Reproducible Miracle

Gökmen Altay

2019-09-07

1 Preface

This book presents 19 based system with reproducible coding evidences that I discovered, tested and witnessed in a book fully written 1387 years ago (632) than the publication date (2019) of this book. Most of the codings could only be practically realized by the invention of computers. You will not only witness some of the miraculous examples of the 19 based codings but also have the ability to easily test them yourself by running the R programming codes I will provide along with each coding evidence. It means all the evidences presented in this book are easily *reproducible*. Hence, the title as "*Reproducible Miracle*". You can analyze the codes for sanity check and even modify them to try your own different hypothesis on the text of the book under consideration. The book, in which I discovered the 19 based system, states that it is the word of God, sent by God to all humanity as the final and ultimate message and will also be always protected by God and thus must be unchanged. This book is Quran, the book of Islam religion that has around 1.8 billion adherents that makes up about 24% of the world population. I will demonstrate many reproducible evidences based on the codings of its text over number 19, which could only be realized and tested practically by the invention of computers.

To the best of my knowledge, almost all the 19 based coding evidences, presented in this book, were hypothesized, tested and witnessed first time by myself and will be revealed first time in this book. If I later realize that any of those evidences were already available in the literature before, then I will update this information in the book's online version. Therefore, this book is the first of its kind that provides easily testable and reproducible codes for testing evidences of the 19 based codings in the text of Quran.

Also, this book uses the **full text** of Quran that was transmitted in Arabic from the very beginning since around 632. It has in total **6348 verses, which include 6236 numbered verses and 112 unnumbered repeated Basmala verses**. In particular, I use the *Hafs mushaf* as the text of Quran, which is the most common one and is used by around 97% of Muslims. I declare here that I did not change or manipulated any part of Quran not even any of the letters of the original text. Therefore, this book has no relation to the early attempts on 19 based coding claims on the text of Quran, where acclaimed author and his followers, unfortunately, manipulated parts of the text to end up with their own made up 19 system claim, which was unacceptable regarding scientific data analysis. Because, once the text is

manipulated to show the computed numbers match to 19, then it is not the evidence of the original text anymore but a made up numerology study of the manipulators. In the end, it is no surprise to get a desired result by manipulating any data! Data scientists often use this very famous quote of a Nobel economist to explain the situation:

> "If you torture the data long enough, it will confess to anything." - Ronald Coase

Therefore, to make sure this study has a scientific approach with respect to analyzing the text data, I use the text of Quran as it was fully revealed 1387 (19x73) years ago (regarding the first publication date of this book, 2019) and written down and still available in our hands *as is*. By the way, the digits sum of 1387 (1+3+8+7) is also 19. These two simple date examples are quite interesting only to me and thus I do not mention these two interesting examples as evidences but as interesting facts for myself as only I can now for sure the discovery date of the system.

Back to the main point, I declare again that I did not make any change regarding the original text and I did not even touch to a single letter of it. It is also worth mentioning that I would be considered as mostly *illiterate* by any Arabic speaker as I can just somewhat read Quran if the helper punctuation marks are made available in the text but cannot understand it except for some of the verses that I had memorized. I can only fully understand English and Turkish. I never wrote a single Arabic word by myself on a computer. I will discuss about the usefulness of this inability in the end of the book, but in short, this situation forces me to analyze the text of Quran as is with straight forward mathematical and algorithmic tests almost blindly on the main numbers of text of Quran using computer programming. Even if I wanted to intervene, I do not have the capability to intervene to an Arabic text. This situation also proves that anyone with scientific knowledge could decode and witness the 19 based coding system of the text of Quran and it was not really a secret for only Arabic speakers. As any ordinary investigator can do, I downloaded the pure text of Quran from tanzil.net/download and tested some of my own hypothesis I had in mind. Since my approach is reproducible by anyone and thus unique and also the amount of evidences I witnessed was very large and rule based, I decided to write all those evidences along with their proofs as easily reproducible tests. And this book emerged as "Reproducible Miracle" whose title kind of forced me to be as is!

2 Introduction for book

The title of this book is numerically encoded.

Imagine you live in the old times where no computer or printing technology yet exist and books are written by hand. You are writing a very important book for the goodness of humanity on earth. Fans of evil also looks for ways to distort this good message as they are

not fan of humanity. Over it is nineteen. You also want to make sure that your book remains intact and not even a single letter of it is changed by the publishers in the future copies of your book, even when you are no longer living. How can you succeed that? Not to mention, at old times, communication is very limited and prone to distortions.

By the way, have you already realized the encoding of the title of this book and got its message by now? If not, I will explain it later or you can give it one more try! Let's get back to the subject for now with a more relevant technical example in the next section.

2.1 One technical example

This problem is similar to error control coding (ECC) in telecommunications of science. Basically, when signals are sent at the transmitter side via wires or air or in any other medium, they are naturally distorted by noise from various sources. This causes the transmitted signal to be received as distorted at the receiver side. Consequently, a wrong message is received than original transmitted one. ECC is a telecommunications field that particularly aims to deal this specific problem. As an example, a very simple algorithm of an ECC is the parity-check codes, which is still in use in some communication protocols. As an example of its implementation, let's say we want to send two digit binary numbers 1 and 0 from the transmitter. So, the message to be sent is "10". This is not decimal ten but binary one and zero in two binary digits. If we send this message as is and if one of the binary digits (bits) are distorted and thus changes during the transmission then at the receiver side we might obtain an incorrect message such as "11" instead of the original message"10". *Without asking if the message is correct or not to the transmitter side*, we have no way of knowing if the message is correctly received or not. Because we cannot ask to the transmitter for this as it would make communicating remotely meaningless. If we had the ability to ask the correct message directly, then why would one send the message from a distance at the first place. ECC science provides solutions for this problem. This time, let's us an algorithm of ECC and encode the exemplary message "10" with a simple *even* parity-check algorithm. Instead of sending the original two bits message "10", we encode it as "101" by **concatenating** one more redundant digit to the end of the message. This makes the sum of all the digits of the message as two which is an even number or, in other words, it is now multiple 2. The last concatenated bit (binary digit) is the parity bit we added for **detecting** the error if it occurs. So, at the receiver side, if we already know the coding system such that the original message was always encoded by even-parity check algorithm, then we have the ability to understand if the message is distorted or not at some level at the receiver side without asking to the transmitter. As an example error event, let's say the message was again distorted by one bit and we received it as "111" instead of the original transmitted and encoded message "101". The receiver checks the sum of the digits, because there is an ECC system in the communication now. The sum is 3 and this is not an even message like it must have always been so by the coding rule of the communication system.

Therefore, based on the system of the encoded communication, the receiver detects that the message contains error and do not trust this message and discards it in this simple case. ECC is a large field and there are much more complex algorithms that are also able to correct the errors in the message at some level.

It is also worth emphasizing that in the simple ECC example, we observed an algorithm that defines the set of rules and we also observed **concatenation** operation as part the algorithm. A communication with such a design is generally referred as a communication **system**.

Interesting enough, I have my PhD in ECC and even had developed and published my own ECC algorithms in the telecommunications field (Altay and et.al. 2006a), (Altay and et.al. 2006b), (Altay 2008). Therefore, when I realized about the earlier 19 based coding system claims in the text of Quran, my first impression was that, all-knowing God might have encoded the text of Quran similar to ECC to assure us that the message is always intact and not changed at all. This is particularly important in our current time in which materialism and advance science are flourished and people of knowledge always wants to see evidences to be convinced on any topic. If there is a coding system in the text of Quran that can be practically tested, then this would be an important scientific evidence of the message of God for the minds of this time who got used to approve only testable and reproducible facts.

2.2 Decoding the encoding

After the above long technical example of coding, it is time to explain the coding in the title of this book for the readers who could not find out it yet. The number of letters of the title "Reproducible Miracle" is 19. I had also given a hint on this by writing the number 19 in a short sentence above as "Over it is nineteen" out of context. The number of letters in any title would normally be a random number. However, I also mentioned the key number for my encoding within the text in a unique and bizarre way. If the number of letters in the title is equal to the number stated in the book then this is very unlikely to occur by chance but most likely to be designed that way by the author. As the author of this book, I can assure you that I designed the title of my book deliberately! If there are many other similar encodings in the book. then you can easily come to the conclusion that, these are design patterns and not random coincidences.

In fact, if you are careful enough, you might have realized the second coding in the title of this sub-section! Since you learned the approach from the coding in the main title, I will leave the other one to you and will not explain it here again!

One thing to note from these two encodings by 19 in this small text portion of the book should tell you that these two events can almost only be done by design but not with a mere coincidence. As the author of this book, I tell you that both of the titles were different than

the current forms. They were longer and more descriptive. However, I wanted to demonstrate codings in a text in real time while you are reading about it as examples. As a result, the titles ended up in different forms but with the identical meanings to their longer basic versions.

Also, I want to share my personal feelings about the main title of this book. It was about two times more of the current title. Then, I wanted to match it exactly to 19 by adjusting the number of letters in it and tried a very short one. At my *first attempt*, I tried the current title "Reproducible Miracle" and it just matched to 19. I was quite surprised and again **personally** thought that this particular title is also not a mere coincidence and it was meant to be so. My own impression led me to the conclusion that the title should be as is and it was probably beyond my personal preference. God knows best and this is just my gut feeling on it. I will talk about the importance of its meaning later in more detail while discussing about the meaning of a miracle in general in the end.

2.3 Related verses of unchanged Quran and motivation

There is this unique verse that refers to number 19 with no **explicit** meaning.

> "Over it is Nineteen", Quran, 74:30.

There is no other verse like this special one out of all the other 6348 verses. This states directly an isolated number and focuses our attention to it without any other information in this independent verse. Scholars look at the other neighboring verses and **interpret** from the context that this number might be referring the number of guardian angels. It may well be correct but it may also be correct that this number is the key number *over it is (19)* a protective coding system was designed to present evidences that the text of Quran has been protected as promised by the Author of Quran. There are verses in Quran from which we understand that Quran is intact and will be unchanged and protected.

> "We, indeed We, it is We who have sent down the Reminder, and indeed it is We who will preserve it.", Quran, 15:9
>
> "This is the book in which there is no doubt, a guide for the conscientious.", Quran, 2:2

Also, here are some of the verses that mentions that the book is collected and arranged as in its form:

> Do not try to hurry it up with your tongue; (Quran 75:16, quran.com, Dr. T. B. Irving)
>
> it is up to Us to **collect** it, as well as [to know how] to recite it. (Quran, 75:17)
>
> So whenever We do read it, follow in its reading; (Quran, 75:18)

> And those who disbelieve say: Why is the Qur'an not revealed unto him all at once? (It is revealed) thus that We may strengthen thy heart therewith; and We have arranged it in right order. (Quran, 25:32, quran.com, Pickthall)

These are some of the verses I came across and I consider them as supporting information for the goal of this book, which is to test whether the text of Quran was designed by a coding system, which provides systematic code evidences to indicate that the Quran has been unchanged since 632 for the last 1387 years.

The important point is that no matter you already believe that Quran is the book sent by God or not, we have scientifically proven very old book dated back to around 7th century and we read the above mentioned verses that might suggest that there might be a design in the text of it. We also observe that the design of the text of this old book is also unique and there is probably no such book exists regarding the design of its text and organization. Then it is certainly worth testing to see if there is indeed any 19 based coding system in this old text. This is what exactly I attempted to do and witnessed that indeed there is a 19 based coding system in the text. I probably could not have discovered all the codings and their associated rules but I certainly have observed sufficient evidences to rationally come to this conclusion.

2.4 Summary

In this book, I will provide reproducible evidences of some of the important 19 based codings in the text of Quran, which I hypothesized, tested, discovered and witnessed as a general 19 based system of the full text of Quran. I will also provide the rules of the evidence codes and present 19 based system, or in other words, 19 System over the text of Quran based on my observation and judgment. I provided all the programming scripts along with each evidence in order to make them testable to eradicate doubts on the historical and universal truths about the codes to make sure they can be easily *reproducible*. For this, I will use R programming language (www.r-project.org) to provide reproducible tests. I had started this study with the intention to test some of the existing claims about the 19 based codings on the text of Quran around last Ramadan month of Muslims (or early 2019). Then, I also tried some of my own hypothesis, of which some of them have been validated. Then, I hypothesized more codes and validated more and ended up with this book. Since the tests I perform in this book based on open source software rather than a user interface based application or manually counting the numbers, anyone with a tiny level of programming experience can analyze my R codes and run them by simply copy paste operations in their computers and reproduce and witness the results that I will present in this book. Anyone who analyses the codes I will share in this book and run and test the results might attain to the level of knowledge, which is knowing the truth by heart. Otherwise, even if the existing acclaimed cases on 19 based codings within Quran are

correct, minds and hearts are always in doubt as they are not easily testable by readers as it is almost not practical for most. For the ones with negative prejudices, this situation causes ignoring and not witnessing to the truth. It also lefts the Muslims who want to test before believing it with a burden of testing the claims manually, which is almost impractical for 99% of them. End result of this situation is a big barrier between a universal truth and humanity. I mainly aim to demonstrate reproducible tests on the 19 based codings of the text of Quran and provide the software material so that the ones who wish to try themselves can easily perform and witness the tests and attain to the knowledge of the truth by heart without any doubt. I also calculate the probability of observing the presented evidences by chance alone to make sure we have a rational conclusion over the witnessed 19 System in the end.

2.5 How to read and asses this book. God knows best, let be cautious

After you finish this introduction chapter, I suggest you directly go to the chapter where main system evidence presented, which are Chapter 4 and Chapter 5. You should spend your energy and motivation more efficiently to witness the 19 System presented in this book as the presented system has many evidence codes and it might be mentally tiring to finish all. Therefore, in those two chapter you will start witnessing the 19 System code evidences initially. After finishing the two chapters, then you can complete the rest of the chapters in order or as you wish. I wanted to give this guidance as this book has too many technical details and also many additional codes presented as additional information for future reference. I tried to write this book in an academic book format and thus the order of chapters as is. For example the next chapter has information about the general rules, R functions and preparing the Quran text data for analysis. It has to be there as we will use their result in the following chapters of evidences.

Rules are more important than the codes presented and they were harder to define based on my observations and also what universally make most sense. Without a defined rules of a claimed system, no one can claim any such system. Because without the rules, we cannot know the boundaries of the claimed system and thus we cannot know the possible number of code trials within those boundaries. We can only measure the probability of a claimed system if meaningful rules are defined for the claimed system. In this book this is what I tried to fulfill and it was the hardest part of all my research. As far as I know this is the only book, where such 19 System claim has all the general and meaningful rules are defined. As a scientist, who wrote many peer reviewed journal publications, I tried my best to fulfill this aspect as best as possible. I first published book was in 2019 and improved it after a few years along with the rules I had defined initially. In my last major upgrade in November 20, 2023, I tried my best to generalize the rules as much as possible as well along with my new code discoveries until now. On the other hand, it quite a difficult task and I might not have performed a perfect work and there might still be some room to improve upon them. So,

feel free to contemplate codes along with the entailing codes I presented and see if you see any better rule among the evidence codes I presented. You might even discover new codes that I might not have discovered yet, which might perfectionate the current rules. So, in short, I do not claim that I discovered the full available system but I claim that the 19 System I discovered over the text of Quran is miraculous and suggest that there is an intact coding system over the text of Quran. It consequently suggest that the text of Quran is also intact. Because if the the text was distorted, we would most likely not witnessed the system I present in this book.

However, I am just an ordinary Muslim and cannot know the absolute truth. **Only God knows best** and only he knows whether all or some or none of the codes that I discovered and presented in this book were in fact designed by God or all we observe is just the result of an extremely small random chance. As a scientist, who has PhD in Error Control Coding (or Message coding), I can only search for available codes of a potential system and try my best to define its rules if what I observe is a rule based system and then using the rules I can get the number of trials and successes and failures and then I can measure the probability of what I observe. The probability of the overall system is extremely small as you can see in my book. The rules are also meaningful and quite general. Therefore, my expert level educated *conclusion* is that there is a miraculous 19 System design over the text of Quran and it indicates that the text of Quran is intact as we Muslims expected. Nonetheless, it is a big sin to claim anything incorrect on behalf of God. I fear from God and make it clear that all my claims are just my best conclusion over what I observe. Only God know best. My conclusion might be correct or false. The 19 System I discovered and presented might be fully or partially be correct or even might be the result of mere coincidence as there is still that measured extremely small probability of observing them by chance alone. I emphasize this point again and again to make sure even a lay person or a young people do not have the impression that I claim something as if absolute truth. Readers should read this book like an academic technical book. This book presents the 19 based codes that **suggest** a rule based 19 System, which together look miraculous from my point of view. I presented the ones I considered them as part of the overall 19 System as “evidence” and some other interesting codes that I do not consider in the 19 System only as “facts”. I might be fully or partially correct or even fully wrong in my conclusions. So, readers should make their own judgement and feel free to critically read it and discuss with others before having their own conclusion. However, I also suggest readers to be fair in their critical reading. If your mind and heart concludes like me that there is 19 based miraculous design over the full text of Quran, then you should accept the conclusion of your mind and heart but not be arrogant and deny it despite your self conclusion. Also, if you consider and accept them as miraculous design like me, you should still be humble and cautious while presenting it to other people and let them also freely and critically judge and conclude by themselves.

In any part of my book or in my social media or video shares, If I by mistake said anything that contradicts with what I described in this chapter, please ignore it and assume it was a mistake on my side, which I already corrected all of them in this chapter, once and for all. So, feel free to also inform me if you observe any such wrongdoing form my publications so that I can have chance to correct if I deem essential.

So, in short God knows best and all of my claims are just my conclusions and might not represent the absolute truth. I fear from Allah for saying anything wrong about him as it would be a big sin warned in Quran. However, I need to write and share what I discovered and conclude that there is a 19 based miraculous system exist in the text of Quran. I seek refuge to God and ask for forgiveness if I make a mistake or say anything on his behalf by mistake while writing or presenting this book. I disclose here again that all my claims are just my conclusions based on my observations and not necessarily fully correct. Read this book just as an academic study on the observations over the text of Quran and feel free to do your own conclusion. I already shared my conclusion in the book after what I witness. This book is not any sort of divine book but should be rather treated like an academic book where observations and conclusions of a scientist are shared.

2.6 Can we believe Quran without a 19 based system?

Of course, yes. I will talk about this later in detail during the discussions chapters in the end of this book. Because, it is a long discussion and not the main point of this book and I do not want readers to be distracted by this argument. Having said that, most of the Muslims took a position against 19 system claims on Quran and have negative prejudice on this topic as the authors of the first 19 system claim had manipulated Quran to make it match to their false and made up 19 system claim. I wanted to clarify this point again to clear up the potential negative prejudices of most Muslims in the content of this book. This book is not about the false and made up early 19 system claim but a new one that is based on the full text of the Arabic Quran of 6348 verse that Muslims around the world keeps reading it for centuries and is still available as is on the bookstores that all the Muslims can access. Also, I, myself, discovered all the evidences in this book except a few simple known ones. I mentioned those few already known evidences where I present in the book.

Muslims have the belief that Quran is intact and unchanged as it was revealed and completed around 1387 years ago since completed on year 632. They have already acceptable reasons to believe it. First of all, almost all 1.5 billion Muslims have the same Arabic Quran and they claim that they follow it! I will come to that later as it is another important subject to talk about but not the place to elaborate in this section. The point is if you ask any ordinary Muslim haw many Arabic text of Quran exist, you will always get answer as **one**. While I was writing about this book, as an ordinary Muslim I wanted to make sure about it and searched internet and saw some claims that there are some

exceptions. Then, I have found out that the common text, called *Hafs mushaf*, used by around %97 of Muslims and %3 use a few other version of the text with tiny differences. Dr.Shehzad Salem has along research on the topic and have a book published on the topic where he concludes that only *Hafs mushaf* is the *mutewatir* one (related by masses to next generations) and was always the common one among Muslims. His research concludes that only the *Hafs mushaf* is the fully unchanged version and there is therefore only one fully unchanged Quran and it has been already commonly used by almost all Muslims. I agree with his conclusion and my analysis is already in the *Hafs mushaf*. As an ordinary Muslim, I was not even aware of such claims until I performed an intentional search on the topic. So, having an exact Arabic Quran by almost all Muslims is an important evidence. Because, if there were some changes during the history, of hundreds of years, then we would see them spread thorough out the world and we would not be able to see almost all, around %97 of Muslims still use the same exact original Arabic text among different nations and communities.

Second reason to believe that Quran is intact and managed to arrive to our time as unchanged is the system of *Hafiz* tradition. If you go to any Muslim country, you will see that there are thousands of people called *Hafiz*. Hafiz is given as the title to the people who memorizes the whole Quran in Arabic by heart. Even if they are not Arabic speakers, they are able to memorize the whole Quran and precisely recite it. Considering all the Muslim countries, there may be tens of thousands of Hafiz people exist even at our current time of technology. Historical sources mentions that this is a tradition dates back to the time of Prophet Muhammed. There have been thousands of religions on earth from old times until now but there is only one book that has been fully and precisely memorized by tens of thousands of people on earth in the current time and before. I consider this fact as the second evidence that supports the belief of Muslims that the text of Quran is intact and unchanged.

There are also some very old Quran manuscripts that are dated back to the end of seventh century and even some parchment papers of Quran radiocarbon dated back to the time of the Prophet Muhammed such as The Birmingham Quran manuscript. One can search internet and get more information on them. I will not go into much detail on this as it requires another long and expert level scientific discussion.

The fourth evidence to believe that Quran is unchanged is its content. If you read the interpretation of Quran, one can judge herself but in my personal judgement, I have to state that the content is the best proof that it is the book from God. My heart calms down as I find answers for the meaning of my life and everything around me. Once you are convinced that these meanings are the word of God then there are verses, where God promises that Quran will be protected and there is no doubt in it.

Then why a 19 based coding would be important? Well, the above points might be more convincing for ordinary Muslims who were raised as Muslims already. It might be easier for them to accept all the above points but it might not be seen sufficient for especially non-Muslim readers of Quran. Such a 19 based coding system of the text of Quran, which could not be designed by the people of that time, indicates that the text of Quran is intact and unchanged since the completion of revelation in 632 and can help convince people who have doubts about it. It also has a function to increase the belief ("iman" in Arabic) of the Muslims who already believe in Quran as there are levels of belief depends on the knowledge one has. I believe the following verse after the verse of 19 already best describes the function of a 19 System.

The translation is from quran.com of Dr.Ghali:

> 74:30 Over it are nineteen.
>
> 74:31 And in no way have We made the Wardens (Literally: companions) of the Fire except Angels, and in no way have **We made their (right) number except as a temptation for the ones who have disbelieved, (and) that the ones to whom the Book has been brought may have certitude, and that the ones who have believed may increase in belief, and that the ones to whom the Book has been brought and the believers may not be suspicious, and that the ones in whose hearts there is sickness and the disbelievers may say, "What would Allah intend by this as a similitude?"** Thus does Allah lead into error whomever He decides, and He guides whomever He decides, and in no way does anyone know the hosts of your Lord except He. And in no way is it anything except a Reminding to the mortals.

3 The Text of Quran and Rules

I strongly advise readers to *skip this preparation chapter and start reading the coding evidences* chapters of the 19 System, especially from the chapters Chapter 4 and Chapter 5. This whole chapter has technical details about the used text and the rules and so on, which you ca later revisit and read when you have more time and energy.

3.1 About the Text of Quran

Hafs mushaf, which is used by around 97% of Muslims around the world, was used for the text analysis of Quran in this book. Under this chapter, I will discuss all the details about the text of Quran I used to perform text analysis over it. In 2019, I first started analyzing possible 19 based codings over the text of Quran to see if there is a system based on rules. I discovered many interesting codings that suggested a system. I finished the analysis and

wrote the book and published it online in September 7, 2019. The server where I downloaded the text of Quran is from the Tanzil project. From the Tanzil server at http://tanzil.net/download/, I downloaded and used the "Simple Clean" text type that does not include *haraka* marks or any pause marks or the other options available in the server. Those options already are not part of the main text. Tanzil is almost the common server for most online Quran related web sites. I did not cherry pick a version of my choice to download. The reason I downloaded the "Simple Clean" text is because, as I did not know Arabic, I searched a tutorial that performs text analysis with R computer programming language over the text of Quran and found this one at (Sharaf 2019b), which was using that "Simple Clean" text type for text analysis. So, the text type was not my choice but I followed the tutorial, which was already using the most suitable text version for the text analysis of Quran as it only contains the letter characters of words but no other helper marks.

When I downloaded the text of Quran from http://tanzil.net/download/ in 2019, the released text version was Version 1.0.2 and that version was released on May 12, 2008 and it was online without any error until I downloaded and used it for the analysis of this book. Sometime after the publication of my book based on that long available text, Version 1.0.2, they decided to make a few "optional" non-essential changes, based on their choice, and released it as text Version 1.1 on February 12, 2021. You can see details about the update on on https://tanzil.net/updates/. They made the particular word, "ba'dama" written as two words as "ba'da ma" instead of the previous form of one word. I have made a research on that particular word for about a year and explained all the details I gathered and concluded about it on Chapter 8.1. Upon my research I concluded that "ba'dama" should be written as one word and decided to continue using the text Version 1.0.2 of Quran. You can see my long research summary on the topic on Chapter 8.1. You can currently download it from the github account of this book on https://github.com/quran2019/Quran19/blob/master/quran-simple-clean.txt.

Let's not distract further from the book and continue discussing on the text analysis and the topics around it. Interested people mostly ask about the text I used and the reasons why I did not use a classical paper printed ones with the *haraka* helper marks. First of all, I did not cherry picked this text, as I mentioned before, I found and followed this tutorial (textminingthequran.com/tutorial/quran.html), where the author used this simple text of Quran for his own text analysis. However, it turned out to be that this manuscript is the most suitable according to my investigations. Because, I wanted to count only the natural numbers of the text, which are number of chapters, verses, words and letters. I did not need the helper added marks along with the text and this text appears to be just right for this. The author of the tutorial did his PhD in around the text analysis of Quran and it is reasonable to consider that he might have selected this text as it is the most suitable one for the text analysis of Quran.

Among almost all the written old or modern Hafs mushafs, the only difference should be when we count the number of letters as some words might be written slightly differently, which does not change the meaning of the word. Scribal errors are also known facts that might exist in the earlier hand written manuscripts. When it comes to the earlier manuscripts, there is no single reference manuscript to be the reference for all the rest of the manuscripts that follows it up to the last letter of it. The famous early Uthmanic mushafs might be considered as the reference in general but there is no original copy of the first written ones and the currently available ones are "at best, the copies of the copies of the copies of the original ones, written at least 4 generations later", as Dr.Shehzad Saleem replied to my question during his interview with me about the history of Quran (Saleem and Altay 2020). Since the main medium of the transmission of Quran is via oral transmission with the tradition of memorizing Quran by the large number of dedicated people, called *Hafez*, who memorize Quran in its entirety, any written text that precisely follows the classic Arabic grammar rules and also approved by Muslim scholars as fully representing Quran might be used to see whether there is a systematic coding design over it. Basically, the hypothesis is that "there might be a rule based system in the text of Quran, if the text represents Quran precisely and fully with the condition that the text is written with respect to classic Arabic grammar rules". Because, we learn from Quran that it is written in Arabic and therefore we should have the text written in classic Arabic with its grammar rules.

> Quran, 12.2: "Indeed, We have sent it down as an Arabic Quran so that you may understand." (Translations are from quran.com, the Clear Quran).
>
> Quran, 41.44: "Had We revealed it as a non-Arabic Quran, they would have certainly argued, "If only its verses were made clear ⌜in our language⌝. What! A non-Arabic revelation for an Arab audience!" Say, ⌜O Prophet,⌝ "It is a guide and a healing to the believers. As for those who disbelieve, there is deafness in their ears and blindness to it ⌜in their hearts⌝. It is as if they are being called from a faraway place." "
>
> Quran, 13.37: "And so We have revealed it as an authority in Arabic. And if you were to follow their desires after ⌜all⌝ the knowledge that has come to you, there would be none to protect or shield you from Allah."

Therefore, in my opinion, any old or modern, text that is written in the classic Arabic grammar and accepted as fully representing the Quran (Hafs recitation/mushaf) by scholars might be considered for the text analysis to see if there is a meaningful rule based systematic coding design over the text that suggest that the text is intact and unchanged. In the end, the recitation (the Zikr / the Reminder) was declared to be protected by God but not the text of the book in the verse 15:9.

> Quran, 15.9: "It is certainly We Who have revealed the Reminder, and it is certainly We Who will preserve it."

Without being aware of much of the above information in the beginning of my study for this book in the early 2019, I had hypothesized that, the text of Quran can well be designed by God to the last letter of it and I discovered the codes that includes all the letters information as can be seen in Chapter 4.2 and in some other chapters. I presented them separately from the main evidences, which are presented in Chapter 4, Chapter 4.1.2 and also Chapter 5, which do not include letter information but just word information regarding the content and thus might be considered as universal as it is applicable to all the common Hafs mushafs from history to our current date. Because, although the writing of the words might slightly change, all the words are the same as they do not change the meaning of the words. Because of this fact, the codes that includes letter information are always considered weaker compared to the codes that do not include letter information as the data without letters information can be considered as intact and reliable for all the *common* Hafs mushafs that have been used by the majority of Muslims till now.

The codes with letters information are considered valid only if there is no apparent error about a letter with respect to the classic Arabic language. We know there are various ways of writing the same words with slightly different letters in some cases though it gives the same meaning when it comes to Hafs recitation. Although people recite Quran correctly, they overlook those letter changes among the texts and just ignore them as they know how to recite the word anyways. In case if there is any single letter is found to be apparently erroneous in the text I used, then, most probably, all the letter incorporating codings that I present in this book should collapse. So, feel free to reach out to me if you are 100% sure that there is an error in any of the 332837 total letters of the text of Quran manuscript I used. Nonetheless, make sure to consult with an expert on Arabic language before coming to conclusion on this as there are already known variations in writings of some of the words. Because of these variations in writings, I consider the codings in my book that includes the letters information as weaker evidences compare to others. Since the first publication of the book, I never received solid mathematical objection to the codes I presented but the ones who tried to falsify, always first attacked the letters information I used by ignoring the main code evidences. I suggest those kinds of people to ignore all the letters based evidences, which I already designated as weaker, and look at first the main evidences that do not include letters information. Therefore, I suggest to those kinds of readers to read first the main evidences and also the other evidences that do not include letters information and ignore the the letters based codings. If they see no issue with the main ones, then they have already witnessed the 19 system based on chapter, verse and words information, which indicates the intact design over the text and hence suggest that the text is intact and unchanged too. Certainly, these evidences have their own limits in proving the intact and unchanged text of Quran as the evidences can only go into the

resolution of the number of words or letters per verse. However, for the ones without negative biases, it should indicate sufficient evidences as there is already one common Hafs manuscript used by Muslims. The question is not to select a manuscript among various text versions but to test whether or not there is a clear rule based system over the full text of the common Hafs manuscript.

Since the letter incorporating evidences that I presented are not the main evidences of this book, anyone who have doubts about the accuracy of the letters might just opt to ignore related chapters. It will not change the fact that the text of Quran appears to have a design up to its number of words in each verses along with chapters and verses as is when considering the main miraculous 19 based system I presented in Chapter 4, Chapter 4.1.2 and Chapter 5.

However, the ones who would like to genuinely consider the letters based evidences of this book might well have some questions considering the feedback I received after the first publication of this book. A question might pop up to some with extreme doubt, whether the volunteer people of the tanzil.net has deliberately made such a design considering the letters based evidences? Well, I know the answer on my side for sure. I discovered all the evidences in this book myself. I cannot know for sure the other side, the volunteer people of tanzil.net, as I do not know them. However, in my opinion, I am personally 100% sure that they did not do such a thing and even more, they cannot do such a design. Because, as I quoted above, they have written the text with respect to classic Arabic grammar rules and the early Hafs manuscripts. The only way, one can claim such an artificial design is if one can spot an artificial rule that is not meaningful and artificial or redundant for the text with respect to the classic Arabic grammar rules. In such a case one might claim that this text has artificial data in it or has letters against the classic Arabic grammar rules that might have been written in it deliberately to make such a design. However, there is no such case that I could observe. I have initially discovered the evidences in 2019 and as they mention in their web site as I quote in the below chapter, they did not receive any typo report since the release of the first version of the text in 2008. So, I see no reason to have that extreme paranoiac doubt. I addressed those extreme potential thoughts anyways in case some extremely skeptical people wonders about them. The other proof that the Tanzil has nothing to do with such 19 based codings is that they changed the writing of one word in their latest updated text in February 2021. They were writing a word as a single word and they changed it into two words after 13 years of their last update since 2008. If their change was correct regarding classic Arabic grammar rules, then the codes with words information in this book would collapse as they mostly include words count information. But after my long research, it turned out to be that they are wrongly changed it after the publication of my book. I discuss on this phenomenal event and my research on the topic in the Chapter 8.1 and Chapter 8.1.1

3.1.1 Fetching Quran's Text into R

I will mainly show, first, how to fetch the text of Quran into R programming environment, then compute some of the important descriptive natural numbers of the text of Quran but I will not analyze those numbers in this chapter and leave it to the chapters about evidences such as Chapter 4.1.2.

I downloaded the text of Quran from tanzil.net/download in early 2019 to start the analysis about the text of Quran. Arabic speakers do not need punctuation, namely helper marks, and thus there are no punctuation in the early texts as we see today in most modern Quran texts. I am not able to speak in more technical details as I do not know Arabic. After searching the internet, I found this tutorial (textminingthequran.com/tutorial/quran.html) and I followed it for some initial text analysis on the text of Quran. In order to download the text of Quran that I used for the text analysis in this book, as instructed in the mentioned tutorial, we go to the tanzil.net/download and select "Simple Clean" option without any pause marks or other options. For this, deselect "Include pause marks" and "Include sajdah signs" options. These are all marks not part of the simple and pure text but added later to ease the reading. Then select "Text(with aya numbers)" option and click download button. This way you will get a pure text of Quran in your computer with verse ("aya" in Arabic) numbers. In this file, there are "sura" numbers (sura is in Arabic for chapter) followed by verse numbers followed by the actual text of the verses. You can open it in a text editor and better see its text structure. Each field is separated by a bar "|" symbol and there is also some copyright notes at the end of the text, which are all added by tanzil.net as part of their work. Therefore, we remove them first, as you will see below while reading about fetching the downloaded text file into the R programming environment. They do not mention the text version at the download page but when I downloaded in 2019, the text version was Version 1.0.2. All the logs of the updates of the text can be seen in this page:https://tanzil.net/updates. It was released in May 12, 2008 and around 18 months after the publication of my book on the text Version 1.0.2, they updated it on February 12, 2021 as Version 1.1, with a few "optional" changes as they describe in the updates page. In this book, I still use the text version Version 1.0.2 and a long discussion about their updates and its consequences can be read in the Chapter 8.1 and Chapter 8.1.1. In the current chapter, I will continue the technical details of how I analysed the text. So, if you use the tanzil.net/download page to download the text, you can download the Version 1.1 and need to revert back the mentioned few changes back to get the text Version 1.0.2. Or, you can use the text I had downloaded, used and backed up in the github account of this book on this url: https://github.com/quran2019/Quran19/blob/master/quran-simple-clean-v.1.0.2.txt. The text in that link is the Quran text Version 1.0.2 that I had downloaded from tanzil.net/download in early 2019 and used for the text analysis of this book. You can also download it and use it to run the codes in this book over that downloaded text.

Everything is constructed from smaller components. When it comes to the text of a book, the main components are letters, words, verses and chapters. Therefore, I had first searched over these components if there is any 19 based coding design patterns over them. As you will see in the chapters of evidences , there are indeed 19 based coding system over the text of Quran with rules based patterns. I think, I might not have discovered all the system yet but the evidences I provide are sufficient to witness a beautiful and strong 19 based coding system of the text of Quran, which will be contributed by this book to the literature for the first time as further proofs that support the belief that Quran is intact and unchanged from the beginning.

In the following of this chapter, you will see how to fetch the text of Quran into R programming environment and also perform some basic text processing and get the important descriptive numbers of Quran.

An important point to remind is that the structure of the text of Quran is also unique and not the same as any other book we might come across. All the verses are numbered but there are 112 unnumbered and repeated Basmala verse in front of all the 112 chapters out of the 114 chapters. Also the first verse of the first chapter is the numbered Basmala verse. Moreover, Chapter 9 does not have any Basmala verse in contrary to the rest of 113 chapters but interesting enough Chapter 27 has a Basmala verse within its chapter content. So, it looks like there is this non-standard structure and deliberate organization of the text. It leaves the question whether to refer the total descriptive numbers (e.g. verse, words and letters) with respect to only the numbered verses or together (numbered and unnumbered Basmala verses). In my analysis, I analyzed both of them at the same time and concluded that they should be designed together and both types of descriptive numbers of the text are valid because the system I discovered suggests that they were designed together as you will see in the chapters of the evidences. So, I will always refer both of the types of the text of Quran with respect to, first, the 6236 numbered verses only and, second, the 6348 numbered and unnumbered verses together or in other words, all the 6348 verses.

Before going any further, one tiny point I want to mention about the text of Quran is about the punctuation. Arabic speakers do not need them and thus they are already not part of the original text but they were added as helper markers later on for especially non-Arabic speakers such as Turkish speaking people like me. I would not normally even talk about this point but when I had a discussion with one of my non-Muslim friends, he made an argument based on those punctuation marks and claimed that the text of Quran has been changed as other earlier holly books. I was quite surprised that even such a simple fact was being used as an argument and he got this misinformation from the internet as he later searched about this. Anyway, in short, punctuation marks are not part of the original text of Quran and I did not include them in text analysis. If one have doubts about it, she should feel free to speak to an Arabic expert about it.

In order to be able to process and analyze the text of Quran, we need to fetch it into an R console. For that, I utilized this very useful tutorial at (Sharaf 2019b). As mentioned in that tutorial, in 2019, I downloaded the text file of Quran from http://tanzil.net/download/ with "Simple Clean" option without any pause marks or other options, and also with the "Text (with aya numbers)" option selected. I then downloaded text file in a folder with the name "data" under the current working directory. Since they updated the text with a tiny change on February 12, 2021 as explain above, you can only download the text version 1.0.2 from the github link I provided above from repository of this book.

We can run below R script to read Quran text file into R programming environment:

```
options(tinytex.verbose = TRUE)
tenzil = read.csv("data/quran-simple-clean-v.1.0.2.txt", header=F,
stringsAsFactor=F, encoding="UTF-8", sep="|")

#head of the text
head(tenzil)

##    V1  V2                          V3
## 1   1   1   1  بسم الله الرحمن الرحيم
الحمد لله رب العالمين    2   1   2  ##
الرحمن الرحيم              3   1   3  ##
مالك يوم الدين             4   1   4  ##
إياك نعبد وإياك نستعين  5   1   5  ##
اهدنا الصراط المستقيم    6   1   6  ##

#tail part of the text
tail(tenzil)

##
V1  V2
## 6259 #    of the text, and shall be reproduced appropriately in all
files  NA
## 6260     #    derived from or containing substantial portion of
this text. NA
## 6261
# NA
## 6262                #  Please check updates at: http://tanzil.net/
updates/ NA
## 6263
#  NA
## 6264
```

```
#=====================================================================
NA
##      V3
## 6259
## 6260
## 6261
## 6262
## 6263
## 6264
```

It looks, the head of the data is clean and it is a table with three columns (a data frame in R). Each row contains one verse in order. First column contains the chapter numbers (or, in Arabic term, 'sura' numbers). Second column has verse numbers (or, in Arabic term, 'aya' numbers). Third column has the verses in Arabic.

However, there is some license related information appended to the tail of the text by tanzil.net. Let's find where to clean it at the tail of the text file.

```
tenzil[6234:6238,]

##
V1 V2
## 6234
114  4
## 6235
114  5
## 6236
114  6
## 6237                  # PLEASE DO NOT REMOVE OR CHANGE THIS
COPYRIGHT BLOCK NA
## 6238
#=====================================================================
NA
##                                V3
## 6234        من شر الوسواس الخناس
الذي يوسوس في صدور الناس  6235  ##
من الجنة والناس            6236  ##
6237  ##
6238  ##
```

As we see the last verse appears to be in the row index of 6236. The last chapter (sura) in Quran is the Chapter Nas (sura-al-nas). Since it is very short, almost all Muslims would have

memorized it and sometimes recite it in their regular daily prayers. Although, I am no expert in Arabic, I can also recognize it easily from the Arabic writing even without the helper punctuation that we non-Arabic speakers need to be able to read the Arabic text of Quran with the correct pronunciation. Without Arabic knowledge, even I can confidently recognize the last verse of Quran from the verse in the index 6236. So, as instructed in the tutorial, I remove the rest of the last verse to clean the additional general text related information added by tanzil.net. I keep this table as an the R object and named as *quran* to remember that this object keeps all the words and letters of Quran that we hold in our hand.

```
quran <- tenzil[1:6236,]
tail(quran)

##        V1 V2                                                V3
## 6231 114  1  بسم الله الرحمن الرحيم قل أعوذ برب الناس
ملك الناس                                          2  114 6232 ##
إله الناس                                          3  114 6233 ##
من شر الوسواس الخناس                          4  114 6234 ##
الذي يوسوس في صدور الناس                     5  114 6235 ##
من الجنة والناس                                  6  114 6236 ##
```

As we see, the first column of the table keeps the chapter number, the second column keeps verse number and the third column keeps the text of each verse. Basically, each row of this table keeps the information about one verse in order. Let's first give their correct names in English to the columns and see the table again.

```
colnames(quran) = c("chapter", "verse", "text")
head(quran)

##   chapter verse                      text
## 1       1     1  بسم الله الرحمن الرحيم
الحمد لله رب العالمين   2       1         2 ##
الرحمن الرحيم             3       1         3 ##
مالك يوم الدين            4       1         4 ##
إياك نعبد وإياك نستعين  5       1         5 ##
اهدنا الصراط المستقيم    6       1         6 ##
```

Let's also add the row names of the table into the table. Row names should keep the verse order from beginning to end, which we can also test it later on. Since Quran has an order and the order is important, we start given independent verse index numbers from first verse to the last as row names to be able to correctly access them later. I name the column of this independent verse indices as "VerseI" in the table. It is important to remember that

this column is given by us independently and the verse indices per chapter that we refer when we quote any specific verse in Quran (such as this formal notation: 74:30).

```
quran <- cbind(as.numeric(rownames(quran)), quran)
colnames(quran)[1] = "VerseI"
quran$VerseI <- as.numeric(quran$VerseI)
quran$verse <- as.numeric(quran$verse)
quran$chapter <- as.numeric(quran$chapter)
head(quran)
```

```
##   VerseI chapter verse                    text
## 1      1       1     1  بسم الله الرحمن الرحيم
الحمد لله رب العالمين  2      1       2       2  ##
الرحمن الرحيم          3      1       3       3  ##
مالك يوم الدين         4      1       4       4  ##
إياك نعبد وإياك نستعين  5      1       5       5  ##
اهدنا الصراط المستقيم  6      1       6       6  ##
```

3.1.2 The categories of the main descriptive numbers

It is helpful to define the categories of the main descriptive numbers of the text of Quran to clarify this point. Because I will keep mentioning the categories of the numbers while defining the rules of the coding system in Chapter 3.2 and later present evidences with them.

There are four main descriptive numbers of Quran: the number of chapters, verses, words and letters. All the categories of the descriptive numbers of the text of Quran, except chapters, has numbered type and also the numbered and unnumbered type together versions because of the unique structure and organization of Quran that we observe in the book of Quran in our hands today. Basically, each of the three categories has two types Since the number of chapters has only numbered version, this category has a single number. Therefore, there are 7 main descriptive numbers of the text of Quran. In this chapter, I will compute them blindly via only the computer programming and provide its codes so that you can also reproduce and test those numbers from the text of Quran.

3.1.3 Number of chapters and verses, and sanity checks on the text

Let's now first check if the indices of verses are in correct order. I will perform two tests here. First by the sum of all the index numbers, second by a simple plot and see if we observe what we expect for. We know that sum of the unique integer numbers from 1 to n is nx(n+1)/2 (by Gauss formula). Therefore, sum of the indices of the verses must be 6236x6237/2 = 19446966. In your computer, make sure its precision is capable of dealing

with large numbers. Alternatively, you can also use a big number calculator such as this one ("Good Calculators" 2019).

Now let's write a code to sum the index values in the table and see if it matches to 19446966 as it must be.

```
cat("the sum of verse index column VerseI is ",sum(quran$VerseI))

## the sum of verse index column VerseI is  19446966

if(sum(quran$VerseI) == 19446966)
  print("The sum of the indices of verses are correct and passed this
test.")

## [1] "The sum of the indices of verses are correct and passed this
test."
```

The first sum test passed for the indices of the verses. But, still in the middle or any other part of it the indices might be multiple of two numbers or more than the maximum 6236. Let's see the minimum, which must be 1, maximum, which must be 6236, median, which must be 3118.5 (median of even number) from the data and also most importantly the number of unique indices that must be 6236 too.

```
print(paste("Minimum, Maximum, Median of VerseI is ",
    min(quran$VerseI),",",
max(quran$VerseI),",",median(quran$VerseI)))

## [1] "Minimum, Maximum, Median of VerseI is  1 , 6236 , 3118.5"

print(paste("Number of unique values of VerseI is
",length(unique(quran$VerseI))))

## [1] "Number of unique values of VerseI is  6236"
```

As we see all are correct as expected. Let's plot it and see if it is monotonically increasing from 1 to 6236.

```
plot(quran$VerseI)
```

The plot is exactly as we expected that is increasing monotonically from chapter 1 to 114. Let's now check in a similar way, if the chapter numbers are in order and then observe the maximum number.

```
plot(quran$chapter)
```

```r
print("Unique chapter numbers regarding the order of text: ")

## [1] "Unique chapter numbers regarding the order of text: "

print(unique(quran$chapter))

##   [1]   1   2   3   4   5   6   7   8   9  10  11  12  13  14  15
16  17  18
##  [19]  19  20  21  22  23  24  25  26  27  28  29  30  31  32  33
34  35  36
##  [37]  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51
52  53  54
##  [55]  55  56  57  58  59  60  61  62  63  64  65  66  67  68  69
70  71  72
##  [73]  73  74  75  76  77  78  79  80  81  82  83  84  85  86  87
88  89  90
##  [91]  91  92  93  94  95  96  97  98  99 100 101 102 103 104 105
```

```
106 107 108
## [109] 109 110 111 112 113 114
```

The plot is exactly is as we expected as increasing in general but have horizontal lines at some points because of the long chapters.

So, based on the mathematical and visual tests, we conclude that the text of Quran analysed in this book, which was downloaded from tanzil.net, has no apparent error in its text regarding verse and chapter indices and ready for further analysis.

These sanity checks are purely based on mathematical blind computations on the text of Quran. Therefore, they also blindly provide the number of chapters as 114 and the number of verses as 6236. Therefore, these sanity checks provides reproducible tests to count the number of chapters and verses of Quran and they confirm that its number of chapters is 114, which will be denoted by '**c**', and number of verses is 6236, which will be denoted by '**v**' for the rest of the book in the R programming codes used. If we include the unnumbered Basmala verses as well, then we get, total number of verses that includes all the numbered verses and all the unnumbered verses (112 Basmalas) together, which is equal to 6236+112=6348 and we denote this number by '**V**' for future reference in the R codes. We will demonstrate how those numbers are part of 19 based coding system in the Chapter 4.1.2.

```
c <-  114
v <- nrow(quran) #6236
V <- v+112       #6348
```

3.1.4 Numbered and Unnumbered Verses of Quran

Regarding its importance for the analysis, I will separately test the numbered verses and the numbered and unnumbered verses and also together as they are two types of the text of Quran. Quran has an extraordinary structure than we used to see in other usual books and in that sense it also stands as unique. There are 114 chapters and they are all numbered from 1 to 114 and ordered deliberately as is in Quran. There are also verses and they are also numbered from 1 to the end of each chapter. For example, the first chapter, also the most famous one, al-Fatiha has chapter number 1 and it has 7 verses and each verses are numbered from 1 to 7. There is no such concept of paragraphs that we used to see in our books but in a sense each sentence or a group of sentences together corresponds to each verse and numbered. This is also very useful when we refer to a specific verse in Quran as we can easily quote two numbers to refer to it precisely. As an example, 19:38 refers to the chapter 19 and verse 38. Some verses are long and some verses are very short.

However, there is another interesting structural situation in the text of Quran. There is a special and repeated verse, Basmala (بسم الله الرحمن الرحيم), which is the first verse of the first chapter, namely 1:1 regarding its formal chapter and verse numbers. The translation of Basmala is “In the name of God, the merciful, the compassionate”. In Quran, this special verse is written before all the chapters except Chapter 9 of Quran and it is recited before start reciting any Quran verse by Muslims. In a sense, it is like a key. This makes Quran as a book consisting of numbered and unnumbered verses. Therefore, in the text analysis of Quran, I will consider two categories that represent the two fundamental structure of it. First one represents the whole Quran, including numbered and unnumbered 6348 verses. Second, represents only the numbered 6236 verses, which means without those repeated unnumbered Basmalas in front of the chapters. Since, these numbered and unnumbered verses are part of Quran, they both might have a role in the 19 based coding system of Quran. I will discuss about this and show some evidences on it in Chapter 4.1.2.

Now, I will generate a second R programming object that keeps only the numbered verses of Quran for further analysis on it. Let’s see first verses of some of the chapters in the main object that keeps the whole Quran.

```
print(quran$text[quran$verse<=2 & quran$chapter==1])

## [1] "الحمد لله رب العالمين"  "بسم الله الرحمن الرحيم"

quran$text[quran$verse<=2 & quran$chapter==2]

## [1] "ذلك الكتاب لا ريب فيه هدى للمتقين"  "بسم الله الرحمن الرحيم الم"

quran$text[quran$verse<=2 & quran$chapter==3]

## [1] "الله لا إله إلا هو الحي القيوم"  "بسم الله الرحمن الرحيم الم"
```

As we see, tanzil.net has themselves included all the Basmalas inside the first verse of each chapter contrary to the written hard copy texts of Quran that Muslims have since the beginning till now. The tanzil.net probably might have done so for computational reasons to simplify the organization of the text. So, in the following, I will generate the second main table by separating those unnumbered Basmalas and get the table that keeps only the numbered verses of Quran.

```
require(data.table, quietly = T)
quran <- data.table(quran)
nQuran <- quran
nQuran$text <- gsub("^بسم الله الرحمن الرحيم ","",quran$text)
nQuran$text[nQuran$verse<=2 & nQuran$chapter==1]
```

```
## [1] "الحمد لله رب العالمين"  "بسم الله الرحمن الرحيم"
```

```
nQuran$text[nQuran$verse<=2 & nQuran$chapter==2]
```

```
## [1] "ذلك الكتاب لا ريب فيه هدى للمتقين"                                    "الم"
```

```
nQuran$text[nQuran$verse<=2 & nQuran$chapter==3]
```

```
## [1] "الله لا إله إلا هو الحي القيوم"                                "الم"
```

```
Basmala <-quran$text[1] #keep Basmala verse for future reference
```

As we see, in this second object, only first chapter has first verse as Basmala and numbered but other chapters do not have it as this table contains only the numbered verses. Also, I assigned the special verse Basmala into the R object "Basmala" for future reference in this book. So this R object, denoted with *nQuran*, represents only the numbered verses of Quran. Let's add one more column that keeps chapter and verse numbers together for easy referencing from the data table that I present below. It is a dynamic table, once can either search or download the analysis ready text for the 6236 numbered verses.

```
require(data.table, quietly = T)
require(DT)
```

```
## Loading required package: DT
```

```
datatable(nQuran,
          caption = 'Table head of the 6236 numbered verses of
Quran.',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel', 'csv')
                        ), rownames= FALSE)
```

```
## PhantomJS not found. You can install it with
webshot::install_phantomjs(). If it is installed, please make sure the
phantomjs executable can be found via the PATH variable.
```

For future reference and analysis of *chapter level text data* of the numbered verses text type, I will also generate another table from this table, which holds the chapter indices and the number of verses per chapter as follows. I will assign this table into the R object *dfVC* for future reference in this book.

```
require(data.table, quietly = T)
require(DT)
```

```
versecomb <- c()
for(j in 1:114){
  i <- which(nQuran$chapter==j)
  versecomb <- c(versecomb, nQuran$verse[i[length(i)] ])
}

dfVC <- data.table(cbind(c(1:114), versecomb))
colnames(dfVC) <- c("Chapter_index","Verse_sum")
datatable(dfVC,
          caption = 'Table: The chapter indices and corresponding sum
of verses of numbered 6236 verses.',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel',
'csv')
                        ),rownames= FALSE)
```

3.1.5 Some text mining and tables of the text

Let's prepare a more comprehensive data table that keeps some further information about the numbers of text of Quran using text mining tools of R. I utilized the tutorial in (Sharaf 2019a) and the R package (Mullen et al. 2018) to get each word and its frequencies, even the frequencies of the letters of it. I used the R programming language but I also used the 'tokenizers' text mining R package (Mullen et al. 2018) to get each word from the text of Quran.

I prefer to keep this book for all readers and thus will not go into details of explaining each lines of the code chunk below. In short, it computes the numbers of words and letters in both types of the text of Quran. I will keep using these R objects in the rest of the book as needed in the coming chapters.

```
require(tokenizers, quietly = T)
#All words in 6236 numbered verses
words <- unlist(tokenize_words(nQuran$text))
w <-  length(words) # should be 77797
cat("Number of words in 6236 numbered verses is ", w)

## Number of words in 6236 numbered verses is  77797

#number of letters in numbered verses
letters <-  sapply(words, nchar)
```

```
l <- sum(letters) #should be 330709
cat("Number of letters in 6236 numbered verses is ", l)

## Number of letters in 6236 numbered verses is  330709

#All words in numbered and unnumbered 6348 verses
Words <- unlist(tokenize_words(quran$text))
W <- length(Words) #should be 78245
cat("Number of words in numbered and unnumbered 6348 verses is ", W)

## Number of words in numbered and unnumbered 6348 verses is  78245

Letters <-  sapply(Words, nchar)
L <- sum(Letters) #should be 332837
cat("Number of letters in numbered and unnumbered 6348 verses is ", L)

## Number of letters in numbered and unnumbered 6348 verses is  332837
```

Now, we obtained the number of words and letters per verse in both types of the text of Quran. Let's add this information into the table of the numbered verses of Quran as follows.

```
vwords<- c()
vletters <- c()
for(i in 1:nrow(nQuran)){
  tmpw <- unlist(tokenize_words(nQuran$text[i]))
  vwords <- c(vwords,length(tmpw))
  vletters <- c(vletters,sum(nchar(tmpw)))
}
nQuran<- cbind(nQuran[,1:3],vwords, vletters,nQuran[,4])
colnames(nQuran)[6] <- "text"

require(data.table)
require(DT)

tmpN <- nQuran
tmpN$CV <- paste(nQuran$chapter,nQuran$verse, sep = ":")


datatable(tmpN,
          caption = 'Table of numbered 6236 verses of Quran',
          extensions = c('Buttons'),
          options = list(pageLength = 5,
                         autoWidth = TRUE,
```

```
                              dom = 'Blfrtip',
                               buttons = c('excel', 'csv')
                            ), rownames= FALSE)

## Warning in instance$preRenderHook(instance): It seems your data is
too big for
## client-side DataTables. You may consider server-side processing:
## https://rstudio.github.io/DT/server.html
```

From this data we can also get the number of **unique** words and its number of letters of Quran a presented in the next chapter. But, before that lets also generate the similar table for the whole Quran text, including unnumbered Basmala verses as follows. As see, we represent the table with *unQuran* R object to be able to use in the rest of the book.

```
unQuran <- c()
for(i in 1:114){
  if(!(i %in% c(1,9))) {
    tmp <- data.frame(1,i,0,4,19,as.character(nQuran$text[1]))
    colnames(tmp) <- colnames(nQuran)
    unQuran <- rbind(unQuran,tmp,
                     nQuran[nQuran$chapter==i,])}else{
                                        unQuran <- rbind(unQuran,
                                        nQuran[nQuran$chapter==i,])
                                        }
}
unQuran$VerseI <- c(1:nrow(unQuran))

tmpUN <- unQuran
tmpUN$CV <- paste(unQuran$chapter,unQuran$verse, sep = ":")


datatable(tmpUN,
          caption = 'Table of all 6348 verses of Quran',
          extensions = c('Buttons'),
          options = list(pageLength = 5,
                         autoWidth = TRUE,
                          dom = 'Blfrtip',
                           buttons = c('excel', 'csv')
                        ), rownames= FALSE)

## Warning in instance$preRenderHook(instance): It seems your data is
too big for
```

```
## client-side DataTables. You may consider server-side processing:
## https://rstudio.github.io/DT/server.html
```

3.1.5.1 The number of unique words in Quran

We had assigned all the word in the text of Quran to R objects *words* and *Words* in the previous sections. They contain each unique word in both types of the text of Quran. Then, it is very easy to compute the number of unique words and generate a table of it as follows.

```
tmp <- table(words)
tmp2 <- table(Words)
identical(names(tmp),names(tmp2)) # TRUE

## [1] TRUE

require(data.table)
uwordsTable<- data.table(uwords = names(tmp),
                         count = as.numeric(tmp),countW =
as.numeric(tmp2),
                         uletters=sapply(names(tmp), nchar) )

u <- nrow(uwordsTable) # u represents the number of uniqiue words
print(paste("The number of UNIQUE words in Quran is ", u,"."))

## [1] "The number of UNIQUE words in Quran is  14870 ."

uwordsTable <- uwordsTable[order(-count)]

datatable(uwordsTable,
          caption = 'Table of unique words of Quran',
          extensions = c('Buttons'),
          options = list(pageLength = 5,
                         autoWidth = TRUE,
                          dom = 'Blfrtip',
                           buttons = c('excel', 'csv')
                         ),
          rownames= FALSE)
```

Figure 3.1: Table

As seen, Table 3.1 is very useful as we can easily access the number of usage (frequency) of any unique word in Quran (including numbered and unnumbered verses) from the frequency column **countW**. For example, we can see from the head of the table that the number of times the word '**Allah**' (or in Arabic 'الله'), which is the primary name of God in

Quran, is used 2265 times in the whole Quran. Similarly, the column named as **count** keeps the frequency of the unique words used in the numbered verses of Quran. The column **uwords** keeps the unique words in the whole Quran. The column **uletters** keeps the number of letters of each of the corresponding unique words. Then, as we see it is easy to compute the number of unique words in Quran from this table alone, which is equal to the table's number of rows.

This table is especially important and useful as there are already many claims that some words appear in Quran that align with their corresponding numbers in nature (such as the number of days). However, this is something, in my opinion mostly appeal to people with Arabic language knowledge. Therefore, I could not test any of such claims available in the literature already but I provided a searchable table in the online version of this book so that interested people can easily search the word of their interest and even test the available claims.

Back to the main point, as we just calculated, the number of unique words in Quran is

$$14870$$

and I assigned it to the object '**u**' in R programming environment to refer to this number later in this book. Since numbered verses and, unnumbered and unnumbered verses together is all the same except the unnumbered Basmala verses, all the unique words and their frequency counts must be the same except for the 4 words of the Basmala verse. I therefore placed the counts of those unique words in the second and third columns for both types of the text separately. As mentioned before, one numbered Basmala verse is available in Quran 1:1 (chapter 1, verse 1) and therefore the number of unique words are the same in both numbered verses and, unnumbered and unnumbered verses together. This means the number of unique words in Quran is always 14870.

3.1.5.2 The number of letters in unique words of Quran

If we count the number of letters in each of the unique words and multiply by its frequency in Table 3.1, we can find the number of letters in unique words of Quran. We can easily calculate this by summing the last column named as *uletters* in the table as follows:

```
U <- sum(uwordsTable$uletters)
print(paste("The number of letters in UNIQUE words
            of Quran is ",U,"."))

## [1] "The number of letters in UNIQUE words\n            of Quran is
80068 ."
```

So, we reproducibly demonstrated that the number of letters in **unique** words of Quran is

. We also denote this number as '**U**' and will use this *R* object name whenever we refer to this number in our analysis for the rest of the book.

3.1.5.3 Table of unique words of the Basmala verse

There is the special unnumbered Basmala verse in the beginning of 113 chapters out of 114 chapters. The first chapter and the first verse is a numbered Basmala verse.
Therefore, only the 4 words of the Basmala has different total number counts regarding the both categories in the table of unique words. Here, I will present those words of Basmala by filtering them from the table of unique words from Table 3.1. This will provide us the frequencies of the words of the Basmala verse in Quran. This will be later used to show one of the evidences of the text of Quran.

```
BasmalaTable <- uwordsTable[count != countW]
BasmalaTable$count <- as.numeric(BasmalaTable$count)
BasmalaTable$countW <- as.numeric(BasmalaTable$countW)
BasmalaTable$uletters <- as.numeric(BasmalaTable$uletters)
knitr::kable(BasmalaTable, booktabs = TRUE,
  caption = 'Table head of the unique words of Basmala verse in
Quran.')
```

Table 3.1: Table head of the unique words of Basmala verse in Quran.

uwords	count	countW	uletters
الله	2153	2265	4
الرحمن	45	157	6
الرحيم	34	146	6
بسم	3	115	3

3.1.5.4 Number of words and letters in Quran

We calculated the number of words and letters in Quran before but let's summarize them here as they are important for the evidences.

We have already computed the number of all the words and letters in Quran previously. The number of words in the numbered verses of Quran, which is denoted as lowercase **w** for future references in this book. Second, the number of words in Quran (means, all Quran,

including numbered and unnumbered verses.), which is denoted as uppercase **W** for future references.

In summary, we computed numbers in three different categories about the words of Quran from lowest to highest, which are denoted as u (14870), w (77797) and W (78245).

There are two main and one derived numbers of letters in Quran to compute. The derived number is the number of letters in all the unique words of Quran that was previously derived from the unique words of Quran. We had computed this number before as 80068 in Chapter 3.1.5.2 and denote it as **U** for future reference in the book.

The number of letters in the **numbered verses** of Quran is denoted by **l**, and the number of letters in the whole Quran (including numbered and unnumbered verses) is denoted by **L**. The number of letters in the numbered verses of Quran is computed as 330709 and it will be denoted as the lowercase letter **l** for the rest of the book to refer it in text and in R programming environment. Also, the number of letters in whole Quran is computed as 332837 and it will be denoted as the uppercase letter **L** for the rest of the book.

3.1.6 All Numbers in Quran: Chapter, Verse, Word and Letter.

If you search it on internet, you might come across different numbers regarding the number of verses, words and letters of Quran. The only common one you can see is the number of chapters that is 114. If you ask 100 randomly selected Muslims about the number of words and letters of Quran, almost none of them can answer it. If you ask them for the number of verses, then most of them again cannot answer it, a very small portion of them might give varying numbers for it. The direct reason for that is, there is no well known and commonly accepted numbers for the number words and letters of Quran. There are also multiple version of numbers circulating around for the number of verses as it is not mentioned correctly much enough and there are also various incorrect numbers mentioned in some old religious books. Previously, in Chapter 3.1.5, I provided a reproducible open source code that allows easily reproduce and generate all the 9 different descriptive numbers about the text of Quran. In fact, if Quran is unchanged and intact, then there can only be unique numbers for various attributes of its text and all Muslims should quote those same numbers if needed. By summarizing all the 9 numbers here within a table, this sub-section will serve as a universal reproducible reference and will clarify the confusion on all of these numbers once and for all, as the numbers generated here are reproducible via testable R codes that can be run by anyone who wishes to test them. On the other hand, the number of words and letters might still vary as in some text the writing style might be different. In anyways, the number of verses and chapters should be the same.

3.1.6.1 The 7 main numbers of the text of Quran

From lowest to highest, the **main** numbers related to the text of Quran are as follows:

1. **The number of chapters in Quran is** 114 (denoted as **c**). See Chapter 3.1.3 for the proof.
2. **The number of verses in Quran is** 6236 (denoted as **v**). See Chapter 3.1.3 for the proof.
3. **The number of verses in Quran by including unnumbered Basmala verses is** 6348 (denoted as **V**). We just add the 112 unnumbered Basmala verses upon the number of the numbered verses, **v**.
4. **The number of words in numbered verses of Quran is** 77797 (denoted as **w**). See Chapter 3.1.5.4 for the proof.
5. **The number of words in Quran (including unnumbered verses) is** 78245 (denoted as **W**). See Chapter 3.1.5.4 for the proof.
6. **The number of letters in numbered verses of Quran is** 330709 (denoted as **l**). See Chapter 3.1.5.4 for the proof.
7. **The number of letters in Quran (including unnumbered verses) is** 332837 (denoted as **L**). See Chapter 3.1.5.4 for the proof.

```
dfnums <- data.frame(c,v,V,w,W,l,L)
# Table:
knitr::kable(dfnums, booktabs = TRUE,
  caption = 'Table of all the main descriptive numbers of the text of
Quran.')
```

Table 3.2: Table of all the main descriptive numbers of the text of Quran.

c	v	V	w	W	l	L
114	6236	6348	77797	78245	330709	332837

3.1.6.2 The unique descriptive numbers of the text of Quran

The **unique** descriptive numbers related to the text of Quran are as follows:

1. **The number of unique words in Quran is** 14870 (denoted as **u**). See Chapter 3.1.5.1 for the proof.
2. **The number of letters in unique words in Quran is** 80068 (denoted as **U**). See Chapter 3.1.5.2 for the proof.

3.1.7 Could these numbers be counted and designed by the people?

In chapters Chapter 4.1.2 and other chapter of evidence codes, I presented reproducible evidences for the 19 based coding system in the text of Quran using all the 9 descriptive numbers of the text of Quran. However, the next question might be whether those evidences can be designed by a human or a group of people around 1387 years ago or was it beyond the ability of mankind at that time? I preferred to discuss on this matter here before presenting the evidences to better comprehend the level of difficulty of designing such coded numbers in the text.

To be able to design the codings of the evidences, such as the ones in Chapter 4.1.2, Chapter 5, these are some of the necessities:

- Manually count the number of chapters (c): This is doable and it was already known from the beginning.
- Manually count the number of verses in Quran (v): Given that there is limitations on the paper and pen and the very large number of verses, this is a bit difficult for one person but it is still doable by a group of about 20 people, including unbiased double checks.
- Manually count the number of unique words in Quran (u): There are 14870 unique words and 77797 words used in Quran (without repeated Basmala verses). Thus, it is fair to say, practically it is impossible to count the number of unique words manually in Quran.

This is very difficult to achieve manually even with a group of 1000 people. Because, even if they work on chapters separately, they first need to find each unique words in each chapter and then they need to compare the words among the 114 chapters and merge them together into a single list without making a single mistake. If they could work directly on all the words of the text, then they have to consider all the words of Quran, whose number was previously denoted as **w** that is equal to 77797 (excluding the repeated unnumbered Basmala verses). Then the total number of words pair comparisons to be performed can be found from the upper and lower triangles of the square matrix of this number 77797 as (77797 * 77796) = 6052295412. Roughly speaking, more than 6 billion word pairs comparisons must be made between the words of the text of Quran to be able to decide the number of unique words of Quran. This is apparently impractical and thus impossible to perform manually by people. Additionally, they could only use papers (mostly on skin and with pen and they are not in abundance of those).

Anyway, let's say in a very very long time, possibly many years, a very very large group of people might, in theory, manually perform this task but, still, they cannot be sure if they did

it correct unless the manual process is repeated independently at least twice by another two independent groups of around 1000 people each. So, to get this number right needs quite a big dedication by a very large number of people. In total, it might need around 3000 people and maybe a year of dedication to this task. However, in a small sized town, could they find that much people who has time and ability and papers and pens and motivation to perform this difficult task. Even if there is, would that much people have the same motivation to perform it right. What would be the motivating purpose of what they are doing at that time? Even if some of the 3000 people are made motivated by the explanation of the benefit of a coding system in a text, would all of them be made fully motivated. If not, some of them might not have taken it fully seriously what they are doing. And there is considerable chance that one of the three independent groups comes up with a different number than 14870. In that case, they have to find another independent group of 1000 people to repeat the same process or may be another independent group of 1000 people too to make sure the one differently calculated number does not leave any doubt in their minds. As we see, this does not seem to be a practical task to achieve 1387 years ago. Another very important point to mention is that, right or wrong, there is no historical record at all that mentions such a task or anything similar was performed or even discussed by the people of that time or by the Prophet Muhammad. In fact, in total, there are millions of detailed, wrong or right, historical narratives, called *hadiths* narrated from the time of Prophet Muhammad but there is nothing mentioned in regard to the necessities I just discussed on getting this particular number of Quran. I keep saying 'wrong or right' when I mentioned the historical records, *hadiths*, because a very small portion (around 7000) of them are 'considered or accepted' by Muslim Scholars to be truthful and even more, they do not agree with each other in many of them. However, to emphasize my point, I assumed all the historical records of narrated hadiths, which are known to be more than a million, and state that no such situation or anything similar are mentioned in them. Therefore, considering impracticality of manually getting the number of unique words right as 14870 and there is no historical record at all among more than a million of hadiths nor any other historical records afterwards, I rationally conclude that this number was never counted by Prophet Muhammad nor his companions at that time and thus cannot be designed by the people of that time when Quran was written down first. For extremely skeptical people, I also want mention that there is no historical record at all in literature for the 'unique number of words' in Quran until the 21st century. This brings us to two logical explanations for the coding evidences you will witness: It is either might be designed by God as implicitly mentioned in Quran "74:30. Over it is Nineteen" or it might be by a mere random chance, which is highly unlikely as we also calculated their probabilities in those chapters. In my rational opinion, those evidences suggest that they should be designed by a supernatural power in that time and the only logical explanation is that it might be the design of God. I prefer to use cautious words as only God knows the absolute truth and this is only my best educated conclusion on what I observe. For me, this design is no much different than the

fine tune that we observe all over the universe and in particular on earth that we have its knowledge in great detail, but no scientific explanation at all **for the source** of the force that causes these design of the universe. Since the text of Quran has many other 19 based codings too, as you will see in the rest of this book, my conclusion is that observing all those independent rule based codings in an old book does not seem to happen by chance but a supernatural power. Furthermore, these evidences not only suggest that the text of Quran was miraculously designed but also protected for around last 1387 years and intact as it was in the beginning, just as we might expect from a divine book that speaks to our time. No matter you believe in God or not, if you cannot find a substantial error in these reproducible evidences and in the analysis of the text, then rationally, you might have to accept anyway this 'reproducible miracle' in the text of Quran after you witness evidences.

3.2 Rules & Probabilities

The rules of how to build the codes are extremely important to define for any book that claims to present a similar coding system in a book. Because, only then we can determine the boundaries of the claimed system and have the full set of possible code trials and so can measure the probability of the system presented. Otherwise, it is impossible to measure the probability of any such code system claim and any claimed probability is just considered as invalid and thus nonsense. Rules are also vital to better understand whether the claimed system has meaningful patterns, are they natural or stretched and whether there would be better more sensible alternatives or not. In this book, for me the hardest part was to define the rules of the system I observed. Therefore, although, I did my best to define, I might not have perfectly define what I observed although I think I did try my best.

In this chapter, I will describe some of the general rules on how to select text numbers and how to test them, and also about computing the probabilities of observing the successful tests on these numbers by chance alone. I made this as a separate chapter as it contains general information about the rules heavily referred and used in the chapters dedicated to the evidences. However, a more detailed rules for various code patterns can be seen in their respected chapters. For example, in Chapter 4 where the Main 19 System of this book was presented, more detailed descriptions of the rules to construct the 19 System codes presented in this book are given.

3.2.1 Rules

I will describe here some of the general rules that will be applied to test on any number of interest. Basically, how a number is obtained and which tests applied to consider whether the number of interest is under the 19 based coding system in Quran or not. These may not be necessarily the complete universal coding rules of the text of Quran but the ones I observed from the data and my analysis and followed them to test my hypothesis on any

new number with respect to those rules. This means, if any error of flaws exist in the analysis, it would be my own unintentional mistake and not about the text of Quran itself.

Setting rules in the beginning is important, otherwise, without establishing rules that limits the boundaries of the coding numbers set to be tested, one cannot really claim a 19 based coding system on the text of Quran.

1. The first and most important **universal rule** is that the numbers to be tested must be obtained in a meaningful way. This is the most general principal for all the rules and approaches used in this book. Also, the coding patterns must be natural, intuitive, meaningful, simple and and as general as possible.

2. Another **universal rule** for all the relevant evidences is that the concatenations operation is always done in the natural order. Briefly, the natural numbers are concatenated in natural order. The natural order of the natural numbers of the text of Quran is from chapters, verses, words and letters. Also, the natural order of the numbers is from first number to the last and concatenated from left to right as usual. The only exception is the re-writing coding pattern, where we attempt to re-write the text of Quran with its natural representation numbers and thus each verse is replaced in its own place in the text, which appears from right to lfet following the Arabic writing style. This exception is explained in more detail in its corresponding coding pattern.

3. We have two categories regarding the structure of the text of Quran. As mentioned in the before, we have numbered verses and also unnumbered repetitive Basmala verses in the beginning of 112 chapters out of 114 chapters. I hypothesized that both represents the full text of Quran and therefore all the relevant coding patterns must be tested over their corresponding numbers from both text types regarding the applicability of a coding pattern. Thus, as a universal rule, any coding pattern is tested in both of the text types of the text of Quran. This means, we need to test the coding numbers from all the 6348 verses and also from numbered 6236 verses. Namely, we have to take into account all the possible trials that can come up from these categories. For example, if a single coding pattern is applicable to one of the categories alone, then we must test it for the other category too and take this trial into account in the probability calculations of the overall system.

4. The primary goal of this book is to test the intactness of the full text of Quran. The evidences that test this main goal, testing the *full text*, must use either the 4 natural numbers of the text from chapters, verses, words and letters or the 3 natural numbers from chapters, verses, words. The former might indicate intactness up to the letters of the used text, whereas the latter might indicate intactness up to the words of the text of Quran. Both approaches can provide evidences for the intactness

of the full text of Quran with its content information but at different levels if the text content. This rule is applied while testing the intactness of the *full text* of Quran.

5. There are three **levels** of the representation numbers of the text of Quran. We need to test coding patterns in these levels if suitable for the tested coding pattern.

- First level is the total level, which shows the total number of chapters, verses, words and letters.
- Second level is at the chapter level sums of the numbers. For example, Chapter 1 has 7 verses, 29 words and 143 letters.
- Third level is at the verse level sums of the numbers. For example, Chapter 1 Verse 1 has 4 words and 19 letters.

6. The main and thus default testing operation on a coding number to be tested is to test whether it is multiple of 19 or not. As a general rule, if it is multiple of 19 then we designate it as under 19 based coding.

7. The followings are the summary of the primary coding patterns used in this book to test the intactness of the full text of Quran. Details can be found within the sections of the evidences. I summarized them here to be able to overview them together:

- **The default coding pattern:** The natural numbers are concatenated in the natural order.

- **The pairing coding pattern:** In this coding pattern, we pair two corresponding numbers. For example, between the numbers of the two text types of Quran. Namely, between the numbers of all the 6348 verses and the 6236 numbered verses.

+**The coding patterns based on the key coding patterns:** I observed some simple key coding patterns on obvious but most important small parts of the text and observed that the same key coding patterns also exist in the full text of Quran too. I considered the system with the codes based on key coding pattern as the *main 19 System* in this book. The detailed rules and description can be seen in Chapter 4. For example, I observed the most important key coding patterns based system in *the first chapter, Al-Fatihah*. The first chapter of Quran is named Al-Fatihah in Arabic and can be translated as The Opening or The Opener. It is considered as the most important chapter in Quran and memorized by all Muslims as it is deemed to be required to recite in the daily prayers. It is a short chapter with 7 verses. I realized that there are many independent 19 based codings available in Al-Fatihah. I then hypothesized that God might have left those special coding patterns of Al-Fatihah as clues, as The Opener, to discover the 19 based design in the full text of Quran, which turned out to be true. Therefore, this particular rule instructs that all 19 based codings we observe in the

first chapter, Al-Fatihah, are considered as key coding patterns and we apply them to the full text of Quran. The detailed rules of this main 19 System can be seen in Chapter 4.

- **The rewriting coding pattern:** In this coding pattern, we attempt to re-write the full text of Quran with its ow natural numbers. This can only be done in two levels of numbers of the text of Quran. Namely, chapter and verse levels natural numbers. Since we are attempting to re-write the text with its natural numbers, we replace the text parts with their corresponding numbers. Because the Arabic is written from right to left, the numbers replaced in their same positions in the text as well. Therefore, concatenation of the numbers from right to left is only used in the evidences of the re-writing coding pattern. Also, just like we write, we must also have the letter information when we rewrite the content. So, letters information must be available for the rewriting coding pattern if we were to testing the content based on rewriting coding pattern. This and associated rules was also described in more detail in Chapter 4.

- **Special codings patterns:** There are also some special coding patterns other than the above four and their details are described in their own sections. Universal rules applied on all the evidences of this book.

8. **Levels of the text representation numbers:** There are three main levels of the numbers that can be derived from the full text of Quran. Each level provides a different level of resolution of the design and thus intactness of the full text of Quran. First level is the total level, where sum of the total numbers of units in each components of the full text. Namely, each of the total numbers of chapters, verses, words and letters as explained in Chapter 3.1. The second level is the chapter level numbers, where total numbers of verses, words and letters counted for each chapter. The third level is the verse level numbers, where total numbers of words and letters are counted for each verse of each chapter. As a general rule, any **relevant** coding pattern must be tested over all levels of the numbers that can be derived from each of those three main levels of the full text of Quran. Also, for a coding to be designated as evidence, it must exist in at least two of these levels if this coding pattern considered independently. Special codes, like the *key coding pattern* based evidences have their own rules and not bound by this particular rule, which is for more general codes.

9. All the numbers that might represent the full text of Quran with content information needs to be used if relevant to a coding pattern. Therefore, we have two cases with and without letters information, regarding the categories of the numbers. The first case is as follows: the numbers of chapters, verses, words and letters. The second case is without letters information as follows: the numbers of chapters, verses,

words. Note that both categories contain content information of the full text of Quran along with the structural chapter and verse information of the full text. Moreover, we have another two categories regarding the text type of Quran. As mentioned before, we have numbered 6236 verses and also unnumbered repetitive Basmala verses in the beginning of 112 chapters out of 114 chapters, which make 6348 total verses. I hypothesized that both represents the full text of Quran and therefore all the relevant coding patterns must be tested over the numbers from both text types regarding the applicability of a coding pattern. This means, we have to take into account all the possible trials that can come up from these categories.

These rules reduces the number of tests dramatically and allow us to test a small set of meaningful numbers to test for the general 19 based system. The codings designated as evidences must obey these rules. Only these evidences will be counted to calculate the probability of the general system presented in this book. Any other potential coding examples will be presented as strong or weak **facts** only and they are not considered under the 19 based system presented in this book. I will present them as facts because some of them still looks interesting and also in the future someone else might consider them as evidence if additional information is realized with them. While I was writing this book, I had designated some codings as facts that later turned out to be evidences as I discovered additional information around them.

We have to set rules that define and so limit the ways we can combine multiple descriptive numbers. Otherwise, the potential numbers of combinations becomes too large to follow for readers and also would be difficult to define in a system of rules. Therefore, here I aim to set only the most meaningful rules, which are simple to understand and follow along with the evidences. I observed the combinations of the coding numbers and inferred these meaningful rules. I decided to make sure that the combinations are meaningful and did not include some other codes that were also multiple of 19 but not fall into the defined system of rules.

Here are the other general information related to the rules for combining multiple descriptive numbers:

Combining the main descriptive numbers and the general verse index::

The descriptive numbers can only be combined in the natural order. Each of the two text types has 4 different main descriptors, which are chapter, verse, word and letter numbers in order. That order is the natural order of **concatenating** these numbers and I use this order as a general rule in combining these numbers. This means for instance, I can never concatenate first, letters and then words in combining the multiple descriptive numbers. I also generated an independent verse index (denoted by *VerseI* in text data tables) from 1 to 6236 or from 1 to 6348 for both of the text types. This especially helps to correctly refer to

the order of the unnumbered Basmalas in calculations in some codings. In a special use case of these numbers is in the **the pairing coding pattern:**. Because, while pairing two corresponding categories, the numbered and unnumbered special verse indexes should also pair. However, since there is no number to represent unnumbered Basmala verses indexes, while pairing the correspondence on this special verse indexes might have missing information. Therefore, as a special rule to the codings with **the pairing coding pattern:**, we always use the general verse indexes instead of the special verse indexes in such coding patterns as there should be a correspondence in pairing.

3.2.1.1 Rule about obtaining the numbers from text

All the descriptive numbers must be obtained blindly from the text of Quran. One cannot change any of these numbers for any reason, which will be used to test 19 based coding system of the text of Quran. Here, the word *blindly* refers to the approach that we do not look at any content of the verses at all and just count with computer whatever we have in the text of the verses of Quran that represents the Quran. Please read Chapter 3.1 to read further details on how I got the final text document of Quran. However, I again declare that I did not make any single change to the text of Quran and it represents the same Quran as any traditional copy you can access online for example from tanzil.net or quran.com. Although I mentioned this very important point many times before, it is essential to include it in the rules again. Since I used computer friendly version of the text from tanzil.net/download, all the characters are counted as letters. A single blank character is used to separate words.

3.2.2 Probabilities

I will discuss about the probability that I use to compute the probability of observing the successful tests that I provide in this book. The probability of a number being divisible by a particular number *n* is 1/n. For scientific explanations, see wikipedia.org/wiki/Natural_density. Therefore, the probability of a number being **divisible by 19** or multiple of 19 is 1/19 or in other words 5.26%. As a reference, I will refer to this particular probability as Probability P1 in the rest of the book in the R codes.

```
P1 <- 1/19
cat(P1)

## 0.05263158
```

3.2.2.1 About the 19 system presented in this book

God knows best and this is only my inference based on my analysis over the text data of Quran. The 19 based coding system I described here might or might not fully represent the

real 19 based coding and only God knows best. However, the presented system is based on my personal observations along with their codes so that anyone who has doubt can also easily test, reproduce and witnesses to the truth by heart. In the end, we observe a coding system in the text of Quran and in this book I introduce this system that I discovered in the text of Quran in 2019. So, in conclusion, when I say '19 based coding system of the text of Quran', this means the 19 based coding system of the text of Quran based on my reproducible tested and validated observations and inference. Therefore, feel free to investigate more on this subject and see if you can find new unexplored parts of the system in Quran.

The most important point of the 19 based coding system presented in this book is that, I do not change nor touch any text data, not even a single letter, of Quran that Muslims use. This point is important to repeatedly emphasize, as there is an older acclaimed 19 system claim that was 'made up' by modifying some parts of Quran (by R. Khalifa and his followers) and therefore almost all Muslims who know about the older claim have prejudices and put a distance between themselves and 19 based coding system claims about the text of Quran.

Back to the main topic, by default we apply the divisibility test and it has the probability 1/19 to have success.I will use Binomial test to approximately calculate the probability of the overall system. Also, note that most of the evidences are dependent to each other and the expected exact probability would be lower.

3.2.3 Tables of the numbers to be used

The followings are the two tables that show the total numbers of each category of the text per verse in all and also the numbered verses. I will use these numbers of both category in the evidences.

```
knitr::kable(head(unQuran), booktabs = TRUE,
  caption = 'Table head of all verses of Quran.')
```

Table 3.3: Table head of all verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم

```
knitr::kable(head(nQuran), booktabs = TRUE,
  caption = 'Table head of numbered verses of Quran.')
```

Table 3.3: Table head of numbered verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم

I already provided the full dynamic tables for the verse level text data in Chapter 3.1.5. I presented the head parts of them here to remind the content of the verse level data.

The followings are the two tables that show the total numbers of each category of the text per chapter in the numbered verses. Namely, they are the chapter level data data tables.

```
require(data.table)
nQuran <- data.table(nQuran)
cwords <- c()
cletters<-c()
for(i in 1:114){
  cwords <- c(cwords,sum(nQuran[chapter==i]$vwords))
  cletters <- c(cletters,sum(nQuran[chapter==i]$vletters))
}
dfVCwl <- cbind(dfVC[,c(1:2)], cwords, cletters)
# Let's print this table
require(DT)

datatable(dfVCwl,
          caption = 'Per chapter total numbers of each category in the
numbered 6236 verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5,
                         autoWidth = TRUE,
                         dom = 'Blfrtip',
                         buttons = c('excel')
          ),
          rownames= FALSE)
```

Similarly, we can get a table that also includes the unnumbered Basmala verses into the above table. We need to be careful about the numbered Basmala of the first verse of the first chapter and the no Basmala situation of Chapter 9.

```
cWords <- cwords + nQuran$vwords[1]
cLetters<-cletters +  nQuran$vletters[1]
cWords[1] <- cWords[1]-nQuran$vwords[1]
cLetters[1] <- cLetters[1]-nQuran$vletters[1]
cWords[9] <- cWords[9]-nQuran$vwords[1]
cLetters[9] <- cLetters[9]-nQuran$vletters[1]

#add the one Basmala per chapter verse into the verse counts
dfVCWL <-cbind(dfVC[,c(1:2)],cWords, cLetters )
dfVCWL$Verse_sum <- dfVCWL$Verse_sum+1
dfVCWL$Verse_sum[1] <- dfVCWL$Verse_sum[1]-1
```

```
dfVCWL$Verse_sum[9] <- dfVCWL$Verse_sum[9]-1
# Let's print this table
datatable(dfVCWL,
          caption = 'Per chapter total numbers of each category in all
6348 verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5,
                         autoWidth = TRUE,
                         dom = 'Blfrtip',
                         buttons = c('excel')
          ),
          rownames= FALSE)
```

3.2.4 Some R Functions

Some R functions to be used in the book is defined here. It is technical and you might just skip it.

This is the function to compute the sum of the digits of any integer number.

```
digitsum <- function(tmp_){
  tmp_ <- unlist(strsplit(as.character(tmp_), split=""))
  tmp_<- sum(as.numeric(tmp_))
  return(tmp_)
}

#Example
cat(digitsum("1387"))

## 19
```

Some necessary R libraries:

```
library(gmp, quietly = T)

##
## Attaching package: 'gmp'

## The following objects are masked from 'package:base':
##
##     %*%, apply, crossprod, matrix, tcrossprod

library(data.table, quietly = T)
```

3.2.5 Abjad numbers and functions to be used later

This book is mostly based on natural numbers of the text but not with the Abjad numbers (means Gematrical numbers) but I still have some several interesting Abjad based codes, especially in the end the book. Therefore, below is about the introduction of the used Abjad numbers and functions, which will be used in those abjad several based codes.

The Abjad numbers, are a decimal alphabetic numeral system, in which the 28 letters of the Arabic alphabet are assigned numerical values and it is a very old tradition in Arabic language. I quote this information and each letter and their corresponding Abjad numbers from en.wikipedia.org/wiki/Abjad_numerals. It is, in nature, similar to Roman numbers. As the source of Abjad numbers is not Quran and there is no information about it in Quran, I personally am reluctant to pursue a deep textual analysis using Abjad numbers in regard to 19 based coding system of the text of Quran. However, since there were early attempts and some interesting Abjad number based coding examples available on Basmala verse, I wanted test with it anyway for exploratory analysis purpose. Because, if the historical Abjad numbers that we know is correct and if there is also coding with the Abjad numbers then we might have a utility to go into the furthest resolution in the text of Quran. In the table below, I present the Arabic letters exist in the text I used and the corresponding Abjad numbers I used. It was not reviewed by an expert. If any of the numbers in the below table are incorrect, then ignore all the Abjad based codes I presented in this book and assume that they were observed by chance. In such a case, those codes would at least serve as negative control, namely examples of random codes. In short, be caution about the Abjad numeral based codes in this book. They are very few and are mainly tested for exploratory analysis. The R codes I presented to generate those codes might also help for future research studies. Let's first see the Abjad numbers below:

```
suppressWarnings(require(tokenizers))
suppressWarnings(require(stringr))

## Loading required package: stringr

##
## Attaching package: 'stringr'

## The following object is masked _by_ '.GlobalEnv':
##
##     words

suppressWarnings(require(data.table))
suppressWarnings(require(gmp))
#See github.com/quran2019/Quran19/blob/master/abjads.Rda
```

```
load("abjads2.Rdata") # get this R object from the above github url.
dfAbjads <- data.table(cbind(abjadL, abjadN2))
datatable(dfAbjads,
          caption = 'Abjad numbers for each unique letter character in
Quran',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel', 'csv')
                       ), rownames= FALSE)
```

The following R function 'AbjadSeqofaWord' generates the sequence of Abjad numbers for an input word. The following function 'AbjadSeqofaWordSumValue' returns abjad value of each word of the verse that is input to the function.

```
###
AbjadSeqofaWord <- function(word, abjadL_=abjadL,
                            abjadN_=abjadN2, rmHamza = T) {
  word <- unlist(str_split(word, ""))

  # Optionally removes Hamza ("ء")
  if (rmHamza) {
    word <- word[word != "ء"]
  }

  i <- match(word, abjadL_)
  tmp <- abjadN_[i]

  return(tmp)
}
###
AbjadSeqofaWordSumValue <- function(xverse, abjadL_=abjadL,
                                    abjadN_=abjadN2, rmHamza_=T){
  # Usage: A verse is input. Abjad numbers of words per verse is
calculated by summing Abjad numbers of each letter in a word.
  # AbjadSeqofaWordSumValue(unQuran$text[1])
  # Basmala verse example output:: "102" "66"  "329" "289"
  tmp <-as.character(xverse)
  tmp <- unlist(tokenize_words(tmp))
  for(i1 in 1:length(tmp)){
    tmp[i1] <-sum(AbjadSeqofaWord(tmp[i1],abjadL_,
                                  abjadN_, rmHamza = rmHamza_))
```

```
  }
  return(tmp)
}
###
AbjadSeqofwordsperVerse <- function(xverse, rev_=TRUE, rmHamza_ = T,
                                    abjadL_=abjadL, abjadN_=abjadN2){
  #usage: Abjad numbers are replaced with each letter in a verse in
selected order.
  #AbjadSeqofwordsperVerse(unQuran$text[1]) # Basmala
  #Basmala verse example output:
  #"40602"       "530301"      "50408200301" "40108200301"
  #use rev function to have them in Arabic order.
  tmp <-as.character(xverse)
  tmp <- unlist(tokenize_words(tmp))
  for(i1 in 1:length(tmp)){
    if(rev_==TRUE){
      tmp2<- rev(AbjadSeqofaWord(tmp[i1],abjadL_,
                                 abjadN_, rmHamza = rmHamza_)) #rev
for Arabic
    }else{ tmp2<- AbjadSeqofaWord(tmp[i1],abjadL_, abjadN_, rmHamza =
rmHamza_) }
    tmp[i1] <-paste0(tmp2,collapse = "")
  }
  return(tmp)
}

###
```

3.2.6 Counters are initialized for probability calculations

Lastly, before starting presenting the 19 based codings, I will initialize two global counters here. I will use them to count how many successes and how many trials in total we observed in this book. As I present codes, I will add each success and total trial number of the tested codes to the global counter and in the end of the book we will use them to approximately calculate the probability of observing the overall system event.

```
global_tested_nums <- 0
global_success_nums <- 0
```

I will also add an additional global counter to count the number of independent trial groups. Because we will observe different related groups of 19 based system and when we look at the overall probability of events, we might use this number to be able to perform

multiple testing correction to correct the overall probability considering this. This operation only makes sense for the readers with statistical knowledge and others do not need to worry about it. Basically, it will help correcting the overall probability and make it more conservative and reliable.

```
global_tested_groups_nums <- 0
```

I also initialize the following special counters to use them in the calculation of the probability of all the even and odd coding patterns based evidences separately.

```
#Even and odd coding counters initialized
evenodd_tested_nums <- 0
evenodd_success_nums <- 0
```

To calculate the probability of all the evidences of key coding patterns and Al-Fatiha based coding patterns of Chapter 4.1.2 separately, I also initialize the following special counters to count all the trials and successes to calculate the probability of both Al-Fatiha based evidences and also global probability of this book in the end.

```
# Al-Fatiha based coding counters initialized
alFatihah_tested_nums <- 0
alFatihah_success_nums <- 0
# Counters for all the key coding patterns initialized
key_codings_tested_nums <- 0
key_codings_success_nums <- 0
```

4 Key Coding Patterns based 19 System of the Full Text of Quran

The coding evidences that will be presented in this chapter are based on **the key coding patterns**. I hypothesized that God might have left some easily testable key coding patterns into the basic but most important parts of the full text of Quran so that we can easily observe and use them as key coding patterns to open up the 19 System of the full text of Quran. By applying the key coding patterns over the full text of Quran, we can easily discover the parts of the 19 System of the full text of Quran, which are based on the key coding patterns. I named them as *key coding patterns* as it reminds me leaving a key around the door of a house so that the person who are supposed to enter the house, but should not be directly communicated, can herself have a look around find the key easily and use it to enter the house. Quran is a message and if God might have placed a 19 based coding system over the message so that we, the receivers, have a tool to scientifically test whether the message is distorted or not by observing an undistorted message coding system over it, similar to what we do in modern communication systems. If that is the case, then God might

also have left some key simple codings that can easily catch our eye, most likely, at the entrance of the text or from a quick overall look to the full text so that we can easily test them and discover the key coding patterns and use them to discover the evidence codes over the full text of Quran. I have made hypotheses with such sensible approach in mind and discovered the 19 System of the full text of Quran based on the **key coding patterns**, which I present the in this main chapter, Chapter 4.

All the key coding pattern based evidences are important part of the system but I refer **the Main 19 System** part of this book as the codes based on key coding pattern based evidences but without letters information as this makes theme less prone writing styles of different texts and more universal.

How to apply key coding patterns:

If the found key coding pattern, is based on chapter information, then it is applied to chapter level data of the text. If it is clear, which text type (6348 or 6236) the key coding pattern is observed, then it is applied to that particular text type. If the key coding pattern is based on a verse bu the verse is clearly mentioning chapter (sure) in its meaning, we again apply the key coding pattern to chapter level data. An example of this case if the verse 10:38 ('… Then produce a *sura* like it …').

If the key coding pattern is based on a verse (not mentioning chapter), then it is applied to verse level data of Quran using both text types (6348 and 6236). If the text type of the key coding pattern is clear, then we apply to the same text type (6348 or 6236).

Also, the follow up even odd coding trials of the key coding based evidence codes must be tested on the same text type (6348 or 6236).

Places to look at the key coding patterns:

1. (First Chapter, Al-Fatiha)

The first place to look for the key coding patterns is the first and the most famous chapter of Quran, which is Al-Fatiha. The chapter Al-Fatiha is a 7 verses short chapter and it is memorized almost by all Muslims as it is considered that it needs to be read in every daily obligatory prayers, which is performed 5 times a day. Al-Fatiha means "The Opener" or "The Opening" and with that meaning it perfectly align with my hypothesis that it is the main place to look for the **key coding patterns**. Also, since, it is an independent chapter, we can observe codings in chapter level text data and also verse level text separately and look for chapter and verse level key coding patterns in these two different levels of the text. So, it is perfect and most obvious place for the **key coding patterns** to be placed by the sender and to be looked for by the receiver over the full text of Quran. In my humble opinion, it is unique and unrivaled in that respect and the most obvious place to look for the key coding

patterns. Therefore, the first and the main place to be looked at for the key coding patterns is over the first chapter of the full text of Quran, Al-Fatiha. Since we can observe the chapter and verse information in this special chapter, Al-Fatiha, the key coding patterns observed in chapter level data of Al-Fatiha will be tested on the chapter level data of the full text of Quran. Also, the key coding patterns observed in verse level data of Al-Fatiha will be tested on the verse level data of the full text of Quran.

2. (First Verse, Basmala)

I considered the second possible place for the **key coding patterns** to be looked at is the special and the unique verse, Basmala. Again, it is unique because, first of all, it is the first verse of Quran. It aligns with my sensible hypothesis to look at the entrance of the home or structure anology and in this case it is the text of Quran. Secondly, this special verse is repeated in the beginning of the 113 chapters of Quran but does not appear at the beginning of one chapter, Chapter 19. However, the Basmala verse also appears within one of the chapters and repeated 114 times in total and this suggests an additional and apparent 19 based association. There are 114 chapters and 114 Basmala verse observed in the full text of Quran and 114 is multiple of 19 as 16x6 =114. Moreover, the Basmala verse has this apparent and obvious 19 related natural numbers. It has indexes chapter 1 and verse 1 and has 4 words. When concatenated, we observe 114 again, which is also the total number of Basmala verses in the full text of Quran. Moreover, the Basmala verse has 19 letters and it demonstrates a clear 19 based association and stands as a clear place to look for the **key coding patterns** for the full text of Quran. Since, this is a special and unique verse and also appears at the beginning of all chapters, one of them is indexed but the rest are not indexed, I will test the key coding patterns observed in the Basmala verse, both in verse and also chapter level data of the full text of Quran. Appearance of Basmala before the starting of all chapters except one, suggest its strong relation with chapters and thus the chapter level data trials should be included. Also, as a general rule, in the places to look for key coding patterns, if we do not have chance to observe both chapter and verse level data separately then we also do not separate the chapter or verse level data while trying the relevant coding patterns in the full text of Quran. So, in short the key coding patterns from Basmala verse will be tested both in chapter and verse level data of the full text of Quran.

3. (Verse 83:20)

This special verse 83:20 directly and independently states that the book (Quran) is numbered as see in the following:

> 83:20 A numbered book it is. (Quran, Y.N Öztürk, kuranmeali.com)

I translated this from Turkish to English from the Turkish translation of Y.N Öztürk as traditional English translations seem to be givingg indirect meanings in such verses like this one.

Regarding the verse, “A numbered book it is”, We naturally ask the question as how it is numbered. If it is numbered to be codes by 19 system then this verse should show it. It turned out it shows it with two key coding patterns over it as follows.

83:20 كِتَـٰبٌ مَّرْقُومٌ

83:20 Kitabun marqoom

This verse has 2 words and 9 letters. When concatenated in the natural order, we get this key coding number that is multiple of 19:

832029 /19 = 43791

If we take the sum of these natural numbers, it is again multiple of 19. Moreover, it is exactly 114 that is the number of chapter is Quran!

We witness that the resulting two key coding numbers are multiple of 19, which stand as key coding patterns considering the meaning of this verse.

83:20 A numbered book it is

There are also other verses, verse 10:38 and verse 15:87, I used as key coding patterns and explained in detail in its used chapter, which should be read there not to repeat here.

Lastly, I considered **the total numbers** of each natural numbers of text to look for key coding patterns. It is like to look at the overall picture of the structure and see if there is an obvious key coding patterns exist. Similar to the Basmala based key coding patterns, the key coding patterns from the total numbers will be tested both in chapter and verse level data of the full text of Quran as there is no chance to make clear distinction to test in both chapter and verse level data.

I will describe in more detail about these 3 places where we look at the key coding patterns while presenting the relevant codes in the subchapters of this main chapter.

The two subchapters, without and with letters information:

This main chapter has two main subchapters. First subchapter does not include letters information in any of its presented codes. It is the chapter, where I present **the Main 19 system** of the full text Quran. You can refer to that chapter why I classified as such. So, it is therefore the main chapter the critics should try to attack and nullify but not the others first. Because if there is no substantial critics on the **the Main 19 system**, then it is itself

sufficient to claim a miraculous system over the full text of Quran that supports the intactness of the full text along with its content at the word level.

The second main subchapter includes letters information as well. The reason I separated as such is because, by some people, letters information is *considered* less reliable than chapters, verses and words information. Because, in various writings of the text some of the exact same words might be written slightly differently. An example in English can be given as the word 'color' and 'colour'. Therefore, I wanted to present in the first chapter the 19 System of the key coding patterns without letters information. This way, the system presented in that subchapter will not be able to criticized with text related concerns and thus can be considered as universal. Namely, the codes and the 19 System built by them presented in the first main subchapter, should exist over all the Hafs manuscripts that represent the most common text representation of the full text of Quran. However, it is not necessarily the same for the codes with letters information, which I separately present in the second main subchapter of this main chapter. In my humble opinion, as long as there is no grammatical error in the writing of the text I used with respect to letters information, then the system with letters information suggest a strong 19 based design over the full text of Quran too. However, anyone with doubts about letters, can only focus on the codes without letters information, which is still sufficient to witness a strong 19 based design over the full text of Quran.

The natural numbers of the text will be used for the codes. They are chapter, verse, words and letters numbers. In the first subchapter, I will present codes with only numbers of chapter, verse and words. In the second subchapter, I will present the codes with the numbers of letters information as well.

As a general rule, all our approaches should be as natural as possible and also practical. There are 4 different natural numbers information, namely, numbers of chapter, verse, words and letters. I will never consider all the combinations blindly as this would not be sensible and practical. I will only consider the most obvious, meaningful and essential combinations of these 4 numbers. Over all, we will consider each of these 4 numbers independently as it seems to be the most natural and obvious way. However, this does not provide the full information about the text and might be considered secondary. For this, the most natural and essential first combination is using chapters, words and words information (without letters) in their natural order when concatenated. The second combination is the same but including letters information, namely, using chapters, words, words and letters in their natural order when concatenated. This way we will have only 2 main combinations both of which provide sufficient information about the content and structure of the full text of Quran. Of course, both of them have some limitations at the information resolution they poses and provide. Let me summarize the combinations of the

numbers to be considered. Thee following text numbers and combinations will be used in the two main subchapters.

First main subchapter, **the Main 19 System** will consider the numbers of the following combinations in the natural order:

- chapters, verses, words
- chapters
- verses
- words

The second main subchapter is presenting the key coding pattern based codes with letters information and will consider the numbers of the following combinations:

- chapters, verses, words, letters
- letters

The coding operations used: Sum, concatenation and digit sum operations are the 3 coding operation tested over the numbers of the full text of Quran in their natural order when possible. The operations also has a natural priority order as written from sum, then concatenation and lastly digit sum is tested. Let me clarify this with an example. Let's say we summed the chapter, verse and words information as this 4,6,9 and got 19. So the resulting number from the decimal sum operation is 19 and we will use this sum operation as the key coding pattern to test the same pattern over the full text of Quran. However, since each number has only one digit we could also say that the digit sum of the numbers also multiple of 19. So, the question is, which one we will use as the key coding pattern to test the full text of Quran. In such cases, the natural priority of the operations that I described is used and in this example only the decimal sum operation is used as the key coding pattern to test the full text of Quran and the digit sum case is not tested nor counted.

In summary we have the following coding operations in the natural order of priority as follows:

1. Sum
2. Concatenation
3. Digit sum

Lastly, for the reference, to the best of my knowledge, **all** the codes of the 19 System, which are based on **the key coding patterns** presented within this main chapter, Chapter 4, are first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself.

4.1 Key Coding Patterns based 19 System of the Full Text of Quran Without Letters

In this main subchapter, I will present the codes of the 19 System of the full text of Quran based on the key coding patterns without letters information. Basically, in this subchapter, I will consider the numbers of the following 4 combinations in the natural order:

- chapters, verses, words
- chapters
- verses
- words

For these numbers combinations, as mentioned before, I looked at few places to find the key coding patterns. I mentioned them before but to remind, the places are, the first chapter Al-Fatiha, the first and the special verse Basmala, and the total numbers and few special verse with strong meaningful connection to the 19 Coding System.

4.1.1 About the Even and Odd Coding Pattern

In this section, I will explain explain why I did hypothesize the even and odd based coding pattern. Among others, one of the universal rules were as follows:

A coding hypothesis must have a meaningful support from the verses of Quran such that we can interpret the meaning of the verse, at least potentially, referring to the coding we hypothesized. To clarify this rule, the reason I selected number 19 as the common divisor of all the codes but no other number is that there is this *separate* verse in Quran: "74:30. Over it is Nineteen", which we interpret that Quran might have 19 based coding system over its text that shows the intact design over it and hence the intactness of it.

Similarly, in Quran at the chapter Al-Fajr, which is Chapter 89 and Verse 3, there is this independent verse that we might interpret, among others, such that it might also refer to an even and odd pattern based codings of the 19 based system of the text of Quran.

> "by the even and the odd", Quran, (89:3).

Basically, the reason we test the even and odd coding pattern in **all the evidences of the successful key coding patterns based 19 system** in this main chapter, is because there is this independent verse, 89:3. I hypothesized that this verse might also be about the 19 based codings of the text of Quran and, if it is, it should also be witnessed primarily within the **main 19 System** of the text of Quran if not all. Since the overall main 19 System of Quran is considered the system of codes based on the key coding patterns presented within this main chapter, **as a compulsory rule**, all the suitable codes of the 19 based System with

the key coding patterns are also followed up and tested for the even and odd coding pattern version of it. Since the even and odd coding pattern is based on pairing coding pattern, which pairs the even and odd parts of the code with its corresponding number pair, by the nature of it, only concatenation coding pattern based codes are suitable to follow up and test for also with the even and odd coding version of it. Because, for example, sum of all numbers would be equal to sum of odd and even parts of the same numbers and thus not suitable to test for even and odd coding pattern as it would be mathematical necessity to be multiple of 19 in such a case and thus not suitable.

By the way, it is also interesting to see the concatenation of the indices of this verse, 89:3, *893* is also multiple of 19 and the remainder is 47 where the first digit of it, 4, is even and the second digit, 7, is odd too. This stands as a weak but interesting *sign* that this verse well may refer to what I hypothesize in this book. Not to mention, there was already other kinds of even and odd based interesting coding proposals based on only the chapter and verse indices at a website called amazing19.com. A simple internet search brings many similar claims on that. However, the evidences you will witness in this book is different than all the others. Because, first, unlike all the others, I also include **all** the word content information of the full text of Quran as described already in the rules of this chapter. So, the even and the odd based coding evidences you will witness in this book suggest the intactness of the full text of Quran but not for only about the order of chapter and verse indices as others do. Moreover, the evidences I present in this book are bound by all the general rules I described in Chapter 4.1.2. Now, let's continue describing the even and odd pairing coding pattern.

The even and odd pairing coding pattern closely resembles to **the double helix** of the **DNA** structure, where one strand represents even and the other strand represents the odd numbers in our case. We first classify the text of Quran as even and odd with respect to the chapter indices.

The rules we have **to classify verses as even and odd** is as follows:

If the key coding pattern is based on chapter level data, then we classify the verses belong to even chapters as even. Otherwise, we classify the verses as odd verses. If the key coding pattern is using all the verses of a chapter using its verse level data, we again classify the verses belong to even chapters as even. Because, in such a case, the whole chapter is used and we classify verses regarding chapter level data. Additionally, if the content of a verse is explicitly referring to chapters (suras) instead of verses, then the verses regarding this key coding pattern is still classified regarding chapters as described before. An example of this is the verse 10:38 ('… Then produce a *sura* like it …').

The second rule to classify verses as even or odd is using their general verse indexes. If the key coding pattern is based on a single verse (without chapter relation), then we classify

the verses belong to even general verse indexes as even. Otherwise, we classify the verses as odd verses.

After performing the even and the odd classifications, then we apply the **pairing** coding pattern that I first time introduced in this book, which is similar to the structure of **the double helix**. Basically, we start pairing the even and their corresponding odd numbers by concatenating each pair in natural order and then concatenate all the paired numbers again in the natural order to get the single big even and odd paired codded number. As an example, if we want to get even and odd pairing coding number of the numbers from 1 to 10, then we start pairing them first as 21,43,65,87,109. We then concatenate the pairs again in the natural order and get this big even and odd codded number 21436587109.

While using verse level text numbers with chapter based even odd classification, one side of even or odd might be shorter as we classify them by chapter indexes in the case of key coding pattern is based on the whole chapter. Then naturally, the shorter side starts over from the beginning while pairing. The reason I used this pairing pattern of unequal pairs is because it is the most natural one we could design. Since the representation number is a big number, we might also witness a miraculous evidence.

Since it is not suitable, the code obtained by a sum operation cannot be coded with the even and odd coding pattern. Because sum of two groups give the same number as the initial direct sum. Also, since the even and odd coding pattern is itself based on pairing coding patterns, it can only be clearly applied to codings based on a concatenation of a single category text.

In the main chapter, so far, we witnessed 8 total key coding pattern based evidences *that are suitable* to test the follow up even and odd coding pattern. Just check all the "even odd" terms including chapters under the main chapter to see those 8 code pairs as even odd codes are presented right after their predecessor code. As we witnessed, we observed 8 total even and odd coding evidences based on these 8 key coding pattern based evidences. Namely, in total we have 8 out 8 successes regarding the coding pairs of key coding pattern based evidence and their compulsory even odd codings. This appears to be a miraculous design if we pause and think again carefully. The total number of suitable key coding pattern based evidences to test their even odd coding is 8. For all those 8 codes, we witnessed their even odd coding pair. God knows best but this miraculous **8 pairs coding design** might potentially be related with the **seven pairs** mentioned in the verse 15:87:

> 15:87 Surely, We have given you **the seven pairs** with the great Quran. (Quran, B. Saglam, kuranmeali.com)

In the system I presented, I observed one more coding pair than 7. The 8th one might not be the part of **the seven pairs** if this verse if really mentioning about the system of these

coding pairs or one of the pairs might also be the results of a random event, which makes the 7 pairs observation stronger and more reliable.

We we compute the probability of observing such 7 pairs of code, as there are no other trials could be done regarding the rules, we have 7 successes out of 7 trials with probability p=(1 / 19x19) = 1/361 = 0.00277. Then using the Binomial test we can calculate the probability of such a miraculous observation as 1.25e-18 as follows:

```
tmp <-binom.test( 7, 7, p = 1/(19*19),
                  alternative = c("greater") )

tmp1 <- formatC(tmp$p.value, format = "e", digits = 2)

print(paste("The probability of", 7, "successes out of", 7 ,
            "(with p=1/361) is:", tmp1) )

## [1] "The probability of 7 successes out of 7 (with p=1/361) is:
1.25e-18"
```

If we want to be more conservative and take p=(2 / 19x19), the probability is calculated as 1.60e-16.

We can also compute the probability of observing the 8 pairs of codes so far, as there are no other trials that could be done regarding the rules, we have 8 successes out of 8 trials with a conservative probability p=(2 / 19x19) = 2/361 = 0.005540166. Then using the Binomial test we can calculate the probability of such a miraculous observation as 8.88e-19 as follows:

```
tmp <-binom.test( 8, 8, p = 2/(19*19),
                  alternative = c("greater") )

tmp1 <- formatC(tmp$p.value, format = "e", digits = 2)

print(paste("The probability of", 8, "successes out of", 8 ,
            "(with p=1/361) is:", tmp1) )

## [1] "The probability of 8 successes out of 8 (with p=1/361) is:
8.88e-19"
```

A much more conservative case with the probability 4/361 would result 2.27e-16.

4.1.2 The Main 19 System utilizing Al-Fatiha over the Full Text of Quran Without Letters

In this chapter, I will present the **Al-Fatiha based 19 system** of the full text of Quran, which I consider it within the **Main 19 System**. This means, considering the rules, we test all the sensible possible codings over the 4 possible natural numbers of the text of the key chapter, chapter Al-Fatiha, and whichever of the tested codings over Al-Fatiha is successful, namely, multiple of 19, then those ones are considered as the key coding patterns, like clues, and all of them have to be tested over the full text of Quran as a rule. The ones that are also successful in the full text of Quran are considered as evidence codes and part of the main 19 System of the the full text of Quran presented in this book. We count all the successful numbers of tests and total number of trails and can easily calculate the probability of what we observe.

When all the possible sensible codings tested regarding the 4 mentioned natural numbers of Al-Fatiha at the *chapter level* numbers, I observe only two codings as multiple of 19 thus they will be tested over the full text of Quran as the key coding patterns. As you will witness in the following subsections of this subchapter, both of these key coding patterns also exist over the full text of Quran. See Chapter 4.1.2.3 and Chapter 4.1.2.5 for these two codings. Moreover, as per the rules we need to test the even and odd coding patterns as the obligatory follow up tests for each successful key coding patterns. For the details about why we always test with the even and odd coding patterns as follow up test, one can read the Chapter 4.1.1. Therefore, we test the even and odd coding patterns for these successful key coding patterns and observed that they also exist over the full text of Quran. See Chapter 4.1.2.4 and Chapter 4.1.2.6 for these two codings.

When we look at the verse level data of Al-Fatiha to look for key coding patterns similarly, we observe one successful sensible coding without letters information. When we test this key coding pattern over the over the full text of Quran at the verse level data we observe that it also exist in it. Moreover, we test the follow up even and odd coding pattern with this successful key coding pattern and it also exist over the full text of Quran.

By the way, there is also one successful sensible coding *with* letters information observed at the verse level data from the chapter Al-Fatiha, which is a pairing coding operation. When tested, this key coding pattern also exist over the over the full text of Quran at the verse level data. Since pairing and sum coding operation are not suitable, as per the rule, this key coding pattern is not tested for the even and odd coding pattern. This coding will be presented in the second main subchapter with the letters information separate from this first main subchapter that only presents codes without the letters information.

4.1.2.1 About the 19 System based on the chapter Al-Fatihah based coding patterns

Assuming that the text I used and the computations I performed are correct, I consider the **Al-Fatiha based 19 system** I present in this chapter as the most important evidences that demonstrates an apparent 19 based system within itself though it is still part of the general 19 system that is the combination of all the evidences I present in this book. Since the evidences presented in this chapter are mainly based on the rules derived from codings observed in, arguably, the most important and also the first chapter of Quran, named Al-Fatihah (The Opener), I consider them as the most important evidences in my humble opinion. This is my conclusion considering all the 19 based codings that I discovered and presented in this book. This is because the evidences I present in this chapter are based on a clear, universal, meaningful and quite a strong rule with which we can easily screen all the possible coding trials.

The evidences of the **Al-Fatiha based 19 system** presented in this chapter suggests the intactness of the full text of Quran to a great degree. By full text, I mean including **all** the number of words at each verse and chapters along with the current exact structure and order of the chapters and verses. Since there is no letter based coding in the **Al-Fatiha based 19 system**, it might also be considered universal as it covers chapters, verse and words information only, which is less open to variations in writing in comparison to letters information. The Hafs recitation is known as the common manuscript, which represent the text of Quran, which is used by around 97% of Muslims (Saleem 2018). It can be easily accessed from commonly used websites, such as tanzil.net or quran.com. See Chapter 3.1 for the details of the text I used in this study.

The coding evidences of this chapter together make the **Al-Fatiha based 19 system** suggest a design over the full text of Quran down to the number of words. Since we observe a miraculous design over the text, it suggests that the Quran text, which I explained in detail in Chapter 3.1, is intact and unchanged. If there was even a single word missing or redundant, or the structure of verses or chapters were any different, then all my evidences together would most likely be invalid. Therefore, the *Al-Fatiha based 19 system* presents solid mathematical coding evidences that strongly support the hypothesis that the full text of Quran is unchanged since the year around 632 when it was first *fully* revealed and recorded.

My main coding approaches can be best summarized in short as *the concatenation of the natural numbers of the text in the natural order*. When I realized that there are many independent 19 based codings available in Al-Fatiha (The Opener), I then hypothesized that God might have left those special coding patterns of Al-Fatihah as clues, as **the opener** of the Al-Fatiha based 19 system, so that we might easily discover the 19 based system design in the full text of Quran and be assured by the witnessing it. My hypothesis turned out to be

validated and I ended up discovering the Al-Fatiha based main evidences. All the evidences of the chapter (without the letters information), including the successor even and odd coding evidences, together makes **Al-Fatiha based 19 system** that I discovered and presented in this book. I consider the other evidences I presented in this book as additional and not as primary comparing to the **Al-Fatiha based 19 system**. This is my personal conclusion considering all the evidences I witnessed. On the other hand, I also sometimes present some codings as **facts**, not as evidences of the 19 System, because they are not within the boundaries of the rules I described. I present them because I might still find them interesting and also they might be potential evidences that I might not have noticed the correct rule yet and some other researchers might notice later in case it exists.

I already described the rules in a separate chapter for about how to obtain the codings to be tested. Briefly, the particular rule of this main chapter is that, regarding all the mentioned rules, we try all the possible sensible coding patterns and whatever the 19 based sensible and successful coding patterns we observe on the chapter Al-Fatiha of Quran, then we will further test it over the full text of Quran as well since we hypothesize that they might be left as the clues for the Al-Fatiha based 19 system of the full text of Quran. Also, as mentioned before, for any key coding pattern of Al-Fatiha that is validated over the full text of Quran, we must also test them with the follow up even and odd coding pattern as per the defined rules.

In order not to make the book too long, I might not print out here all the big coding numbers of each evidence. However, you can easily run the codes I provided and regenerate them. Alternatively, you might access them and other related materials from the Github repository of this book at https://github.com/quran2019/Quran19.

Lastly, for the reference, to the best of my knowledge, **all** the evidences of the **Al-Fatiha based 19 system** presented within this main chapter, Chapter 4.1.2, are first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself.

4.1.2.2 Rules of Al-Fatiha based 19 system evidences

Here I state the rules that have to be used in **all** the evidences within this chapter, Chapter 4.1.2, if applicable over the numbers to be tested.

1. **Meaningful code patterns**: All the rules, universal or particular, must be meaningful. We should be able to find answers for what and why we are applying each of the coding patterns. No redundant information can be added or removed. Manipulations at any level, even for a single letter, are *not* allowed at all for any reason. This is a universal rule and reminded here that is followed in all the chapters of this book.

2. **Codes and Context from Quran**: This is also another universal rule that is reminded here. The coding hypothesis must have meaningful support from the verses of Quran such that we can interpret the meaning of the verse, at least potentially, referring to the coding we hypothesized. To clarify this rule, the reason I selected number 19 but no other number for the divisibility test is that there is this independent verse in Quran (74:30): "Over it is Nineteen", which we interpret such that, Quran might have a 19 based system design over its text that indicates the intactness of it. This rule is very important as it dramatically reduces the potential testable number of codings in it. This rule also partly answers the thoughtless counter argument and the ignorant stereotype critics such that "*all books has some kind of patterns in it*". Because, this rule connects the content information of the book to the text medium that conveys the content information.

3. **Coding patterns in order of importance**: As mentioned before, sum, concatenation and digit sum operations are the 3 main coding operation tested over the numbers of the full text of Quran in their natural order when possible, with the priority from sum, concatenation and lastly digit sum. Also, if we see an operation, for instance sum, is used in the key coding pattern, while testing it in chapter level data, we must use it for each chapters and concatenate all in natural order. The process is the same with verse level number. In the verse level data, we must use the operation for each verses and concatenate all in natural order. This when we have to test a key coding pattern both in chapter and verse level data. Also, concatenation must always be used to connect chapters if we observe a key coding pattern at the chapter level numbers in the special chapter, which is Al-Fatiha in our case. Similarly, concatenation must always be used to connect verses if we observe a key coding pattern at the verse level numbers in the special chapter of Al-Fatiha. But, any key coding pattern observed from an isolated meaningfully relevant verse, we have to test that key coding pattern both in chapter and verse level data. Because an isolated verse is does not represent all the verses in a particular chapter like we observe in Al-Fatiha and we cannot *clearly distinguish* whether the pattern is specific to verses only or not. If there is a single number without any operation, then we look at what that single number represents. If it represent for example number of total chapters, then we look at the sum of chapter number in the verse or chapter level data similarly as an example. If it represent a verse index for example, then it is not about sum and we just use concatenation operation at the verse level and chapter level data using indexes similarly.

4. **Re-writing always with letters data**:The special coding pattern, which is called as *re-writing* coding pattern can only used if there are letters numbers information in the code. Because, it literally tries to represent the text by re-writing from right to left as in Arabic text. Therefore, whenever we have letters information among the

numbers, the direction of concatenation is always from right to left as in Arabic, which seems as the reverse order of the standard concatenation we use. This is also another universal rule that is reminded.

5. **Ignoring identical**: If a coding pattern is used and obtained a successful coding number but some other coding patterns also resulting the same successful number, only the first coding pattern with the higher priority is used and the others are ignored. Since the coding patterns have priority, the coding patterns with the highest priority is used as the key coding pattern alone. Namely, sum, concatenation and digit sum is the order of priorities of the coding operation, respectively.

6. **Natural numbers in natural order**: The natural numbers of the full text of Quran is concatenated in natural order by default. For example, if we are using the numbers, the natural order starts from 1 to the maximum number, such as 1 to 114. The numbers of the text has also natural order, which starts from chapters and proceeds in the natural order as verses, words and letters. This is also another universal rule that is reminded here.

7. **Three levels of text numbers**: As there are three levels of the numbers of the text that can be derived from the full text of Quran, which are total level, chapter level and verse level as described in Chapter 3.2.1, the evidences of this chapter must consider those levels and be tested in all of them *if relevant*. This is also another universal rule that is reminded.

8. **The chapter, verse and words information are considered universal**: Since this particular subchapter provides the **Al-Fatiha based 19 system** of the full text of Quran, **Al-Fatiha based 19 system** should have been readily available to be discovered at all times since Quran was revealed in its completeness since 632. Although I used the common Hafs manuscript text that represents Quran, there might still be various versions of Hafs manuscripts considering various slight differences in writing of some of its words because of varying writing styles. Namely, they are the same words but they might have slight differences in letters while writing the same word during the history. See the details on this matter in Chapter 3.1 and Chapter 3.2.1. The **Al-Fatiha based 19 system** of the text of Quran presented in this particular subchapter Chapter 4.1.2 does not include the letters information and therefore represents almost all of the Hafs manuscripts. Namely, the evidences of the **Al-Fatiha based 19 system** should incorporate information that verifies the exact structure and content of the text of Quran in most of the Hafs manuscripts of the current and past time. Since the main sounding narrative about the preservation of Quran is such that "it has been protected till the last word of it", the three text elements of the text, *chapter, verse and words*, is universally required

in any code that claims to stand as an evidence for the protection of Quran along with its content and structure at some level. These three content information of the text together are the bare minimum to represent the full text with its structure and content information. As mentioned before, there might be some variations in writing some of the words with slight differences in writing of the same words but they all mean the exact same word. In English, we can give an example of the word "color" and "colour" for the same word written with different letters. Therefore, I consider the codes without the letters information as the most universal as it covers almost all of the Hafs manuscripts and independent from the slight letters differences. On the other hand, in the second main subchapter, Chapter 4.2, I will also include the letters information in the trials to make sure I have followed scientifically rigorous approach and try to answer all possible critics and questions. So, the coding patterns will be tested in both of the possible content information to represent the text. However, the ones with *chapter, verse and words* information is considered the most universal codings and thus I classified as **the Main 19 System**. The codes with *chapter, verse, words and letters* information is providing more resolution but is not considered as at the same level of strength like the universal codes. Basically, all the two possible combinations to represent a full text with its structure and content will be tested and included in the probability calculations but separately. The people who might have doubt about the letters of the text can then focus on the this main subchapter, Chapter 4.1, for the most universal 19 System, **the Main 19 System**, which does not have any letters information in its codes.

9. *All sensible code patterns regarding rules are tested on Al-Fatiha to find keys*: For this particular subchapter, Chapter 4.1.2, the question then becomes which coding operations we can try on Al-Fatiha? The short answer is all the possible and sensible ones that are also meaningful and in accordance with the rules described here in this sub-chapter.

10. **Pairing coding pattern**: Pairing is a special concatenation coding pattern that we might use to test between two different categories when suitable. Because of its special structure, the current even and odd coding pattern cannot be applied to a paired code. Because the even and odd coding pattern is already using pairing coding pattern but applied to single category numbers by replacing the order of the text by prioritizing the even ones first. Moreover, the rewriting coding pattern is never used together with the pairing coding pattern as pairing is not considered a rewriting of the text.

11. **The even and odd coding pattern is applied as well:** After each of the successful key coding patterns, we must also test them with the even and odd coding pattern over the full text of Quran in the same text category (6348 or 6236) if suitable.

Namely, for instance, for each Al-Fatiha based successful coding, we also have to test **the even and odd pairing coding** pattern as the follow up test as per the rules. This is a general rule for all the successful key coding patterns. See the sub-section Chapter 4.1.1 for more details on the even and odd coding pattern. Basically, the reason I test the even and odd coding pattern in all the key coding pattern based evidences is because there is this independent verse: "by the even and the odd", Quran, (89:3). I hypothesized that this verse might also be about numbers and if so, it should also be observed within the **Main 19 system** of the full text Quran, which is the key coding pattern based 19 System. As I consider this part of the 19 System as the the most important part over all the other codes, I expect that the even and odd coding pattern might also exist in this most important 19 System. Because, for example, if the **Al-Fatiha based codings** we witnessed are really part of the **main 19 system** of the text Quran, the further ensuring even and odd coding pattern based codes might be expected to be within the same system part. The follow up even and odd coding pattern based coding test are therefore required and if successful, it further assures and strengthen the **Main 19 system**.

12. Another special rule for **the even and odd pairing coding pattern** is such that, it is always paired as even numbers first and then the corresponding odd number. This rule follows the exact observed order in the source verse, which is "by the even and the odd", Quran, (89:3). Also, **the even and odd pairing coding** pattern is applied to the same text type of the key coding based evidence it follows, either 6348 or 6236.

In the above points, I described all the rules of the key coding pattern based 19 System of the full text of Quran. I consider the codes of this system **without** letters information as the **Main 19 system** of Quran. Those are the rules I defined based on my observations to make sure the 19 System I present is rule based system with which we can easily count all the possible 19 based coding trials and thus can measure the coding space of all the possible trials. This has vital importance to be able to accurately calculate the probability of what we observe in the end. I try to follow a scientific approach to be able to measure the probability of the 19 system of the full text of Quran that I discovered and present in this book. You might come across other earlier or later claims regarding the 19 based system over Quran but, to the best of my knowledge, none of them provide the total possible number of trials of their claims. In fact, as far as I know, the system I discovered and present in this book is the first fully rule based 19 system in literature. Without a rule based claim, we cannot measure the boundaries of the proposed system and thus cannot measure whether what we observe is extraordinary or not.

4.1.2.3 Evidence to silence: Harmony among Chapters, Verses and Words

The code I will present in this chapter is the first Al-Fatiha based code evidence of the **Main 19 system**, which is also a key coding pattern based system. I discovered this evidence on February 10, 2020 and added into the e-book right away. I might have discovered it before without its connection to Al-Fatiha but have forgotten this evidence when I first discovered the initial evidences and published them in this book in 2019. Because, it is so evident and similar to my other evidences. I was so overwhelmed with many evidences while writing this book and probably forgot this one by then as I had not seen the relation of it with the **Al-Fatiha based 19 system**. After the publication of my book, there were some critics on my book as it was mostly based on the evidences that includes the number of letters. Since some have doubts about the exact letters, they doubted about those evidences that include letters information. I guess, it may seem too good to be true for them. Having this criticism in mind, I was looking at the table below, which shows each chapter and the number of verses, words and letters within each chapter.

```
x<- dfVCWL
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbers at chapters in Quran.')
```

Table 4.1: Table head of the numbers at chapters in Quran.

Chapter_index	Verse_sum	cWords	cLetters
1	7	29	143
2	287	6144	26268
3	201	3505	15004
4	177	3767	16351
5	121	2841	12225
6	166	3060	12745

The most important chapter in Quran might be considered as the first chapter, Al-Fatiha (**the Opener**). This chapter is recited in every obligatory daily prayers by all Muslims. Reciting Al-Fatiha in the daily prayer is *considered* a requirement by the Tradition. Therefore, all Muslims know and recites this first chapter of Quran every day in the obligatory daily prayers. This numbers if this uniquely important and also the first chapter of Quran caught my eye as the digit sum of the chapter index (1), number of verses (7) and number of words (29) is exactly 19 (1+7+2+9 = 19). This woke me up right away. I then tested the universal concatenation rule of this book by concatenating these numbers, as

always, in the natural order from chapters towards words. Then I got 1729, and it is also multiple of 19 as 1729/19 = 91.

As we witnessed, there are two simple and crystal clear 19 based codings in the most important chapter, Al-Fatiha, of Quran. They stand apparently in the first and most important chapter of Quran. Namely, over the chapter Al-Fatiha, or "over it is 19". There is also the independent verse at chapter 74 and verse 30, 74:30 "Over it is 19". Since, we clearly see 19 over the Al-Fatiha, it is fair to hypothesize that the clear 19 based codings over the. chapter Al-Fatiha might be left as clues to discover the main 19 based system over the full text of Quran.

Then, I learned the pattern! My hypothesis was simple. God might have left us these obvious and simple coding patterns as clues within the most important and most recited and also a short chapter of Quran so that anyone can observe it and even manually try and witness those coding patterns and consider them as potential clues and migt then test it over the full text of Quran. Therefore, the next step for me was to test these patterns in the full text of Quran. Because, as a information coding expert, the hypothesis I thought was that they might be left as clues or key coding patterns and if the hypothesis is true then we should observe these two coding patterns in the full text of Quran too. For each of the 114 chapter, I first applied these patterns and obtained the representation number of each chapter. I then concatenate them from first chapter till 114 in the natural order as always. This concatenation approach is similar to what we observed in Evidence 5.5.1. Regarding the big number to be tested, since I inferred this pattern specifically from the first chapter, Al-Fatiha, this evidence has its own rule and not necessarily have to fully align with the rest of the book. I already described all the rules before.

In this particular section, I present one of the two codings as an evidence code that we learned its coding pattern from the chapter level representation number of the first chapter, Al-Fatiha, which is 1729, where the chapter index (1), number of verses (7) and number of words (29), which were concatenated in the natural order. Let me also illustrate the coding pattern of this evidence. Basically, we first concatenate the chapter index, the number of verses and also the number of words in each chapter within itself and then concatenate all of them in the natural order again and get the big representation number of the full text of Quran as illustrated below:

> [Chapter 1 | Total Verses in Chapter 1 | Total Words in Chapter 1] [Chapter 2 | Total Verses in Chapter 2 | Total Words in Chapter 2] . . . . . [Chapter 114 | Total Verses in Chapter 114 | Total Words in Chapter 114]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. Square brackets are used to separate each chapter information and all the adjacent brackets are concatenated to each other by default.

Considering all the 6348 verses of Quran, if we use the real numbers in the above formula, it would be like this:

[1 | 7 | 29] [2 | 287 | 6144] . . . . . [114 | 7 | 24]

And, the final number after all the concatenation would look like this:

172922876144 114724

See below R programming scripts for the proof of this evidence. They can be used and the code can be easily **reproduced** and witnessed as if it is a *Reproducible Miracle*. I will print out this 800 digits length big number in the end of this chapter so that you can easily perform tests and checks on it. The final big number includes all the verses, including the unnumbered Basmala verses of Quran, which means this evidence exists over the text type of all the 6348 verses of Quran.

```
require(gmp)
require(data.table)
# dfVCWL is a data table that keeps the chapter level text numbers of
the 6348 verses
tmp <- paste0(dfVCWL$Chapter_index,dfVCWL$Verse_sum, dfVCWL$cWords)

head(tmp) # head part of the text

## [1] "1729"     "22876144" "32013505" "41773767" "51212841"
"61663060"

tail(tmp) # tail part of the text

## [1] "109731" "110423" "111627" "112519" "113627" "114724"

tmp <- paste0(tmp, collapse = "")
#Test if the remaining is 0 from mod 19.
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 800
```

This evidence suggests that chapters, verses and words of Quran is under the observed 19 based coding system of the text of Quran. In particular, it is part of the Al-Fatiha based 19 system and not distorted from the beginning and unchanged since the year around 632.

The coding pattern in Al-Fatiha is also tested over the second text type, namely in the 6236 numbered verses, as per the general rules. But we only observed it over the text type of 6348 verses. Therefore, statistically, we performed two trials and observed one success in this particular coding pattern of Al-Fatiha.

Let's add the number of successful evidences and the number of tested trials regarding this evidence so that in the end of the book we can calculate the global probability using the counters. We will add them into the counters.

```
#Two trials one successes
alFatihah_tested_nums <- alFatihah_tested_nums + 2
alFatihah_success_nums <- alFatihah_success_nums +1
```

Here is the "800" digits length big number:

"17292287614432013505417737675121284161663060720733458761246912925051011018431112419501211217991344857145383415100661161291848171121562181111587199997520136135721113117822791283231191056246513232578900262281324279411632889144229709823061821313555432313763374130734558883546782368473437183869388973939761181408612304155798425486443908404460350453849246366494739546483056449193575046377516136452503165363364545634655793565697383573057958234795925451601435661152306212181631218564192466513293661325867313376853305695326470452217129231722929073212047457260754116876322477751185784117879471838043137813010882208583371738426112852311386186587207688279689311439021869116589222759312449493195938962076976349899899401001244101124010293210341810410371056271065211078291084141097311104231116271125191136271147 24"

4.1.2.4 Even and Odd chapters at the chapter level Evidence in all the 6348 verses

Since the even and odd evidence code I will present in this chapter, as per the rule, is the follow up code to the previous evidence, Evidence 4.1.2.3, I placed this evidence right after the previous chapter of the predecessor evidence. These two separate consecutive coding evidences together constitute the hypothesized dependent evidences pair from the Al-Fatiha based 19 system, which is also part of the key coding pattern based Main 19 System of the full text of Quran.

As per the rule, for each of the key coding pattern based evidence code, which is based on Al-Fatiha in this case, which exist over the full text of Quran, as per the rules, we have to follow up and also test the even and the odd coding pattern over the same numbers and patterns used in that predecessor evidence. As we observed the successful key coding

pattern based evidence over text type of all the 6348 verses, the follow up even and odd coding pattern also exist in the same text type, namely the 6348 verses.

Let me first illustrate the follow up even and odd pairing coding pattern as follows, which, as mentioned before, closely resembles to **the double helix** of a **DNA** structure, where one strand is even and the other strand is the odd numbers as formulated below:

> [[Chapter 2 | Total Verses in Chapter 2 | Total Words in Chapter 2] [Chapter 1 | Total Verses in Chapter 1 | Total Words in Chapter 1]] [[Chapter 3 | Total Verses in Chapter 3 | Total Words in Chapter 3] [Chapter 4 | Total Verses in Chapter 4 | Total Words in Chapter 4]] . . . . . [[Chapter 114 | Total Verses in Chapter 114 | Total Words in Chapter 114] [Chapter 113 | Total Verses in Chapter 113 | Total Words in Chapter 113]] [[Chapter 113 | Total Verses in Chapter 113 | Total Words in Chapter 113] [Chapter 113 | Total Verses in Chapter 113 | Total Words in Chapter 113]]

As it is seen the predecessor key coding pattern still kept within each of the chapters as illustrated within the rectangular brackets. However, they are concatenated by placing the even pair before the odd pair as opposite to the normal concatenation, which was already the predecessor coding evidence of it.

If we use the real numbers of all the 6348 verses in the above coding pattern, it would be like this:

> [[2 | 287 | 6144] [1 | 7 | 29]] [[4 | 177 | 3767] [3 | 201 | 3505]] . . . . . [[114 | 7 | 24] [113 | 6 | 27]]

And, the final even and odd coding number after all the concatenations would look like this:

> 2287614417294177376732013505 114724113627

This chapter provides the even and odd pairing coding evidence as a compulsory follow up to the Evidence 4.1.2.3, which exist over the text type of all the 6348 verses. In the following, considering all the 6348 verses, I present the R script to reproduce and test this evidence code. It first classifies the even and odd chapters and pair them **from even to odd** (as per the rule since we observed in that order in the relevant verse of Quran, which is "by the Even and the Odd") and obtains a big number after concatenating them in the natural order. As shown below, it is also multiple of 19 as we can witness in the following reproducible proof:

```
ev<- dfVCWL[(dfVCWL$Chapter_index%% 2 == 0), ]
cat("The number of even chapters is",nrow(ev))

## The number of even chapters is 57
```

```r
od<- dfVCWL[(dfVCWL$Chapter_index%% 2 != 0), ]
cat("The number of even chapters is",nrow(od))

## The number of even chapters is 57

ev <- paste0(ev$Chapter_index,ev$Verse_sum,
               ev$cWords)
cat("The head of concatenated even chapters to be paired",head(ev))

## The head of concatenated even chapters to be paired 22876144
41773767 61663060 8761246 101101843 121121799

cat("The tail of concatenated even chapters to be paired",tail(ev))

## The tail of concatenated even chapters to be paired 1041037 106521
108414 110423 112519 114724

od <- paste0(od$Chapter_index,od$Verse_sum,
               od$cWords)
cat("The head of concatenated odd chapters to be paired",head(od))

## The head of concatenated odd chapters to be paired 1729 32013505
51212841 72073345 91292505 111241950

cat("The tail of concatenated odd chapters to be paired",tail(od))

## The tail of concatenated odd chapters to be paired 103418 105627
107829 109731 111627 113627

tmp <- paste0(ev, od) #pairing ev and od
cat("The head of paired even and odd chapters",head(tmp))

## The head of paired even and odd chapters 228761441729
4177376732013505 6166306051212841 876124672073345 10110184391292505
121121799111241950

cat("The tail of paired even and odd chapters",tail(tmp))

## The tail of paired even and odd chapters 1041037103418 106521105627
108414107829 110423109731 112519111627 114724113627

tmp <- paste0(tmp, collapse = '')
as.bigz(tmp) %% 19  #mod 19 must be 0

## Big Integer ('bigz') :
## [1] 0
```

Here is the 800 digits length big number:

“22876144172941773767320135056166306051212841876124672073345101101843912925051211217991112419501453834134485716129184815100661181111587171121562201361357199997522791283211131178246513232311910562622813242578900288914422794116330618212970982323137631355543455888337413073684734354678238897393718386940861230397611814254864415579844603504390840463664945384924830564473954650463774919357525031651613645456346536336456973835793565823479573057960143565925451621218161152306419246631218566132586513293685330567313377045221695326472292907129231745726073212047632247754116878411787751185804313779471838220858130108842611283371738618658523113882796872076902186893114392227591165894931931244962076959389899897634100124499940102932101124010410371034181065211056271084141078291104231097311125191116271147241136 27”

One can just copy the big number and paste it into a web based big number calculator and test it herself.

We witnessed that the even and odd pairing coding evidence between even and odd chapters of Quran considering all the 6348 verses. I will show in the next chapter that the same even and odd coding pattern also exist in the numbered 6236 verses too. Therefore, in this section, we performed one trial and observed one success considering the even and odd pairing coding pattern. We add these observations in the even and odd counters to be able to calculate the probability separately as well in the end of the main chapter of this chapter.

```
evenodd_tested_nums <- evenodd_tested_nums + 1
evenodd_success_nums <- evenodd_success_nums + 1
```

4.1.2.4.1 Fact: Even and Odd chapters at the chapter level Evidence in the 6236 numbered verses

Based on the rules of even odd coding testing, we only need to test the key coding pattern based coding in the same text type. In the previous chapter, Evidence 4.1.2.4, we had observed the even and odd coding pattern of the Evidence 4.1.2.3 in the text type of 6348 verses.

I also observed that if we use the 6236 numbered verses we still observe a successful 19 base even odd coding similar to Evidence 4.1.2.4. As per the rule, we are not required to test it but since it looks supportive of Evidence 4.1.2.4, in this chapter, I will present this code as a **fact** butt not as an evidence. Because, as you will see, this code number is not only

multiple of 19 but it is multiple of **19x19**. Here, we will see that the same even and odd coding pattern also exists in the text type of 6236 numbered verses.

In the following, considering all the 6236 numbered verses, we observe that the code is not only multiple of 19 but also multiple of 19x19 (361). So, with this code and the previous one, we observe that both text types of Quran (6236 numbered and all 6348 verses) have this same exact same even and odd pairing coding pattern over its text. Here is the proof of this evidence in the following reproducible code:

```
ev<- dfVCwl[(dfVCwl$Chapter_index%% 2 == 0), ]
cat("The number of even chapters is",nrow(ev))

## The number of even chapters is 57

od<- dfVCwl[(dfVCwl$Chapter_index%% 2 != 0), ]
cat("The number of odd chapters is",nrow(od))

## The number of odd chapters is 57

ev <- paste0(ev$Chapter_index,ev$Verse_sum,
               ev$cwords)
cat("The head of concatenated even chapters to be paired",head(ev))

## The head of concatenated even chapters to be paired 22866140
41763763 61653056 8751242 101091839 121111795

cat("The tail of concatenated even chapters to be paired",tail(ev))

## The tail of concatenated even chapters to be paired 104933 106417
108310 110319 112415 114620

od <- paste0(od$Chapter_index,od$Verse_sum,
               od$cwords)
cat("The head of concatenated odd chapters to be paired",head(od))

## The head of concatenated odd chapters to be paired 1729 32003501
51202837 72063341 91292505 111231946

cat("The tail of concatenated odd chapters to be paired",tail(od))

## The tail of concatenated odd chapters to be paired 103314 105523
107725 109627 111523 113523

tmp <- paste0(ev, od) #pairing ev and od
cat("The head of paired even and odd chapters",head(tmp))
```

```
## The head of paired even and odd chapters 228661401729
4176376332003501 6165305651202837 875124272063341 10109183991292505
121111795111231946

cat("The tail of paired even and odd chapters",tail(tmp))

## The tail of paired even and odd chapters 104933103314 106417105523
108310107725 110319109627 112415111523 114620113523

tmp <- paste0(tmp, collapse = '')

#Test mode 19
as.bigz(tmp) %% 19 # This should result 0 if multiple of 19.

## Big Integer ('bigz') :
## [1] 0

#also test mode 19x19 =361
as.bigz(tmp) %% (19*19)

## Big Integer ('bigz') :
## [1] 0
```

As we observed the 798 digits length big number of this code is multiple of 19 too. As you will see, this number is not only multiple of 19 but it is multiple of **19x19**, which makes it more strong in that regard. One can just copy the below printed big number of this evidence and paste it into a web based big number calculator and test it herself. For example, this one or another web application for any precise big numbers calculator, such as this ("Good Calculators" 2019) can be used.

Here is the 798 digits length big number:

"2286614017294176376332003501616530565120283787512427206334110109183991292505121111795111231946145283013438531612818441599657181101583171111558201351353199897122781279211121174246413192311810522622713202577896288814382793115930608172969978323037231345503454884337313033683730354577838887353718286540851226397511774253860415479444593464389836463564545374884829560473854250453734918353524931251603605455342536236056963795578352582247557295756013352592444762111776114226641824263111816612254651228968523016730333704421769522607228286712822774562567320200763124375401647840174775018180421337946179821981812910484251088336169861761852210988269287197290208289301399221719115549482793114096197295834988949 75

3010011409983610282810111361049331033141064171055231083101077251103191
0962711241511152311462011352 3”

4.1.2.5 Evidence to silence 2: Harmony among Chapters, Verses and Words

This is the second most important key coding pattern based evidence, which is also based on chapter Al-Fatiha. As I presented before, I had discovered Evidence 4.1.2.3 on February 10, 2020 and then added that into the e-book of this book right away. The rule of Evidence 4.1.2.3 was obtained from the most well known and recited chapter, Al-Fatihah, which therefore might arguably be considered as the most important chapter in Quran. As presented before, this chapter has very explicit 19 based coding with the natural numbers of its text. The chapter index of it is 1, the number of verses of it is 7 and the number of words in it is 29. When we concatenate them in the natural order it makes 1729 and it is multiple of 19 as 19x91. In Evidence 4.1.2.3, I had applied the same coding pattern of Al-Fatiha to the full text of Quran and showed that the same key coding pattern also exist in the full text of Quran too. The hypothesis was that the coding patterns in Al-Fatihah might be left as a clue that leads us to the 19 based design over the full text of Quran.

However, there is one more independent coding pattern in the same chapter level numbers of Al-Fatihah, which is based on the digit sum of the same natural numbers as follows: 1+7+2+9 = 19. This is so obvious as the digit sum is exactly 19. So, I set my next hypothesis similar to what I did in Evidence 4.1.2.3. I hypothesized that the same pattern exist in the whole text of Quran and God might have left this apparent coding pattern to us as a clue that might lead us to the 19 based design over the full text of Quran. After testing this hypothesis, I witnessed that it is also correct and I discovered this new evidence, Evidence 4.1.2.5 of this chapter. Along with Evidence 4.1.2.3, these two evidences suggest that the two apparent coding clues of Al-Fatihah exist in the full text of Quran as well. They are so clear and apparent such that there is nothing much to argue on these 19 based evidences, Evidence 4.1.2.5 and Evidence 4.1.2.3, which are based on the two clue coding patterns of Al-Fatihah. These evidences suggest that the number of chapters, verses, words of Quran might be designed with the 19 based coding system of the text of Quran and unchanged since the year 632 when Quran was fully revealed. Since we witness that both of the apparent coding clues of Al-Fatiha also exist in the full text of Quran, along with their follow up even and odd coding pattern evidences, then we can rationally consider that the Quran is intact and unchanged from the beginning till our current time as there is an intact 19 based design over its text. Moreover, the observed 19 based coding designs over the full text of Quran are complex and hard enough to fairly say that they could not be performed by the people of that time and might only have been done by a supernatural power that we Muslims consider as God, who is also the author of Quran. Also, since we did not use the number of letters in those codings, these evidences should exist in almost all of the text versions of Hafs mushafs of Quran.

The evidence I present in this chapter exist in the numbered 6236 verses of the text of Quran. This means out of the two chapter level clues, namely the key coding patterns, of Al-Fatihah, the first clue pattern exists in all the verses (6348 verses, including unnumbered Basmala verses) and the second clue pattern exists in the numbered verses of Quran (6236 numbered verses). This observation also supports the conclusion of this book, which suggests that both type of the text of Quran are under the 19 based coding system together.

Let's again remember the head of the table over which we will witness the evidence.

```
x<- dfVCwl
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbers at chapters in Quran.')
```

Table 4.2: Table head of the numbers at chapters in Quran.

Chapter_index	Verse_sum	cwords	cletters
1	7	29	143
2	286	6140	26249
3	200	3501	14985
4	176	3763	16332
5	120	2837	12206
6	165	3056	12726

Let me shortly describe how we obtain the big coding number to be tested. For each of the 114 chapters, I first applied the observed key coding pattern, namely, digit sum pattern (as in Al-Fatiha 1+7+2+9=19) over the chapter level numbers of each chapter and obtained the representation number of each chapter. For example, the first chapter Al-Fatiha is represented by 19 as we compute the digits sum of the chapter index (1), the number of verses (7) and the number of words (29) as this 1+7+2+9=19. We perform the same process for all the 114 chapters and obtain the representation numbers of each chapter. We then concatenate them from first chapter till the chapter 114 in the natural order as usual and obtain the single big representation coding number of the full text of Quran. Let me illustrate the coding pattern of this evidence first as follows, where *DS* stands for the digit sum of the number in the squared brackets:

> DS[Chapter 1 | Total Verses in Chapter 1 | Total Words in Chapter 1] DS[Chapter 2 | Total Verses in Chapter 2 | Total Words in Chapter 2] . . . . . DS[Chapter 114 | Total Verses in Chapter 114 | Total Words in Chapter 114]

If we use the real numbers of all the 6236 verses in the above coding pattern, it would be like this:

DS[1 | 7 | 29] DS[2 | 286 | 6140] . . . . . DS[114 | 6 | 20]

And, the final big number after all the digit sum and the concatenations would look like this:

192914 14

See below for the reproducible proof of this evidence. I will print out this 227 digits length big number in the end of this chapter for you to be able to test easily. This number is based on all the numbered 6236 verses of Quran. As you will see, this number is not only multiple of 19 but it is also multiple of **19x19**, which makes it more strong in that regard.

```
tmp <- paste0(dfVCwl$Chapter_index, dfVCwl$Verse_sum,
                dfVCwl$cwords)
cat("Head of the concatenated numbers per chapter:", head(tmp))

## Head of the concatenated numbers per chapter: 1729 22866140
32003501 41763763 51202837 61653056

cat("Tail of the concatenated numbers per chapter:", tail(tmp))

## Tail of the concatenated numbers per chapter: 109627 110319 111523
112415 113523 114620

#Get digit sum per chapter
tmp <- sapply(tmp, digitsum)
cat("Head of the digit sum of the concatenated numbers per chapter:",
head(tmp))

## Head of the digit sum of the concatenated numbers per chapter: 19
29 14 37 28 32

cat("Tail of the digit sum of the concatenated numbers per chapter:",
tail(tmp))

## Tail of the digit sum of the concatenated numbers per chapter: 25
15 13 14 15 14

tmp <- paste0(tmp, collapse = "")
as.bigz(tmp) %% 19 #Test if remaining is 0 with mod 19

## Big Integer ('bigz') :
## [1] 0
```

```
#also test mod 19x19 = 361
as.bigz(tmp) %% (19*19)

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 227
```

As per the rules, we must also test this key coding pattern in all the 6348 verses as well and thus we have one success out of two trials for this evidence coding pattern. On the other hand, there is also a related coding in all the 6348 verses as presented in the following subsection, Fact 4.1.2.6.1, as a **fact**.

Let's add the number of trials and successes into the special counters of the chapter Al-Fatihah based codings as follows.

```
alFatihah_tested_nums <- alFatihah_tested_nums + 2
alFatihah_success_nums <- alFatihah_success_nums +1
```

For the reference, to the best of my knowledge, Evidence 4.1.2.5 is also first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 4.1.2.5 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

Here is the 227 digits length big number:

"192914372832262933322828272342353028442320382330442537425025212023363
930404240283428413539333334332721262528354540333520222521273326252530 2
529351435272629314321252936282729343533212522183029342438357132112201 6
192213251513141514"

4.1.2.6 Even and Odd chapters at the chapter level Evidence with digit sum

As per the rule, for each key coding pattern based evidence, in this particular case that is Al-Fatiha based evidence, we have to test the even an the odd pairing coding pattern over the same numbers and with the predecessor coding pattern. This chapter provides the even and odd coding pattern as a compulsory follow up to the Evidence 4.1.2.5 considering all the 6236 numbered verses, which is also the same text type of its predecessor evidence. In the following, considering all the 6236 numbered verses, we first classify the even and odd chapters and apply the *digit sum* coding pattern of the predecessor Evidence 4.1.2.5 to each of the chapters and pair them from even chapters to odd chapters. We then obtain the big representation coding number after concatenating those in the natural order as always.

Let me also illustrate below the descriptions of the even and odd pairing coding pattern applied in this particular evidence along with the digit sum coding pattern of the predecessor evidence. As mentioned before, the even and odd coding pattern closely resembles to **the double helix** of the **DNA** structure, where one strand is even and the other strand is the odd numbers in our case:

> DS[[Chapter 2 | Total Verses in Chapter 2 | Total Words in Chapter 2] [Chapter 1 | Total Verses in Chapter 1 | Total Words in Chapter 1]] DS[[Chapter 3 | Total Verses in Chapter 3 | Total Words in Chapter 3] [Chapter 4 | Total Verses in Chapter 4 | Total Words in Chapter 4]] . . . . . DS[[Chapter 114 | Total Verses in Chapter 114 | Total Words in Chapter 114] [Chapter 113 | Total Verses in Chapter 113 | Total Words in Chapter 113]]

If we use the real numbers in the above coding pattern with respect to the 6236 numbered verses, it would be like this:

> DS[[2 | 286 | 6140] [1 | 7 | 29]] DS[[4 | 176 | 3763] [3 | 200 | 3501]] . . . . . DS[[114 | 6 | 20] [113 | 5 | 23]]

And, the final number after concatenating them all would look like this:

> 29193714 1415

We witness below that it is also multiple of 19 as we can see in the following reproducible proof:

```
# dfVCwl has the chapter level numbers table of the 6236 numbered
verses.
# We only use the chapter, verse and words numbers by specifying the
table column indexes 1,2,3.
x<- dfVCwl[,c(1,2,3)]

ev<- x[(x$Chapter_index%% 2 == 0), ]
cat("The number of even chapters is",nrow(ev))

## The number of even chapters is 57

od<- x[(x$Chapter_index%% 2 != 0), ]
cat("The number of od chapters is",nrow(od))

## The number of od chapters is 57
```

```r
# Get digit sum of each chapter level numbers both for even and odd
ev <- apply(ev,1,digitsum)
cat("The head of even chapters as digit sums: ",head(ev))

## The head of even chapters as digit sums:  29 37 32 29 32 28

cat("The tail of even chapters as digit sums: ",tail(ev))

## The tail of even chapters as digit sums:  20 19 13 15 14 14

od <- apply(od,1,digitsum)
cat("The head of odd chapters as digit sums: ",head(od))

## The head of odd chapters as digit sums:  19 14 28 26 33 28

cat("The tail of odd chapters as digit sums: ",tail(od))

## The tail of odd chapters as digit sums:  12 16 22 25 13 15

# Pair even and odd digit sum numbers
tmp <- paste0(ev,od)
cat("The paired head of the digit sums of even and odd
chapters",head(tmp))

## The paired head of the digit sums of even and odd chapters 2919
3714 3228 2926 3233 2828

cat("The paired tail of the digit sums of even and odd
chapters",tail(tmp))

## The paired tail of the digit sums of even and odd chapters 2012
1916 1322 1525 1413 1415

tmp <- paste0(tmp, collapse = '')
cat("The mod 19 is zero as follows: ")

## The mod 19 is zero as follows:

as.bigz(tmp) %% 19  #0

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 227
```

Here is the 227 digits length big number:

“29193714322829263233282823273542283023443820302325444237255020213623303942402840283435413339343327332621282545353340203525222721263325252530352935142627312921432925283629273534213322253018342938247352113201219161322152514131415”

One can just copy the big number and paste it into a web based big number calculator and test it herself.

We witnessed that the pairing with digit sum coding pattern between even and odd chapters of Quran considering all the 6236 numbered verses is under Al-Fatiha based 19 system of the text of Quran too. As per the rule, we only need to test the even and odd coding pattern in the same text type of 6236 verses. Therefore, we have one trial and one success in this evidence. Again remember that we always pair in the direction from even to odd numbers as per the rules.

```
evenodd_tested_nums <- evenodd_tested_nums + 1
evenodd_success_nums <- evenodd_success_nums + 1
```

4.1.2.6.1 Fact as addition to Evidence to silence 2: Harmony among Chapters, Verses and Words

When I see interesting codes that are not within the boundaries of the set rules I might still share them as a *fact*. I do not classify them as part of the 19 based system but they might be interesting to be aware of them anyways. In Evidence 4.1.2.5, I showed that the coding pattern of the first chapter of Quran Al-Fatiha also exist in the full text of Quran. The coding pattern of Al-Fatiha is based on digit sum of the chapter level numbers as 1+7+2+9=19. In Evidence 4.1.2.5, I extended this coding pattern to the full text of Quran using the *default coding pattern*, namely concatenation of the natural numbers in the natural order. We observed this coding pattern was successful in the numbered 6236 verses of Quran in Evidence 4.1.2.5. However, there is also the following coding with the digit sum of the concatenated numbers exist if we look at the numbers of 6348 verses. Basically, not the big number itself but digit sum of the coding of Evidence 4.1.2.5 in all the 6348 verses also multiple of 19. I present this coding as a **fact** as follows:

```
tmp <- paste0(dfVCWL$Chapter_index, dfVCWL$Verse_sum,
              dfVCWL$cWords)
cat("Head of the concatenated numbers per chapter:", head(tmp))

## Head of the concatenated numbers per chapter: 1729 22876144
32013505 41773767 51212841 61663060
```

```r
cat("Tail of the concatenated numbers per chapter:", tail(tmp))

## Tail of the concatenated numbers per chapter: 109731 110423 111627
112519 113627 114724

#Get digit sum per chapter
tmp <- sapply(tmp, digitsum)
cat("Head of the digit sum of the concatenated numbers per chapter:",
head(tmp))

## Head of the digit sum of the concatenated numbers per chapter: 19
34 19 42 24 28

cat("Tail of the digit sum of the concatenated numbers per chapter:",
tail(tmp))

## Tail of the digit sum of the concatenated numbers per chapter: 21
11 18 19 20 19

tmp <- paste0(tmp, collapse = "")
tmpd<-digitsum(tmp)
tmpd %% 19 #Test if remaining is 0

## [1] 0

cat("The digits sum of this big number is", tmpd)

## The digits sum of this big number is 779

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 227
```

Also, here is the "227" digits length big number. Recall that not this number but the digit sum of it is multiple of 19 and it is just presented as a fact but not as an evidence.

"193419422428313433192433322820402633492825342826313033383721262528413
535454736243933282235383830383226223033404136383125182126322931303035 2
125311931323134363926212532242334304029263027232634302943311291717162 1
152718211118192019"

4.1.2.6.2 Fact

There is also an interesting relation between Evidence 4.1.2.3 and Evidence 4.1.2.5. As I mentioned before, both of these two evidences are based on the two clue evidences of Al-Fatiha and one of the same clue patterns exist in Evidence 4.1.2.3 over all the verses (6348

verses) and the second clue evidence of Al-Fatiha exist in Evidence 4.1.2.5 over all the numbered verses (6236 verses). As mentioned before, this suggests that both text types are under 19 based coding of the text of Quran. Here, in this fact, I will present an interesting relation between these two evidences as a *fact*.

The relation between both of the numbers of the two evidences, Evidence 4.1.2.3 and Evidence 4.1.2.5, is as follows. The tested number of Evidence 4.1.2.3 is 800 digits in length. The tested number of Evidence 4.1.2.5 is 227 digits in length.

The **fact** is that, the digit lengths of these numbers are 800 and 227. The digit sum of these numbers is exactly 19 as if they complement each other.

4.1.2.7 Verse level Harmony among Chapters, Verses and Words as Evidence

This evidence is based on the key coding pattern that we observed in Al-Fatiha at the its verse level numbers. Therefore this evidence is also part of the **Main 19 System** presented in this book. In this evidence, we will witness that chapters, verses and words are in harmony at the verse level numbers too and within the Al-Fatiha based 19 system. We had already observed the 19 based harmony among chapters, verses and words in Evidence 4.1.2.3 and Evidence 4.1.2.5 at the *chapter* level numbers. In this evidence, Evidence 4.1.2.7, we will again witness 19 based harmony among chapters, verses and words, but this time, at the *verse* level numbers.

As you will recall, in Evidence 4.1.2.3, we had learned the rule to get the key coding pattern of the evidence to be tested from the most well known chapter of Quran, Al-Fatihah. Here, we learn another key coding pattern from Al-Fatiha to get the evidence coding number and use it in this current evidence, Evidence 4.1.2.7.

Here is the key coding pattern that we observe as a 19 based coding in the first and most well known and recited chapter of Quran, Al-Fatihah:

In the chapter Al-Fatihah, at its verse level numbers, for each verse, we **sum** the chapter index, verse index and the number of words in that verse. Since there are 7 verses, I will present the calculation here and get the single number to be tested that represent Al-Fatihah.

Chapter index of Al-Fatihah is 1 as it is the first chapter of Quran. The first verse of it has 4 words. Then, we get the representation number of the first verse as this: 1+1+4=6. If we perform this for all the 7 verses of Al-Fatihah, the we get the representation numbers of each of the 7 verses as follows:

1 + 1 + 4 = 6

1 + 2 + 4 = 7

1 + 3 + 2 = 6

1 + 4 + 3 = 8

1 + 5 + 4 = 10

1 + 6 + 3 = 10

1 + 7 + 9 = 17

Now we have the representation number of each verse of the chapter Al-Fatiha. We then concatenate them as the classical operation of this book by concatenating them in their natural order. We get the following single number that represent the 19 based coding design in Al-Fatiha as : 6 7 6 8 10 10 17

6768101017

Now we observe, this number is multiple of 19 as follows:

```
tmp <- "6768101017"

#Test if the remaining of mod 19 is 0
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this number is", nchar(tmp))

## number of digits on this number is 10
```

As we witnessed, there is an apparent 19 based coding on the text of Al-Fatiha with its verse level natural text numbers. I have not seen this particular 19 based code on Al-Fatiha before anywhere else. Therefore, if it was not published anywhere else before, this code of Al-Fatiha should also be cited among the novel contributions of this book.

Before testing the evidence code of this key coding pattern let me briefly talk about another interesting fact on it. The digit sum of that single big number, 6768101017, is 37. Also, when divided by 19 to test whether it is under the 19 based coding system, the quotient is 356215843. Interesting enough, the digit sum of this quotient is also 37. I recalled this number instantly because at the chapter level sums, Al-Fatiha has this number as follows: Al-Fatiha is chapter 1, has 7 verses and has 29 words. When summed this also gives 37. This might or might not be a coincidence but I wanted to share it here as a tiny interesting **fact**.

Back to the main point, we just witnessed that there is the above mentioned 19 based key coding pattern in the first and most well known and recited chapter of Quran, Al-Fatiha at the verse level data too. The hypothesis I put forward was that the same code should also exist over the full text of Quran as it might be left as a clue. This means, we infer the **rule** of coding pattern from Al-Fatihah to get the coding number of the full text of Quran to be tested. As we witness below for this current evidence, the same 19 based coding of Al-Fatiha also exists over all the text of Quran as well.

Let's first remember the head part of the table of the verse level numbers of the full text of Quran from all the 6348 verses.

```
x<- unQuran
x$VerseI <- NULL
x$vletters<-NULL
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbers of verses in Quran.')
```

Table 4.3: Table head of the numbers of verses in Quran.

chapter	verse	vwords	text
1	1	4	بسم الله الرحمن الرحيم
1	2	4	الحمد لله رب العالمين
1	3	2	الرحمن الرحيم
1	4	3	مالك يوم الدين
1	5	4	إياك نعبد وإياك نستعين
1	6	3	اهدنا الصراط المستقيم

Let me summarize the key coding pattern to be tested over all the text of Quran. In this Evidence 4.1.2.7, we first **sum** the chapter index, the verse index and the number of words of each verse, which gives the representation number of each of the 6348 verses. We then concatenate each of those representation numbers in the natural order and get the single big representation number of all the 6348 verses of Quran. As we witness in the following, this representation coding number is also multiple of 19 and thus under the key coding pattern based 19 system of the text of Quran, which uses Al-Fatiha as the key source in this particular case.

Also, here is the illustration of the coding pattern I described:

[Chapter 1 + Verses 1 + Total Words in Verse 1] [Chapter 1 + Verses 2 + Total Words in Verse 2] . . . . . [Chapter 114 + Verse 6 (last verse of Quran) + Total Words in Verse 6]

If we use the real numbers regarding the 6348 verses in the above formula, it would be like this:

[1 + 1 + 4] [1 + 2 + 4] . . . . . [114 + 6 + 3]

And, the final number after all the concatenation would look like this:

67 123

Below is the proof of Evidence 4.1.2.7.

```
x<- unQuran
tmp <- x$chapter + x$verse + x$vwords
cat("The head and tail of the numbers that represent each verse.")

## The head and tail of the numbers that represent each verse.

head(tmp)

## [1]  6  7  6  8 10 10

tail(tmp)

## [1] 119 118 119 122 124 123

tmp <- paste0(tmp, collapse = "")
cat("Mode 19 test of the big coding number:")

## Mode 19 test of the big coding number:

#Test if the mod 19 is 0:
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("Number of digits on this big number is", nchar(tmp))

## Number of digits on this big number is 15430
```

As we see, the mod 19 is zero and thus the big number is under Al-Fatiha based 19 system of the full text of Quran.

We also have to try this coding pattern in the text type of 6236 numbered verses. Thus, we have two trials and one success for this evidence. As per the rules, since we used the sum operation in Al-Fatiha, we do not use digit sum again as their results are identical. Sum operation has always the priority over digit sum in this book as defined in the general rules. Because, as per the Rule 5 of Chapter 4.1.2.2, we only use one of the coding operations, and use the one with higher importance only, if the resulting coding numbers are identical. Because the numbers of the Al-Fatihah is single digit, that coding pattern could also be interpreted that way but because of the priority of operations rule we do not test it as the sum operation has higher importance than the digit sum operation as per the rule. Let's add the trials and successes into the special counters of the chapter Al-Fatihah based coding patterns as follows.

```
alFatihah_tested_nums <- alFatihah_tested_nums + 2
alFatihah_success_nums <- alFatihah_success_nums +1
```

For the reference, to the best of my knowledge, just like all the other evidences, Evidence 4.1.2.7 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 4.1.2.7 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

One can just copy the below printed big coding number of this evidence and paste it into a web based big number calculator and test it herself.

Also, here is the 15430 digits length big number:

"676810101764111318151921212124242134322429362640473547453961674943506
0484658495657505751566152525655566169696265626283726577807990123888079
7977899389899784861139610188911051059694114101136101117100117119123105
1221131061231171121111121251781171191321271261281441291311311461461291
3213014413115313813614314514915814314714715014215116215115216915815015
5172158165190180179162156169168183170160166169169168168184181173176173
1742091981801921871821941911892002051881922302181901981962002002182312
0525420721820521820021021821127122922621322621721223022322122022022622
3229233234264246239243276236247248262251241240241241236270277262278267
2992612842632742482562692492512732552633022922803112672802633072783072
8228330332830128728827630529430329928328728729330230529332228929829429
8296298413317314314337751217251922562625292824454142302639484942364642
4354515854594846474456637556626064585467695673569772627565638972716877
7089807299848984848582859210885114881071101109611792100116101107991001
0310711811012010810910912511412211812111814012112212612012212313612515
0130132127137143152150144135137136140143146139143148146139140147150161

1541531471511671501581581741721701691611651591731951812321791961741681
9218118517817419218817820318718519218519019319218920119219821821320619
4214199211213211211201204215206216211241206207222232214834223522254730
2528278610435314134414658413643817087444440574747635678617256605859576
0966258888072676475676776708081879294808283918897777591818693969911010
0129118101961099911711011110510811412113012715611313813210812811411313
5128168127130124117125133132127126130150144139140132130144131132147147
1441461421711611551451671461491521771691611481571771811651631661601681
6216616717616317319417718116619517017717817919219218218418318218418419
8229194203190194230930606940537331402422406250444439645353484145494643
4556494744627772525465545658641147363908177681048765798573977372867585
9282808111682959710494949511110387105971061009410410111310910510498110
1051391111161101221231511211291121151211321161291331301631381351291791
2913913314113716615113414813610212221212343292724292743284430314031623
9414041406343505044556451536269526266626159596370607567696384748374876
7838578968884808680988178978712111686103949097101102971111099910311198
1001021101121121411201481291181141191171491211251241181251191251261391
3612913914113114313214013413415513814715214415915914114317014316414714
7157147160173163170167166178164172190190180166191163183199193176177169
1761982011841821831771771991921192224212419202427283436332626303937435
2335742433953655752535465695261548185607058648679627167697177776998937
0789382877679808385888785821039410392115106105911009110110099102979913
0117113117138109104112116114120121113114116126131118126120130124120121
1251241251231311261331341351311301301321321491391371491551511581471601
5115316415315417316915615616617219116617218916717717419616917417417620
3193207197174210188186197190190184193189216187197205195186195213193195
2162011951971952022142032312232252092052062122152282122142172132172202
1623321922822412272717232425382328364143342835444632514037404253465347
4656545659536356656362635882857171666772927571687779797376758075101818
2918110010095868810392125941001051925443540333933312933394234354944505
2454039526657534865676263565672638177766492657465676870737373757483748
5817577838791968388908791959311010510410594129969410198108114117991171
1111011310711111111612612412113312211912212313513413212812812913012714
0140145134157137142145142142153158137181148153149151146151157151153141
6384242383032243434394940346444415746465373597746526456495668535361746
3696468626663646475716965817272757485817182788989113827789851019210388
9311598100106999698104951001089911510710510111312711012710811612712611
5114115129124124125127123141124132141141130152222392335334941313432504
2414043675241554140484645486759635173575463586459686077637377747181777
8797976818081738589838288100959793879586919599919698969110210111610310

2122105102122111108119135123110121119124123116113118118119120136125130
1201261261331371401391321351411391331531361391451481411361501618203132
3343263535383532383544324848484165435855605749535160756362565875757661
8473728064688073757284927680807585767988827988929310310210711097978896
9792981211131061041291111051131091091111201221111251121151171181131281
1811912515913412812112612812513313715014114617294140444339353627375934
4554397472584740475451446155595250719558856167746972606670737118313033
3740463235605754434338343747544739698054535153595447566671566362657770
6663636966847372727269707579192224252727303032313234323538383837404543
4749444647494955534953565954565756576459616862676564727170707076757777
7977798081818185839490868988909292919795949798991001011031011051141061
0911810910911011011111511311911911911920263626282929373335394343425142
3640444146444952495663646353666260716083806772666675637472776971817973
7979818077848083948810095969497999897109106109109104100118121112109113
1211221041061141121211131171291221271401261291261271311221251251341311
3513213214613613513214414215213814315315413814915414714414715115716315
4157152213931293439344736423636524338534747534849494865535453535759596
1577268636967627468687266827482837475729378868587869293971029194901009
1971021001081041031001031001041061051091081111071121121121161161131241
2011711912113612612612414112913913113713512913513113214213313114914922
3035242839353632374436394251515369587551717348595167607675607764626565
6671647673678072718677768295948283818692921059585919092101919595919497
1001049810110810210711910811410810813511011210512911811911012311511312
4132125133123131128123130134126133137133135132145152232126273737333941
4242413938394345474547505546565352635759585761576162706367687067687776
7376787681827880787984838379106899191929110196939695989799991081021191
0810410410710410810711111011011011511111211811411712211711912412613124
2227273029383436334836413845454642514345485347495049515054525455565659
6262648195637068727573887874797683928383828592878696879694979892941059
8117111107107105108115106104115118111109113114133122120121127120120117
1341201321451301321281281301291361321291331411411401401431471511461451
5014514515415614816115615315415916515817016916416617316625293439354035
4238383942404441444449525346495650676155546463696561656566746666767175
7678837779887778788184798383908587888890909392959897969896100101109111
1021091101131141111161151141211131131311171211301231211201271231271381
3012912813113213514113813313314014313914014326334637379741414346415848
4553594761775848475667557264637059767463667672857973719780736977819183
8180808110191979390879888989810110098114981069710011011112312410510810
8111144272730313132393736373640424258434450545552594963735854826660606
0698164676370736768727173867676777578848683858285868786879391971009595

989410199103110104101105109107112111109113110113118115113117115125117
1
181381211221231251281271261301391341311361331361371371361461411421421
4
414614615015814828345245474047404342436348515355545049635380726057606
6
707470691337310571107748076859786731057810081868380909386941011178892
1
321021071611251141102935465045394348504352444647475351586459656557575
6
576064606565677266706970757171817784778486768386848483849391948696961
0
198971001009410195103115102111105106108112109106114302832354142404442
4
044414447464849485452525856545956576063636164646567696967697073797476
7
979757777968388868484848587878988959410293969510199991021031031031061
0
610510910810911011111611511611611811712012111912012412612412412612912
8
129130130135137135135139137137146139142144146144146151148153151150155
1
531521571551551641591591601601631621621671711681671751711701751731731
8
217717617818017918118418419119018918619419019019419219220119520320219
9
200199201201205208206206209208208217213211218215216221222219225224222
2
222232252242262322292312312342332332322352372392412392402422422482432
4
724924724824825025325325325325825727231343239414240504943574958485257
6
253657059576361686661616665656372727470797776821058083829985868785908
4
879085899398919198114109105110110106107103107105106105108110109112115
1
081131131181221251211241201281321331271301351341313230344051454657495
5
554956585281575462806759617867796584718478798570767881839579787880878
5
919493102901018588969498971101031071031069810910599101106110104113118
1
211141101201331311341281241261361251301321291311353331414343464548584
5
704659535950587360616858686573816774718165757785757182738381978983808
3
951009590929595100948997949310493101103105114108110101111114107343234
4
146434747607153494752495457535663617165677571647585758270738170758182
8
491928686898386939510689999093971089710696107971003533373744445554474
8
685661596275726665618173686962716779708577818595923634425360544449485
5
565460616062596258637362676966687676677267374847426566685749645950587
2
616164746587767173747374757377768078859181989311893859082788985868588
9
310514511911015698118103104103114112100107111104106111108109119112118
1
231213852546948505657587257573667569665969726476827975687173747074978
1
110182778394819384889411189931049889911009595971033960566050555455686
1
698075766761575787585960736271736884808073828881808489978398108959610
4
109105403840424344495154575459625761665858666467646674656570707773787
8
747980798582828291858488869293107919393971019910198999999991101021061
0
410511211111311111711411911411511711812112412512512713112812741404142
4
449494954505460525455586056596363656667646667697171777473757582797979
8
281828283848786918989929593979597981009810210210210510410710610911111
0
110111113113115115117118118119121121122122124126128128128129129130134
1
331341341361371411401421421411671441451491481471491491501521541601561
5

715715715816016116216316416616716816716917017117217317417517617617817818018218218318518718618819018919119319319319419519419719920520020120120320520720520620721121021121321221421521521522021921922322122342434651525156556154585558585963626663626466837694729581797675758177818882798084849086919691899094939396949699989899100107109110110107108114111109109116116118119115118128124120122123122123124125126130134130130434651755967817781727159566159737268706879918196767477774873773868081869088113888798107969410210211198110100105106113106110110105109108113111110113110118111123129123118144120132129131444248575766567464616564676762717170736575917569718484801079681857989104988610087911039197105969599106100102106102102101981071191091111101131211141101251191261371201191191171181201131126124131150128132127147138136142454347515263635658646668726378817672646873808373769178788386908877879287889791102107919610111510498116101101123105110113107464445555666607169676772679386917670827084858894887980868387828780908386958991879692999310611410411011710610311512111047454752545655585862646666766167667270747872768781757875788182841009382909087939194909294931011019710410410011210610710410410310911511211114112123116119119117120117118129122122123124125129128127134132133134138141421381391384846485553555759625860606264646566697172707072727474737576818182828481878593899189959490909392969998100100991021021041101081071064947535458706356676574677174737174867679728380929086898287858888989939689905048546479696167797980767472691068091817493928082888510483919396929610198108515667688955576461647369817474106877080809480797778888881858789861009196949690115525465557172756361658396807076949292857486838283911131021039013153667469626673846488691009383908281857754546360636468686369656969677375807576787677847980798687868789868890899110110010110195989999103108555455565759606163646367676972717674727575767883818583838889898789898992949597969899102102103103105103103107109113116110110111113117116119118565456585859606364656566697172738074787779927983838285858989898992919295959699969998101104105104107109110106575760606261626364676869697070717475777576787910181819789979399100116899093969396897989910010110310310410510610710711410811011211411211711611611611858596363656468697072697075727475747878828079838088888588908788939391979695100979610110010310610310310610611110811011111111113115595759606163646666706871717274767576777779808182858485888794899091105939895989710299102101104104104106106105108108110112112118114120116116118120120120122120124124126127128128130131132135134137136139606061616464656669706869717273747577798079818082848786888787888990939294949596989910210110210410610711210610911111211311211411411611711712012312612412212512712412612813213213113413413413513713613713914014114214314314814714714914915215213

5415215215615661677069977075798083104809197918710187879611610310095931
1097123107108627783828881791121048785100939591838490939286881316371102
7675779010385999298878496859286958889989410110064110757611678858289901
2692111936573727376909984808483879083111667585737690867888938794678177
7789828790889094856882777682828689821008591878697879693876910897899784
1039787819211010270827998918895851208710310195717780888184808288948883
8889889694969310110210010110299991021071101091077273757676757686798183
8284858790879588949091979498979998103103103105110109108106108110111119
1121171191221221181211201271271231311257371737677788191828485878788898
7909593979494949410110599100101101101103108108108109110110111111113117
1171161181171191221201231231231257475767785787979828284908486908888919
0939495949899971001031031031101081071071091091111121161141171191201221
2375868079938382928387878692908894949394959510596107103108107108114768
6838483878988889495929599969296999810110010110611110710810511211377777
9818383878687919090899195999598971011717878787980818383868788899089919
3959395969897991001041041021051061051071621081101111121121181171161171
1712012212212312412412612812712813513213113214179808183858585858587908
9919494939796979899981001011021051051051061071091101101131121141161181
1811912280888886868989909195939593999699979998104103110106105109106109
1111131141171178180818283848687888990919292969596979899102102102103104
1061051111081121131141131131141161171171201211201231221261251251281271
3112913182818385848688878890919294949797961001021011021031021041081061
0611010911111311211211311411911912513012613483828384858688889090949496
9696981011011031021021021041041071091111121101121131141131151171191191
1912012212812412612612612913484838587888889919291939495969697981011021
0310310410610810810911011011011112113115116119117118123121121124123126
8585868788899091929394959697999999101102104107105106108110111109113114
1188686878889929593969595959799100100102104106110878691919290949695949
6981021031051041031071071061051061091091121121151131151201171201211201
2312112588888990929299969697100989810210310510310410510710811111011111
1118898989909293959810210410911010110210210310410610510910911011090891
9291969596989898102100101102103104104107919292939495961039710010010010
3106105106107107110109929393939597100101999910110310310410410510611111
0111112113113115116116118939193949610010199103103102104104107106115115
1111121121131161161211181191191201221211219495969699101100102102101102
1041061051101081101161111151139594969798991001011021041051051061111121
0996969799991011001011041031041091071091091111111111141171171159795981
0110210210310310410610710898999910010110310410410599989910110510411010
6107100102102102103106106106108108109112111113115117115115116120101103
1041061101071021111061041131191201141271031041041061061081111121131041

0310410510710811011111211611411610510310510811011011111211311211511410
6105107108110112110113115107105109115108109110111112113113115115116109
1131121121131131101091121131171111121131151131171161161121121131151131
1411511711811911911411611912011511711911811812111611711611912111711811
9121122123118119118119122124123”

You can also access this big number from the following link:

https://github.com/quran2019/Quran19/blob/master/5.14Evidence.txt

4.1.2.8 Even and Odd chapters Evidence at the Verse level

As per the rule, for each key coding pattern based evidences, which is also based on Al-Fatiha that is also the main part of the Main 19 System presented in this book, we also have to test the follow up even and odd pairing coding pattern over the same numbers with the key coding pattern of the predecessor evidence. This chapter provides the even and odd coding evidence as a compulsory follow up coding to the predecessor evidence, Evidence 4.1.2.7. We test the follow up even and odd coding pattern over the same text type, all the 6348 verses, of Quran similar to the predecessor Evidence 4.1.2.7 that also exists in the text type of all the 6348 verses.

As per the rule, we separate all the verses into two categories as even and odd verses. If a verse has an odd chapter index then it is categorized as odd and otherwise as even. We then sum the chapter index, verse index and also the number of words of each verse, which is the key coding pattern of the predecessor evidence, Evidence 4.1.2.7, and get the representation numbers of each of the 6348 verses. Then, we pair them from even to odd and concatenate all the paired numbers and finally get the big representation coding number to be tested. Let me also formulate the even and odd pairing coding pattern used in this evidence as follows. As mentioned before, it closely resembles to **the double helix** of the **DNA** structure, where one strand is even and the other strand is the odd numbers in our case:

> [[Chapter 2 + Verses 1 of Chapter 2 + Total Words in Verse 1 of Chapter 2]
> [Chapter 1 + Verses 1 of Chapter 1 + Total Words in Verse 1 of Chapter 1]]
> [[Chapter 2 + Verses 2 of Chapter 2 + Total Words in Verse 2 of Chapter 2]
> [Chapter 1 + Verses 2 of Chapter 1 + Total Words in Verse 2 of Chapter 1]] . . . . . .

I did not illustrate the tail of the coding as the even and odd verse numbers are not equal in length and thus not straight forward to formulate. The number of verses of even chapters is 3262 and the number of verses of odd chapters is 3086. Therefore, while pairing both vectors, naturally, the short one, which is the odd verses, starts over from the beginning part of itself and keeps pairing. As this is the most natural operation approach, it is also the

default way of processing in the R programming language while pairing two unequal vectors to each other. Therefore, it does not require additional coding in R.

If we use the real numbers in the above coding pattern, it would be like this:

[[2 + 0 + 4] [1 + 0 + 4]] [[2 + 1 + 1] [1 + 2 + 4]] . . .

[6 6] [4 7] . . .

And, the final number after all the concatenation would look like this:

6647 119174118192

As we will see in the result of the following R code, this big number is multiple of 19. Here is the reproducible proof of the evidence of this chapter:

```
x<- unQuran # all the 6348 verses are used
#Get even and odd chapter verses
ev <- x[(x$chapter %% 2 ==0),]
cat("The number of even verses is",nrow(ev))

## The number of even verses is 3262

od <- x[(x$chapter %% 2 !=0),]
cat("The number of odd verses is",nrow(od))

## The number of odd verses is 3086

x<- ev
ev <- x$chapter+ x$verse+x$vwords
cat("The head of even chapters to be paired as sum: ",head(ev))

## The head of even chapters to be paired as sum:  6 4 11 13 18 15

cat("The tail of even chapters to be paired as sum: ",tail(ev))

## The tail of even chapters to be paired as sum:  119 118 119 122 124
123

cat("The number of verse of even chapters: ",length(ev))

## The number of verse of even chapters:  3262

x<- od
od <- x$chapter+ x$verse+x$vwords
cat("The head of odd chapters to be paired as sum:",head(od))
```

```
## The head of odd chapters to be paired as sum: 6 7 6 8 10 10

cat("The tail of odd chapters to be paired as sum:",tail(od))

## The tail of odd chapters to be paired as sum: 117 118 119 121 122
123

cat("The number of verse of odd chapters:",length(od))

## The number of verse of odd chapters: 3086

tmp<-paste0(ev,od) #pairing of even and odd verses' sum
cat("The head of paired even and odd chapters",head(tmp))

## The head of paired even and odd chapters 66 47 116 138 1810 1510

cat("The tail of paired even and odd chapters",tail(tmp))

## The tail of paired even and odd chapters 119174 118192 119188
122178 124203 123187

# reverse of this numbers in tmpr
tmpr <- paste0(rev(tmp), collapse = '')
tmp <- paste0(tmp, collapse = '')
#Testing the big coding number with mod 19
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

#Testing the reverse of the big number with mod 19*19 !
as.bigz(tmpr) %% (19*19)

## Big Integer ('bigz') :
## [1] 0
```

As a **fact**, not only the big number itself but also the reverse of it too (as shown with *tmpr* in the above code) are multiple of 19 of this big coding number. Even more interestingly this reverse coding number is not only multiple of 19 but it is multiple of 19x19 (361), which makes this more interesting than a simple coding as a fact only. Since this reverse coding is not within the rules, I do not classify that as evidence in the 19 system of this book and do not include in the probability calculations. However, it may be part of another rule based system that I might not have yet seen or purely random. Therefore, I present it here for other investigators in case they might observe a rule that covers this or other similar

interesting codes, which I present only as a fact but not as an evidences and thus the reverse big coding number is not within the current presented 19 System of this book.

We witnessed that the verse level pairing of sums between even and odd chapters of Quran considering all the 6348 verses isalso under Al-Fatiha based 19 system of Quran too. As per the rule, we do not need to test the same coding with the text type of the 6236 numbered verses as well. Therefore, we have one trials and one success in this evidence and add them into our counters below.

```
evenodd_tested_nums <- evenodd_tested_nums + 1
evenodd_success_nums <- evenodd_success_nums + 1
```

Also, as a strong *fact*, the reverse of the 15867 digits length big number is not only multiple of 19 but also multiple of 19x19 (361).

Also, below is the 15867 digits length big number. One can just copy this big number and paste it into a web based big number calculator and test it herself.

“6647116138181015101917217215211224172425211934223256242629253629262840244745354147424530392661396748494943425036604648424643585449515658575450595748514656476144525652635675555656626160696469586254656762696256837372566597777280627975906512363888980727971796877778970938989808972979984848689113849684101858882918510592105108968594114114881011071361101011101179610011711792119100123116105101122107113991061001231031171071121181111101121201251081781091171091191251321141271221261181281211441181291401311211311221461261461201291221321231301361441251311501531301381321361271431371451431491521581501431441471351471371501361421401511431621461511391521431691481581461501391551401721471581501651611901541801531791471621511561671691501681581831581701741601721661701691691691611681651681591841731811951731811762321731791741962091741981681801921921811871851821781941741911921891882001782052031881871921852301922181851901901981931961922001892002012181922311982052182542132072062181942052142181992002112102132182112112112712012292042262152132062262162172112122412302062232072212222202322202142269223302296023369234402645324673239312434027624236222474024862262502514424414424039241642415323653270482774126245278492674629943261452845626349274472484425662269772497225152273542556526354302562925828064311114267732806326390307812787730768282104283873036532879301852877328897276733057229486303752998528392287822878029381302116305822939532297289104298942949429895296111298103413873171053149731410633710089434104221013511322109251054710430982511028105271398611110411635110311224112334151411214612958112411153612143132811167012987133441304416340138571354712947179631295613978133611417213756166601515813 45

914857136601196962225824882180247219672064247527672867347636703380268 1
268730923994378043825283339157884297437739755391658157865293539654996 5
110691005212961118541018196851096099701175811064111861057910862114711 2
167130691277115677113771386913298108931287011478113931358212887168761 2
779130801248311785125881338713285127821261031309415010314492139115140 1
061321051309114410013191132101147100147991441021469714299171130161117 1
551131451171671381461091491041521121771161691141611201481211571131771 1
418111616512616313116611816012616812016213016612416712017612116312517 3
124194125177123181131166126195133170134177135178131179130192130192132 1
821321841491831391821371841491841551981512291581941472031601901511941 5
323016410153211542217321169211562315643166291722719124166291722718943 1
672817744174301963116940174311746217639203411934020741197401746321043 1
885018650197441905519064184511935318962216691875219762205661956218661 1
955921359193631957021660201751956719769195632028421474203832317422387 2
256720983205852067821296215882288421280214862178021398217812207821697 2
338721912122811622486191032594449035974010133102399733111311092999331 0
339111429834100351024911044112501125214145120401483912952118661145711 9
531174814965121671256212463118561255611972125631268113977136761296413 9
921416513174143651326714068134701347315573138731477515274144831597415 9
851418114375170771438316487147911479615783147881609017387163911709516 7
931661101781051641041721051909419012918096166941911011639818310819911 4
193117176991771171691111761101981132011071841111821111831161771261771 2
419912119213312122271192712217123231352413425132381282312828129361304 1
127431403414028145351344415746137321425114540142371424015342158531374 6
181531484715346149561515414656151591575315163153561565226322623963235 8
358233854971417131663467327250924275417140684377677952794173557641754 0
804875461014581488267915981631005110073955786548863103589264125599468 1
006010577146316733877427442713881307732782479347934763981498040813473 6
485448941835782468846100539573975993778746955286649156954999569168965 3
985396619174102631016911664103681026212266105631026412264111751087111 9
691356512381110721217211975124741238511681113711188211878119891208913 6
113125821307712089126851261011339213710314088139931321151359814110013 9
106133991539613698139104145951481001411081369915011517107291054110140 1
134412743110391273510836116271273712659115341144511554129391247412472 1
255812747123401414712454132511414414161130551659185220503171329533584 3
852661356735743869357232603866357044733271481948224824412565274327583 0
553060325731493253345132603575386338623856375840754575437647614984447 3
467247804964496855805373497553725684599254765680578056755785647659796 1
886882627967886592649372103711027010770110709776977588779677977992779 8
791218011381106811048112985111831059411390109861098911188120901229211 1

921259111297115951179411897113981289911810011910112510315910113410512811412110612610912811812510913310913711015011014111114611518113311193011933119371194021463932313529603457395434434743363842343637364752544347383953694780475453534851495349594854654753565466537153565763596259656177577072666863636369696766628474736872687272726669827074758279832074267536722693287829862985378733863592399343974310242915194429036100409144974110246100441084910452103491005610363100641046310653105661096210860111711076011283112801126711672116661136612475120631177411972121771366912671126811247914173129791397913181137801357712984135801318313294142881331001319514996149942397219926982797371093710633109391094110442100421184112139112381093911343121451224710445106471145011255121461135611753129521226312757140591265812957126611275713161122621257012563134671316813570132671326814677136761357313276144781427615281138821437815380154781387914984154831478314479147106151891579116391154921579115210122963093359624952898399735993699321083710244119361083910442104511075110453108691075811175110511107111073115481115911251118671146011776122751176011977124641266213165256529663471396435764073356742803872387139864277407644824195449444824983528153864692499256105509567856191559054926410163916995659561916594659766100741046698661017610871102751077611978108831147710879108888135771107811278105811298411879119831108312390115851138712488132881259013390123931319212895123981309713496126981339613710013310113510913211114510215210924110221132711427111301162911538114341213611333113481313611741121381304512345121461204212751123431274513848130531294712849131501324913551141501385413352133541405514356139561405914362276227643081319531633270396837723675377336884078427442795876438344925083548355825285599249876386739658875496829466976098609260946910581986411767111631077010773105671086811572106711047311586118761117610977113751147813384122861208312185127821208512086117871348612087132931459113097132100128951289513098129941361011329912910313311014110414110114010514010914310714711215111114610914511315011014511314511815411515611314811716111515612515311715411815913816512115812217012316912516412816612717312616613026139331344613137136371339713641137411374313646146411415814248142451445314659146471506115877148582948354746565067455539724364486350704359527644744663476647765372518558796473597165976580577357695677578160916483608165806580678172101669170976993709075877198718881987798841017710084988611476988310686978410084110831118412393124911059410886108961119614410128983497521004510047944010147954010343115421024311163105481065110853112551095410650114493163345332803972416042574060506649704374577049695813348735210557716210753746580707659855797638661736810566786110061816686658365806390729372867494701017911777887692821321051028010783161821259911481

5110863087288532903584418742904085448942934098449141914498471144610948
1054911048110541065210752103581075610554106591055610857110601096311263
1156110864113641136511867122691256912167124691207012873132791337412776
1307913579134751317733773196418343884386468445844884588545877087468959
8853955994501025893739660956110168995899681026510373103811036710674106
7110581109651087510977110851117511671115821167311683118811179712089121
8311980120831249512610012495124901269212995128951291001309413089135971
3794135931351041399313710113710314610513911414210814411014610114411114
6114151107148351533315137150371554415344152551575415547155481646815956
1596116059160621637516272162661676517161168811677317568171691706217571
1736717379182701778517677178811808517995181921843718448191471904218965
1866619468190571904919464192591925020158195722036120261199642007419965
2018720176205712087320674206732097420875208732177721376211802187821585
2169122181222982199322511822493222852229022382225782248922685232862298
5231882319323410523314523311923211023515623798239118241103239104240103
2421142421122481002431072471112491042471062481112481082501092531192531
1225311825312325812125739272603256306034504055515445554668576149695580
5575497656675861525781575787545862598060677359626171787367687984658084
8071738482788879818580708476897897818383989510879957896781048010987105
8541914094419342102449049101498549885496509454986097521105410355107581
0360106569859109631056399651016610667110641046611367118691217111471110
7712074133731317513475128821247912679136791258213081132821298213183135
8434873286349141894689439247954793609771955397499847100529849102541025
7102531055610463107611067110965111671107511071111641137511385115751158
2117701187311881119701217512181122821228412491126921288612886128891298
3129861309313495133106134891349913690137931419714010814297142106141961
6710714497145100149361483414742149531496015054152441544916048156551575
6157541576015861160601616216259163621645816663167731686216767169691706
6171681727617376174671757217667176381785217854180691824818250183561855
7187581867218857190571897319166193751936919366194591956919472197641997
6205822007920175201682037120573207742057020674207972118121010121182213
7721283214942158121593215842208821994219111223892219322310443984689519
1751005995679581977710381407238714059425643614459497351725468577054685
9796291578161966676587458776677647467876473667774866580658170867090778
8731137888788774987910780967994851028210282111829891110851008410588106
8611392106931101071109110593109931089711310111199110101113981109911899
1119912399129110123102118106144104120105132112129111131113451114311747
1145111952114631156311756118581216412466125681257212763131781288112776
4272436446685173528051835673557661915478587855835886589059886377628766
9263876288649766918310276107949172969510181115791047698751167510181101

7712381105881108211379107804784458447905286549156965591588958906294649
3669366967694619667996698729870997410078107721097611087110811077510878
1147511178109811098211684116100118931198211590118901288712493120911229
4123901229212394124931251011261011309713410413010413010044112421064810
7571045710466103561097411564112611116511464112671236711662119711197111
7701207311765118751299112275122691237112484125841298012810712796134811
3285133791348913810414198142861381001398713891491034791539754105589670
9563995610667100651027410667102711027410173987110774119861097611179110
7211383121801149211090125861198912682137871208511988119881179911889120
9313196126891249013151150561286713268127891475513857136641426146644473
4569558156746674601067187697067806780729467809379867791787688708882817
0858487858988869410088917996809486968390871158253876680749069836286669
5738984916487889669921009993938310690114821048111085117771065510354115
5512156110574859466048615563536455635767596762695872607160766274647264
7565756676697871837281708570837283728874897489738775897689818981928294
8295849781968798859993102891029110389103951059410390103901079310992113
9611699110981101001111001139911710211610211910411811057108571076010660
5062486154626463796469676168676979697970807076717474727569771067580769
1788179741019381928180978289889785931049983100911169389969092939696101
9398961089852975498659955100711017210375103631046110565106831079610780
1147010876110941129211492112851177411686116831168211883599157113591026
0103619063131645466546763706068637164716872687463766975657669776977677
9738075818082758576847885768877878494798980907991861058793869887958998
8697881029099891029110110110410010410110410110695106981059910899108103
1101081125611254118561145812058116591166011863120641206512065122661206
9124711247212673127801287412878130771317913292135791348313783136821398
5618567897089698997897092759179928095839510496809991969799919887101101
1048710587104961071161091031101001069558935911063976312365107641086863
6971701027276697570777590721037485759974927898788782848096798583928086
8895888885898898909487101881009365937391729773967695901009997849680101
8410083103871069010383103111106671068111177108771108911182111871119011
3881159060946085616961108649764896597668469103709768876981719272110731
0274717577778079888081798481808082828884948788868388888789878888968994
9096939392101941029410095101961029899999910210210110710211010410910610
7107731127110673109761117711278113811129111482114841168511787117871208
8123891268712490122951259312797124941269412894132941321011311051349913
4100134101135101137101136103137108139108140108141109142110143110143111
1481111471131471171491171491161521181521171541191521221521201561231561
2362123771258375828688808179799311283104828792858310087938795869192839
0848890949394929386948895131956410511096751077610311610878107851088211

4897790771267992811118393836687758685877391769090908689789188959399879
5949868978210177171767982808281868389858285100858585918587878690978987
9196949394879370978296799798989199889895100851011201028710510310510110
5951067210773109751107611076113751127611486116791188111883119821228481
8580878190828783958488869487908891899790949198929792999698951039610397
1039810599110102109102108102106103108104110106111105119111112108117112
1191131221141221131181131211141201161271171271171231201311211251207412
3751227612677125851257812879127791318212982131848390828483868490858886
8888918890909390949495949496989699969798100101103101103103103102110102
1081021071041071041091071091091111111121121161101141121171131191141201
1312211512311776119861198311984120831228712889124881268812694126951299
2134958599859686928796889989989010191100921019310694111951079610897105
9911299113997810178102781047910780105811068310883110861118710988113891
1490118898791869391959193929590969498969795999410096104981041021021031
0510510610410510310710716210710810611010511110611210911210911811211711
2116115117113117115120120122117122120123121124120124123126121128125127
8912889135891329013192132931419580988810288104861098611089101891029010
2911039510493106951059310999109961109911097919992989210493103941109510
6961051031099710610010910011110011310311410611710511710682107811078311
0851098493869188938794889690100911019299941039410397102971049610410010
7102106101115102115103111102112104112108113106116106116110121109118111
1191131191121201121221131211141211199511994125961309712698134998410083
1018510287104881058810589106911119211291109939794959598961019610297102
9810310110310210410310610310710410810699108981089910910111010511010411
0110111106112107113101115103116104119106117110118107123103121104121104
1241061231061261088611186112871138810589103921059510893110961109511195
1129511397112991151001141001071021051041091061151101098811388112891129
0113921139211199112961139611597113100117981169811610211310311410511510
3117104118105119107119108115111117110119111118111118118121901178911892
1199112196122951239669879869881021010010101171027103510412104171072592
1993229356932695259729100281012499459941101421033010326104391044810549
1064211136110461114211243113541135111558116541165911848944695479644965
6996310175100561026210260101641025810454106671056911056108731105611697
1117211562113759665966397899972997110168100771017010489103801047210999
1078410989109841118411185111821148511792117108115859811499889910710011
0101110103961041171049210510010011610210110210710299103100106103106107
1061181081101081201091081121091111091131251151141171221151181151211161
1812014010212111112210612610412011312211912312013611412512715010413010
3132104127105137107143108152110150111144112135116137114136116140106143
1051461071391081431101481121461101391131401151471081501091611101541111

5311214711315111316711515011515811615811017410917211217011316911716111
2165112159113173115195114181116232119179120196116174117168116192119181
1211851181781191741181921191881221781242031231 87”

Also, as a strong *fact*, here is the reverse of the 15867 digits length big number, which is not only multiple of 19 but also multiple of 19x19 (361):

“1231871242031221781191881181921191741181781211851191811161921171681 16
1741201961191791162321141811151951131731121591121651171611131691121701
0917211017411615811515811515011316711315111214711115311015410916110815
0115147113140110139112146110148108143107139105146106143116140114136116
1371121351111441101501081521071431051371041271031321041301271501141251
2013611912311312210412010612611112210212112014011611811512111511811712
2115114113125111109112109109108108120108110106118106107106103103100102
9910210710210110011610510010492104117103961011101001109910799889811411
5851171081179211485111821118511184109841098910784109991047210380104891
0170100771016899719972978996639665113751156211172116971105610873110561
0569106671045410258101641026010262100561017599639656964495479446118481
1659116541155811351113541124311142110461113610642105491044810439103261
0330101429941994510124100289729952593269356932292191072510417104121035
1027101171001010210988986987966951239612291121921198911890117118121111
1181111181101191111171081151071191051191041181031171051151031141021139
8116981161001179711396115961139911292111921139011389112881128811311010
9106115104109102105100107100114991159711295113951129511196110931109510
8921058910388105871138611286111126108123106124106121104121104123103118
1071171101191061161041151031131011121071111061101101101041101051091011
0899108981069910410810310710310610210410110398103971029610296101959894
9593979110992112911118910688105881058710485102831018410013499126981309
7125961199411995114121113121112212112120113119111119109118110121106116
1061161081131041121021121031111021151011151021061001079610497104971029
4103941039299911019010088968794889386918493851098311081107821071171061
1710511410611310311110010910010610010997105103106961109510394104939892
9992979199110961109910993109951059310695104911039010289102891018611086
1098810488102809814195132931319213290135891288912789128125126121124123
1241201231211221201221171201201171151171131161151171121181121121091121
0911110611010510810616210710710710510310610410510510210310410210498100
9699949795989696949590939295919391918689879011889114881138710986111831
1083108811068010579107781047810278101113991129910599108971079611195106
9410193100921019198909989968892879686998595859213495129941268812688126
8912487128831228412083119861197611912311712211512011311911411711311411
2116110112112111111109109109107107104107104108102110102103102103103103

1011001019798999698969496959494949390909091888888888690858684848390828
4838213182129791317912778128851257712576126751227412312512013112112312
0127117127117120116121114118113122113122114119113117112112108119111111
1051101061081041061031081021091021101021059910398103971039698959996979
2989294919790918990889487888695848783908287818580848182122831198111879
1188611676114751127611376110751107310972107951061011051031058710512010
2851019510088989199989879978296709787939394969487919789869087879185858
5100858285898586838281828076797717182101689794988795939988957891868990
9076907391858775866687938311183928112679907789778211485108781071161087
6103751071109664105131958895869492939394909484888390919295869387100878
5838792104821128379938179888082868375771256212315612315612315212015212
2154119152117152118149116149117147117147113148111143111143110142110141
1091401081391081371081361031371011351011341011341001349913110513210113
2941289412694124941279712593122951249012687123891208811787117871168511
4841148211291113811127811177109761067311271107731061071041091021101011
0710210299999899961029510194100941029210193939096899488968788878988888
6838788849482888082818079848081798877807577747173102721107192698168877
0976910366846597648964976110861696085609411590113881119011187111821108
9108771117710681106671031111038310690103871008310184968097841009995909
6769773917293739365881008710190948898858988888895808683927985809682847
8877898749275997485721037590707769757276701026971686364108651076312363
9759110589310695110100109103107116104961058710487101101988799919697999
1968095104958392809179927589708997896989708567856182139831368313779134
9213579132771317813074128801287312772126711246912466120651226512064120
6312060118591165811658120561145411856112108112103110991089910898105951
0610110610110410010410110491101891029099881028697899887958698879386105
7991809079898494778776887885768475858082758173806779697769776576697563
7668746872647163716068637054675466131649063103611026011359915783598211
8831168611674116851179211292114941127611070108801149610783107651066110
5631047510372103711015510065995498529710898989610193969692939690938991
1168310010499859388978289809792819381741018179917880761067569777275747
4767180707970796967696168696779646463546248615062106601076010857110571
0411810211910211699117100113100111981109911096116921139310990107901039
4103951058910391103891029310285998798819684978295829481928189768975897
3877489748972887283708370857281718369786676657564756472627460766071587
2626959675767556353645563486146604859110571215611555103541065511777110
8510481114821069093839993921009669878891648984957386668362906980748766
8253871158390869680947996889194100888685898487708582817088768891788677
9379678072946780678069707187601066674567455814569447346641426113664138
5714755127891326812867150561315112490126891319612093118891179911988119

881208513787126821198912586110901149212180113831107211179109761198610 7
749871101731027410271106671027410065106679956956396701055897549153103 4
791498713810013986138981421041418913879134851338113296134107127801288 4
129841257112469123751229112275129651187311770120711177111962119671166 7
123641126511461111641127411556109661035710457104481074210644112130100 1
301041341041309712610112510112493123941229212390122941209112493128871 1
890115901198211893116100116841098210981111781147510878107751108111087 1
097610772100789974987098729966966794619676936693669464906289589158965 5
915686549052844784458047791078211388110811057712381101751017511676987 9
104811159510172969491761078310266916497628863876692628763775988589058 8
655835878547861915576567351835280517346684364427212776128811317812763 1
257212568124661216411858117561156311463119521145111747111431134511113 1
112129105132104120106144102118110123991299912399111991189811010111399 1
101011119711393108931099110510711093110921068611388106841058510091110 8
298821118210285102799480967910774987887788873113778870907086658165807 4
866677647367876474667758775874667661965781629159795468577054685172497 3
445943614256405938714072103819777958195671005991758951984610443932238 9
221111223942198821984220932158121594215832147721282213101211812109721 1
742077020674205732077120568203752017920182200762056419972197691945919 5
661946919375193661937319157189571907218858186571875618550183481826918 2
541805217838178671767217667175761747617368172661716917067169621677316 8
631675816662164591636216260161611606015854157561575515748156491604415 4
541526015053149421493414736148100149971451071449616710614197142108142 9
714093141901379913689134106134951339313486130831298912986128861289212 8
911268412482122811227512170121811197311870118821177511585115751136411 3
711117511067110651117110961106631075610453105571025410249102529847100 4
998539771956097479347954392468941893491328634871358413183129821328213 0
811258213679126791247912882134751317513373120741107711471121711186911 3
671046611064106671016699651056310963985910656103601075810355110549752 9
860945496508854854910149904910244934294419140854187105801097810478967 9
959510883988183789776897084858079817888848271738480658079846768787361 7
159626773806062595458578781575257586156674976557558049695761466845555
154405534503060325627260257392581212531232531182531122531192501092481 0
824811124710624910424711124310724810024211224211424010323910424110323 9
118237982351562321102331192331452341052319323188229852328622685224892 2
578223822229022285224932251182199322298221812169121585218782118021376 2
177720873208752097420673206742087320571201762018719965200741996420261 2
036119572201581925019259194641904919057194681866618965190421914718448 1
843718192179951808517881176771778518270173791736717571170621716917568 1
677316881171611676516266162721637516062160591596115956164681554815547 1

5754152551534415544150371513715333148351511071461141441111461011441101
4210813911414610513710313710113993135104135931379413597130891309412910
0128951299512692124901249512610012495120831198012183120891179711881116
8311673115821167111175110851097710875109651058110671106741036710381103
7310265996899581016895619660937310258945095598853895987468770854584588
4488445864688438343964177317733751317913479135761307412779133731327012
8691206712469121691256712265118641136411361108631156311260109571105610
8591055410656105581075210352107541064811049110481054610947114449841914
4914098429344894085429041873584329028853087110861148512599161821078310
2801321059282887611777101799470867493729072806383658665816610061786110
5667368866197638557765980707465107537162105577352133486958704974577043
6649605057406042724180395332633449315011454106551095311251108481066310
5431114210243115401034795401014794451005210034972898144101111961089610
8861059412491123931118411083100849784106869883114769886100841017798849
8778881987187719075937097699170101668172806780658165836091648160775769
5673578057976571657359796485587251765366476347744676445952704363506448
7243553967455650474648355829771486115847150591465314645144481425814241
1414614643136411374113797136371333713646131331342613916613017312616612
7164128169125170123158122165121159138154118153117156125161115148117156
1131541151451181451131501101451131461091511114711214310714010914010510
4110114110413311012910313299136101129941309812895128951321001309714591
1329312087134861178712086120851278212185120831228613384114781137510977
1117611876115861047310671115721086810567107731077011163117679864105819
4699260986097609466968287549658867387639249855982528355835492508344764
3795874427842884073367537723668377039633295318131643062276227591435614
0561395514354140521335413350138511414913550132491314712853129481304513
8431275112342127461204512145123381304112136117481313311336113341213811
4291153011627111271142211324110152109145102132111135109133101137100133
9612698134961309712398128951319212393133901259013288124881138711585123
9011083119831187912984105811127811078135771088810879114771088311978107
7610275108711017698661046610074976694659165956195659169101639264905491
5585619567105509256924986468153835282499444954482417644774086427139723
8803867427335764064357139663465296525621316412677124601197511776122601
1767114511185911248111731157111051110751105811169107531085110451107421
0439104361084411937102321083699359939972898249535963093229615210115791
1549216391157911518914710614479147831548314984138791547815380143781388
2152811427614478132761357313676146771326813267135701316813467125631257
0122621316112757126611295712658140591275712263129521175311356121461125
5114501064710445122471214511343109391123812139118411004210442109411093
9106331093797379827992697219423961499514910013188133941428313280131841

3577129801358113779131791397312979141811247112669126771367212174119631
1775120661246611372116671168011283112601127110760111621086610953105631
0664104631005610349100521034910444108461004110244974091361004290519442
9143102439739933592338637872985298628782693367226752074798375827074698
2726672727268736884746662696763696363666870727757656162596359565771536
6535654475354655948534951495348545380476947395347385443475237363436384
2433643475434573960343529323146394021371193311930119311191811314611514
1111150110137110133109125109128118126109121106128114134105159101125103
1191011181001289911398118971179411595112971259111192122921209011188109
8910986113901059411183129851048110681113811218098799277977996778877977
5977611070107701027010371937292648865796782628868796176598564755780568
0577656925484597256755373498053685564498049724773468444614976477543754
5584056376238633875386035513253344932573160325530583043276527412548244
8224819327144733570386632603572386935743567266143853358329531712050185
2165913055141611414413251124541414712340127471255812472124741293911554
1144511534126591273711627108361273511039127431134410140105411072911517
9915010813610014195148104145981399613699153106133100139981411151359313
2881391031409213710113385126891267712082130113125891368912078119821187
1118811138511674123751247211972121811106512369135711197510864111641226
3102661056212268102641036911663101741026191539653986896569149995695649
1528646957787599373975395461004688578241834489648534734081498039813476
3479247932783077388142714274387716731463105771006094681255992641035888
6386549557100731005181639159826781481014575468048754076417355794179527
7676843714075419242725067326634713171418549823358356323623963226522561
5631535315159157561515414656151461494715353148461815313742158401533714
2401425114532142461374415735134281453414043140411273613028129231283812
8251322413423135171232712227119121221921331991211771241771261831161821
1118411120110719811317611016911117711717699193117199114183108163981911
0116694180961901291909417210516410417810516611016793170951639117387160
9014788157831479614791164871438317077143751418115985159741448315274147
7513873155731347313470140681326714365131741416513992129641367613977126
8112563119721255611856124631256212167149651174811953114571186612952148
3912040141451125211250110441024910035983411142103399933109291113197331
0239101339740903594441032586191162241212288721997233782168122098217802
1386217802148421288228962157821285206832056720987225742238323174203842
1463202691956719775195602017021663195591935921361195621866619562205521
9769187622165318951193641845519044190501975018643188632104017441197402
0741193392036217631174401743116930196441742817743167271892917224166271
9129172431662315621156211692217321154101532301641941531901512031601941
4722915819815118415518414918213718313918414918213219213219213017913017

8131177135170134195133166126181131177123194125173124163125176121167120
1661241621301681201601261661181631311651261811161771141571131481211611
2016911417711615211214910414610916713814511715511316111717113014299146
9714410214799147100132101131911441001309113210514010613911514492150103
1309412610312782132851338712588117851248313080127791687612887135821139
3114781287010893132981386911377156771277113069121671147110862105791118
6110641175899701096096851018111854129611005211069996596549353865281579
1657553773997438842915783338252804394379239873081268026703376366734672
8752764246720721980248821582462229696011571365914858134601515616672137
6114178133561396312947179471295713540138441634413087133701298111643132
3612141115581124612941121341514112331122351101041168611127139281052511
0309847104251052210935113221013410489433710031410631497317105413872981
0329611129895294942989428910432297293953058230211629381287802878228392
2998530375294863057227673288972877330185328793036528387282104307682787
7307812639028063267733111142806429258302562635425565273542515224972269
7725662248442744726349284562614529943267462784926245277412704823653241
5324164240392414425144262502486224740236222762424340239312467326453234
4023369229602233022692202142202322212222232072302062122412172112262162
1320622621522920427120121121121821121021320021121819920521421819420720
6254213205218231198218192200201200189196192198193190190218185230192192
1851881872052032001781891881911921941741821781871851921811801921981682
0917417419617317917623217318118119518417316815916816516916116916916617
0160172170174183158168158169150156167162151179147180153190154165161158
1501721471551401501391581461691481521431511391621461511431421401501361
4713714713514314415815014915214514314313713612713813215313013115014412
5130136132123129122146120146126131122131121129140144118128121126118127
1221321141191251171091781091251081121201111101121181171071231031061001
1399122107105101123116119100117921001171179610111013611010110711488941
1496851051081059291858882101859684113848689848497998972898093898970777
7796879718072888912363906579758062777265977256837362566269656762546958
6964616056625556567552635256614456475146574850595754565849515854464348
4260465036434249496748613939264530474235414745402426283629292524263256
3422211924252417211221521719171510181013811647 66”

One can just copy this big number and paste it into a web based big number calculator and test it herself.

4.1.2.8.1 Verses and Words Sum: Fact

In the previous chapters, we presented all the evidences considering the chapters, verses and words. We also considered chapters, verses, words and letters but there was no key

coding over the chapter Al-Fatiha with them. I considered those numbers necessary to test the content information of the full text of Quran. Because of the rules describe in the beginning of the main chapter, we do not look at other combinations as these are the most meaningful and necessary information to test the intactness of the full text of Quran and its structure along with its content together.

In this chapter I will present other similar interesting coding we observe both in Al-Fatiha and full text of Quran. But as just mentioned, since this is code based on only verse and words number, it is not within the boundary of the described rules and is not considered as an evidence but only as an interesting fact. When I first observed this coding I had considered it as an evidence but I decided to simplify the rules as much as possible and thus I now classify it as a fact currently. Researchers should feel free to investigate more on this and the following code if they like and might consider it as an evidence in the future if they deem so. The reason I later classified this code as a fact instead of evidence is to simplify the overall key coding pattern based Main 19 system of the full text of Quran and keep the strongest part as evidences. Because otherwise, those strong and clear evidences might be ignored and seemingly weaker evidences might be criticized and using them, the overall system might be unfairly attacked to falsify. In order to make sure the Main 19 System are evaluated over the main codes of the main 19 system, I thought it is better to keep only the strongest evidences within the system and therefore simplified the rules. After that, I classified the code of this chapter, Chapter 4.1.2.8.1, and the code of Chapter 4.1.2.8.2 as a *fact* rather than as an evidence as I had classified when I first discover and presented them in around 2020. Otherwise, these two codings are also observed both in the chapter Al-Fatiha and in the full text of Quran with the same key coding patterns and stand as quite strong codes. The only concern I had was using only verse and words information to represent the content of Quran might be open to critics and might also cause the system look more complex overall. Now, let me present the code and move on.

Just as before this coding fact gets its rule to obtain the number to be tested from chapter Al-Fatihah. In this code, we also test **decimal sum** operation and we **again** observe the 19 based coding in the full text of Quran. Basically, in this fact, we sum all the numbers. Let's first see the fact in chapter Al-Fatihah and then apply it to the full text of Quran again.

```
x<- nQuran
x<- x[x$chapter==1,]
tmp <- x$verse+x$vwords
tmp <- sum(as.numeric(tmp))

cat("The sum of the verse indices and their number of words in Al-
Fatiha is ", tmp, "  and it is also divisible by 19 and the result is
", tmp/19)
```

```
## The sum of the verse indices and their number of words in Al-Fatiha
is  57   and it is also divisible by 19 and the result is  3
```

Now we observed the rule and will apply it to whole Quran. Let's first see the illustration of the coding pattern.

> [Verses 1 + Total Words in Verse 1]+[Verses 2 + Total Words in Verse 2]+ . . . . . + [Verse 6 (last verse of Quran that is in Chapter 114) + Total Words in Verse 6]

If we use the real numbers in the above formula, it would be like this:

> [1 + 4] [2 + 4] . . . . . [6 + 3]

And, the final number after all the concatenation before the digit sum operation would look like this:

> 411464

The sum of all these numbers are multiple of 19 as reproducibly proved below:

```
x<- nQuran
tmp <- x$verse+x$vwords
tmp <- sum(as.numeric(tmp))
cat("The sum of the verse indices and their number of words in all
Quran is ",
    tmp, "  and it is also divisible by 19 and the result is ", tmp/
19)

## The sum of the verse indices and their number of words in all Quran
is  411464   and it is also divisible by 19 and the result is  21656

as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

This code, Fact 4.1.2.8.1, also considered as a fact as it does not fully align with the described rules of this chapter. Therefore, we do not add this into the counters of the overall 19 system of evidences.

Fact of even and odd pattern follow up:

Basically, just like before, since the even and odd coding pattern is not relevant for the Code 4.1.2.8.1 to follow up and thus the even and odd counters are not increased here. Because, even if we construct the even and odd based coding pattern, the sum of them would be the

same as the one of Code 4.1.2.8.1 and just like before this test is irrelevant for this coding pattern.

4.1.2.8.2 Fact: Coding between Verses and Words

Just as before, this coding fact gets its rule to obtain the number to be tested from chapter Al-Fatihah. In the previous code of Chapter 4.1.2.8.1, we had observed 19 based coding between verse indices and number of its words using *sum* of all the numbers. However, it would still work in Al-Fatiha if we had used digit sum instead of the digit sum as the relevant numbers in the chapter Al-Fatihah are all single digit. Namely, both operations can be used in chapter Al-Fatihah and yield the same successful coding number. As per the rules of key coding pattern, sum operation has the priority and we if the key coding numbers are equal, we do not test for digit sum pattern as well. However, since this code is classified as a *fact* but not as an evidence of the system, I also tested with the digit sum operation as well over the full text of Quran and observed that it also exist in the full text of Quran too. We already observed success in the code of Chapter 4.1.2.8.1 with the decimal sum operation. In this code, we also test **digit sum** operation and we **again** observe the 19 based coding in the full text of Quran. Basically, in this fact, we compute digit sum of all the numbers.

In this chapter, I will present the coding based on the verse and word numbers. Similar to the rule, whatever the coding we observe in Al-Fatihah, we also test it on the full text of Quran too as we hypothesize that the coding in Al-Fatihah might be left as the clue for the full text. In this code, we observe the following 19 based coding in Al-Fatihah between verse indices and number of words.

Verse index of Al-Fatihah is 1 as it is the first chapter of Quran. The first verse of it has 4 words. We get the representation number of the first verse by concatenating verse 1 and number of words 4 as this: 14. We apply this to all the 7 verses of Al-Fatihah and concatenate them. We then obtain this big number: 14243243546379. The digit sum of this number is 57, which is 19x3.

Let's first see the fact in chapter Al-Fatihah and then apply it to the full text of Quran again. Let's run and test this coding of Al-Fatihah as follows:

```
x<- nQuran
x<- x[x$chapter==1,]
tmp2 <- paste0(x$verse, x$vwords)
tmp <- paste0(tmp2, collapse = "")
print(tmp)

## [1] "14243243546379"
```

```r
#Test if the mod 19 is 0
digitsum(tmp) %% 19

## [1] 0
```

As we observed, there is 19 based coding on the text of Al-Fatihah. Now the hypothesis is again, it might be available in the full text of Quran too. As I will show in the following, it exists in the full text of Quran too considering the text type of numbered 6236 verses.

Here is the head of the numbers table we will use. It contains the verse level natural numbers of the numbered verses of Quran.

```r
x<- nQuran
x$text <- NULL
x$VerseI <- NULL
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbered verses of Quran.')
```

Table 4.4: Table head of the numbered verses of Quran.

chapter	verse	vwords	vletters
1	1	4	19
1	2	4	18
1	3	2	12
1	4	3	12
1	5	4	19
1	6	3	19

We will concatenate all the verse indices of the 6236 numbered verses and number of words of each verse by following the rule we observed from Al-Fatihah. Here is the illustration of the coding pattern I just described:

> DS[[Verses 1 | Total Words in Verse 1] [Verses 2 | Total Words in Verse 2] . . . . . .
> [Verse 6 (last verse of Quran that is in Chapter 114) | Total Words in Verse 6]]

Recall that DS stands for the digit sum operation. If we use the real numbers in the above formula, it would be like this:

> DS[[1 | 4] [2 | 4] . . . . . [6 | 3]]

And, the final number after all the concatenation before the digit sum operation would look like this:

DS[1424 . . . . . 63]

Then, as we see below the digit sum of resulting big coding number is multiple of 19 and thus it is one of the interesting coding fact but still is not considered as an evidence of Al-Fatiha based 19 system of the text of Quran regarding the described rules of this particular system. Here is the reproducible proof as follows.

```
x<- nQuran
tmp2 <- paste0(x$verse, x$vwords)
cat("The head of each verse and words as concatenated: ",head(tmp2))

## The head of each verse and words as concatenated:  14 24 32 43 54
63

cat("The tail of each verse and words as concatenated:",tail(tmp2))

## The tail of each verse and words as concatenated: 14 22 32 44 55 63

tmp <- paste0( tmp2, collapse = "")

# Test if remaining is 0
digitsum(tmp) %% 19

## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 22051

tmpd <- digitsum(tmp)
cat("the digit sum of the big number is ", tmpd,
    " and it is also multipl of 19*19 ! as follows:")

## the digit sum of the big number is  81947  and it is also multipl
of 19*19 ! as follows:

tmpd/(19*19)

## [1] 227
```

As we observed the digit sum of all the verse indices and their corresponding number of words is not only multiple of 19 but also multiple of 19x19! We observed a double of test 19 in one coding number. This is interesting because although, the digit sum of the big number

has 5 digits and not too long but observing that it has multiple of 19 twice makes it more interesting.

Also, below is the 22051 digits length big number. Recall that the digit sum of this number is multiple of 19 but not itself.

“1424324354637911273841258611712811910101211111271319141615716111717186191920252112222323202413253426392720281329193028311532123323341335193619371138173910401441184284374410458468471248194918501051125285375427551556757185820591860286160622463156413651266967206823691870177124721073117437751976237797811792480238113821083298415854986138728881089269027913092119327941795996259718981299101001010122102741031210413105251061910717108181093311017111181121711331114301151211614117111182411910120311211512212123181241912522126301271412817129161301813191321713327134151351513631137191381013914140301411514221143451443414532146141477148191491715031151171526153111541315512156101579158241592016011161131629163916443165311661216723168171691117022171181721517325174291751117614177511783817991801618113182161831518432185441861718765188171892719013191251926193151942219514196731973019826199122002420114202820325204172051420612207112081620912210172112021220213492143021522216252175721816219262202622139222272231622414225142261322772284022946230302314523233233642342523547236252373523882391524027241624272432824492451624654247432483024960250152512725292535225422255502562425724258432596726039261242622426311264392652726635267302681326916270152712027228273302741727545276112771927814279172801428115282129283322842828527286491127311418511613746815913101611141291329142415241611176181819262026211822112320241525152625272128272922302631143211331134735183624373538153920401741204213438442045214674723485494550195185220539546553156135711587591560761256215636643265166620671468136913709711172177332748753676977277829792880138133827831484298513861887988989119014912492159324941195119610972598139920100151011710213103341041410514106171071010811109111102311111112351131411415115911618117231183111928120211211112212123101241312515126171279128121291613013131513251331113413135231361513713138613991402414161421314312144271452414621147191481014913150615119152401532515475155211563715714158715930160181612116213163816425165201669167331681616913170191711117215173171741517511176221771217817179361803018122182918328184121852318624187211882018991901119121192111932019414195431967197719821199302001112921632841451663771981391510131171128813181413152216141720182419352017211122172354244225582614271328829243013311232273319344035223632371538183915401541124214434944144594638472948204914501051205211531054185511562057205825592960306115621663166423651966276766836918707711172177319742175317

6207748783679188012812482138330842285228615871788228928903691329260931
6944095339689727981299101003110123102621032010422105151067107141082110
9191101311111112141133311426115201162011711118811921120712171222112320
1241612517126121274012829129221301113132132101331213414135381362913720
1386139141403314136142191431614418145111461814711148141491415022151815
2171533715419155221566157341588159141601416114162261632516414165151661
3167111681216911170241715417218173261741217515176501242533614315436627
1982791010711241245133214251524161817421830192920232115221823212417251
3261427242816291330931263240333434133514362437123813391440194168422643
1544414531462647164851493350105123522853155438551356115724581259216027
6116621363136447651266246725683169207019711972347325748752576167724781
7791080198115822683218416851486787188812894590169120921393249424955196
2097279899911100161012610291032110424105201065210726108221091511064111
1311222113151142211517116451172911811119241201111421431241151263171681
3991013111012251391424159169171718719372013211422122312241025322611271
7281629930193127321333143422352836103719382239174015411242114314442045
9462347144815498502851175225531554275565621572258145931602261176212631
7641065276696756823691270457139728732474147597615771878187912802581228
2118314842185786887988168917901691449222934994299517961297169813994410
0151011810216103910415105810613107131082510921110131112211223113121142
3115111161811711118101193012012121201222412315124291252812691271012836
1298130281311013291331813471351913631137201382613922140201413114216143
2314440145391462814713148371498150271514215235153171541715581561415735
1583715919160161611616291638164291652111213314410512667689911101111161
2171313145154167171518121917202521522282312241225726202731282229163016
3116322633293411351936113737384039144023411042154336442845104618471348
1449155020511952105338543255856155729581759216096111621163136414651666
1467116876927701771257213733574257523768771678679158013811182138378488
5388624871988228942901291692139316941395189618979989991010019101231029
1031610491051810611107610861099110711171124113111145115111161111711118
6119412031214122312319124812551261612721128161292213010131221321213313
1342313511136111372913824139101409141181422314341144151452014636147131
4822149181503915111152151531415415155411563015743158321598160431612016
2171632716419165181661116719168141694017010171191722617315174517513176
3017791781017930180141817182818351841118522186101873718828189291901219
1719271931219414195261969197101981219972001020112202720323204820516206
1111821736411511611723879111018112212231313146151216201721186192420122
1822102311242125132619271228102919301631173219331234213513362137183816
3916401041334235432044194513461347174836491850135195217531854175510561
2571058145986033611262126320649652766266720681069117025711372457313741

875221921433242252661872381691310101113121813201411151116241718182319 2
420162110228232024332523261827122828292930233123321533143429351936363 7
313829391640434115422343134414451446154717481649155016511452225312542 2
551756105711581659196022612662126316641765136616671968166932702671247 2
247312744675127697715781179208025812782883258418851686188711881489139 0
179126922393199430951896149716981699271002510122102171031610416105161 0
612107241082310927110151113711216113201142211518116171172711831119912 0
521211812222123171241812512126161272112814129151522632942852361471586 9
151014111812271317141015391618171418291917201621222241232624432511261 6
272728182910301631273211331034173529361737223816391940124115421143114 4
104520461547124874922501251115213531154215516565571558105920601961426 2
106346415651066256715682569970137134721673177422751476107711781679680 1
081178278322841385108658716882989119027917921493249422951096897898219 9
151001410114102151031010427105910616107241082310911110293254851961673 1
822911101311101227131814161514161617391823191120242192272314241125926 1
127292820292330103131321433103418351236173711381939104026411142204323 4
419451546244719481949195018511452185316541655756185721581459126017612 8
622263236418651166186786812691570187197213731474117557615771378277913 8
011813082128388427851586118721883689239099119921693209418951096697109 8
999910091012410212103161045105101069107151081810920110181111011212113 1
711414115711626117811810119151201712191223123161526316416516625778159 1
410161112128131314915171641719181819172092132229232324192523261927102 8
132910301831323219331734103511362737263826391040324120421843254484511 4
622471448154911502251295212531554145585617577589591760106166214631764 1
765266624672868306916701571572127312746751176337724781679138037811882 1
183188413851286138721882289109023919921193129412956962097998999141004 7
101211021410361041010511106710714108171092911019111231152263244275256 2
071581595101411351291319142715111645174218271915207211322192315247252 3
261627192811298302831513213333934143519362537193821398401341164218431 5
116214316419521626711813937103311291217131614101551671716182219142052 1
342244231724152512261327182812294301231213225339341535133615372638183 9
134094184213439442645144612471148104965065110521316273748576978899710 7
118125137149158167175187191120821112212236247257268277281229930431732 9
331134535636637438439104044154211434448455463471048849650551452953754 8
557568575586596606615624637644651466967468669470571672573374875576377 5
785795805815826833846851486587788158959049149239339469539689779869951 9
218374858677148991010131116121513131421151116417718101962010217221123 1
324925152621272128192983020311532123322341035323628371438183911401041 1
842543154412451646747848174914507511252115312541055656125775895919601 2
612362176317641465166617671568136924702071227221731574107527762977197 8

1579188025812582683784148511861987108813892490169120923293179419951596
1597189889910100910117102131031610412105111062410713108111097110181111
5112241139114131152211622117511815119191201112171229123121241712522126
1212714128812121239413517611723811916109118122313131471521161417131818
1912201221112292325241225122610279281229133012311332833223417351136163
7133873918401141104213436442145124619471948949950551255295316541455155
6135718581859216025611362156310641965966146718681569227017711572117313
7497512761377117814791280148198213831284118514861387988198914901091119
2129326941595149611972798149923100141011910216103910414105910691071810
8810951102211121111215334651661171186910101611712913111419151816191734
1822193820132132223323724172582623271528302928301231283214331134133512
3612371638839194015418422043114494523461347114816492850265113521353105
4145519561857305819598601361116212632064965126611676688691070127115728
7310741675976137724781279178010819823583984108528625871388138939015916
9239313942095129619978981599111005101111021410351041110514106910710108
6109181102411253541451368713814914101311111281361461591610171118819920
1121152252314241025826182711281229103083111326339349351636837113811391
2408418421643144410451246134710481449145095110527537541155956857358295
9116012611162116396418651266867106886910708719728731674975257613778787
7998058188268398478568658798848949099149269310944955969971098141125344
6546127788941018115129135141115101610175181319420521722112342452552632
7428229530231332333334235436637538639224035412428435448451046747214810
4955095155211531954955856657858145986066115625631364106512661267568669
1670871267219731474137510761277187887958015811782983684985986278715881
2891290179199289349420955961697289812991310081017102810361041210571063
1076108131091211010111911211113141141711511116911713118711961201412115
1226123181241212581268127121281712991302013118132121331313419135111721
1315410514687148998108111012713101461581671711181319132052172213236242
2251526827628152913301831133283311341035103617378387391640104113421343
1444184511461247204884985075195211535548557561357758859860761862763964
7659661167968769870571872873157416756761277127814791480108114821283108
4168578668723888891190199111928936941295796109720981199910071019102910
3111041610512106610751081110913110811181121011022231241157061371281391
5109112512141310141715221691722183719172062142212232224925252616271428
2029830243121329331134203515362737203813391040354117429434441145144623
4714481149950851852275316542155165612578581859760166115621763156412652
7661067176876997018711872297329749751176107712784413253544546107785951
0311612713614211551651710181319132092115224231724262510265273228152983
0731632143325347359364371038123954054184264374419458467477484496501151
1252853954555756757758559560106176212631464865766967468106977010711672

9735748751176877127810797801081682883128488558688758814895905912492693
6946957969977985998100161011010261031010461058106810771085109141108111
8112711381149115811611117181187192263184195116177981199109112812121314
1415151616141791871920209213522262313249251126162719282229173015317832
1733483413354836143719381439224033412142743384410453146114715481149750
1651185210531754235538568571158505919602361766239632764221921932241659
6127168179910171181291391481513161017161821191520202119221023924725726
9271228729113010311132153383411359369371338839740164111421743944154516
4654711481349105095175275315541255145655714581359176013611162136312645
6511664671168226987016719729731074137597657712112436411511687118895108
1141261381461571671751810197206211122823524925526527728929830531732633
6347358367374385395407411242643744945846347448349215075111528535544553
5635745835946026186266313643655663678685694706716725734746755763776784
7948048148288368468558668748868969039139269379449539649769849941004101
3102710381045105410671074108310911110311151126113711441155116911751189
1196120412181225123312471254126312711128512941304131313251333134213561
3691375138313910140514131427143414431451114651473148414951503151415261
5351541115591567157315810159516041617162416331641116541661116791685169
5170317141723173617481755176417761784179318011181618231839184518551869
1879188518910190819151924193419451953196419791985199620052017202520342
0422054206520762087209421042115212421392143215621672174218421932204221
6222522342243225722652271916233941051067716814971020111112191381411151
5161917918201924201221922142311241725142682772811299308315321333123413
3583616371338113916403841124214431244284513461347134810491450751952115
3554855115615577586591260276121621663206419651466146796812699709717729
7310748751076127747887978011811482168311841385886158718881889119013911
7921593111124394195126127228139181017111012161317141015381613179181619
3320192110221123272415252626112729281529273020312032253393414351536173
7183829391240104194210431644134518462047184826491350235165285315541255
1556135725581759206015611762863186413656667671168146977015711972217313
7487517762977267828792180168117822683148418851986158716881911210311410
5126107128219710311161218131114161561613172718131913201921822172313242
0252726122718281429233063115321633233412357361737738163913402841194212
4384410452146254719481349145016511552195312546551356957758175956012611
3621463226415651666667156817699112238412586117108229321013118125139145
1591611176188191420112120221323142421251626827182827291630223193211331
8346351036153715381639224022411542144316449451146174718482849105019519
5211531454245512562057958195986010112433495861871688981027111412181315
1417152916251718181619112030212122152315247251526102721281129253016311
9322233313427112831842451766710889141014111112161316141415151611171318

819122021219221323142410251126182717287291130511421236428528629717889 2
210161161213132614141513161517241814193520232117221823182416251626162 7
132816291430173114322033253414353036243748382239134017418423431344845 8
466478481249235062513552255370541155305614571458125922601961662126315 6
476586612678688691770971147218731511721833241051161671681692910131112 1
227131914271520161617818171919201021212226232224172592611271228122973 0
103132321533343414358361337233893920401041134218433444114514462447174 8
749850165110529531054151242193224115156137138259171024113412281328141 8
151116617518341942042142216234241225132672722281729163083116322133133 4
113514361837253810392440334119421943264430452511223343536778810912108 1
112121413814111515166175181219920112172282315245254268277281329830123 1
113263310341035836133793883974015418426439446451146114724487498507511 0
521353105411557567576585594601461562863564565116696710687691270871127 2
673674775776977117811791080118114821083812223243576675899410711121231 3
414415616717218419720621722723724325426427528629530103163243353443510 3
663753843964044144234334434554634774844935055175245375445555655765835 9
660561462663464665466667768569470471572473574475576577478479580481482 3
834845856865874884893903916924934943954964977985996100510131022810341 0
441057106510731084109311031114112511310114511551164117311831194120412 1
412241234124512551265127312841294130413141324133413441354136313741383 1
394140514141424143514461454146514761484149515061515152415341544155215 6
415751581015941604161316241635164616531663167316861694170417151723173 4
174417531762177617841793180618131824142631041058612710815971010116128 1
371471510168171118719520621722232315243225926312716281329930731632113 3
634935153683743843974064111426431044144584654754884965055175245355475 5
556457458459106011611162106366466511667674683699708719729734746751576 1
077578679680481482483484485786108758841621033341652363673183492410221 1
912513914615191617171218131910202021312220233424132510261227112872919 3
043173215338348351236153712383639104084118422643144411451846174725481 1
492250115115521553215413551656155795812591060146111629631164765146666 7
176822691570971347297320741675171126314413521610727816912101511131215 1
314148151616151713181519620152130221323624725192618271328392927301131 1
432733163430352336103723389391240234110421543224412451046134719481249 1
350165111521053854455125623571258135911601361206212637642165146620673 0
681269107097167267377417751176877147832799801281682258315841285171124 3
747517616788991410151116121913914231525161917141851982012211822202392 4
112525261127102814291630193116324331334173511361137193812392240264194 2
134317443045184611472848124911503251135217531954121121310410519612722 8
199161015111912131338143015341618171118221992022212222242329242225122 6
122717281329163010311432633153473593617371038113964014419421543844204 5

2746164721482749155011512252275315112236475866788791010111112121113201
4415916717121891912201521822112321241425726927528729930931103225331734
5351236113773812399401141642743844645134612477481349125075118521153115
4755656457958145910608611062763176496511661067768969570571157277367467
5676677978779580118188288388411851386138788888961122384556677881095106
1151261371461561661781891992062152262352462552632742842983073173263373
4335836537123873984054110428433442454462475487495506515523535544555561
0577585593112636495206127481491110191111121413161414151116131724181319
1520721172213232424212516261827102814291130133112322233113414351636837
8112631542951869714825924102411191216131314915451618172818171992027212
5221223132418251426322710281729183020311532183322341835271821831843853
6471086981016111112221314141315441624176181519142027211222102372472516
2615277281029113012318322133113415351236133763830152153441951962178859
8102511371220139141415311628172718191972018211422122312241925402628272
8281429541162233174951261872887930101011401232132114271518161617191810
1321137495961271185910105118127134149151016141781881992062162212236246
2542610271028829830931532633734535636153713381339124054174274364494513
1222324253637384941021151241351471551691761831952042142252392462592662
7528929930831532633534435636737738839640741742943844845746847548449750
8511152135365455555665795875996071122334252627484941031131251361461561
6121751881962072119225238247255267276289298307316328336346358367377389
3954074154274394494574694710481049513253445536373839510511512413414315
3165175186193203214224232524425326182792816291130163116323133334335536
7373385396404414424434444455464474484494504513529532543554565572586594
6036126231427364755687888991051151291351461561641771861992062142272332
4102592652772882943043183273343493573653793853934074154274394454544664
7548949550651652553454555611223242536374849610311512413414515616417418
4193204214224234246254264276284291030431432433173443583643763843984044
1642443644545446547448249450351452553454955456957458359460561462363464
1654663674684694703714724734746754766774786132332445363738595102112123
1331431531631741851952032142222332442562642752832923023123223343423533
6237238239340341542343344445546547948249450551552553354455356457458359
5607619626633645656662673684697706714726735744754765773783794804814824
8348438578658748858949069159269339429559641921139436586127158159171037
1112122213271420151516281713181219202039212522212315241225282614273928
2229221182233214265186157478389201017113112231324141915101610171518171
9152082192251111241314412513625737818931102311281216131214231511161717
1018181910201021182213231924171492133134525136197158219211056112112391
3201112939411524632716811914101211151217139143611222138410523618798189
2210151121117212311422514618720817918102111111172113941451361671881092

7101111161211139141915816161712185142230321428514632725814971017113412
2511521132942151762371284691210271124121719211318410512677881391810111
1512913914715141611171218819152015211222122312248257269271328152913301
0142535445262711839410511312413414515716317101821972022122272332462542
6527328729630531632103383463533643753853912404418429431144104554674754
8114910505511252511223444546671585961061171261361461531651791861992052
1422323224825112642742842933023133273363453553653743843934044174264344
4545346447648349550451352414243441153637284931041191221331461531621741
8219420421422223524525226427628529430103173253343453543653753883954074
1842843944911427354185765714849710611412913614315816717518519520421132
2323132482512261027102815113293947510611798891310131191211131414101551
6817101881910208218221223162411251126727132813132435465568768699107116
1241351481511166178186199207813223242526372849410411412413214315416517
2183193204212222323324625526227428429230331573223333433533623773853934 0
3412424435444454464473484495503513529535543553561114243546556473829310
5113124136145153166174184194204212223233243255264273283293304314323335
3433543653763853954071112103746586777879101071181251310146158165176184
1992072113228236249255267278289299301131101222324252637383931031131231
3214515316317318319320521422323324325426227728329630631632433334335436
4373385395403415423436444453465473486493504122334425364728293103113124
1331451541621751861942042142222332462532622752832943053133223323423563
6537103814399401612223242526372839210511412513414315416617518619420321
2223232244255266276283294304314322333344355364373383394409414425434443
4554691223344453637484921031131231331421521621741841942032132242352442
5426427328229230231232333334535236237638339240441242413233343536373839
3103113123133144153162173183194206213223234245255262275285298132333435
5677486941031121231341441531641751861991226354552657684921031141271371
4815616417718619420221222423324525426627328429830431632633434635336613
2333445369758494106113122135145156163173183194204216224234243259132232
4353647689910101411141241341431531631741821952042142231224324654647584
9310611312313314315316217414233343536379829410311212413614415416417318
5193142332435466768392103114123133142152162176184194204214223234244253
2641122324356667386951031141231351431511161017518519420421622523924525
5264274285293302142433455664758492102113124132146153164179183196203122
3334353637383941041131231371471531323344354627284921021161231341431541
6317218419620521211233545546473839410411414233343546473831222334654697
4841524334355647384931031151231341451561631721821951525364955112263341
1516616798211423344354667686122232435364748497104115112234455464748492
1041121223334455627485112439142434445463748393172534445312243447142435

42556372132334142435455564152737152634435514223445142435455514223244556 3”

Here is the link to access the 22051 digits length big number: https://github.com/quran2019/Quran19/blob/master/5.16_Evidence_bignumber.txt

Fact with the Even and Odd chapters at the Verse level as digit sum:

As per the rule of Al-Fatiha based 19 system, we should test the same coding pattern of the code of Chapter 4.1.2.8.2 with the even and odd pairing coding as well as the previous one successful. However, the even and odd pairing coding is not applicable in this particular case. Since the code of Chapter 4.1.2.8.2 is based on the digit sum of all the numbers of the big number, even if we construct the even and odd based coding, the digit sum of this big coding number of the the even and odd based coding would be the exact same as we saw in Chapter 4.1.2.8.2. It means, we would again observe a successful coding but this would be the result of the mathematical property. Therefore, there is no point to calculate it again as the even and odd coding pattern does not bring any unique and independent information.

Basically, the even and odd pairing coding pattern is not relevant for the code of Chapter 4.1.2.8.2 to follow up and thus we do not need to test it for this code.

4.1.2.9 Overall probability of Al-Fatiha based 19 system in detail

Below I will calculate the probability of all the evidences so far of the main chapter **based on Al-Fatiha** and without letters information. They are bound by the rules described in Chapter 4.1.2. Recall, **all** of the evidences of this chapter suggest the 19 based coding design within the **full text** of Quran with respect to chapters, verses and words information. If we conclude that there is a design then it suggests that the design has not been changed since year 632 and thus our witness to this design supports the current knowledge among Muslims that the text of Quran is intact and unchanged. Now, we will measure how likely to observe such a design by chance below. The overall probability of **Al-Fatiha based 19 system** presented in this main chapter, Chapter 4.1.2, is calculated in the following.

So far, out of total 6 trials, we have observed 3 validated evidences of Al-Fatiha based 19 system of the full text of Quran, regarding only Al-Fatiha based key coding patterns and without the letters information. As per the rules, we also have witnessed the compulsory follow up even and odd coding patterns as successor evidences after each of those predecessor evidence codes. Out of the total 3 trials of even and coding pairing successor trials, we have observed 3 validated evidences. So overall, we witnessed 9 trials and 6 validated evidences. These are **all** the possible key coding patterns we observed from Al-Fatiha with respect to the rules described in the beginning of the main chapter, Chapter 4.1.2, of Al-Fatiha based 19 system.

Let's now calculate the probability of **all** the key coding pattern based evidences from Al-Fatiha along with **all** the successor even and coding pairing based evidences that exist over the full text of Quran, *without letters information*, as below:

```
tmp <-binom.test( (alFatihah_success_nums+evenodd_success_nums),
                  (alFatihah_tested_nums+evenodd_tested_nums), p =
1/19,
                  alternative = c("greater"))
tmp1 <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of",
(alFatihah_success_nums+evenodd_success_nums),
            "successes out of",
(alFatihah_tested_nums+evenodd_tested_nums) ,
            "(with p=1/19) is:", tmp1))

## [1] "The probability of 6 successes out of 9 (with p=1/19) is:
1.55e-06"
```

So, the probability of key coding pattern based system from Al-Fatiha is calculated as **1.55e-06**. For some extremely skeptical people, I will double the number of trials and re-calculate the probability for them so that they can also be assured about the strength of the presented 19 System:

```
tmp <-binom.test( (alFatihah_success_nums+evenodd_success_nums),
                  2*(alFatihah_tested_nums+evenodd_tested_nums), p =
1/19,
                  alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of",
(alFatihah_success_nums+evenodd_success_nums),
            "successes out of",
2*(alFatihah_tested_nums+evenodd_tested_nums) ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 6 successes out of 18 (with p=1/19) is:
2.27e-04"
```

One thing to note that, inferring the rules from the observed codings is not that simple. The rules are based on my best educated judgement. I aimed to simplify the system so that rules are general an used in over all of the book when suitable. Therefore for examples I kept the universal rule of this book, all coding are always tested in both 6348 and 6236 verses text types, in the Al-Fatiha base 19 System. However, in the presented Al-Fatiha based 19 system, for each Al-Fatiha based key coding pattern, which is the predecessor coding, we

observed the successor even and odd pairing coding pattern in the same text type. Namely, if the predecessor coding was observed in all the 6348 verses, then we also observed the successor follow up coding in the same 6348 verses based text type. It as true for the other text type too. If the predecessor coding was observed in the 6236 numbered verses, then we also observed the successor follow up coding in the same 6236 verses based text type. So, the rule *could* also be inferred that way and their probability could be calculated together. I will discuss below that scenario, which present the system from a different angle and demonstrates how strong it actually is.

In that case, since the coding pairs are dependent and we have to test them both, the probability of observing a single evidence pair based on an Al-Fatihah based coding pattern is p=(1/19)x(1/19)= 1/361. Here, **p** stands for the probability of each event to be successful by chance, namely probability of observing two dependent codings together being multiple of 19 by chance. It is because the probability of the first Al-Fatihah based coding over the full text of Quran being successful in the full text of Quran is 1/19 and then, as per the suggestion of the alternative case, we have to test the follow up even and odd pairing coding in the same text type and it has also probability of being successful as 1/19. Since they are tested together one after another in the same text type, the joint probability of observing these two coding events together, is p=(1/19)x(1/19)= 1/361. So, we consider a single statistical event with probability p=1/361 as testing the two dependent codings together in the same text type of the full text of Quran. In total we observed three double validated such evidences. Lets recall each of them and how many trials we had.

For the first double validated evidence we have the dependent evidences pair Evidence 4.1.2.3 and Evidence 4.1.2.4, which was successful in the text type of all the 6348 verses but not in the text type of numbered 6236 verses. So, we have two trials and one success with p=1/361 in this double validated evidence event. The second double validated evidence is the dependent evidences Evidence 4.1.2.5 and Evidence 4.1.2.6, which was successful in the text type of the numbered 6236 verses but not in the text type of all the 6348 verses. So, we have two trials and one success with p=1/361 in this second double validated evidence event. The third double validated evidence is the dependent evidences, Evidence 4.1.2.7 and Evidence 4.1.2.8, which was successful in the text type of all the 6348 verses but not in the text type of numbered 6236 verses. So, we have two trials and one success with p=1/361 in this double validated evidence event.

So, in total we observed 3 successes and 6 trials with p=1/361. We can approximately calculate the probability of our observations so far in **Al-Fatiha based 19 system** with respect to the same text type condition considered as follows:

```
tmp <-binom.test(3,
                 6, p = 1/(19*19),
```

```
                  alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", 3,
            "successes out of", 6 ,
            "(with p=1/361) is:", tmp))

## [1] "The probability of 3 successes out of 6 (with p=1/361) is:
4.22e-07"
```

As we see that, if we were to include the same text type rule in the follow up of key coding patterns in codings Al-Fatiha based 19 system, it means we would witnessed an event with the probability of occurring by chance alone as 4.22e-07.

Since we observe an intact and unchanged design over the full text of Quran, this system along with its miraculous evidences, supports the current accepted narrative of Muslims that the full text of Quran with its word content and current text structure is intact and unchanged since its completion by the year 632.

Now, for the very skeptical people, let's double the number of all trials but keep the total successes the same and see what would then be the overall probability. This should further calm down those skeptical people.

```
tmp <-binom.test(3,
                  6*2, p = 1/(19*19),
                  alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", 3,
            "successes out of", 6*2 ,
            "(with p=1/(19*19)) is:", tmp))

## [1] "The probability of 3 successes out of 12 (with p=1/(19*19))
is: 4.59e-06"
```

As we observe that even if we had the double of the trials we currently have, what we observed so far still stands as statistically very significant, which still suggest the design of the codes we observed.

I think both ways make sense, but I decided to make rules as universal as possible an therefore kept the universal rule of applying all coding patterns always in both text types. An in that case we had calculated the probability of key coding pattern based system from Al-Fatiha is calculated as **1.55e-06**. It is statistically extremely significant, which suggest that what we just witnessed should be the result of a miraculous design. Of course, God

know best and this is my conclusion based on the factual observation and the result of the statistical calculation.

Recall that **all** of the evidences of this chapter suggest that there is 19 based design within the **full text** of Quran. Since we witness a miraculous unchanged design, this suggest that the book, which itself claims to be of divine origin and will be protected, is intact and unchanged. Even, **if you do not read the rest of the book, these evidence should be sufficient to witness the 19 based coding system of the full text of Quran**. I have PhD in Error Control Coding in telecommunications and considering the rules and the entailing evidence codes of the Al-Fatiha based 19 System and the statistical calculations, my scientific conclusion is what we observe might best be explained by a super natural design considering the technology and history in the date of 632. Surely, only God knows the absolute truth and we can just conclude on what we observe. In order to find out more about this supernatural power, I suggest the readers to read the content of the book, Quran, for the answer, in which we will read that God has sent down Quran to all humankind and it is the final and ultimate message and the Author of the book promises that this message will always be protected. The 19 based evidences we observed so far, suggest that the full text of the book was indeed protected.

In order to observe the probabilities of different chapters separately, I will not add the Al-Fatihah and even-odd counters into the global counters for now. However, I will incorporate their probability into the calculation of *the over all*s probability of the book in the end or at to any point in the book.

So far, I presented the overall probability of all the evidences together of Al-Fatiha based 19 system of the full text of Quran, without letters information, which I presented in this main chapter, Chapter 4.1.2. In the sub-chapters of this chapter, I will also separately present the probabilities of Al-Fatiha based coding alone and also the even and odd pairing codings alone to make sure we measure them separately as well out of curiosity. Since we have two main dependent coding patterns within the Al-Fatiha based 19 system, I want to present the probability of them separately too. It was not really needed but I wanted to see their individual group probabilities as well out of my curiosity.

Finally, I will add these special counters to the counters of all the key coding pattern based codes as below so that we can approximately calculate their overall probability too in the end of the main chapter.

```
# Counters for all the key coding patterns
key_codings_tested_nums <- alFatihah_tested_nums +
evenodd_tested_nums
key_codings_success_nums <- alFatihah_success_nums +
evenodd_success_nums
```

4.1.2.9.1 Probability of the evidences based on the Al-Fatiha codings only

Before calculating the probability of observing Al-Fatihah based evidences, without letters information and ignoring the even and odd codings, we need to make sure we counted all the possible codings we observed in Al-Fatihah regarding the rules described in the beginning of the main chapter. Based on the defined rules, we performed 6 trials and observed 3 different Al-Fatihah based evidences over chapters, verses and words.

Now, we can safely calculate the probability of observing the Al-Fatiha coding pattern evidences. So far I have presented many different evidences based on the coding patterns of the chapter Al-Fatihah. I have been counting the number of tests and number of successes out of these events to be able to calculate the overall probability of what we have been observing in this particular chapter. It is a good time to have a look at them by calculating the overall probability of **only** the Al-Fatihah based evidences so far as they are in a similar category regarding their structures. This means, we exclude the even and odd coding evidences. Here is the overall probability of the Al-Fatihah based evidences so far.

We have 6 trials and 3 successes with Al-Fatihah based coding patterns. Probability of all the Al-Fatihah based coding evidences so far in this book is as follows:

```
tmp <-binom.test(alFatihah_success_nums,
                 alFatihah_tested_nums, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", alFatihah_success_nums,
            "successes out of", alFatihah_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 3 successes out of 6 (with p=1/19) is:
2.58e-03"
```

4.1.2.9.2 Probability of the evidences based on the Even and Odd codings only

We have 3 trials and 3 successes with the even and odd coding pattern observed in Al-Fatiha based 19 system presented so far. Probability of all the even and odd pairing coding evidences so far in this book is as follows:

```
tmp <-binom.test(3,
                 3, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", evenodd_success_nums,
```

```
            "successes out of", evenodd_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 3 successes out of 3 (with p=1/19) is:
1.46e-04"
```

4.1.3 The Main 19 System evidence utilizing total number of chapters of the Full Text of Quran

In this chapter, I will present another type of the key coding pattern based coding evidence utilizing the total numbers of the text of Quran.

In the main chapter of all key coding pattern based system, Chapter 4, I had discussed the three different key places or sources to look for key coding patterns. One of them was the first chapter of Quran, Al-Fatiha and I already presented the system based on it without letters information. The second one was the first and the special verse Basmala. However it only has one key coding pattern without letters information and that coding pattern is the concatenation of chapter, verse and words information (chapter 1, verse 1, words 4 = 114) and I already tested this key coding pattern and showed successful evidence over the full text of Quran in Chapter 4.1.2.3 at the chapter level data. Because of Basmala, we could also test it over the verse level data too. Therefore, I add two more trials to count for those testings in the counter.

```
key_codings_tested_nums <- key_codings_tested_nums + 2
```

The third place to look for key coding patterns was the total numbers of each natural numbers of the text. Namely total number of chapter, verse, words and letters respectively. Since, we are still considering only the key coding patterns *without letters information*, the only key coding pattern from those total natural numbers of the text if the total numbers of chapters, 114. As per the define rules of the key codings in the beginning of this chapter, we accept it as the key coding pattern and have to test it over the full text of Quran in both text types, namely in all 6348 verses and in 6236 numbered verses. We also have to test it in chapter level and verse level data. However, the chapter indexes are from 1 to 114 and by the general mathematical property, the sum of those indexes must be multiple of 19. Therefore, we do not text on chapter level data as is is obvious that they must be multiple of 19 already. So, the only mathematically independent test we can do is over the verse level data by summing the chapter indexes. As I will prove below, this key coding pattern, sum of chapters, also exist over the full text of Quran considering verse level data too in all the 6348 verses.

Therefore the evidence code of this chapter is based on the key coding pattern of the total number of chapters. Namely, when we add all the chapter indexes in the verse level data of

the full text of Quran considering all the 6348 verses, we obtain the coding number *215574*, which is multiple of 19. Below is the proof for this evidence:

```
tmp <- sum(unQuran$chapter)

# Test if mod 19 is 0.
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

print(paste("The sum of chapter indexes is ",tmp))

## [1] "The sum of chapter indexes is  215574"
```

As per the rule we also have to test the same key coding pattern in the numbers 6236 verses and therefore we have two trials and one success with this key coding pattern. Let's add them in the counter for key coding patterns

```
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  2
key_codings_success_nums <- key_codings_success_nums + 1
```

Also hold the key coding counters without letters separately in these counters:

```
# Counters for all the key coding patterns without letters information
key_codings_tested_nums_NoLetter <- key_codings_tested_nums
key_codings_success_nums_NoLetter <- key_codings_success_nums
```

4.1.4 Overall probability of all the key coding based evidences without letters information

Considering all the presented and considered key coding based evidences, we have 13 trials and 7 successes so far. Probability of observing them by chance alone can be approximated as follows:

```
tmp <-binom.test(key_codings_success_nums,
                 key_codings_tested_nums, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", key_codings_success_nums,
            "successes out of", key_codings_tested_nums ,
            "(with p=1/19) is:", tmp))
```

```
## [1] "The probability of 7 successes out of 13 (with p=1/19) is:
1.45e-06"
```

To see a more conservative probability, I will again double the total number of trials and keep the successes the same and see the overall probability in such a case:

```
tmp <-binom.test(key_codings_success_nums,
                 2*key_codings_tested_nums, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", key_codings_success_nums,
            "successes out of", 2*key_codings_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 7 successes out of 26 (with p=1/19) is:
3.02e-04"
```

4.2 Key coding pattern based 19 System with Letters information

In Chapter 4.1, the first sub-chapter of the main chapter, Chapter 4, I presented all the codes of the key coding pattern based 19 System *without letters information*. In that chapter, I did not include any coding with letters information. I made this separation to make sure the system presented in Chapter 4.1 is universal and applicable to the writing of the text of Quran with respect to the most of the Hafs manuscripts. As I mentioned before, writing the same words might be slightly different in some rare cases, similar to *color* and *colour* in English. Therefore, the codes with letters information in it should have been separated to make sure any textual criticism or doubt do not cause an unfair judgement on the presented key coding pattern based 19 System. As a result, I will present all the key coding pattern based 19 System **with letters information** in it under this main sub-chapter, Chapter 4.2. All the rules are the same as described in Chapter 4. However, I will present here the codes with the remaining possible combinations of the natural numbers of the text, which are as follows:

- chapters, verses, words, letters
- letters

4.2.1 Letters pairing of Al-Fatiha based key coding evidence

The only key coding pattern observed in Al-Fatiha with letters information is by pairing the letters information of two text types of Quran. Since Al-Fatiha is identical in both text types, which are all the 6348 verses and all the numbered 6236 verses, as per the rule we will

have to test in both directions while pairing the two text types with letters in the full text of Quran.

Let's first see the number of letters per verse in the first chapter Al-Fatiha as follows:

```
x<- nQuran$vletters[nQuran$chapter==1]
print('The number of letters per verse in the first chapter Al-
Fatiha:')

## [1] "The number of letters per verse in the first chapter Al-
Fatiha:"

print(x)

## [1] 19 18 12 12 19 19 44
```

Now, when we apply the pairing coding pattern, we observe the key coding pattern of Al-Fatiha, which is multiple of 19 as shown below.

```
tmp <- paste0(x,x, collapse = "")
print(paste("The code from pairing letters is ",tmp))

## [1] "The code from pairing letters is
1919181812121212191919194444"

# Test if mod 19 is 0.
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

Now, as per the rule we have to test this key coding pattern in the full text of Quran too by pairing the number of letters per verse of the two text types to each other. As proved below, we also witness this key coding pattern in the full text of Quran too. Before that, let me also illustrate this pairing coding pattern used in this evidence as follows. As mentioned before, it closely resembles to **the double helix** of the **DNA** structure, where one strand is the number of letters of each of the 6348 verses and the corresponding strand is the number of letters of each of the 6236 numbered verses as illustrated in the following:

> [Number of Letters of Verse 1 (of 6348 verses)] [Number of Letters of Verse 1 (of the 6236 numbered verses)] [Number of Letters of Verse 2 (of 6348 verses)] [Number of Letters of Verse 2 (of the 6236 numbered verses)] . . . . . [Number of Letters of Verse 6236 (of 6348 verses)] [Number of Letters of Verse 6236 (of the 6236 numbered verses)] [Number of Letters of Verse 6237 (of 6348 verses)] [Number of Letters of Verse 1 (of the 6236 numbered verses)] . . . . . [Number of

Letters of Verse 6348 (of 6348 verses)] [Number of Letters of Verse 112 (of the 6236 numbered verses)]

The number of all verses is 6348 and it is 112 more than the numbered verses text type. Therefore, while pairing both vectors one-to-one, naturally, the shorter one starts over from the beginning part of itself and keeps pairing. As this is the most natural operation approach, it is also the default way of processing in the R programming language while pairing two unequal vectors to each other. Therefore, it does not require additional coding in R.

If we use the real numbers in the above coding pattern, it would be like this:

[[19] [19]] [[18] [18]] . . . . . [[20] [13]] [[18] [19]] . . . . . [[13] [98]]

[1919] [1818] . . . [2013] [1819] . . . [1398]

And, the final number after all the concatenation would look like this:

19191818 . . . 20131819 . . . 1398

Below is the code to verify the coding pattern.

```
tmp <- paste0(unQuran$vletters, nQuran$vletters)

print("The paired numbers from 6235 to 6238:")

## [1] "The paired numbers from 6235 to 6238:"

tmp[6235:6238]

## [1] "1920" "2013" "1819" "1618"

print("The paired numbers from 6347 to 6348:")

## [1] "The paired numbers from 6347 to 6348:"

tmp[6347:6348]

## [1] "2065" "1398"

tmp <- paste0(tmp, collapse = "")

print("Test if mod 19 is 0.")

## [1] "Test if mod 19 is 0."

as.bigz(tmp) %% 19
```

```
## Big Integer ('bigz') :
## [1] 0

print(paste("The number of digits in this code is ",nchar(tmp)) )

## [1] "The number of digits in this code is  26634"
```

As we witnessed the pairing key coding pattern also exist in the full text of quran when paired from 6348 verses to 6236 verses in the order of pairing. Since the predecessor key coding pattern is also suitable to consider pairing from 6236 towards 6348, we have two trials and one success in this evidence based on the key coding pattern with letters information. Let's add this into the counters of the key coding pattern based evidences so that we can approximately calculate the overall probability of the presented system.

```
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  2
key_codings_success_nums <- key_codings_success_nums + 1
```

As per the rule, we cannot test even and odd coding follow up coding with any pairing type coding pattern. As a side not, the code I will presented has the similar approach of Evidence 4.2.9.2, but with only letters information at the verse level numbers.

Also, below is the 26634 digits length big number of the presented evidence code.

"191918181212121219191919444419332727474752523333474753534747494951514
343292977777373343457577272191986861021025353999978786666145145155155 8
282606070701111117070484810110163638080868643436868515169697979424241 4
155554747383858586969848450505353303037371211216060303090909595777711 8
118257257108108707054545454454583838080717162629797454557571411417777 1
011013636454510210291915454525215015071712312316363138138464610810810 7
107119119515113113167674444102102727255554444444489893083084949656598 9
861615959737312312376767272585814114111311352525656474710310346461121 1
270705858676783831151151221226565767681817474333370701141145454636313 5
135797937376363127127545489891961961461461301307373272775756666138138 8
787323253535050666645454242898991915757646437373535187187123123575796 9
668685050898966666262939312212261615858266266163163393977775454555561 6
112312318518577772862868787120120595913013024246565107107666629029012 1
121110110494997975757353510310365655959525249496767494972727474939321 4
214127127104104939324724772721231231181181821821221228181666665655454 2
929177177193193114114203203147147288288122122200200111111401404444656 5
116116343431311061063838696921721716516511411424024077771221224141208 2
088787189189102102118118169169249249148148979792924444174174123123148 1
481251256868656557578989112112134134797918618645458787545472725252545
```
```

4551551138138103103118118196196319243532474533774503719750541974754664
7686643681164312511610712550107545072541077212210788122508881506581536
5925386921138679113967962964762484727486627109661381095213892526392806
3608037608137918133917933357918735801873480863446863046132306013259603
2594732254711425541142854129287012975706175666154663954523979521157934
1151443436144116361201161201206712014667291466229126625212683524783374
7433762439162569199564499474442479942509977506977746954741575470157657
0816543814943444911344481131524859152845940847740987712598127125881274
9885749475760476960686943684543614562612762292755297155104717010454702
9544129105413310560335160107519910788998788508764502664842616684106166
2911068929115789531572853121287512168755368325310732731074773151477415
1547478544778694777696477546487545387745314674122146951223795120375512
0995510899991088699388657381005745100954558951885829188302985301218557
1211255782191151255882791151865891797018671916370271712996379271552991
0779705590107106701579083106491576383265491856326426561185602643461996
0533456991085388561921089288158192789285158687855854368615520543646144
2051776412144691775412140699454434037948043383795801003810295132100125
1026513273125656510573776510710527772110792272821499263287549936313975
9893204139143987320449143101735649135101875677135578761778857128611688
8162128235168701621702351727037170128172643740128122649640281122106969
4281671063094546782307954508246795450135469754811356797438136671094335
3632109953572326695737245661787312645102178431261291024043491296240163
4913062781632813071781372816171911375816185914558928548455392494810053
4349781001624390781031623190128103323157128603273571366013173581366613
1615843665061444399502164487991292165087731291915097732421912781913797
2012422812788613711720147281408610711720747141401191079220780141157119
1349210780921577013475107100926970527562100996964525662389910664162561
4038521066816288140495264684988714928164113496871195281140113117686619
5228140136117456610422811613680451581046811648801091585468774811010968
5463776711021868626310467942181296292104899478129139929689407898139589
6904071984258789070711284289786370671284089696352672054082699252722051
1682104921967286116119104371964586731191003734458573100100863421385128
1009986592132801286199865966280976170861536610897477010215342108694749
1025242421953691384966525342445356138416610053374492562941361005637329
2137296836545657324313741681335447576843604139133764711168606066399076
1141115060676682907111462504667578263717962424690575663647943421039065
5610564714310810335657410577715910811335957471774859731133695105713248
2173103364710517532160213810310647581755016054386910665585350925493695
2655853100923493445256585910081346644171561025920181128666917162102692
0159128187696862656953594318759684465445353431035990446044100539510362

9010560481006395396240105116485963963910040691161185911096411004169151
1183811013441384137151713827134753812837967111727957583128145967011710
6951678312814512270511061421673612811812218051149142753675118441806114
9144751387577446461661443913832771046486664395032571044386461936427504
5575643484673365727504521561648367366575450702110516263613066545448703
4105832613813094546948783464831111381109447697478586415711116111062471
0474425870157150161110624810487426270721506811087489587456214672145683
5876595123457214676145323539654412359727176573258393944305911371715710
7586639132301131139671371076666331326311353964637546636334063156531074
6835493361594053156331075983649359159825385334059386444597982102854140
7138344465793610224412671323430653436162446262232403055344116254625221
7402055124177254125221766201001276778841472294664710080769088434760941
3947998036904043856010913916599653689401538563109891657465172894615369
6359896374170172129462226914159326320017093129732221181418132792004193
8073771181728152797941104806477271726452132794710442641222769643113240
4718424012288694031153401041812540558828403315356104641259955392847335
2563264449950393147895241326944485089318289344147694748511910189338252
3467479947103515810130335452816786992610397585430365439814986952658979
5546136483982497495695872955261934858829874816959726652469315058149988
8818859616667467615014014974886788376174676876821403874446743375574356
8134825038534476433755115351071347850395346769437541152091075778853995
4641946454135209985713385749510541776456135399868133797493105597745561
0239836899791109380594445311029783170999611083804044113311239710717010
2966483604013911384123160107134102122647060176139718411316052134771227
0707117686716411363526577567093714786956481634565445662938247118951148
1554564447362648267118105114795516864125731326410767621051907952168371
2567132471079362103190118524337112677147749382103461187643561128071103
7490828646132768856598069103719011386128132998874596569677185113541281
1799867410165616717485109548411788866110161611091741271094184199887761
1026178109821275441561999797760102547822829954113561267910160625471193
0227499661138612610410187624271138306574546612386711046887844216613811
3651985445123727111868898446166631131141984845397263118978960468363661
1481484539606347974560428387666381494530608147534539425287436384495830
2281635344397352764314184365821226563424490736176961413536592113665604
2879093616996383548597713626603987649333698538524848772626833913164513
3118852852614810926858344131305133118942860615310960856444453010033389
4556085538760456436453510098382855858564871274593194736563548989528758
5646462127659314647100565048100954175276467626165351464010011350811009
2413827123675961383566405211358815592733842123945948387366865284585655
7673634272947548637352868284615665762863657281756163505268821116183658
5

2870654781736141504468631116883488548706047487322415444486310968434830
4811860574831221105474484210982431373078118375779316511082748642378231
1374478463742793665948244865737203136443746574275367794724443574620663
6683729571107535774272614369464166186873292211031356442636163691064130
1857735919682243313464546338637610620308057735977684243138344354913876
7689206880367343774242731381314384916876418938681153611243104424673127
1318684706810541413850115961125710453463912792861107047105544161503396
7257355339397292351102947745471616633114728835111391107262356529277444
7148662511445881231118411063625065139277244534870255145491234784816310
1503913984723953467056514749274772813910135395584169391054657562647362
7497230395935675512316979105945760261153610149111301125990675612358793
0945419121604211586101107111551121889018256118585830345454121101427286
3010794557418867182521183858106341935455101139725330899410174746782523
2385810668193715564139725354897610175748682117324858506815771143641121
9787278544376237525866211790485650181571381431871128378597855434923842
5506221905356861810713843187618355595855114496184545039213953608645107
1094364615155425850114326131543639603925603045391093164275137423450393
2293128363360231926253930363937312127293752343439422963282933422325263
3392836453736212229275231343942206324292442172518334628204519364122202
7303120391720402430242617221818463720281935413220293023202617244029302
0261622291823376228403522322329182323262524242919204116212915231962244
0282225233018302319252424691919413621631521192124202819251430273019193
4242869241922364263682136213020401931145927481944344728712471224919100
4249682236273039402531415932485544494740716971864998100824944229027673
9642591414332118551224946407369538637987882254461906367676428913143671
1858122324651734853433738783425576134633767652858319667715872326351614
8694365385434935774349237986562584296103711097271637561686911965110542
9933974519245989162434259103103109817189751316868119831105729643976514
0454191414367595610369814889521319468628356572764657651401074144415767
8456946920486652719443623556422749657551911075344515732849594572031666
0717643573511042494971754291435311651593231198295685753317160527645575
0110364910871514253434511648595031558248685953347190527145565057364810
8245167535945444848503055874858598234769042714556195710048442471675559
6844524884307487925811382587664424145961935100544473715755876881527084
3974639237113485860644241609646355654367357575387408154705039306376375
3483760454253609246585660364757114537140925463507830677640536137464545
5370923558306090477211442716992136327785867464044612746424561703035393
0489078727519804212769109131732756581424615144252758423761813054391294
8129784875123807012750109501734156501425715128256358623730817954391293
7129102486712352706350122501114159506557512854638362923011879753943374

910249674952856334122511113759216524513654438365922711838756443294946 4
910349488576345151403714821382434369439165462750381064532923461010351 4
878764951774035148493848342794791654625504910665342234810255168789249 5
771935174952485227304745655225434945664642344825252668349242195153019 3
217385257522430574538523543764541464034382534264934294236513430533235 3
847574824465734383535507650414040463854343549552960363734415336352947 4
848414633341635129505250514046464654333561555660313738414336362929483 4
413633741635129985262513946284631332261335633314138254327362429373420 3
614744435169824623839172823314322453346332412325152731241937442030142 9
441516682419383717232344433945374618194821423201532314019194418301529 1
015166810191837823104412391237111814482014192020329340130191318311519 1
030163510271887835101712291221113514742039194120289334130601333312319 5
930303567274287393549171929212159353774115397641612842344660493369233 7
591930756765423539204933193621105597537481154476686137422846184971691 7
376219104753965443531203033363627105477532481544206856374428381835714 2
176262651043639424449312230213652276547233270154720285638445038673535 4
285627565593653427949502231214252726544235870354759284238455037674435 2
985487524593753357942505319573126422772524422588235535938422945593751 4
480295748392447374035494272533757302661274552562250825553823846294759 8
351438037573339374745402549317231375530356137453456325035553282394637 4
736834243343735333337294542253931833175552935513761346132723545326539 5
137413669423434313583334029434292395783337530294951326137617572424535 6
526513841386957346631528323402543429250573233293043494032863744754442 2
623546264338453861573566101524823412572428550383210229144436919234015 8
652449844382621084676435145946146351001018148364143728985763812810289 1
444469452314815855236981838511086176975160944546311004181413610643748 9
897664128598941447745351485685603660185551456110197436067452931414160 4
163106136741228931644559414163771993514562160216020552145421013043286 7
252915412960286322136104122183122454141566356199401966142121632110420 3
021194213830622837252515242955281112232104421819224241415619562240486 6
252127638510439303719381382462303748255224335539111193228422719254223 4
121194522334849254727368528394137213842242730424875523733243938194528 4
427442548233021474522334049474729362228334121214842222726428075323720 2
426382745364426441748303065474322304047472829342237333121224861224326 3
680243234203426402742366326291751301226573439430434781283734503737313 8
221026159436536632470345634384031428563382915019121516812247734994994 3
858187377050663735038831022175961652036355708756583899311088583383515 0
140121446810647474970994885288767708366453507683102217173614820353552 1
987875810399315108180831203586140444473106924766704748512870676583424 5
627639102371734248385350219408768103873156518096120858651193844347339 9

2446649472851487041654942696237394837424249386950374033686987446568963
7855551573822344939554446494328264833416449476955372448444252497269613
7483350696144276847372055475785223649695535464243452664334464264745553
2419442752457243613848395029612127324716202047358523363369323520423845
3264254446263245211940320192327304539433738193923292421263226163520343
5162324332232322051382532262548463132172120401220962327304339353725191
9231524152620261435233414163824202257321651232515262948213119172320281
2209617272843223519252319171519151620181431232614233822202457171619232
0151829182122192823212816201917212819221919142311172619291621181831242
6142317224024171726192420251819181622362816214016281918212919211915142
4111426172940212118232420141717244016171026232436251819131644362116164
0252814181729402121151124181426171740202127232220381731243116201041232
1361818241314441721401623254114351721402021181118181426311729202127222
2203814311731402029412121421829242214351737401923414129352121202016182
2181314173135292321252224202914221718401729192120422329272216351837221
9194134291921282026162022151316171735252317252324212922222118921724191
6204723452743162818652256192834741935287226362058156916771743258517106
2344214522472142927719622427162847474533433428236550565328617439356972
6036475855691367747435985431061104458456147514242776862312743284447283
3393447235850395331614939104698960704782557813657474459444347110405832
6130513242386831313743474421283439284745585639703142495710433896470668
2717840575244634461475140332193038328538593155379247632167346728374564
5665704942148574633366472661197176404252446310861505110619483110195938
1098582597355100923363576775677337696410865524951148444648367572521198
1767742864410610849509210629483411055596510974825073971007333825766757
5734069841086452335135444248587528525881787787866210640497092109291053
4102557865707465501139767737582666659756040638436440335635434245584228
7058907843871206237408670611096910540102567811870526547113726732755966
6059766011763441987357401035627437045674290705090304374120393777866961
1246988404356421184552894711272893252595960627664117914465873857561034
0272870866725905350643050748439657764693612473886543474234598931112468
9335242594462986415291606532382656434026284386582528533964605040848365
6764643685736565314779191133609923148464533714234444398621525760723287
2685436726574356583928513983608740115833767716441854665553181795511386
6042927648324539713341943166247573372728767853967355710556543970515483
7687112115823769715441454611155878166556486304265764032783941199735819
6816924712233100723673139663592105635432703654257660112558242697554664
5641116687566646643130596595404978514159975258456869927512230100441926
3613143662692127631263214336802542609855764236755866105646066555657468
0316859155951024965518559755272457469777561307944642669196461814312226

5612722312692143196807542619866763536165865105356038552957338058681031
5526710213765858529475397212674637763616779996487693464438162122295633
2235592461963775716140665935921693656735683812329503346586610361267661
3710585532945139107126876310963746775993587823487434562702993338555624
6353746714840545930924193143196967160685412339504946100664561736651105
5853775113010747875910989745275263529825787354536703893578510062683585
4643486354583062419114376691081601155412739115498110047452373185113858
2177181301647625912894852672627299457783576363738655799195710045685585
7243108634458100621329176768310811111512012797115281134714231318171383
0213018451651623612544858673827579455782876233755653899465729453155587
2171081944301002713247763083471114512023975019442371356143713391737305
8303545235133362254455842389257305535283323395553383946422928313258231
7161925305027234736302147244557234650494430374356333750393337295831353
0233633422241453742449263303435353311391353133912423528313218233716172
5285046231336172119242157354615491630284324332750383329291731143017362
4422841213736442563203425352019381133132213221223351931161814371217142
8194616132417201913212435231519163428152421271938262913172814191721242
3282221233621253220232520202038183322222022242319192616251420121914201
9191619241520181316242523221918341615112115192626131320281619182119233
2222923232116321623100201920191831222020152419191426162519202719482021
1929192415231823162125172219182116191118152826241318201916191814191932
1929182319161816141002219171918312020191519192114221621192227264820212
9292924212319232021141710191421241947181728192414181719161920141519161
9151822192018181429221617191814201719171930211422152123221626192015292
2293721441932205114381050143124484724173419361422173516322044153616201
5332230209318602913716331912214701766175030331429154223301639194919331
5202221372844223246512638465054314848262428343836232222353532224421362
1201933213020931560381374533401223870306621504033372911421330333927493
2333620222128285422344620262346245417481826232820381723312236351822172
1292145191262163201051513838126451224010538953031212340293721118513613
3602767323836802212028775413234612040235924441728188123162030175831343
6331858175719412914845401263263771051071385412648122761057695973143238
3294321688559618560526764385180321204277451326561504028595744342862812
4168630775874343233151584557944173148774023229775610752549848427612876
7697534367836543626853593785635259644751673228426245119656350312834578
7346962482414686101774174553227151524510594937340779419372482988564152
6198864250128427661538267456553627353533746634159204753679328536269119
4363623182344187336998485314676101118414455392744523210523932340609446
3742485888123414361598628501044267615182704525319733353334675417420365
3409362536769674389624082944110233899874532776341185644783984444632482

3992352605546614279589312370431459512871104426750518870551991210119393
3463353751297472364640107624067436713089564051947310239892743274334385
6907853849046714860995952895556611527911493149707114525196713842755084
8810755118919110151396446685352129637241464810729405543261303656745150
7364392919572353664328387290123535690687111560625947897756109152561142
1491371305227963538237532843210752118459150514964846819523763314146483
4296655532633364674835060643629405722353266392836724212311156776830115
5362384738774910940564019262341336302627533555233132553247523045675034
4946843619363724313346483442663653453329467983366047364040342234322939
2936694235111277726302253293837383449224048403126363442364426635352553
7312755264723013673434174623362636372439331448284220362645282925792936
2947354031343534242921292369243527271826142220292237373433222848293129
3614423244246350523737362723263419292121310341817102324262537203919141
9281120272619282225482925292935173123529243121342389245327141857144520
7222423763336028612944297414102325524645032378536562394347829681270105
2185410472462255920781943196111762737194222248292572291061764194525929
9931743495897653751452574345193728142113636660436112944957454102555575
6460321388547567394807878686070655285547947107623559817881431676117762
0374642301935275294472108106546448451725910499327465957376117754852454
3371933381631136566414348129409566545055867555605513858476573358012978
1960616519859479931071161940352781498110516715117852043466130141351247
5110448610837548948521725210441327765179731301171204860452493764339863
7765414148487940127662850144865355159551295893651163591129651976194561
1419449427933611632405327514920105451512285374330611914136124361105786
3737268934522352234145772117921130171204160372493419316433982577224129
4824792512754284114454534915925129299332116279136655376134513191314134
4152713361532155312511120184518221937323020193736253619572637202619342
3233723284538212321221738413937323423312633202519222629282436253454254
1345430493225272937323227313629532519291329133913461321151913251527153
0122711431831186191032920133713251319142610201719152317371828213825232
2225338203938322923332684202819332632282436273428253134313028322727313
7233229312729312528294029203927462121331933253927323033274243413125191
2616101491413131311131514101018171815161717181521142514221853162021381
8291833188414289933153217246527472851314131542873271293114231529192720
3115281840212013271921163315331539263213331942154114251819121232161314
1114171320111015201019181518111617172215311431142818201628214018351843
1821142699381522172465234716512941235436732712916142915141941203215231
8352132132219161641152915162638132419291543142218151229321913361135172
0202110292020193515181126172619182217311931212862092810401035174318212
3261738342217242523201619292423203619272116192917141841193223231935313

2192212162741192935161938182419297843192234151929311919362735192040211
9292620213519181926192610181917161919211919196419191037101917201819232
3171934141719258201919172419201919192113191917181819192223191926311919
2712142715191035141913181419167827192734171913311219122714191240191920
2623212119161916197101919181625191719251910419198379191120171910231619
1414101912812191317251911191019131321192518471915221919242625191727171
9191415151610211414132514321635273227151725132912101212142212331928202
1233021281617161972019121811251717172522102291981692811201720101916181
4221020122612101310251611171039134321402513447371552197424692569171531
7431910915132169921641411825553257351053218015108256929581056121382274
3319128942185307328103179019115208112641116317167171052282221391992161
1528732040204319641873227220372634102211043161851760195139604390401661
3498371345210674129697369451539443471096813250997264511184855845751105
8718078108220696858625622113856747319163949185101192587394103173908011
5438134643216346167101105129826813954926011547737240754341641647352729
2373734392211051971434518579608851726088908216651984413410410666129707
3904590947547856844505972475149486284535182876978511912222059685862592
2137568773396379915010129258173941321737380118195443146349032644632101
7212915368965457604947114729275824110716451191945262921213797397910533
7153456579428868723488321953826351394431104386638702790599040754885304
4621954594247474955623153308234695251581224959405816591937188715391379
1350392914191717316132137317118135415146339015645032107227153139613192
7571949261141792238212107285126194246223121399739792619233314531865174
2476816343832385352634439183127382138422740592540624819306628541642204
7235527316830163434522858304929402319301617192518431526134213203914141
0171116401344171413181514331315950121031272313201320271719182616171123
1512262824261724232316391739212617232114201813171747161617381538475214
4414181027192117421640402512621619221910610815169201723152717681016223
4222814302129242318302117422530432826234224201714241021112840224435143
1184214401344951122231252365202620211779181616281127152126442420171423
3116311723212517212120204913151753193516541737154147711449143510331928
1737164640331241165122441037103915529491727153917391031224122261424214
0246418452136422730442852231224151718242421212830222135263136423240354
4191922514022512531653526262131793291612287278211044112013141031163116
2318251621172010491315125321351154103710411171519949133519331628937134
6123310411251250449371239135214491027243917391431144110261224184016641
8451736142722442152151910123115191811241021443017212026243623322335181
9122294015512431835182626312132914192012177208141017111213141012161516
1718171691712101713171212211211171011101311215189171326192716409491332
1235103512332503593712401329143610232444173414371423103012191847162918

5917301427223321211529104031471931114110424413191317132013241323102315
1814121491415132410891818261621141415201717162018141717111218141612171
5121738171692412211720171812121216171411181316212618181716262027151929
4019491632263516352433163518371040132916361023124417341337142316301619
1747202916592530162711331921262922402147163111411642241914139132113181
3181323101415121412141014241318104795818321669141315131713161318131714
1113181416121727121638191616241421142025181812161617141618816102691817
1626201915252914192016172620161324171620182019171091316161710321216172
5131414131619163617820121616251816111110191426142272111161211101610241
1149982117181118152312141312131215102124161815471458103212691019101317
1314131713913121424131414121219271016191912161614141414251418141614171
6161081310149141714261419132511141320131715201913101715201920181718910
1618171832321615251714141315191836281918817121716151811111410161416141
5716111812191034101111309248221781123152212141391316152021221633153014
2610171225102410151791413171691612222416143212131919103619191931122716
2014301416142414141414161210161314143714211419141913231113131013181513
1918101315121913181518141026181818173215194115161713141115151814281318
2717401740156511651413161416151513161118161910341919171112301024142216
8112319221814129221615201422173315301426101711251424915239151311161216
1522131613323113121916361119143119271920123014162024151919141514171214
1610141337132119191819142311131010151812131318121312121213251517141726
1618151714151341221913161513611815121412131627184012402365266515131714
1715181314114916401019192317201217102019191443162111201915182012212213
1510141517151511142010201117141591423121914151411161261519131213153145
1217163211131412191419151215141520141512192015131913171514131030133913
1319131814141811111015151112131316121112131221251217191716161715121414
1317222113211591966128151220121816161813121523172617151617131713181214
1249144013191323122014179201519264318214220171521201821151314101319181
5171511111420132010171815121415121714261415161061219201221151945201737
3218135619231211144515781566154214831220201813161316151313323022392113
1319131313141118111118151511171325161411191372191217192616241717121414
1617921132189131914612121415202011181816211361515175217141616191513171
3161214121814141310132512191920141891515102623181842261719211719201811
1520141313141816171211151416131410191817121915141719263115301015121920
1519172115191120937121815191456923151120451578146684288317192020131819
1618161213123219221921441931327134713521133114718531547174925511443192
9197777393417572672241917861410216539991378866191451315514821260147020
1111170184821101196368015865243196814511669157917421641145518471438105
8196925841950205318301537191211060233018902695197719118172572010811702
0541354144519831680127115621997164514571914117771910114361945191023191

3054195215150197115231176315138194611108910712119155119131146794415102
2072155519441444889830817492065139 8”

4.2.1.1 Letters paired with digit sum at verse level

Key coding pattern: The two codings we will observe in this sub-section shares the same coding pattern of this simple coding that is considered as a **Key coding pattern**: If we take the digit sum the number of all the letters (which is 332837) of 6348 verses we get 26. Similarly, if we take the digit sum the number of all the letters (which is 330709) of the 6236 numbered verses we get 22. Then if we pair them we get 2622, which is multiple of 19. Basically what we observed is that the pairing coding pattern with digit sum at the *top data level* has that 19 based coding. Considering this as key coding pattern, and testing over the full text of Quran, the same coding pattern exist at the verse level data too as I present in the below codes. As an additional fact, the resulting big coding number is multiple of 19 itself but the reverse of it also multiple of 19 as will be presented below.

The evidence code I will present has the same pairing approach as we observed in Code 4.2.1. But now, we will see that if we pair digit sum of the number of letters for each verse instead of pairing them directly, we have another big representation number and it is also multiple of 19. Even more interestingly, this big number is multiple of 19 considering both sides. Namely, if we concatenate the paired numbers in natural order just as we did in Code 4.2.1 or if we concatenate the paired numbers in the reverse order from right to left, then in both cases the resulting big numbers are multiple of 19 as shown below. However, the second code that is the reverse version in pairing codes is against the rules of this book and I just present as an interesting fact but nor as an evidence.

Let me also illustrate this pairing coding pattern used in this evidence as follows. As mentioned before, it closely resembles to **the double helix** of the **DNA** structure, where one strand is the digit sum of the number of letters of each of the 6236 numbered verses and the corresponding strand is the digit sum of the number of letters of each of all the 6348 verses as illustrated in the following:

> DS[Number of Letters of Verse 1 (of 6236 verses)] DS[Number of Letters of Verse 1 (of the 6348 numbered verses)] DS[Number of Letters of Verse 2 (of 6236 verses)] DS[Number of Letters of Verse 2 (of the 6348 numbered verses)] . . . . . DS[Number of Letters of Verse 6236 (of the 6236 numbered verses)] DS[Number of Letters of Verse 6236 (of 6348 verses)] [Number of Letters of Verse 1 (of the 6236 numbered verses)] [Number of Letters of Verse 1 (of the 6348 verses)] . . . . . DS[Number of Letters of Verse 112 (of 6236 numbered verses)] DS[Number of Letters of Verse 6348 (of the 6348 verses)]

DS stands for digit sum operation. All the rectangular bracket are concatenated. The number of all verses is 6348 and it is 112 more than the 6236 numbered verses text type. Therefore, while pairing both vectors one-to-one, naturally, the shorter one starts over from the beginning part of itself and keeps pairing. As this is the most natural operation approach, it is also the default way of processing in the R programming language while pairing two unequal vectors to each other. Therefore, it does not require additional coding in R.

If we use the real numbers in the above coding pattern, it would be like this:

> DS[[19] [19]] DS[[18] [18]] . . . . . DS[[13] [20]] DS[[19] [18]] . . . . . DS[[98] [13]]
>
> [[10] [10]] [[9] [9]] . . . . . [[4] [2]][[10] [9]] . . . . . [[17] [4]]
>
> [1010] [99] . . . [42] [109] . . . [174]

And, the final number after all the concatenation would look like this:

> 101099 . . .42109 . . . 174

Below is the code to verify the coding pattern.

```
tmp1 <- unQuran$vletters
tmp2 <- nQuran$vletters
tmp <- paste0( sapply(tmp2, digitsum),  sapply(tmp1, digitsum))
head(tmp)

## [1] "1010" "99"   "33"   "33"   "1010" "1010"

tail(tmp)

## [1] "85"  "178" "118" "138" "112" "174"

tmp[6235:6238]

## [1] "210" "42"  "109" "97"

tmpr <- rev(tmp)
head(tmpr)

## [1] "174" "112" "138" "118" "178" "85"

tail(tmpr)

## [1] "1010" "1010" "33"   "33"   "99"   "1010"
```

```r
tmpr <- paste0(tmpr, collapse = '')
tmp <- paste0(tmp, collapse = '')

#code test for mod 19
as.bigz(tmp) %% 19  #0

## Big Integer ('bigz') :
## [1] 0

#reverse code test for mod 19
as.bigz(tmpr) %% 19  #0

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 17580
```

We could have tested 2 in verse level but this 2 in chapter level data, thus we have 1 success and 4 trials to add to the global counters, which I add below:

```r
global_tested_nums <- global_tested_nums + 4
global_success_nums <- global_success_nums + 1
```

Here is the 17580 digits length big number of the evidence code:

"1010993333101010108831093119711671168111181311613761171411101471012791
2109141031483188151812151012111010116107637731272129289148714147614156
1615616561051110111113111513121551285381034106436931491414101414109147
9979999119811888816891612961214621492993910391079678668961291012910891
1186115613581338931098108817811171311111317117171471014610136913139613
5675117111141110441074137131311137115711513119131196117667969999169101
6910109910179161711164111049101291212121215125158558125912691761017121
0101210108101686161261512141551417512178121285127513714131014121014129
1410971067146141416141516315143414641168111281112411241321613121681248
1141411714137131313139131191211712107510125131291369106111051195129111
2911119151113156135612518125182532538511881178477411715111015121061266
1465145510515101815318103161015161315161311168111286121368131481114121
1171241784168151691515991599799711912114121041610316610831161085111710
9511171291411712814878858989589591685591611589111114851116141558161115
1289111212109121271011129781169108961010691610861616887161481073146106
3146561114756119710612971012127712129712127916127771697978939381331131

1138119117811911710117118101071181810811111868181156141815511149151311
7911139771113987513128851412128414141217481410171681310121611136121511
1467159147789971181098115107895117596116566668618616815185161015851210
1387121213177131281710134812101448125148810511871011119715111191515141
1101591415108911151185111411105314101018391018181491118121411191214113
9171411133171311431213841012710138161015710137168159101072081691010820
7169107813711913791313111413129713614712187861179181681211119141615121
3111414101571371471010787157410158915441315791048131171410183116148111
3106118611141081196314118109133911121012131391712612813101713628111091
3152141112971516141112157916101171589101010711810104105111510114751315
1311379131013163591010916951610991397169910138759141098125101499161291
0397161294313781210441315810108411158101081311138910111312138913111127
8151391974154911954124611105101256131012107571351287187951581218591015
1112165810171111103161181417911113411814996111141188913681181111871312
8181511778121811015117118718910511711147169135107131481611135101413158
5119512141215105995128128101491451281089141414212141099131411281459131
3121111817515131312151141717151313915846171513791181769151374111517797
1310411159787510161114911810591610141117101391101416711131811414106711
1418121416107791491211163769159131173668101215121387861185121121081181
1119511151011111411991211755117141191412671251373116141269126135313610
1289861051213910168689101112109716461196118109784111114614859148811121
4101495614583124101191367511374131151397151111781311512971513111871181
2117141391127983113141191512891531431611141511881571414168148118847914
6818148846912691121448861412159112154108214515517151110821151058791112
8111115109814911121011715791414111151067779141011951461271298107991412
1214121081271295125141410412512125751014910949511121271010129593971191
2121091275638749912129771161281341591512107311212111311151315131083825
1161171361328128155869714615214129151181098141115614991311510128811146
8912131351212385148881212136125315510812861296851015910912461298811101
2915984612148101114121015138461114810161431051384711118916638558377117
9106484510357777108424310145574712812133161411513411128191371661113131
8119849137106121311181799491317101112101110171591499178111210610615514
2912810121069616552812141010107916165510891410106711166551015941046911
4616541594548910410166411910518812101110765118105184121711571551281751
0471711511156122106177101371811411136329697141381816491393129139141413
8141679129101211131514913714127131217109111415129107612141316171697141
3121310561114131610161171413101311581171310108118145108111381077108815
8125108131391011712813151412510101399171171211136141451110129141716712
1114691431111121814216812814491638111518112485864816381015611134125768
8537101468135127714875871414108951171114127118141491099811811101210116

1410910910810813106101661510810610810813106716101513811612848101077410
8131111101210413101178448911141061016131411158845911141861116111413151
3895911141821171112131013129169714721071012510191214163715710109101151
6196149341518105991121686893101141218145591526812811391161281414512151
3651218119996108171410129136512181299916106171110129969126121199166615
1191213939968111297671512913134399881012137679123131146998710151386149
1036111561291571115128141481012610156121315711121281411851261010610137
7101213881135661310610876101013981311610131361589691089171101113101013
1015129111011912814171210101381011101112111511112514912131078811411519
5111115691413117128741351091011611136121410111412127111313109109612139
1271010147121111101311999712591473101171311710111110957859141431211121
3671211410951281097143121012126412241196121010117153101016121141021411
1064108111015610916131181012142109410812101261499137810121221491110212
8126147915751091210144114210896977153512914101410747491011913927831012
1414614127771091311171314298710614106512127141051311177144957106101014
5712614555111571248512101110214117967565915812128912811112111189127661
6938212891189118111287129661612392581311998871267139116912291251213129
1081171169139111298210121612612121081191113939141213861016161366127829
3134391411131363169134106614782103174119101113137399249631413811101317
7111110713137109132891732131111101357131114781310109139813171221411910
1255131314884101510159795137128149911129512131681141415101513712557388
9141189712716101113146107139121251236891410810767610513564799612712361
2941091010676125115104695681012793101234119710776129111110667568101299
9104391147127266961186971062101095924392481242368648991010102810551125
3826811423781145981041048559115578661011523761110568104743539105671561
0109593363102610105793103710106615410691499333424101451298101178108613
4110136414991237454514101213841115814817131018139413910121077510551010
1310481510141517710789913131010410137131055610121078111071512777109111
3131015481391395761512117911127111211717108116134151088912914711152111
1912126119111017781464491017851214141111122101113124659510137111415412
9717135814111191211106138485125121313112151212877138861113912111068868
5121412121342612138127281368136127108814645101014148128476913512929136
8869712851410412101414789887119125129691361488912123515101312101413769
9810111128128610131414781212113111551313101013561598109110812815109147
7121291110111256136106510151189912108124159957312139810101296861161310
6111196128811499155133413781010997881131396911661584119913151013849761
0793712812315912981010610151141197137107813910697931212121212156127851
0510511511127107978133101691291012312131276975535145115612910119118103
1216712131013313131377965103314611967911119111110101211710134131213131
3674613101137699107101159111810511110641512131314684131312119711911107

1013512168125711461115513101488713712399117117791310127671287714611610
3551011812767123119871375941011777138117967683851111121210671281158513
4510491187101361110957981181211512610771287565104101069781110461110759
9111171295116871712871261010410466761154711976910112759811786171188125
1074941062655674910681032115681471061011588512710991012105225564410109
8631117611491081015383122105921210522125444104910631879115988811133382
1151225101027126464541410331386912151381083111431087111312756101071361
5610510141231113862126139106312141210871413107106910813815810510121281
1483296991165126122811148101110896888118956121384433791195117511610211
1158131188136128141189166513446397811135871411610911105813118121361210
1488616851210849679481013881114116149610881211121211641013896108312789
9117541010108101111111114761086121012911744134910108310779511855101210
1010911611778106611106912711412411106871077959811561251015976471184671
1116121261131213115610712769898111161151215127745117467511512116734131
4581081210610878911711812212127559713611535911157510647141781189101310
6713910718929127517913131111173899151351369791761179161366913410515979
1171717101314115171488911136136910996277161361195465951075114179105149
5191458311362631069321077136111151064951095445911511941912103593533210
3126831010776610113105465109645510114111247129313912510311106123812107
7661210103105967105635910641312117991013512310611966312121076611129108
1089127351134946111311114961035123468986512210869119988883121137113411
4101171110446437127498687572486999118685310111377391110105710101143414
7111799761171174413611961141014611513101813137159710125810111110371451 1
1091571311181194111381156847141111713121810131315117912138311111012785
1210151541391899311148851081171211117612710111361189121310361111125841
2141515411915913361411107812108111312101112657131115610812126101361511
1056415148151411101510131264111371012108713810612105111310156108127691
3715121056715981114210111013129415138106109710886810911310106989779117
1212115375971122811513695152811659710108583941023510391291071011512611
8385877278654655627118512741085233415295738127101010656628585857117261
2475566711831210458102238151094710857810106769245855541162812107259691
1431010357101023810101045102588111037996458854486886107210979947104310
7910113310610655288411335926856874185896974108739777451089411332696858
8249345112484627513599695488435757853824939259481183249245118444112356
3119468510810455115382372494985845117364112459884101123569117498410101
0751011103822764748878855736411341196871011295791071191141010117810910
9813215614778137788593114631411810961071111697751051181171012111586911
9101310151114147713271387961166141448798101011126117135125481375121715
7610111510121081181411742513375611641410411738710101291111137126412136
5101712781041571298786113410511313514111041110911133137101010911111371

361012969101112138648799577612102314101011101310141106111291213101315109107116138131210129799111413146781391151177121021114111051016101011061212121241012151096786681312101213715915148144771310116113715107111111551316121012101412612943124101167896613710913715315108144771510461131015771111955131412612131496891510123449117713996573911712314101514771615746119101774111797514148610131091181115111244109147713891055312111112101491510711161173699417104617678141788106105118117118471013141071286104511121311101013911104111611510631191249108676788171289615513813712811712136101112156741011813510101310119410161456613115121293810777118612991315121381361291171296131141510715109895310151012910103141164131555121610133141011751116394131212118965997796131046101215129109123111510124101431411134615145716913151412113581810737481210119985896717613109613126126101012121181014411143141113136121497119141571216310815810109757118710119168128761217813791113861161110612138414151111313111513121299911914137181615107157108911561110710111016812471412118127131114861151110612137412156118136158121591091191213818101515797781211136810810101012894314511812151071391412613511091210761213614846118141517107118121181210815991171212113148138710912139831051389157710971291311159910126313914748113141217137981311151213810911111812121091101491397891136813101113393716102749511458931233996798931312111312910131015513101011111018111249131089109389111631311119353516810102114105124108133835966499961311113128106101258101211610101154513787105359911336111291051353871061151061211104133895665410986911738826412483128641095105871071054589103368126107131036796115116811548369106359107829772811106244445310874593105810107106428410635810677610361098114111081053856410533957522722911462464105810772510325101010766927476459107726638104824710910103551145573751510210249246210651078107921210321110610565937871043910792106689410210759101010591110597574181091024102106310453741089212113111136105253185106311108910105689710210657106104921099115741085982810310536453741086241110118351062115514512661178910458857829627663412269111167510751285863115663512713106102634101048105861011951248121061175944884538391023623612116911461153731245106211466391251396421039107421058610899125821081145949884113939109362126911596414114353114310132746613911589341410697742145861089975321387469139128510131149591498691212913513616147411571114314131377610136115863914116571041214788106914714311135776913131210514132411511147817961211131313816137111187814101491314711101361058611991145710151215712811621451410119577691213410131410101221611511771417566117131089138111088810105921481112138101587118910457615171581213111028512108957565126410136101312616751471014551366771029108610681210115924881213813151774813103517611179871311101581212108125185751067101661213765761481065

5131661071010221210106861212911109844871341311176410131232173117911791
1815912810612141817711108761614128775156118126125816101010106210121410
7891259121011810487941111561010111212108212310791169118149788611141417
1011118264143897815511512512789105101361210101410749105712121181068109
1111659104114125812129106936141131487118111113144104118107294838910845
1051153713975101391291061064121067912981161610911116497474115111215986
9381443118101171141312444986789987810109481021143713875108910912656101
2268910971111161198114487673115116159899582441110106710411121145956685
9107910597811103214971865782101012105210921084101277111118824118467 31
7586591299592649106671081111113510510655131011913515714117371991118614
7152710710132109610241112977111089101421811114147131712875712139995612
9761271489111031210610125111310118131515614117137169811889149151478721
3101036810122811999712101095145181111101491312129710761399115512127412
1214591410101210613121111810128101576101113131216884109813969714138727
1063782121481091797127105514517114103961215910101761495111251612104101
2958141510121012138111081112131091057810913912588469213964710133710796
9712210148107175757953143178453106715410610717414115612716910510991387
1511125129891081141349410456849696538269299104510231010791098122101085
7105105119534311812551057842610784101196777975395139710115549119781110
1141241043410674963693724969110954241047510188261085910310711458421111
1211565128102610586109910747471039549510115944111074112119123106361012
7596369577431076515944246415919876886953579478329119119651218106685116
1196105494101012954651011296491034421097366668124510666559731053472585
2412261016929874846451052910743897939851118466851171111655999107121155
6510525689534471057116761186411107645691131059482283211122810968288910
8410434610921101488975388711847625107611251093910781195105551054810534
9710581110791110615111077410641110109910842103811321081091081810978101
0103101056109101101281095510857108871028101061021010431010981094101058
1010491053691105841059710915910874103431059310104210583371071071010191
0778107101109581091021082110755101531038410782101104103471011961010461
0788108910106576315574558759697811413334563101032351038710727310298788
4741109781092228101974521831314778212174438710117611101561579878101066
1871031051071256895961571311111123114116131013310341098710921031021486
8104134111077101042721010109941027851711476861061297134178810771211101
5915139117141056918610121012106121561594914158135111112101191110132131
5101310114897779510101021412614109136111179101245711107101191010127658
1097161416696166109613817581277129109912131311814145119136812812106151
5615510144131414810515111210169510112111561310111089101179710551092912
1514129136611119101285611141087411161016126688119616141679516810910126
4811511129714949121231388910614111110134838710715136135414713101491061

5412416125511810711468104106961169510159949415910101281386511310108866
1458124121681651056988111167141171157889912943116114971484101263887926
5119101447377107313111354310877107986642451215284784589456469635415924
2489910782865836108856758123128835254988711876111111575819109837644377
8410110166897826589114474751033611953368371075866826531102448845694584
6943741158232168791079236882658454758733823132648881097108568111358561
1010108107645367841011217613998126128415484654310699939683710356698663
3310348894568410841046644781188431416377108913284215747495778312413363
8281911025589104131087691041031016357698310412571136981251254153896749
1089594938671104310629168383236859559831094646684988834514210832758813
2543167878997388184333382214132958984910471395483816387109431149551867
8105553110311911714938956433116411144105261484104842461565595359461698
9978536582789285289375833611878693328983373589274839978286911101047138
5786876981104471119358847510757381021171171473291068341134711247566510
9434949454513635156594111139591574546484749584259379873101177565372997
3877589179889871027651121087284786272981091748751737854451079788327797
2712510587423371217269589832969354543633176695111133511511084548494346
5543510319107310775555575957781748515958584102745426810214681029298199
7985567875564910109910888367295271756577921037121326948885246539474264
3673685817361619845787943765543101091101041093273575655555377154105351
0510554421494469104136410695981998965510764825665941099484811611245576
7462779110107810321356742810594354967528466531828579656692437674447453
4710295101041093253276610106585531745410103910510251461394439343374868
5786958464541067648236357499345481161184859654132471015102883211010753
7226102933441665682625218265593551056726310634649483574235510610636552
3621046410684531124444105995226126437423433337108788736558434349661036
6823937749638588764848393551344410355298628109763823692635441910862652
4212983665838565173621033106291089511451023951561266611523927474465443
3124441044252992668274571027493838106788537598438349510365326229937646
6785877610847453935514741032109569165899861088321029264554793862755410
1891035610848366110362810632109231069510911652269515812868112104210997
3734105104833109411474621128911613867751110141010779128981061483587189
1541281010114105637532721292391086146771410651571666857105119115131151
0127510823910641061359914814101010148927292949511108783861610971256101
4821095910310104937106681066981261010928911366510135893692106810851781
18138112174”

Also, here is the reverse version of the same 17580 digits length big number of the code, which is also multiple of 19 and presented just as a follow up fact:

“174112138118178858101069236891355106611389921010126986681066710931043
109109521014861012597161086838711109594927292148101014101489935614101 0
639825101271510131115119105576816615765141077146869102312972327563105 1
141010128154189873514810698128791071410111075671381168911262741149431 0
831041053437971094221081186812515692265911510693109221063810621036136 4
810856103891015475623879544526292108310886995816699521010374145593537 4
846107758786664379922265336510498343987553886781083937410257748266922 9
254441044312435446747492231156612615695235101149510829106332103617658 5
836536981242522686910415463923682639781062985235410445133539484876888 5
634977932368366109634348455368778108373343237443266122955941044124314 5
684104621036526563610510354257839464341066372565103559658221252668651 6
443329610223775101021832851010147132549685846118115434997435368264674 1
045465869788586743334394439611425510910103410451753856510106627533210 9
104510297103445474467372469569657281853668452674935941052874561332810 1
071107927466757451121164848994105966254876510658999815969410364191046 9
414425410510535105547137555565753527934101010911010435576437978459861 6
173818536674326749453465288486932217110392776575715229678388910109910 6
455876755989719989210268141026842452741058585951481778575957555577310 1
071910335546534948454841101153511351169763163434535692983899526171237 2
374585101227977732889710745547873518774918102927864728872105117610287 8
998178975877399725356771011739837594258494748464515759139111946515353 6
515494943494510667524711344118310629737147112118107375510478835197114 4
110987668788571310411106928789983749258733398283369781183683759328859 2
788265537899981646595359651546424841048615241011441116336495381491171 1
910331551057886519511443109876381835413947910848995324121823333848138 9
789876731543281582783210514348898846664943109855596823838316291064311 0
673849598991074963815545128126911357412310987635163104109107610841391 0
582511019283836413128377957474154228138971037141643888114764464101088 4
569488343103366986635710839693991064365845441128126981397612110184675 3
641071081010618513581156108978108864132233873584745582688369210779168 3
282115744369844569458844102316582665810737683395611335104747114896582 9
768161104107837447683109195857111161187711884925358831281275568861083 6
528789108924245941359646569458844728155122464867971087310541113313107 7
773144910511267988631012847144961131194912897811511771411681198565108 1
612161245861486108310511868131012910415499915510696116941081046711810 5
111254164126159101014713414135136715710384810131111614910883131212491 4
997111211548126910810516791416616119886616121610411871410611851012119 6
111361291514912925101059711791010810116131115112510169121015111051481 3
141445106151515106812812136119145814131112139991071212758817613109166 9
616616149781065127101011971011105712491011761191314101262141010510797 7

8911413101510213101391110111112511813141549159156612121012106109185614
1011713991510151211778101781349761261068147715178102941091010724210107
7111013410468148102103927109841010313313101161141231111311157969568125
1071051031876610107898157156111076101187437412182771413832145971012822
1097810941478887293102710787103353210106345331311478695987557455317665
1010898107861010461011971034410110210784103831015510751108221091081095
1107108107791010171071071033582101043105931034410879109157105941058110
6953910104810105410109981010431010102106810102871085710855109281011011
0956101010310107810918108109108328111034210899101041110674107151110691
1107811105973410548105551059581110739109256111072576847118853978814110
9261034104849108882968102211132288294105113694576111064118761165771044
5389565251056115712910995511671151168461118853979894310729105454648872
9691012612248525475331097556610645812666673109423491064291011655412910
1094546101191168566181051296911911327894575369887698911564244459517631
0745769635912761063310912211411107411941155104995103474710799610586101
0212865115111221184457113109108561082185104741042951106949729336967410
6341041241141110781194955101197513397579779610118410726845751012511843
5311910510557108210812109791010235101049992263865694968454104941381191
0985121112715138995109107166121154147176104107151065384317314955757717
8101014122979610737101347962136984589129138105791013101112108811121312
1015108149510121041612125511149176101015961239410171114555710712179109
1482127863710721387146913998410881216131310117610151288101111131210610
1214105912144121275121159961310797121291310141111518514109121097998111
2281036101021387147915914888111691371176141515813101111131256101210103
9111481277612956991397127512813171471141811142910108711971112246101091
3271071015214786111997173141115713511913105510610535111181171066910649
2951295986175734611824881111711112741010892210105101221078651897143211 1
0785991010759685659114111210467101041124589998615511311678744811119111
6711109892610125612610989510877134321181094101078988967984412441371110
1111843814938615911121157474491169111610116989126712106461091091210137
5139371151054510889839472810411410131411111188731414113669910121258412
4119106511111096881012117121054910710141210136510910785125125118159738
4142611810111417111486781491186991110712382121011121010561111948710411
8121059912781410101262101010108161251261181567587141261687111017714186
1281091281591111779311217123101364111741371348841099111212861061210221
0101071665136581061457761213166710106751851251081212158111071398111717
6351310481771315138812489211512106861010829710671365510141477561613126
1010136451256578912108510213118121715615571048971115881012138112145910
1088108811913108713611561417775111611122101013144101213697795101151421
4116128157151271045911119861051361110147913101481487111113781613131113

6121797811141152414131051312913765711131431476981078121410457116914635
8611101376137141314371111574161413613512991286149594913115101281396974
1383275991088614542776914103489115139667413231011453431411645991112662
9391093113849894458112105891289610582107491010342965139126346211106453
1237115469111166122336102393845884459117106812124951011861054810103426
6101310127356611563581287551067111169122346627968257884591078611126455
1115625108310114116210874536453310810825910874115992104961071065210710
8956101089111063510185325105361111113212894103745310106102249108104157
9710591110510105910710294681069210739104873759566101110321210921077851
0106622449102102157573551145510391071024488106326779104576749266107101
0251032577810105642446911222752573953410563810510841181110936610771065
8634102864710101058310597410853444462111028772978910351066983548111161
1596671037136108123610389451051078710595410863124841226887391186109546
6953841311106125106117103813510512961133911595371078513541011610121181
0125610810312111161399496659831331081241051141028105165393111131311691
3810989131049111210181111101051310151013129111313129398679933312894551
1492716103739111313106811389979131014911210181211111091381512131198137
1217314811749143131269105911191371210977915138105831399127101381481131
2121179981512101188127111710141511846148136612107912110135126914713151
0812511314941281010810810136121178971571015818121311910915981261581361
1121574121310651161114813111271181412478121016101110761111589710715151
0181613791491199121215131311113151141413861211101168611137981312177612
8168119710118579710101581081637121415119971214136111331411141448101211
1012610612131296131017667898599101181274738108135121115149137161456151
3414111434101012111512310912912156101046137997599611812124133916511117
1410133161051215541311631410101291510310959815101074151311967129116128
1312131315996121187710738129512131166145101694101110135108131011741561
1126101213117128137138155961288177876869101241196351016114111110139101
0131111124561012810713147108471181151161081017881467617104417993611711
1610791510141112121153105897131471094411121115118109101386141475179411
1779106117416157715141410123117395796139779114412315108996131461214125
1395111177101511346151077144108315715913710613967811641031294612141212
1012101316551111711151037611101171347814151415913710121312688667109121
5410121212121061011610510111011141027121171151397814614139117912912108
1361371191015101013121312961111010141013101114102312107657998764138111
2910961012136137111110910101371339111110104141113511310534611789871241
5810127101765121364712111391110127103811710441411656375134211781481112
1015101011761715512137481251351171261011810794814146661179138277131471
1141015101311969158121171081151151077691111107968101411631149385781377
8147156132989108101171010114119107799511271068119344113657857888746427

8210310117510104109874911562310118498451126473511848549497223381155510
4108854611963351124484511244932118485992932438855757438854699935512746
4811245932488859626334118951074773987410979658187468852659334118852656
1031011391010743710947910972610888644855864993711108825510104101038102
7103510104391196251078126241155854592761068105710847109815231025810431
2118675675124261175758582866651010710812739515234238541012785711625546
6578728785836115121011107129395102341039581087105911628515695138112271
1593711512121177997981063109118108610897610810151394131211102101114987
1556121071591376812610101511131056128107131081012137411126101310151411
8151514641051511136610121210815613115712610111312811121078111061413315
9119154141541258111261110312138961111137106121171211117108851483119991
8413151512108512711103111389121171315101312187131111714845681111139418
1113111571095117141031111810125710159137181313101151464106111191364411
7111769911714734114101057101091173137101153681189969487275689874712434
6104711101111434711113312888899911862105128689461233561049111111134649
1133512789810910111266107121263966113105121013991171312649103556710961
0510312106677121038612111010312513993712124411101155641096554310101166
7710108312610332539335121041911911559449551049106115611713107326931026
3631158191495514910417511107956554119136716279610969613111389148517141
1101317171177959514109136616137961191797136135915891731111131317975912
9218107139671310910118178714645101579113511513697551272128127119117810
8106812810145413731165125116774511741271215115116811896912710756131131
2611121211671146118477615951061211598957771068111012411412769111066810
7761191110101210510855117910783101049413749111012612108761114111110111
0810105411799783121089613841011612121211886101491161114881013487996841
2108561688101461212131188131059116101411871358119763445131668914111281
3688131158111110211675511119793344138612951188868891110810111428612512
1169996324881112125108108158139101061071413871210121463910613212861113
1231014105156136107610751312711108143311108138121569138331410546464712
1025101221158233113818815991873110649410441252210521259210312381581091
0114761116398101044562552121091010912785581011106147681153281010649675
5261069474510812118617788115927101169977115461167464101010126871712871
1695712111199751110461110786910101046575128776105121211118985710961110
1387911104455135881171210612121111858376961171387711741059137871191236
7127118510356106117148771276101291377711911397127138810145131115146711
2568121135710111011997121113138414613131512641105118101115910111079976
1131310466713131213413101311710121110911111179966113141036579137131313
3131071212161031181199106121151453555977613123121012129169310813971071
2751151151051078612121512121212939710613978710713119114101510681012915
9123128377961097841013131599411158669119631381178991010784131331559911

4886121196111310116869610128101393125799415812121099118101565610613125
1011911121277914151012810891810159561013131051311151131212781414101386
8121121011986913710141312151035121289148136691291251198798781414121010
4514128978668913925129137684812141410104514688710612813136281271386124
2121314125126888106121113961188713871212215131112131258584613111091211
1181413571712915411141375105946131210111221111141451217891044146781017
9116111212119211111514712989108415613811171011711121279111171512769591
3813154131011131097712771511107812106105513101374101010131399787101517
1014815104101351010575107101213994813101171314815841113810125145474123
9941413611013486810117810129145410423393149694106151067101039357101026
3103693951010156671053935741046810561137521011667855911554841081059114
7823114688253112558101021010994886364281224392459109210106978661169261
2747911439109910126875661110911612777101193410129312781056691041151257
6106910410129367126129947565136106710710891468123125912713610131410117
1671289141189385712513710151415114168121395111299814712513791591510410
8813145131259101411122131798913101081314713115710131111213173891321091
3771311107111317111013831496249973131310111191741038214766410913316136
1113914433132978612136161661013814123913991181112106121612101282129911
9131161171081291213125299121161396771288991311589212361696712128811911
1188921238169661278911111128119121288129156575961172141110121085124157
5115561471214510101065749714111751314101275121066147109814217131311109
7712761414141012832713911991074741410141012935715979610842411101491251
0157796148122121110149122101278913149126121010894210121481013119166101
0158114101061411102114161210101531171010612119244121261012312714109128
9541012116712131211143914855710911117101311117310147597129911910131111
7121014710912121396910131011131271412101112141366111011109135741281171
4136911511195514118117813109125141125111111112111081010131210141712811
9111012910151013131010111718991096158136101311613981013610876101310663
5811138101277101310661051211881412127111315612101512681014141281115157
1291566111031498615137109869114313912671371012889943131312971576129811
9639139912151166916119612912961291110617161099129121865913101217141089
6991811512136121514581461291111312868152591451218114310898621691159181
0415936141619115910101015737141619125101012107727141691291013121371121
1141891195138131511141116186111459841581411161361014109114884117131010
4101211118134107710104812811613810157161068138106108101510166610131010
8108109109614101110128118119991014141181271114117951081414877514877512
8131467105388761251346111015388166458481121518811163498148122161814111
2311914146121116714171291110145614111371217119910135101412131512811791
0131310812515888710107138811510814811101071381111510131413117101613161
1145613101312714169161714136121071291415911171013121277149131514111310

1212979141613814141391299391316481814139796321364111811137710617210612
1115115717104175128155571711412518810511761110121018810511964101610489
5494415165469114641015951065111667101091410855161679101014108125216596
1061012128295146156101210811917149159101710111112171091394179111812131
0613749981811131361171691381111213411516141331212847571453102484710775
7103454810679711375885639161187118451331016148101114461381015141210111
4861284159129111088129469129101015859661212810815553612121381288514381
2121351213891468111285101311996141115814109118915141215214697861551282
8613713611511828313101315111511132123111071512159134128116771299124987
6375912121091271139591291010127111295949101014751255124121410514512129
1271081412121291479810129127146951011914776751011111414797151011111214
9981510111112891187105115821110715515152141081541121591412864812149112
6698414818689144788811814141671481511814151611143153891512119314311981
2791141311781271118131171512911581311715119751313117411375136119410312
5861495101412148111485914814611118497810611119467161091112910681689101
2131058689101213653613912126614311137125671412119714511751211991411111
1510111951111118108112512118868712131215810667313111596937111691291477
1610121414187111061414181111367141110139710111101491610511814916115108
7971115104713791517411137915176118791513617849151313171541715111312151
3175118121113135981411213149914102121414914108128145149810812512991051
2151214955111581413510111381613141071351691477115119107181181171015181
8127715111812871311881181113689118114611998144111139111417118316111017
1181016511121015591218158951878751271375121013105610121056111245411949
4159791151378112131189121311139101381311108810111584101015841310481213
7431297163991016129910141259814105987101399716139991610959161010591631
0139133713111315751141510511410101011810710108971510119161571112161471
5129141115291311102813610178136121712139121312109111331091183149681114
1061111810611381614311181410117813104791315449151584101578710771071471
3101514141311151214161191211168918117861877126147131291413131191313711
9137789107168201010169208107910815716101315716101387101012841213431311
3171113171413914191211112141118149181891018310103141051411511118111589
1510914101514111515119151197111171011810588514812144121048101381713121
7712137121381210851015516151816818686666665611591179578510811109118978
9779147151461511612111312161310168101781417414124141281412851285138713
9711971113791311915111415514185618116811188111810118107810711101111711
9789118111113113133383989979771677161279121297121277121271012910697611
7511145614663610314107148716881616861610691010961086981197111271012121
0912129111281115816155161451114811118911591655168598995985888878147121
4111291117951710511108116836103161610104412121111997799991515991515161
6884417171212111114148813136612128811111616131315151616101033181815151

0105555141466661212101015151111774477881111885533225518181212556613131
5151111991111121299551111101066991313121255101077121211119913131313131
3771414111144881212161613132244111112128811116644141433151516161414141
4667710109914141212101014141313775512128812121717551414151512126616168
8101010101212101017176699121255885515151212121212129910104411111616171
7991010991010161699999966776611119913131111557711111313131377441010441
1111111775566131399131366101014147717171111131311111717888810109933881
3135566111188991010121299668866779910103399992214146612129916168888881
1119999997799141410101414141499336644101033885512121515131311111111101
0556616161515661414771414889922121277337766101011111010121215151818883
3141410109912127710101414111177661313111188111166771111993310881010101
03333991010”

4.2.2 Rewriting of Basmala based key coding evidence

As already mentioned in the description of the rules of the key coding patterns based evidences, the second key place to look at in Quran is the verse Basmala, which is the first verse of Quran and repeated 114 times in Quran. Like an opener, it is used in the beginning of each of the 113 chapters out of the total 114 chapters of Quran and it is also used one time in one of the chapters, which makes it repeated 114 within the Quran interestingly and thus a unique verse. There are two key coding patterns exist in this special verse Basmala.

First key coding pattern is, the concatenation of the chapter index, verse index, number of words and number of letters in it is multiple of 19 as follows:

> Natural numbers of the text of Basmala verse: Chapter 1, verse 1, 4 words, 19 letters 1,1,4,19 11419 is the coding representation number of Basmala.

In this chapter, I will present the evidence based on this key coding pattern of Basmala. The second key coding pattern is the concatenation of chapter index, verse index, number of words, which makes 114. It was already considered in Chapter 4.1.3 with the codes where there is no letters information is included. Since, these two key coding patterns are multiple of 19, the number letters must be multiple of 19 and as a result of mathematical necessity and thus it is not considered as a key coding pattern. So, in short the only key coding pattern with letters information is the 11419 and I will present in this chapter that it also exist in the full text of Quran too.

As per the rules, when a code is tested with letters information in a *single text type*, I assume it is rewriting of the text because of the letters in it and I always concatenate from right to left as in Arabic. This is the only exception in this books that we concatenate from right to left as if we are rewriting the Arabic text of the Quran with its corresponding natural numbers. We do never concatenate from left to right with letters information in a

single text type as it is always considered as rewriting. Rewriting can only be done in a single text type and thus the pairing coding patterns of two different text types is not considered a rewriting and thus concatenated always in a standard order. These point already mentioned in the rules section of the key coding pattern based evidences but I wanted to clarify here again to remind them to the readers. Now, let's continue the evidence code of this chapter.

We learned the key coding pattern from Basmala, which is the concatenation of chapter, verse, words and letters information. as, per the rules we will concatenate as if we are rewriting the text and thus from right to left in the full text of Quran. Also as per the rule we have to test this key coding pattern both at verse and chapter level data. Because, we do not have *clear distinction* like we observed in the Al-Fatiha whether the key coding pattern is *only* in chapter or verse level data.

In this chapter I will present the evidence we observe in the verse level data of the full text of Quran. This code of this evidence was one of the first codings I had discovered in 2019. By then, I had not realized, it was based on a key coding pattern of Basmala. I had hypothesized that how I can rewrite the full text of Quran by its natural numbers? This was the apparent coding pattern and when I tested it was successful both in verse and chapter level data. Because, from my point of view, I wanted to rewrite Quran by its own natural and thus universal numbers and my first hypothesis was validated. Even without the key coding pattern, they were standing as strong evidence to support that the chapter, verses, words and letters information along with the test structure has a strong 19 based relation. I was amazed by this observation and had named this particular coding as "The Ultimate Evidence" at that time. Instead of rewriting the previous subchapter of it, I will present as a subchapter of this chapter and will not change much and keep that old subchapter as much as possible in the original form. So, the following subchapter presents the evidence at the verse level data based on the key coding pattern we observed in the verse Basmala.

4.2.2.1 The Ultimate Evidence: Rewriting the full text by main descriptive numbers per verse

Along with Basmala verse, the key coding pattern for this evidence code is the verse 83:20. Let's recall this key verse that seems to show the key coding pattern that is also strongly connected with its meaning:

> 83:20 A numbered book it is. (Quran, Y.N Öztürk, kuranmeali.com)

We naturally ask the question as how it is numbered. This verse should show it. It turned out it shows it.

> 83:20 كِتَـٰبٌ مَّرْقُومٌ
>
> 83:20 Kitabun marqoom

This verse has 2 words and 9 letters. When concatenated in the natural order, we get this key coding number that is multiple of 19:

832029 /19 = 43791

We witness that the resulting number is multiple of 19, which stands as key coding pattern. As per the rule, we will consider this as key coding pattern and apply it to full text of Quran. When I tested this key coding pattern, I witnessed that it also exists over the full text of Quran. Moreover, it also has its compulsory even and odd coding too. In this main chapter and in its subchapters, I will present these codes. This was the first code I had discovered and named it as *The Ultimate Evidence* as it literally rewrite the entire Quran with the natural numbers of its text and suggest that the entire Quran is protected with all its letters.

Moreover, the exact same key coding pattern also exist in the first verse of Quran. which is the special verse **Basmala**. It has chapter index 1, verse index 1, 4 words and 19 letters. When concatenated we get 11419, which is also multiple of 19. The Ultimate Evidence shows that this apparently key coding pattern also exist over the full text of Quran considering all the 6348 verses.

Since the code of this chapter was based on one my first hypothesized coding pattern, which is to re-write the text of Quran with its natural text numbers, and also this code was one of my first discovery, if not the first, I had considered this evidence as the **Ultimate Evidence** at the first publication of my book in 2019. I will keep the title as is for this evidence although I later discovered more powerful evidences, like the one in the Al-Fatiha based 19 system, which I considered them as the main 19 system in my book. However, after Al-Fatiha, I realized that the rewriting coding pattern of this evidence is based on the key coding pattern of the key verse 83:20 and the special verse Basmala, which showed that the **Ultimate Evidence** was already a key coding pattern based evidence with letters information included.

The code of this chapter suggests that the full text of Quran with all of its text structure, size and order along with words and letters are under the 19 based coding system of the full text Quran and thus suggest that the text of Quran is intact and unchanged from the beginning since 632. In a sense, this code fully decodes the text of Quran by its descriptive numbers. In order to decode the full text of Quran, we need its own text numbers to decode. The way I will decode the text of Quran is simply by rewriting the text of Quran, verse by verse with its counted descriptive numbers in the exact same order of the text from right to left as in Arabic. For these kinds of rewriting evidences, we can add this rule upon general rules such that in order to *rewrite* the text of Quran by its descriptive numbers we should to mimic the Arabic text of Quran that is written from right to left.

The same key coding pattern was also observed in verse 83:20 and explained in detail in the first key code of Chapter 4.4.1, where it is shown that the concatenation of chapter verse, words and letters is multiple of 19 (832029). We see this key coding pattern if strongly represented in the text of Quran.

In order to rewrite the full text of Quran in the exact same order, I will utilize from this table that keeps all the descriptor numbers for each and every verse of the full text of Quran in order:

```
knitr::kable(head(unQuran, 9), booktabs = TRUE,
  caption = 'Head part of all 6348 verses of Quran to show how the
natural numbers of it look.')
```

Table 4.5: Head part of all 6348 verses of Quran to show how the natural numbers of it look.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم
7	1	7	9	44	صراط الذين أنعمت عليهم غير المغضوب عليهم ولا الضالين
8	2	0	4	19	بسم الله الرحمن الرحيم
9	2	1	1	3	الم

Using all the descriptive numbers per verse, I will rewrite the full text of Quran with the numbers in each row of the table above. I will basically rewrite the full text of Quran with numbers in the same order of the words of Quran from right to left as in Arabic. As numbers, I will use the exact chapter index, verse index, number of words and also number of letters of each verse. Since, in the full text of Quran there are 112 unnumbered Basmala verses, I will also take this into account and I will not assign any verse number for the unnumbered Basmalas but still assign their chapter index and word and letter numbers for them just like they are written in the text of Quran. This literally means, rewriting the full

text of Quran with the 4 main descriptor numbers of the text. There is not much versions of such an hypothesis. Because, I am trying to test the order and size of each verse at the smallest resolution that is number of letters and words per verse along with all the two other specific descriptor numbers, chapters and verses.

Considering all the 6348 verse of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [Chapter 114 | Last Verse of Chapter 114 | Total Words in Last Verse of Chapter 114 | Total Letters in Last Verse of Chapter 114] [Chapter 114 | Verse 5 of Chapter 114 | Total Words in Verse 5 of Chapter 114 | Total Letters in Verse 5 of Chapter 114] . . . . . [Chapter 1 | Verse 2 in Chapter 1 | Total Words in Verse 2 of Chapter 1 | Total Letters in Verse 2 of Chapter 1] [Chapter 1 | Verse 1 in Chapter 1 | Total Words in Verse 1 of Chapter 1 | Total Letters in Verse 1 of Chapter 1]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [114 | 6 | 3 | 13] [114 | 5 | 5 | 20] . . . . . [1 | 2 | 4 | 18] [1 | 1 | 4 | 19]

And, the final number after all the concatenation would look like this:

> 1146313 1145520 . . . . . 12418 11419
>
> 11463131145520 1241811419

Here is the proof with a reproducible R code that rewrites, namely decodes, the full text of Quran by the 4 different descriptor numbers first and then test this big number.

```
x<- unQuran # 6348 verses
tv <-c()
 for(j in 1:nrow(x)) {
     if(x$verse[j] != 0){#for all the numbered verses
         tmp <-
paste0(x$chapter[j],x$verse[j],x$vwords[j],x$vletters[j])
         }else{#For unnumbered Basmala verses
             tmp <- paste0(x$chapter[j],x$vwords[j],x$vletters[j])
             }
     tv <- c(tv,tmp)
   }
 tmp <- paste0(tv, collapse = "")
 #I revert the order from right to left as in Arabic.
```

```
tmpr <- rev(tv) # matches the coding from right to left as in Arabic.
cat("Head of the per verse representation numbers : ", head(tmpr))

## Head of the per verse representation numbers :  1146313 1145520
1144417 114328 114228 1141414

#"1146313" "1145520" "1144417" "114328"  ...
cat("Tail of the per verse representation numbers : ", tail(tmpr))

## Tail of the per verse representation numbers :  16319 15419 14312
13212 12418 11419

tmpr <- paste0(tmpr, collapse = "")
cat("The test of divisibility by 19:")

## The test of divisibility by 19:

cat(as.numeric(as.bigz(tmpr) %% 19)) #"0"

## 0

cat("Number of digits on this big number
    is ", nchar(tmpr))

## Number of digits on this big number
##      is  46900
```

First of all, before discussing on the main point, as you can see in the last result, the digit sum of the length of this big number, namely the number of digits of this big number, which is obtained by rewriting the full text of Quran, is also exactly 19.

The big number of this evidence represents all the 6348 verses of the full text of Quran with respect to the number of words and letters per verse and supports the hypothesis that there is no redundant or missing words or even letters to a degree in each and every verses and the verse orders and sizes and also contents of the full text of Quran are also correct, intact and unchanged.

For the reference, to the best of my knowledge, Evidence 4.2.2.1 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 4.2.2.1 had been available in another article, which is very unlikely, then in such a case, I surely add a citation and update the online version of this book.

Because of the reasons I explained before, I had named this evidence, Evidence 4.2.2.1, as a single code, as the *Ultimate Evidence*, when considering the letter level information. It is not

necessarily be really the ultimate code considering all the codes of this book but I will honor my initial experience and feelings with this code when I first discovered it in around 2019 keep its name as is. The coding pattern of Evidence 4.2.2.1 is quite strong, because, first, we literally rewrite the full text of Quran in the exact same structure and order using the main natural descriptor numbers per verse. Secondly, the same coding pattern also exist at the chapter level data of the text too, which I present in Chapter 4.2.2.3. Third, and now by the time I discovered the key coding pattern based system, it is based on the key coding pattern of the key verse 83:20 and the special verse Basmala and it is the main reason is for this code being special.

We used the full text with all the 6348 verses of Quran, which means including unnumbered and numbered verses in this evidence together. In my opinion, there is not much alternative than this big number to represent Quran with numbers up to its letters and thus this is one of the few best possible rewriting representation number of the full text of Quran considering letter level resolution information. We witnessed that this number is under the 19 based coding system of the text of Quran. On the other hand, I have observed some other interesting rewriting representations as well but they might be considered underneath of this evidence as secondary evidences compare to this one. Because this coding pattern is the most natural way of representing the text of Quran for rewriting it by its natural numbers. If Evidence 4.2.2.1 was not successful, those follow up rewriting codings would not be as meaningful as now. Because, one could always argue that the most natural rewriting representation did not pass the test, which is not the case right now.

There are two more codings, which further assures that the full text of Quran can be rewritten as a 19 based code with the natural numbers of the text along with the letters information. In the code of chapter 4.2.6, I present the coding that uses the number of letters of each word to replace each word in rewriting. Basically, it also suggest that not only the number of letter per verse but also the order of each word has under 19 based coding system when we apply the similar coding pattern of Evidence 4.2.2.1. Also, in the code of chapter 4.2.3.1, we witness that if we use sum instead of concatenation to get representation number per verse similar to the Evidence 4.2.2.1, we still have 19 based representation code for rewriting the full text of Quran. See those codes for more details in the respected chapters.

Since the key coding pattern is suitable to consider the text type of the numbered 6236 verses too, we have two trials and one success in this evidence based on the key coding pattern with letters information. Let's add them into the counters for probability calculations.

```
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  2
key_codings_success_nums <- key_codings_success_nums + 1
```

Lastly, you can access this big number from the following link:

https://github.com/quran2019/Quran19/blob/master/BigNumber_6.1.txt

One can just copy the big number and paste it into a web based big number calculator and test it herself.

In the subchapters of the particular chapter 4.2.11, I will provide related rewriting codes as *facts* which seem to be strongly associated with this particular rewriting evidence, "the ultimate evidence". I will peovde them current as *facts* since I have not yet found clear key codings for this rewriting codes. Although, they are so strongly associated to "the ultimate evidence", and might be considered as evidence in that respect, I will keep them as strong *facts* for now.

As per the rule, we have to test the follow up even and odd coding of the key coding evidence as I present ın the next chapter.

Also, here is the "46900" digits length big number of Evidence 4.2.2.1:

"1146313114552011444171143281142281141414114419113551511345201133515113249113141411341911245151123412112229112141111241911155151114317111341511126191111515111419110373011027311101519110419109641410955191094517109351910924141091416109419108341510823121081316108419107721410763131075520107421110735201072417107141910741910647261063418106242310612101064191055315105441810534201052519105172510541910493101048314104741810463141045416104441710434151042416104141410441910339521032415103116103419102852110274181026211102552010244141023312102231410212131024191011128101104131019291018416101741410164171015424101452610134171012291011171014191001151910010414100972510084171007415100641810053111004311100321310022131001213100419998621997622996632995413994316993416992318991420994199882183987942986166698516789841145983311982623981125698419975518974937973620972519971521974199619520961821296172109616315961562696145179613415961231296115189610310969313968414967311966417965518964313963314962415961518964199584219574179569429554189546269533159522995121495419948312947313946413945414944312943312942313941413944199311416931041793941793831593731393641693541893452093351593231293116934199221299220521921962192184179217214921631292154179214316921341992123129211621921021392921192841692721392621192541592431192341892231492131392419911531391147399113730911231391113159110413919413918320917312916314915315914315913315912314911212914199020313901963290183179017945901641590153129014619901326901241690113149010214909212908414907515906417905620904520903311902415901415904198930210892931389285218927420892641589255208924521892394389225198

921620892041789194208918523891751989161040891511498914314891351889123178911417891031589952689862389731289661889561689431289321289228891168941988264158825313882442288234138822314882141588204168819417881841788176258816212881521288142128813313881231288114158810310889211888314887618886619885413884313883210882314881417884198719315871851987173158716420871541487144128713619871241987112148710311879416878212877931876313875313874315873312872311871415874198617423861629861531486143118613310861231486113158610617869314868415867522866412865418864619863211862416861214864198522310852141285204178519519851821085174168516311851531385143158513414851241385111465851014658591040858940857627856413855314854315853211852213851316854198425941842431584234178422418842162684204148419415841831384173128416313841561884145138413518841221084113138410623849419848419847521846937845314844416843312842314841314844198336624833531683346308333420833262783316318330419832983683284198327313832663283254168324522832331683224168321213832029831941583186248317725831641783156268314830831373383127228311420831031683929838414837622836523835288345228335248326308312118341982199348218619821751882164168215315821441682134168212314821121182103158294178286178274188267288255188243158233148223178213158241981298328128518812751881262108125518812451881234198122315812131081206198119415811831381173138116211811531381144148113314811231481113148110313819310818316817314816314815314814314813314812316811312814198042419804121080404198039212803831480376248036212803529803451780333148032317803121080302108029212802821080273148026415802541680244218023515802241380213138020312801941580184118017417801628801529801421180133108012310801131280103118092780841480741480631080531180441880341680231280128804197946936794551979443137943414794252579414167940932793941779383167937397936417793552079344207933317793221379314207930417792942079283147927625792661979255267924417792329792231079212879203167919417791861679175187916625791541479143147913416791251979114167910527799212798314797213796314795213794213793213792213791213794197840166978399327838145878371047783651878356247834210783321278322127831314783052378294187828318782752178262978253147824624782331678222117821416782042178194227818626781751978162117815416781452578133167812420781131778103167893167882147872137864177853127842107834167823137812107841977504187749316774862477473167746526774531677444197743629774231577415207740316773951877385267737316773641877354147734316773331277324187731620773062177296247728316772773877262127725417772431677233187722311772141777205187719316771831777173157716314771531677145187713297712310771131377103147793147783147773157763107752137742137732137722137712137741976311042763011417629931762894776278407626729762552176249337623627762283076211359762072976199477618419761763076165237 6

1583776146347613104476125237611836761072976910407687377677357667337658
3576463576373276210497611140764197540727753952675385177537618753652175
3541375343117533517753231275314127530417752931775283127527397526417752
5517752431575233127522314752121275204177519414751842075174177516620751
5314751452175136267512418751138751052475931575829757312756418755523754
6237535247524207514177541974561144745531074543117453519745293174513107
4503157449521744842274473147446417744541874444167443518744241274412107
4403147439314743851774377247436210743531474343137433312743229743157250
7430312742921074284127427413742629742551674246197423313742239742125742
0411741931074183107417211741652174154127414313741321074124177411416741
0418749416748416747210746313745211744210743287422774131274419732078329
7319931731862673178357316631731511517314840731352273124197311635731073
2739936738626737621736830735521734624733518732415731312734197228135272
2713447226727722511367224114572231664722212407221824722082672191041721
8831721710397216839721552772141049721314527212113972119377210134472913
5172884172793372611467251037724728723933722935721134972419712815717127
1041712610377125125471248357123135371223157121134971204207119521711852
5711752371167317115831711431471136207112944711142171106277197287184167
1714797165217157267141865713525712722711145171419704494470439407042842
7041831704073570395227038828703752170365247035417703452470334237032528
7031730703010427029421702851870276247026421702521470245227023522702221
0702141770204157019417701829701741570162107015310701462270133167012212
7011940701041670931770841970721070631470531470411477034157024177014167
0419695241769513136950420694952169483176947621694641769453166944523694
3417694262469417266940415693931169384166937418693651769355206934520693
3623693273169313126930296929313692841469274186926414692511446924840692
3211692231069214146920520691994269186266917943691652569153176914630691
3623691262969117306910628699634698516697156869662769542369442069341669
2286911669419685251968511262685052568491040684811426847521684672768455
1868441044684311526842938684183868404166839124768385176837518683641468
3532368346266833839683210396831623683052468296266828728682731268265236
8254176824626682331968227276821213682021368197276818210681710506816315
6815733681451568134136812417681131368105166894176883146871139686213685
2136844156835186825196814166841967301040672913496728155867271352672693
4672573067248316723125567221247672112426720155467191562671883067171248
6716114067151459671472767139386712938671153167101139679186367813536778
3267673467512686741042673186567211536719336741966121779661124976610271
2166912626684619466712516662310766517826642192663291146621149661155766
4196512259665113415365101772659732658146465725906563214665514546542811
8653217365230132651421736541964185296417125064161679641583964141987641

3937641211596411165864101159649271226481051647186964616826451353644146
2643949642114764117596441963111144631021856391875638179063720906361870
6351466634221046331144632125163117826341962112188621015726292288628187
9627945626187162523105624103962383762221926211252624196114361646113941
6112177561111572611012476191460618115461716686163212961524101614114661
3932612934611114361419601320806012391736011219460105625860921101608219
1607156360619736051356604522216031362602136860149220604195924177859231
9875922135159211884592010485919105159181872591710505916176859151147591
4239459131245591216735911281295910231065993113459818985973716659625905
9513605941251593146059241185591114359419582251221582193458208375819157
2581817735817156458161043581510405814197358132411558122392581131139581
0178258920105588381675874716358615645851881584261155832190582231035811
8735841957292285572822945727391915726147457252813857241256572315585722
2169572125108572039180571920105571812575717135557162811857151564571420
9957132713257122210957111243571037153579176957815695771574576125257583
7574361345739405721143571939574195696417569551656942105693310569262656
9152056906225689418568851956874205686520568572856843165683419568242256
8142256804175679417567831156773125676520567541956744175673528567263056
7142156706285669733566842256673125666210566562956645255663315566263256
6193556607325659525565831456574215656416565531556544195653317565251756
5152556505245649419564821556479475646525564552156444135643310564231156
4152556403135639312563821256372105636214563531656342105633417563221156
3129563028562929562831056275255626417562562556244185623319562227562141
6562031656195215618523561742056163195615312561431456133125612312561121
3561021756952756852756731656631456531356441456321056231556131456419557
8627557741955766265575419557462255734195572418557141955703135569419556
8419556741955663175565419556418556341955623145561419556052355594195558
3205557419555693755554195554941555341955525195551419555031655494195548
2105547419554651955454195544521554362655424195541640554041955398275538
4195537631553641955358345534419553317785532419553141855304195529103555
2841955276275526412552541955246315523419552242355214195520418551931755
1841955174215516419551562055145245513419551242055115255510317559634558
4175574235563185553175542105532105522955116554195455621545451954534175
4525185451626545062654495185448935544752054466295445421544452054439355
4427365441519544072954393155438522543794354365295435724543493854334165
4327295431841543041654294225428832542773554265235425932542410415423314
5422729542141654206275419936541862354177295416416541562354146245413522
5412938541152654105215499435488355478405468285455205447285436315427315
4142254419536231753612115360315535941953586205357210535652053554175354
3115353213535293253513125350418534941453484155347419534641353455265344

4155343415534241653414195340413533962153385185337315533672053355195334
3155333314533231129533116735330165453291141532816515327947532618655325
3175324415532325995322414532141853203185319318531862153175165316518531
5314531431453134155312417531151653105185395185383105373155363115353135
3451453341453251653131253419524952552481041524710425246933524573252449
3952439335242733524152152407275239520523894052377285236731523582752346
2952336235232831523162752307285229831522893152276285226727522552452247
3252238335222528522119845220733521962952188385217520521612535215622521
4625521362152125185211317521031552941752841052741452621352521352421352
3395222105211652419516073151599435158727515793051566275155525515451951
5362151521346515111395150829514972951484255147529514683151457325144837
5143827514293251417305140734513962551388345137736513672851356265134419
5133520513262651315235130832512993951289385127522512662351259385124628
5123937512252351214195120420511952651183195117625511693751155205114732
5113519511241851115185110211519412518415517315516313515315514213513213
5122135112135141950451353504493650436275042732504172950405255039124950
3813545037134150361554503562550345245033729503262250315255030933502983
1502883450271037502610415025417502462150236215022124550216235020623501
9934501882650178375016145750151036501493650134195012730501183750105225
0910455085205071151506125350593250493650372750211445013145041949181045
4917197649161665491518914914271164913219349123212949114015949101053499
3014449872849728127496187949512484949414931777492239849116644941948295
4249482814604827281204826281304825401794824197748231241482212524821145
2482018894819737481819864817271104816281244815311414814146148139434812
2085481137151481025105489849488527487840486211164851993484199448341948
2156148151948419473830129473763547361365473512584734155547331155473221
8647318504730126647291140472810484727741472615654725166347247334723737
4722104547211248472027117471914734718156547176324716241044715441724714
1348471314544712221084711114447101675479835478630477104647642047531747
4381674731881472188147183547419463527107463418794633228546321865463115
6046302078462918804628177346271047462632138462514604624187546231355462
2125446212595462027129461994346181766461728113461618814615451934614943
4613135246121675461119764610249546924744682599467145946694546518644642
9106463157246262946112464194537842453683745351676453414614533114345322
2784531125945301362452911474528145445271052452618704525166845242178452
3249445221356452117854520732451915644518135545172410245161374451511444
5141461451316604512146345111142451019724591145458145745741445612534552
0894549344536314526294511245419445931744585294457725445610484455522445
4419445352744523114451519445061944495204448725447524444621044454184444
4210444331244428294441103444405234439836443873744371250443652444358324

4343144433729443262944317284430733442983744284224427420442631444255184
4246274423524442262344215214420624441993544189314417835441662944156294
4146254413728441262644115204410628449514448103944783744672644562344451
7443834442213441124441943896264388827438783743861352438513634384114443
8384243828364381831438011484379522437873443779374376629437562243746264
3736274372735437115694370529436952943689344367734436610404365114743649
3643631779436272943611045436083643591042435814484357933435642443556364
3547364353114643521134435118674350730434912474348135543477314346125543
4513534344626434383643427344341626434011404339940433812494337738433611
3843351253433453043331777433225111433110424330936432993943287324327522
4326940432573643241460432321834322114643218334320155343191266431893443
1712464316731431593743144194313208443121149431112504310114543910524387
3243783243662343583543472743363043221343112434194253155642522710942512
2774250114742491562424827115424721684246165642452712342442072424382842
4215664241935424014574239629423811644237105042361774423593642347264233
1555423262942311448423010414229166342281352422717684226126442251251422
4229142232911842222410742212284422022754219938421822964217115242161871
4215341494214301144213381524212135642111989421015594291660428197142722
9042612534251990424103842310434221342112424194154123941531973415217514
1511356415032130414911434148124041472810741461146414518724144301294143
1753414213464141939414026101413922914138125541371988413611504135114241
3417714133135141324144131167041301993412916794128146141271055412611524
1252599412411484123946412220844121187841201256411983441185274117147441
1619894115251024114239441139404112198941111667411015674191462418940417
8364161674415177541473341373341241941112414194085177040841251408315674
0822510440816284080125940799434078321234077145840768424075114640741760
4073723407262340716324070944406910394068124440673011840662076406514534
0642198406373340621241406120824060136240591143405813694057125340562393
4055125340544204053841405210464051115340501673404913534048124540471982
4046136140451042404412504043228640421561404110414040238840391248403893
7403723944036104040352393403430105403316524032727403114554030114140292
7101402839146402713484026186940251987402473440236314022136340213011940
2015624019628401815674017134740161559401516634014837401314534012156240
1113654010156740912534081676407271284061042405219840413524031456402629
4011240419397517773974167339732094397294539713415139709323969157439682
2773967178639666243965146239647343963115739629283961115039601465395910
4539581242395793239561551395516643954135239532185395215593951156839501
1433949228339481143394725973946177639451876394411483943145439422610739
4118773940832393910403938361483937124139361557393512583934833393383439
3215583931730393041639291981392872839271144392612593925104039241361392

3341323922207739213112039202080391910383918136739171260391617613915198
5391462139139293912523391193139102295399241053983412239731126396361383
9523105394166339333126392104539162939419388841738875183886103638857313
8844173883420388242338814183880417387962438786233877520387610343875155
4387462838734223872936387193238708273869933386831338674113866737386511
4038646213863630386210383861114038601145385910383858415385742038564213
8555193854721385352138524223851735385052238496233848838384752838465263
8458483844145438431046384262638411146384062238397283838421383742038368
3338351549383493938336303832114238316293830733382995038281366382716703
8263112238259333824321373823156038222393382173038206333819520381873638
1711443816832381510353814722381373638128343811624381010483897313881550
3871038386125138583238410443831037382622381415384193718241937181316371
8062337179315371784143717763037176217371753173717441437173419371723163
7171529371704183716942037168622371673153716631637165315371646203716351
6371624173716131437160419371594173715810473715752437156414371552103715
4414371534203715241937151521371506293714952937148420371476263714652237
1454213714462237143521371424193714141937140520371394183713831737137422
3713631437135418371344193713341837132419371314193713041437129419371284
1937127318371265243712552837124518371234193712242137121419371204173711
9421371183233711732337116424371155293711452137113104837112527371114193
7110316371093143710841937107315371065203710573137104419371034193710228
1003710131637100516379962337985293797732379641937954183794316379342037
9241337916263790315378931137884163787418378652237856253784516378341837
8231537814193780419377952037784193777420377652537755263774419377352437
7242037715223770418376942037685203767723376663237654213764623376342237
6262337614213760519375962837583133757626375651937555213754415375373437
5241937517233750524374931337484203747724374631637455193744314374331237
4231437414163740419373962337384223737522373663337351038373442037335253
7324203731625373010363729521372862837275243726417372541437243173723729
3722738372172737206243719728371841637172153716735371562137144193713417
3712313371112463710728379417378937377518376631375735374312373213372213
3712113741936838353682103436811463368011443679103736781141367711423676
9363675730367473136736293672633367112503670833366912433668730366710493
6669463665115736645243663521366283636615233660145036594253658516365762
3365673236557283654114236531039365213533651103936507333649835364873036
4724923646114236451145364462236439333642623364183536401558363973736388
3936379373636135636358373634104436331050363262336311145363012473629830
3628134736277273626830362541936245173623155836228313621729362011463619
9383618125536175233616628361515553614115736138383612145836111254361083
6369125136810453678303667303653173643133633143622133611236419354525973

5443012035432611135421983354119763540331323539241003538104435372510835
3618723535145535341145353313573532219935311665353083735291676352817783
5272294352672735251367352412483523412352216623521416352041835194213518
3413835175183516623351511473514188135132811535122812735113411535102410
8359177635825913571362356135835515633541143353228535219683512410035419
3454155734531038345293634511035345016573449829344872634471752344624893
4451459344411473443341303442187734411358344010513439207334389453437231
0034361349343583934341454343334160343215693431321433430104134297303428
1254342712483426114634259353424176234232285342226933421217034201045341
9198734181782341783534161675341520743414271093413198734122710734111251
3410135334929105348166634716613461666345114634410503433212334218683411
7673441933731593337218923371145933709403369177133688373367846336612553
3658333364729336315623362124333616343360198733592299335812673357146333
5614633355301263354113933537029433522585335135137335062267334923103334
8125833478333346629334583833448353343136533423163341835334017663339136
1333822753337481963336249233353022333341456333325122333220813331146433
3017693329146433281679332713613326167733251674332416723323187533221885
3321176533202310233193515533181468331724803316155733151355331414603313
2610533121358331163633101676339229833884233717803362914333528126334281
2733362633212433311461334193230526322911443228730322717753226186932251
1453224105232231459322213513221949322021953219125932188313217134632161
1563215156632141464321316663212167532111142321014553291460328825327103
6326632325176332424923231866322831321133241931342710031333112231322292
3131196831301658312925973128114131272178312610403125156531247303123156
4312215663121218731203011131191145311816543117186931162582311529112311
4177631131554311218703111145431102710531983531883931716673161872315833
3149473133163124193111331419306010393059832305819763057942305620863055
1255305424813053145530521146305194130501971304910373048281153047188730
4617833045115130449393043165630421457304115673040228530392287303816723
0371557303615623035104330346343033187130321145303194830302292302916603
0282711330271879302683130251665302421853023146430221367302120833020114
0301914603018839301762830161158301594330145263013943301252630118323010
1360309321523082298307104430611423058333041246303831302293011330419296
9947296817652967157329666362965166429641565296322842962145029611364296
0125329595252958178629577282956940295513562954638295312652952199129511
5642950166229491459294813522947198929462511229452189294410452943842294
2124329411988294028124293913692938167729377392936177429357302934125029
3323902932166729311570293062729292310329281457292718872926124429252711
7292420762923136029221759292183229201972291913472918135229172711829161
3562915640291416692913116129121886291163729103112029974329821902971270

2961042295124529410432931156292104029113294192888196328871660288615592
8851966288418752883146728822611328811765288016702879217828782810228772
6105287629109287517702874840287313622872218728711978287015582869728286
8145828671142286673528656332864136428631884286284028611775286015662859
2082285817732857259728561350285515742854126528531555285283428516292850
2392284913492848261062847188628462077284518812844135228431675284210482
8419442840105128391252283829108283718692836177328351575283414572833933
2832251002831207328302082282927109282815592827291102826114828252610628
2415502823271082822114428211042282019762819331192818167228179362816134
6281538148281410492813176528121664281110372810176728918672881363287229
2286125528512592841985283938282419281132841927931151279215612791176327
9013522789114027881871278718662786156427858332784135727831142278216702
7811456278011452779728277883427774212776124727751037277483127731038277
2932277173027709322769940276812472767944276614442765145727641978276320
8227621670276121892760271042759124927586312757739275615582755114727548
3927535282752114427519432750731274914682748104227471351274613612745135
8274428110274312432742145927411247274038136273916552738114727371360273
6166927358392734136127331253273213502731523273083427299332728114727277
2827268272725146227241777272311422722144727219452720124427192410627182
0852717943271619772715156927141158271383627121972271111352710207427972
8278145627716652767282751043274104527394727231627162427419262271992262
2652126225722262243212622342326222517262216252622041726219316262184152
6217420262167262621562826214319262139342621241926211522262104182620941
6262087272620762326206520262054192620421726203418262025222620172926200
5242619962526198523261979352619641726195313261945222619341626192420261
9152126190829261891041261885192618793726186935261855222618452926183942
2618232126181629261801140261793172617841426177620261764222617552126174
8292617363126172314261714182617031826169520261685212616793526166114126
1654232616411402616331726162414261617242616041826159521261581041261573
2026156731261559312615411382615352226152627261514202615031726149526261
4841826147311261465212614511402614431726143414261427252614131626140521
2613910442613831326137518261369362613562326134210261333162613252426131
3172613042026129423261285212612711402612631726125414261247242612331526
1225212612182926120418261196282611894026117516261169362611551626114419
2611372526112624261115262611031726109114026108317261074142610672426105
4182610452126103829261027262610131126100414269941926984192697621269641
9269531626944212693728269262226913182690318268962026886192687417268662
4268552226846232683626268283126814182680416267941926784172677623267631
9267552226746282673417267252026716282670623266941926685212667829266631
5266552326643162663135726626202661838266021426594232658314265742026563

1526553152654419265352526528352651114326507272649219626483122647420264
6317264583126449482643726264262526411251264073226395222638524263741626
3673426358352634726263362626326242631723263051926298372628939262773026
2652326255202624940262352126228322621114626206252619732261810382617520
2616732261573326146232613835261262026114162610832269521268829267113926
6838265114326411452636272624192611326419257712452576526257594425741364
2573104525729422571935257016692569836256822852567114725664202565114725
6452725631261256213502561114825601361255917722558135225571444255652425
5514552554124725531564255273325517262550943254910462548135525471149254
6522254516572544155525439372542176825411144254016692539733253883725371
3692536949253594225341148253383725321569253111492530104125291148252872
8252712492526944252573925247342523938252210512521198525202096251915652
5182187251716682516104025151350251483825139422512937251183925101762259
9422581765257167025612512559472541666253229225219732519442541924642286
2463271202462391802461763152460231032459198724585021924571153245684824
5538173245423102245317762452104524511883245016672449728244811482447157
0244611472445311062444104424433814024427352441218324403310824392299243
8145824371987243614552435482032434136124334821724321783243178350243015
6624291770242822872427198524261699242511492424947242313682422261212421
3515024209382419208524187312417938241614562415167024141563241314652412
1259241128102241093824993724811502479372461781245114324419942431873242
2612224195124419231187292311718632311611422311584023114934231138342311
2724231118362311084323109146123108522231077312310683723105834231046282
3103104723102630231011043231001665239983023985172397726239693623957272
3946262393620239263223912480239052623895222388144823875212386833238552
2238482923831247238284023816222380104723797302378104823771244237684423
7511452374838237352423729372371167523701042236972723681042236742123669
4123657282364836236314472362124923617332360104523595212358523235772523
5672723557282354519235393923528332351125223501148234963023484242347738
2346737234583923441985234372723426252341848234052223395192338124123371
0422336419233594223347322333251112332145523316242330725232983723281562
2327321382326519232510302324261042323176323224212321156623209402319135
6231813562317104123165222315518231421104231362223127282311629231031523
9525238528237730236104223542123442023352123252123131423419227844199227
7126322761041227511452274931227329122227229136227118632270186022699412
2687292267176722661043226527101226412452263155522621760226115602260165
6225973522581877225784122561259225516642254218922531674225227106225184
1225084122499312248114522471460224623972245146122441151224341822429362
2411785224035148223910452238134422372089223627128223515762234208922331
1432232936223121812230241002229846222820942227145122261676222525108222

4938222322982222125222214152220623221917692218371442217221022216938221
5228522141772221310412212144822112510122109352291561228134522712432261
3462257026222411442231244222228622110402241921112104321111829211108322
1109135021108114221107525211066232110512522110416662110311572110293821
1019382110072621999352198114221972075219610372195732219412492193630219
2833219111572190199221891143218884021872383218663121857342184166921831
0412182125121811465218010452179147221781461217712612176125121756292174
1675217315832172839217184221705292169833216873521679342166114221659362
1647372163939216273221618352160732215983421588372157735215613552155731
2154831215352521521145215193721507332149837214884321472083214612472145
1146214418822143145521421350214113562140104521391661213873021378372136
1772213510492134104021331147213283921311357213018802129135121281559212
7629212683821251553212422822123622212213522121727212052621191357211813
5321171142211673521158372114624211310482112729211110442110837219845218
9422171459216835215145821410442131572212114221173121419201351150201341
9792013313532013212592013118752013020852012993520128176720127125020126
8382012582820124124720123187020122623201211565201201452201196212011872
2201171349201169422011511362011417652011314622011211422011193520110103
8201091244201081356201076202010631520105732201041247201036272010283620
1017302010083120991344209812392097281042096166220955172094207120934182
0928282091937209017682089124420881248208715752086271052085936208493320
8362020829352081176520801575207951920788372077186920761249207510462074
1342207314612072197620712611520708372069165920686212067519206612492065
1239206410422063136720625302061155920606232059833205814602057834205662
8205584120549392053197420521135205152120509292049517204810352047218720
4672720451035204483020435192042831204121320403513020392293203862020375
1920366202035414203421120333122032312203131020302820295182028210202741
6202631020255152024518202341920221140202173220205202019414201813482017
5182016103720151039201411442013523201293720115192010186820941520882920
7730206124420541920463120341520252320112204191998144619971045199694319
9552319944171993103819926241991416199094419894141988420198793719865241
9856271984725198394119826331981833198052219799311978728197783919761362
1975259819749351973167419728361971934197082919691036196884319671038196
6831196512561964186119639331962114619611146196012511959115219582912919
5731619568331955941195411481953729195273619511041195093719491460194814
5519471035194613541945124619441040194314501942165019418351940834193912
4619381148193711471936835193516531934934193393619326291931114919308341
9291038192812401927114119261876192583519241038192314571922524192115571
9201138191993219188301917115119161042191593419146261913625191283419111
1461910134519914431981452197134519683019513521941452193517192519191151

941918110249218109186818108625181071048181069421810514661810411491810 3
525181021465181011147181005271899114818981549189783518961977189512491 8
942078189313511892310189162318901553188931018881350188713461886259118 8
529188410341883938188235148188194018801051187917761878124818772410318 7
613461875929187416641873103818728271871156518701243186910361868824186 7
621186611371865125118649341863208518621249186111491860134918598431858 1
975185730118185618921855198318541454185310511852136518511359185026111 1
849281221848166318471152184613671845231021844937184311391842207918418 3
018401562183919631838828183716571836125018351241183413501833115018321 4
701831281231830124818292812918283012918271554182623811825837182417581 8
237251822331511821321421820135618193817318182210918173412718161980181 5
187518141978181311481812939181173018101661189104218862718711441861146 1
851658184627183313182156918111421841917111217217110229017109530171088 3
517107187017106945171059461710414611710394017102166717101197817100146 3
179923921798147117972711417961147179514601794155817932692179212531791 1
145179010371789145317881976178793017861350178514541784114017831253178 2
135717819361780145617791246177814601777114217761360177512481774937177 3
136317721139177115701770178117692287176815571767187317661454176593517 6
419961763104117621564176113581760251131759219217581874175718841756135 2
175515681754145517531671175294417512510017505191749945174894217471976 1
746198217451258174421871743630174213481741104417401159173918671738724 1
737134817361657173511561734177117332290173283417311359173012481729135 5
172812501727948172610451725125317241251172325108172293617211150172012 4
517191252171818711717135317161468171521821714731171313591712231161711 8
431710942179167117811491772311017611571751776174136017393117212571712 1
951741916128832161271451161261253161252291161241775161231249161229421 6
121735161201143161191971161181566161175201611622941611522841611413571 6
113944161122410716111155116110186516109727161081156161071362161062494 1
610511521610412481610316691610213561610117671610094116991041169884016 9
718761696156416951557169419831693176816923213116912089169016811689241 0
316881359168710431686199116851145168414511683739168262916812511016802 5
119167918681678157516771971167629109167527103167410421673156216722198 1
671229216702074166924931668135416671565166617691665166116641463166317 7
216621771166123961660125816591965165893716577341656125716556341654103 8
165312431652114816511251165073216491458164817671647831164672816451667 1
644126316431561164252516411878164010371639115316381873163714461636281 2
216353211816341043163322911632126416311567163020901629844162819821627 2
198162621861625156916249401623134916221155162173216201041161962516181 0
391617727161642216151149161421100161313491612157116111671161013471691 0
441689481671459166731165840164830163736162186816194216419159952215986 2

4159772815968341595319159462715933141592319159142015904211589521158815
6315877361586519158514691584624158331915826301581530158052515795281578
5241577519157631515755211574841157331915725241571625157052315694181568
6231567422156694015651462156442315637291562416156152015606291559624155
8626155752315568291555732155483515537281552937155141815505221549626154
8830154710401546317154552015448301543420154211411541519154042015391046
1538418153741715366241535624153452015331139153293115317271530422152993
6152812451527728152683315257251524742152362915221263152111421520834151
9115215187291517521151673715158361514939151372615125231511833151072815
9729158939157834156937155727154831153739152730151625154191452136014511
0361450631144963214481050144711421446125114451464144426109144394514421
3601441839144093914391354143818611437261141436155814351355143415611433
9431432251071431218614301253142942114281250142718841426134914251255142
4155914231783142244187142134138142051814191456141822901417166214167251
4155231414104314131678141217781411291121410331431493715714813501471148
1462611714521861441975143167614214541411672144191343156413421871134116
6813401358133983213382182133719741336251011335198913341453133339139133
2135513315119313302810613298381328115213271967132616741325239413247301
3231572132219101132113541320734131915581318271181317421821316451881315
1155131427107131319861312942131135121131014541395301381558137155613620
9013525112134271111332410113226115131156013419121112394121101979121092
9123121081767121071459121067301210511491210410361210362612102145712101
2110512100471691299145512989351297939129620721295627129412471293125612
9211461291939129023841289103912882210112872181128613471285124912841351
1283187012821153128118721280371391279135012781663127724841276331231275
1145127462512731248127212441271527127015651269166212683011012672811112
6624881265261141264176612631771126214741261629126010351259177212589391
2577351256177212558331254146112531554125212471251291101250229212491139
1248155312471457124622961245115012448411243251051242187012412086124032
1271239104612382610412372611212362711512351138123410411233176812321984
1231321311230187312291042122813431227103612261968122523891224197612232
3911222943122132138122094212191777121818731217198012164201215177612149
3812131354121283412111243121016681291459128155712773012625106125166312
4166312316641226311215221241911123167311122318111219411112017691111915
6111118104211117835111162611011115729111141468111131766111121246111111
0431111018721110920771110818751110715571110693711105103611104520111031
6571110212441110124941110093611999421198946119710441196631119510371194
1886119320821192166511911979119093711892378118836137118721821186114211
8515741184271101183831118212571181301181180113011791343117827109117713
4811761554117552211741148117314601172134811719481170186811691563116812

441167841116618731165114711641870116323851162228311612811116017681159
125011581461115721811156186511557281154166511531661115218821151145211 5
018631149197511481972114719631146247611451556114419841143238611422073 1
141114811402694113910421138197311371155113617581135125211341866113310 3
811321459113131123113010381129239211282081112729113112611401125935112 4
116111231467112272711219411120241001119115011182310011173914611161665 1
115146211141664111318751112279511111048111013561191147118229311731127 1
161664115198511482811325981129351111036114191010911451010823871010724 8
510106165510105938101042710010103104510102156410101146010100145310991 5
601098219410978331096830109510441094228510932410910921461109172810902 7
118108911511088291311087168310865261085104810841352108322851082733108 1
176410801039107962610781677107711481076103810751469107422931073178710 7
216601071341361070135910699351068259610671561106625901065104210641565 1
063421106210361061421411060197610592073105810441057156310565221055165 8
105421841053114310521352105111391050125310492281104873010471249104615 6
310452087104410421043114510421147104115601040124510391981103816661037 2
283103617601035299710341763103310391032114810312711410301663102910461 0
281889102727118102616721025114510244319810232611310224116610212284102 0
166810191771101829123101714541016186510153913810141042101317871012271 0
410111886101014661091574108630107157110614621052310110428126103291131 0
226991015221041991291554912814609127217991261656912512549124188291231 7
789122221029121187791205219991199419118311279117271099116176191151861 9
114228891132084911216109911137174911015619109271019108238691072411791 0
612549105168591041667910316659102177491012299910025128999271139981671 9
971669996145999518889943013299319869922390991261039901780989135698814 7
698711469861882985167498418719832511298284398127118980251039792093978 1
147977156797693797512529744619097312629722410797124132970261259693216 8
968167996719105966166796513649641773963166496212559612611496022118959 1
982958166295711449561045955178195422959531247952229395114569501665949 1
563948166494717869461571945147094414779431352942231139411571940431769 3
916709382912293731134936361609351984934291399331460932156493123102930 2
310792929123928281139271240926188392523969243317092320979228319211044 9
201680919241109182399917188391624102915114591411599132093912187991113 6
891010399913569816779723105961874952613394229893321359214649194187522 9
587418858731357872452098711354870259486911468681039867207886626107865 2
711586493786320768621253861125086033134859835858145585710438561244855 1
038854178285318688521774851937850136784918748483614084717768461367845 1
361844198884320888423514984133150840104683916668381659837188183621988 3
513588342193833125283219728311769830167482919828281048827126182619958 2
513588242195823114982210398218368201254819249781862681721868162081815 1

2548146308131358812231038112299810186789115288733872310186115185114784
1147836348217828118898419720611487205166972048417203238972027317201125
0720010447199732719812527197104771969397195269971941464719312567192733
7191728719012557189291257188281047187371537186104071852288718411407183
5187182840718173171801469717930122717810427177947717630132717513647174
5277173156471722610471711979717010527169401727168147771671980716611417
1651879716419817163271187162177371612093716043200715983271583214171574
3222715630129715541170715415637153145971521569715111467150391727149187
4714822897147136371463615371452089714415657143411657142231097141188571
4094071391036713824997137291397136116071351143713423907133138071321247
7131229471301047712922887128167671272110071261666712552271248417123197
7712231271214207120317711942571186257117114171161155711511407114522711
3114671124167111734711073071099327108626710762471061136710518657104934
7103167171029417101231027100197979910447989387979407961885795188279413
5979316647921359791633790125378942159788229378719837862410778538156784
8407837367821354781114678013537791563778633777166677683777523967742511
3773351327721366771251077701771769271137687307671139766145876516577641
4717631359762114476111397609327592176758177275729123756156575583575432
1457533814675210457511995750208774915687481472747136274618877451048744
2811074336150742157074110427402310473914627384016173737157736115873519
7473411477332911073226111731166473016787291669728229472731138726208372
5734724124872312547222813072152672025105719177071812547171566716736715
4167145217131350712175771116737101148791156789457762776636751246741043
7314577213507114741961652186616429104616383261629396161166661601664615
9197761583713861573514461561461615584461541775615317756152351496151421
8061502711861498366148371426147135161462812261453912861444016761432310
6614216706141311456140208361392295613826117613720966136311286135197561
3472761331871613293761311038613028134612983861283615161271041612694161
2528110612429118612315696122241006121209661201259611930116611810406117
1139611618636115114861142310561131262611223956111221006110136061092190
6108251036107135361061344610584461041559610394361021653610118656100156
8699441876981359697166969612626951769694291286934920169222102691441716
9016666891781688165968795668684468573468421100683145868211526812293680
2592679125367818656771869676155467595067414586732410667283867139160670
4517566912476682310366752166693266527105664103666317736621248661177166
0229565931113658145965722776562174655635654271086531571652251056511765
6502810364984364815646471456646239064594264420796431463642115764112466
4015626391771638228263719676361050635281146342290633146663213606312711
1630197662993962816606271768626114762532133624104162312436221257621145
4620136861937137618732617175661693661592961424926139376122510061110416

1013566994468135367166666311386512536411426312526214496114696419512011
4251192410251181147511729108511645153511517705114229751131566511222865
1111361511064280510915595108229951072612851065221351052086510424100510
3218551029345101261005100167359911455989375972711959620865955119659424
1045932411659213725912092590168258945205588125258718695867405851467584
1663583218958226128581157058019785791042578177157724905761658575259857
4840573259657234139571197857019895692092568311295672594566241045651262
5644721856313675621363561166856027110559217755812545572410955611485551
3685543815855315805522811655123104550104554933136548512285471666546261
1754531140544411955431568542261135416828154019715391449538136453712495
3624885351468534135253334140532401625312610653093852913565281664527249
9526146252513525241769523211005221875521157052023925192910751830134517
4215751618805152492514251195133214151245207511241075107405910475827117
5719865662281554320154311375361278525324251249754194176501914175157341
7412504173261294172188741715421641702499416911444168125041671143416613
6141651566416414584163251314162261364161147341601460415914574158832415
7341284156631415522103415419904153371624152177841518434150221004149144
9414814534147114841461892414511454144188541431658414219914141361614140
3313741391471413862841372078413629130413538163413414624133124941321040
4131321294130114341292210241282912641274017841261245412517734124166641
2320724122219541217324120735411921109411883641171143411620674115208141
1426974113331354112145441111146411013504109197941082182410714544106730
4105156741042294410320106410262281410123964100311224991040498126449727
1284968374953317249440170493167049260235491321624903616848928128488228
8487176148615574852277484228748330135482135648124101480124947918734783
6143477482044762098475311394742193473197547217634711149470728469189246
8321467627466271074651977464231054631665462167346115654603012545929132
4582510245720100456209545511384541880453103745211434512094450104044914
5444820694472912144638177445944444146444349205442146144112434401555439
1568438188543715784363215843522924344019243319884322710843112564301353
4292499428834427136042614614255826442442185423542654221763421114942017
8341935157418241064172090416147041522107414135541318794128829941171271
4101363491571481370471991463718645167944145843281154216824129125441932
0011573199301213198218531977303196729319543188319414583193209531921145
3191211003190115731899383188208631872199318624108318523993184125531832
8120318293731812295318030122317936146317817743177125331762287317511543
1741564317317773172156931711147317019783169135431681674316733151316694
7316520733164251073163832316213533161216831601875315930121315872831571
4533156371573155218931547529131532510631524016631511984315062631491364
3148105031471987314621883145249931442710731431251314213603141633314024

1053139941313862931371354313615703135231043134137131331155313252931315
2731301362312916613128124531279433126176831251569312413603123104731221
2573121114931202188311928127311831125311723983116187731159403114158431
1314593112351523111114831102311331091144310811493107104331061781310514
6531041470310334157310213543101177431001569399207739813503972599396104
2395114739411443932499392155639124913901462389114338893738794738618833
8513523842912638314623827293813314638013673792812037829120377271163769
3637536144374834373321153721779371115237093936913543681366367146136620
7536516703643212936362836215543612511436072535915473587323571159356136
0355311323546303539463522086351834350198034945187348535347237934673334
5219134420813438373421360341208034017633392092338155233735138336241093
3518663347273331148332114733114623302696329227932827113327218632625923
2515533241565323208132211503211888320261223192610731818723176543161150
3152410731424125313291163129433111468310166639134738155437461973613503
5113734187433115332724311334192286491962285271182284281032283321382282
1295512281155422801452227917722278145422771987227611452275451862274177
9227330134227228112227120892270155722691665226813682267301252266351482
2652712322643917422631144226224922261249722603914822596724922584316922
5724118225624102225550189225422872253522082252941225127122225015772249
6024022483011422474316522465421722451669224493822432810622427312241634
2240271162239156522388442237351402236251112235472002234251222233642882
2323314722314520322303011422294619322284017722277292226135422251465222
4146622231681222227122222139182222026118221926123221816722217572472216
2593221522104221430127221349214221220932211207422101772220912492208166
7220711492206125222051459220417652203251032202835220114572200249721991
2492198261102197301212196732902195146621942210721931565219262421912513
0219013592189271202188178721876528621861777218544185218432123218315612
1821655218113542180167721799392178381632177512662176145821751161217429
1222173259321721562217118662170228921691150216817682167239621661257216
5311232164431872163935216293721611364216011572159209121582489215794221
5610452155126621541350215311532152632215117872150311382149176621481975
2147727214614732145321302144341462143451962142218921411554214030127213
9146321381037213719792136311352135156321341554213327114213217702131933
2130187421291681212817762127146521263012221252211521241983212318672122
1258212115702120311122119104621182410321171147211614562115125221143011
3211331141211217582111187221101776210933123210818732107175921061961210
5259821041365210312492102743082101228921001044299104429812552971872296
2510229594429417672932713129211512913011929027107289261082881046287281
3828613632854923128415712832915028210522811354280239127924102278114527
7936276231012751977274371412731157272104527124972701762269187126823802

6720832669452651254264135426315702622410826160257260281182591877258209
5257189025673025515602542712125373725283025112532501050249188424819692
4712582468382458472441055243741242842241187924014692391051238176823711
4323619862351980234136323323101232124823115702302811122919702281360227
2082226391552253414522413662232078222239922112532202510221919862186192
1717722161157215734214167321319772127292111143210125129104928114727125
3261147258332412522384722727211324191794416319154191431213212124181141
9”

4.2.2.2 The even odd code of the Ultimate Evidence

As per the rule, for each key coding pattern based evidence, we have to test the follow up even and odd coding of the key coding evidence of the the **Ultimate Evidence** presented in the previous chapter, Evidence 4.2.2.1. In this chapter, I will show that the **Ultimate Evidence** has its even odd coding that is multiple of 19 too.

Considering all the 6348 verse of Quran, here is the illustration of the even odd coding pattern of the big coding representation number as shown below:

> [(For the Verse with General Verse Index 6347) Chapter index | Special verse index | Total Words | Total Letters] [(For the Verse with General Verse Index 6348) Chapter index | Special verse index | Total Words | Total Letters] . . . . . [(For the Verse with General Verse Index 1) Chapter index | Special verse index | Total Words | Total Letters] [(For the Verse with General Verse Index 2) Chapter index | Special verse index | Total Words | Total Letters]

Here the “|” symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [114 | 5 | 5 | 20] [114 | 6 | 3 | 13] . . . . . [1 | 1 | 4 | 19] [1 | 2 | 4 | 18]

And, the final number after all the concatenation would look like this:

> 1145520 1146313 . . . . . 11419 12418
>
> 11455201146313 1141912418

Here is the proof with a reproducible R code that rewrites, namely decodes, the full text of Quran by the 4 different descriptor numbers first and then test this big even odd coding number.

```
xx<- unQuran # 6348 verses
x <- xx
ev <- x[(x$VerseI %% 2==0),]
x <- ev
i<- which(x$verse ==0)
ev <- paste0(x$chapter,x$verse,x$vwords, x$vletters)
ev[i] <- paste0(x$chapter[i],x$vwords[i],x$vletters[i])

x <- xx # unQuran
od <- x[( (x$VerseI %% 2) !=0),]
x <- od
i<- which(x$verse ==0)
od <- paste0(x$chapter,x$verse,x$vwords,x$vletters)
od[i] <- paste0(x$chapter[i],x$vwords[i],x$vletters[i])

tmp <- paste0(ev,od) # even odd pairing

tmpr <- rev(tmp)
tmpr <- paste0(tmpr, collapse = "")

cat("Test if it is multiple of 19:")

## Test if it is multiple of 19:

cat(as.numeric(as.bigz(tmpr) %% 19))

## 0

cat("Number of digits on this big number is ", nchar(tmpr))

## Number of digits on this big number is  46900
```

For the reference, to the best of my knowledge, Evidence 4.2.2.1 and Evidence 4.2.2.2 are first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out thay were available in another article, which is extremely unlikely, then in such a case, I surely add a citation and update the online version of this book.

The coding pattern of Evidence 4.2.2.1 and Evidence 4.2.2.2 are quite strong, because, first, we literally rewrite the full text of Quran in the exact same structure and order using the main natural descriptor numbers per verse. Secondly, the same coding pattern also exist at the chapter level data of the text too, which I present in Chapter 4.2.2.3. Third, they are also the key coding pattern based system as it is based on the key coding pattern of the key

verse 83:20 and the special verse Basmala and it is the main reason is for this code being special.

We used the full text with all the 6348 verses of Quran, which means including unnumbered and numbered verses in this evidence together.

Since the key coding pattern is suitable to consider the text type of the numbered 6236 verses too, we have two trials and one success in this evidence based on the key coding pattern with letters information. Let's add them into the counters for probability calculations.

As per the rule, we have to test the follow even and odd coding of the key coding evidence. We observed the follow up even and odd coding when we consider the special verse indexes as per the rule with respect to the key coding pattern of the key verse 83:20. So, we have 2 trials and 1 success for this case based on the general rules and add this to the counters.

```
evenodd_tested_nums <- evenodd_tested_nums + 2
evenodd_success_nums <- evenodd_success_nums + 1
```

Also, here is the "46900" digits length big number of Evidence 4.2.2.1:

"114631311455201144417114328114228114141411441911355151134520113351511
3249113141411341911245151123412112229112141111241911155151114317111341
5111261911115151114191103730110273111015191104191096414109551910945171
0935191092414109141610941910834151082312108131610841910772141076313107
5520107421110735201072417107141910741910647261063418106242310612101064
1910553151054418105342010525191051725105419104931010483141047418104631
4104541610444171043415104241610414141044191033952103241510311610341910
2852110274181026211102552010244141023312102231410212131024191011128101
1041310192910184161017414101641710154241014526101341710122910111710141
9100115191001041410097251008417100741510064181005311100431110032131002
2131001213100419998621997622996632995413994316993416992318991420994199
8821839879429861666985167898411459833119826239811256984199755189749379
7362097251997152197419961952096182129617210961631596156269614517961341
5961231296115189610310969313968414967311966417965518964313963314962415
9615189641995842195741795694295541895462695331595229951214954199483129
4731394641394541494431294331294231394141394419931141693104179394179383
1593731393641693541893452093351593231293116934199221299220521921962192
1841792172149216312921541792143169213419921231292116219210213929211928
4169272139262119254159243119234189223149213139241991153139114739911373
0911231391113159110413919413918320917312916314915315914315913315912314

911212914199020313901963290183179017945901641590153129014619901326901 2
416901131490102149092129084149075159064179056209045209033119024159014 1
590419893021089293138928521892742089264158925520892452189239438922519 8
921620892041789194208918523891751989161040891511498914314891351889123 1
789114178910315899526898623897312896618895616894312893212892288911689 4
198826415882531388244228823413882231488214158820416881941788184178817 6
258816212881521288142128813313881231288114158810310889211888314887618 8
866198854138843138832108823148814178841987193158718519871731587164208 7
154148714412871361987124198711214871031187941687821287793187631387531 3
874315873312872311871415874198617423861629861531486143118613310861231 4
861131586106178693148684158675228664128654188646198632118624168612148 6
419852231085214128520417851951985182108517416851631185153138514315851 3
414851241385111465851014658591040858940857627856413855314854315853211 8
522138513168541984259418424315842341784224188421626842041484194158418 3
138417312841631384156188414513841351884122108411313841062384941984841 9
847521846937845314844416843312842314841314844198336624833531683346308 3
334208332627833163183304198329836832841983273138326632832541683245228 3
233168322416832121383202983194158318624831772583164178315626831483083 1
373383127228311420831031683929838414837622836523835288345228335248326 3
083121183419821993482186198217518821641682153158214416821341682123148 2
112118210315829417828617827418826728825518824315823314822317821315824 1
981298328128518812751881262108125518812451881234198122315812131081206 1
981194158118313811731381162118115313811441481133148112314811131481103 1
381931081831681731481631481531481431481331481231681131281419804241980 4
121080404198039212803831480376248036212803529803451780333148032317803 1
210803021080292128028210802731480264158025416802442180235158022413802 1
313802031280194158018411801741780162880152980142118013310801231080113 1
280103118092780841480741480631080531180441880341680231280128804197946 9
367945519794431379434147942525794141679409327939417793831679373979364 1
779355207934420793331779322137931420793041779294207928314792762579266 1
979255267924417792329792231079212879203167919417791861679175187916625 7
915414791431479134167912519791141679105277992127983147972137963147952 1
379421379321379221379121379419784016697839932783814587837104778365187 8
356247834210783321278322127831314783052378294187828318782752178262978 2
531478246247823316782221178214167820421781942278186267817519781621178 1
541678145257813316781242078113177810316789316788214787213786417785312 7
842107834167823137812107841977504187749316774862477473167746526774531 6
774441977436297742315774152077403167739518773852677373167736418773541 4
773431677333127732418773162077306217729624772831677277387726212772541 7
772431677233187722311772141777205187719316771831777173157716314771531 6

7714518771329771231077113137710314779314778314777315776310775213774213
7732137722137712137741976311042763011417629931762894776278407626729762
5521762493376236277622830762113597620729761994776184197617630761652376
1583776146347613104476125237611836761072976910407687377677357667337658
3576463576373276210497611140764197540727753952675385177537618753652175
3541375343117533517753231275314127530417752931775283127527397526417752
5517752431575233127522314752121275204177519414751842075174177516620751
5314751452175136267512418751138751052475931575829757312756418755523754
6237535247524207514177541974561144745531074543117453519745293174513107
4503157449521744842274473147446417744541874444167443518744241274412107
4403147439314743851774377247436210743531474343137433312743229743157250
7430312742921074284127427413742629742551674246197423313742239742125742
0411741931074183107417211741652174154127414313741321074124177411416741
0418749416748416747210746313745211744210743287422774131274419732078329
7319931731862673178357316631731511517314840731352273124197311635731073
2739936738626737621736830735521734624733518732415731312734197228135272
2713447226727722511367224114572231664722212407221824722082672191041721
8831721710397216839721552772141049721314527212113972119377210134472913
5172884172793372611467251037724728723933722935721134972419712815717127
1041712610377125125471248357123135371223157121134971204207119521711852
5711752371167317115831711431471136207112944711142171106277197287184167
1714797165217157267141865713525712722711145171419704494470439407042842
7041831704073570395227038828703752170365247035417703452470334237032528
7031730703010427029421702851870276247026421702521470245227023522702221
0702141770204157019417701829701741570162107015310701462270133167012212
7011940701041670931770841970721070631470531470411477034157024177014167
0419695241769513136950420694952169483176947621694641769453166944523694
3417694262469417266940415693931169384166937418693651769355206934520693
3623693273169313126930296929313692841469274186926414692511446924840692
3211692231069214146920520691994269186266917943691652569153176914630691
3623691262969117306910628699634698516697156869662769542369442069341669
2286911669419685251968511262685052568491040684811426847521684672768455
1868441044684311526842938684183868404166839124768385176837518683641468
3532368346266833839683210396831623683052468296266828728682731268265236
8254176824626682331968227276821213682021368197276818210681710506816315
6815733681451568134136812417681131368105166894176883146871139686213685
2136844156835186825196814166841967301040672913496728155867271352672693
4672573067248316723125567221247672112426720155467191562671883067171248
6716114067151459671472767139386712938671153167101139679186367813536778
3267673467512686741042673186567211536719336741966121779661124976610271

2166912626684619466712516662310766517826642192663291146621149661155766
4196512259665113415365101772659732658146465725906563214665514546542811
8653217365230132651421736541964185296417125064161679641583964141987641
3937641211596411165864101159649271226481051647186964616826451353644146
2643949642114764117596441963111144631021856391875638179063720906361870
6351466634221046331144632125163117826341962112188621015726292288628187
9627945626187162523105624103962383762221926211252624196114361646113941
6112177561111572611012476191460618115461716686163212961524101614114661
3932612934611114361419601320806012391736011219460105625860921101608219
1607156360619736051356604522216031362602136860149220604195924177859231
9875922135159211884592010485919105159181872591710505916176859151147591
4239459131245591216735911281295910231065993113459818985973716659625905
9513605941251593146059241185591114359419582251221582193458208375819157
2581817735817156458161043581510405814197358132411558122392581131139581
0178258920105588381675874716358615645851881584261155832190582231035811
8735841957292285572822945727391915726147457252813857241256572315585722
2169572125108572039180571920105571812575717135557162811857151564571420
9957132713257122210957111243571037153579176957815695771574576125257583
7574361345739405721143571939574195696417569551656942105693310569262656
9152056906225689418568851956874205686520568572856843165683419568242256
8142256804175679417567831156773125676520567541956744175673528567263056
7142156706285669733566842256673125666210566562956645255663315566263256
6193556607325659525565831456574215656416565531556544195653317565251756
5152556505245649419564821556479475646525564552156444135643310564231156
4152556403135639312563821256372105636214563531656342105633417563221156
3129563028562929562831056275255626417562562556244185623319562227562141
6562031656195215618523561742056163195615312561431456133125612312561121
3561021756952756852756731656631456531356441456321056231556131456419557
8627557741955766265575419557462255734195572418557141955703135569419556
8419556741955663175565419556418556341955623145561419556052355594195558
3205557419555693755554195554941555341955525195551419555031655494195548
2105547419554651955454195544521554362655424195541640554041955398275538
4195537631553641955358345534419553317785532419553141855304195529103555
2841955276275526412552541955246315523419552242355214195520418551931755
1841955174215516419551562055145245513419551242055115255510317559634558
4175574235563185553175542105532105522955116554195455621545451954534175
4525185451626545062654495185448935544752054466295445421544452054439355
4427365441519544072954393155438522543794354365295435724543493854334165
4327295431841543041654294225428832542773554265235425932542410415423314
5422729542141654206275419936541862354177295416416541562354146245413522

5412938541152654105215499435488355478405468285455205447285436315427315
4142254419536231753612115360315535941953586205357210535652053554175354
3115353213535293253513125350418534941453484155347419534641353455265344
4155343415534241653414195340413533962153385185337315533672053355195334
3155333314533231129533116735330165453291141532816515327947532618655325
3175324415532325995322414532141853203185319318531862153175165316518531
5314531431453134155312417531151653105185395185383105373155363115353135
3451453341453251653131253419524952552481041524710425246933524573252449
3952439335242733524152152407275239520523894052377285236731523582752346
2952336235232831523162752307285229831522893152276285226727522552452247
3252238335222528522119845220733521962952188385217520521612535215622521
4625521362152125185211317521031552941752841052741452621352521352421352
3395222105211652419516073151599435158727515793051566275155525515451951
5362151521346515111395150829514972951484255147529514683151457325144837
5143827514293251417305140734513962551388345137736513672851356265134419
5133520513262651315235130832512993951289385127522512662351259385124628
5123937512252351214195120420511952651183195117625511693751155205114732
5113519511241851115185110211519412518415517315516313515315514213513213
5122135112135141950451353504493650436275042732504172950405255039124950
3813545037134150361554503562550345245033729503262250315255030933502983
1502883450271037502610415025417502462150236215022124550216235020623501
9934501882650178375016145750151036501493650134195012730501183750105225
0910455085205071151506125350593250493650372750211445013145041949181045
4917197649161665491518914914271164913219349123212949114015949101053499
3014449872849728127496187949512484949414931777492239849116644941948295
4249482814604827281204826281304825401794824197748231241482212524821145
2482018894819737481819864817271104816281244815311414814146148139434812
2085481137151481025105489849488527487840486211164851993484199448341948
2156148151948419473830129473763547361365473512584734155547331155473221
8647318504730126647291140472810484727741472615654725166347247334723737
4722104547211248472027117471914734718156547176324716241044715441724714
1348471314544712221084711114447101675479835478630477104647642047531747
4381674731881472188147183547419463527107463418794633228546321865463115
6046302078462918804628177346271047462632138462514604624187546231355462
2125446212595462027129461994346181766461728113461618814615451934614943
4613135246121675461119764610249546924744682599467145946694546518644642
9106463157246262946112464194537842453683745351676453414614533114345322
2784531125945301362452911474528145445271052452618704525166845242178452
3249445221356452117854520732451915644518135545172410245161374451511444
5141461451316604512146345111142451019724591145458145745741445612534552

0894549344536314526294511245419445931744585294457725445610484455522445
4419445352744523114451519445061944495204448725444752444462104445418444
4210444331244428294441103444405234439836443873744371250443652444358324
4343144433729443262944317284430733442983744284224427420442631444255184
4246274423524442262344215214420624441993544189314417835441662944156294
4146254413728441262644115204410628449514448103944783744672644562344451
7443834442213441124441943896264388827438783743861352438513634384114443
8384243828364381831438011484379522437873443779374376629437562243746264
3736274372735437115694370529436952943689344367734436610404365114743649
3643631779436272943611045436083643591042435814484357933435642443556364
3547364353114643521134435118674350730434912474348135543477314346125543
4513534344626434383643427344341626434011404339940433812494337738433611
3843351253433453043331777433225111433110424330936432993943287324327522
4326940432573643241460432321834322114643218334320155343191266431893443
1712464316731431593743144194313208443121149431112504310114543910524387
3243783243662343583543472743363043221343112434194253155642522710942512
2774250114742491562424827115424721684246165642452712342442072424382842
4215664241935424014574239629423811644237105042361774423593642347264233
1555423262942311448423010414229166342281352422717684226126442251251422
4229142232911842222410742212284422022754219938421822964217115242161871
4215341494214301144213381524212135642111989421015594291660428197142722
9042612534251990424103842310434221342112424194154123941531973415217514
1511356415032130414911434148124041472810741461146414518724144301294143
1753414213464141939414026101413922914138125541371988413611504135114241
3417714133135141324144131167041301993412916794128146141271055412611524
1252599412411484123946412220844121187841201256411983441185274117147441
1619894115251024114239441139404112198941111667411015674191462418940417
8364161674415177541473341373341241941112414194085177040841251408315674
0822510440816284080125940799434078321234077145840768424075114640741760
4073723407262340716324070944406910394068124440673011840662076406514534
0642198406373340621241406120824060136240591143405813694057125340562393
4055125340544204053841405210464051115340501673404913534048124540471982
4046136140451042404412504043228640421561404110414040238840391248403893
7403723944036104040352393403430105403316524032727403114554030114140292
7101402839146402713484026186940251987402473440236314022136340213011940
2015624019628401815674017134740161559401516634014837401314534012156240
1113654010156740912534081676407271284061042405219840413524031456402629
4011240419397517773974167339732094397294539713415139709323969157439682
2773967178639666243965146239647343963115739629283961115039601465395910
4539581242395793239561551395516643954135239532185395215593951156839501

1433949228339481143394725973946177639451876394411483943145439422610739
4118773940832393910403938361483937124139361557393512583934833393383439
3215583931730393041639291981392872839271144392612593925104039241361392
3341323922207739213112039202080391910383918136739171260391617613915198
5391462139139293912523391193139102295399241053983412239731126396361383
9523105394166339333126392104539162939419388841738875183886103638857313
8844173883420388242338814183880417387962438786233877520387610343875155
4387462838734223872936387193238708273869933386831338674113866737386511
4038646213863630386210383861114038601145385910383858415385742038564213
8555193854721385352138524223851735385052238496233848838384752838465263
8458483844145438431046384262638411146384062238397283838421383742038368
3338351549383493938336303832114238316293830733382995038281366382716703
8263112238259333824321373823156038222393382173038206333819520381873638
1711443816832381510353814722381373638128343811624381010483897313881550
3871038386125138583238410443831037382622381415384193718241937181316371
8062337179315371784143717763037176217371753173717441437173419371723163
7171529371704183716942037168622371673153716631637165315371646203716351
6371624173716131437160419371594173715810473715752437156414371552103715
4414371534203715241937151521371506293714952937148420371476263714652237
1454213714462237143521371424193714141937140520371394183713831737137422
3713631437135418371344193713341837132419371314193713041437129419371284
1937127318371265243712552837124518371234193712242137121419371204173711
9421371183233711732337116424371155293711452137113104837112527371114193
7110316371093143710841937107315371065203710573137104419371034193710228
1003710131637100516379962337985293797732379641937954183794316379342037
9241337916263790315378931137884163787418378652237856253784516378341837
8231537814193780419377952037784193777420377652537755263774419377352437
7242037715223770418376942037685203767723376663237654213764623376342237
6262337614213760519375962837583133757626375651937555213754415375373437
5241937517233750524374931337484203747724374631637455193744314374331237
4231437414163740419373962337384223737522373663337351038373442037335253
7324203731625373010363729521372862837275243726417372541437243173723729
3722738372172737206243719728371841637172153716735371562137144193713417
3712313371112463710728379417378937377518376631375735374312373213372213
3712113741936838353682103436811463368011443679103736781141367711423676
9363675730367473136736293672633367112503670833366912433668730366710493
6669463665115736645243663521366283636615233660145036594253658516365762
3365673236557283654114236531039365213533651103936507333649835364873036
4724923646114236451145364462236439333642623364183536401558363973736388
3936379373636135636358373634104436331050363262336311145363012473629830

3628134736277273626830362541936245173623155836228313621729362011463619
9383618125536175233616628361515553614115736138383612145836111254361083
6369125136810453678303667303653173643133633143622133611236419354525973
5443012035432611135421983354119763540331323539241003538104435372510835
3618723535145535341145353313573532219935311665353083735291676352817783
5272294352672735251367352412483523412352216623521416352041835194213518
3413835175183516623351511473514188135132811535122812735113411535102410
8359177635825913571362356135835515633541143353228535219683512410035419
3454155734531038345293634511035345016573449829344872634471752344624893
4451459344411473443341303442187734411358344010513439207334389453437231
0034361349343583934341454343334160343215693431321433430104134297303428
1254342712483426114634259353424176234232285342226933421217034201045341
9198734181782341783534161675341520743414271093413198734122710734111251
3410135334929105348166634716613461666345114634410503433212334218683411
7673441933731593337218923371145933709403369177133688373367846336612553
3658333364729336315623362124333616343360198733592299335812673357146333
5614633355301263354113933537029433522585335135137335062267334923103334
8125833478333346629334583833448353343136533423163341835334017663339136
1333822753337481963336249233353022333341456333325122333220813331146433
3017693329146433281679332713613326167733251674332416723323187533221885
3321176533202310233193515533181468331724803316155733151355331414603313
2610533121358331163633101676339229833884233717803362914333528126334281
2733362633212433311461334193230526322911443228730322717753226186932251
1453224105232231459322213513221949322021953219125932188313217134632161
1563215156632141464321316663212167532111142321014553291460328825327103
6326632325176332424923231866322831321133241931342710031333112231322292
3131196831301658312925973128114131272178312610403125156531247303123156
4312215663121218731203011131191145311816543117186931162582311529112311
4177631131554311218703111145431102710531983531883931716673161872315833
3149473133163124193111331419306010393059832305819763057942305620863055
1255305424813053145530521146305194130501971304910373048281153047188730
4617833045115130449393043165630421457304115673040228530392287303816723
0371557303615623035104330346343033187130321145303194830302292302916603
0282711330271879302683130251665302421853023146430221367302120833020114
0301914603018839301762830161158301594330145263013943301252630118323010
1360309321523082298307104430611423058333041246303831302293011330419296
9947296817652967157329666362965166429641565296322842962145029611364296
0125329595252958178629577282956940295513562954638295312652952199129511
5642950166229491459294813522947198929462511229452189294410452943842294
2124329411988294028124293913692938167729377392936177429357302934125029

3323902932166729311570293062729292310329281457292718872926124429252711
7292420762923136029221759292183229201972291913472918135229172711829161
3562915640291416692913116129121886291163729103112029974329821902971270
2961042295124529410432931156292104029113294192888196328871660288615592
8851966288418752883146728822611328811765288016702879217828782810228772
6105287629109287517702874840287313622872218728711978287015582869728286
8145828671142286673528656332864136428631884286284028611775286015662859
2082285817732857259728561350285515742854126528531555285283428516292850
2392284913492848261062847188628462077284518812844135228431675284210482
8419442840105128391252283829108283718692836177328351575283414572833933
2832251002831207328302082282927109282815592827291102826114828252610628
2415502823271082822114428211042282019762819331192818167228179362816134
6281538148281410492813176528121664281110372810176728918672881363287229
2286125528512592841985283938282419281132841927931151279215612791176327
9013522789114027881871278718662786156427858332784135727831142278216702
7811456278011452779728277883427774212776124727751037277483127731038277
2932277173027709322769940276812472767944276614442765145727641978276320
8227621670276121892760271042759124927586312757739275615582755114727548
3927535282752114427519432750731274914682748104227471351274613612745135
8274428110274312432742145927411247274038136273916552738114727371360273
6166927358392734136127331253273213502731523273083427299332728114727277
2827268272725146227241777272311422722144727219452720124427192410627182
0852717943271619772715156927141158271383627121972271111352710207427972
8278145627716652767282751043274104527394727231627162427419262271992262
2652126225722262243212622342326222517262216252622041726219316262184152
6217420262167262621562826214319262139342621241926211522262104182620941
6262087272620762326206520262054192620421726203418262025222620172926200
5242619962526198523261979352619641726195313261945222619341626192420261
9152126190829261891041261885192618793726186935261855222618452926183942
2618232126181629261801140261793172617841426177620261764222617552126174
8292617363126172314261714182617031826169520261685212616793526166114126
1654232616411402616331726162414261617242616041826159521261581041261573
2026156731261559312615411382615352226152627261514202615031726149526261
4841826147311261465212614511402614431726143414261427252614131626140521
2613910442613831326137518261369362613562326134210261333162613252426131
3172613042026129423261285212612711402612631726125414261247242612331526
1225212612182926120418261196282611894026117516261169362611551626114419
2611372526112624261115262611031726109114026108317261074142610672426105
4182610452126103829261027262610131126100414269941926984192697621269641
9269531626944212693728269262226913182690318268962026886192687417268662

4268552226846232683626268283126814182680416267941926784172677623267631
9267552226746282673417267252026716282670623266941926685212667829266631
5266552326643162663135726626202661838266021426594232658314265742026563
1526553152654419265352526528352651114326507272649219626483122647420264
6317264583126449482643726264262526411251264073226395222638524263741626
3673426358352634726263362626326242631723263051926298372628939262773026
2652326255202624940262352126228322621114626206252619732261810382617520
2616732261573326146232613835261262026114162610832269521268829267113926
6838265114326411452636272624192611326419257712452576526257594425741364
2573104525729422571935257016692569836256822852567114725664202565114725
6452725631261256213502561114825601361255917722558135225571444255652425
5514552554124725531564255273325517262550943254910462548135525471149254
6522254516572544155525439372542176825411144254016692539733253883725371
3692536949253594225341148253383725321569253111492530104125291148252872
8252712492526944252573925247342523938252210512521198525202096251915652
5182187251716682516104025151350251483825139422512937251183925101762259
9422581765257167025612512559472541666253229225219732519442541924642286
2463271202462391802461763152460231032459198724585021924571153245684824
5538173245423102245317762452104524511883245016672449728244811482447157
0244611472445311062444104424433814024427352441218324403310824392299243
8145824371987243614552435482032434136124334821724321783243178350243015
6624291770242822872427198524261699242511492424947242313682422261212421
3515024209382419208524187312417938241614562415167024141563241314652412
1259241128102241093824993724811502479372461781245114324419942431873242
2612224195124419231187292311718632311611422311584023114934231138342311
2724231118362311084323109146123108522231077312310683723105834231046282
3103104723102630231011043231001665239983023985172397726239693623957272
3946262393620239263223912480239052623895222388144823875212386833238552
2238482923831247238284023816222380104723797302378104823771244237684423
7511452374838237352423729372371167523701042236972723681042236742123669
4123657282364836236314472362124923617332360104523595212358523235772523
5672723557282354519235393923528332351125223501148234963023484242347738
2346737234583923441985234372723426252341848234052223395192338124123371
0422336419233594223347322333251112332145523316242330725232983723281562
2327321382326519232510302324261042323176323224212321156623209402319135
6231813562317104123165222315518231421104231362223127282311629231031523
9525238528237730236104223542123442023352123252123131423419227844199227
7126322761041227511452274931227329122227229136227118632270186022699412
2687292267176722661043226527101226412452263155522621760226115602260165
6225973522581877225784122561259225516642254218922531674225227106225184

1225084122499312248114522471460224623972245146122441151224341822429362
2411785224035148223910452238134422372089223627128223515762234208922331
1432232936223121812230241002229846222820942227145122261676222525108222
4938222322982222125222214152220623221917692218371442217221022216938221
5228522141772221310412212144822112510122109352291561228134522712432261
3462257026222411442231244222228622110402241921112104321111829211108322
1109135021108114221107525211066232110512522110416662110311572110293821
1019382110072621999352198114221972075219610372195732219412492193630219
2833219111572190199221891143218884021872383218663121857342184166921831
0412182125121811465218010452179147221781461217712612176125121756292174
1675217315832172839217184221705292169833216873521679342166114221659362
1647372163939216273221618352160732215983421588372157735215613552155731
2154831215352521521145215193721507332149837214884321472083214612472145
1146214418822143145521421350214113562140104521391661213873021378372136
1772213510492134104021331147213283921311357213018802129135121281559212
7629212683821251553212422822123622212213522121727212052621191357211813
5321171142211673521158372114624211310482112729211110442110837219845218
9422171459216835215145821410442131572212114221173121419201351150201341
9792013313532013212592013118752013020852012993520128176720127125020126
8382012582820124124720123187020122623201211565201201452201196212011872
2201171349201169422011511362011417652011314622011211422011193520110103
8201091244201081356201076202010631520105732201041247201036272010283620
1017302010083120991344209812392097281042096166220955172094207120934182
0928282091937209017682089124420881248208715752086271052085936208493320
8362020829352081176520801575207951920788372077186920761249207510462074
1342207314612072197620712611520708372069165920686212067519206612492065
1239206410422063136720625302061155920606232059833205814602057834205662
8205584120549392053197420521135205152120509292049517204810352047218720
4672720451035204483020435192042831204121320403513020392293203862020375
1920366202035414203421120333122032312203131020302820295182028210202741
6202631020255152024518202341920221140202173220205202019414201813482017
5182016103720151039201411442013523201293720115192010186820941520882920
7730206124420541920463120341520252320112204191998144619971045199694319
9552319944171993103819926241991416199094419894141988420198793719865241
9856271984725198394119826331981833198052219799311978728197783919761362
1975259819749351973167419728361971934197082919691036196884319671038196
6831196512561964186119639331962114619611146196012511959115219582912919
5731619568331955941195411481953729195273619511041195093719491460194814
5519471035194613541945124619441040194314501942165019418351940834193912
4619381148193711471936835193516531934934193393619326291931114919308341

929103819281240192711411926187619258351924103819231457192252419211557 1
920113819199321918830191711511916104219159341914626191362519128341911 1
146191013451991443198145219713451968301951352194145219351719251919115 1
941918110249218109186818108625181071048181069421810514661810411491810 3
525181021465181011147181005271899114818981549189783518961977189512491 8
942078189313511892310189162318901553188931018881350188713461886259118 8
529188410341883938188235148188194018801051187917761878124818772410318 7
613461875929187416641873103818728271871156518701243186910361868824186 7
621186611371865125118649341863208518621249186111491860134918598431858 1
975185730118185618921855198318541454185310511852136518511359185026111 1
849281221848166318471152184613671845231021844937184311391842207918418 3
018401562183919631838828183716571836125018351241183413501833115018321 4
701831281231830124818292812918283012918271554182623811825837182417581 8
237251822331511821321421820135618193817318182210918173412718161980181 5
187518141978181311481812939181173018101661189104218862718711441861146 1
851658184627183313182156918111421841917111217217110229017109530171088 3
517107187017106945171059461710414611710394017102166717101197817100146 3
179923921798147117972711417961147179514601794155817932692179212531791 1
145179010371789145317881976178793017861350178514541784114017831253178 2
135717819361780145617791246177814601777114217761360177512481774937177 3
136317721139177115701770178117692287176815571767187317661454176593517 6
419961763104117621564176113581760251131759219217581874175718841756135 2
175515681754145517531671175294417512510017505191749945174894217471976 1
746198217451258174421871743630174213481741104417401159173918671738724 1
737134817361657173511561734177117332290173283417311359173012481729135 5
172812501727948172610451725125317241251172325108172293617211150172012 4
517191252171818711717135317161468171521821714731171313591712231161711 8
431710942179167117811491772311017611571751776174136017393117212571712 1
951741916128832161271451161261253161252291161241775161231249161229421 6
121735161201143161191971161181566161175201611622941611522841611413571 6
113944161122410716111155116110186516109727161081156161071362161062494 1
610511521610412481610316691610213561610117671610094116991041169884016 9
718761696156416951557169419831693176816923213116912089169016811689241 0
316881359168710431686199116851145168414511683739168262916812511016802 5
119167918681678157516771971167629109167527103167410421673156216722198 1
671229216702074166924931668135416671565166617691665166116641463166317 7
216621771166123961660125816591965165893716577341656125716556341654103 8
165312431652114816511251165073216491458164817671647831164672816451667 1
644126316431561164252516411878164010371639115316381873163714461636281 2
216353211816341043163322911632126416311567163020901629844162819821627 2

1981626218616251569162494016231349162211551621732162010411619625161810
3916177271616422161511491614211001613134916121571161116711610134716910
4416894816714591667311658401648301637361621868161942164191599522159862
4159772815968341595319159462715933141592319159142015904211589521158815
6315877361586519158514691584624158331915826301581530158052515795281578
5241577519157631515755211574841157331915725241571625157052315694181568
6231567422156694015651462156442315637291562416156152015606291559624155
8626155752315568291555732155483515537281552937155141815505221549626154
8830154710401546317154552015448301543420154211411541519154042015391046
1538418153741715366241535624153452015331139153293115317271530422152993
6152812451527728152683315257251524742152362915221263152111421520834151
9115215187291517521151673715158361514939151372615125231511833151072815
9729158939157834156937155727154831153739152730151625154191452136014511
0361450631144963214481050144711421446125114451464144426109144394514421
3601441839144093914391354143818611437261141436155814351355143415611433
9431432251071431218614301253142942114281250142718841426134914251255142
4155914231783142244187142134138142051814191456141822901417166214167251
4155231414104314131678141217781411291121410331431493715714813501471148
1462611714521861441975143167614214541411672144191343156413421871134116
6813401358133983213382182133719741336251011335198913341453133339139133
2135513315119313302810613298381328115213271967132616741325239413247301
3231572132219101132113541320734131915581318271181317421821316451881315
1155131427107131319861312942131135121131014541395301381558137155613620
9013525112134271111332410113226115131156013419121112394121101979121092
9123121081767121071459121067301210511491210410361210362612102145712101
2110512100471691299145512989351297939129620721295627129412471293125612
9211461291939129023841289103912882210112872181128613471285124912841351
1283187012821153128118721280371391279135012781663127724841276331231275
1145127462512731248127212441271527127015651269166212683011012672811112
6624881265261141264176612631771126214741261629126010351259177212589391
2577351256177212558331254146112531554125212471251291101250229212491139
1248155312471457124622961245115012448411243251051242187012412086124032
1271239104612382610412372611212362711512351138123410411233176812321984
1231321311230187312291042122813431227103612261968122523891224197612232
3911222943122132138122094212191777121818731217198012164201215177612149
3812131354121283412111243121016681291459128155712773012625106125166312
4166312316641226311215221241911123167311122318111219411112017691111915
6111118104211117835111162611011115729111141468111131766111121246111111
0431111018721110920771110818751110715571110693711105103611104520111031
6571110212441110124941110093611999421198946119710441196631119510371194

188611932082119216651191197911909371189237811883613711872182118611421185157411842711011838311182125711813011811801130117913431178271091177134811761554117552211741148117314601172134811719481170186811691563116812441167841116618731165114711641870116323851162228311612811116017681159125011581461115721811156186511155728115416651153166111521882115114521150186311491975114819721147196311462476114515561144198411432386114220731141114811402694113910421138197311371155113617581135125211341866113310381132145911313112311301038112923921128208111272911311261140112593511241161112314671122727112194111202410011191150111823100111739146111616651115146211141664111318751112279511111048111013561191147118229311731127116166411519851148281132598112935111103611419101091145101082387101072485101061655101059381010427100101031045101021564101011460101001453109915601098219410978331096830109510441094228510932410910921461109172810902711810891151108829131108716831086526108510481084135210832285108273310811764108010391079626107816771077114810761038107514691074229310731787107216601071341361070135910699351068259610671561106625901065104210641565106342110621036106142141106019761059207310581044105715631056522105516581054218410531143105213521051113910501253104922811048730104712491046156310452087104410421043114510421147104115601040124510391981103816661037228310361760103529971034176310331039103211481031271141030166310291046102818891027271181026167210251145102443198102326113102241166102122841020166810191771101829123101714541016186510153913810141042101317871012271041011188610101466109157410863010715711061462105231011042812610329113102269910152210419912915549128146091272179912616569125125491241882912317789122221029121187791205219991199419118311279117271099116176191151861911422889113208491121610991113717491101561910927101910823869107241179106125491051685910416679103166591021774910122999100251289992711399816719971669996145999518889943013299319869922390991261039901780989135698814769871146986188298516749841871983251129828439812711898025103979209397811479771567976937975125297446190973126297224107971241329702612596932168968167996719105966166796513649641773963166496212559612611496022118959198295816629571144956104595517819542295953124795222939511456950166594915639481664947178694615719451470944147794313529422311394115719404317693916709382912293731134936361609351984934291399331460932156493123102930231079292912392828113927124092618839252396924331709232097922831921104492016809192411091823999171883916241029151145914115991320939121879911136891010399913569816779723105961874952613394229893321359214649194187522958741885873135787245209871135487025948691146868103986720788662610786527115864937863207686212538611250860331348598358581455857104385612448551038854178285318688521774851937850136784918748483614084717768461367845 1

3618441988843208884235149841331508401046839166683816598371881836219883
5135883421938331252832197283117698301674829198282810488271261826199582
5135882421958231149822103982183682012548192497818626817218681620818151
2548146308131358812231038112299810186789115288733872310186115185114784
1147836348217828118898419720611487205166972048417203238972027317201125
0720010447199732719812527197104771969397195269971941464719312567192733
7191728719012557189291257188281047187371537186104071852288718411407183
5187182840718173171801469717930122717810427177947717630132717513647174
5277173156471722610471711979717010527169401727168147771671980716611417
1651879716419817163271187162177371612093716043200715983271583214171574
3222715630129715541170715415637153145971521569715111467150391727149187
4714822897147136371463615371452089714415657143411657142231097141188571
4094071391036713824997137291397136116071351143713423907133138071321247
7131229471301047712922887128167671272110071261666712552271248417123197
7712231271214207120317711942571186257117114171161155711511407114522711
3114671124167111734711073071099327108626710762471061136710518657104934
7103167171029417101231027100197979910447989387979407961885795188279413
5979316647921359791633790125378942159788229378719837862410778538156784
8407837367821354781114678013537791563778633777166677683777523967742511
3773351327721366771251077701771769271137687307671139766145876516577641
4717631359762114476111397609327592176758177275729123756156575583575432
1457533814675210457511995750208774915687481472747136274618877451048744
2811074336150742157074110427402310473914627384016173737157736115873519
7473411477332911073226111731166473016787291669728229472731138726208372
5734724124872312547222813072152672025105719177071812547171566716736715
4167145217131350712175771116737101148791156789457762776636751246741043
7314577213507114741961652186616429104616383261629396161166661601664615
9197761583713861573514461561461615584461541775615317756152351496151421
8061502711861498366148371426147135161462812261453912861444016761432310
6614216706141311456140208361392295613826117613720966136311286135197561
3472761331871613293761311038613028134612983861283615161271041612694161
2528110612429118612315696122241006121209661201259611930116611810406117
1139611618636115114861142310561131262611223956111221006110136061092190
6108251036107135361061344610584461041559610394361021653610118656100156
8699441876981359697166969612626951769694291286934920169222102691441716
9016666891781688165968795668684468573468421100683145868211526812293680
2592679125367818656771869676155467595067414586732410667283867139160670
4517566912476682310366752166693266527105664103666317736621248661177166
0229565931113658145965722776562174655635654271086531571652251056511765
6502810364984364815646471456646239064594264420796431463642115764112466

4015626391771638228263719676361050635281146342290633146663213606312711
1630197662993962816606271768626114762532133624104162312436221257621145
4620136861937137618732617175661693661592961424926139376122510061110416
1013566994468135367166666311386512536411426312526214496114696419512011
4251192410251181147511729108511645153511517705114229751131566511222865
1111361511064280510915595108229951072612851065221351052086510424100510
3218551029345101261005100167359911455989375972711959620865955119659424
1045932411659213725912092590168258945205588125258718695867405851467584
1663583218958226128581157058019785791042578177157724905761658575259857
4840573259657234139571197857019895692092568311295672594566241045651262
5644721856313675621363561166856027110559217755812545572410955611485551
3685543815855315805522811655123104550104554933136548512285471666546261
1754531140544411955431568542261135416828154019715391449538136453712495
3624885351468534135253333414053240162531261065309385291356528166452724 9
9526146252513525241769523211005221875521157052023925192910751830134517
4215751618805152492514251195133214151245207511241075107405910475827117
5719865662281554320154311375361278525324251249754194176501914175157341
7412504173261294172188741715421641702499416911444168125041671143416613
6141651566416414584163251314162261364161147341601460415914574158832415
7341284156631415522103415419904153371624152177841518434150221004149144
9414814534147114841461892414511454144188541431658414219914141361614140
3313741391471413862841372078413629130413538163413414624133124941321040
4131321294130114341292210241282912641274017841261245412517734124166641
2320724122219541217324120735411921109411883641171143411620674115208141
1426974113331354112145441111146411013504109197941082182410714544106730
4105156741042294410320106410262281410123964100311224991040498126449727
1284968374953317249440170493167049260235491321624903616848928128488228
8487176148615574852277484228748330135482135648124101480124947918734783
6143477482044762098475311394742193473197547217634711149470728469189246
8321467627466271074651977464231054631665462167346115654603012545929132
4582510245720100456209545511384541880453103745211434512094450104044914
5444820694472912144638177445944444146444349205442146144112434401555439
1568438188543715784363215843522924344019243319884322710843112564301353
4292499428834427136042614614255826442442185423542654221763421114942017
8341935157418241064172090416147041522107414135541318794128829941171271
4101363491571481370471991463718645167944145843281154216824129125441932
0011573199301213198218531977303196729319543188319414583193209531921145
3191211003190115731899383188208631872199318624108318523993184125531832
8120318293731812295318030122317936146317817743177125331762287317511543
1741564317317773172156931711147317019783169135431681674316733151316694

7316520733164251073163832316213533161216831601875315930121315872831571
4533156371573155218931547529131532510631524016631511984315062631491364
3148105031471987314621883145249931442710731431251314213603141633314024
1053139941313862931371354313615703135231043134137131331155313252931315
2731301362312916613128124531279433126176831251569312413603123104731221
2573121114931202188311928127311831125311723983116187731159403114158431
1314593112351523111114831102311331091144310811493107104331061781310514
6531041470310334157310213543101177431001569399207739813503972599396104
2395114739411443932499392155639124913901462389114338893738794738618833
8513523842912638314623827293813314638013673792812037829120377271163769
3637536144374834373321153721779371115237093936913543681366367146136620
7536516703643212936362836215543612511436072535915473587323571159356136
0355311323546303539463522086351834350198034945187348535347237934673334
5219134420813438373421360341208034017633392092338155233735138336241093
3518663347273331148332114733114623302696329227932827113327218632625923
2515533241565323208132211503211888320261223192610731818723176543161150
3152410731424125313291163129433111468310166639134738155437461973613503
5113734187433115332724311334192286491962285271182284281032283321382282
1295512281155422801452227917722278145422771987227611452275451862274177
9227330134227228112227120892270155722691665226813682267301252266351482
2652712322643917422631144226224922261249722603914822596724922584316922
5724118225624102225550189225422872253522082252941225127122225015772249
6024022483011422474316522465421722451669224493822432810622427312241634
2240271162239156522388442237351402236251112235472002234251222233642882
2323314722314520322303011422294619322284017722277292226135422251465222
4146622231681222227122222139182222026118221926123221816722217572472216
2593221522104221430127221349214221220932211207422101772220912492208166
7220711492206125222051459220417652203251032202835220114572200249721991
2492198261102197301212196732902195146621942210721931565219262421912513
0219013592189271202188178721876528621861777218544185218432123218315612
1821655218113542180167721799392178381632177512662176145821751161217429
1222173259321721562217118662170228921691150216817682167239621661257216
5311232164431872163935216293721611364216011572159209121582489215794221
5610452155126621541350215311532152632215117872150311382149176621481975
2147727214614732145321302144341462143451962142218921411554214030127213
9146321381037213719792136311352135156321341554213327114213217702131933
2130187421291681212817762127146521263012221252211521241983212318672122
1258212115702120311122119104621182410321171147211614562115125221143011
3211331141211217582111187221101776210933123210818732107175921061961210
5259821041365210312492102743082101228921001044299104429812552971872296

2510229594429417672932713129211512913011929027107289261082881046287281
3828613632854923128415712832915028210522811354280239127924102278114527
7936276231012751977274371412731157272104527124972701762269187126823802
6720832669452651254264135426315702622410826160257260281182591877258209
5257189025673025515602542712125373725283025112532501050249188424819692
4712582468382458472441055243741242842241187924014692391051238176823711
4323619862351980234136323323101232124823115702302811122919702281360227
2082226391552253414522413662232078222239922112532202510221919862186192
1717722161157215734214167321319772127292111143210125129104928114727125
3261147258332412522384722727211324191794416319154191431213212124181141
9”

4.2.2.3 Rewriting with chapter level data with Basmala based key coding pattern

In the previous subchapter, Evidence 4.2.2.1, we witnessed the Basmala verse key coding pattern based rewriting of the full text of Quran at the verse level data in the text type of 6348 verses. As per the rule, we also test all the key coding patterns of Basmala verse also in the chapter level data. In this chapter, I will present the evidence code that shows the same key coding pattern also exist in the chapter level data of the full text of Quran too and this time it is in the 6236 numbered verses.

To remember the natural numbers to be used at the chapter level data, I first provide the head and tail of the table I will use.

```
knitr::kable(head(dfVCwl), booktabs = TRUE,
  caption = 'Table head of numbered verses of Quran.')
```

Table 4.6: Table head of numbered verses of Quran.

Chapter_index	Verse_sum	cwords	cletters
1	7	29	143
2	286	6140	26249
3	200	3501	14985
4	176	3763	16332
5	120	2837	12206
6	165	3056	12726

I will concatenate the numbers per chapter in the exact same order of the text of Quran, namely from right to left, as I did in Evidence 4.2.2.1. We observe this coding in the numbered 6236 verses text type of Quran as below. Before that, considering all the 6236 numbered verse of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [Chapter 114 | Total Verses of Chapter 114 | Total Words of Chapter 114 | Total Letters. of Chapter 114] [Chapter 113 | Total Verses of Chapter 113 | Total Words of Chapter 113 | Total Letters of Chapter 113] . . . . . [Chapter 2 | Total Verses of Chapter 2 | Total Words of Chapter 2 | Total Letters of Chapter 2] [Chapter 1 | Total Verses of Chapter 1 | Total Words of Chapter 1 | Total Letters of Chapter 1]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [114 | 6 | 20 | 80] [113 | 5 | 23 | 73] . . . . . [2 | 286 | 6140 | 26249] [1 | 7 | 29 | 143]

And, the final number after all the concatenation would look like this:

> 11462080 11352373 . . . . . 2286614026249 1729143
>
> 1146208011352373 22866140262491729143

Here is the proof with a reproducible R code that rewrites, namely decodes, the full text of Quran by the 4 different descriptor numbers first and then test this big number at the chapter level data.

```r
# Proof on per chapter level rewriting
tmp <- paste0(dfVCwl$Chapter_index,dfVCwl$Verse_sum,
              dfVCwl$cwords, dfVCwl$cletters)
tmpr<-rev(tmp)
cat("Heand and tail of the chapter level represenation numbers: ")

## Heand and tail of the chapter level represenation numbers:

head(tmpr)

## [1] "11462080" "11352373" "11241547" "11152381" "11031980"
"10962799"

tail(tmpr)

## [1] "6165305612726" "5120283712206" "4176376316332" "3200350114985"
## [5] "2286614026249" "1729143"

tmpr <- paste0(tmpr, collapse = '')

cat("The test of divisibility by 19:")

## The test of divisibility by 19:

cat(as.numeric(as.bigz(tmpr) %% 19))

## 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 1205
```

This code has a similar approach to Evidence 4.2.2.1 but at the chapter level numbers resolution of it. We could perform two tests and observed one success considering the text type of all the 6348 verses.

For the reference, to the best of my knowledge, like all the other, Evidence 4.2.2.3 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 4.2.2.3 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

Since the key coding pattern is suitable to consider the text type of all the 6348 verses too, we have two trials and one success in this evidence based on the key coding pattern with letters information. Let's add them into the counters for probability calculations.

```
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  2
key_codings_success_nums <- key_codings_success_nums + 1
```

Here is the “1205” digits length number of this evidence:

“1146208011352373112415471115238111031980109627991083104310772511410641777105523971049331341033147310282812310111361601001140169998361589889440497530115961972288958341629482710293114016592217131491155425390208234289301395848826923828719722968617612548522109469842510844583361697508219813338129104435804213355279461797857840174796775018184176312431087754016467674562561035732020085472282861109712822796570442179716952260113368523011289673033313476612254110565122891203641824210916311181801621117776861142269666013352156059244471970582247520465729575254556963791756557835216475455342146953623601433524931213245160360154650453731507491835315334829560251047385422423463564526674537488208544593461474438983636094253860352241547943365408512265108397511774869388873530653718286538993683730306835457783238345488435943373130357883230372156331345502171306081734722969978431728881438593027931159479026227132056302577896387824641319575423118105244832278127953142111211745094201351353539919989713935181101583655217111155866431612818447832159965728821452830353913438533545121111795730711123194678171010918397589912925051111587512425387720633411443561653056127265120283712206417637631633232003501149852286614026249172914 3”

4.2.2.4 Even Odd coding of rewriting with chapter level data

In the previous evidence in Chapter 4.2.2.3, I presented a key coding pattern based evidence that showed we can rewrite the full text of Quran by its chapter level natural text numbers, which are chapter, verses, words and letters. The evidence was observed in chapter level data considering all the 6348 verses. As per the general rules of any suitable key coding pattern evidence of the Main 19 System, we also need to test the even and odd coding pattern as the obligatory follow up coding tests for each successful key coding patterns. For the details about why we always test with the even and odd coding patterns as follow up test, one can read the Chapter 4.1.1. When I tested, I observed that there is also the even odd successful coding of Evidence 4.2.2.3. Therefore, I present that code as an evidence here.

When we test the even and odd coding pattern of the previous evidence of Chapter 4.2.2.3, we observe that it also exist over the full text of Quran considering 6236 numbered verses as presented below.

Considering all the 6236 numbered verses of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [Chapter 113 | Total Verses of Chapter 113 | Total Words of Chapter 113 | Total Letters of Chapter 113] [Chapter 114 | Total Verses of Chapter 114 | Total Words of Chapter 114 | Total Letters. of Chapter 114] . . . . . [Chapter 1 | Total Verses of Chapter 1 | Total Words of Chapter 1 | Total Letters of Chapter 1] [Chapter 2 | Total Verses of Chapter 2 | Total Words of Chapter 2 | Total Letters of Chapter 2]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [113 | 5 | 23 | 73] [114 | 6 | 20 | 80] . . . . . [1 | 7 | 29 | 143] [2 | 286 | 6140 | 26249]

And, the final number after all the concatenation would look like this:

> 11352373 11462080 . . . . . 1729143 2286614026249
>
> 1135237311462080 17291432286614026249

Here is the proof with a reproducible R code that rewrites, namely decodes, the full text of Quran by the 4 different descriptor numbers first and then test this big number at the chapter level data.

```
x<- dfVCwl
tmp <- paste0(x$Chapter_index , x$Verse_sum , x$cwords , x$cletters)
ev<- which((x$Chapter_index %% 2) ==0)
od<- which((x$Chapter_index %% 2) !=0)
#tmp<-paste0(tmp1,tmp2)

ev<- tmp[ev]
od<- tmp[od]

tmp <- paste0(ev,od)
tmpr<- rev(tmp)

 cat("Head of the per verse representation numbers : ", head(tmpr))

## Head of the per verse representation numbers :  1146208011352373
1124154711152381 1103198010962799 10831043107725114 1064177710552397
10493313410331473
```

```r
cat("Tail of the per verse representation numbers : ", tail(tmpr))
```

```
## Tail of the per verse representation numbers :
12111179573071112319467817 10109183975899129250511115
87512425387720633411443 5 6165305612726512028371220 6
4176376316332320035011498 5 2286614026249172914 3
```

```r
tmpr <- paste0(tmpr, collapse = "")
cat("The test of divisibility by 19:")
```

```
## The test of divisibility by 19:
```

```r
cat(as.numeric(as.bigz(tmpr) %% 19)) #mod 19 test if "0"
```

```
## 0
```

```r
cat("Number of digits on this big number
    is ", nchar(tmpr))
```

```
## Number of digits on this big number
##      is  1205
```

For the reference, to the best of my knowledge, Evidence 4.2.2.4 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 4.2.2.4 had been available in another article, which is very unlikely, then in such a case, I surely add a citation and update the online version of this book.

Let's add it to the counters for probability calculation. We also tried it on 6348 verses, so 2 trials, 1 success.

```r
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  2
key_codings_success_nums <- key_codings_success_nums + 1
```

Also, here is the "1205" digits length big number of Evidence 4.2.2.4:

"1146208011352373112415471115238111031980109627991083104310772511410641
7771055239710493313410331473102828123101113616010011401699983615898894
4049753011596197228895834162948271029311401659221713149115542539020823
4289301395848826923828719722968617612548522109469842510844583361697508
2198133381291044358042133552794617978578401747967750181841763124310877
5401646767456256103573202008547228286110971282279657044217971695226011
3368523011289673033313476612254110565122891203641824210916311181801621
1117776861142269666013352156059244471970582247520465729575254556963791

7565578352164754553421469536236014335249312132451603601546504537315074
9183531533482956025104738542242346356452667453748820854459346147443898
3636094253860352241547943365408512265108397511774869388873530653718286
5389936837303068354577832383454884359433731303578832303721563313455021
7130608173472296997843172888143859302793115947902622713205630257789638
7824641319575423118105244832278127953142111211745094201351353539919989
7139351811015836552171111558664316128184478321599657288214528303539134
3853354512111179573071112319467817101091839758991292505111158751242538
7720633411443561653056127265120283712206417637631633232003501149852286
6140262491729143”

4.2.3 Total natural numbers based key coding evidences

The key coding pattern for this code is the verse 83:20.

> 83:20 A numbered book it is. (Quran, Y.N Öztürk, kuranmeali.com)

We naturally ask the question as how it is numbered. This verse should show it. It turned out it shows it. This verse has 2 words and 9 letters.

> 83:20 كِتَـٰبٌ مَّرْقُومٌ
>
> 83:20 Kitabun marqoom
>
> 83+20+2+9 = 19x6 = 114 (number of chapters of Quran)

If we sum all of its natural numbers we witness that the resulting number is multiple of 19, which stands as key coding pattern. As per the rule, we will consider this as key coding pattern and apply it to full text of Quran. When I tested this key coding pattern, I witnessed that it also exist over the full text of Quran. Moreover, it also has its compulsory even and odd coding too. In this main chapter and in its chapters, I will present these codes.

This key coding pattern also exist when we look at the total numbers of Quran. However, that coding should be considered as supporting evidence to this key coding pattern described above regarding verse 83:20. As already described in the introduction of Chapter 4, the third key place to look for key coding patterns is **the total natural numbers** of the full text of Quran. It was like to look at the overall picture of the structure and see if there is an obvious key coding patterns exist in regard the over all numbers of the text. Similar to the Basmala based key coding patterns, the key coding patterns from the total numbers will be tested both in chapter and verse level data of the full text of Quran as there is no chance to make clear distinction to test in both chapter and verse level data.

Let me remind the total numbers of the full text of Quran in all the 6348 verses and in the numbered 6236 verses in the following:

Total numbers per text category in 6348 verses. : 114, 6348, 78245, 332837.

Total numbers per text category in 6236 numbered verses: 114, 6236, 77797, 330709.

4.2.3.1 Rewriting with the total numbers based key coding pattern at verse level

The key coding pattern we observed considering the totals of the natural number of the text is that the total number of chapters, verse, words and letters information is multiple of 19 considering the text type of all the 6348 verses as follows:

114 + 6348 + 78245 + 332837 = 417544.

417544 / 19 = 21976.

As a supportive evidence, we will also consider this as key coding pattern and apply it chapter and also verse level data too considering both text types. In this chapter, I will present the evidence code at the verse level data considering all the numbered 6236 verses. Basically, we first **sum** the chapter index, verse index, the number of words and the number of letters in that verse. This gives us the representation number of that verse. We then place those representation numbers where we see in the text as this is a rewriting test just as in the case of *the Ultimate Evidence*, Evidence 4.2.2.1. Namely, as per the rules we write from right to left whenever there is letters information in a single text type as we consider it rewriting of the full text. Then, we concatenate all the 6236 representation numbers and obtain the single representation number of the text of Quran considering only the numbered verses.

A numbered book it is. (Quran, 83:20, Y.N Öztürk, kuranmeali.com)

The same key coding pattern was also observed in verse and explained in detail in the second key code of Chapter 4.4.1, where it is shown that the sum of chapter verse, words and letters is exactly 114 and also multiple of 19 (83+20+2+9). We see this key coding pattern if strongly represented in the text of Quran.

Let me first remind the numbers by presenting the head and tail of the table of the numbered verses.

```
knitr::kable(head(nQuran), booktabs = TRUE,
  caption = 'Table head of numbered 6236 verses of Quran.')
```

Table 4.7: Table head of numbered 6236 verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم

```
knitr::kable(tail(nQuran), booktabs = TRUE,
  caption = 'Table tail of numbered 6236 verses of Quran.')
```

Table 4.7: Table tail of numbered 6236 verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
6231	114	1	4	14	قل أعوذ برب الناس
6232	114	2	2	8	ملك الناس
6233	114	3	2	8	إله الناس
6234	114	4	4	17	من شر الوسواس الخناس
6235	114	5	5	20	الذي يوسوس في صدور الناس
6236	114	6	3	13	من الجنة والناس

Considering all the 6236 numbered verses of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [Chapter 114 + Last Verse of Chapter 114 + Total Words in Last Verse of Chapter 114 + Total Letters in Last Verse of Chapter 114] [Chapter 114 + Verse 5 of Chapter 114 + Total Words in Verse 5 of Chapter 114 + Total Letters in Verse 5 of Chapter 114] . . . . . [Chapter 1 + Verse 2 in Chapter 1 + Total Words in Verse 2 of Chapter 1 + Total Letters in Verse 2 of Chapter 1] [Chapter 1 + Verse 1 in Chapter 1 + Total Words in Verse 1 of Chapter 1 + Total Letters in Verse 1 of Chapter 1]

Here the "+" symbol stands for the sum operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [114 + 6 + 3 + 13] [114 + 5 + 5 + 20] . . . . . [1 + 2 + 4 + 18] [1 + 1 + 4 + 19]

And, the final number after all the concatenation would look like this:

> 136 144 . . . . . 25 25
>
> 136144 2525

Here is the proof with a reproducible R code that rewrites, namely decodes, the full text of Quran by the sum of the 4 different descriptor numbers first and then test this big number.

```
x<- nQuran
tmp <- x$chapter + x$verse + x$vwords + x$vletters

tmpr <- rev(tmp)
cat("Head and tail of the representation numbers of verses after
ordering as rewriting:")

## Head and tail of the representation numbers of verses after
ordering as rewriting:

head(tmpr)

## [1] 136 144 139 127 126 133

tail(tmpr)

## [1] 29 29 20 18 25 25

tmpr <- paste0( tmpr, collapse = "")
print("Test if mod 19 is 0:")

## [1] "Test if mod 19 is 0:"

as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("The number of digits on this big number is", nchar(tmpr))

## The number of digits on this big number is 17790
```

As we see the remainder is 0 and thus is multiple of 19. It has a similar approach to Evidence 4.2.2.1 but using the second type of the text of the numbered verses and also sum operation to get the representation number of each verse.

In Evidence 4.2.2.1, we had witnessed that we could rewrite Quran by concatenating the 6348 representation numbers of each verse at the verse level. In this **key coding pattern** based evidence, Evidence 4.2.3.1, we also witnessed a similar rewriting coding, also in the second type of the text with 6236 verses.

At the verse level, we could also use the text type of 6348 verses and also with the chapter level data. Therefore, we have 4 trials and one success for this key coding pattern based evidence to add to the counters.

```
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  4
key_codings_success_nums <- key_codings_success_nums + 1
```

For the reference, to the best of my knowledge, Evidence 4.2.3.1 is also first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself.

You can access this "17790" digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/6.1.6_Evidence.txt

One can just copy the big number and paste it into a web based big number calculator and test it herself.

Also, here is the "17790" digits length big number:

"1361441391271261331381421361281321361311251281361351331381321501501351
3331381351361291301301251281301291371241351301311431311351191281311321
3113812612913312712912912612612316712411113613112113212412012111812212
8121129126128134136125114110135128141129126128119118118117116134134143
1211221221221242101561861971581151291671251471261231241401281251301431
3212812313011912112211712312411611611712012812315212213111610811211711
7117117113112112112124124123119116119120122116110101124138138131125123
1281251281191301171141201141111161101171111091221511411191201181171221
1311411411311211010612614712816112512012911112211811611311611711712111
9107111110131134143140134139139164135136130132135130155164120125121121
1171291261111191161081061019713312913812812712812812812713611811711611
7115118111110113119119110108103107110124129122127120117125122114111116
1091341091081091051031071301131181141121151151191121131201081131151021
0810312012212612811512211511611711611417517414414212510810710710110210
5159126128128137122122118116116123116120108111123116115117136106108102
1031021491371531401481511361561341261471281341251251191141211311321201
3013513612411811210310911811798114115121971441251221181151161151111061
1011211311112311010410210410115013213111912912812712111512611911511411
0112113111110109107103108105104103102101102971451331431331351471301261
3613013212312212312012412512512912311911711511811311810610610710610510
6104981061059999106103979117014813914015114016013913612813613913713212
6134130132124137130135124113114110118119119119126112110112115110121102
1041011029998979695203158188172137143124125124126136129127131115120132

1201131191231231281191071131221101141091071061021001059894101969114914
5155143154141144155137143136139146133135130130125131134134136124149117
1231201211131191201151151121101111141011021041041031021029697969594931
5915814516015113812714213213616913215111712912013613014311613112213512
8125122124121118137128149145135136137127123130122122126124118114122122
1171131141101161121171131171071151201099711410294971031081081071019718
5142142151166138142149148138141141138140132127131130134142122126124122
1174121191151181181111201231131081021091061051041161051049910710510610
3102939692908785905001321231331261501351131081251221271131071171041079
9948916515613214415217514612512614212913813511914515113412913914512912
1135124111117118135185149144162138160111154115116119116125125102110136
1071141159917110310915810410213716716216215015213614413313512613313013
5138152124121127121111121120104112109110991069898112102961301009910189
9392132929391142136143144137143136133141133141143128122127128127129128
1311391151101141151181131491411051041081141391191381151041191111161171
1311898159108101979281771441931481671691411481361661741571551281661281
2812212913414814912812712913111012211412411312410410312198145102123102
9810195999893125898891949489147158168159136129130157148142156163123144
1341551151271261141271571411141141521231531331101741982241493141362021
7018321212813919826316411315118724913821516222928111614317512618412314
6149144222133158168135144125124141129179165178180157148193121128163182
1591811671231571951151101771272751241651591301441341522281911221051061
1617328418638419118014515813433713814333017818814518213713916713616013
2190129160227198233183269180137126136287114352122123164166154127123164
2101852391671922712751431622031721861501932013141712481491531692112962
0114414221915119022920012325715214915312710723110911310617317216216218
0172174167168167167176159162164163157156148148157154151162164152160165
1501381341561501371561611551451311381321291331291301371351281211591321
2711711211212711211010810510811010211010198969697113103112102101879795
1011029794868784838285979682797778717674166155163153157151149149141147
1461451411431281411341391431371361351571331591311311291241271151251251
2312513012014211812911612911413211218311010810812910611597103116101104
9997949697949698919196851048489828071706863136132128129137136126146126
1351241231411391191301111191431241201351071221341041091221231081201299
4112951071181011079098989411396901151051099684939494811351271311351371
2213412912112114611912512012012311612911611511511711011911410811611210
5103245173153134148136162989620093969493989192858485868586857478737476
7476691311511511401361441371341191261161391241261221211141231161171201
2011311210611511610717611210611694133959792878380827477737271676660149
1621431471401361291311621521381361281321361351401291341291321211311311

2211810810911511012112812610510612310912010195951019199113911048885857
4767876737470696867161139126131127120150155141155116113119110111122118
1201241279610110012910099112102112137111109869910687114831191219699871
0768122161146173206176222259122232922111521141031461721303801502232322
9216812413413517511117120221623513711316524718811488103191165165741267
3244125161152151146186136155127133122153151111114124128211153145102191
2781221281891131489991110777225614914891215177186161152174173164130242
1451631371341872221171472041612991121241491521751531781261061331851368
3501321261721541321771471501321411341591541681861361681041431311881481
1513413413410914611012470116159928582491231361331581261211291101191191
1812412010211110010212312911212712614310911995113111110114118989587921
0196959194107102104959489928880887210196837870896148164166175194204182
1761691631821491621661541461491491571981471461541511591661522021411591
4715416314212714014015314017913015115912815615411913012611613413114212
5128143112170211126118120110971181111411701221051311401041189710480160
1151161091149090789181826047166230192150168232178160237178121165127153
1161551391691221091451091351231501351541441301792121951691591081781221
4724020024512316112612714016111315694984846146186161161253144141223144
1762441541421302081931461851381291631389115818316514413313019012411916
7158129102911461651831721031611351331269892137138858466452121872052511
5519117127318916617219114314114916315816425520217222314315520317515318
0162212160118142148155179155145188160137146191158132191139124194126191
2091411061401221972531281531711051001382101379314011713013499120129129
1321141402029816410911377442082022261652951501972062091351801441701381
6117815315113716117415819816517314319314120817817814215021417511912826
1129147144114114144107891681021211361141372281582111591061371281331588
0907990166177203203219172122201967514714817016114314514714113914714514
0158182146137155150143149122120148154129137148150154145115119119117120
1171161311151161321181151391501371121361061121019911513712010712310410
8126145151217105231136176969782991109498819492791068511193107839688685
8242237246234233250232232229233228242229230233222222220227221220215220
2172522232112042092142122142222202092162102072092062022012021981952001
9019419419219219118518918818519219518418318418117818118118018118617720
8181171166163168162168180164163267157158165169173156154150154146160145
1401451461501531421421371411401411381381431431341391331351291301301341
4112713012612812312113011112611711811013111211811610210911510210698959
6981001051011011121209510093991139299938480819610492879175719579747165
1068267916780845655545116216219417116216616615714814814414716914716014
1162157169129125142125160124115122131126143138154136126128121199135137
1081211071201491191211191411161241299712312510312497100848213297931131

0212181861211189512011390108998179615656534020222921517917124019812720
5161139125138187147110156158178951401197413576777922575801081481912021
9517713715911711211893145124160160135131130157120115150193152136241171
1461351661261941321161362611502401151001281211171031371641751461091591
5194141143184153180108110177124118122969819212211921421517715219014615
4166139133173150134199213170167166244137450195256412208151121114124120
1549411715614616831418532113721316614214914015613415214814514915813617
8242133154121116121177116861351629113721119219268901099311697151145113
1181281181111681228910811512812412713596111115738576117152119733719221
7177149135182111157107136921331341601921061191351541871381131311101738
3861211277791535636139129183138192152189152139131170126221182176137122
1451431531771781561391431181041521181181741351981549513616013113215410
1123958111597759573811132231589189769272433515417918413717417319815516
7154118190121134153127159191159157151142184212184128122126177221150160
1121561011251751441459218412816111119814912512790140108112191114901281
1414583190881481188791869981341981911881982051922491911942062362362421
9015017620819617113216814813613216919313818116918917620714717215915112
2114193139208179171172137162128122129131203152154153133103185152160193
1301941131851171861051011431991349010322910112312086122122112149101104
1367853331821951981821672041981921531811631951781631411471291621491401
4814013513814515414715116318819217519821814712213015614012811313413011
5158127138147143209125142127241137123137148109135125122869998113898812
8145103110102103176150961391261108413084131711051156885868648583642782
8027427627027826726426326727527526228226126425825526826225725424925125
5263255256252267243237247239242243253266238259256238244260232242257225
2222292282272372362152192172202202372442182412092062182082112352062202
2122920621120119620619618719822219018720018619221918018620719017217818
7177180182180204172169181167174184168179193164187162163171168168156186
1541511631531561661611411441481471501451401451541461381371411391341421
3813914114712912612812513212412813412012313112511812013011011910915911
4133102112101107100991031091211311101928997921101271029913010592938310
3104939188878010010290807699758810477849268818169826457766171837885866
2513115913215317615314814018013820015011514812116115014515917314814011
0149138157117109127130141132981431391141521211501041081441191111181031
4111610611388113104969095108150161124151126911038589838311485115118948
6111142119791962343054762101893511451362902031701311761571081311561282
0612224510816920518413416712931013232215648313514016115516510910412819
3230911488088110125116116107165817993771288314111817485177221192186180
1781661781842071581681741701611831611772041601431531641521491421532181
4413917313615013514416515313216013915915615115414312514118514512614311

5139123131147146124138108109112113113101124116138132108991151131151711
0096120908611411282109961921248485971282207388177126701259211111091666
1162647069516264678153515251413431741491531362462591741701411261731412
1514315516115815412317512814915718616520712212111112614318814212887109
1652451161171682131481651099915517610516411414018093165108627112722116
3851441258696159761078884873598181132731861691711931821581561902071921
7016915416417221316415517615015418022216415721414414719015516618115618
6174171160131186192140142125131131131140131129132122125120122124120145
1141141041291181111151201711261231651331261311161379610314611510511210
0122149114123839311414972108767211010591798165926986768380101709879111
7660216252219223244255193232209192181203231171221206166167199187182216
2091851751781851971531441641831561661581591761692491941372051351481571
9516516819723815014612914618319012314318415715114916818723213516411511
1147136136163117155109120152119110124122166118971089111317510011010287
1017622517484818273676867646072606759656766938065579960838489617855116
4865648248614250241771711671421341601411301621261311521341371351521401
4112613813214317021713718213513312613413813412415216212413813714214123
5951161241321081141211151421361111321221131261271031011161161149812396
9786110919699981398791113701128879759887776563738787859384638989444526
2442131571831752031821511991771501761801582101742101751231381761201691
6422011414614828314815919015622215313117213912516914313311811213214612
5186141139140128170223184175140132148141205217145128144188108111159971
3513992128116106115112134200108204205114148881177322421310724816719613
3126129907866105795980819755371047222123916116821217717719616920221519
4231200255171186184228174164154173200143166170152165169143167154169147
1661521371661391731851951571751511261961311581492151891671761381551401
5712219391120116159164132169961201121271418611512611913916291120107114
1071019810710417384999410012410011513569102168797811385157911159460881
3418420820725423220018917919022521515824823720018225919320915919119824
0184180204187201166166162207191183212194271216203232176156212157165145
1332322401811841832302211421662072011802021511631681581571681661961461
5912011414111111812412713010513714810297144135135881531031191451132022
0110316212412915697145162149125891011047687668367589115191114114867981
9660695862104681411431471531321421251291301301301811451251831291201331
3112512712211610911613811011611711310611210813015610611497101110104105
1001081091121031138892961011128185978210980791107573818074988780718910
0778272887311289779769587574776155676060716467545864544713911110110112
2114123137193111129102102120131191123117124991781521096810414310210611
2137267207571031441096257811211211662002178580163126112109841031351441
3812492154143175156114224113288177881041261291557412315510174105176254

2629416113176180915794911291551551411568924022027320419215517716214718
5239328180154157200140165173161151209150223201158158160183158183268154
1691972441431171451401151621592202181902171591631621081171601181111571
0814113412320217611112813017611810518514215921110718018719096971301472
0613393968512514913114986203831251211285212073926678106949256149969595
5140223154182217206181171263162207207181175211217212190163162140187169
2301561611641621441532092061842001472012722011501852321331622401321462
2514915611314415814413916715813512716813416318217821115613214417015010
1146141163128142154150140157127158163146111171102141114122110129921161
9689155140180888010711567821559115221310810210511714580907813417697120
5113757581752282261871622411681911851771842231481441592112361771362451
6125819612715315920013217213912118114613416819918715825115212319915319
1127154981182541651621221459313916911712711112516295118134162106109110
1261071491301521231711249210118211995145182124912751722391371141171809
5109202761271531251001085410392139168155137382072112362072002332272552
2538017828526220320323322624633119524622625718121519619320223126224819
4191178210265207214229196167187153195184182229142235217201145168131148
3191562122362302781722001581511631521382102091691451211201621801211761
3014013613715914113814411718713626813419821124114721111612016516919017
8881361532361497084125162149127151809313511810168871101441071731331798
9602001851513341461971341251732072151181671351312351101351181201111611
4715110513814923214813412715915923423210412912114416311415610513112512
8138941081481041489179739414858132125895892146140103805613976717051109
1162722972603222472702612452692612513272792682392332643503273842433022
4221323722627033823724034525921325930927623938826627322526927131525928
1410206338429322373239233243215368248266230342261231356281251196192268
3122141962542331982541942462272552151591802261441521471551561761891731
4817713915915415714714416019515419715923320516015215320620217318017113
7162297210196224286139133156145153164124166128201219247158210165216112
1241451451561421241181081631542161431052382441141721641391411291581101
8923613410017412224623811213599179176118131121151203136739196187591571
1391105664247839310776836947557064817213278303209216249246261339342237
2132522513423793011993332173023183572782343232492622872593012351742281
8418529818132118418226927721325224319727117417320318024819323623918922
6242179169163184161177190189336176188176187257349222312178193169158144
1322111611512022031501671701511401522091242762961342009911320311615912
8155183209137162157102195145188139187106133123165102149126116105123133
1481291021831521191111751318311011890196818497951071996396675913665143
6885688095181766373719017825018125931920723819922519045918823426637621
6233214150232194160149248207347227238182208193344157179138171168198241

171182136171196155203127199250173183186233191199144334148143150202162 1
291951201412551532011831102233321341942212851311863951351071201031531 2
210421223916882103113155107951151491201111401601872211191361631912691 4
762711571173542541773473021274212672403322814452972282342252442502403 2
332825223823420232319728426735625120627621621921026020525122125634231 4
228176239299340214198186296188257287349187219210219242164166253166175 2
072202412851841721772112151791471912242334492242571531782561453043081 8
339128929824920216916218819725215521014517426133319824919217115613510 9
183961042041651961481551452192241891811751081561041101691041211412012 6
510212630112110011412614513423015327014417110310015674104105351255346 1
068512421515213110414886114403357909995121233104801501041592713533072 3
723542926931125131526123929731032131025433423130133536427224528824325 6
270259232270239261354225261299206231253256313196227353268523287361257 1
852292112562582712812092181832721921762072242652212021691662082091881 8
221421220018319418423227727724121416721618930217324916717116320718719 1
297172195187199164224151156152219166209169146137146190153242162121263 1
632302302231242581192231711371211391501451641542281001342039512410013 0
132221931111619615228491152891601489111814412315410821317212271959311 0
155133171137146961071278613017115511180801491661616796957280253725699 7
036853343241745596435234837034838533450837243941438234435235142445141 7
479320380384449577472401384496365515304402344551394457519332293379282 2
833853212924143744843835874144813764704472652953063063223734443663703 0
852333634337347832730730127229326927228028833324727432326233635056127 7
325275224348264338294540282416341261255250275229381496250249327293251 2
572832322552882373213962092102402302722732102132352192191922573212342 4
418323530932638625421229921818723730421520527622117522422822320828026 4
228210194208265177247177188181259287189203205267201185188230184166486 2
141561551671892251501802531562422262251462551643671722641461501962071 3
612420217325414312919415116017317212213313315019638020815617516795132 2
049992118112153138119941021119394140125102125931431361121599411817112 0
103131222206105123146881491264510886581051115067757068746648706038761 2
92920182525”

4.2.3.2 Even Odd on rewriting with the total numbers based key coding pattern at verse level

In the previous evidence in Chapter 4.2.3.1, I presented a key coding pattern based evidence that showed we can rewrite the full text of Quran by its verse level natural text numbers, which are chapter, verses, words and letters. The evidence was observed in verse level data considering all the 6236 numbered verses. As per the general rules of any suitable key coding pattern evidence of the Main 19 System, we also need to test the even and odd coding pattern as the obligatory follow up coding tests for each successful key

coding patterns. For the details about why we always test with the even and odd coding patterns as follow up test, one can read the Chapter 4.1.1. When I tested this, I observed that there is also the even odd successful coding of Evidence 4.2.3.1. Therefore, I present that code as an evidence here.

When we test the even and odd coding pattern of the previous evidence of Chapter 4.2.3.1, we observe that it also exist over the full text of Quran considering 6236 numbered verses as presented below.

Considering all the 6236 numbered verses of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [(For the Verse with General Verse Index 6235) Chapter index + Special verse index + Total Words + Total Letters] [(For the Verse with General Verse Index 6236) Chapter index + Special verse index + Total Words + Total Letters] . . . . . [(For the Verse with General Verse Index 1) Chapter index + Special verse index + Total Words + Total Letters] [(For the Verse with General Verse Index 2) Chapter index + Special verse index + Total Words + Total Letters]

Here the "+" symbol stands for the sum operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [114+5+5+20] [114+6+3+13]. . . . [1 + 1 + 4 + 19] [1 + 2 + 4 + 18]

And, the final number after all the concatenation would look like this:

> [144] [136]. . . . . [25] [25]
>
> 144136 2525

Here is the proof with a reproducible R code that rewrites, namely decodes, the full text of Quran by the sum of the 4 different descriptor numbers first and then test this big number.

```
x <- nQuran # all 6236 verses, verse level data as input

ev <- which((x$VerseI %% 2) == 0)
ev <- x$chapter[ev] + x$verse[ev] + x$vwords[ev] + x$vletters[ev]

od <- which((x$VerseI %% 2) != 0)
od <- x$chapter[od] + x$verse[od] + x$vwords[od] + x$vletters[od]

tmp <- paste0(ev,od) #pair even and odd numbers
```

```r
tmpr <- rev(tmp)
tmpr <- paste0(tmpr, collapse = "")
#Test if mod 19 is 0
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

print(paste0("Number of digits in the coding numbers is: ",
nchar(tmpr)))

## [1] "Number of digits in the coding numbers is: 17790"
```

For the reference, to the best of my knowledge, Evidence 4.2.3.2 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 4.2.3.2 had been available in another article, which is very unlikely, then in such a case, I surely add a citation and update the online version of this book.

Let's add it to the counters for probability calculation. We also tried it on 6348 verses, so 2 trials, 1 success.

```r
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  2
key_codings_success_nums <- key_codings_success_nums + 1
```

Also, here is the "17790" digits length big even-odd number of Evidence 4.2.3.2:

"1361441391271261331381421361281321361311251281361351331381321501501351
3331381351361291301301251281301291371241351301311431311351191281311321
3113812612913312712912912612612316712411113613112113212412012111812212
8121129126128134136125114110135128141129126128119118118117116134134143
1211221221221242101561861971581151291671251471261231241401281251301431
3212812313011912112211712312411611611712012812315212213111610811211711
7117117113112112112124124123119116119120122116110101124138138131125123
1281251281191301171141201141111161101171111091221511411191201181171221
1311411411311211010612614712816112512012911112211811611311611711712111
9107111110131134143140134139139164135136130132135130155164120125121121
1171291261111191161081061019713312913812812712812812812713611811711611
7115118111110113119119110108103107110124129122127120117125122114111116
1091341091081091051031071301131181141121151151191121131201081131151021
0810312012212612811512211511611711611417517414414212510810710710110210

5159126128128137122122118116116123116120108111123116115117136106108102
1031021491371531401481511361561341261471281341251251191141211311321201
3013513612411811210310911811798114115121971441251221181151161151111061
1011211311112311010410210410115013213111912912812712111512611911511411
0112113111110109107103108105104103102101102971451331431331351471301261
3613013212312212312012412512512912311911711511811311810610610710610510
6104981061059999106103979117014813914015114016013913612813613913713212
6134130132124137130135124113114110118119119119126112110112115110121102
1041011029998979695203158188172137143124125124126136129127131115120132
1201131191231231281191071131221101141091071061021001059894101969114914
5155143154141144155137143136139146133135130130125131134134136124149117
1231201211131191201151151121101111141011021041041031021029697969594931
5915814516015113812714213213616913215111712912013613014311613112213512
8125122124121118137128149145135136137127123130122122126124118114122122
1171131141101161121171131171071151201099711410294971031081081071019718
5142142151166138142149148138141141138140132127131130134142122126124122
1174121191151181181111201231131081021091061051041161051049910710510610
3102939692908785905001321231331261501351131081251221271131071171041079
9948916515613214415217514612512614212913813511914515113412913914512912
1135124111117118135185149144162138160111154115116119116125125102110136
1071141159917110310915810410213716716216215015213614413313512613313013
5138152124121127121111121120104112109110991069898112102961301009910189
9392132929391142136143144137143136133141133141143128122127128127129128
1311391151101141151181131491411051041081141391191381151041191111161171
1311898159108101979281771441931481671691411481361661741571551281661281
2812212913414814912812712913111012211412411312410410312198145102123102
9810195999893125898891949489147158168159136129130157148142156163123144
1341551151271261141271571411141141512123153133110174198224149314136202 1
7018321212813919826316411315118724913821516222928111614317512618412314
6149144222133158168135144125124141129179165178180157148193121128163182
1591811671231571951151101771272751241651591301441341522281911221051061
1617328418638419118014515813433713814333017818814518213713916713616013
2190129160227198233183269180137126136287114352122123164166154127123164
2101852391671922712751431622031721861501932013141712481491531692112962
0114414221915119022920012325715214915312710723110911310617317216216218
0172174167168167167176159162164163157156148148157154151162164152160165
1501381341561501371561611551451311381321291331291301371351281211591321
2711711211212711211010810510811010211010198969697113103112102101879795
1011029794868784838285979682797778717674166155163153157151149149141147
1461451411431281411341391431371361351571331591311311291241271151251251

2312513012014211812911612911413211218311010810812910611597103116101104
9997949697949698919196851048489828071706863136132128129137136126146126
1351241231411391191301111191431241201351071221341041091221231081201299
4112951071181011079098989411396901151051099684939494811351271311351371
2213412912112114611912512012012311612911611511511711011911410811611210
5103245173153134148136162989620093969493989192858485868586857478737476
7476691311511511401361441371341191261161391241261221211141231161171201
2011311210611511610717611210611694133959792878380827477737271676660149
1621431471401361291311621521381361281321361351401291341291321211311311
2211810810911511012112812610510612310912010195951019199113911048885857
4767876737470696867161139126131127120150155141155116113119110111122118
1201241279610110012910099112102112137111109869910687114831191219699871
0768122161146173206176222259122232922111521141031461721303801502232322
9216812413413517511117120221623513711316524718811488103191165165741267
3244125161152151146186136155127133122153151111114124128211153145102191
2781221281891131489991110777225614914891215177186161152174173164130242
1451631371341872221171472041612991121241491521751531781261061331851368
3501321261721541321771471501321411341591541681861361681041431311881481
1513413413410914611012470116159928582491231361331581261211291101191191
1812412010211110010212312911212712614310911995113111110114118989587921
0196959194107102104959489928880887210196837870896148164166175194204182
1761691631821491621661541461491491571981471461541511591661522021411591
4715416314212714014015314017913015115912815615411913012611613413114212
5128143112170211126118120110971181111411701221051311401041189710480160
1151161091149090789181826047166230192150168232178160237178121165127153
1161551391691221091451091351231501351541441301792121951691591081781221
4724020024512316112612714016111315694984846146186161161253144141223144
1762441541421302081931461851381291631389115818316514413313019012411916
7158129102911461651831721031611351331269892137138858466452121872052511
5519117127318916617219114314114916315816425520217222314315520317515318
0162212160118142148155179155145188160137146191158132191139124194126191
2091411061401221972531281531711051001382101379314011713013499120129129
1321141402029816410911377442082022261652951501972062091351801441701381
6117815315113716117415819816517314319314120817817814215021417511912826
1129147144114114144107891681021211361141372281582111591061371281331588
0907990166177203203219172122201967514714817016114314514714113914714514
0158182146137155150143149122120148154129137148150154145115119119117120
1171161311151161321181151391501371121361061121019911513712010712310410
8126145151217105231136176969782991109498819492791068511193107839688685
8242237246234233250232232229233228242229230233222222220227221220215220

2172522232112042092142122142222202092162102072092062022012021981952001
9019419419219219118518918818519219518418318418117818118118018118617720
8181171166163168162168180164163267157158165169173156154150154146160145
1401451461501531421421371411401411381381431431341391331351291301301341
4112713012612812312113011112611711811013111211811610210911510210698959
6981001051011011121209510093991139299938480819610492879175719579747165
1068267916780845655545116216219417116216616615714814814414716914716014
1162157169129125142125160124115122131126143138154136126128121199135137
1081211071201491191211191411161241299712312510312497100848213297931131
0212181861211189512011390108998179615656534020222921517917124019812720
5161139125138187147110156158178951401197413576779225758010814819120 21
9517713715911711211893145124160160135131130157120115150193152136241171
1461351661261941321161362611502401151001281211171031371641751461091591
5194141143184153180108110177124118122969819212211921421517715219014615
4166139133173150134199213170167166244137450195256412208151121114124120
1549411715614616831418532113721316614214914015613415214814514915813617
8242133154121116121177116861351629113721119219268901099311697151145113
1181281181111681228910811512812412713596111115738576117152119733719221
7177149135182111157107136921331341601921061191351541871381131311101738
3861211277791535636139129183138192152189152139131170126221182176137122
1451431531771781561391431181041521181181741351981549513616013113215410
1123958111597759573811132231589189769272433515417918413717417319815516
7154118190121134153127159191159157151142184212184128122126177221150160
1121561011251751441459218412816111119814912512790140108112191114901281
1414583190881481188791869981341981911881982051922491911942062362362421
9015017620819617113216814813613216919313818116918917620714717215915112
2114193139208179171172137162128122129131203152154153133103185152160193
1301941131851171861051011431991349010322910112312086122122112149101104
1367853331821951981821672041981921531811631951781631411471291621491401
4814013513814515414715116318819217519821814712213015614012811313413011
5158127138147143209125142127241137123137148109135125122869998113898812
8145103110102103176150961391261108413084131711051156885868648583642782
8027427627027826726426326727527526228226126425825526826225725424925125
5263255256252267243237247239242243253266238259256238244260232242257225
2222292282272372362152192172202202372442182412092062182082112352062202
2122920621120119620619618719822219018720018619221918018620719017217818
7177180182180204172169181167174184168179193164187162163171168168156186
1541511631531561661611411441481471501451401451541461381371411391341421
3813914114712912612812513212412813412012313112511812013011011910915911
4133102112101107100991031091211311101928997921101271029913010592938310

3104939188878010010290807699758810477849268818169826457766171837885866
2513115913215317615314814018013820015011514812116115014515917314814011
0149138157117109127130141132981431391141521211501041081441191111181031
4111610611388113104969095108150161124151126911038589838311485115118948
6111142119791962343054762101893511451362902031701311761571081311561282
0612224510816920518413416712931013232215648313514016115516510910412819
3230911488088110125116116107165817993771288314111817485177221192186180
1781661781842071581681741701611831611772041601431531641521491421532181
4413917313615013514416515313216013915915615115414312514118514512614311
5139123131147146124138108109112113113101124116138132108991151131151711
0096120908611411282109961921248485971282207388177126701259211111091666
1162647069516264678153515251413431741491531362462591741701411261731412
1514315516115815412317512814915718616520712212111112614318814212887109
1652451161171682131481651099915517610516411414018093165108627112722116
3851441258696159761078884873598181132731861691711931821581561902071921
7016915416417221316415517615015418022216415721414414719015516618115618
6174171160131186192140142125131131131140131129132122125120122124120145
1141141041291181111151201711261231651331261311161379610314611510511210
0122149114123839311414972108767211010591798165926986768380101709879111
7660216252219223244255193232209192181203231171221206166167199187182216
2091851751781851971531441641831561661581591761692491941372051351481571
9516516819723815014612914618319012314318415715114916818723213516411511
1147136136163117155109120152119110124122166118971089111317510011010287
1017622517484818273676867646072606759656766938065579960838489617855116
4865648248614250241771711671421341601411301621261311521341371351521401
4112613813214317021713718213513312613413813412415216212413813714214123
5951161241321081141211151421361111321221131261271031011161161149812396
9786110919699981398791113701128879759887776563738787859384638989444526
2442131571831752031821511991771501761801582101742101751231381761201691
6422011414614828314815919015622215313117213912516914313311811213214612
5186141139140128170223184175140132148141205217145128144188108111159971
3513992128116106115112134200108204205114148881177322421310724816719613
3126129907866105795980819755371047222123916116821217717719616920221519
4231200255171186184228174164154173200143166170152165169143167154169147
1661521371661391731851951571751511261961311581492151891671761381551401
5712219391120116159164132169961201121271418611512611913916291120107114
1071019810710417384999410012410011513569102168797811385157911159460881
3418420820725423220018917919022521515824823720018225919320915919119824
0184180204187201166166162207191183212194271216203232176156212157165145
1332322401811841832302211421662072011802021511631681581571681661961461

591201141411111181241271301051371481029714413513588153103119145113202 2
011031621241291569714516214912589101104768766836758911519111411486798 1
966069586210468141143147153132142125129130130130181145125183129120133 1
311251271221161091161381101161171131061121081301561061149710111010410 5
100108109112103113889296101112818597821098079110757381807498878071891 0
077827288731128977976958757477615567606071646754586454471391111011011 2
211412313719311112910210212013119112311712499178152109681041431021061 1
213726720757103144109625781121121166200217858016312611210984103135144 1
381249215414317515611422411328817788104126129155741231551017410517625 4
262941611317618091579491129155155141156892402202732041921551771621471 8
523932818015415720014016517316115120915022320115815816018315818326815 4
169197244143117145140115162159220218190217159163162108117160118111157 1
081411341232021761111281301761181051851421592111071801871909697130147 2
061339396851251491311498620383125121128521207392667810694925614996959 5
514022315418221720618117126316220720718117521121721219016316214018716 9
230156161164162144153209206184200147201272201150185232133162240132146 2
251491561131441581441391671581351271681341631821782111561321441701501 0
114614116312814215415014015712715816314611117110214111412211012992116 1
968915514018088801071156782155911522131081021051171458090781341769712 0
511375758175228226187162241168191185177184223148144159211236177136245 1
612581961271531592001321721391211811461341681991871582511521231991531 9
112715498118254165162122145931391691171271111251629511813416210610911 0
126107149130152123171124921011821199514518212491275172239137114117180 9
510920276127153125100108541039213916815513738207211236207200233227255 2
253801782852622032032332262463311952462262571812151961932022312622481 9
419117821026520721422919616718715319518418222914223521720114516813114 8
319156212236230278172200158151163152138210209169145121120162180121176 1
301401361371591411381441171871362681341982112411472111161201651691901 7
888136153236149708412516214912715180931351181016887110144107173133179 8
960200185151334146197134125173207215118167135131235110135118120111161 1
471511051381492321481341271591592342321041291211441631141561051311251 2
813894108148104148917973941485813212589589214614010380561397671705110 9
116272297260322247270261245269261251327279268239233264350327384243302 2
422132372262703382372403452592132593092762393882662732252692713152592 8
141020633842932237323923324321536824826623034226123135628125119619226 8
312214196254233198254194246227255215159180226144152147155156176189173 1
481771391591541571471441601951541971592332051601521532062021731801711 3
716229721019622428613913315614515316412416612820121924715821016521611 2
124145145156142124118108163154216143105238244114172164139141129158110 1
892361341001741222462381121359917917611813112115120313673919618759157 1

139110566424783931077683694755706481721327830320921624924626133934223721325225134237930119933321730231835727823432324926228725930123517422818418529818132118418226927721325224319727117417320318024819323623918922624217916916318416117719018933617618817618725734922231217819316915814413221116115120220315016717015114015220912427629613420099113203116159128155183209137162157102195145188139187106133123165102149126116105123133148129102183152119111175131831101189019681849795107199639667591366514368856880951817663737190178250181259319207238199225190459188234266376216233214150232194160149248207347227238182208193344157179138171168198241171182136171196155203127199250173183186233191199144334148143150202162129195120141255153201183110223332134194221285131186395135107120103153122104212239168821031131551079511514912011114016018722111913616319126914762711571173542541773473021274212672403322814452972282342252442502403233282522382342023231972842673562512062762162192102602052512212563423142281762392993402141981862961882572873491872192102192421641662531661752072202412851841721772112151791471912242334492242571531782561453043081833912892982492021691621881972521552101451742613331982491921711561351091839610420416519614815514521922418918117510815610411016910412114120126510212630112110011412614513423015327014417110310015674104105351255346106851242151521311041488611440335790999512123310480150104159271353307237235429269311251315261239297310321310254334231301335364272245288243256270259232270239261354225261299206231253256313196227353268523287361257185229211256258271281209218183272192176207224265221202169166208209188182214212200183194184232277277241214167216189302173249167171163207187191297172195187199164224151156152219166209169146137146190153242162121263163230230223124258119223171137121139150145164154228100134203951241001301322219311116196152284911528916014891118144123154108213172122719593110155133171137146961071278613017115511180801491661616796957280253725699703685334324174559643523483703483853345083724394143823443523514244514174793203803844495774724013844963655153044023445513944575193322933792822833853212924143744843835874144813764704472652953063063223734443663703085233363433734783273073012722932692722802883332472743232623363505612773252752243482643382945402824163412612552502752293814962502493272932512572832322552882373213962092102402302722732102132352192191922573212342441832353093263862542122992181872373042152052762211752242282232082802642282101942082651772471771881812592871892032052672011851882301841664862141561551671892251501802531562422262251462551643671722641461501962071361242021732541431291941511601731721221331331501963802081561751679513221049992118112153138119941021119394140125102125931431361121599411817112 0

1031312222061051231468814912645108865810511150677570687466487060387612
92920182525”

FACT:

When we test the even and odd coding pattern of the previous evidence of Chapter 4.2.3.1 by classifying the verses as even and odd with respect to chapters, we again observe that it also exist over the full text of Quran considering 6348 numbered verses as presented below.

Considering all the 6348 verses of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> . . . . . [Chapter 1 + Verse 1 in Chapter 1 + Total Words in Verse 1 of Chapter 1 + Total Letters in Verse 1 of Chapter 1] [Chapter 2 + Verse 1 in Chapter 2 + Total Words in Verse 1 of Chapter 2 + Total Letters in Verse 1 of Chapter 22]

Here the “+” symbol stands for the sum operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> . . . . [1 + 1 + 4 + 19] [1 + 1 + 4 + 19]

And, the final number after all the concatenation would look like this:

> 25 25
>
> 2525

Note that, here, 25 represents the Basmala verses at the beginning of each chapter. Since the even and odd numbers are in different length, I did not provide the tail of it, which look like the head of the number as it is reversed like in the rewriting coding pattern.

Here is the proof with a reproducible R code that rewrites, namely decodes, the full text of Quran by the sum of the 4 different descriptor numbers first and then test this big number.

```
x <- unQuran # all 6348 verses, verse level data as input

ev <- which((x$chapter %% 2) == 0)
ev <- x$chapter[ev] + x$verse[ev] + x$vwords[ev] + x$vletters[ev]

od <- which((x$chapter %% 2) != 0)
od <- x$chapter[od] + x$verse[od] + x$vwords[od] + x$vletters[od]

tmp <- paste0(ev,od) #pair even and odd numbers
```

```r
tmpr <- rev(tmp)
tmpr <- paste0(tmpr, collapse = "")
#Test if mod 19 is 0
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0
```

Also, here is the “18547” digits length big number of the Fact of Evidence 4.2.3.2:

“1362611443541392251272611262991332061372311362531312561253131281961352271503531502681355231332871303611252571281851312291432111312561352581192711292811262091292181331831272721291921291761262071262241232651272211362021311691211661322081242091201881211821182141252121352001281831411941291841262321282771192771182411182141171671162161231892103021561731862491971671581711151631292071671871211911402971281721251951301871431991321641282241231511301561191521212191221661172091231691241461161371161461171901201531192421171621171211172631171631132301122301122231121241172581241191382231381711311371251211231391281501251451281641191541302281171001141341202031149511112411610011013011713211122110993115111126161147961281521612841259112015212989111160122148118911161181131441161231171541171081212131191721071221117111095113931331101291551381331281711271371281461289612810712712713686118130117171116155117111115801188011114911016611316111967119961109510872103801072531107211156130991137011836114811226115611152911929112201131812025108251131381151421021361081281031321091361591361261351281331281381371321221341221331181381161351161361231291161301201321081301111291231371161241151351171301361311061301081281021311031321021311071381441281251671221241181111151261161221151281111211061291101261121281131341111361231251101141041101021241041341011341051431451211331221431221331221351241471221301251261471361261301231321241231201221281231231201521241221251311251161291081231121191181171241151241181231131191181161061191061201071221061161051101061011041169812210615110514199119991201061181031179712291113103114203114158113188112172110137106143114124131125134124143126140136134129139127139131164115135120136132130120132113135119130123155123164128120119125107121113121122117110129114126109111107119106116102108100106105101989794112101124961299112210112715912015811714512516012215111413811112711614210913213413610916910813210915110511710312910712011013612013012214312611612813111512212213511512811612511712211612411412117511817413714412814299125185108142107142107151101166102138105142108149149148137138153141140141148138151

4013613215612713413112613014713412814213412212512612512411912211411712
1412131119132115120118130118135111136120124123118113112108103102109109
1181061171059810411411611510512110497991061071501051321061311031191021
2993128961279212190115871268511990115971141651101561121321131441111521
1017510914610712510312610814210512910413810313510211910114510215197134
1041291701391481451391291401211511351401241601111391171361181281351369
5139167137162132162126150134152130136132144124133137135130126135133124
1301131351141381101521181241191211191271191211261111121211101201121041
1511211010912111010299104106101981029899112981029796961309510010299149
1011458915593143921541321419214493155911379314314413619313914814616713
3169135141130148130136125166131174134157134155136128124166149128117128
1231221201291211341131481191491201281151271151291121311101101111221141
1410112410211310412410410410310310212110298961459710296123951029498931
0110095149991459813593136125137891278812391130941229412289126911241741
1819811422412214912231411713611320211417011018311621211212811713911389
1171161071431151751201261091849712311414610214994144972221031331081581
0816810713510114497125981245001411328712318213315912618115016713512311
3157108195125115122110127177113127107851171731042841071869938494191891
8096145185158149134144337162138138143160330111831543521151221161231191
6411616612515412512710212311016413621010718511423911516799192171271103
2751091431581621042031021721371869415014281136173143172144162137162143
1801361721331741411671331681411671431671281761221591271621281641271631
2915712815613114813914811515711015411415111516211816411315214916014116
5105150104138108134114156139150119137138156115161104155119145111131116
1381171321131291181339812915913010813710113597128921218115977132921271
4711715811216811215912713611212911013010815710514810814211015610216311
0123101144981349615596115971271131261031141121271021571011418711497114
9515210112310215397133941108690871988426383164821138515197187962498213
8792157716278229712817688741297917913616513217812818012915713714813619
3126121146128126163135861242751231241411651391591191301301441111341191
5214322812419112012213510510710612211613484104178109188122145123182108
1371201391291679413611216095132107190118129101160107227901989823398183
9426911318096137901261151361052871091149682841939320194314941718124877
1491311531511691512111402961362011441441371421342191191511261901162291
3920012412312625712215212114911415312312711610711723112010912011311310
6112801061661151551161631071531761571121511061491161499414113314795146
9714592141871438312880141821347413977143731377213671135671576613360159
7513116113113912912612413112712711512012515012515512314112515513011612
0113142119118110129111116122129118114120132124112127183961101011081001
0812912910010699115112971021031121161371011111041099986979994106968797

1149483961199812191969199968785107104688473893808215080223712327029268
1686312478134135135127175131111135171137202122216134235129137121113121
1651462471191881251141208812010312319111616512916511674115126115731177
1110215119177114186108161116152112174105173103164245130173242153145134
1631481371361341621879822296117200147932049616194299931129812491149921
5285175841538517886126851068613385185741367883735074697612374136761336
9158761261491211621291431101471191401191361181291241311201621021521111
3810013610212812313212913611213512714012612914313410912911913295121113
1311111311101221141181181089810995115871109212110112896126951059110694
1231071091021201041019595949589101929188998011388917210410188968583857
8747076897861764873677416670230691926815067168742321221781611601462371
7317820612117616522212725915312211623215592139211169152122114109103145
1461091721351301237215024413512515416114415213015117914621218619513616
9155159127108133178122122153147151240111200114245124123128161211126153
1271451401021611911132781561229412898189481134614865992129118711020577
2517215525619114917114827391189701661321721261911721431541411321491771
6314715815016413225514120213417215922315414316815518620313617516815310
4180143162131212188160148118115142134148134155134179109155146145110188
1241607013711614615919192158851328219149139681241641941661261751911942
0920414118210617614016912216319718225314912816215316617115410514610014
9138149210157137198931471401461171541301511341599916612015212920212914
1132159114147140154202163981421641271091401131407715344140631791471301
4815117015916112814315614515414711914113013912614711614513414013115814
2182125146128137143155112150170143211149126122118120120148110154971291
1813711114814115017015412214510511513111914011910411711812097117104116
8013116011511511611613210911811411590139901507813791112811368210660112
4710166991461151861371611201611072531231441041411082231261441451761512
4421715410514223113013620817619396146971858213899129110163941389891811
5894183921657914410613385130111190931241071198316796158881296810258916
1146162165162183194172171103162161166135166133157126148981489214413714
7138169851478416066141451626415720816920212922612516514229512515016019
7124206115209122135131180126144143170138138154161136178126153128151121
1371991611351741371581081981211651071731201431491931191411212081191781
4117811614212415012921497175123119125128103261124129971471001448411482
1141321449710793891131681021021211218113686114121137118228951581202111
1315990106108137991288113379158618056905679539040166591771602031352031
3121913017215712212020111596150751936215224213623724124617123414623313
5250166232126232194229132233116228136242261229150230240233115222100222
1282201212271172211032201372151642201752171462521092231592111512049420
9141214143212184214153222180220108209110216177210124207118209122206962

0298201192202122198119195572009319011619497194151192145192113191118185
1281891181881111851681921221958918410818311518412818112417812718113518
1961801111811151867317785208761811171711521661191637316837162551681391
8012916418316313826719215715215818916515216913917313115617015412615022
1154182146176160137145122140145145143146153150177153178142156142139137
1431411181401041411521381181381181431741431351341981391541339513513612
9160130131130132134154141101127123130951268112811512397121751309511173
1268111711311822311015813191112891187611692102721094311535102531061989
8191951889619898205100192105249101191101194112206120236952361002429319
0991501131769220899196931718413280168811489613610413292169871939113875
1817116995189791767420771147651721061598215167122911146719380139842085
6179551715417251137601622021282291222151291791311712032401521981541271
5320513316110313918512515213816018719314713011019415611315818517811795
1861401051191017414313519976134779079103225229751018012310812014886191
1222021221951121771491371011591041171361127811853933314551124364160278
5828021427421527617727015227819026714626415426316626713927513327517326
2150282134261199264213258170255167268166262244257137254450249195251256
2554122632082551512561212521142671242431202371542479423911724215624314
6253168266314238185259321256137238213244166260142232149242140257156225
1342221522291482281452271492371582361362151782192422171332201542201212
3711624412121817724111620986206135218162208912111372352112061922201922
2168229902061092115620119219621720617719614918713519818222211119015718
7107200136186921921332191341801601861922071061901191721351781541871871
7713818011318213118011020417317283169861811211671271747718491168531795
6193361645418715416217916318417113716817416817315619818615515416715115
4163118153190156121166134161153141127144159148191147159150157145151140
1421451841542121461841381281371221411261391771342211421501381601391121
4115614710112912512617512814412514513292124184128128134161120111123198
1311491251251181271209013014011010811911210919115911411490133128102114
1121451018310719010088991481031181098712191131861109919281893497529218
2110195127198102182991671302041051989219293153831811031631041959317891
1638814187147801291001621021499014080148761409913575138881451041547714
7841519216368188811928117569198822186414757122761306115671140831287811
3851348613062115511583112749138196147234143305209476125210142189127351
2411451371361232901372031481701091311351761251571221088613199156981281
1320689122882451281081451691032051101841021341031671761291503109613213
9322126156110483841351301408416113115571165105109115104681288519386230
8691481485880508815911013212515311617611615310714816514081180791389320
0771501281158314814112111816117415085145471593431731741481491401531101
3614924613825915717411717010914112712613017314114113221598143143155139

161114158152154121123150175104128108149144157119186111165118207103122 1
411211161111061261131438818811314210412896879010995165108245150116161 1
171241681512131261489116510310985998915583176831051141648511411514011 8
180949386165111108142621197179127482211771632218519214418612518086178 9
616615917876184107207881588416887174359170811618118313216173177452042 1
616025214321915322316424415225514919314223215320921819214418113920317 3
231136171150221135206144166165167153199132187160182139216159209156185 1
511751541781431851251971411531851441451641261831431561151661391581231 5
913117614716914624912419413813710820510913511214811315711319510116512 4
168116197138238132150108146991291151461131831151901711231001439618412 0
157901518614911416811218782232109135961641921151241118414785136971361 2
816322011773155881091771201261527011912511092124111122110166911186697 6
110816291641137017569100511106210264876710181765322551174528451814182 4
673186671696817167193641826015872156601906720759192651706716966154931 6
480172652135716499155601768315084154891806122278164551571162144814465 1
476419082155481666118142156501862417443171244160213131157186183192175 1
402031421821251511311991311771311501401761311801291581322101221741252 1
012017512212312413812017614512011416911416410422012911411814611114811 5
283120148171159126190123156165222133153126131131172116139137125961691 0
314314613311511810511211213210014612212514918611414112313983140931281 1
417014922372184108175761407213211014810514191205792178114565128921446 9
188861087611183159809710113570139989279128111116761066011544112177134 1
712001671081422041342051601141411481308816211712673131224152213134107 1
372481351671521961401331411261261291389013278143661701052177913759182 8
013581133971265513437138104134721244115218416220812420713825413723214 2
200141189235179951901162251242151321581082481142371212001151821422591 3
619311120913215912219111319812624012718410318010120411618711620111416 6
981661231629620797191861831102129119496271992169820313923287176911561 1
321270157112165881457913375232982408718177184651836323073221871428716 6
852079320184180632028915189163441684515826157421682211662391961611461 6
815921212017711417714119611116911820212421512719413023110520013725514 8
171102186971841442281351741351648815415317310320011914314516611317020 2
152201165103169162143124167129154156169971471451661621521491371251668 9
139101173104185761958715766175831516712658196911311511589114911421511 4
189861677917681138961556014069157581226219310491681203911613915911116 4
101132101169122961141201231121371271931411118612911510212610211912013 9
131162191911231201171071241149910717810115298109107681041041731438410 2
991069411210013712426710020711557135103691441021091686279577881113121 8
512115716691200115217948560808816313412640112141109143841471031533713 2
240142220125273129204130192130155130177181162145147125185183239129328 1

2018013315413115712520012714012216511617310916111615113820911015011622
3117201113158106158112160108183130158156183106268114154971691011971102
4410414310511710014510814010911511216210315911322088218921909621710115
9112163811628510897117821601091188011179157110108751417313481123802027
4176981118712880130711768911810010577185821427215988211731071121808918
7771909796699758130751477420677133619355966785601256014971131641496786
5420358836412554121471283852135120144731389212466927815410614394175921
5656114149224961139528895177518840104351261751292281552267418712316215
5241101168741911051851761772541842622239414816114413115976211180236911
7757136942459116112925815519615512714115315615989200361322231721541391
8212121718120614618113417116826319916218720715820725118115217512321119
9217153212191190127163154162981401181872541691652301621561221611451649
3162139144169153117209127206111184125200162147952011182721342011621501
0618510923211013312616210724014913213014615222512314917115612411392144
1011581821441191399516714515818213512412791168275134172163239182137178
1142111171561801329514410917020215076101127146153141125163100128108142
5415410315092140139157168127155158137163381463311120017118510215114133
4114146122197110134129125921731162071962158911815516714013518013188235
8011010713511511867120821111551619114715215121310510813810214910523211
7148145134801279015978159134234176232971041201295112113714457163581143
4156207105211131236125207128200138233942271082551482251043801481789128
5792627320394203148233582261322461253318919558246922261462571401811032
1580196561931392027623171262702485119410919111617831210278265303207209
2142162292491962461672611873391533421952371842131822522292511423422353
7921730120119914533316821713130214831831935715627821223423632323024927
8262172287200259158301151235163174152228138184210185209298169181145321
1211841201821622691802771212131762521302431401971362711371741591731412
0313818014424811719318723613623926818913422619824221117924116914716321
1184116161120177165190169189190336178176881881361761531872362571493497
0222843121251781621931491691271581511448013293211135161118151101202682
0387150110167144170107151173140133152179209891246027627229629713426020
0322992471132702032611162451592691282611552511833272092791372681622391
5723310226419535014532718838413924318730210624213321312323716522610227
0149338126237116240105345123259133213148259129309102276183239152388119
2661112731752251312698327111031511825990281196410812068433897429953221
0737319923963233962436721559368136248652661432306834285261682318035695
2811812517619663192732687131290214291964212542672332401983322542811944
4524629722722825523421522515924418025022624014432315232814725215523815
6234176202189323173197148284177267139356159251154206157276147216144219
1602101952601542051972511592212332562053421603141522281531762062392022

991733401802141711981371861622962971882102571962872243492861871392191
3321015621914524215316416416612425316616612817520120721922024724115828
5210184165172216177112211124215145179145147156191142224124233118449108
2241632571541532161781432561051452383042443081141831723911642891392981
4124912920215816911016218918823619713425210015517421012214524617423826
1112333135198992491791921761711181561311351211091511832039613610473204
9116596196187148591551571451132199122410518966181421754710883156931041
0711076169831046912147141552017026564102811267230113121301001781142501
2618114525913431923020715323827019914422517119010345910018815623474266
1043761052163512332552143461501062328519412416021514915224813120710434
7148227862381141824032083571939034499157951791211382331711041688019815
0241104171159182271365331714321964171554552039641273521993482503701733
4818338518633423350819137219943914441433438214834414335215035120242416
2451129417195479120320141380255384153449201577183472110401223384332496
1343651945152213042854021313441865513953941354571075191203321032931533
7912228210428321238523932116829282414103374113484155383107587954141154
8114937612047011144714026516029518730622130611932213637316344419136626
9370147308625237133615734311737335447825432717730734730130227212729328
2692712723532803072882373332352474292742693233112622513363153502615612
3927729732531027532122431034825426433433823129430154033528236441627234
1245261288255243250256275270229259381232496270250239249261327354293225
2512612572992832062322312552532882562373133211963962272093532102682405
2323028727236127325721018521322923521121925621925819227125728132120923
4218244183183272235192309176326207386224254265212221299202218169187166
2372083042092151882051822762142212121752002241832281942231842082322802
7726427722824121021419416720821626518917730224717317724918816718117125
9163287207189187203191205297267172201195185187188199230164184224166151
4861562141521562191551661672091891692251461501371801462531901561532422
4222616222512114626325516316423036723017222326412414625815011919622320
7171136137124121202139173150254145143164129154194228151100160134173203
1729512212413310013313015013219622138093208111156161175961671529528413
2912041529989921601181481129115311813814411912394154102108111213931729
4122140711259510293125110931551431331361711121371591469496118107171127
1208610313013117122215520611110580123801461498816614916112667459610895
8672588010525311172505667997570703668874266661482970296020381872525252525”

4.2.4 Rewrite the full text of Quran regarding general verse indexes

Since the beginning of the main chapter, Chapter 4, I have been presenting key coding pattern based evidences. Until this chapter, for each of the 6 of them, we witnessed that there is also even odd version of each code that coupled each of those 6 codes. Since there

were 6 codes, I started thinking whether there is also 7th such coupled key coding based evidence code with even odd coding. The reason I expected and thus hypothesized that there must be also a 7th coupled codes that I did not discover yet is because of this verse, whose real meaning is yet to be clearly witnessed. I will use a Turkish translation and then translate the Turkish translation of the verse to English myself. This is because, I find the direct English translations does not directly translate the direct meaning of the word "al-Mathani" as "pair" but translate that as "repeated", which may be an alternative translation. They might have done so as the "pair" might seem less meaningful to them. However, I had seen some Turkish translations who directly translated the verse. Considering the 19 system code pairs so far, I witnessed 6 pairs. Then I recalled this verse and hypothesized that this verse might be about these amazing key coding based 19 based system codes with even odd pair I presented in this main chapter, Chapter 4. Then the next question was, what is the 7th code pair that? I discovered that pair as well and will present in in this chapter. Let me first present the verse about the "the seven pairs" in the original Turkish translation from the author and then translate it to English myself.

Turkish original translation from the author:

> 15:87 Andolsun! Biz sana yedi ikili ile büyük Kur'anı verdik. (Kuran, B.Saglam, kuranmeali.com)

My English translation of this verse:

> "15:87 Surely, We have given you the seven pairs with the great Quran." (Quran, B. Saglam, kuranmeali.com)

The scholars are not fully agreeing about the meaning of this verse but they mostly think that it refers to the first chapter of Quran with the 7 verses, which is Al-Fatiha. It might be true but I suggest all the scholars to consider the 7 pairs of the 19 based codes I discovered and presented in this main chapter so far under Chapter 4.

Now, let's return back the 7th pair of the codes I will present in this chapter. I discovered the key coding pattern of the the 7th pair, whichh completed the 7 pairs of codes, in the exact verse that mentions the "the seven pairs".

The verse 15:87 has the general verse index 1902 considering all the 6348 verse of Quran. Namely, it is the 1902th verse when counted from the first verse. It has 7 words and 36 letters. When concatenated we observe a key coding number as it is multiple of 19 as follows:

> 1902 | 7 | 36 is concatenated
>
> 1902736 /19 = 100144

When I test this key coding pattern over the full text of Quran considering the 6348 verses, I discovered that is it also multiple of 19, which I will present below in more detail.

In Evidence 4.2.2.1, I had used the 4 main descriptors numbers to rewrite the full text of Quran. It was the natural way of rewriting the full text by the 4 main descriptive numbers. However, we can also refer to each verse by their general verse index that we assign from 1 to 6348 to the full text. If we use only use these general verse indexes and refer to each verse, we can similarly rewrite the full text of Quran by the number of words and letters per verse in natural order. As you will see in the following, I will use tthis key coding pattern and rewrite, the full text of Quran regarding the total number of verses 6348.

As we know, Quran is written from right to left and I again follow this same pattern while rewriting the text by the descriptive numbers. As per the rules, whenever we have letters information as have to use rewriting code pattern if we are testing a single text. This represents the rewriting of the whole text of Quran with respect to number of words and letters per general verse index and supports the hypothesis that there is no redundant or missing words or letters in each verse and their orders are also correct.

Considering all the 6348 verse of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [Last General Verse index, 6348 | Total Words in the Verse | Total Letters in the Verse] [General Verse index, 6347 | Total Words in the Verse | Total Letters in the Verse] . . . . . [General Verse index, 2 | Total Words in the Verse | Total Letters in the Verse] [General Verse index, 1 | Total Words in the Verse | Total Letters in the Verse]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [6348 | 3 | 13] [6347 | 5 | 20] . . . . . [2 | 4 | 18] [1 | 4 | 19]

And, the final number after all the concatenation would look like this:

> 6348313 6347520 . . . . . 2418 1419
>
> 63483136347520 24181419

In the following proof, I demonstrate that this hypothesis for the case of 6348, which represents the total general verse indexes of the full text of Quran.

```
#Verse index (VerseI)  as descriptor
x<- data.table(unQuran)
```

```
tmp <- paste0(x$VerseI,x$vwords,x$vletters)
head(tmp)

## [1] "1419" "2418" "3212" "4312" "5419" "6319"

tmpr <- rev(tmp) ## matches the coding from right to left as in
Arabic.
head(tmpr)

## [1] "6348313" "6347520" "6346417" "634528"  "634428"  "6343414"

tmpr <- paste0(tmpr, collapse = '')
cat(as.numeric(as.bigz(tmpr) %% 19))

## 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 47284
```

As per the rule,we have to test even odd coding of each of the key based coding, which I did and discovered that it is also multiple of 19. I will present it in the following chapter after this.

In Evidence 4.2.2.1, we had witnessed that we could rewrite Quran by concatenating the 6348 representation numbers of each verse at the verse level. In this **key coding pattern** based evidence, Evidence 4.2.4, we also witnessed a similar rewriting coding, also using the general verse indexes in all the same 6348 verses.

As per the rules, we have to test only 6348 verses the key coding pattern was clearly from 6348 verse. Therefore we have one trial and one success for this key coding pattern based evidence to add to the counters.

```
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  1
key_codings_success_nums <- key_codings_success_nums + 1
```

For the reference, to the best of my knowledge, Evidence 4.2.4 is also first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself.

One can just copy the big number and paste it into a web based big number calculator and test it herself.

Also, here is the “47284” digits length big number:

“6348313634752063464176345286344286343414634241963415156340520633951563384963374146336419633551563344126333296332411633141963305156329317632841563276196326515632541963247306323731632251963214196320414631951963185176317519631641463154166314419631341563123126311316631041963092146308313630752063062116305520630441763034196302419630172663004186299423629821062974196296315629541862944206293519629272562914196290310628931462882418628731462864166285417628441562834166282414628141962809526279415627816627741962765216275418627421162735206272414627131262703146269213626841962672862664136265296264416626341462624176261424626052662594176258296257176256419625551962544146253725625241762514156250418624931162483116247213624621362452136244419624362162426226241632624041362393166238416623731862364206235419623421836233942623216666231167862301145622931162286236227125662264196225518622493762236206222519622152162204196219520621821262172106216315621562662145176213415621231262115186210310620931362084146207311620641762055186204313620331462024156201518620041961994216198417619794261964186195626619431561932961922146191419619031261893136188413618741461863126185312618431361834136182419618141661804176179417617831561773136176416617541861745206173515617231261711661704196169296168521616762161664176165214616431261634176162316616141961603126159621615821361572116156416615521361542116153415615231161514186150314614931361484196147313614673961457306144313614331561424136141413614032061393126138314613731561363156135315613431461332126132419613131361306326129317612894561274156126312612561961242661234166122314612121461202126119414611851561174176116620611552061143116113415611241561114196110210610931361085216107420610641561055206104521610394361025196101620610041760994206098523609751960961040609511496094314609351860923176091417609031560895266088623608731260866186085616608431260832126082286081166080419607941560783136077422607641360753146074415607341660724176071417607062560692126068212606721260663136065312606441560633106062211606131460606186059619605841360573136056210605531460544176053419605231560515196050315604942060484146047412604661960454196044214604331160424166041212604093160393136038313603731560363126035311603441560334196032423603129603031460293116028310602731460263156025617602431460234156022522602141260204186019619601821160174166016214601541960143106013412601241760115196010210600941660083116007313600631560054146004413600314656002146560011040600094059996275998413599731459963155995211599421359933165992419599194159903155989417598841859876265986414598541559843135983312598231359816185980513597951859782105977313597662359754195974419597352159729375971314597041659693125968314596731459664195965624596431659636305962420596162759606315959419595883659574195956313595563259544165953522595231659514165950213594929594841

5594762459467255945417594462659438305942733594172259404205939316593829
5937414593662259355235934285933522593252459316305930211592941959289345
9276195926518592541659243155923416592241659213145920211591931559184175
9176175916418591572859145185913315591231459113175910315590941959088325
9075185906518590521059045185903518590241959013155900310589961958984155
8973135896313589521158943135893414589231458913145890314588931358883105
8873165886314588531458843145883314588231458813165880312587941958784195
8772105876419587521258743145873624587221258712958705175869314586831758
6721058662105865212586421058633145862415586141658604215859515585841358
5731358563125855415585441158534175852285851295850211584931058483105847
3125846311584527584441458434145842310584131158404185839416583831258372
8583641958359365834519583331358324145831525583041658299325828417582731
6582639582541758245205823420582231758212135820420581941758184205817314
5816625581561958145265813417581229581131058102858093165808417580761658
0651858056255804414580331458024165801519580041657995275798212579731457
9621357953145794213579321357922135791213579021357894195788166957879325
7861458578510475784518578362457822105781212578021257793145778523577741
8577631857755215774295773314577262457713165770211576941657684215767422
5766626576551957642115763416576252557613165760420575931757583165757316
5756214575521357544175753312575221057514165750313574921057484195747418
5746316574562457443165743526574231657414195740629573931557385205737316
5736518573552657343165733418573241457313165730312572941857286205727621
5726624572531657247385723212572241757213165720318571931157184175717518
5716316571531757143155713314571231657115185710295709310570831357073145
7063145705314570431557033105702213570121357002135699213569821356974195
6961042569511415694931569394756928405691729569052156899335688627568783
0568613595685729568494756834195682630568152356808375679634567810445677
5235676836567572956741040567373756727355671733567083556696355668732566
7104956661140566541956647275663526566251756616185660521565941356583115
6575175656312565541256544175653317565231256513956504175649517564831556
4731256463145645212564441756434145642420564141756406205639314563852156
3762656364185635385634524563331556322956313125630418562952356286235627
5245626420562541756244195623114456223105621311562051956199315618310561
7315561652156154225614314561341756124185611416561051856094125608210560
7314560631456055175604724560321056023145601313560031255992955985725055
9731255962105595412559441355932955925165591619559031355893955882555874
1155863105585310558421155835215582412558131355802105579417557841655774
1855764165575416557421055733135572211557121055702855692755683125567419
5566783295565931556462655638355562631556111515560840555952255584195557
6355556732555593655546265553621555283055515215550624554951855484155547

3125546419554513525544134455437275542113655411145554016645539124055388
2455378265536104155358315534103955338395532527553110495530145255291139
5528937552713445526135155258415524933552311465522103755217285520933551
9935551813495517419551615715515104155141037551312545512835551113535510
3155509134955084205507521550652555055235504731550383155023145501620550
0944549942154986275497728549641654951479549452154937265492186554915255
4907225489145154884195487944548694054858425484831548373554825225481828
5480521547952454784175477524547642354755285474730547310425472421547151
8547062454694215468214546752254665225465210546441754634155462417546129
5460415545921054583105457622545631654552125454940545341654523175451419
5450210544931454483145447114754464155445417544441654434195442417544131
3544042054395215438317543762154364175435316543452354334175432624543172
6543041554293115428416542741854265175425520542452054236235422731542131
2542029541931354184145417418541641454151144541484054132115412310541141
4541052054099425408626540794354065255405317540463054036235402629540173
0540062853996345398516539715685396627539542353944205393416539228539116
5390419538951953881262538752553861040538511425384521538372753825185381
1044538011525379938537883853774165376124753755175374518537341453723235
3716265370839536910395368623536752453666265365728536431253635235362417
5361626536031953597275358213535721353567275355210535410505353315535273
3535151553504135349417534831353475165346417534531453441139534321353422
1353414155340518533951953384165337419533610405335134953341558533313525
3329345331730533083153291255532812475327124253261554532515625324830532
3124853221140532114595320727531993853189385317531531611395315186353141
3535313832531273453111268531010425309186553081153530793353064195305177
9530424975303271215302126253014619453001251529923107529817825297219252
9629114529511495294155752934195292259652913415352901772528973252881464
5287259052863214652851454528428118528321735282301325281421735280419527
9529527812505277167952768395275198752749375273115952721658527111595270
2712252691051526818695267168252661353526514625264949526311475262175952
6141952601144525921855258187552571790525620905255187052541466525322104
5252114452511251525017825249419524821885247157252462288524518795244945
5243187152422310552411039524083752392192523812525237419523636164523594
1523417755233157252321247523114605230115452291668522832129522724101522
6114652259325224934522311435222419522120805220391735219219452185625852
1721101521621915215156352141973521313565212522215211136252101368520949
2205208419520717785206198752051351520418845203104852021051520118725200
1050519917685198114751972394519612455195167351942812951932310651923113
4519118985190371665189259051881360518712515186146051854118551841143518
3419518251221518193451808375179157251781773517715645176104351751040517

4197351732411551722392517131139517017825169201055168381675167471635166
1564516518815164261155163219051622310351611873516041951592285515822945
1573919151561474515528138515412565153155851522169515125108515039180514
9201055148125751471355514628118514515645144209951432713251422210951411
2435140371535139176951381569513715745136125251358375134361345133940513
2114351319395130419512941751285165127210512631051256265124520512362251
2241851215195120420511952051187285117316511641951154225114422511341751
1241751113115110312510952051084195107417510652851056305104421510362851
0273351014225100312509921050986295097525509631550956325094935509373250
9252550913145090421508941650883155087419508631750855175084525508352450
8241950812155080947507952550785215077413507631050753115074525507331350
7231250712125070210506921450683165067210506641750652115064295063285062
2950613105060525505941750586255057418505631950552750544165053316505252
1505152350504205049319504831250473145046312504531250442135043217504252
7504152750403165039314503831350374145036210503531550343145033419503262
7503141950306265029419502862250274195026418502541950243135023419502241
9502141950203175019419501818501741950163145015419501452350134195012320
5011419501093750094195008941500741950065195005419500431650034195002210
5001419500051949994194998521499762649964194995640499441949938274992419
4991631499041949898344988419498717784986419498541849844194983103549824
1949816274980412497941949786314977419497642349754194974418497331749724
1949714214970419496962049685244967419496642049655254964317496363449624
1749614234960318495931749582104957210495629495516495441949536214952519
4951417495051849496264948626494751849469354945520494462949434214942520
4941935494073649395194938729493731549365224935943493452949337244932938
4931416493072949298414928416492742249268324925735492452349239324922104
1492131449207294919416491862749179364916623491572949144164913623491262
4491152249109384909526490852149079434906835490584049048284903520490272
8490163149007314899422489841948973174896211489531548944194893620489221
0489152048904174889311488821348879324886312488541848844144883415488241
9488141348805264879415487841548774164876419487541348746214873518487231
5487172048705194869315486831448673112948661673486516544864114148631651
4862947486118654860317485941548582599485741448564184855318485431848536
2148525164851518485031448493144848415484747174846516484551848445184843 3
1048423154841311484031348395144838414483751648363124835419483452548331
0414832104248319334830732482993948289334827733482652148257274824520482
3940482272848217314820827481962948186234817831481662748157284814831481
3931481262848117274810524480973248088334807528480619844805733480462948
0383848025204801125348006224799625479862147975184796317479531547944174
7934104792414479121347902134789213478839478721047861647854194784731478

3943478272747819304780627477952547785194777621477613464775113947748294
7737294772425477152947708314769732476883747678274766932476573047647344
7636254762834476173647607284759626475841947575204756626475552347548324
7539394752938475152247506234749938474862847479374746523474541947444204
7435264742319474162547409374739520473873247375194736418473551847342114
7334124732415473131547303134729315472821347272134726213472521347244194
7231353472293647216274720732471972947185254717124947161354471513414714
1554471362547125244711729471062247095254708933470783147068344705103747
0410414703417470262147016214700124546996234698623469793446968264695837
4694145746931036469293646914194690730468983746885224687104546865204685
1151468412534683932468293646817274680114446793144678419467710454676197
6467516654674189146732711646722193467132129467040159466910534668301444
6677284666281274665187946641248466394146621777466123984660166446594194
6585424946571460465628120465528130465440179465319774652124146511252465
0145246491889464873746471986464627110464528124464431141464314614642943
4641208546403715146392510546388494637527463684046352111646341993463319
9446324194631156146305194629419462830129462763546261365462512584624155
5462311554622218646218504620126646191140461810484617741461615654615166
3461473346137374612104546111248461027117460914734608156546076324606241
0446054417246041348460314544602221084601114446001675459983545986304597
1046459642045953174594381674593188145921881459183545904194589271074588
1879458722854586186545851560458420784583188045821773458110474580321384
5791460457818754577135545761254457525954574271294573943457217664571281
1345701881456945193456894345671352456616754565197645642495456324744562
2599456114594560945455918644558291064557157245566294555124554419455384
2455283745511676455014614549114345482278454712594546136245451147454414
5445431052454218704541166845402178453924944538135645371785453673245351
5644534135545332410245321374453111444530146145291660452814634527114245
2619724525114545241457452341445221253452120894520934451963145186294517
1245164194515317451452945137254512104845115224510419450952745083114507
5194506619450552045047254503524450221045014184500210449931244988294497
1034449652344958364494737449312504492524449183244903144489729448862944
8772844867334485837448442244834204482314448151844806274479524447862344
7752144766244475935447493144738354472629447162944706254469728446862644
6752044666284465514446410394463837446272644616234460517445983444582134
4571244564194455626445482744538374452135244511363445011444449842444883
6444783144461148444552244447344443937444262944416224440626443962744387
3544371569443652944355294434934443373444321040443111474430936442917794
4287294427104544268364425104244241448442393344224244421636442073644191
1464418113444171867441673044151247441413554413731441212554411135344106

2644098364408734440762644061140440594044041249440373844021138440112534
4005304399177743982511143971042439693643959394394732439352243929404391
7364390146043892183438811464387833438615534385126643849344383124643827
3143819374380419437920844378114943771250437611454375105243747324373832
4372623437183543707274369630436821343671243664194365155643642710943632
2774362114743611562436027115435921684358165643572712343562072435582843
5415664353935435214574351629435011644349105043481774434793643467264345
1555434462943431448434210414341166343401352433917684338126443371251433
6229143352911843342410743332284433222754331938433022964329115243281871
4327341494326301144325381524324135643231989432215594321166043201971431
9229043181253431719904316103843151043431413431312431241943111239431019
7343091751430813564307321304306114343051240430428107430311464302187243
0130129430017534299134642989394297261014296229142951255429419884293115
0429211424291177142901351428941442881670428719934286167942851461428410
5542831152428225994281114842809464279208442781878427712564276834427552
7427414744273198942722510242712394427094042691989426816674267156742661
4624265940426483642631674426217754261733426073342594194258124257419425
6177042551251425415674253251044252628425112594250943424932123424814584
2478424246114642451760424472342436234242632424194442401039423912444238
3011842372076423614534235219842347334233124142322082423113624230114342
2913694228125342272393422612534225420422484142231046422211534221167342
2013534219124542181982421713614216104242151250421422864213156142121041
4211238842101248420993742082394420710404206239342053010542041652420372
7420214554201114142002710141993914641981348419718694196198741957344194
6314193136341923011941911562419062841891567418813474187155941861663418
5837418414534183156241821365418115674180125341791676417827128417710424
1762198417513524174145641736294172124171419417017774169167341682094416
7945416634151416593241641574416322774162178641616244160146241597344158
1157415792841561150415514654154104541531242415293241511551415016644149
1352414821854147155941461568414511434144228341431143414225974141177641
4018764139114841381454413726107413618774135832413410404133361484132124
1413115574130125841298334128834412715584126730412541641241981412372841
2211444121125941201040411913614118341324117207741163112041152080411410
3841131367411212604111176141101985410962141089294107523410693141052295
4104241054103341224102311264101361384100231054099166340983312640971045
4096629409541940944174093518409210364091731409041740894204088423408741
8408641740856244084623408352040821034408115544080628407942240789364077
9324076827407593340743134073411407273740711140407062140696304068103840
6711404066114540651038406441540634204062421406151940607214059521405842
2405773540565224055623405483840535284052526405184840501454404910464048

6264047114640466224045728404442140434204042833404115494040939403963040
3811424037629403673340359504034136640331670403231122403193340303213740
2915604028239340277304026633402552040247364023114440228324021103540207
2240197364018834401762440161048401573140141550401310384012125140118324
0101044400910374008622400741540064194005419400431640036234002315400141
4400063039992173998317399741439964193995316399452939934183992420399162
2399031539893163988315398762039865163985417398431439834193982417398110
4739805243979414397821039774143976420397541939745213973629397252939714
2039706263969522396842139676223966521396541939644193963520396241839613
1739604223959314395841839574193956418395541939544193953414395241939514
1939503183949524394852839475183946419394542139444193943417394242139413
2339403233939424393852939375213936104839355273934419393331639323143931
4193930315392952039287313927419392641939252810039243163923516392262339
2152939207323919419391841839173163916420391541339146263913315391231139
1141639104183909522390862539075163906418390531539044193903419390252039
0141939004203899525389852638974193896524389542038945223893418389242038
9152038907233889632388842138876233886422388562338844213883519388262838
8131338806263879519387852138774153876734387541938747233873524387231338
7142038707243869316386851938673143866312386531438644163863419386262338
6142238605223859633385810383857420385652538554203854625385310363852521
3851628385052438494173848414384731738467293845738384472738436243842728
3841416384021538397353838621383741938364173835313383412463833728383241
7383193738305183829631382873538273123826213382521338242113823419382283
5382110343820146338191144381810373817114138161142381593638147303813731
3812629381163338101250380983338081243380773038061049380594638041157380
3524380252138018363800523379914503798425379751637966233795732379472837
9311423792103937911353379010393789733378883537877303786249237851142378
4114537836223782933378162337808353779155837787373777839377693737751356
3774837377310443772105037716233770114537691247376883037671347376672737
6583037644193763517376215583761831376072937591146375893837571255375652
3375562837541555375311573752838375114583750125437498363748125137471045
3746830374573037443173743313374231437412133740123739419373825973737301
2037362611137351983373419763733331323732241003731104437302510837291872
3728145537271145372613573725219937241665372383737221676372117783720229
4371972737181367371712483716412371516623714416371341837124213711341383
7105183709623370811473707188137062811537052812737043411537032410837021
7763701259137001362369913583698156336971143369622853695196836942410036
9341936921557369110383690936368910353688165736878293686726368517523684
2489368314593682114736813413036801877367913583678105136772073367694536
7523100367413493673839367214543671341603670156936693214336681041366773

0366612543665124836641146366393536621762366122853660269336592170365810
4536571987365617823655835365416753653207436522710936511987365027107364
9125136481353364729105364616663645166136441666364311463642105036413212
3364018683639176736384193637159336361892363514593634940363317713632837
3631846363012553629833362872936271562362612433625634362419873623229936
2212673621146336201463361930126361811393617702943616258536153513736146
2267361323103361212583611833361062936098383608835360713653606316360583
5360417663603136136022275360148196360024923599302233598145635972512235
9620813595146435941769359314643592167935911361359016773589167435881672
3587187535861885358517653584231023583351553582146835812480358015573579
1355357814603577261053576135835756363574167635732298357284235711780357
0291433569281263568281273567626356612433565146135644193563526356211443
5617303560177535591869355811453557105235561459355513513554949355321953
5521259355183135501346354911563548156635471464354616663545167535441142
3543145535421460354182535401036353963235381763353724923536186635358313
5341335334193532271003531311223530229235291968352816583527259735261141
3525217835241040352315653522730352115643520156635192187351830111351711
4535161654351518693514258235132911235121776351115543510187035091454350
8271053507835350683935051667350418723503833350294735013163500419349913
3498419349710393496832349519763494942349320863492125534912481349014553
4891146348894134871971348610373485281153484188734831783348211513481939
3480165634791457347815673477228534762287347516723474155734731562347210
4334716343470187134691145346894834672292346616603465271133464187934638
3134621665346121853460146434591367345820833457114034561460345583934546
2834531158345294334515263450943344952634488323447136034463215234452298
3444104434431142344283334411246344083134392934381334374193436947343517
6534341573343363634321664343115653430228434291450342813643427125334265
2534251786342472834239403422135634216383420126534191991341815643417166
2341614593415135234141989341325112341221893411104534108423409124334081
9883407281243406136934051677340473934031774340273034011250340023903399
1667339815703397627339623103339514573394188733931244339227117339120763
3901360338917593388832338719723386134733851352338427118338313563382640
3381166933801161337918863378637337731120337674333752190337412703373104
2337212453371104333701156336910403368133367419336619633365166033641559
3363196633621875336114673360261133359176533581670335721783356281023355
2610533542910933531770335284033511362335021873349197833481558334772833
4614583345114233447353343633334213643341188433408403339177533381566333
7208233361773333525973334135033331574333212653331155533308343329629332
8239233271349332626106332518863324207733231881332213523321167533201048
3319944331810513317125233162910833151869331417733313157533121457331193

3331025100330920733308208233072710933061559330529110330411483303261063
3021550330127108330011443299104232981976329733119329616723295936329413
4632933814832921049329117653290166432891037328817673287186732861363328
5229232841255328312593282198532819383280419327913327841932771151327615
6132751763327413523273114032721871327118663270156432698333268135732671
1423266167032651456326411453263728326283432614213260124732591037325883
1325710383256932325573032549323253940325212473251944325014443249145732
4819783247208232461670324521893244271043243124932426313241739324015583
2391147323883932375283236114432359433234731323314683232104232311351323
0136132291358322828110322712433226145932251247322438136322316553222114
7322113603220166932198393218136132171253321613503215523321483432139333
2121147321172832108273209146232081777320711423206144732059453204124432
0324106320220853201943320019773199156931981158319783631961972319511353
1942074319372831921456319116653190728318910433188104531879473186316318
5624318441931831992318252131817223180321317942331785173177625317641731
7531631744153173420317272631716283170319316993431684193167522316641831
6541631647273163623316252031614193160217315941831585223157729315652431
5562531545233153935315241731513133150522314941631484203147521314682931
4510413144519314393731429353141522314052931399423138321313762931361140
3135317313441431336203132422313152131308293129631312831431274183126318
3125520312452131239353122114131214233120114031193173118414311772431164
1831155213114104131133203112731311193131101138310952231086273107420310
6317310552631044183103311310252131011140310031730994143098725309731630
9652130951044309431330935183092936309162330902103089316308852430873173
0864203085423308452130831140308231730814143080724307931530785213077829
3076418307562830749403073516307293630715163070419306972530686243067526
3066317306511403064317306341430627243061418306052130598293058726305731
1305641430554193054419305362130524193051316305042130497283048622304731
8304631830456203044619304341730426243041522304062330396263038831303741
8303641630354193034417303362330323193031522303062830294173028520302762
8302662330254193024521302382930223153021523302031630191357301862030178
3830162143015423301431430134203012315301131530104193009525300883530071
1433006727300521963004312300342030023173001831300094829997262998625299
7125129967322995522299452429934162992734299183529907262989626298862429
8772329865192985837298493929837302982523298152029809402979521297883229
7711462976625297573229741038297352029727322971733297062329698352968620
2967416296683229655212964829296311392962838296111432960114529596272958
4192957132956419295512452954526295394429521364295110452950942294993529
4816692947836294622852945114729444202943114729425272941126129401350293
9114829381361293717722936135229351444293452429331455293212472931156429

3073329297262928943292710462926135529251149292452229231657292215552921
9372920176829191144291816692917733291683729151369291494929139422912114
8291183729101569290911492908104129071148290672829051249290494429037392
9027342901938290010512899198528982096289715652896218728951668289410402
8931350289283828919422890937288983928881762288794228861765288516702884
1251288394728821666288122922880197328799442878419287722862876271202875
3918028747631528732310328721987287150219287011532869848286838173286723
1022866177628651045286418832863166728627282861114828601570285911472858
3110628571044285638140285573528542183285333108285222992851145828501987
2849145528484820328471361284648217284517832844783502843156628421770284
1228728401985283916992838114928379472836136828352612128343515028339382
8322085283173128309382829145628281670282715632826146528251259282428102
2823938282293728211150282093728191781281811432817199428161873281526122
2814951281341928127292811186328101142280984028089342807834280672428058
3628048432803146128025222801731280083727998342798628279710472796630279
5104327941665279383027925172791726279093627897272788626278762027866322
7852480278452627835222782144827815212780833277952227788292777124727768
4027756222774104727737302772104827711244277084427691145276883827675242
7669372765167527641042276372727621042276142127609412759728275883627571
4472756124927557332754104527535212752523275172527507272749728274851927
4793927468332745125227441148274363027424242741738274073727398392738198
5273772727366252735848273452227335192732124127311042273041927299422728
7322727251112726145527256242724725272383727221562272132138272051927191
0302718261042717176327164212715156627149402713135627121356271110412710
5222709518270821104270762227067282705629270431527035252702528270173027
0010422699421269842026975212696521269531426944192693441992692126326911
0412690114526899312688291222687291362686186326851860268494126837292682
1767268110432680271012679124526781555267717602676156026751656267473526
7318772672841267112592670166426692189266816742667271062666841266584126
6493126631145266214602661239726601461265911512658418265793626561785265
5351482654104526531344265220892651271282650157626492089264811432647936
2646218126452410026448462643209426421451264116762640251082639938263822
9826371252263641526356232634176926333714426322210226319382630228526291
7722628104126271448262625101262593526241561262313452622124326211346262
0702622619114426181244261722862616104026154192614104326138292612832261
1135026101142260952526086232607125226061666260511572604938260393826027
2626019352600114225992075259810372597732259612492595630259483325931157
2592199225911143259084025892383258863125877342586166925851041258412512
5831465258210452581147225801461257912612578125125776292576167525751583
2574839257384225725292571833257073525699342568114225679362566737256593

9256473225638352562732256183425608372559735255813552557731255683125555
2525541145255393725527332551837255084325492083254812472547114625461882
2545145525441350254313562542104525411661254073025398372538177225371049
2536104025351147253483925331357253218802531135125301559252962925288382
5271553252622822525622252413522523727252252625211357252013532519114225
1873525178372516624251510482514729251310442512837251184525109422509145
9250883525071458250610442505157225041142250373125024192501115025001979
2499135324981259249718752496208524959352494176724931250249283824918282
4901247248918702488623248715652486145224856212484722248313492482942248
1113624801765247914622478114224779352476103824751244247413562473620247
2315247173224701247246962724688362467730246683124651344246412392463281
0424621662246151724602071245941824588282457937245617682455124424541248
2453157524522710524519362450933244962024489352447176524461575244551924
4483724431869244212492441104624401342243914612438197624372611524368372
4351659243462124335192432124924311239243010422429136724285302427155924
2662324258332424146024238342422628242184124209392419197424181135241752
1241692924155172414103524132187241272724111035241083024095192408831240
7213240635130240522932404620240351924026202401414240021123993122398312
2397310239628239551823942102393416239231023915152390518238941923881140
2387732238652023854142384134823835182382103723811039238011442379523237
8937237751923761868237541523748292373730237212442371419237063123694152
3685232367122366419236514462364104523639432362523236141723601038235962
4235841623579442356414235542023549372353524235262723517252350941234963
3234883323475222346931234572823448392343136223422598234193523401674233
9836233893423378292336103623358432334103823338312332125623311861233093
3232911462328114623271251232611522325291292324316232383323229412321114
8232072923197362318104123179372316146023151455231410352313135423121246
2311104023101450230916502308835230783423061246230511482304114723038352
3021653230193423009362299629229811492297834229610382295124022941141229
3187622928352291103822901457228952422881557228711382286932228583022841
1512283104222829342281626228062522798342278114622771345227614432275145
2227413452273830227213522271145222705172269519226815226741922662492226
5186822646252263104822629422261146622601149225952522581465225711472256
5272255114822541549225383522521977225112492250207822491351224831022476
2322461553224531022441350224313462242259122412922401034223993822383514
8223794022361051223517762234124822332410322321346223192922301664222910
3822288272227156522261243222510362224824222362122221137222112512220934
2219208522181249221711492216134922158432214197522133011822121892221119
8322101454220910512208136522071359220626111220528122220416632203115222
0213672201231022200937219911392198207921978302196156221951963219482821

931657219212502191124121901350218911502188147021872812321861248218528 1
292184301292183155421822381218183721801758217972521783315121773214221 7
613562175381732174221092173341272172198021711875217019782169114821689 3
921677302166166121651042216462721631144216211462161165821606272159313 2
158156921571142215641921552172215422902153530215283521511870215094521 4
994621481461214794021461667214519782144146321432392214214712141271142 1
401147213914602138155821372692213612532135114521341037213314532132197 6
213193021301350212914542128114021271253212613572125936212414562123124 6
212214602121114221201360211912482118937211713632116113921151570211417 8
121132287211215572111187321101454210993521081996210710412106156421051 3
582104251132103219221021874210118842100135220991568209814552097167120 9
694420952510020945192093945209294220911976209019822089125820882187208 7
630208613482085104420841159208318672082724208113482080165720791156207 8
177120772290207683420751359207412482073135520721250207194820701045206 9
125320681251206725108206693620651150206412452063125220621871206113532 0
601468205921822058731205713592056231162055843205494220531671205211492 0
512311020501157204917762048136020479312046125720452195204441920438322 0
421451204112532040229120391775203812492037942203673520351143203419712 0
331566203252020312294203022842029135720289442027241072026155120251865 2
024727202311562022136220212494202011522019124820181669201713562016176 7
201594120141041201384020121876201115642010155720091983200817682007321 3
120062089200516812004241032003135920021043200119912000114519991451199 8
739199762919962511019952511919941868199315751992197119912910919902710 3
198910421988156219872198198622921985207419842493198313541982156519811 7
691980166119791463197817721977177119762396197512581974196519739371972 7
341971125719706341969103819681243196711481966125119657321964145819631 7
671962831196172819601667195912631958156119575251956187819551037195411 5
319531873195214461951281221950321181949104319482291194712641946156719 4
520901944844194319821942219819412186194015691939940193813491937115519 3
673219351041193462519331039193272719314221930114919292110019281349192 7
157119261671192513471924104419239481922145919217311920840191983019187 3
619171868191694219154191914522191362419127281911834191031919096271908 3
141907319190642019054211904521190315631902736190151919001469189962418 9
831918976301896530189552518945281893524189251918913151890521188984118 8
831918875241886625188552318844181883623188242218819401880146218794231 8
787291877416187652018756291874624187362618725231871829187073218698351 8
687281867937186641818655221864626186383018621040186131718605201859830 1
858420185711411856519185542018541046185341818524171851624185062418495 2
018481139184793118467271845422184493618431245184272818418331840725183 9
742183862918371263183611421835834183411521833729183252118317371830836 1

829939182872618275231826833182572818247291823939182283418219371820727 1
819831181873918177301816625181541918141360181310361812631181163218101 0
501809114218081251180714641806261091805945180413601803839180293918011 3
541800186117992611417981558179713551796156117959431794251071793218617 9
212531791421179012501789188417881349178712551786155917851783178444187 1
783341381782518178114561780229017791662177872517775231776104317751678 1
774177817732911217723314317713715717701350176911481768261171767218617 6
619751765167617641454176316721762419176115641760187117591668175813581 7
578321756218217551974175425101175319891752145317513913917501355174951 1
931748281061747838174611521745196717441674174323941742730174115721740 1
910117391354173873417371558173627118173542182173445188173311551732271 0
717311986173094217293512117281454172753017261558172515561724209017232 5
112172227111172124101172026115171915601718419171723941716197917152912 3
171417671713145917127301711114917101036170962617081457170721105170647 1
691705145517049351703939170220721701627170012471699125616981146169793 9
169623841695103916942210116932181169213471691124916901351168918701688 1
153168718721686371391685135016841663168324841682331231681114516806251 6
791248167812441677527167615651675166216743011016732811116722488167126 1
141670176616691771166814741667629166610351665177216649391663735166217 7
216618331660146116591554165812471657291101656229216551139165415531653 1
457165222961651115016508411649251051648187016472086164632127164510461 6
442610416432611216422711516411138164010411639176816381984163732131163 6
187316351042163413431633103616321968163123891630197616292391162894316 2
732138162694216251777162418731623198016224201621177616209381619135416 1
883416171243161616681615145916141557161373016122510616111663161016631 6
091664160863116075221606419160516731604318160394116021769160115611600 1
042159983515982611015977291596146815951766159412461593104315921872159 1
207715901875158915571588937158710361586520158516571584124415832494158 2
936158194215809461579104415786311577103715761886157520821574166515731 9
791572937157123781570361371569218215681142156715741566271101565831156 4
125715633011815621130156113431560271091559134815581554155752215561148 1
555146015541348155394815521868155115631550124415498411548187315471147 1
546187015452385154422831543281111542176815411250154014611539218115381 8
651537728153616651535166115341882153314521532186315311975153019721529 1
963152824761527155615261984152523861524207315231148152226941521104215 2
019731519115515181758151712521516186615151038151414591513311231512103 8
151123921510208115092911315081140150793515061161150514671504727150394 1
150224100150111501500231001499391461498166514971462149616641495187514 9
427951493104814921356149111471490229314893112714881664148719851486828 1
485259814849351483103614824191481114514802387147924851478165514779381 4

762710014751045147415641473146014721453147115601470219414698331468830146710441466228514652410914641461146372814622711814611151146029131145916831458526145710481456135214552285145473314531764145210391451626145016771449114814481038144714691446229314451787144416601443341361442135914419351440259614391561143825901437104214361565143542114341036143342141143219761431207314301044142915631428522142716581426218414251143142413521423113914221253142122811420730141912491418156314172087141610421415114514141147141315601412124514111981141016661409228314081760140729971406176314051039140411481403271141402166314011046140018891399271181398167213971145139643198139526113139441166139322841392166813911771139029123138914541388186513873913813861042138517871384271041383188613821466138115741380630137915711378146213772310113762812613752911313742699137352213724191371155413701460136921791368165613671254136618821365177813642210213631877136252199136194113603112713592710913581761135718611356228813552084135416109135337174135215611351271011350238613492411713481254134716851346166713451665134417741343229913422512813412711313401671133916691338145913371888133630132133519861334239013332610313321780133113561330147613291146132818821327167413261871132525112132484313232711813222510313212093132011471319156713189371317125213164619013151262131424107131324132131226125131132168131016791309191051308166713071364130617731305166413041255130326114130222118130119821300166212991144129810451297178112962295129512471294229312931456129216651291156312901664128917861288157112871470128614771285135212842311312831571128243176128116701280291221279311341278361601277198412762913912751460127415641273231021272231071271291231270281131269124012681883126723961266331701265209712648311263104412621680126124110126023991259188312582410212571145125611591255209312541879125313681252103912511356125016771249231051248187412472613312462298124532135124414641243941124222951241188512401357123945209123813541237259412361146123510391234207812332610712322711512319371230207612291253122812501227331341226835122514551224104312231244122210381221178212201868121917741218937121713671216187412153614012141776121313671212136112111988121020881209351491208331501207104612061666120516591204188112032198120213581201219312001252119919721198176911971674119619821195104811941261119319951192135811912195119011491189103911888361187125411862497118562611842186118320811182125411816301180135811792310311782299117718671176115211757331174231011173115111721147117111471170634116917821168188911674191166114811651669116484111632389116273111611250116010441159732115812521157104711569391155269911541464115312561152733115172811501255114929125114821041147371531146104011452288114411401143518114284011417311140146911393012211381042113794711363013211351364113452711331564113226104113119791

1301052112940172112814771127198011261141112518791124198111232711811221
7731121209311204320011198321118321411117432221116301291115411701114156
3111314591112156911111146111039172110918741108228911071363110636153110
5208911041565110341165110223109110118851100940109910361098249910972913
9109611601095114310942390109313801092124710912294109010471089228810881
6761087211001086166610855221084841108319771082312108142010803171079425
1078625107711411076115510751140107452210731146107241610717341070730106
9932106862610676241066113610651865106493410631671106294110612310210601
9791059104410589381057940105618851055188210541359105316641052135910516
3310501253104942159104822931047198310462410710453815610448401043736104
2135410411146104013531039156310386331037166610368371035239610342511310
3335132103213661031251071030177110292711310287301027113910261458102516
5710241471102313591022114410211139102093210192176101817721017291231016
1565101583510143214510133814610121045101119951010208710091568100814721
0071362100618871005104810042811010033615010021570100110421000231049991
4629984016199737157996115899519749941147993291109922611199116649901678
9891669988229498731138986208398573498412489831254982281309815269802510
5979177097812549771566976736975416974521973135097217579711673970114896
9115696894596762796663696512469641043963145796213509611496041995921869
5829104957832956939955166695416649531977952371389513514495014619498449
4817759471775946351499454218094427118943836942371429411351940281229393
9128938401679372310693616709353114593420839332295932261179312096930311
2892919759287279271871926937925103892428134923838922361519211041920941
9192811091829118917156991624100915209691412599133011691210409111139910
1863909114890823105907126290623959052210090413609032190902251039011353
9001344899844898155989794389616538951865894156889344187892135989116698
9012628891769888291288874920188622102885441718841666883178188216598819
5688084487973487821100877145887611528752293874259287312538721865871186
9870155486995086814588672410686683886539160864451758631247862231038615
2186093285927105858103685717738561248855177185422958533111385214598512
2778502174849635848271088471571846251058451765844281038438438421564841
1456840239083994283820798371463836115783512468341562833177183222828311
9678301050829281148282290827146682613608252711182419768239398221660821
1768820114781932133818104181712438161257815145481413688133713781273281
1175681093680992980824928079378062510080510418041356803944802135380116
6680031138799125379811427971252796144979514697944197931142792241027911
1477902910878945153788177078722977861566785228678413617836428078215597
8122997802612877952213778208677724100776218577593477426100773167377211
4577193777027119769208676851196767241047662411676513727642092763168276
2452057611252760186975974075814677571663756218975526128754157075319787

5210427511771750249074916587482598747840746259674534139744197874319897
4220927413112974025947392410473812627374721873613677351363734166873327
1107322177731125473024109729114872813687273815872615807252811672423104
7231045722331367215122872016667192611771831140717411957161568715261137
1468281713197171214497111364710124970924887081468707135270634140705401
6270426106703938702135670116647002499699146269813526971769696211006951
8756941570693239269229107691301346904215768918806882492687251196863214
1685452076842410768374068210476812711768019866796228167843201677311376
7661278675532426742497673419672501916711573670125066926129668188766754
2166662499665114466412506631143662136166115666601458659251316582613665
7147365614606551457654832653341286526316512210365019906493716264817786
4784364622100645144964414536431148642189264111456401885639165863819916
3736161636331376351471634628633207863229130631381636301462629124962810
4062732129626114362522102624291266234017862212456211773620166661920726
1821956177326167356152110961483661311436122067611208161026976093313560
8145460711466061350605197960421826031454602730601156760022945992010659
8622815972396596311225951040594126459327128592837591331725904017058916
7058860235587321625863616858528128584228858317615821557581227758022875
7930135578135657724101576124957518735743614357348204572209857131139570
2193569197556817635671149566728565189256432156362756227107561197756023
1055591665558167355715655563012555529132554251025532010055220955511138
5501880549103754811435472094546104054514545442069543291215423817754194
4540146453949205538146153712435361555535156853418855331578532321585312
2925304019252919885282710852712565261353525249952483452313605221461521
5826452042185519542655181763517114951617835153515751424106513209051214
7051122107510135550918795088829950771271506136350515715041370503199150
2371865011679500145849928115498168249729125496419495115749430121493218
5492730491729490431884891458488209548711454862110048511574849384832086
4822199481241084802399479125547828120477937476229547530122474361464731
7744721253471228747011544691564468177746715694661147465197846413544631
6744623315146194746020734592510745883245713534562168455187545430121453
7284521453451371574502189449752914482510644740166446198444562644413644
4310504421987441218844024994392710743812514371360436633435241054349414
3362943213544311570430231044291371428115542752942652742513624241661423
1245422943421176842015694191360418104741712574161149415218841428127413
3112541223984111877410940409158440814594073515240611484052311340411444
0311494021043401178140014653991470398341573971354396177439515693942077
3931350392259939110423901147389114438824993871556386249138514623841143
3839373829473811883380135237929126378146237772937633146375136737428120
3732912037227116371936370361443698343683211536717793661152365939364135

4363136636214613612075360167035932129358628357155435625114355725354154
7353732352115935113603503113234963034894634720863468343451980344451873
4353534223793417333402191339208133883733713603362080335176333420923331
5523323513833124109330186632972732811483271147326146232526963242279323
2711332221863212592320155331915653182081317115031618883152612231426107
3131872312654311115031024107309241253082911630794330614683051666304134
7303155430246197301135030011372991874298115329772429613295419294491962
9327118292281032913213829012955128915542881452287172286145428519872 84
1145283451862821779281301342802811227920892781557277166527613682753012
5274351482732712327239174271114427024922692497268391482676724926643169
2652411826424102263501892622287261522082609412592712225815772576024025
6301142554316525454217253166925293825128106250731249634248271162471565
2468442453514024425111243472002422512224164288240331472394520323830114
2374619323640177235729234135423314652321466231168123027122229391822282
6118227261232261672225572472242593223221042223012722149214220209321920
7421817722171249216166721511492141252213145921217652112510321083520914
5720824972071249206261102053012120473290203146620222107201156520062419
9251301981359197271201961787195652861941777193441851923212319115611901
6551891354188167718793918638163185512661841458183116118229122181259318
0156217918661782289177115017617681752396174125717331123172431871719351
7093716913641681157167209116624891659421641045163126616213501611153160
6321591787158311381571766156197515572715414731533213015234146151451961
5021891491554148301271471463146103714519791443113514315631421554141271
1414017701399331381874137168113617761351465134301221332211513219831311
8671301258129157012831112127104612624103125114712414561231252122301131
2131141120175811918721181776117331231161873115175911419611132598112136
5111124911074308109228910810441071044106125510518721042510210394410217
6710127131100115199301199827107972610896104695281389413639349231921571
9129150901052891354882391872410286114585936842310183197782371418111578
0104579249778176277187176238075208374945731254721354711570702410869602
5768281186718776620956518906473063156062271216173760830591253581050571
8845619695512585483853847521055517415084249187948146947105146176845114
3441986431980421363412310140124839157038281113719703613603520823439155
3334145321366312078302399291253282510227198626619251772241157237342216
7321197720729191143181251171049161147151253141147138331212521184710727
913841979446319541943123212241814 19”

4.2.5 Even Odd Code of Rewriting the full text of Quran regarding general verse indexes

In the previous chapter, Evidence 4.2.4, I presented a key coding based evidence with rewriting coding pattern using general verse indexes in all the 6348 verses.As per the rule,

for each key coding pattern based code, we have to test also its even odd pattern version in the same text type, which is 6348 verses in this case. In this chapter I show that this code, which is the pair of Evidence 4.2.4, is also muultiple of 19.

Considering all the 6348 verses of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [General Verse index, 6347 | Total Words in the Verse | Total Letters in the Verse] [Last General Verse index, 6348 | Total Words in the Verse | Total Letters in the Verse] . . . . . [General Verse index, 1 | Total Words in the Verse | Total Letters in the Verse] [General Verse index, 2 | Total Words in the Verse | Total Letters in the Verse]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [6347 | 5 | 20] [6348 | 3 | 13] . . . . . [1 | 4 | 19] [2 | 4 | 18]

And, the final number after all the concatenation would look like this:

> 6347520 6348313 . . . . . 1419 2418
>
> 63475206348313 14192418

In the following proof, I demonstrate that this hypothesis for the case of 6348, which includes all the general verse indexes of the full text of Quran.

```
#Verse index (VerseI)  as descriptor
xx<- unQuran # 6348 verses
x <- xx
ev <- x[(x$VerseI %% 2==0),]
x <- ev
ev <- paste0(x$VerseI, x$vwords, x$vletters)
x <- xx # unQuran
od <- x[( (x$VerseI %% 2) !=0),]
x <- od
i<- which(x$verse ==0)
od <- paste0(x$VerseI,x$vwords,x$vletters)

tmp <- paste0(ev,od)

tmpr <- rev(tmp)
```

```r
tmpr <- paste0(tmpr, collapse = "")
print("Test if this even odd code is multiple of 19: ")

## [1] "Test if this even odd code is multiple of 19: "

# mod 19 must be 0 if multiple of 19
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 47284
```

In Evidence 4.2.4, we had witnessed that we could rewrite Quran by concatenating the 6348 representation numbers of each verse at the verse level using the general verse indexes and content of it. In this follow up compulsory code evidence, Evidence 4.2.5, we also witnessed that, it is also multiple of 19.

As per the rules, we have to test even odd in only 6348 verses regarding the key coding pattern was clearly from 6348 verse. Therefore we have one trial and one success for this key coding pattern based evidence to add to the counters.

```r
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  1
key_codings_success_nums <- key_codings_success_nums + 1
```

For the reference, to the best of my knowledge, Evidence 4.2.4 and Evidence 4.2.5 are also first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself.

One can just copy the big number and paste it into a web based big number calculator and test it herself.

Also, here is the “47284” digits length big number:

“634831363475206346417634528634428634341463424196341515634052063395156
338496337414633641963355156334412633329633241163314196330515632931763 2
841563276196326515632541963247306323731632251963214196320414631951963 1
851763175196316414631541663144196313415631231263113166310419630921463 0
831363075206306211630552063044176303419630241963017266300418629942362 9
821062974196296315629541862944206293519629272562914196290310628931462 8
841862873146286416628541762844156283416628241462814196280952627941562 7

816627741962765216275418627421162735206272414627131262703146269213626 8
419626728626641362652962644166263414626241762614246260526625941762582 9
625717625641962555196254414625372562524176251415625041862493116248311 6
247213624621362452136244419624362162426226241632624041362393166238416 6
237318623642062354196234218362339426232166662311678623011456229311622 8
623622712566226419622551862249376223620622251962215216220419621952062 1
821262172106216315621562662145176213415621231262115186210310620931362 0
841462073116206417620551862043136203314620241562015186200419619942161 9
841761979426196418619562661943156193296192214619141961903126189313618 8
413618741461863126185312618431361834136182419618141661804176179417617 8
315617731361764166175418617452061735156172312617116617041961692961685 2
161676216166417616521461643126163417616231661614196160312615962161582 1
361572116156416615521361542116153415615231161514186150314614931361484 1
961473136146739614573061443136143315614241361414136140320613931261383 1
461373156136315613531561343146133212613241961313136130632612931761289 4
561274156126312612561961242661234166122314612121461202126119414611851 5
611741761166206115520611431161134156112415611141961102106109313610852 1
610742061064156105520610452161039436102519610162061004176099420609852 3
609751960961040609511496094314609351860923176091417609031560895266088 6
236087312608661860856166084312608321260822860811660804196079415607831 3
607742260764136075314607441560734166072417607141760706256069212606821 2
606721260663136065312606441560633106062211606131460606186059619605841 3
605731360562106055314605441760534196052315605151960503156049420604841 4
604741260466196045419604421460433116042416604121260409316039313603831 3
603731560363126035311603441560334196032423603129603031460293116028310 6
027314602631560256176024314602341560225226026141260204186019619601821 16
017416601621460154196014310601341260124176011519601021060094166008311 6
007313600631560054146004413600314656002146560011040600094059996275998 4
135997314599631559952115994213599331659924195991941599031559894175988 4
185987626598641459854155984313598331259823135981618598051359795185978 2
105977313597662359754195974419597352159729375971314597041659693125968 3
145967314596641959656245964316596363059624205961627596063159594195958 8
365957419595631359556325954416595352259523165951416595021359492959484 1
559476245946725594541759446265943830594273359417225940420593931659382 9
593741459366225935523593428593352259325245931630593021159294195928934 5
927619592651859254165924315592341659224165921314592021159193155918417 5
917617591641859157285914518591331559123145911317591031559094195908832 5
907518590651859052105904518590351859024195901315590031058996195898415 5
897313589631358952115894313589341458923145891314589031458893135888310 5
887316588631458853145884314588331458823145881316588031258794195878419 5

8772105876419587521258743145873624587221258712958705175869314586831758
6721058662105865212586421058633145862415586141658604215859515585841358
5731358563125855415585441158534175852285851295850211584931058483105847
3125846311584527584441458434145842310584131158404185839416583831258372
8583641958359365834519583331358324145831525583041658299325828417582731
6582639582541758245205823420582231758212135820420581941758184205817314
5816625581561958145265813417581229581131058102858093165808417580761658
0651858056255804414580331458024165801519580041657995275798212579731457
9621357953145794213579321357922135791213579021357894195788166957879325
7861458578510475784518578362457822105781212578021257793145778523577741
8577631857755215774295773314577262457713165770211576941657684215767422
5766626576551957642115763416576252557613165760420575931757583165757316
5756214575521357544175753312575221057514165750313574921057484195747418
5746316574562457443165743526574231657414195740629573931557385205737316
5736518573552657343165733418573241457313165730312572941857286205727621
5726624572531657247385723212572241757213165720318571931157184175717518
5716316571531757143155713314571231657115185710295709310570831357073145
7063145705314570431557033105702213570121357002135699213569821356974195
6961042569511415694931569394756928405691729569052156899335688627568783
0568613595685729568494756834195682630568152356808375679634567810445677
5235676836567572956741040567373756727355671733567083556696355668732566
7104956661140566541956647275663526566251756616185660521565941356583115
6575175656312565541256544175653317565231256513956504175649517564831556
4731256463145645212564441756434145642420564141756406205639314563852156
3762656364185635385634524563331556322956313125630418562952356286235627
5245626420562541756244195623114456223105621311562051956199315618310561
7315561652156154225614314561341756124185611416561051856094125608210560
7314560631456055175604724560321056023145601313560031255992955985725055
9731255962105595412559441355932955925165591619559031355893955882555874
1155863105585310558421155835215582412558131355802105579417557841655774
1855764165575416557421055733135572211557121055702855692755683125567419
5566783295565931556462655638355562631556111515560840555952255584195557
6355556732555593655546265553621555283055515215550624554951855484155547
3125546419554513525544134455437275542113655411145554016645539124055388
2455378265536104155358315534103955338395532527553110495530145255291139
5528937552713445526135155258415524933552311465522103755217285520933551
9935551813495517419551615715515104155141037551312545512835551113535510
3155509134955084205507521550652555055235504731550383155023145501620550
0944549942154986275497728549641654951479549452154937265492186554915255
4907225489145154884195487944548694054858425484831548373554825225481828

5480521547952454784175477524547642354755285474730547310425472421547151
8547062454694215468214546752254665225465210546441754634155462417546129
5460415545921054583105457622545631654552125454940545341654523175451419
5450210544931454483145447114754464155445417544441654434195442417544131
3544042054395215438317543762154364175435316543452354334175432624543172
6543041554293115428416542741854265175425520542452054236235422731542131
2542029541931354184145417418541641454151144541484054132115412310541141
4541052054099425408626540794354065255405317540463054036235402629540173
0540062853996345398516539715685396627539542353944205393416539228539116
5390419538951953881262538752553861040538511425384521538372753825185381
1044538011525379938537883853774165376124753755175374518537341453723235
3716265370839536910395368623536752453666265365728536431253635235362417
5361626536031953597275358213535721353567275355210535410505353315535273
3535151553504135349417534831353475165346417534531453441139534321353422
1353414155340518533951953384165337419533610405335134953341558533313525
3329345331730533083153291255532812475327124253261554532515625324830532
3124853221140532114595320727531993853189385317531531611395315186353141
3535313832531273453111268531010425309186553081153530793353064195305177
9530424975303271215302126253014619453001251529923107529817825297219252
9629114529511495294155752934195292259652913415352901772528973252881464
5287259052863214652851454528428118528321735282301325281421735280419527
9529527812505277167952768395275198752749375273115952721658527111595270
2712252691051526818695267168252661353526514625264949526311475262175952
6141952601144525921855258187552571790525620905255187052541466525322104
5252114452511251525017825249419524821885247157252462288524518795244945
5243187152422310552411039524083752392192523812525237419523636164523594
1523417755233157252321247523114605230115452291668522832129522724101522
6114652259325224934522311435222419522120805220391735219219452185625852
1721101521621915215156352141973521313565212522215211136252101368520949
2205208419520717785206198752051351520418845203104852021051520118725200
1050519917685198114751972394519612455195167351942812951932310651923113
4519118985190371665189259051881360518712515186146051854118551841143518
3419518251221518193451808375179157251781773517715645176104351751040517
4197351732411551722392517131139517017825169201055168381675167471635166
1564516518815164261155163219051622310351611873516041951592285515822945
1573919151561474515528138515412565153155851522169515125108515039180514
9201055148125751471355514628118514515645144209951432713251422210951411
2435140371535139176951381569513715745136125251358375134361345133940513
2114351319395130419512941751285165127210512631051256265124520512362251
2241851215195120420511952051187285117316511641951154225114422511341751

1241751113115110312510952051084195107417510652851056305104421510362851
0273351014225100312509921050986295097525509631550956325094935509373250
9252550913145090421508941650883155087419508631750855175084525508352450
8241950812155080947507952550785215077413507631050753115074525507331350
7231250712125070210506921450683165067210506641750652115064295063285062
2950613105060525505941750586255057418505631950552750544165053316505252
1505152350504205049319504831250473145046312504531250442135043217504252
7504152750403165039314503831350374145036210503531550343145033419503262
7503141950306265029419502862250274195026418502541950243135023419502241
9502141950203175019419501818501741950163145015419501452350134195012320
5011419501093750094195008941500741950065195005419500431650034195002210
5001419500051949994194998521499762649964194995640499441949938274992419
4991631499041949898344988419498717784986419498541849844194983103549824
1949816274980412497941949786314977419497642349754194974418497331749724
1949714214970419496962049685244967419496642049655254964317496363449624
1749614234960318495931749582104957210495629495516495441949536214952519
4951417495051849496264948626494751849469354945520494462949434214942520
4941935494073649395194938729493731549365224935943493452949337244932938
4931416493072949298414928416492742249268324925735492452349239324922104
1492131449207294919416491862749179364916623491572949144164913623491262
4491152249109384909526490852149079434906835490584049048284903520490272
8490163149007314899422489841948973174896211489531548944194893620489221
0489152048904174889311488821348879324886312488541848844144883415488241
9488141348805264879415487841548774164876419487541348746214873518487231
5487172048705194869315486831448673112948661673486516544864114148631651
4862947486118654860317485941548582599485741448564184855318485431848536
2148525164851518485031448493144848415484747174846516484551848445184843 3
1048423154841311484031348395144838414483751648363124835419483452548331
0414832104248319334830732482993948289334827733482652148257274824520482
3940482272848217314820827481962948186234817831481662748157284814831481
3931481262848117274810524480973248088334807528480619844805733480462948
0383848025204801125348006224799625479862147975184796317479531547944174
7934104792414479121347902134789213478839478721047861647854194784731478
3943478272747819304780627477952547785194777621477613464775113947748294
7737294772425477152947708314769732476883747678274766932476573047647344
7636254762834476173647607284759626475841947575204756626475552347548324
7539394752938475152247506234749938474862847479374746523474541947444204
7435264742319474162547409374739520473873247375194736418473551847342114
7334124732415473131547303134729315472821347272134726213472521347244194
7231353472293647216274720732471972947185254717124947161354471513414714

1554471362547125244711729471062247095254708933470783147068344705103747
0410414703417470262147016214700124546996234698623469793446968264695837
4694145746931036469293646914194690730468983746885224687104546865204685
1151468412534683932468293646817274680114446793144678419467710454676197
6467516654674189146732711646722193467132129467040159466910534668301444
6677284666281274665187946641248466394146621777466123984660166446594194
6585424946571460465628120465528130465440179465319774652124146511252465
0145246491889464873746471986464627110464528124464431141464314614642943
4641208546403715146392510546388494637527463684046352111646341993463319
9446324194631156146305194629419462830129462763546261365462512584624155
5462311554622218646218504620126646191140461810484617741461615654615166
3461473346137374612104546111248461027117460914734608156546076324606241
0446054417246041348460314544602221084601114446001675459983545986304597
1046459642045953174594381674593188145921881459183545904194589271074588
1879458722854586186545851560458420784583188045821773458110474580321384
5791460457818754577135545761254457525954574271294573943457217664571281
1345701881456945193456894345671352456616754565197645642495456324744562
2599456114594560945455918644558291064557157245566294555124554419455384
2455283745511676455014614549114345482278454712594546136245451147454414
5445431052454218704541166845402178453924944538135645371785453673245351
5644534135545332410245321374453111444530146145291660452814634527114245
2619724525114545241457452341445221253452120894520934451963145186294517
1245164194515317451452945137254512104845115224510419450952745083114507
5194506619450552045047254503524450221045014184500210449931244988294497
1034449652344958364494737449312504492524449183244903144489729448862944
8772844867334485837448442244834204482314448151844806274479524447862344
7752144766244475935447493144738354472629447162944706254469728446862644
6752044666284465514446410394463837446272644616234460517445983444582134
4571244564194455626445482744538374452135244511363445011444449842444883
6444783144461148444552244447344443937444262944416224440626443962744387
3544371569443652944355294434934443373444321040443111474430936442917794
4287294427104544268364425104244241448442393344224244421636442073644191
1464418113444171867441673044151247441413554413731441212554411135344106
2644098364408734440762644061140440594044041249440373844021138440112534
4005304399177743982511143971042439693643959394394732439352243929404391
7364390146043892183438811464387833438615534385126643849344383124643827
3143819374380419437920844378114943771250437611454375105243747324373832
4372623437183543707274369630436821343671243664194365155643642710943632
2774362114743611562436027115435921684358165643572712343562072435582843
5415664353935435214574351629435011644349105043481774434793643467264345

1555434462943431448434210414341166343401352433917684338126443371251433
6229143352911843342410743332284433222754331938433022964329115243281871
4327341494326301144325381524324135643231989432215594321166043201971431
9229043181253431719904316103843151043431413431312431241943111239431019
7343091751430813564307321304306114343051240430428107430311464302187243
0130129430017534299134642989394297261014296229142951255429419884293115
0429211424291177142901351428941442881670428719934286167942851461428410
5542831152428225994281114842809464279208442781878427712564276834427552
7427414744273198942722510242712394427094042691989426816674267156742661
4624265940426483642631674426217754261733426073342594194258124257419425
6177042551251425415674253251044252628425112594250943424932123424814584
2478424246114642451760424472342436234242632424194442401039423912444238
3011842372076423614534235219842347334233124142322082423113624230114342
2913694228125342272393422612534225420422484142231046422211534221167342
2013534219124542181982421713614216104242151250421422864213156142121041
4211238842101248420993742082394420710404206239342053010542041652420372
7420214554201114142002710141993914641981348419718694196198741957344194
6314193136341923011941911562419062841891567418813474187155941861663418
5837418414534183156241821365418115674180125341791676417827128417710424
1762198417513524174145641736294172124171419417017774169167341682094416
7945416634151416593241641574416322774162178641616244160146241597344158
1157415792841561150415514654154104541531242415293241511551415016644149
1352414821854147155941461568414511434144228341431143414225974141177641
4018764139114841381454413726107413618774135832413410404133361484132124
1413115574130125841298334128834412715584126730412541641241981412372841
2211444121125941201040411913614118341324117207741163112041152080411410
3841131367411212604111176141101985410962141089294107523410693141052295
4104241054103341224102311264101361384100231054099166340983312640971045
4096629409541940944174093518409210364091731409041740894204088423408741
8408641740856244084623408352040821034408115544080628407942240789364077
9324076827407593340743134073411407273740711140407062140696304068103840
6711404066114540651038406441540634204062421406151940607214059521405842
2405773540565224055623405483840535284052526405184840501454404910464048
6264047114640466224045728404442140434204042833404115494040939403963040
3811424037629403673340359504034136640331670403231122403193340303213740
2915604028239340277304026633402552040247364023114440228324021103540207
2240197364018834401762440161048401573140141550401310384012125140118324
0101044400910374008622400741540064194005419400431640036234002315400141
4400063039992173998317399741439964193995316399452939934183992420399162
2399031539893163988315398762039865163985417398431439834193982417398110

4739805243979414397821039774143976420397541939745213973629397252939714
2039706263969522396842139676223966521396541939644193963520396241839613
1739604223959314395841839574193956418395541939544193953414395241939514
1939503183949524394852839475183946419394542139444193943417394242139413
2339403233939424393852939375213936104839355273934419393331639323143931
4193930315392952039287313927419392641939252810039243163923516392262339
2152939207323919419391841839173163916420391541339146263913315391231139
1141639104183909522390862539075163906418390531539044193903419390252039
0141939004203899525389852638974193896524389542038945223893418389242038
9152038907233889632388842138876233886422388562338844213883519388262838
8131338806263879519387852138774153876734387541938747233873524387231338
7142038707243869316386851938673143866312386531438644163863419386262338
6142238605223859633385810383857420385652538554203854625385310363852521
3851628385052438494173848414384731738467293845738384472738436243842728
3841416384021538397353838621383741938364173835313383412463833728383241
7383193738305183829631382873538273123826213382521338242113823419382283
5382110343820146338191144381810373817114138161142381593638147303813731
3812629381163338101250380983338081243380773038061049380594638041157380
3524380252138018363800523379914503798425379751637966233795732379472837
9311423792103937911353379010393789733378883537877303786249237851142378
4114537836223782933378162337808353779155837787373777839377693737751356
3774837377310443772105037716233770114537691247376883037671347376672737
6583037644193763517376215583761831376072937591146375893837571255375652
3375562837541555375311573752838375114583750125437498363748125137471045
3746830374573037443173743313374231437412133740123739419373825973737301
2037362611137351983373419763733331323732241003731104437302510837291872
3728145537271145372613573725219937241665372383737221676372117783720229
4371972737181367371712483716412371516623714416371341837124213711341383
7105183709623370811473707188137062811537052812737043411537032410837021
7763701259137001362369913583698156336971143369622853695196836942410036
9341936921557369110383690936368910353688165736878293686726368517523684
2489368314593682114736813413036801877367913583678105136772073367694536
7523100367413493673839367214543671341603670156936693214336681041366773
0366612543665124836641146366393536621762366122853660269336592170365810
4536571987365617823655835365416753653207436522710936511987365027107364
9125136481353364729105364616663645166136441666364311463642105036413212
3364018683639176736384193637159336361892363514593634940363317713632837
3631846363012553629833362872936271562362612433625634362419873623229936
2212673621146336201463361930126361811393617702943616258536153513736146
2267361323103361212583611833361062936098383608835360713653606316360583

5360417663603136136022275360148196360024923599302233598145635972512235
9620813595146435941769359314643592167935911361359016773589167435881672
3587187535861885358517653584231023583351553582146835812480358015573579
1355357814603577261053576135835756363574167635732298357284235711780357
0291433569281263568281273567626356612433565146135644193563526356211443
5617303560177535591869355811453557105235561459355513513554949355321953
5521259355183135501346354911563548156635471464354616663545167535441142
3543145535421460354182535401036353963235381763353724923536186635358313
5341335334193532271003531311223530229235291968352816583527259735261141
3525217835241040352315653522730352115643520156635192187351830111351711
4535161654351518693514258235132911235121776351115543510187035091454350
8271053507835350683935051667350418723503833350294735013163500419349913
3498419349710393496832349519763494942349320863492125534912481349014553
4891146348894134871971348610373485281153484188734831783348211513481939
3480165634791457347815673477228534762287347516723474155734731562347210
4334716343470187134691145346894834672292346616603465271133464187934638
3134621665346121853460146434591367345820833457114034561460345583934546
2834531158345294334515263450943344952634488323447136034463215234452298
3444104434431142344283334411246344083134392934381334374193436947343517
6534341573343363634321664343115653430228434291450342813643427125334265
2534251786342472834239403422135634216383420126534191991341815643417166
2341614593415135234141989341325112341221893411104534108423409124334081
9883407281243406136934051677340473934031774340273034011250340023903399
1667339815703397627339623103339514573394188733931244339227117339120763
3901360338917593388832338719723386134733851352338427118338313563382640
3381166933801161337918863378637337731120337674333752190337412703373104
2337212453371104333701156336910403368133367419336619633365166033641559
3363196633621875336114673360261133359176533581670335721783356281023355
2610533542910933531770335284033511362335021873349197833481558334772833
4614583345114233447353343633334213643341188433408403339177533381566333
7208233361773333525973334135033331574333212653331155533308343329629332
8239233271349332626106332518863324207733231881332213523321167533201048
3319944331810513317125233162910833151869331417733313157533121457331193
3331025100330920733308208233072710933061559330529110330411483303261063
3021550330127108330011443299104232981976329733119329616723295936329413
4632933814832921049329117653290166432891037328817673287186732861363328
5229232841255328312593282198532819383280419327913327841932771151327615
6132751763327413523273114032721871327118663270156432698333268135732671
1423266167032651456326411453263728326283432614213260124732591037325883
1325710383256932325573032549323253940325212473251944325014443249145732

4819783247208232461670324521893244271043243124932426313241739324015583
2391147323883932375283236114432359433234731323314683232104232311351323
0136132291358322828110322712433226145932251247322438136322316553222114
7322113603220166932198393218136132171253321613503215523321483432139333
2121147321172832108273209146232081777320711423206144732059453204124432
0324106320220853201943320019773199156931981158319783631961972319511353
1942074319372831921456319116653190728318910433188104531879473186316318
5624318441931831992318252131817223180321317942331785173177625317641731
7531631744153173420317272631716283170319316993431684193167522316641831
6541631647273163623316252031614193160217315941831585223157729315652431
5562531545233153935315241731513133150522314941631484203147521314682931
4510413144519314393731429353141522314052931399423138321313762931361140
3135317313441431336203132422313152131308293129631312831431274183126318
3125520312452131239353122114131214233120114031193173118414311772431164
1831155213114104131133203112731311193131101138310952231086273107420310
6317310552631044183103311310252131011140310031730994143098725309731630
9652130951044309431330935183092936309162330902103089316308852430873173
0864203085423308452130831140308231730814143080724307931530785213077829
3076418307562830749403073516307293630715163070419306972530686243067526
3066317306511403064317306341430627243061418306052130598293058726305731
1305641430554193054419305362130524193051316305042130497283048622304731
8304631830456203044619304341730426243041522304062330396263038831303741
8303641630354193034417303362330323193031522303062830294173028520302762
8302662330254193024521302382930223153021523302031630191357301862030178
3830162143015423301431430134203012315301131530104193009525300883530071
1433006727300521963004312300342030023173001831300094829997262998625299
7125129967322995522299452429934162992734299183529907262989626298862429
8772329865192985837298493929837302982523298152029809402979521297883229
7711462976625297573229741038297352029727322971733297062329698352968620
2967416296683229655212964829296311392962838296111432960114529596272958
4192957132956419295512452954526295394429521364295110452950942294993529
4816692947836294622852945114729444202943114729425272941126129401350293
9114829381361293717722936135229351444293452429331455293212472931156429
3073329297262928943292710462926135529251149292452229231657292215552921
9372920176829191144291816692917733291683729151369291494929139422912114
8291183729101569290911492908104129071148290672829051249290494429037392
9027342901938290010512899198528982096289715652896218728951668289410402
8931350289283828919422890937288983928881762288794228861765288516702884
1251288394728821666288122922880197328799442878419287722862876271202875
3918028747631528732310328721987287150219287011532869848286838173286723

1022866177628651045286418832863166728627282861114828601570285911472858
3110628571044285638140285573528542183285333108285222992851145828501987
2849145528484820328471361284648217284517832844783502843156628421770284
1228728401985283916992838114928379472836136828352612128343515028339382
8322085283173128309382829145628281670282715632826146528251259282428102
2823938282293728211150282093728191781281811432817199428161873281526122
2814951281341928127292811186328101142280984028089342807834280672428058
3628048432803146128025222801731280083727998342798628279710472796630279
5104327941665279383027925172791726279093627897272788626278762027866322
7852480278452627835222782144827815212780833277952227788292777124727768
4027756222774104727737302772104827711244277084427691145276883827675242
7669372765167527641042276372727621042276142127609412759728275883627571
4472756124927557332754104527535212752523275172527507272749728274851927
4793927468332745125227441148274363027424242741738274073727398392738198
5273772727366252735848273452227335192732124127311042273041927299422728
7322727251112726145527256242724725272383727221562272132138272051927191
0302718261042717176327164212715156627149402713135627121356271110412710
5222709518270821104270762227067282705629270431527035252702528270173027
0010422699421269842026975212696521269531426944192693441992692126326911
0412690114526899312688291222687291362686186326851860268494126837292682
1767268110432680271012679124526781555267717602676156026751656267473526
7318772672841267112592670166426692189266816742667271062666841266584126
6493126631145266214602661239726601461265911512658418265793626561785265
5351482654104526531344265220892651271282650157626492089264811432647936
2646218126452410026448462643209426421451264116762640251082639938263822
9826371252263641526356232634176926333714426322210226319382630228526291
7722628104126271448262625101262593526241561262313452622124326211346262
0702622619114426181244261722862616104026154192614104326138292612832261
1135026101142260952526086232607125226061666260511572604938260393826027
2626019352600114225992075259810372597732259612492595630259483325931157
2592199225911143259084025892383258863125877342586166925851041258412512
5831465258210452581147225801461257912612578125125776292576167525751583
2574839257384225725292571833257073525699342568114225679362566737256593
9256473225638352562732256183425608372559735255813552557731255683125555
2525541145255393725527332551837255084325492083254812472547114625461882
2545145525441350254313562542104525411661254073025398372538177225371049
2536104025351147253483925331357253218802531135125301559252962925288382
5271553252622822525622252413522523727252252625211357252013532519114225
1873525178372516624251510482514729251310442512837251184525109422509145
9250883525071458250610442505157225041142250373125024192501115025001979

2499135324981259249718752496208524959352494176724931250249283824918282
4901247248918702488623248715652486145224856212484722248313492482942248
1113624801765247914622478114224779352476103824751244247413562473620247
2315247173224701247246962724688362467730246683124651344246412392463281
0424621662246151724602071245941824588282457937245617682455124424541248
2453157524522710524519362450933244962024489352447176524461575244551924
4483724431869244212492441104624401342243914612438197624372611524368372
4351659243462124335192432124924311239243010422429136724285302427155924
2662324258332424146024238342422628242184124209392419197424181135241752
1241692924155172414103524132187241272724111035241083024095192408831240
7213240635130240522932404620240351924026202401414240021123993122398312
2397310239628239551823942102393416239231023915152390518238941923881140
2387732238652023854142384134823835182382103723811039238011442379523237
8937237751923761868237541523748292373730237212442371419237063123694152
3685232367122366419236514462364104523639432362523236141723601038235962
4235841623579442356414235542023549372353524235262723517252350941234963
3234883323475222346931234572823448392343136223422598234193523401674233
9836233893423378292336103623358432334103823338312332125623311861233093
3232911462328114623271251232611522325291292324316232383323229412321114
8232072923197362318104123179372316146023151455231410352313135423121246
2311104023101450230916502308835230783423061246230511482304114723038352
3021653230193423009362299629229811492297834229610382295124022941141229
3187622928352291103822901457228952422881557228711382286932228583022841
1512283104222829342281626228062522798342278114622771345227614432275145
2227413452273830227213522271145222705172269519226815226741922662492226
5186822646252263104822629422261146622601149225952522581465225711472256
5272255114822541549225383522521977225112492250207822491351224831022476
2322461553224531022441350224313462242259122412922401034223993822383514
8223794022361051223517762234124822332410322321346223192922301664222910
3822288272227156522261243222510362224824222362122221137222112512220934
2219208522181249221711492216134922158432214197522133011822121892221119
8322101454220910512208136522071359220626111220528122220416632203115222
0213672201231022200937219911392198207921978302196156221951963219482821
9316572192125021911241219013502189115021881470218728123218612482185281
2921843012921831554218223812181837218017582179725217833151217732142217
6135621753817321742210921733412721721980217118752170197821691148216893
9216773021661661216510422164627216311442162114621611658216062721593132
1581569215711422156419215521722154229021535302152835215118702150945214
9946214814612147940214616672145197821441463214323922142147121412711421
4011472139146021381558213726922136125321351145213410372133145321321976

2131930213013502129145421281140212712532126135721259362124145621231246
2122146021211142212013602119124821189372117136321161139211515702114178
1211322872112155721111873211014542109935210819962107104121061564210513
5821042511321032192210218742101188421001352209915682098145520971671209
6944209525100209451920939452092942209119762090198220891258208821872087
6302086134820851044208411592083186720827242081134820801657207911562078
1771207722902076834207513592074124820731355207212502071948207010452069
1253206812512067251082066936206511502064124520631252206218712061135320
6014682059218220587312057135920562311620558432054942205316712052114920
5123110205011572049177620481360204793120461257204521952044419204383220
4214512041125320402291203917752038124920379422036735203511432034197120
3315662032520203122942030228420291357202894420272410720261551202518652
0247272023115620221362202124942020115220191248201816692017135620161767
2015941201410412013840201218762011156420101557200919832008176820073213
1200620892005168120042410320031359200210432001199120001145199914511998
7391997629199625110199525119199418681993157519921971199129109199027103
1989104219881562198721981986229219852074198424931983135419821565198117
6919801661197914631978177219771771197623961975125819741965197393719727
3419711257197063419691038196812431967114819661251196573219641458196317
6719628311961728196016671959126319581561195752519561878195510371954115
3195318731952144619512812219503211819491043194822911947126419461567194
5209019448441943198219422198194121861940156919399401938134919371155193
6732193510411934625193310391932727193142219301149192921100192813491927
1571192616711925134719241044192394819221459192173119208401919830191873
6191718681916942191541919145221913624191272819118341910319190962719083
1419073191906420190542119045211903156319027361901519190014691899624189
8319189763018965301895525189452818935241892519189131518905211889841188
8319188752418866251885523188441818836231882422188194018801462187942318
7872918774161876520187562918746241873626187252318718291870732186983518
6872818679371866418186552218646261863830186210401861317186052018598301
8584201857114118565191855420185410461853418185241718516241850624184952
0184811391847931184672718454221844936184312451842728184183318407251839
7421838629183712631836114218358341834115218337291832521183173718308361
8299391828726182752318268331825728182472918239391822834182193718207271
8198311818739181773018166251815419181413601813103618126311811632181010
5018091142180812511807146418062610918059451804136018038391802939180113
5418001861179926114179815581797135517961561179594317942510717932186179
2125317914211790125017891884178813491787125517861559178517831784441871
7833413817825181781145617802290177916621778725177752317761043177516781
7741778177329112177233143177137157177013501769114817682611717672186176

6197517651676176414541763167217624191761156417601871175916681758135817
5783217562182175519741754251011753198917521453175139139175013551749511
9317482810617478381746115217451967174416741743239417427301741157217401
9101173913541738734173715581736271181735421821734451881733115517322710
7173119861730942172935121172814541727530172615581725155617242090172325
1121722271111721241011720261151719156017184191717239417161979171529123
1714176717131459171273017111149171010361709626170814571707211051706471
6917051455170493517039391702207217016271700124716991256169811461697939
1696238416951039169422101169321811692134716911249169013511689187016881
1531687187216863713916851350168416631683248416823312316811145168062516
7912481678124416775271676156516751662167430110167328111167224881671261
1416701766166917711668147416676291666103516651772166493916637351662177
2166183316601461165915541658124716572911016562292165511391654155316531
4571652229616511150165084116492510516481870164720861646321271645104616
4426104164326112164227115164111381640104116391768163819841637321311636
1873163510421634134316331036163219681631238916301976162923911628943162
7321381626942162517771624187316231980162242016211776162093816191354161
8834161712431616166816151459161415571613730161225106161116631610166316
0916641608631160752216064191605167316043181603941160217691601156116001
0421599835159826110159772915961468159517661594124615931043159218721591
2077159018751589155715889371587103615865201585165715841244158324941582
9361581942158094615791044157863115771037157618861575208215741665157319
7915729371571237815703613715692182156811421567157415662711015658311564
1257156330118156211301561134315602710915591348155815541557522155611481
5551460155413481553948155218681551156315501244154984115481873154711471
5461870154523851544228315432811115421768154112501540146115392181153818
6515377281536166515351661153418821533145215321863153119751530197215291
9631528247615271556152619841525238615242073152311481522269415211042152
0197315191155151817581517125215161866151510381514145915133112315121038
1511239215102081150929113150811401507935150611611505146715047271503941
1502241001501115015002310014993914614981665149714621496166414951875149
4279514931048149213561491114714902293148931127148816641487198514868281
4852598148493514831036148241914811145148023871479248514781655147793814
7627100147510451474156414731460147214531471156014702194146983314688301
4671044146622851465241091464146114637281462271181461115114602913114591
6831458526145710481456135214552285145473314531764145210391451626145016
7714491148144810381447146914462293144517871444166014433413614421359144
1935144025961439156114382590143710421436156514354211434103614334214114
3219761431207314301044142915631428522142716581426218414251143142413521
4231139142212531421228114207301419124914181563141720871416104214151145

1414114714131560141212451411198114101666140922831408176014072997140617
6314051039140411481403271141402166314011046140018891399271181398167213
9711451396431981395261131394411661393228413921668139117711390291231389
1454138818651387391381386104213851787138427104138318861382146613811574
1380630137915711378146213772310113762812613752911313742699137352213724
1913711554137014601369217913681656136712541366188213651778136422102136
3187713625219913619411360311271359271091358176113571861135622881355208
4135416109135337174135215611351271011350238613492411713481254134716851
3461667134516651344177413432299134225128134127113134016711339166913381
4591337188813363013213351986133423901333261031332178013311356133014761
3291146132818821327167413261871132525112132484313232711813222510313212
0931320114713191567131893713171252131646190131512621314241071313241321
3122612513113216813101679130919105130816671307136413061773130516641304
1255130326114130222118130119821300166212991144129810451297178112962295
1295124712942293129314561292166512911563129016641289178612881571128714
7012861477128513521284231131283157112824317612811670128029122127931134
1278361601277198412762913912751460127415641273231021272231071271291231
2702811312691240126818831267239612663317012652097126483112631044126216
8012612411012602399125918831258241021257114512561159125520931254187912
5313681252103912511356125016771249231051248187412472613312462298124532
1351244146412439411242229512411885124013571239452091238135412372594123
6114612351039123420781233261071232271151231937123020761229125312281250
1227331341226835122514551224104312231244122210381221178212201868121917
7412189371217136712161874121536140121417761213136712121361121119881210
2088120935149120833150120710461206166612051659120418811203219812021358
1201219312001252119919721198176911971674119619821195104811941261119319
9511921358119121951190114911891039118883611871254118624971185626118421
8611832081118212541181630118013581179231031178229911771867117611521175
7331174231011173115111721147117111471170634116917821168188911674191166
1148116516691164841116323891162731116112501160104411597321158125211571
0471156939115526991154146411531256115273311517281150125511492912511482
8104114737153114610401145228811441140114351811428401141731114014691139
3012211381042113794711363013211351364113452711331564113226104113119791
1301052112940172112814771127198011261141112518791124198111232711811221
7731121209311204320011198321118321411117432221116301291115411701114156
3111314591112156911111146111039172110918741108228911071363110636153110
5208911041565110341165110223109110118851100940109910361098249910972913
9109611601095114310942390109313801092124710912294109010471089228810881
6761087211001086166610855221084841108319771082312108142010803171079425
1078625107711411076115510751140107452210731146107241610717341070730106

993210686261067624106611361065186510649341063167110629411061231021060 1
979105910441058938105794010561885105518821054135910531664105213591051 6
331050125310494215910482293104719831046241071045381561044840104373610 4
213541041114610401353103915631038633103716661036837103523961034251131 0
333513210321366103125107103017711029271131028730102711391026145810251 6
571024147110231359102211441021113910209321019217610181772101729123101 6
156510158351014321451013381461012104510111995101020871009156810081472 1
007136210061887100510481004281101003361501002157010011042100023104999 1
462998401619973715799611589951974994114799329110992261119911664990167 8
989166998822949873113898620839857349841248983125498228130981526980251 0
597917709781254977156697673697541697452197313509721757971167397011489 6
911569689459676279666369651246964104396314579621350961149604199592186 9
582910495783295693995516669541664953197795237138951351449501461949844 9
481775947177594635149945421809442711894383694237142941135194028122939 3
912893840167937231069361670935311459342083933229593226117931209693031 1
289291975928727927187192693792510389242813492383892236151921104192094 1
919281109182911891715699162410091520969141259913301169121040911113991 0
186390911489082310590712629062395905221009041360903219090225103901135 3
900134489984489815598979438961653895186589415688934418789213598911669 8
901262889176988829128887492018862210288544171884166688317818821659881 9
568808448797348782110087714588761152875229387425928731253872186587118 6
987015548699508681458867241068668388653916086445175863124786223103861 5
218609328592710585810368571773856124885517718542295853311138521459851 2
277850217484963584827108847157184625105845176584428103843843842156484 1
145684023908399428382079837146383611578351246834156283317718322282831 1
967830105082928114828229082714668261360825271118241976823939822166082 1
176882011478193213381810418171243816125781514548141368813371378127328 1
117568109368099298082492807937806251008051041804135680394480213538011 6
668003113879912537981142797125279614497951469794419793114279224102791 1
147790291087894515378817707872297786156678522867841361783642807821559 7
812299780261287795221377820867772410077621857759347742610077316737721 1
457719377702711976920867685119676724104766241167651372764209276316827 6
245205761125276018697597407581467757166375621897552612875415707531978 7
521042751177175024907491658748259874784074625967453413974419787431989 7
422092741311297402594739241047381262737472187361367735136373416687332 7
110732217773112547302410972911487281368727381587261580725281167242310 4
723104572233136721512287201666719261177183114071741195716156871526113 7
146828171319717121449711136471012497092488708146870713527063414070540 1
627042610670393870213567011664700249969914626981352697176969621100695 1
875694157069323926922910769130134690421576891880688249268725119686321 4

1685452076842410768374068210476812711768019866796228167843201677311376
7661278675532426742497673419672501916711573670125066926129668188766754
2166662499665114466412506631143662136166115666601458659251316582613665
7147365614606551457654832653341286526316512210365019906493716264817786
4784364622100645144964414536431148642189264111456401885639165863819916
3736161636331376351471634628633207863229130631381636301462629124962810
4062732129626114362522102624291266234017862212456211773620166661920726
1821956177326167356152110961483661311436122067611208161026976093313560
8145460711466061350605197960421826031454602730601156760022945992010659
8622815972396596311225951040594126459327128592837591331725904017058916
7058860235587321625863616858528128584228858317615821557581227758022875
7930135578135657724101576124957518735743614357348204572209857131139570
2193569197556817635671149566728565189256432156362756227107561197756023
1055591665558167355715655563012555529132554251025532010055220955511138
5501880549103754811435472094546104054514545442069543291215423817754194
4540146453949205538146153712435361555535156853418855331578532321585312
2925304019252919885282710852712565261353525249952483452313605221461521
5826452042185519542655181763517114951617835153515751424106513209051214
7051122107510135550918795088829950771271506136350515715041370503199150
2371865011679500145849928115498168249729125496419495115749430121493218
5492730491729490431884891458488209548711454862110048511574849384832086
4822199481241084802399479125547828120477937476229547530122474361464731
7744721253471228747011544691564468177746715694661147465197846413544631
6744623315146194746020734592510745883245713534562168455187545430121453
7284521453451371574502189449752914482510644740166446198444562644413644
4310504421987441218844024994392710743812514371360436633435241054349414
3362943213544311570430231044291371428115542752942652742513624241661423
1245422943421176842015694191360418104741712574161149415218841428127413
3112541223984111877410940409158440814594073515240611484052311340411444
0311494021043401178140014653991470398341573971354396177439515693942077
3931350392259939110423901147389114438824993871556386249138514623841143
3839373829473811883380135237929126378146237772937633146375136737428120
3732912037227116371936370361443698343683211536717793661152365939364135
4363136636214613612075360167035932129358628357155435625114355725354154
7353732352115935113603503113234963034894634720863468343451980344451873
4353534223793417333402191339208133883733713603362080335176333420923331
5523323513833124109330186632972732811483271147326146232526963242279323
2711332221863212592320155331915653182081317115031618883152612231426107
3131872312654311115031024107309241253082911630794330614683051666304134
7303155430246197301135030011372991874298115329772429613295419294491962

9327118292281032913213829012955128915542881452287177228614542851987284
1145283451862821779281301342802811227920892781557277166527613682753012
5274351482732712327239174271114427024922692497268391482676724926643169
2652411826424102263501892622287261522082609412592712225815772576024025
6301142554316525454217253166925293825128106250731249634248271162471565
2468442453514024425111243472002422512224164288240331472394520323830114
2374619323640177235729234135423314652321466231168123027122229391822282
6118227261232261672225572472242593223221042223012722149214220209321920
7421817722171249216166721511492141252213145921217652112510321083520914
5720824972071249206261102053012120473290203146620222107201156520062419
9251301981359197271201961787195652861941777193441851923212319115611901
6551891354188167718793918638163185512661841458183116118229122181259318
0156217918661782289177115017617681752396174125717331123172431871719351
7093716913641681157167209116624891659421641045163126616213501611153160
6321591787158311381571766156197515572715414731533213015234146151451961
5021891491554148301271471463146103714519791443113514315631421554141271
1414017701399331381874137168113617761351465134301221332211513219831311
8671301258129157012831112127104612624103125114712414561231252122301131
2131141120175811918721181776117331231161873115175911419611132598112136
5111124911074308109228910810441071044106125510518721042510210394410217
6710127131100115199301199827107972610896104695281389413639349231921571
9129150901052891354882391872410286114585936842310183197782371418111578
0104579249778176277187176238075208374945731254721354711570702410869602
5768281186718776620956518906473063156062271216173760830591253581050571
8845619695512585483853847521055517415084249187948146947105146176845114
3441986431980421363412310140124839157038281113719703613603520823439155
3334145321366312078302399291253282510227198626619251772241157237342216
7321197720729191143181251171049161147151253141147138331212521184710727
9138419794463195419431232122418141 9”

4.2.6 Rewriting the full text of Quran at verse level by replacing the number of letters of each word with the words

For all the key coding pattern based codes do far, as per the rule, we have to test the even odd coding pattern. We test even odd coding pattern regarding this verse as explained in detail in Chapter 4.1.1. Let’s recall this verse:

> 89:3 by the even and the odd (Quran).

Since we have observed a miracolous system of codes with even odd coding pairs so far, I also hypotheszed that ther might also be a key coding pattern left in this verse that has key

role in this key coding based system with even odd pairs we have witnessed so far. When I checked, I observed this special coding pattern.

This verse has 2 words each has 6 letters. When we write the number of letters in each word along with chapter, verse and word information instead of the total number of letters per verse, we observe this multiple of 19 key coding pattern of this core verse:

> 89 | 3 | 2 | 6 | 6
>
> 893266 /19 = 47014

Then, when I test this key coding pattern over the full text of Quran, I discovered that it also exist in it considering the 6236 numbered verses. Moreover, it also has the compulsory even odd coding as will be presented in the following chapter after this one.

This coding pattern is also closely similar and has strong relation to the evidence code of the Ultimate Code presented in Chapter 4.2.2.1. In code 4.2.2.1, we had witnessed that we could rewrite Quran by concatenating the 6348 representation numbers of each verse at the verse level. In this code of Chapter 4.2.6, we will observe a similar rewriting coding, but with more deep resolution of the text. This time instead of using the number total letters per verse, I will literally replace each word with the number of letters of each word and rewrite the text of Quran. This further reassures the rewriting of code 4.2.2.1 and shows that not only the total number of letters per verse but also the order of each word in a verse pattern has 19 the similar 19 based design. This fact answers any potential objections such that "why is there no coding that shows the order of the word are also under 19 based design?". This code, Evidence 4.2.6, answers that question by proving that there is also a coding at the number of letters per word resolution and we can rewrite Quran also with the same pattern of code 4.2.2.1 but now with the information of the order of words per verse. Also, this fact is based the second type of the text with 6236 numbered verses. Therefore, considering code 4.2.2.1 and code 4.2.6 together, they support each other and assures that the text of Quran is under 19 based design up to its letters and thus intact and unchanged. Moreover, there is also further code, Code 4.2.3.1, that further shows that the pattern of code 4.2.2.1 works again if we use sum instead of concatenation operation while coding per verse. Considering all those three similar rewriting based coding patterns, we witness a very strong 19 based rewriting design that shows that there is 19 based system in the full text of Quran up to its last letter with the current order of chapters, words.

Considering the 6236 numbered verse of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [Chapter 114 | Last Verse of Chapter 114 | Total Words in Last Verse of Chapter 114 | Number of Letters of Words in Last Verse of Chapter 114] [Chapter 114 | Verse 5 of Chapter 114 | Total Words in Verse 5 of Chapter 114 | Number of

Letters of Words in Verse 5 of Chapter 114] . . . . . [Chapter 1 | Verse 2 in Chapter 1 | Total Words in Verse 2 of Chapter 1 | Number of Letters of Words in Verse 2 of Chapter 1] [Chapter 1 | Verse 1 in Chapter 1 | Total Words in Verse 1 of Chapter 1 | Number of Letters of Words in Verse 1 of Chapter 1]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

[114 | 6 | 3 | 6 5 2] [114 | 5 | 5 | 5 4 2 5 4] . . . . . [1 | 2 | 4 | 8 2 3 5] [1 | 1 | 4 | 6 6 4 3]

And, the final number after all the concatenation would look like this:

11463652 1145554254 . . . . . 1248235 1146643

114636521145554254 12482351146643

Here is the proof of this fact:

```
x <- nQuran
tmpwr <- c()
for(i in 1:nrow(x)){
  word<-unlist(str_split(x$text[i]," "))
  tmpwr <- c(tmpwr,paste0( rev(sapply(word, nchar) ), collapse = "") )
}

cat("Tail of the representation numbers of each verse with number of
letters per its words: ", tail(tmpwr))

## Tail of the representation numbers of each verse with number of
letters per its words:  5342 53 53 6722 54254 652

cat("Head of the representation numbers of each verse with number of
letters per its words: ", head(tmpwr))

## Head of the representation numbers of each verse with number of
letters per its words:  6643 8235 66 534 6544 865

tmp <- paste0(x$chapter,x$verse, x$vwords, tmpwr)
cat("Tail of this big number at verse level: ", tail(tmp))

## Tail of this big number at verse level:  114145342 1142253 1143253
114446722 1145554254 11463652
```

```r
cat("Head of this big number at verse level: ", head(tmp))

## Head of this big number at verse level:  1146643 1248235 13266
143534 1546544 163865

tmpr <- paste0(rev(tmp), collapse = '')
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("The number of digits on this big number is", nchar(tmpr))

## The number of digits on this big number is 111098
```

As we see the remainder of mod 19 is 0 and thus it is multiple of 19. It has a similar approach to code 4.2.2.1 but using the second type of the text, the 6236 numbered verses. It also goes further in the letters resolution of the text by using the number of letters per word resolution. This is the maximum resolution we could look at in a text with the natural numbers of a text.

Since the key coding pattern is suitable to consider the text type of the numbered 6348 verses too, we have two trials and one success in this evidence based on the key coding pattern with letters information. Let's add them into the counters for probability calculations.

```r
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  2
key_codings_success_nums <- key_codings_success_nums + 1
```

For the reference, to the best of my knowledge, Evidence 4.2.6 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself.

Also, here is the "111098" digits length big number:

"1146365211455542541144467221143253114225311414534211355334231134552823113353342311324322211131453421124534233112344332112225411214342211155323521114355711134334511126334342111153333311037533834411027643265511015643331096433531095542643109455243310935426431092462421091484221083462521082354310813673107727710763625107555622510742741073574333107246344107146445106473263264106345328106246647106124610553546105444266105346455105255254310517563332310493532104835541047473441046374310454625310444626310434542410424543410414443310339675786553103243372103116102856256210274637210262651025563623102446332102336331022374310212761011125310 11

0432531019254101847324101745423101647424101547665101457754310134725310
1227210111710011555342100104622410097622434410084553410074533410064547
2100534251004342510032491002249100124999863335439976343543996675654599
5434339943745993432749923756991475539882133333544344675243443698796325
8655298616622546432963255298516634666755264735398411662323655439833434
9826544424981126636963255329755543249749322444684973633235497255425397
1554273961956542396182849617255961635559615686423396145343439613453259
6123732961155332596103334969344596846332967363296645723965542273964363
4963364496243273961534344958485449574635395695334865539554646295465427
5395336549522549512869483534947354494644522945445239443426943344494234
3694144243931144354931044364939443649383555937344593644543935453559345
6223793353334293233369311692212459220563363921964424439218454449217268
9216353492154636292143448921347633921235529211643434392102679292749284
7324927267926274925454249243452923475339223437921343691153643911476645
5769113774444349112365291113744911045233919452429183767917353491635369
1535379143636913353791235369112669020353590196752756901837559017987675
5232901645262901535259014652325290132429012462539011365390102779092669
0845243907533225906444549056344225904532753903333590245424901454428930
2468929352689285553358927485528926435438925535426892456452489239624755
5548922533634892163353338920433568919434678918574363891756622389161053
5444623489151153556362374891439328913543353891236478911462458910372689
9565555898662542489736338966433323895633332289433368932668922358911688
2646522882536528824466468823444238822365388214434488204435488194436488
1844364881764353648816266881526688142668813363488123534881145442881035
3288925688835548876324342886642343388544324884354488325588235548814744
2871935738718565332871735378716466628715443348714442428713643442287124
6544871126887103425879464248782668779435434323876343687534458743645873
3435872343487146333861745684861624586153464861436238613334386123536861
1353786106433223869374386845433867585324866443238654327686464533228632
6586246253861277852235328521444228520446258519552552851825585174644285
1634348515365285143663851345423851245332851114653752443865528510146444
4462298552859104323568324858966562345385764962338564452285536358543753
8532658522768513637842595333865538424345684234534584224655284216626534
8420462338419432468418343684173336841636438415652332384145422238413564
2338412255841135448410644542484946436848455548475654248469743343742845
3455844454258433354842345584135638336665263283353673833466625568333465
6383326652554833165753748330483448329865525652832848344832735268326610
8333583254542583245646248323367383224437283212858320254831945253831865
3742383177624434283164654283156854243831486526332383137763644383127442
3243831145465831038538392548384425383764364238365835438352448345745338

3356626483267537358312838219935644342382186532522821755325382164742382
1535378214443638213443728212362682112658210375382946623828643242282745
5448267643274282555423482435648233464822367482136638129882442363812856
2433812758332281262648125545423812455532381234663481223663812134248120
6452332811944443811834368117343681162568115364381144523481133554811234
6481113464811034548193433818348481734648163464815346481434648133464812
3664811345380424662580412468040445558039275803835548037653544380362578
0352548034542533803336448032393580312468030246802925780282558027334780
2643552802543553802445376802354233380224533280213652802034628019454428
0184432280174527380162448015245801425680133532801234338011354380103434
8092438084442480744343806342480536238044664280344453802364280125379469
5243626357945562434794437337943462337942564627794146253794095254343247
9394626379383664793733247936433657935532753793446644793339357932267793
1475447930453367929455557928365379276562435792664353227925576445792446
4347923254792234427921244792036557919453367918642322379175335347916636
6352791544442791438247913454257912553335791144534791057284679925779835
5479727679637437952497942497932497922497912497840165352654425435583783
9943343345378381454623237239543783710536266368278365543247835653446278
3425578332667832275783135727830553636782945733782835767827555254782625
4782536537824653446278233646782224778214644278204556578194656578186665
2437817563532781626578154632578145538277813355678124545678113566781035
5678935567882687872677864554378537327842737834732478236527812827750464
4477493853774866263347747385377465645747745385377444844377436643574774
2363677415542727740385377395633337738587533773738537736483437735462337
7343853773333547732464447731652434277306342237772966242377728385377277
5396546772627577254554377243853772338467722353377214442777205432637719
3853771839447717376277163743771538537714553253771325477123433771134547
7103464779346477834647773564776342477524977424977324977224977124976311
0553395242476301155342442363762995334335327628967544567376278546675527
6267545255376255643357624952443334576236664533762286544333276211355463
2557344676207555424476199656636555761847444761767634467616566326761587
4632555761466656567613107344427346761256353676118646532467610775442437
6910534442446476876663367767773347657667684434476586633267276466758637
6375453663762105576542753761116432523733275407642353475395757347538544
4327537643242375365342757535452427534352475335543327532353475314333375
3046533752936567528363375273324752647433752555342375243555752335437522
3554752126675204752375194552275184556475174645275166255242751537437514
5543727513643357475124753375113323751055357475936547582547573534756473
4475555574275465423637535543757524764375147442745611746324423637455343
3745435337453566223745295442442427451352374503735744956723374484856374

4736537446454447445482447444474237443572225744243252744128274403842743
9365374385543327437752524337436255743535547434343674333426743226374315
7543232334434254243444444936256965553655665575543553635553743033457429
2557428433427427432537426236742555333274246433324742337427422343274212
3274204333274193334741834337417256741655733374154424274143625741325574
1246425741145434741044383749443547484723474725574636437452567442467432
4474225274136427320784442494542435327634447656734274427643265266445236
2427545223754535265554244343273199533433532731866432567317847445254731
6654765473151155363555563731485565754373135563267312466527311656649573
1075476235739956233276273866453357376546222736845432552735554453734666
4422733553424732453527313642722813432555346622572271344343244425237226
7443435472251143242625422722411445428624337223164464323643384253722212
6423334262327221843334232722084243344272191044655433347218844253373721
7104553324337721684397382372155456847214104564384834721314434434432455
3472121145352442244721194533348347210134434252343424729134523453554434
7288554486547279444225345726114742565243472510443554224472474436434723
9435424254722945432553472113455364235334271281553833995434724271271055
3535552371261058253322347125126432353476837124853833553712313554353343
6426712235467121135354422754233712045447711955533571185674627117555265
7116755444547115856343343711436537113653523271129635435567711146564711
0653348471976363532718456327171489668627535644716553553715764443237141
8642423343243376234713576462712744333237111444623244243463704496545336
7570439633557263704286456376570418833444237040773873437039563733703884
3424425703754636270365645547035464257034576326703346926703255692670317
7263453703010635742273370294672670285534427027664422670264546670252867
0245527267023566325702227370214553470204543370194537270182547017454247
0162557015334370146525523701335477012257701195542526387010454437093665
7084664370725570635547053545704113356332468470347242702442387014454369
5246344695136346950483546949564254694837646947663324369464636269453736
6944583543694348225694266254436941762544236940444436939362369384634369
3748352693655234369355455246934574333693366542336932775555226931346269
3025469293733692845342692747452692646233692511632525654246924876263574
6923256692235326921454236920564343691996645654246918654426569179655335
7366916555366691537466914653575569136545234691265365376911772753336910
6546445699681043546985523336971553554454547435569665447346954874469448
4446934625369226269116685258332368511263755388554368505825376849105374
3246246848115342553334568475635526846764234626845544235684410623296443
5684311636355336756842983636324368418652875326840444446839126332733555
3268385633326837563432683646332683539866834664437268338652466646832106
4334462436831653352568305833556829663345568287643336368273732682656355

4682546335682465557226823383868227642535268212676820276681976332454681
8273681710686255537368163735681577636443681455323268134433368124445468
1135446810544233689474246883833687119435223423268627668527668444344683
5535236825635326814636167301044634542626729134422286524622672815442843
5233462626727135244345544444672694435435426725764253376724865525422672
3126258853464226722126434434434446721125324244264336720154238263263324
3367191543336362655534467188434525346717124385542622526716114245342622
6671514654257265533426714766332436713964432625667129445364552671156656
8671011652324243266791844234232432564523567813453653444524467784353545
3676764445566751264378587664467410435545554267318423255526323256334672
1166344477534671943233544566121782554655236554545661124852555255244232
4255554446610278255444255396625353635554436691264475510645426684643233
3553446963453565442375244774424354435554266712642545725542666236275245
2446585647635542665177566666644652523366421433985652434637334352663296
6533524254325434462445633533662116636574343266115445655243242542651225
4334243432342755555363344651134424424467524455554353728655564454565101
7454425574246553436597455454565814458559543234256572543345523444244364
4334232565632426736576635354357352357735253276551442563443355433654284
4224433542576427456626262476532143343244424343535232665230524433565432
2443774337672685446514243344342433444344456523536272446566765354264185
6685464171244535364446264161682642337477772466415843454874641419444377
5383487225542641398744233246412116663563674764111643354354344352426410
1164465557656649276534467524466345554373354636481046356466566471844345
3626432622553646164354766746856443645134445463255353644146445635256822
4643965555656836421146354545542641174323353525238223463111634553344436
3102182454336425554232722763918826343432737525542638176294975454567353
6637206294685463443236265263618854242344236223754635148357644436633463
4226346752542653564637564633116236345255363212652344425376631177924563
4545345943621121835735234322565642544621015655474327528644629226423345
5433663264355426281864378543527435452262799456434736261864256532364525
5422625238542545555336464722755362410652542543362386633634662221443325
3767755445723426211266655238223461143667535565573255453934362943433455
5542611398444423756112176533424675244763461111564233478442865661101244
2653525542619148333536446544261811833435843766171685425734354353436163
2433585444424567233355443732434336152485425644545443637232543361411555
3527534261396226243436129622625542611116635238223360132065263362525434
6255426012394442437752637637653753535345522378435426011216244466237455
7637235360105644554434628627746368372543626352332226373683844978535542
6092182663627376285275246460821834257626273528252462607154454544654542
4360619652434356443344433360513663343555462460452655564432422432857334

5634876543543264443652367244342603134635547373762602136256865753672601
4964234536363447556752554245626664253537556646255425924176636822246726
6642592319634576676665233244259221366285423324425921187556744426563363
6259201082555655525919108256744663591818634424634236455542591710844465
2584591617824433433344732745915114445455525459142362353375645534225323
5925913126235342624355912166227564826446263591128744586344443466363255
8665323591023443455362438659344652565993182642335333637534625354255285
6659818825647742468626597597376442467353565348344226498647453253442596
2543235423444443324634534435951386456358242525941264434436455359314546
2462665432559241742885766562472324642674562525462632554425911166352382
2335822518243234353544346752447346762357272726536432656564325821943425
3643582087256465258191582732373543775658181782433347363275463581715642
5554427374425816104444425376581510652345534358141963537434225434553235
8132463456476567544623563362758122344435235333463366635542581131463555
5645544763434477263335542581017874444346455572645892064446757668673735
5425883864745434646274242345466868343626245323587474334273536252342343
3243623436235424252382244223586154323554553754635851844954635253356465
2584264494446573646523623285532358321463526462324653626276582234443552
5756637272262475581184442845436526434325729226525425435343233636344572
8224453525435525566455542572739645545567253456357288546542677435666352
5726146454576726846457252843426552465643367655864785635724126524343657
6557231545232553635235557222144332623242362352524257212565254254335555
4664544253657203964366364264463542554256434872656543664657192065576566
5343882555565718124343544479825717136563425354426571628645645543265663
4233446425533571515646256552344426571420655433376776563543385713276426
6353245448663525755109435712226523467524456963549833571112433274444422
5710374635643473265244555324245268544426333579174534353727544344257815
6427335767562335771543374563853765557612644352656254575864446832574364
6354234344362434435232453524326834257394333776525721143233546832571966
3682233569646344569556233256942465693342456926782324569156522556906652
3245689444645688582324568746428568656342556857624444456843655568347435
5682464575681464665680482255679483425678354256773453567654624456754664
3567446344567357657356726832665567145457567066556425669783252855668464
5756673732566627356656655742566458327556633627566266566545661962227742
3566078335553565958327556583527565746573565645353565535375654462475653
3647565254232656515874425650553538564948722564827856479846544466564656
5356564556335456444434256433523564235425641565266564037245639372356382
6656372645636268563535835634264563346362563225656312545630253562925456
2835325627565266562645543562566344625624465345623376656222345621463345
6203736561956346256185424765617465545616385656153633561437255613372356

1236425611285561028956957527656857527656735655663545565336456443533563
2555623573561374355786862335557746544557664634365575465445574633536255
7346544557246273557146544557034545569465445568454555567465445566375555
6546544556418556346544556235635561465445560573742555946544555838755557
4654455569335362564555546544555493746273365553465445552555225555146544
5550365555494654455482555547465445546553434554546544554452445655436834
4435542465445541688578455404654455398333424265538465445537674565455364
6544553587353246455344654455331763627685262726442553246544553147335553
0465445529103223268225552846544552768623355526435225525465445524685276
3552346544552248654552146544552046246551937735518465445517483825516465
4455156324254551457527355134654455124852555115736545510365655967636575
5847253557474575563666555366555426455327355226355116545565433425454544
2725453455435452552533545164237645450664535354495463235448932563526354
4754428254466447662544545655544455436254439525326237544275438475544155
5234544074235654543934565438554454543794566642645436567664543573244524
5434947323556354334633454327423565454318756545635430445345429446665428
8532545265427768346535426556237542593422524555424104433355356542336445
4227423565454214453454206535554541995332545635418645343454177423565454
1644534541564233745414633347454135453375412932335655654115546565410565
3345499656563354548833384536547854572674546833353344545553354544753272
5454365337765427537634354145566536237375361265536035375359466345358654
3233535726453565652435355463445354332653532495352954254323453513435535
0464445349462245348454245347466435346443425345575734534445424534345424
5342473335341466525340433435339632373353385435335337334853367432342253
3553353553343555553333446533231434265374244352623427432538557553311676 5
5536555238224533016534352234232526353291166335242255328164424243436 23
2233532796586762525326185434423234742823235325376453244427253232554254
6434362523442748532253224443353214635453203675531936575318663423353175
3353253165426425315363553143743531344434531243239531153263253105424355
3954253453835325373663536363253535445345433225334524353253362253133365
2495665535248104334474345524710626433555352469623454423524576345635524
4954656244352439634543332524278256462524156355252407642346252395646225
2389467537332523779223552523676226852523588223325252346652457523366225
6252328532247625231692446252307632546252298535353345228964235323352276
6465435226765233355225583355522475453555522385343244852225634695221194
3342325273636668565220734863365219664357452188644645365217554272521612
6425454622765215662423552146634453521363433535212563225521138545210346
5529446435284422252745342526276525276524276523352252225552116516076452
5545159983743555351587652624251579624332442515667364435155584634515455
3344515365322275152135245342525324515111443333442635150844333435514976

5553235148484765147574477514686454323451457753428351448637743255143833
6332435142975343323251417655623351407434286751396524455513884653724351
3776665346513678233453513568243275134483355133532555513266336355131584
5335130866233345512994455432665128945632544551275633555126644443451259
6343564525124687344251239642333664512256356351214646351204845351195862
7351183829511766252555116963354452551155542725114782443655113565323511
2453465111554225511028351943234518453345173537516355351535645142495132
4951224951124950451344274553363435044945335454350436665433504276335663
5041744264365040566553503912645433446235503813424343263685450371343542
3233532250361542262644323256350356464623503456335750337444663250326443
6235031543756503094225625435029865333542502887543372350271044234624535
0261066273442345025444545024644242550236432354502212455536324233502165
4432550206633524501994332355455018844433242501784636295250161463244442
5257545015104323222567501494353234665013436645012754633545011864442764
5010543366509106342763626508543355507114322475477650612423377356364505
9432353552504944645425250374335444502114338444525250136714918106345683
4424917196427525342735226245491616433552382245647249151882544278772265
5584491427444247252646362744654622474491321444264362865853273542491232
4442468443425445436334324257554249114082632373653873663443234243446233
2342554249101065466374844993083427667434334344763733677827349874455424
4972882587554625753445524262444274961865237646274452554249512445344543
5434949626742752493174453664555443755249223625742454626353376255424911
6444246643362554248295455548655436356443675444726725363262674246445556
3536444482814554353644654424827285433246224627665432666565433482628533
4463366478453645846625532482540554556624252453444762726564544266662655
2482419563445623234474624348231264433323244348221253452275556348211453
2344344256254820187578364543334855454819755448564818195475756224638282
4334817275554375244564333633363336334816285563263634445636294343367282
4815315362528283243572244626658537385481414554442543468344813958646542
3481220445526623446396522524811375634324343233424423432623286377767282 5
4810255474443434345336342474852489864777657488566573487855446844486215
5434654455552579910954851954433474546752449854841955446844726884274424
8345446482157564544342424254815542534738307622546637555424543425442755
4247376756692473613763656634366447351275345755365347341534434352442555
2473311763674655424732217644525342326644255524731875949439473012745532
9789434729117442236253247281075664426534727786686344726157455327432555
5347251635337534232736524724774326744723775645554722107752626253472112
3444535345444720273552463463625464454544445554719147745995743323547181
5663347334626363471766635664716247763435543455554253345254715447453552
4234267224443268332645232633325473453471413774323332433447131434386452

3324254712223467437756752448655442471111342835544334710167954352553375
2644798754425534786743556477107564625542476435574753557474387334425645
5446443375334433465933645554473187544442465536655334721855743424343336
8656471873442555463527853434424362624353635254335463418643663535534535
5444633224323336423563368344244463218442564224525444323463115442662342
6446524630206444344335432455352546291865343465546742445346281765354442
4643265554627106566525264462632825234456523273735443674363624644625148
5447332744324462418444328222643576544462313645525274354346221282325356
2765462125434543436343432533844233546202764444528435456396627653554446
1996237853544618176546425232325525546172876332524323448442633428427354
6161865453552727524455546154582443352255543543545426233644333466546435
6776461496534465554613136235338244552461216855555544455444346111943382
6234624325555446102485424294437324426432326246924444333423423324243524
3224682566364523363424422637226624671443353455356544466968653553446518
6623733262243243334642964232523325682332525454325262463156635644536368
5246266642654611245378663682834536882538254453516823462666644465445341
4623357354536544533118252345253445322293333326242443272432344531126459
5453455445301365235247865544529116426335546345281464255634325324452710
8456446834452618625443327336262642452516642755235325654445242153223243
3536354663226452324644325354345434334544426452213623433265684445211762
3764865662775324520764545534519157353658344235244518136255437525362451
7247354735432545523237352584516138387287667354451511643264365324514146
5345445256552451316745322355238223445121466428535553344451111432434556
3345101944464326234524434624591144354646234458144556237324444445744433
4561266434454644345520644665352532624437574549644423353453685682245266
6426545112445937464458575665445776523324445610646663546244555553454454
4348444535874264452354244515442724450662423244495663324448764243424447
5643744446264444546246444426444433642444428662343234441106234424423444 0
5675324439862645382443876636853443712654852633233443656427544358733663
2244343752443374432628443268333844431782533524430766273544429865366533
4428454944427464554426345544255542524424663445544235644644422663523444
2158262344206625434441994653435234418944334434244178446535444416673664
3441566456534414654635244137445363344126636344441154435444106456436449
5622224481076345423324478642636824467662332444566335244445432444438633
6427344226744112438966443454388862352225438786446526443861363532374255
4343851365635636832464384116633533624343838645637654382853526825438188
3436322438011656374423624379564462437876464563437796433544264376682547
3437566334424374664428243736645543437276439454437115645646625632554437
0568456436956675543689643553242436777334557436610623462636243651143425
5452764364964375324243631774637433675238434436274333763436110643735364

4436086526464343591074474633224358145322432522237643579534344334435647
5484355669476443547645474643531178332325445435211443424323324351186442
4743324323425543507623645443491274433333632643481365785242332534347764
2375443461282434553746443451364632652426254344664624443438643344574342
7754745243416744254434011442335424454339976245256343381264835432353343
3776476285433611423624632334335127337664332364334565568433317656324774
3653542543322563335545553356662755334634331104823363346433096243354544
3299454537542432876542546432756454343269634455733432578533548432414626
3356453554343232166343365373342424262543221166343365352432188234257243
2015632232432726326431912775565642586431894362362444317124354246335344
3167774434243159457245226431448434431320623333345747344625374312116285
2344735431112644427436235431011654434453344391066566832644387734443743
7882533263436672326343586442454643474456224433665556343226743112425315
6443352382224444252276435462422446473624325244654251224334255542442243
4524334250114435425666242491564345433424683342482747364345333437534634
2557363424721423354232422323423258424616422344343286233342452744282373
7655825543326426566424420423326643844232234434243863332434424215443544
5265653644241942526435442401483234355335445423967256364238116745466758
6423710625248557642361774455534336653263423594232627554234742453624233
1544353224356543242326852653423114433243233527434230104256445263422916
4435334252368353422813653555232544342271744634244452565433422612443942
7865574225126257255264434224226443744644434433443562422329444244234536
2634462286555444342222465234362365286563435368342212244383545454242252
3553242202242622344634334223634324219965342464442182244362652344746563
6253642171146353856444421618444364355262324266421534655446532747354455
5424434374343645421430432352665354433324455455232363421338424542454462
8333735625572534654232523342121343335435468624211196633533667366233684
4210154554344435323734291643233643525642624281943323295242445364334272
2625524332535535255546542612553354464266425196624235239446952684424106
5352382224231066442544444221342112415412433334424243415319432334344335
3636266415217442233225243232624151134434346447364415032442953557642233
4456332364432346441491145433542742414812423253255243414728423255637453
3342437252436334414611653364365324145184323554324453664544144304426535
3362626535522565446656341431744353324253223242414213442542343265241419
4545365524140264633426734422352445526265241392243233656424555645533534
1381262376263368341371964425437535626675534136116623563726441351142236
3553634134174345544442546365341331382445443334434132444244131165244652
4463662834130196446763638558244552412916826737642664455441281467534534
3545434127106544955557412611653664625544125256546425232325535363236536
4124118223833466341239827655445412220635424254637355427434121186533533

2444655527641201265378553623341198635345444118556556411714653565753588
4441161962346666254754254574115256763432544244333264452934411423626346
5432543635363256241139535357363411219665357665542255263641111665542456
3443635241101584452744455254441914823627525357524189533386552417862736
5254161684949435434533424151764545533634634266414762365654137645554441
2466254111240851785452324435437623408412623364545544408315825234525358
5644082256524435263444552553375264408166443564080126546624585444079965
4773344407832854534334443442533442254524424644077146672543542432540768
9444645640751164444526434407417843443243223454324073764233324072665226
2407166872724070964526475540691063442753234068125224543454424067306644
8325255725724624224224254240662083425327534325542432406514823552662332
4240642182464447265564755334440637645554440621264233232444440612062544
5333425737533444060136476285235644405911625444325624058137256386567653
4057126254453246844056236623567223362255444275240551286344572432540544
7553405386737545440521053464784234051117446625655340501642384365358562
4540491362434454552544048126332424238534047195253543433385755273404613
6352664454565404510635345254540441274424345342840432255283435362362423
4743240421566364322322555740411053863622334040234446566434232533534343
2403912632634663432403896456323444037234235336234363555443358540361074
4423525440352345323444554434355444275403430542243454244243332532243832
4544033163223443424232653403276354333403114644435265433334030117335433
2344402927643633235253524326352655332402839442242425435523455234285343
4247645224344027136442522543344402618652422542433544554402519423833683
5556552554402474466653402364674644022136433466856453402130324233374652
6343255255533752644020156624245242565454019664365440181544342826736263
7401713644253243324540161566355334434262340151663552423425452744014883
3526464013144235346235554240121565366243544334440111342433786865454010
1577352652444655240912652453572374408166633886233643474407276445755554
3244559274464356540610554553343540521434742777773245283354404136265355
3442524031464233252645554402666426540112397517823545544465325843974168
3443525574543563973206845463475633453455439729944464563397134836434353
5494455435363474633443554397096343423253969156235548846444563968226424
4332432352382245243967176366669735564245339666823542396514827465342544
4439647844745239631182545566862396294323332443961116235528554539601494
4245643553743959108248355523395812825322263342395797245422423956158333
4324235234239551662546623242542473954136226623227437395321662356442442
6263655223952156453225435442643951157235257525652573950116524435255239
4922626442233643346325272439481182523452534394725762242347363227355522
5523394617735225343854684523945188234253476254644343944116426832573239
4314634625425432623942267453224336555345623255365439411855335352365355

6463394084444545239391064437363223938369544425622562362234624325272466
8326439371262544322343339361532234434268444439351265455754444539348843
4362339338725246353932158442442644333433931774373423930455333929196262
3547244585344433928755323553927117532263255439261265246666254739251062
3266525339241364258473635443923343223443422443343376424554355756434392
2204425432674323337443439213175532255255426642425265362442233920207442
4375245352334553391910522456442439181374264555575753917124463437727763
9161764252443353523523391519672337376558224242739146425442391394343424
3239125834353911952544243239102244584454446326545554223992474546266552
2345646554423398345523554252463432443233443245332724397316443643764324
3533346356434343623963664233252444452332474265672355432532539523662344
4265453656354568339416664264243644244239333442242427322254424438362642
6665333921052545564633916664265388843347388758332238861092333246223885
7644434638844455338834845338824686338814753338804824338796633723387865
3354338775444533876103263263333387515723274434242523387468246533873464
8438729625423554387193244383323870844343342386997266322323868363438674
4322386676663682386511664332343423864653533238636744258386210725353232
6386111524543332453860116437435242538591054435245333858454243857454833
8564647438555337333854742226323853564623385245566385175564546385057353
4384963473333848872353675384757835538465546833845886466765384414435356
3432544338431075534464263842654535438411154743342455384063455233839744
4256338384726638374542938368434545263835156334245242324233834942453764
4383368644353832117533325253438316686432383074353666382997475754743828
1377425298655423827165255455235636653382631634344344255244255435535525
6352382593455233263824325533754532258655333557253535543338231562584543
4632332382223643643555335353254455352382177625343382066467463819542266 3
8187865365338171143525556234381686334334638151042325435433814743533223
8137756634538128726433543811672552338101072863683323897663455238815463
2422222525453871063326524523861244326375245638584432546438410443844452
6383104346325262382653255238145271371824823637181383537180653523537179
3645371784334437177684473437176289371753647371744334437173483533717239
3437171587644371704642637169484443716867245223716737533716638443716537
4437164654233337163563223371624744237161363537160484433715945345371581
0745444544637157564275371564453237155264371544633237153463653715247543
3715157524337150663585237149564658371484338637147662343837146552447371
4544377371446633424371435823353714244357371414824537140575332371394834
3371383647371374656537136375237135482533713446562371334834337132486233
7131484433713045234371294724637128484433712737563712657634437125584646
3712455353237123483533712248625371214844337120464343711947266371183869
3711738693711648268371155652793711456434437113104554735447371125824673

711148623371103844371093734371084724637107344737106566332371057844364 2
371044722837103464543710228824326424323345536233323533437101345737100 5
822223799663343437985884273797762662553796463553795462733794354737934 7
454379246232379166346343790363637893434378846244378748343378656434537 8
566455323784544332378348523378237623781486233780484433779582334377847 2
463777472563776565257377558536437744844337735853353772464643771574524 3
770466333769456543768564622376774255322376666474653765484453764663244 4
376348473376266424343761486343760565332375967336633758363437576824345 3
756563253375556424537544642337537746544437524834437517423344337505833 5
537493535374843566374776423342374638353745542454374438333743364237423 6
353741453353740484433739664235337384666437375845323736655664737351084 3
323335437344944337335762553732453393731673435337301054425253333729566 2
253728662744537275833553726485223725472323724374637237643743237227653 8
556372176244533372065335263719762454253718465323717278371678465444371 5
643332637144834437134625437123742371112432735224338371074466323379444 4
537894227653623775452253766756643375773636823743552373249372249371238 3
683865325446368210522424434436811466335423568345368011634446523343679 1
043333364623678114364234444343677114424426372436769635243553367576333 58
236747654432736736646544367266565383671126336643353443670883543325366 9
124533222535633668764525533667106348373843366696468636433665116536567 7
345366456435636635644433662866454434366156437336601443337622332543365 9
484583658542244365765245433656767342823655763255523654116423534342636 5
310654245434236521384632362525253651106437224524365076533583364986365 4
362364876425337364724442342544225555534536334364611645344232633645116 5
536325334364463363433643962334363336426624236364187526533436401563236 4
535423552363976833566363886653364636379624634534363613624635434734536 3
586465342736341062466424463633106434786534363266543233631116254625624 3
363012825342626342362986245434236281363362324243633627782632333626864 3
235433625475433624544433336231563473323642442536228655442233621763462 26
362011863234374243619963425346536181244388623363536175663533616675344 5
361515634232643533425361411653656855623613885265435361214442733752564 3
336111244656645424436108626228553691262393533632636810637336725336786 2
363523366763642453653665364364336338333622673611235452556343534433644 2
533253545335443055335238232643334365255337526435432664433644337336353 5
543545283542195352454542464537357354119553342327254526844235403353458 3
223433572823325254543255762353924535843434358434533525542353810644368 3
442353725428366642352644343546447335361842446244375424335635351444533 4
524273543534114542534435635331344763252458343532216523448455554562756 6
235311645642433542624653530844342767352916425573737674455235281744427 5
244446587533527223775433637652736244223352674345542352513687856525336 3

3524124433323655733523443323522166225334244273753352146343352045373351
9476533518346445554367645544423333425353343533351755433335166444632351
5116525437454235141843536674382536626235132852624256524444442654526562
5435122866427535484944623434544337533511344433242342434243533342436524
2242553510244254443766566554455454323591764535273336556445358256344255
4434254234344432343571344538656443553561365274444733723551565636663243
2542354116444423436335322642332662643422544654235219663422434334342544
2351244323424252455454484684353454154225432833624543453104426732253345
2944273424634511044263352333450164433344634335422344984364343234487645
4322344717432334334233326223446244433343223272726436265423445144344672
5535254344411424563832733443344333253455453332664335243332556544344218
6344545555334454263441136364652525365344010655684256434392083353326325
5243543223438966257625634372357235354365432345657373343613625445435432
2343587337643634341462633733424263343334652352555276643766255428275328
5854343215642523527485853343132644485854533544378233435364425543430108
3438235323429764253373428126254465543733427126642235265523426116635542
4542342596343636223424174422345244268262234232265345434562333233347433
4222642423325335238235624325552342121432342242374253525233342010825373
5534341919443532242868667344634181756545546534645456341786353537334161
6432443355785357734152043442743245425362433341427662525652245246454343
4254543413196525452665757624226341227642452433344342435326373558341112
4633575246423410136256344243554349294334322624542534326625363234434816
6762762523224435347164334425363352554346166643542324445554345114324357
6246344104453586555343324423433243523823534254843266255434218663443624
3443523243411766362535238222435337315554498345991094533721855337646725
7683753337114543364336357343370954645554233691754345345446625542336885
4762544336787786534633661276455265264333658534524463364753483423363155
4635343542625533621264433324524333616665557336019534822377293626942333
5922554453524382558567254233581255673724985633571455347624564552335614
6644554253584233553053233424674236375375373736254233541153334352452335
3705433424426623445233377444428584426254754342583854753446343342354625
5423352255323445423553523423326232335135554462245463643632434434363424
5442433506255443445743725525283225825425542563566545553544435436466263
5423349235577832533623282853554233481255443553108333347854423384334665
6543633458665735423344854344636334313594537278544233423646334185446554
2334017533447544462334323339135544345374665333822644343245243243432533
2333748643444438523834238443345235555424254444446444443333624552364335
2634246433535333335305553439549969991010999999999998233341455342744262
4263333256753545444645656568453624333220644342456536262445423331145437
5555563443333017543345635564325423329145448343666444333281655767766442

7254233271353234462587573326165765562472632755332516544468444626554333
2416553425423295684533231865352543254462548233221876353644645235783433
2117544564433444423333320235362453726725425733627633193554334745625534
4665345244564466534543318145355353894844233172453443235343424342426422
2331615536245252526622331513643475232465433141453363665272543331326536
2523462654477342432454333121353645236269433311656785533101675676574344
3526233922563445264574625446554233885584528533717564643558334772533362
9662336836231082442445757762945335285544652426445485286623434276334286
4344585478337476733425244323336554435332125633423244253311455342108334
3542323057464532291162375542532322876425337322717647734425553543443226
1864532272562526233432251173547354232322410676536544632231474375242336
4543222137823442353343322196566366293220216244545344646264575543219126
5346448655332188625335343217136534432342343321611674544572663215158234
4644353574432141464354673354536321316665246352453264332121663547664436
5823332111164323345372321014645224334525463291462588534423442328843252
4323271032734432443266668543325175333633244253625432424744332423253524
3263683443231865424252453242266623228822332653211331342744424333433443 4
3722555634423133316563666324324523253424424645542313222442374355435452
6446354313119443532252645524522331301665243642523424333129254634343342
6545265625442233128114442543535231272144424542444246542524331261065242
6822331251562623524668326431247443625631231564442537654533331221565446
7634343443312121643673464524254426334312030443333442525365455523822334
2433119116474242542531181645232424523353433117186323252356248463323116
2544424335228224244235224323115296437632342456628633223224236331141763
8242526334357763113154452542324355333112184343335454334265543111144428
2425346433311027432247362742243342552563483319866334346318864386552317
1645545236237364443161844354734442463525331588264233531496273666653133
8533124664331113306010625732432530598625434443058196342556454322632554
3057982375542630562062465345334425385554305512654435284644305424663424
5433232333232325443053146374234272543330521164364436424305196425554643
0501943233653253543444353049107425423253304828823524224452454464362655
6444304718835346528875344264304617664285565286642533045118323428655530
4496853345323043166542232342325544304214663325533752523041156554375443
6426330402263663242472262625254430392282643642534343552532533038168 26
4365336483623303715645322543544244303615623643453354554303510625353656
2303466477373033186544343632464425243032115533246555230319826367646303
0226254455344525534445544302916623343243347554230282764644678435722527
4223262433302718663682653443525443302686226822330251664352453256642533
0242164532253525362554555330231464532242976653302213853228776835330212
0745322545457662332533020117343242525330191465535542555244301886456825

3301766453463016116626657655430159642386554301457564430139686572333301
2584644301186425254430101383645526655323093266547433857634757343552553
3752643082274552534453636843262743071062623662563061162544444243305866
3424443041284633325343230387532354230225430113296998343584662968178442
4435324435343296715646695256445344296666497372965166234354526445254296
4156527365343366332963226262352465325253623264296214433422552435442961
1364466546832642960126636645424252959574455295817833467524452886562957
7652553229569755425552295513642556335266329546964379295312623496643571
0295219825567566822456453229511564553225464635429501644354364232444462
9491483743555425422294813863643424243329471983743242532667664652946256
2446655545464553425363732945216245445772462646244232944108432256843294
3883635674294212663324252442294119652846434584643265329402866547433625
5252565255462555429391365352984546662938168662577347234355293776527676
2936176525355646324554429357644345429341265362463336329332382463553433
2643433454242932168246357434354423293115655263353577544293068536232929
2382324555234433662667665292814823235276453252927188362462477652665262
9261266233353432429252762335745545473266254643264429242064532252465265
2344332923134436525564556292217433243233623527432921865425424292019432
3426644253375252291913443325254434429181366363352333632917276427754374
3624326524764326429161364233464653282915683876829141663764533344434642
9131165373772777291218743272723766655554291169755472910318423545433632
3344554342445442532997828865629821643763633223225634776297126544974686
5629610824425554329512663343344432294106237276532293118755475254429210
6234626254291132888196552434322332344233288716825333445234425328861585
5332436442433288519442236324324356434228841865237554373343373228831478
5352462566532882268426345422455243544566555528811792334327322335626288
0168363543334455554287921423354233326665352434287828862434533322624242
4244433643287726832425263344435625336544452876297324242423254756226275
4432352287517652433426755532262874864563574287313664283775335328722164
3646433273356543262287119645643327335554326228701565537625223324328697
6363244286814636456332642442867118242454432428667823575528656854574286
4136542653836754286318655246538655455253286286456357428611782732266463
5344642860156453433766532632859206635533654542435433328581783453524274
7442632857256264424325444434452535426285613943424445242328551585254747
3636554285412674677535555285315642334243245544285286224267528516755354
2850238542424234443337645282328491364255424325522848266336655324436444
2344552454284718825555554476435625284620754242524532446255332845186356
5443253355656528441382335435265332843167554556662326454284210922744632
9284196274535482840108533542867283912625454452627283829825443344425535
2254323425425428371884235524342633434428361776245353332557454283515873

5765364554432834146243643653425428339625444323283225645455332755254533
2544234283120723334424353354444332830208243342262862654245428292765524
2445444365345423545434282815442353534745433282729824326432434345335623
5545243328261165723273274282526852432354344342365324734762824154323533
2443424428232743664342562367524552343433428221164623334544282110852423
5544282019822357275242347423428193382424352542342644362542343254242428
1816443423767445572528179854335323281613662324254432328153843337323344
4542435248424523754452433742814108455466434281317626424326435323372812
1662337333525327462811106233225455281017825535242542542452891862345262
3623233555288136586525435527287228274535353426434624237286126524865452
3528512874752853325284198233677445645452352283964564324428246643281132
7931163533956353279215823432355553643279117824253235463242442790136423
5252647332789115532343373227881863433244436233566427871864343235238224
5244278615645322573755343278586235355427841364543636635332783116374343
2244278216627552652436553427811463742342725533278011643644364232779764
3343527788663554322777485442776127324473336322775104423662523277486363
2533277310626453333327729843334232277176425337277096332335432769985337
5252276812763323273353276797475345542766144422422226255227651464634356
8224222764196427524246626352543276320634542453346436452632762166254245
5755436432761216262424573453466455332760276322424562332435273623568332
7591263345553535227586834457275778276358275615744623265234433275511634
2632466527548657653252753556557275211644322535642751966735533527507623
4646274914744452562575752748106352634724274713634243633426527461365484
6378232327451376244625543642744288236264432462433362535445533274312632
4443244252742146452572444534427411262524264535327403843333354533425733
2334634444232436234432739164444524232434253273811662366454232737136344
9333259542736166742533453473634273588426555427341365454674536242733126
4646435343527321363453242654242731566353273086643462327299443435424272
8116454325536427277823255327268652233242725146352568254436327241762362
5773443256662723114343226654327221444325232344434272194672725572720128
2326322245527192485267554354354542624525527182062366727654244533433271
7963664257427161965332322754554245642715158524354355475542714118533554
6103627138433556642712196454553432332544235271111444334323232710208342
3324243533544444279766433422781482465352242454277166535524464435432276
7443265427510826236335527410637347625227396273666652723853271645643226
2271975255652328546865532622656226526225763224232622437682622346755262
2254423426221684236226220466232621938262621844344262174663526216763433
4326215682535526214386526213982534423326212485242621158335326210482532
6209463342620876334263262076652442262065652522620544726262042892620346
3272620256234726201766432622620058426426199662525526198583363261979735

5233342619647334261953445261945825432619346523261924826426191566333261
9086633432226189104343353466261885634332618798232624552618698343533332
6185582345261845775462618396525375632618238852618168263552618011823342
3246326179374626178444332617765343322617648653261755663332617486633432
2261736834457261723752261714825326170365726169563542261685726332616798
2632423526166115342724332626165482762616411823342324632616337462616244
4332616175335332261604833426159566333261581066334322662615736772615674
3474632615595334334332615411823243533322615358234526152663526526151483
6326150374626149565627261484454526147354226146555227261451182334232463
2614437462614344433261427534533226141384426140566333261391066334322962
6138373326137573332261369823225545261356434543261342552613335652613256
3546261313746261304655426129465572612856333626127118233423246326126374
6261254443326124753353322612338342612256633326121866334322261204736226
1196752338261189823354645261175542232611699263242352611554433226114485
3326113762333622611266534332611158625526110374626109118233423246326108
3746261074443326106753353322610548334261045663332610386633432226102782
5332326101344326100462332699483532698483622697644332526964743526953655
2694482472693772824322692664233426913765269037562689644432326886433423
2687463532686672334526855634272684672342526836974222268285362424526814
5265268045344267946625267845354267768232352676387426755642732674664652
5267345282267255282326716634645267066255322669473542668566333266786633
4322266637622665563347266437272663136632465542437266266332332661873453
7542660268265947394265834552657454292656365426553735265446652265356725
5265286463243726511183327434243265077433325264921694276665554733323253
2648364226474834526463665264586242444526449843546666264375425433264268
3353326411283325336563426407825264526395742542638553664263744435263676
7255452635865552624263474532453263368524342632645244526317823223326305
4444326298927445332628964263762326277654462326265763432625573433262496
4263682326235823532622873423544262111826432453452620672436326197824445
5261810442455443326175734422616782435552615774376332614662533426138535
5534526126624323261145353261088532434326956633326886633432226711432246
2534426688252585326511635346232632641163743625432263666344426246643261
1325771254453643342225765664462575964465365525741357743872324662573107
3552455362572954644562625719543445433257016554457446544432325698535736
2525682253343535343456334425262567115334636263625664664425651153624434
4662564564566256312558644535565256213542424347534325611155544562345256
0135663563566334255917525653524326368342558135552454424435255714533423
2332462225565653732555145336453622432725541253454545234325531565564434
4337343255275527833255175422643255095354475642549105665364425254813536
2753346443254711564565533432546554562254516545525533423332325441553228

3226266242254395445442525421753264364552462632254111543444372442540165525266453546344253976547254253885336465525371355873588553342536968755535525359554366454253411545254363652533865553463253215675254546434554253111654482433552530106636422264252911577452352532528755425522527125625244363425269583446455252576847644252475563555252396473252362522106478542843252119545628343285446525425202053474456726674382463251915554443434836363251821446543764624242353265251716642255655432636425161064333662432515136434734532342251485565555225139554645454251296535442532511857337752251017525752443242332452599583572534258176436284443242344225716535344472564633625612553368244452255964443776625416545353466333255425322534346343376363462442725219653245242334436832425195854373452464224335537464442426822323246327446246242756547544245556462246239444243743345484656559528362433354655584246176656344446432463655462562453626522742742642742742642626263336333633363332460234453373573642454552662824591944553444525631054734245850445634443355654535335464337265454324445626745955422457116557526555224568656765672455388263333426284532935453752563521086455432454236636336635263245536746224531763442646226637357245210826544643324511882665625564343833424501682526544262723632449764543332448116443556434424471595333244526854724461164342456463244531432342424443425534254342532423524441075532275442443388443442264225324426255245455244254422324427644683424412163457532256682224422324403332234244235323433355442342353326224392264555444442433365557562438144442454275244724371986354666654323356242436147642444542434224354843355745425443333523454535266424345752754643683424341376524525645642433484473243636637542637635442632874366642463552582432174454245562762947724317865835436625257536536255262643827422627327327275272742628365363674323653667258324301563442343677258224291763524534463562453242822463534276333343734452324271965334537836356255422426164453636578788988242511642427454652424965377754324231344476258885522422264453442538744210964526454432421354454244443243265435784475437562554224209444365435241920625457624435527425522418745634524179642456245241614453645234247252415164433483233287862241415443522576265435241314824368523564542412124336479827242411284424445525244333223362446552241094443654352499823254328248118335644264524798232444282461783356456635333756245114443733255324419826453634685652285624318833442336285253426242268257656564243244634454277724196554478842311878345423231171884233355225234423323116116522332454623115862554747231149644253523231138753324552311274352523231118824535632311086454635102310914834735446524332310856346323107764434642310685446544523105863554533231046643564231031064265567332310268267432310110835553523423100166334636244344544239986235533323985622252397785224232396953436425423957752 4

2342394685263223936625322239266368542391245345335533324332333324422390
5755722389564237238814642443433254222387554237238686535822223855642372
3848642435322383127633232373532382884654445238167323522380106475635443
2379765525432378106258853443237712632344245533237687358377423751167252
2326732374876276253237356437423729833335462237116652367243685744323701
0647552326223697623662223681076322525642367465282366967355454223657623
4562236486237753323631463233254324262236212623544653443236176337275236
0106434474256235956252623585645262357764422522356762272352355753225472
3545336252353955332455723528644535332351124633577245422350115434393443
6234966564542348482682347763756562346754695532345846755462234419624568
4575633224562234378353242234265552622341885548567234056643323395536232
3381272334435332223371083354663222336463552335964655334623347734545423
3325635363453332662965655425423321454432324624547233165452622330773353
2223298834656232328158525435353333642327326455273454323555224564534675
4247232655362323251033273233222324267624526543355245333242555423231754
4323246324434642322465462321156555446236572332320974645324523191365554
3642423723181372434527436272317106523353554231656734223155633422314218
4463472466566466465223136442462231273252754231166427552310382523957732
6238556926237772634532361063574227332354672623446626233565226232566225
2313842227844646462586567535755653332852753325253372524272277126557477
6554222761064445363242275114442534825422749444242452227329863382466327
3562432552283354222722964554554238265565665542456544227118428332333624
2243272270184433242326622442432269973447354422687634436322671763433345
2736255332266105726262643226527456425353326555246522334223226412653435
2382222263154442555362442232262176524362425234243322611544435265625443
3226016444247432242443322597454365822581883343444852524426622578443676
5622561264286565435522551643462466334255432254216435544362527324355562
2531644383683625474252252274455442742456274433334242632251865576246225
0844538656224994433454222248116462533542522471453343343444371022462362
4644742536423643552642245144454635353842522441143462864446224343474224
2954335436322411765462586656652625224035444252475434466455455435446232
4626522391055343557532238134423242552542223720845234735446546364422236
2765374767456444543734345237622351567468623964433522342084634367525234
3755342233116535243354322329642545433223121442524256622654326335223024
5387258542373533233454332229866867562222820667457525237424373572227144
2225424555524222616669844424225485322252544244633363645646744265522224
9643552535222322447632524575244865544222221264646224626422214425422206
7622242219176632332434564275422183742442422343364255257677665238222442
2322172243234273544266789565522216942443547522152242452652634676245223
3222141742442752448655442221310656442433422121466235234224324221125672

3763435463253533344253221096534344332291564736362244244422813443333442
5253227126224434324632261343234644424332257043226455564554433245543325
5255724624334272435545422422422427452324254222411643644523432231245253
4425253222224444623554533245352463221104365245542211121052386554232111
1833534443211108625525432110913624254343635321108116434354344221107584
3732110666463222110512855525326254211041663354533535536432110311644538
8656221102966522366221101964563345221100762434432199964362453221981163
4434326342197206323242325255552445621961063223654332195762484352194126
2455343824321936652557219287445353221911183685246555219019636548727544
2742628218911834452234262188884542728218723823363332272544223632532186
6824629218578225368218416855244647222262821831084444334252182126343347
2628321811463344645354558218010643527344721791464656526545468217814664
5334252627621771269335475552721761265257283242521756823628217416633547
4446275465217315636666573576548217286545652621718846453572170588427216
9873644324216876426755216796443264322166115346224328321659652436352216
4784466362163965283642321627727344521618655432552160772463552159883373
3252158864535356215776523766215613824345468242321557823256521548442744
3321535636552152116344832553221519624324754215076267534214986623645521
4887557645421472063435423533434374584214612633526342454214511623644366
4221441884726543445533755221431463236382526432214213643222627662221411
3825245644246421401062348374622139166236235625235542213876425337213788
3563273213617626436444437255342135106646575532213410832454245321331163
2266753432132866236466213113654546342552621301864232526945682552421291
3844454423343321281565235336353632421276653672212686426464621251573332
3443424263212422634626242432337524426221236634342212213535246643453221
2176252462212056275621191383628243682232118135354424663542211711632428
4425221167663665321158657363432114663352521131065836237622112764235542
1111054575442532110864535563219887439572218965366247321714624253754534
6321686484254221514743474226255522141066366254332131565575333255666521
2116373442326221176423655201351153565287522201341953232555554464258332
0133136522454324646201321268534525674420131185334376644625235432013020
4466454364543344623520129944543244520128175553227256256233420127125366
3543424520126845576443201258533462232012412473645234243201231843334433
3743455453201226444362201211543345326657444520120144245434232374520119
6434424201187434432220117135528362332325201169353646843201151142334323
3542011417442344423274345462011314434255623655752011211434434382432011
1943233646420110104263536324201091242462323742520108134343675232665201
0764344322010635462010574363628201041243525642634320103643525820102845
8552432010174733436201008473443422099134426332252434209812432323324454
2097284427275434435525234242622353209616424576324526234320955524332094

2044373344243536422323209344653209284624252320919454364425209017478643
2543232533420891243334345434420881244453642443520871574585426556562520
8627574235325255544453323454344208597642442432084952454352320836424253
2082952544335420811733444345435372524208015745665495282732207953345420
7885242665720771843442452535632436420761242444675243420751057368325432
0741343442423533232073145355247373554320721966344332455725235252071265
5347542942767554733323253207085534546520691633643435452452242068663332
4206754442520661244524466452320651242342442342520641062543352572063136
8675272674252062566558206115523357443625433206063244552059835436363205
8143533352555544820578425527632056644466420558446565742054955532276420
5319342627362544344533420521143332423353205156633320509324324443204954
2533204810532362542320472154237324526373453535620467445452320451042254
2444420448425444252043533535204284243653420412582040354233324324556427
4543532337523525442203922436344624235746427726220386423362203754344420
3664245232035453332034256203335522032342620313424203023520295425252028
2462027452452026342420255424232024533534202346625202211433325453352021
7667334320205432472019442532018134443433455423201754263320161054534224
5320151043325644622014115647333243420135436642012936635533320115424542
0101835332445444365443220944443208867223324207754446432061253363523822
2205455362046595336203443532025564622011219981443423243232563199710342
5725665199693635865521995547345199443563199310463368222219926442653199
1446421990936455368419894344319884464619879463423762198654438519856463
7431984733345431983935838632319826357873198183374432719805474251979936
2244253197874634254197785464734619761344533389365451975254552228646362
4333626723221974955423256319731645538255553565441972844845542197195433
3634319708434264421969104633442262196884438298519671042332637441966834
4224751965124242766636821964184333333536322343531963943262445319621154
4545344621961115433656343419601246356654432319591135477663524195829544
6454385487433254342725445519573457195684533562519559533477444195411454
5433762519537454622619527476542819511045453346251950943436623619491445
4652543263741948144354333543253819471042333274431946134774237252353194
5124756244243321944104637274232194314454742252523321942164343434224232
5321941845337625194086653533319391262342353263719381144258373534193711
4342554527619368643753431935165224543363242332193496344343431933934444
4337193264563741931113327773236619308466543331929104523243546192812434
3344325321927114433425552419261855434643545244446419258444564441924104
4332535271923145443325246336719225452761921155443553733233431920114233
6342434191994524343431918843237434191711443555755261916105552624625191
5934444334519146453374191364454261912845746242191111545255724341910134
4454343324231991442332533323343198144524356542432319713432242445535219

6842652245195134422356552734194144263345635332319354434219255434319115
1811024436435463443343543453342181091845433542354365532218108644524618
1071047434865521810694557534631810514473343756455551810411464636625251
8103569622181021448463642562555181011148264242645181005485461899114852
4324556189815333444333432433189784283627318961944453443363734336351895
1246544833342318942036542342435266527225189313466246236333318923442189
1644353418901545234233455433318893442188813452266435432418871345633325
4323318862544424423722445443245543331885245188410432275224318839435527
2281882354442253425332468652355644344726746418819454345726188010567266
5464187917452436462552675731878124452266544331877244463236424545825574
3433718761344242735325231875943623233318741644333444535543371873104426
3437231872843623333187115443355735724337187012432433263733186910424354
3263186884232234418676436233186611443523524231865124427524662451864947
3633233186320452555273735446352531862124352536453541861114525564644418
6013442744342543318598576538541858195425243263453726264185730436353534
6362463534424453533431856184635742775567638431855194662736234955262533
1854144347432256325418531054538455841852135563836556544185113474336336
8372185026483333426693324423536468431849284343552663535526336273368464
1848165343523373733336184711445385546441846134453338966475184523632344
6555542662746633518449445324375184311633432732331842204442525635344234
4555184184263454218401545562655424523418391954333325332432344251838844
4334241837164424224245563523183612644533445633183512434232354344183413
4443436364324183311476434353741832144664952575543518312865637346742457
3252457524343518301244234238655218292865636464683734486363363342431828
3044445524623366444533466745524518271564233742342442418262344243324232
5246832534421825848444526182417432535233433544231823733434531822334445
3543443436264325747645647565718213255653553344655655824326324327565182
0134363527275624181938435373475446733657534453324555244359751818224465
4555276466463743671817345423343634324423342363644635254354181619552355
2434535436310318151844353433655444265518141943434424268246526361813113
7554455433181294534725721811744526361810164523444244653632189104625755
2421886455274187114447345325318611464622634451851643627244473322321846
4445551833436182154432865854254541811142436434435171112165423233524233
4424353171102253353536436735236524521710955757617108874332457171071847
5543425552622252171069673353666171059653733676171041453463345674425171
0395338527251710216652545682354243317101196425352452735543454171001457
4747334564221799235384332434542346834424417981454846534675563179727563
4464546373742633343634331796115563364553217951454625675652322179415544
4523552625331793265433235255543543624242324217921259542454364217911166
7544232421790106523432426178914535443226325541788195453355263452355632

1787954342324317861355223224656441785145352633325252817841154234563422
1783125343464473641782135384385422625178195362644331780145642253473462
3177912653523252553177814635425553355631777116633524622317761353562447
5295317751255232264637317749545433625177313574456464285317721154462343
2331771155636666543742431770176534387286428335417692252535225375255544
3625217681553522554244343271767185746435443522524441766145333427525344 4
1765954455235217641953753587275555546271763106464344343176215535773353
3443631761134435353646843176025563637628754364653643224317592163743365
6467332374253175818662335572733733423175718633425756447436555175613634
4363425552175515556337354682344175414557363226323441753165473725472424
6631752953526596317512554232237648335426286243421750552552174995484653
4617489583572534174719643628424234722734317461957344623444636246361745
1265762544564417442155337624543323436582417436546366174213552373634332
2174110536376325417401154745825748173918654253442436234433173876334332
1737134643542345233173616633527652322323317351165338854356173417635266
4434253636317332263352436553633534345631732854533563173113543526635476
3173012556335435432172913655526343634317281264336324645417279547485582
1726106436483623172512583466262344172412563723624445172325544373243362
6545361043633417229665344242172111655473355341720126343334265331719126
5364353464317181866642524342425743217171355554433262631716146855346754
4254171521543633435335352355552171475455354171313655732542575317122366
3376384247563653657561711857465574171095536762531791654328658542446321
7811584644362431772364283353686763344537662176115485695535217517644646
4343555733417413546552662733617395433325241721254263743764617121662362
5464663662454451612886265524216127146332235435343516126128335426247631
6125229435223423242576873433161241773547355333753534161231282335734246
2161229836244627161217643566516120118223535337216119194552327332526555
3221611815665473324525554161175444441611622625436525437444357336316115
2244433333432443374565341611413644244745453516113963666445416112246536
5447455422456644444416111156234232552532431611018455232662523265322161
0978262432161081182686634355161071385424363667531610624444423646324855
4236325321610511826456255541610412444462456252161031644445464435464441
6102138545555325342161011762624345434534354161009622675364169910744553
5233169886725664416971865255944843423253216961565255557343345216951564
2332434544463169419444442535763345476316931764374254234536433169232734
2733724643242342547663325456316912062442554537376363446169016655677256
2686442168924855433664653525625532244168813653635644255516871065243554
3616861974556424357545765341685116234436553416841482355422532244168378
7824461682666455316812565553455745634662345333351680253365887374539574
2344623351679186453224362622653431678156588534462742651677194323424225

4363368341676296433643252432555323334246544416752762623562533434436333
4264443167410625442736316731583468243422432716722162466972654723466233
5167122647433742355553523353516702044424334235433257255166924744322543
6546244336722321668136453562525335166715644322454368653166617855433325
2365723316651664432253525362451664146454374353646316631744455377344233
6351662176553232632574623716612383482534433644253265453166012663654537
6251659196233624233623232526165894354275341657762466371656126436573562
3716556647737165410654434433216531265443243423316521154555368223165112
7543245562441650762752461649148239425238224416481763348625532432344164
7845434362164677236262164516623266253442755516441276532555476816431562
4253754534263164257445516411865246546285232426616401052242634541639116
5455637435163818625443443424427357163714623332424353421636288533752674
3254325784625322541635326635335253432425363332425243265416341082523452
5716332266544535253433428623621632126435654658751631157444624375248341
6302073536546326545444554162989454645716281964344233243256658751627218
3655255534645635673216262162326652553727445253216251552333475537357716
2497654443341623131032363524423216221183567626435162176463535162010634
6243256161966352451618104542624453161776442344161646277161511655734255
2516142166428355484394437534316131364432266523331612156453225676675341
6111674432272387852341610136334433362442169106633456344168962255877616
7144542633662337516676463444165865634358164844244273163763556831621863
3323625242342684161963668343315995653351598682334415977634434415968643
4426515953106315946825435159336531592368515914465515904936315895663331
5881585554346252354215877677246415865662321585146555635363685315846652
4431583366715826556266158156466815805855341579546648157857653315775843
2215763465157559532215748425576661573366715725663451571664255315705824
4515694534615686634523156748734156696554253461565146363453755245415644
7457156376353525156246343156158323415606834563155966733231558663363515
5758453315568733424331555782335651554863542393155374553425155295433564
5215514732615505662531549666335315488742334521547108336226226154635571
5455542721544853433543154346743154211725235523521541563433154048453153
9106952367323153847533153748243153666337231535653364315345444531533115
3252545323153298243225231531782423531530464841529962542355415281253252
4438333152776323266152685325275415257443623315247105441054152368454441
5221272431136275671521115435365332315208724354361519115322475477615187
4465523151754522815167875625415158733274461514963562455315137733326215
1258425415118825342631510773242641597724553315896353538421578823296221
5696354344261557835324215485443426315376456864152765255341516456433145
2137464324828543145110644242324514506565528144967265841448106636953543
1447116244244445314461263553354455314451473635335655526144426423232664

5553433545556635514439485542656144213734464843545314418643972441440945
4536462143913653267532343514381862352324343434243414372665727545255674
6433234525341436154445334535255421435137424745342733143415457262445372
2261433975346653414322573455255343472253625683441431214333234232737376
6556214301253636252663614294647414281263564445532314271842458446366266
5544142613423253255554414251275574544325414241562645454444332314231744
6444675244865551422444438232834364373266732862352523387435425337414213
4423252654845253244235434333857453614205543331419144446325683422314182
2662333536243252557555314171644534234225654361416743254521415544249141
4104453335259141316864555262528655414121797448237553435333141129874444
3662333524233445333253414103346664336265334254337623566842435414937447
3234263536726585643625265433525353148134443552346244147115525485344314
6264424436877638522625446543314521443532245653724427464144196634254244
3545342631431644254844266366751421444284523822244141166643445372554743
1343156343645532535551342185436632424554525331341166435424572654344134
0136664572543523133986255424413382143344344425335636424641337193332422 2
5245754547513362535442434424424424273443667613351958555435457524734531 33
4143242333666624313333932234436255553252525242372525364332342413321343
4625564246413315174242434352532553655435544422554455326232524262452313
3028455423323227634645535232327413298343486551328116544344665513271942
4542342232344455513261643626636765435441325235346355274224327632436613
2475445354132315322569886233834132219543567773737674365613211363746422
4325613207763445513191574544234324444413182764476335273555223222826658
5131742744452554244554744444342465246454566553624131645663324425565553
5267522765223347626428242682221315117675468224413142742384362335534534
3824256442131319643427342357552955513129665545542131135324233233444447
2634242424327434326213101475652323353244139576854138156433537434242441
3715334434323444555136206533535533375233637101352564255672765555433453
4544313427645322523355444545545258353133247453226545543723754452431322
6645564544442654535263483441311562544432445643412111236454326434545532
7545233121101985253342455524556331210929645536552553375264532545342631
2108178233466335343453212107146234662442562712106763356431210511643556
8232512104108332232463121036743543121021463562533455523121012197557624
3684852752622121004766234343254473232523452622433352325533244255354129
9145432364543435412989662333633129796336365251296206224243333355435632
4129566533551294126244343535441293126665333363661292118433445552312919
7335443551290238342435323542234433444512891064255525231288229442555345
6546464254541287218534324234326354276321286136224254353443128512824244
3444551284134352564342445128318662353624344463423128211744646434651281
1865335335334252653612803783324423243543425233425532526363453841279137

3346523424431278168243553543226425127724534552433534246322233425127633
4322442544423532453254444282443841275118445342325512746642535127312633
5254253551272124244323454451271564575127015745543243273754126916653534
3334434354126830625446333455324332424432553254126728975543352324244365
2743262324126624442343644342327425534523126526433436555553734252553756
5412641784353532436334523126317724454553352553541262146553738562767412
6167443651260106343332623125917834543435233637541258962364644412577565
5365125617834342744345525451255844355363125414445533445726541253154432
3323665244312521283424364235312512983442634446543245233342462523125022
4632646632633436442654124911645433332421248156353352543332421247146353
5255344363124622655344643644364532564412451177633355344124487763355512
4325664252654264364436453335412421843524337633653324412412083453425555
4435635521240326254455343633335252344274853426212391066423765521238266
2544545432332542332667536123726627356233433535723773747231236278243753
5444345354445363553412351133764232332123410662353432712331782453534447
3335231232198276424247426436454123132433324323346565454554524436556441
2301844263352425565724412291082335832441228134525233322534122710823532
2533122619823532253252444272312252344242345424245356325457122419862385
3543532433234122323842354334432357542522471222984554643412213262544434
5852752545452623557326441220982366534512191763455643423456755121818523
8544463423335361217196333533556346553525121645456121517623368474526272
5412149733445435121313635552526273312128724543451211127244352225251210
1664273645264624431291464427533346246128154435244353355521277846423312
6254432673253535244548526365125164377242753542323124166266653343325432
1231683423363463544331226655573121566433111231663533456354568341112237
3811121963736625311120178564325524255243411119156652463445533231111810
7635354333111178664553331111626663625554635352625445262351111578342435
1111414843757252564641111317622624323356553631111212463353333436111111
0463373833311110184323554324453664541110920536743264336254342231110818
5343323684246535541110715434323323684246111069544353454111051053553342
3311104554353111031653452533643343221110212444253533335111012453633333
3243254644365473111009544445523119997537443271198975457734411971055335
3755311966467464119510443543452311941866276555353565553411932044384235
4526343736331192164633256942535323119119553374554544354242511909443245
2491189235433343233233423625723311883645545363627342362372434436324332
6323118721664342724226424256425118611553364233441185156525375636875331
1842743454445387634323246323554411838582233351182125425576655341181305
5456262636334535245445233332511801143332332223117913425422523243511782
7434442534634255323765334645117713433443433454411761553455333233247211
7554457211741133276657234117314443535744432751172134432444444524117195

5436855711701833363325445543263411691544323343557754411681254345423452
3116786627655411661865232533353565553411651153334552647116418447463432
4633443331163235383524263436324332632311622244632356424273354324251161
2844324529495262432324632355441160173344345423744632711591244237454553
4115814442835356455341157214323324635437525273531156186433283234225343
5311557622574211541663437443346363421153167233426633552325115218663533
6656445248331151146454334244623211501863424323246323453411491977253324
3363246552311481944352743334463543231147198237244322325224323114624824
2433223253433342333231145158444434242243351144198544636545454345324114
3238245643234325423526334311422082334432424435732343114111453276434641
1402643333335432355522444645333113910444454526411381963444362335423425
5511371164552736755113617653533223424233351135126344647226621134186542
6244323424246311331074332426431132148232535667232511313183336234444626
5543334354345434311301064624262331129236455454555334334244623311282063
5105542463243326323112729652325333547253543543424255541126114345434362
2112594433434641124116447277678311231464255543786552112278262432112196
5243655511202465358526356243233352662511191162734844255111823834434355
5754365443534311173962544324334223567224326555444334632433411161665254
5245362335511151462434753766432111416643233234444738411131864243272674
3452662111227432354343332344462425442345111110445358655311101344337364
4356411911453372437541182282523446363352663364541173143332556532743444
4753444326834311616442297554335242311519644363524673338654311484323364
3113254345445343224433456452483112954334436311110443242554310109118334
4354425101082355335352355553424525422101072466352422453344323243345310
1061682344343522432331010598253554331010427824257444443265434222425422
1010310835345654210102159243825245433731010114623266436824621010014625
3554434243310991566354554522433310982133866254455343376444510978664332
6310968623453521095108254555253109422825332443426655463223310932473547
3543255373728347354109214762525334355561091782434341090278247324433234
3553354657574710891162546387523108829664363635734452646627455434441087
1684674675474254371086585265108510854624643610841364265554232441083228
3452453626523342435331082783374441081178342426425242435410801054254336
3410796443654107816743352845645376510771184334534743107610443255245410
7514646975536452521074228434432253753875344252107317853357557585233761
0721682425433423263631071346335235532285754445755332325323354107013653
6662652624106996254365221068256224374525252382225264445106715645322573
7533421066256323436254325543523822323106510662535255310641565234652636
6263106345655106210623532462310614244234332436235235234336255333263342
3433243106019626453334273543652310592064323342653632344262105810633285
7442105715854623542562542105656554210551662642432368223231054216236546

4376265224332310531174333422231010521364335254555321051118243425323310
5012836452555262104922834835333334323433542210487642533710471262365363
4434104615623442667254354104520653455532586243623641044106654454242104
3116253545442510421162534454725104115634443645442353104012944242252425
1039198533552534654562352103816642432726455266210372282233266434544325
2633310361763442442424233643103529633342342342343444442434272221034176
4525442525427222103310624553343410321164634354445103127543485434255524
4385436626221030166524346435523245102910772326555410281865427456846654
2564102727642555552465542423237644756102616642555333643666510251164342
5633451024437464463235852455564536654338543542662746634102326643765266
4635454244525236410224182632735264434454225643636443552433642642102122
6265244426233354324554102016924383543323444710191773454324458533533101
8296366523824234724375763522432710171484236324435343101618644244432635
5243221015394343424334234245252242242335365253565441014106355252572101
3178544753857535266410122765283432352323354525255472410111867265254554
6945443101014823526444756461091564275248468655210866535651071566226386
7565252106145456824337562210523646453343276375546453421042865345424356
6865555254334356410329647444432342254535243268344421022645328343333255
4542433624541015664339129156523542332443539128144495442446245391272162
3564372325233534524912616623622523322644491251263653473625491241883675
5463544254524912317724274476265655429122226555358528544223547833912118
6524473335635354639120528342424323334326364553442533336253427634427272
5374329119982645554291183166242753243424225655435543355749117274433532
4444323264265810534339116174332432335468324291151843342523435234443391
1422457234333244455235773391132065434232445388256532911216844596288788
8888911137652426469425437872344774427533868254291101544564236244474291
0927854254322633336322364243634910823835725433423332633543329107247445
6352732644378375556691061244554463445691051664378543796545639104166624
3755264242639103164453352533764722910217444254243445457769101224435257
6362635733772549100256534467544343544367689279999274442524734436643542
5565427399816445555736542427399716445534424635643799614852424345346369
9518653447344747573357994306437854352654572452342722553579931962363447
2634639536499223625345247546232374235339912644542832635336252533633733
9901744455564554357284989136534675244343988148267367863566398711623634
7263498618823464547527552454985166365623624448753984186366554433343433
3398325827337544373436236945344398286534575898127652334324262644278726
4447839802585425655533443353623622369792044444347535267282865978116443
7444263977156545246363362579769636254254975128276425344259744643325233
7625546633426342646235362357365454525697312644755106454297224652344263
4246467524498439712444424756476667626863659997026665474338551046745433

5253539693282676274555575256379797653435526968164444652464371094396719
8292644677267632510996616655544523273527296513846662543466496417624428
2623645429496316653454323645236396212652523657356961264434456455585543
3323275555960224454256444396368599774959196433642474566452443958166234
5234453725259571163455262452956106364235457955176365662374447375395422
6336353365375543744253953126444452424629522274377242546235484336229511
4874462343236229501653732552654354429491596435623532442594816634344336
2632663947179453656768536245294615826468434326663945147523675656257494
4148457872565657294313855525334234394223744566467258554475554329411564
2334442787656940434456245655445255464544242642523254555244363939164323
5453547556639382943626643626765374426333325542937318542573334326432384
8465523525649363672427493487646355335468334424344363293519642675237763
5432543934294564428365664426755787252554293314833353644654429321583343
2345843626931236362332547353437432687693023634632553785343675434659292
9632265365524363643263563562569282844423242464443353666338455429271244
5423332442926188445545255845364429252365243555443367244552453924338542
5544375256425376656106888863229232082646373572686625542922843442446921
1044435635469201682643447844277559192485425436244255653366655691823826
2544333646556532454491718625374566364562832916246345583534326346544462
5291511445423456359141163445767467913206425235833636657547391218653524
5475265327539111364655286567539101082633342629913652345255445698166765
8733346256339723734239383663653544338439618623535524443578233952644426
5656753423786838756549422734253556457347228265393324555445347633334368
2442643536425921484434534745526919826536425875224334244244575464773256
8741844533825646442775687313455243633655687245463556533356529373327232
7356365564644278775528711344545324536638702544535433454624426262325428
6911444246455358681044545342448672044564563652434242432866268254456343
3665443344244434865276235552464433666543263835428649825344542863204435
3446342552252634862121054424436263861126623435355538603362553442326364
8252664326543327236859862455553858148324243555325485710655234527485612
5233225624558551062355436228541765352779455526524853184443726333645224
3385217643427464555265248519653436433850136468668555233849184443435355
2362694284836645443422334434533754334525342477333847174635442655462566
3846138242755773647845136554773535542844196444634456275627283843206443
3445296563552462842354543422254232563445472873446673674284133432357537
3536355426498647433325478401064636427538391646343633355442388381673336
3322346255283718825426563346552645836216435662454210442676552835136436
6643536338342162647372753662534633383312836433447433832194552625554242
3325538311776332335425256544830168354576262755243829196525357456344525
5428281043443487478271265877462554282619657265665726528442782513644274

4555246824216445534427635373855428231163663744433822106255443622821862
3556638201265353646554281924824343454433633336355382818683443481721444
2443863444243544738162064464243333625634553815127634555355428146548364
8131364436453645538122342477375554255564383342811227256367345273625534
6628101844424323536274344389116824533748288783365448723845743245346332
6349445386116353654542885117825354235384114464353382583667466582177446
6554464433584811864264753746737272772061163862823352720516823376525455
4235720486572863472032364544253323424428454524720276224278720112624672
4435527200104435637264719978256452719812623466625363719710663582425671
9698536344427195266352752364323643236332354471941464231077443255271931
2642954725363719276634383719176344227719012634664524564718929826563544
5424544645554453254271882864543325435285433432333454227187376254443542
4347436268242366233542646277186106726243442718522644455242333243368526
4718411443223272747183544235718286232975671817635535471801465266265536
6747179308253228536244362443624364255547178108264373432717796577555437
1763075557555334524442545455345374371751372476466643547174566645717315
8338524432644627172266323373625355463766233233371711955327472434353455
5371701083423677667169406455366326434362265543643533576336653524716814
6588833584452871671945465326362733563437166116453434224471651865345556
5255625244716419564355556264452434371632765364626244537625252554462771
6217653624573343445547161208583445736434563633371604366546372524745765
6642324453755424724374645871598635534337158326577544556565423326832455
4435422715743825344576625654485447557346278687256645566571563067266655
8324642245344363463235715541834735534254233532237337532732236648454467
1541565255363735423471531445523265252756715215845662442375652715111844
5275242371503985263724386952233444447543642853454343471491882635462354
2456234714822666563623434244524243571471365235274657567146366467553564
4435625443362324344527552571452083676444533753227226714415823523785373
4237143418344363444433453445455353445234442335843471422384435426554446
3534946477141184424436876638522837140983534644371391065253224527138246
3434334344253536335574771372965355432653733634446485585557713611646755
4294871351162362335454713423733726534343333342555347133136469645867757
7132127233373225467131226264436433356453335664713010657247525471292263
5529542433523362326571281678524263527585437127216546775365527544532547
1261666454463454233437125574335712486824276671231964547727432332325537
1223642712148345712036657119468567118665244471171162424432437711611446
1054554537115117342442342571145835337113118332532556471124443571117672
5545711076552624710994532532537108685243471076452445710611823233433237
1051873354255243434223471049822435244710316853353655374525271029765332
7537101238434443253753856472435371001962363577422532555347991085343434

3779896335625357979635562535796186538546625566553237951862348766226436
6452794136578553324263793166333435367332445792138255554523555791665276
7790127345634255547894283455454464343243444234423434452352424437278822
6343526262356427428553787198335443762625554533786248533765427482324426
6436378538642334735263756385642462432324632355447848853354577837824635
8782137446275234433781116342632466478013823235276532577915852435357332
4457786652767777168232535426432566776862553853775236243353245274338542
8553774256525344756756265263325527773354474634324633443424624323246323
5544772136537554635368771259243852343274852104342532377017823253564324
4456576927654474526333255277433423527768744343667671182245523323766148
2545253425553765165443232463234534764144454755752368676313667743342352
7762116224253536676111822455233237609442534253759214345434323246324434
6375817646444342353454567572965644722275273455543353346443756158244425
4673526375588323554575432824565235676655654535243268344427533865243652
4343532375233543423245464363627521064533365647511967533544366666545657
5020836425453252562555557491564353256546265674814843544257857557471385
2624555574474618637254255673647447745106734844255744288344254435343253
3452522555557433664395426543434524633454356752422622674215642555534428
6567411084545344237402384562253356365342497552739146436632533376573840
6243335245565476454733543445264252323263737376546363454325423585633626
6563244353437361164255549756735196235335435554373332734118348253433473
3296224363624225634466334327334273226646447356625522528644443227311683
2363754236433273016647432686475263572916653526642367633272822622437842
4223556555554727316256853623262537775452643772332726206544233365565556
2332725765655437241233555243456372312826734236544722284347244652635853
2665743644577215834387202582525523632562472542457457191782663535324553
4337181264464436644371715663373735363272716785367437154823371456336371
3138235452243453712173263263333524342371116823253646842727471011625543
6526479116753655673378982674345677663345676687545775126335235526337410
6225568423731462564263425426721385253342334447114616521454643252275335
4555436164297343764324353353324332233444261638834452426162982366552261
6116823357344643354261601662353437337337326159196536243543243465552615
8377372472423243274423434334342342862362615735653636265544453343544245
3444654326261561477233527364462615586567574461541764555433744356452615
3175525452355637753361523565254545423374453442685644342536363615142652
5453434563334327636635276361042635432362615027653762675554344353334265
7326149866337542614837634343623732522553525343253636243265561471385243
3542435361462874673452272742375565332255546145394433333432443423453 26
3244235435342232261444085424234544435343445254285463823725535536143236
4246854638237255355256614216433375634534557361413183236353354342464778

4666747444361402065342436452634475532613922443575334337357573422661382
6653746543626646642362345366137206355243355877738253561363162373333334
3338338463365852333661351984235524264437363226134774336226133185342634
2527632625461329635335354613110664543322361302865463666663553549555435
3644261298653483456128364432432346653344564564528452824425646127106535
3436336126964652734461252862535444624544444233744524336124296534543465
5643444342343425364612315637363477542255612224652834453724352244268434
6121207483983683444434236361201275365652654561193094232348653472353233
3443336333611810664244333561171194352324232611618632343624425522433611
5116637425434461142382535324366765654434545611312722977625546611223635
5233355433545564335561112266444237524325666855436110136726332623875610
9216243463436423636373576108256537643253344344464325553610713553355636
2433610613825233232442461058647486456104155533633643425526103966374375
2610216432337324233244461011843333245233324368461001553663454266453669
9446454225434366467852555525373344373242736244369813646527653264369716
6465264523763343696126653666454746951764444255524464442694296424354354
4557433647263373574693498525434364354556665955282334423533343334324435
3436922276332676653526434457446914465242426346226567675444234642232334
4252424536901684322446225743556891773543535343766755688166524463524224
4336879643810886368688354556868578226556684218456555755332555365266831
4443242544377546821163535476355681226426383652422564636244680257443233
4342326243434283456791282335683444367818634332344433335534677187526352
3334333553467615732334333535424675982668573567414442543465357336732466
3854524353445244568343672864436663671398356524322553652552875452373453
6224325267045653454243536554423243433432334334224666545653669125544326
2553366823852634376444263456265446675645336669553243424665276564343355
4626322525542362266410642323464266317826326355664526226621284352346434
2661176235555333455536366022643626424353627525674365931442343335523363
4243642252362555658149456454282422265722833433352282422632433265621823
3342742243255424326556848645654274445423264432364343543765446531595445
2542674545652258257325523326242466745543651175543342334362652565028747
6522342342333435434543422649865365756648156235335337638436471485342424
4452726462362264342643326348543262645982365554464420624475353332555252
4464314652734634655256421175788423364641126263245255426401564254465244
5272639176435335432724275663822643232625273374435242363719626434234422
3234346636106424676564635288253536433476242524526374333634228324446435
5365236423446331464584725646342632136455366433663631275233637634523625
4663345553263019643663535534343523362998336632266281675343643325523326
2717825454335265352336261163636336353625327633255485333623243463624636
4525624106524363534623126324552363226221264573654256462114842363244353

4362013623655763767561937634543242422444227533276335644425432261876635
3636171743233453232433453616965443534261594343424326142482534234243243
4368444442613966375232361225623655332733864333268223261110853362525261
0138252456442464699625747463681362254463344466716433325547652545366315
4527795247665673422526325262436512825256453553641164534423263631262564
4538243621464244443232542611465552674683435512011432334368335119246533
5443446752443584334351181166343435562511729432345633744325545346226233
3251164564334224342245343232324224263432547534434243351151782452554434
3563435114228347346643462554454343511315825562256644245511222642453625
5423624342932511113655457252935351106443332455485237343564357655454555
5524388765355254545264454434243251091564333325545544351082285425746735
3262538524351072683337382385785552766465333510652733345434233425262576
3295585254252524335635533555542510520643756437322526555425104246346263
4645255644423633451032162754365543353535243251029636252352510126445443
3364346353325262554251001665742466453665225991163524563632598944436442
6597274334352382244273866655656435962064446442435483565333595516245346
3333434455332645264443324523235644335562554259424443335365245765524485
5425932483575265286652354486553359213666347637674759120643634326752875
4274459016658732388754554258945655344477537534553234526266242645775374
7264725881262444645453558718832426334325625542586765576565851484446752
4453475841685246254253542335832182744642535246363425458226825764335355
5546666655553558115645467244365653580196263543263424556453579106524542
7255781766433435543732553577246425563242356343525263225761666254333422
4327257525634263434664545423243436257484451043645732544455563623433323
5442553357234528356544335423534673264436242553357119634544542543255443
6570196655642345445773553569206235335456532895655256831853335632442457
4254387633346322567258542425255643423324423642566246234563463352642543
8764356512641074665632356447832555264654647338757563244245743484253663
6426556313652456552896456213652456852745456116653452523653456456027642
4525749644444424353236225592166332435435423362632255812623535476364557
2464246675265525456562554255611824335664435551363666655664545543844542
5433446344278348347544444244255425531567745473565655555228662523742326
4244562464736254551238542424446336568662554255010644424358554933752536
4624445534442326277434435435485173437564378522745364337445342437434435
5476243355647547168264434233443736546267647243364337772433543563654531
8264434232532434755666666652456544418264434235466365535464428381055657
3443476354315953332624347674542268342655434534434425553565654168446243
6236424325544224354337523536266325652546565536438455252755264254019432
3543542468324243539144442444354323353813445425434778753712444472352626
5362444444273422735552232255253514655277474555425341344427562325535333

4446246233352524276426262552664754453240752334522856455466355365242344
3237335332531268253466334255234453552454453098255434255291384455255542
4352816824436435327334352724724543735253625642534354526148533352636555
3525138545544342323524176536435452462342552321642744657455664465253522
1864463463624644242552115687363343475632520238243226566432544632543351
9294323554534342526252433465263251830656368344254343334276327453865517
4243235424636834552344364242442432436242553351618643755372763642424515
2445342524256254353465263251425653464733875725335755355351332834254445
3453443253356256566675451245642343333752449746444795666653434453446735
4345112487444646365623225446554251076557656591044538655435827634424664
2663334736536555425719644424665422647544756626555574432554423777457353
6626243323324437443737777376763435542554382623433843553736683526552982
9327326555733554316442464437553545386725373323347536144434635243473555
6535566352553534883533352353389992443374565452536442468537374386266252
3473854742466543735365345525542512442442355435423753475554241765043355
2344823655453337565333322533234333233427264284175157547434282855544174
1254574255254241732653443235355798544276786554417218548762638833442662
4171545545238222324264344346563556344366444346443436352526324170245544
6822336334642565254241691154334446443416812573354326552416711554244255
5241661355469554434434165155544533435447644164146444462532472541632555
6765558668737428336346341622654755659686942434436945283416114554877556
3435641601454426345555525415914554744326363234158855444442415734553453
3223232337533345353444346536415665643674155225363654323662486456754415
4195646525235456358556415337564632676232562677444632445362554263541521
7554466354336355564151855873825415022533627454475436275565241491454343
3252524524148145544323526543241471155446527442414618548434826357587553
4145115333526529241441856536278326862554241431652334435335323374142195
3463565563546347924141365838443735458275635483343354233333754140335429
9442534442634633734445326253341391453535578326865413865533934137205733
5432472525252552413629552356558543324475334765555424135385633436253625
6344552432982633356655542413414554476444644324133125334464546324132105
5452382244131325444523822336345265265554523822441301155444234363412922
5534366387526353636283412829563343663466364652643625524534127405234332
6367637211727332726652625434642629412612533445238224412517574557354334
4344341241656356643423282434123205344322332344263538341222144243343446
7524478656412175453465412075375375411921563343247434378747898411886552
6444411711563535342524116205523543433325242424241152055454248435524232
6534114265454456343535252532362423241133354434432257644532636353524546
4435411214556535232425434111115544435544341101355434624424434109195542
2734453662465424108215634452422624342735274107145532324267525341067553

4247410515583344353556463410422554452242663656625625341032065834626784
6465476544102625583425575244232333254354578726255285837524556285478345
5635434410123543582556242626245452544100315544434335526436424345652344
2534991054444424364981256348287621034972755466485433355283543565865249
6855445635495335483944643448378943784421054382852494405633427543324455
4466365365436374425355424931655245444454665434926055444248553235464354
5653233546433332336234354546353333542533491325653578386665568234663422
5772656490365534335568383956433572826462565335534892853446383865344273
6463475362448822523344343252753655923348717542433327338233244861553233
4252455554485225323444323454344234542484226443555332438443424425483305
3776543549554544634326525235448213573643323367448124554435456245443453
4254474801255734344363247918554558434253434252478365662554432224236453
4323645354243566547748563433746424336465424643245554436534656764335323
4762053732767742756442755475315423544235566326465876211442723347421545
4425442537665544274731954543524553236423644721754322344235736343471115
6247545542470755442534691855498972544526743346837594676544284466276434
4262543443526262662553346519674346252253463624346423554663749565243445
3426346316546233545622445546216763525652643573446115535946444236334460
3055527526253738264243443546532345929653356564274353273455674655424582
5553422544266253545385264245720537554344675244786564562055342675576444
6375524551155432252325454185487672534245235624531055524524324521152334
4345554512055524555786662555323450105424543634449145634244265532344820
5453543433325242424244729643455436273654232435535655424463853636454534
4756554352583643565762565524459554454845444146527766255532344349543427
7745735366262433233244373453436263556625542442145463534265553544112553
2553224344401554424742335424243915534445375655255438185452733563563547
6643715558742452765765436325632324274364675662698646104263474352255342
6446525254247644343440543425553638728666743356697264335433636643319532
3342667469833554432275333424247634773463352432634311255774435257243013
5433445456343429245334266344254237576255424288574442444271354627655542
4542614445555253735444255844533634533362832366434456373686654832584587
2742388424452342442553427322745435664283736862442345447423629423545534
2322373637257654335623356626268667287685545878775442217545533322362632
6342111564533543744201755684363666343753419355434546248388565238247734
6523325542418245536543653433355333765654172055445446426265654364416145
5342576437487415225344257362853455962757414134434545556433413186544675
2445643344341288445424433234432525332453554432235254333323543253543333
3332253543235432435433333332273234411715534242543445286323443255423355
5532323323233554375454332446342382357246410135746264475652491554847555
4525255481364363898646344719653232398334798334646375545775548653384336

2667375744536533774516643674853434775344145554332333476543286343742266
3435546233277263434216543373763667377541295534282744655553544532544554
2320011654677655423199306442435355445623654354354363233198217343343244
6752443455331977644624431967625545231954363454325752449746675266276632
5423244342343731941474237353436254319320726734635455527565443192115283
6354234319121544653424683286465465319011755757683223189943235683431882
0444626736236264365523187216245427646735765554333186246323366353653526
5527772631852364366333555243736555532318412676854233353318328642834684
2352255663543534255318296534364333181226455248652564442553433318030463
5685473252732223424245365533179364346635564242544537433526434423844323
1781744448344733445553317712444445285652317622444623343444452452755331
7511642673747443174154325457362442583173176445666735252533531721543646
5562327385317111834243442583170196235335236269424535316913643526442555
3316816642562725272685531673363456232867445529542562442663465631669864
5753633165204323426322233465257531642544332537677554625432834233163863
4543523162136446424334544316121623423242732334332433316018874442642363
3434623159309342435445273744427543333342443158764452343157146335426324
4254315637463554562434553525523525253865662554231552144424434524774753
4552315475644562266224773553546242255235233262522625335223252326824355
6626454544325423153256345623523653376267335362315240833254348452642564
2452523265285335724454315119844576242256355542531506833642314913687365
5625542314810835644644631471985377452863445235333146218358353442635345
3432531452486446433446433554434243331442784644335353737323454232434331
4312657352325544314213854654445625231416855546314024832554555465376443
5233623139964275635331386764543313713853375263523231361583446752454256
5313523635235343643794565255363134138355285976265313311746854425373132
5657473131584456313013654666562554231291644542543452382243128126562542
3522331279686255245312617664323532673434433125156824546352766233124136
8246452638423123106546454454312212874465524732312111445658442433120214
6342455266336453546231192864442652527544445543777375423118316426342464
3727324245725256255423117236644537653352434663262331161864255644273744
2552311598456332633114158267286268756563113146354445536324531123566433
2487456553755424652442435235543111116227683336231102387843446333576268
6553343109116444523822431081184443546443310710642443655431061764366736
6554454433105144436752328666331041482662687535345310334655344447524335
6676345425447635448310213653535245554231011764333553554454564310015673
6655256255423992063543554732442526322398136234545626322397258234333546
2525344343745433961084644533323951182335737432394118263325435339324642
7852742324373237433623921542433263536346239124623344352534535243436552
3901472664247273552389114443733255338896236442463879669445265386188542

5762626735444338513826233434734338429624433424285443866873435435423831
4655468224354353827826334338113382447365443673826434452542637543338013 6
4236768862633792864466437544322555427664524323782963543743223432276223
6277756433772744463735434636234255484465237697343554233753663543747253
5535432344265225446522633374865254264373324454254352243726233424352253
3363372176547635534556325537111654774626323709654562632369136363537263
2533681383556546585423671482335534736732366206254532334633234654236516
6442387537262632364326466534326454342434343654436632236369443533621566
3434332345332361258344552777787363524232343360782333243591552232424344
3432358766624533571183256786554356136233762557554355317344556327335536
5555263663424323546835446353982767534435220645544539343623544343518643
7534235019746424653433572333634945642343226263637446576544453555523434
2452373363485887663472352245433424443363324324346783552553452183762543
4643554242842344207253344475253345552334388266454234213843756424284334
1208645354345543433242334017424443475534243233392082565425555427244386
3381564344422223353533735444244243224323423453755345645735473362467272
6446475443454632464335186633355422243255423347445325433311835373535423
3211832435374623311444563546845422330267454475455223324353242323332922
4323552382254552622522328276444474452332424343832688423272144425425552
4552656254326254323354424424435542545452325156234232533247343241565252
5753552553323206344525544356255532332211623376274553211845652665724774
5652320267456455363637865535334535331926644345435455232365553743523181
8662332655592332343317681199983161154463544465315247454265646752444355
4247231424534566436876652897627253313297553224254553665544253652333231
2964437755231114645746755265243101654264427374425523913742423324543438
1563344233623632437467434343222465294364367663527362548462264364442361
3662332437264235116235234424234186245443455527553323311875433556433276
4233243113228649853763735342342263452535345434625272462642353444222852
7654665642334255853293244363228428432354254354275262253523822322833246
3543463763345654545336555333432282129433547463446343443737734545855423
7357543444352562634237336757327253845523626964623262252544433434334544
4664434243364567433473554222811562342324243364622801464233635354233227
9176362744436424662322781464252325455542227719623533435365678655222761
1442325755442275456425563343532363254354544535455342764433625652274176
2353343547376765227330424332636562766266652482442657227228625533263436
3638326342444543227120463572453337763257522270155283543325242632269167
4343544363342642268134455355587557226730434273623656366352364525265542
2266357563444733575435672242752464232425422652746353452355446534627456
7654226439854255333624546445455654354445657625542226311435364236532262
2462353343533336262244276522612444543553452253534442765322603944425465

2443234245525334643344364342733225967432342432444626363553753552653534
4233324434234234465343433635343252225843854253446233626443735433544373
2544232734323225724642555735287856537265534225624445362676355843425425
2522255506536536853333424635363245344422523822233352642332422542282953
3333234232736554222535242444724333253257476232525524335477434655443243
3555322529834546443225127833244554554354357545554447225015853774454456
6542249608254453453224545536653425356254453364452334523343334742375342
2483064234322855342335425376243253422474344542445652455642352333363455
2435453324253422465494545356534862634425333573653252344254343452432732
5323224516655455627444442222449444274427224328625445333426254345343625
5323224276553444224167338492240274455262422543435353584664662239156622
5347546264322388636677362237354634255536453644442523524535362328322362
5833854644637536262265254222354744427762244274643646364623382494436262
6422545432234254635862445435445457666466223364463427468525354378253643
6542553336452536542533428752747324365759223233625455344565443224385637
5273556542231454334274625762543544744463433343757366268556542230306464
4444523272643534443322335322294682644437344325464344534344535234836233
3652665622284044545785434662325385654227243252333457692227744436532226
1344435345462552225144456437472647222241444553765284463222316846474676
4355336222227948342453265453736268322628222139755555853455355634234563
8637352355438632220264442743362645883335272876222192675634445264862475
6435275272218164454455442766552221757642556762746434424538252639635247
4343466724442343423465272216256254532345243334624333653221522424332636
4989932622647221430443234333566437775524535456252221349643424554237355
4454762325533533745355645767445353221220444245735565527665532211206443
5232444343272732221017644454962324623622209124442776232532208164333756
3452655422207117454564425322061265456554323422051463256554552344220417
6334223456624525322032564474643433434335243742472202864553435220114544
4634624442522002442622362444253432664775421991244424954326221982673424
3537663475254424624532197307426653374532634243433344337442196736442746
6654323354353542455323526343743543242425423225433454366352636337462195
1483427737534427219422724274655244755348666521931583353633554423821926
4443632191258448733836638352377328838219013832426395442721892765467265
4244626534455622627218817656552576336757632187655555444734437265835365
2526526535375343277544546744433453426356433218617652821043544443544218
5446652348585343534434243325336543385265363445321843264233632334435447
5434243325433752183155552533365355422182164442433554243233218113444275
3454543218016733898643255335321799557424624217838443335354253645863422
3377665462653554221775172655554772963686465639649863335487956532447636
5243217614443627535634332175115363876765521742944463734635362625542762

4426522173254442433333343442337456534217215644237725245542217118623332
5434234445542170226346263464624254426334216911622436386642168174333756
3455234542216723527235574543634633226542166127366565265422165316443535
2642553333356437643242532164436456636766422435352532624435435244675768
3222163966233243621629623644246216113669445543655221601166454667553215
9208746562552326726265221582444434434424435252345275221579826542555215
6106443355735215512848772465249215413624525442436321531182427685542215
2663276821511766227767765445463215031665557634553355444654246634343321
4917635433244663434332148194323425433623786244214778253324214614634745
3763767521453283335242327543455365335523365544214434635434243765534654
2466343648624432214345456427543343533643535364253534653556553574375214
2216434247632554625252752141156536352442332332140306354342453343424525
2458668726221391462474745434292213810624442434421371966349422553632524
5321363162443342427435443866873435435452135158233573226524562134156536
3524423323321332762454687544454262532553254221321765353535423264734213
1983534323221301883624628443237324321291666337767554454542128176633537
5253632674212714663334485277432126306454352563335654327245443427332125
2266984428736474275555532124198442353355533663753212318623563344343234
2462122128364554567322121158262432656266752120314332422252443754524322
5437363432119106524365573211824646426653525343624646254211711522454346
8421161462268222264446211512444243356764211430446243623637233256244442
4533432113317354735455362534653336475337465211217623533334343344232111
1864275273524323542621101746342435327636567210933432342544376434232632
4573272632422108186423855332433662622107174332432336832424321061943234
2435244352324221052565254264542325428363255322104134497665625542210312
6523432665432102746526242542622263546352844332262355326258434345332636
5573435565846336338427210122625644465524343443245421001062624444662991
0833435446429812834366583432297188544335444344643222962563454262723334
2536534354829599456434632941764256532543653422293276427265265627655747
2455675329211654256284542913064232466324354353754345443533429027449334
6524234244244436262652892683452552545538326434432454288106266452366287
2866568642345654774346642664542861362364437666552854963543633574662334
3424347648754375638657624576654228415656262663662753283296545362656745
6986361043627355328210642555865628113642556626432328023622436244434436
2653552627924633464334542743236276654278115323536625527796352442642762
3644328543395335344555442751963523272446443336282743763543442434353543
4373537234328333263227311655664446652721064245484532712465375345432554
3544244433270177432455522234333526918835454443352343335268236273343342
4443322343335267208242543475462642543326697653533582651264535524655426
4138256543533262263155532747245567532622462353343545456532985655226160

6643344774565534246855552334632542493666752543343344434242432602865253
4327464232445375545546325918653624553733434554258208673436457443456364
3257186654637252474576562567655327225515657744332424243254276623546333
4676365865432543325376586453252865332452251126542562464632501065527953
5324918442443687663852273248196233443544343234246247128364554567322468
6454545524588336576924410646556655724378276567242865477463241186554663
2436343553624014756356554567322391064255576562381762353343333745464237
1166234453235236193355524345653438477235198266353534445534325234138247
3536468432332364352568343333386486323232126633623332652311564256748352
4734230286224332554465442455552438333229194333636635255223342228136426
2627655632272082552742243276324365226398323352552344444755442437554535
2442624222534643554472532543544245475244328655422413848564566362322320
6424327642555353324322223656363347225362547553342211255526544654222025
4323428644335544343447454219199455372627644536242218662333221717625266
4342544644521611653743676552157672636421416834435834445554421319624724
3733555335334212762482432111163455262334210126534444463622910636363564
7281172357544253271244457454634326116262285455225882642335241262842434
4366238674676652277333263211317973573555416386515465441435341326612482
351146643”

4.2.7 Even Odd coding of the Rewriting of Quran by replacing the number of letters of each word with the words

In the previous chapter, Chapter 4.2.6, I presented a key coding based evidence with rewriting coding pattern by replacing the number of letters of each word with the words in all the 6236 numbered verses. As per the compulsory rule, for each key coding pattern based code, we have to test also its even odd pattern version in the same text type, which is 6236 verses in this case. In this chapter I show that this code, which is the pair of Chapter 4.2.6, is also multiple of 19.

This Evidence 4.2.6 is basedon the even odd verse of 89:3.

> 89:3 by the even and the odd (Quran).

This verse has 2 words each has 6 letters. When we write the number of letters in each word along with chapter, verse and word information instead of the total number of letters per verse, we observe this multiple of 19 key coding pattern of this core verse:

> 89 | 3 | 2 | 6 | 6
>
> 893266 /19 = 47014

In this code we basically test the even odd version of the same code. Considering the 6236 numbered verse of Quran, here is the illustration of the coding pattern of the big even odd coding representation number as shown below:

> [Chapter 114 | Verse 5 of Chapter 114 | Total Words in Verse 5 of Chapter 114 | Number of Letters of Words in Verse 5 of Chapter 114] [Chapter 114 | Last Verse of Chapter 114 | Total Words in Last Verse of Chapter 114 | Number of Letters of Words in Last Verse of Chapter 114] . . . . . [Chapter 1 | Verse 1 in Chapter 1 | Total Words in Verse 1 of Chapter 1 | Number of Letters of Words in Verse 1 of Chapter 1] [Chapter 1 | Verse 2 in Chapter 1 | Total Words in Verse 2 of Chapter 1 | Number of Letters of Words in Verse 2 of Chapter 1]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [114 | 5 | 5 | 5 4 2 5 4] [114 | 6 | 3 | 6 5 2] . . . . . [1 | 1 | 4 | 6 6 4 3] [1 | 2 | 4 | 8 2 3 5]

And, the final number after all the concatenation would look like this:

> 1145554254 11463652 . . . . . 1146643 1248235
>
> 114555425411463652 11466431248235

Here is the proof of this fact:

```
x <- nQuran
tmpwr <- c()
for(i in 1:nrow(x)){
  word<-unlist(str_split(x$text[i]," "))
  tmpwr <- c(tmpwr,paste0( rev(sapply(word, nchar) ), collapse = "") )
}

cat("Tail of the representation numbers of each verse with number of
letters per its words: ", tail(tmpwr))

## Tail of the representation numbers of each verse with number of
letters per its words:  5342 53 53 6722 54254 652

cat("Head of the representation numbers of each verse with number of
letters per its words: ", head(tmpwr))
```

```
## Head of the representation numbers of each verse with number of
letters per its words:  6643 8235 66 534 6544 865

tmp <- paste0(x$chapter,x$verse, x$vwords, tmpwr)
cat("Tail of this big number at verse level: ", tail(tmp))

## Tail of this big number at verse level:  114145342 1142253 1143253
114446722 1145554254 11463652

cat("Head of this big number at verse level: ", head(tmp))

## Head of this big number at verse level:  1146643 1248235 13266
143534 1546544 163865

ev <- tmp[(x$VerseI %% 2 ==0)]
od <- tmp[(x$VerseI %% 2 !=0)]
tmp<-paste0(ev,od)
tmpr <- paste0(rev(tmp), collapse = '')
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("The number of digits on this big number is", nchar(tmpr))

## The number of digits on this big number is 111098
```

As we see the remainder of mod 19 is 0 and thus it is multiple of 19.

As per the rule, we have one trial and one success in this evidence based on the key coding pattern with letters information. Let's add them into the counters for probability calculations.

```
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  1
key_codings_success_nums <- key_codings_success_nums + 1
```

For the reference, to the best of my knowledge, Evidence 4.2.6 and Evidence 4.2.7 codes pair is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself.

Also, here is the "111098" digits length big number:

"114636521145554254114446722114325311422531141453421135533423113455282
311335334231132432221131453421124534233112344332112225411214342211155 3

235211143557111343345111263343421111533333110375338344110276432655110 1
564333109643353109554264310945524331093542643109246242109148422108346 2
521082354310813673107727710763625107555622510742741073574333107246344 1
071464451064732632641063453281062466471061246105535461054442661053464 5
510525525431051756333231049353210483554104747344104637431045462531044 4
626310434542410424543410414443310339675786553103243372103116102856256 2
102746372102626510255636231024463321023363310223743102127610111253101 1
043253101925410184732410174542310164742410154766510145775431013472531 0
122721011171001155534210010462241009762243441008455341007453341006454 7
210053425100434251003249100224910012499986333543997634354399667565459 9
543433994374599343274992375699147553988213333354434467524344369879632 5
865529861662254643296325529851663466675526473539841166232365543983343 4
982654442498112663696325532975554324974932244468497363323549725542539 7
155427396195654239618284961725596163555961568642339614534343961345325 9
612373296115533259610333496934459684633296736329664572396554227396436 3
496336449624327396153434495848544957463539569533486553955464629546542 7
539533654952254951286948353494735449464452294544523944342694334449423 4
369414424393114435493104436493944364938355593734459364454393545355934 5
622379335333429323336931169221245922056336392196442443921845444921726 8
921635349215463629214344892134763392123552921164343439210267929274928 4
732492726792627492545424924345292347533922343792134369115364391147664 5
576911377444434911236529111374491104523391945242918376791735349163536 9
153537914363691335379123536911266902035359019675275690183755901798767 5
523290164526290153525901465232529013242901246253901136539010277909266 9
084524390753322590644454905634422590453275390333359024542490145442893 0
246892935268928555335892748552892643543892553542689245645248923962475 5
554892253363489216335333892043356891943467891857436389175662238916105 3
544462348915115355636237489143932891354335389123647891146245891037268 9
956555589866254248973633896643332389563333228943336893266892235891168 8
264652288253652882446646882344423882236538821443448820443548819443648 8
184436488176435364881626688152668814266881336348812353488114544288103 5
328892568883554887632434288664234338854432488435448832558823554881474 4
287193573871856533287173537871646662871544334871444242871364344228712 4
654487112688710342587946424878266877943543432387634368753445874364587 3
343587234348714633386174568486162458615346486143623861333438612353686 1
135378610643322386937438684543386758532486644323865432768646453322863 2
658624625386127785223532852144422852044625851955255285182558517464428 5
163434851536528514366385134542385124533285111465375244386552851014644 4
446229855285910432356832485896656234538576496233856445228553635854375 3
853265852276851363784259533386553842434568423453458422465528421662653 4

8420462338419432468418343684173336841636438415652332384145422238413564
2338412255841135448410644542484946436848455548475654248469743343742845
3455844454258433354842345584135638336665263283353673833466625568333465
6383326652554833165753748330483448329865525652832848344832735268326610
8333583254542583245646248323367383224437283212858320254831945253831865
3742383177624434283164654283156854243831486526332383137763644383127442
3243831145465831038538392548384425383764364238365835438352448345745338
3356626483267537358312838219935644342382186532522821755325382164742382
1535378214443638213443728212362682112658210375382946623828643242282745
5448267643274282555423482435648233464822367482136638129882442363812856
2433812758332281262648125545423812455532381234663481223663812134248120
6452332811944443811834368117343681162568115364381144523481133554811234
6481113464811034548193433818348481734648163464815346481434648133464812
3664811345380424662580412468040445558039275803835548037653544380362578
0352548034542533803336448032393580312468030246802925780282558027334780
2643552802543553802445376802354233380224533280213652802034628019454428
0184432280174527380162448015245801425680133532801234338011354380103434
8092438084442480744343806342480536238044664280344453802364280125379469
5243626357945562434794437337943462337942564627794146253794095254343247
9394626379383664793733247936433657935532753793446644793339357932267793
1475447930453367929455557928365379276562435792664353227925576445792446
4347923254792234427921244792036557919453367918642322379175335347916636
6352791544442791438247913454257912553335791144534791057284679925779835
5479727679637437952497942497932497922497912497840165352654425435583783
9943343345378381454623237239543783710536266368278365543247835653446278
3425578332667832275783135727830553636782945733782835767827555254782625
4782536537824653446278233646782224778214644278204556578194656578186665
2437817563532781626578154632578145538277813355678124545678113566781035
5678935567882687872677864554378537327842737834732478236527812827750464
4477493853774866263347747385377465645747745385377444844377436643574774
2363677415542727740385377395633337738587533773738537736483437735462337
7343853773333547732464447731652434277306342237772966242377728385377277
5396546772627577254554377243853772338467722353377214442777205432637719
3853771839447717376277163743771538537714553253771325477123433771134547
7103464779346477834647773564776342477524977424977324977224977124976311
0553395242476301155342442363762995334335327628967544567376278546675527
6267545255376255643357624952443334576236664533762286544333276211355463
2557344676207555424476199656636555761847444761767634467616566326761587
4632555761466656567613107344427346761256353676118646532467610775442437
6910534442446476876663367767773347657667684434476586633267276466758637

6375453663762105576542753761116432523733275407642353475395757347538544
4327537643242375365342757535452427534352475335543327532353475314333375
3046533752936567528363375273324752647433752555342375243555752335437522
3554752126675204752375194552275184556475174645275166255242751537437514
5543727513643357475124753337511332375105535747593654758254757353475647 3
4475555574275465423637535543757524764375147442745611746324423637455343
3745435337453566223745295442442427451352374503735744956723374484856374
4736537446454447445482447444474237443572225744243252744128274403842743
9365374385543327437752524337436255743535547434343674333426743226374315
7543232334434254243444444936256965553655665575543553635553743033457429
2557428433427427432537426236742555333274246433324742337427422343274212
3274204333274193334741834337417256741655733374154424274143625741325574
1246425741145434741044383749443547484723474725574636437452567442467432
4474225274136427320784442494542435327634447656734274427643265266445236
2427545223754535265554244343273199533433532731866432567317847445254731
6654765473151155363555563731485565754373135563267312466527311656649573
1075476235739956233276273866453357376546222736845432552735554453734666
4422733553424732453527313642722813432553546622572271344343244425237226
7443435472251143242625422722411445428624337223164464323643384253722212
6423334262327221843334232722084243344272191044655433347218844253373721
7104553324337721684397382372155456847214104564384834721314434434432455
3472121145352442244721194533348347210134434252343424729134523453554434
7288554486547279444225345726114742565243472510443554224472474436434723
9435424254722945432553472113455364235334271281553833995434724271271055
3535552371261058253322347125126432353476837124853833553712313554353343
6426712235467121135354422754233712045447711955533571185674627117555265
7116755444547115856343343711436537113653523271129635435567711146564711
0653348471976363532718456327171489668627535644716553553715764443237141
8642423343243376234713576462712744333237111444623244243463704496545336
7570439633557263704286456376570418833444237040773873437039563733703884
3424425703754636270365645547035464257034576326703346926703255692670317
7263453703010635742273370294672670285534427027664422670264546670252867
0245527267023566325702227370214553470204543370194537270182547017454247
0162557015334370146525523701335477012257701195542526387010454437093665
7084664370725570635547053545704113356332468470347242702442387014454369
5246344695136346950483546949564254694837646947663324369464636269453736
6944583543694348225694266254436941762544236940444436939362369384634369
3748352693655234369355455246934574333693366542336932775555226931346269
3025469293733692845342692747452692646233692511632525654246924876263574
6923256692235326921454236920564343691996645654246918654426569179655335

7366916555366691537466914653575569136545234691265365376911772753336910
6546445699681043546985523336971553554454547435569665447346954874469448
4446934625369226269116685258332368511263755388554368505825376849105374
3246246848115342553334568475635526846764234626845544235684410623296443
5684311636355336756842983636324368418652875326840444446839126332733555
3268385633326837563432683646332683539866834664437268338652466646832106
4334462436831653352568305833556829663345568287643336368273732682656355
4682546335682465557226823383868227642535268212676820276681976332454681
8273681710686255537368163735681577636443681455323268134433368124445468
1135446810544233689474246883833687119435223423268627668527668444344683
5535236825635326814636167301044634542626729134422286524622672815442843
5233462626727135244345544444672694435435426725764253376724865525422672
3126258853464226722126434434434446721125324244264336720154238263263324
3367191543336362655534467188434525346717124385542622526716114245342622
6671514654257265533426714766332436713964432625667129445364552671156656
8671011652324243266791844234232432564523567813453653444524467784353545
3676764445566751264378587664467410435545554267318423255526323256334672
1166344477534671943233544566121782554655236554545661124852555255244232
4255554446610278255444255396625353635554436691264475510645426684643233
3553446963453565442375244774424354435554266712642545725542666236275245
2446585647635542665177566666644652523366421433985652434637334352663296
6533524254325434462445633533662116636574343266115445655243242542651225
4334243432342755555363344651134424424467524455554353728655564454565101
7454425574246553436597455454565814458559543234256572543345523444244364
4334232565632426736576635354357352357735253276551442563443355433654284
4224433542576427456626262476532143343244424343535232665230524433565432
2443774337672685446514243344342433444344456523536272446566765354264185
6685464171244535364446264161682642337477772466415843454874641419444377
5383487225542641398744233246412116663563674764111643354354344352426410
1164465557656649276534467524466345554373354636481046356466566471844345
3626432622553646164354766746856443645134445463255353644146445635256822
4643965556568364211463545455426411743233535252382234631111634553344436
3102182454336425554232722763918826343432737525542638176294975454567353
6637206294685463443236265263618854242344236223754635148357644436633463
4226346752542653564637564633116236345255363212652344425376631177924563
4545345943621121835735234322565642544621015655474327528644629226423345
5433663264355426281864378543527435452262799456434736261864256532364525
5422625238542545555336464722755362410652542543362386633634662221443325
3767755445723426211266655238223461143667535565573255453934362943433455
5542611398444423756112176533424675244763461111564233478442865661101244

2653525542619148333536446544261811833435843766171685425734354353436163
2433585444424567233355443732434336152485425644545443637232543361411555
3527534261396226243436129622625542611116635238223360132065263362525434
6255426012394442437752637637653753535345522378435426011216244466237455
7637235360105644554434628627746368372543626352332226373683844978535542
6092182663627376285275246460821834257626273528252462607154454544654542
4360619652434356443344433360513663343555462460452655564432422432857334
5634876543543264443652367244342603134635547373762602136256865753672601
4964234536363447556752554245626664253537556646255425924176636822246726
6642592319634576676665233244259221366285423324425921187556744426563363
6259201082555655525919108256744663591818634424634236455542591710844465
2584591617824433433344732745915114445455525459142362353375645534225323
5925913126235342624355912166227564826446263591128744586344443466363255
8665323591023443455362438659344652565993182642335333637534625354255285
6659818825647742468626597597376442467353565348344226498647453253442596
2543235423444443324634534435951386456358242525941264434436455359314546
2462665432559241742885766562472324642674562525462632554425911166352382
2335822518243234353544346752447346762357272726536432656564325821943425
3643582087256465258191582732373543775658181782433347363275463581715642
5554427374425816104444425376581510652345534358141963537434225434553235
8132463456476567544623563362758122344435235333463366635542581131463555
5645544763434477263335542581017874444346455572645892064446757668673735
5425883864745434646274242345466868343626245323587474334273536252342343
3243623436235424252382244223586154323554553754635851844954635253356465
2584264494446573646523623285532358321463526462324653626276582234443552
5756637272262475581184442845436526434325729226525425435343233636344572
8224453525435525566455542572739645545567253456357288546542677435666352
5726146454576726846457252843426552465643367655864785635724126524343657
6557231545232553635235557222144332623242362352524257212565254254335555
4664544253657203964366364264463542554256434872656543664657192065576566
5343882555565718124343544479825717136563425354426571628645645543265663
4233446425533571515646256552344426571420655433376776563543385713276426
6353245448663525755109435712226523467524456963549833571112433274444422
5710374635643473265244555324245268544426333579174534353727544344257815
6427335767562335771543374563853765557612644352656254575864446832574364
6354234344362434435232453524326834257394333776525721143233546832571966
3682233569646344569556233256942465693342456926782324569156522556906652
3245689444645688582324568746428568656342556857624444456843655568347435
5682464575681464665680482255679483425678354256773453567654624456754664
3567446344567357657356726832665567145457567066556425669783252855668464

5756673732566627356656655742566458327556633627566266566545661962227742
3566078335553565958327556583527565746573565645353565535375654462475653
3647565254232656515874425650553538564948722564827856479846544466564656
5356564556335456444434256433523564235425641565266564037245639372356382
6656372645636268563535835634264563346362563225656312545630253562925456
2835325627565266562645543562566344625624465345623376656222345621463345
6203736561956346256185424765617465545616385656153633561437255613372356
1236425611285561028956957527656857527656735655663545565336456443533563
2555623573561374355786862335557746544557664634365575465445574633536255
7346544557246273557146544557034545569465445568454555567465445566375555
6546544556418556346544556235635561465445560573742555946544555838755557
4654455569335362564555546544555493746273365553465445552555225555146544
5550365555494654455482555547465445546553434554546544554452445655436834
4435542465445541688578455404654455398333424265538465445537674565455364
6544553587353246455344654455331763627685262726442553246544553147335553
0465445529103223268225552846544552768623355526435225525465445524685276
3552346544552248654552146544552046246551937735518465445517483825516465
4455156324254551457527355134654455124852555115736545510365655967636575
5847253557474575563666555366555426455327355226355116545565433425454544
2725453455435452552533545164237645450664535354495463235448932563526354
4754428254466447662544545655544455436254439525326237544275438475544155
5234544074235654543934565438554454543794566642645436567664543573244524
5434947323556354334633454327423565454318756545635430445345429446665428
8532545265427768346535426556237542593422524555424104433355356542336445
4227423565454214453454206535554541995332545635418645343454177423565454
1644534541564233745414633347454135453375412932335655654115546565410565
3345499656563354548833384536547854572674546833353344545553354544753272
5454365337765427537634354145566536237375361265536035375359466345358654
3233535726453565652435355463445354332653532495352954254323453513435535
0464445349462245348454245347466435346443425345575734534445424534345424
5342473335341466525340433435339632373353385435335337334853367432342253
3553353553343555533334465332314342653742443526234274325385575533116765
5536555238224533016534352234232526353291166333524225532816442424343623
2233532796586762525326185434423234742823235325376453244427253232554254
6434362523442748532253224443353214635453203675531936575318663423353175
3353253165426425315363553143743531344434531243239531153263253105424355
3954253453835325373663536363253535445345433225334524353253362253133365
2495665535248104334474345524710626433555352469623454423524576345635524
4954656244352439634543332524278256462524156355252407642346252395646225
2389467537332523779223552523676226852523588223325252346652457523366225

6252328532247625231692446252307632546252298535353345228964235323352276
6465435226765233355225583355522475453555522385343244852225634695221194
3342325273636668565220734863365219664357452188644645365217554272521612
6425454622765215662423552146634453521363433535212563225521138545210346
5529446435284422252745342526276525276524276523352252225552116516076452
5545159983743555351587652624251579624332442515667364435155584634515455
3344515365322275152135245342525324515111443333442635150844333435514976
5553235148484765147574477514686454323451457753428351448637743255143833
6332435142975343323251417655623351407434286751396524455513884653724351
3776665346513678233453513568243275134483355133532555513266336355131584
5335130866233345512994455432665128945632544551275633555126644443451259
6343564525124687344251239642333664512256356351214646351204845351195862
7351183829511766252555116963354452551155542725114782443655113565323511
2453465111554225511028351943234518453345173537516355351535645142495132
4951224951124950451344274553363435044945335454350436665433504276335663
5041744264365040566553503912645433446235503813424343263685450371343542
3233532250361542262644323256350356464623503456335750337444663250326443
6235031543756503094225625435029865333542502887543372350271044234624535
0261066273442345025444545024644242550236432354502212455536324233502165
4432550206633524501994332355455018844433242501784636295250161463244442
5257545015104323222567501494353234665013436645012754633545011864442764
5010543366509106342763626508543355507114322475477650612423377356364505
9432353552504944645425250374335444502114338444525250136714918106345683
4424917196427525342735226245491616433552382245647249151882544278772265
5584491427444247252646362744654622474491321444264362865853273542491232
4442468443425445436334324257554249114082632373653873663443234243446233
2342554249101065466374844993083427667434334344763733677827349874455424
4972882587554625753445524262444274961865237646274452554249512445344543
5434949626742752493174453664555443755249223625742454626353376255424911
6444246643362554248295455548655436356443675444726725363262674246445556
3536444482814554353644654424827285433246224627665432666565433482628533
4463366478453645846625532482540554556624252453444762726564544266662655
2482419563445623234474624348231264433323244348221253452275556348211453
2344344256254820187578364543334855454819755448564818195475756224638282
4334817275554375244564333633363336334816285563263634445636294343367282
4815315362528283243572244626658537385481414554442543468344813958646542
3481220445526623446396522524811375634324343233424423432623286377767282 5
4810255474443434345336342474852489864777657488566573487855446844486215
5434654455552579910954851954433474546752449854841955446844726884274424
8345446482157564544342424254815542534738307622546637555424543425442755

4247376756692473613763656634366447351275345755365347341534434352442555
2473311763674655424732217644525342326644255524731875949439473012745532
9789434729117442236253247281075664426534727786686344726157455327432555
5347251635337534232736524724774326744723775645554722107752626253472112
3444535345444720273552463463625464454544445554719147745995743323547181
5663347334626363471766635664716247763435543455554253345254715447453552
4234267224443268332645232633325473453471413774323332433447131434386452
3324254712223467437756752448655442471111342835544334710167954352553375
2644798754425534786743556477107564625542476435574753557474387334425645
5446443375334433465933645554473187544442465536655334721855743424343336
8656471873442555463527853434424362624353635254335463418643663535534535
5444633224323336423563368344244463218442564224525444323463115442662342
6446524630206444344335432455352546291865343465546742445346281765354442
4643265554627106566525264462632825234456523273735443674363624644625148
5447332744324462418444328222643576544462313645525274354346221282325356
2765462125434543436343432533844233546202764444528435456396627653554446
1996237853544618176546425232325525546172876332524323448442633428427354
6161865453552727524455546154582443352255543543545426233644333466546435
6776461496534465554613136235338244552461216855555544455444346111943382
6234624325555446102485424294437324426432326246924444333423423324243524
3224682566364523363424422637226624671443353455356544466968653553446518
6623733262243243334642964232523325682332525454325262463156635644536368
5246266642654611245378663682834536882538254453516823462666644465445341
4623357354536544533118252345253445322293333326242443272432344531126459
5453455445301365235247865544529116426335546345281464255634325324452710
8456446834452618625443327336262642452516642755235325654445242153223243
3536354663226452324644325354345434334544426452213623433265684445211762
3764865662775324520764545534519157353658344235244518136255437525362451
7247354735432545523237352584516138387287667354451511643264365324514146
5345445256552451316745322355238223445121466428535553344451111432434556
3345101944464326234524434624591144354646234458144556237324444445744433
4561266434454644345520644665352532624437574549644423353453685682245266
6426545112445937464458575665445776523324445610646663546244555553454454
4348444535874264452354244515442724450662423244495663324448764243424447
5643744446264444546246444426444433642444286623432344411062344244234440
5675324439862645382443876636853443712654852633233443656427544358733663
2244343752443374432628443268333844431782533524430766273544429865366533
4428454944427464554426345544255542524424663445544235644644422663523444
2158262344206625434441994653435234418944334434244178446535444416673664
3441566456534414654635244137445363344126636344441154435444106456436449

5622224481076345423324478642636824467662332444566335244445432444438633
6427344226744112438966443454388862352225438786446526443861363532374255
4343851365635636832464384116633533624343838645637654382853526825438188
3436322438011656374423624379564462437876464563437796433544264376682547
3437566334424374664428243736645543437276439454437115645646625632554437
0568456436956675543689643553242436777334557436610623462636243651143425
5452764364964375324243631774637433675238434436274333763436110643735364
4436086526464343591074474633224358145322432522237643579534344334435647
5484355669476443547645474643531178332325445435211443424323324351186442
4743324323425543507623645443491274433333632643481365785242332534347764
2375443461282434553746443451364632652426254344664624443438643344574342
7754745243416744254434011442335424454339976245256343381264835432353343
3776476285433611423624632334335127337664332364334565568433317656324774
3653542543322563335545553356662755334634331104823363346433096243354544
3299454537542432876542546432756454343269634455733432578533548432414626
3356453554343232166343365373342424262543221166343365352432188234257243
2015632232432726326431912775565642586431894362362444317124354246335344
3167774434243159457245226431448434431320623333345747344625374312116285
2344735431112644427436235431011654434453344391066566832644387734443743
7882533263436672326343586442454643474456224433665556343226743112425315
6443352382224444252276435462422446473624325244654251224334255542442243
4524334250114435425666242491564345433424683342482747364345333437534634
2557363424721423354232422323423258424616422344343286233342452744282373
7655825543326426566424420423326643844232234434243863332434424215443544
5265653644241942526435442401483234355335445423967256364238116745466758
6423710625248557642361774455534336653263423594232627554234742453624233
1544353224356543242326852653423114433243233527434230104256445263422916
4435334252368353422813653555232544342271744634244452565433422612443942
7865574225126257255264434224226443744644434433443562422329444244234536
2634462286555444342222465234362365286563435368342212244383545454242252
3553242202242622344634334223634324219965342464442182244362652344746563
6253642171146353856444421618444364355262324266421534655446532747354455
5424434374343645421430432352665354433324455455232363421338424542454462
8333735625572534654232523342121343335435468624211196633533667366233684
4210154554344435323734291643233643525642624281943323295242445364334272
2625524332535535255546542612553354464266425196624235239446952684424106
5352382224231066442544444221342112415412433334424243415319432334344335
3636266415217442233225243232624151134434346447364415032442953557642233
4456332364432346441491145433542742414812423253255243414728423255637453
3342437252436334414611653364365324145184323554324453664544144304426535

3362626535522565446656341431744353324253223242414213442542343265241419
4545365524140264633426734422352445526265241392243233656424555645533534
1381262376263368341371964425437535626675534136116623563726441351142236
3553634134174345544442546365341331382445443334434132444244131165244652
4463662834130196446763638558244552412916826737642664455441281467534534
3545434127106544955557412611653664625544125256546425232325535363236536
4124118223833466341239827655445412220635424254637355427434121186533533
2444655527641201265378553623341198635345441185565564117146535657535 88
4441161962346666254754254574115256763432544244333264452934411423626346
5432543635363256241139535357363411219665357665542255263641111665542456
3443635241101584452744455254441914823627525357524189533386552417862736
5254161684949435434533424151764545533634634266414762365654137645554441
2466254111240851785452324435437623408412623364545544408315825234525358
5644082256524435263444552553375264408166443564080126546624585444079965
4773344407832854534334443442533442254524424644077146672543542432540768
9444645640751164444526434407417843443243223454324073764233324072665226
2407166872724070964526475540691063442753234068125224543454424067306644
8325255725724624224224254240662083425327534325542432406514823552662332
4240642182464447265564755334440637645554440621264233232444440612062544
5333425737533444060136476285235644405911625444325624058137256386567653
4057126254453246844056236623567223362255444275240551286344572432540544
7553405386737545440521053464784234051117446625655340501642384365358562
4540491362434454552544048126332424238534047195253543433385755273404613
6352664454565404510635345254540441274424345342840432255283435362362423
4743240421566364322322555740411053863622334040234446566434232533534343
2403912632634663432403896456323444037234235336234363555443358540361074
4423525440352345323444554434355444275403430542243454244243332532243832
4544033163223443424232653403276354333403114644435265433334030117335433
2344402927643633235253524326352655332402839442242425435523455234285343
4247645224344027136442522543344402618652422542433544554402519423833683
5556552554402474466653402364674644022136433466856453402130324233374652
6343255255533752644020156624245242565454019664365440181544342826736263
7401713644253243324540161566355334434262340151663552423425452744014883
3526464013144235346235554240121565366243544334440111342433786865454010
1577352652444655240912652453572374408166633886233643474407276445755554
3244559274464356540610554553343540521434742777773245283354404136265355
3442524031464233252645554402666426540112397517823545544465325843974168
3443525574543563973206845463475633453455439729944464563397134836434353
5494455435363474633443554397096343423253969156235548846444563968226424
4332432352382245243967176366669735564245339666823542396514827465342544

4439647844745239631182545566862396294323332443961116235528554539601494
4245643553743959108248355523395812825322263342395797245422423956158333
4324235234239551662546623242542473954136226623227437395321662356442442
6263655223952156453225435442643951157235257525652573950116524435255239
4922626442233643346325272439481182523452534394725762242347363227355522
5523394617735225343854684523945188234253476254644343944116426832573239
4314634625425432623942267453224336555345623255365439411855335352365355
6463394084444545239391064437363223938369544425622562362234624325272466
8326439371262544322343339361532234434268444439351265455754444539348843
4362339338725246353932158442442644333433931774373423930455333929196262
3547244585344433928755323553927117532263255439261265246666254739251062
3266525339241364258473635443923343223443422443343376424554355756434392
2204425432674323337443439213175532255255426642425265362442233920207442
4375245352334553391910522456442439181374264555575753917124463437727763
9161764252443353523523391519672337376558224242739146425442391394343424
3239125834353911952544243239102244584454446326545554223992474546266552
2345646554423398345523554252463432443233443245332724397316443643764324
3533346356434343623963664233252444452332474265672355432532539523662344
4265453656354568339416664264243644244239333442242427322254424438362642
6665333921052545564633916664265388843347388758332238861092333246223885
7644434638844455338834845338824686338814753338804824338796633723387865
3354338775444533876103263263333387515723274434242523387468246533873464
8438729625423554387193244383323870844343342386997266322323868363438674
4322386676663682386511664332343423864653533238636744258386210725353232
6386111524543332453860116437435242538591054435245333858454243857454833
8564647438555337333854742226323853564623385245566385175564546385057353
4384963473333848872353675384757835538465546833845886466765384414435356
3432544338431075534464263842654535438411154743342455384063455233839744
4256338384726638374542938368434545263835156334245242324233834942453764
4383368644353832117533325253438316686432383074353666382997475754743828
1377425298655423827165255455235636653382631634344344255244255435535525
6352382593455233263824325533754532258655333557253535543338231562584543
4632332382223643643555335353254453523821776253433820664674638195422663
8187865365338171143525556234381686334334638151042325435433814743533223
8137756634538128726433543811672552338101072863683323897663455238815463
2422222525453871063326524523861244326375245638584432546438410443844452
6383104346325262382653255238145271371824823637181383537180653523537179
3645371784334437177684473437176289371753647371744334437173483533717239
3437171587644371704642637169484443716867245223716737533716638443716537
4437164654233337163563223371624744237161363537160484433715945345371581

0745444544637157564275371564453237155264371544633237153463653715247543
3715157524337150663585237149564658371484338637147662343837146552447371
4544377371446633424371435823353714244357371414824537140575332371394834
3371383647371374656537136375237135482533713446562371334834337132486233
7131484433713045234371294724637128484433712737563712657634437125584646
3712455353237123483533712248625371214844337120464343711947266371183869
3711738693711648268371155652793711456434437113104554735447371125824673
7111486233711038443710937343710847246371073447371065663323710578443642
3710447228371034645437102288243264243233455362333235334371013457371005
8222237996633434379858842737977626625537964635537954627337943547379347
4543792462323791663463437903636378934343788462443787483433786564345378
5664553237845443323783485233782376237814862337804844337795823343778472
4637774725637765652573775585364377448443377358533537724646437715745243
7704663337694565437685646223767742553223766664746537654844537646632444
3763484733762664243437614863437605653323759673366337583634375768243453
7565632533755564245375446423375377465444375248344375174233443375058335
5374935353748435663747764233423746383537455424543744383337433642374236
3537414533537404844337396642353373846664373758453237366556647373510843
3233354373449443373357625537324533937316734353373010544252533337295662
2537286627445372758335537264852237254723237243746372376437432372276538
5563721762445333720653352637197624542537184653237172783716784654443715
6433326371448344371346254371237423711124327352243383710744663233794444
5378942276536237754522537667566433757736368237435523732493722493712383
6838653254463682105224244344368114663354235683453680116344465233436791
0433333646236781143642344434367711442442637243676963524355336757633358
2367476544327367366465443672665653836711263366433534436708835433253669
1245332225356336687645255336671063483738433666964686364336651165365677
3453664564356366356444336628664544343661564373366014433376223325433659
4845836585422443657652454336567673428236557632555236541164235343426365
3106542454342365213846323625252536511064372245243650765335833649863654
3623648764253373647244423425442255555345363343646116453442326336451165
5363253343644633634336439623343633336426624236364187526533436401563236 4
5354235523639768335663638866533646363796246345343636136246354347345363
5864653427363410624664244636331064347865343632665432336311162546256243
3630128253426263423629862454342362813633623242436336277826323336268643
2354336254754336245443333623156347332364244253622865544223362176346226
3620118632343742436199634253465361812443886233635361756635336166753445
3615156342326435334253614116536568556236138852654353612144427337525643
3361112446566454244361086262285536912623935336326368106373367253367862
3635233667636424536536653643643363383336226736112354525563435344336442

533253545335443055335238232643334365255337526435432664433644337336353 5
543545283542195352454542464537357354119553342327254526844235403353458 3
223433572823325254543255762353924535843434358434533525542353810644368 3
442353725428366642352644343546447335361842446244375424335635351444533 4
524273543534114542534435635331344763252458343532216523448455554562756 6
235311645642433542624653530844342767352916425573737674455235281744427 5
244446587533527223775433637652736244223352674345542352513687856525336 3
352412443332365573352344332352216622533424427375335214634335204537335 1
947653351834644555436764554442333342535334353335175543333516644463235 1
511652543745423514184353667438253662623513285262425652444442654526562
543512286642753548494462343454433753351134443324234243424353334243652 4
224255351024425444376656655445545432359176453527333655644535825634425 5
443425423434443234357134453865644355356136527444473372355156563666324 3
254235411644442343633532264233266264342254465423521966342243433434254 4
235124432342425245545448468435345415422543283362454345310442673225334 5
294427342463451104426335233345016443334463433542234498436434323448764 5
432234471743233433423332622344624443334322327272643626542344514434467 2
553525434441142456383273344334433325345545333266433524333255654434421 8
634454555533445426344113636465252536534401065568425643439208335332632 5
524354322343896625762563437235723535436543234565737334361362544543543 2
234358733764363434146263373342426334333465235255527664376625542827532 8
585434321564252352748585334313264448585453354437823343536442554343010 8
343823532342976425337342812625446554373342712664223526552342611663554 2
454234259634363622342417442234524426826223423226534543456233323334743 3
422264242332533523823562432555234212143234224237425352523334201082537 3
553434191944353224286866734463418175654554653464545634178635353733416 1
643244335578535773415204344274324542536243334142766252565224524645434 3
425454341319652545266575762422634122764245243334434243532637355834111 2
463357524642341013625634424355434929433432262454253432662536323443481 6
676276252322443534716433442536335255434616664354232444555434511432435 7
624634410445358655534332442343324352382353425484326625543421866344362 4
344352324341176636253523822243533731555449834599109453372185533764672 5
768375333711454336433635734337095464555423369175434534544662554233688 5
476254433678778653463366127645526526433365853452446336475348342336315 5
463534354262553362126443332452433361666555733601953482237729362694233 3
592255445352438255856725423358125567372498563357145534762456455233561 4
664455425358423355305323342467423637537537373625423354115333435245233 5
370543342442662344523337744442858442625475434258385475344634334235462 5
542335225532344542355352342332623233513555446224546364363243443436342 4
544243350625544344574372552528322582542554256356654555354443543646626 3

5423349235577832533623282853554233481255443553108333347854423384334665
6543633458665735423344854344636334313594537278544233423646334185446554
2334017533447544462334323339135544345374665333822644343245243243432533
2333748643444438523834238443345235555424254444446444443333624552364335
2634246433535333335305553439549969991010999999999998233341455342744262
4263333256753545444645656568453624333220644342456536262445423331145437
5555563443333017543345635564325423329145448343666444333281655767766442
7254233271353234462587573326165765562472632755332516544468444626554333
2416553425423295684533231865352543254462548233221876353644645235783433
2117544564433444423333320235362453726725425733627633193554334745625534
4665345244564466534543318145355353894844233172453443235343424342426422
2331615536245252526622331513643475232465433141453363665272543331326536
2523462654477342432454333121353645236269433311656785533101675676574344
3526233922563445264574625446554233885584528533717564643558334772533362
9662336836231082442445757762945335285544652426445485286623434276334286
4344585478337476733425244323336554435332125633423244253311455342108334
3542323057464532291162375542532322876425337322717647734425553543443226
1864532272562526233432251173547354232322410676536544632231474375242336
4543222137823442353343322196566366293220216244545344646264575543219126
5346448655332188625335343217136534432342343321611674544572663215158234
4644353574432141464354673354536321316665246352453264332121663547664436
5823332111164323345372321014645224334525463291462588534423442328843252
4323271032734432443266668543325175333633244253625432424744332423253524
3263683443231865424252453242266232288223326532113313427444243334334434
3722555634423133316563666324324523253424424645542313222442374355435452
6446354313119443532252645524522331301665243642523424333129254634343342
6545265625442233128114442543535231272144424542444246542524331261065242
6822331251562623524668326431247443625631231564442537654533331221565446
7634343443312121643673464524254426334312030443333442525365455523822334
2433119116474242542531181645232424523353433117186323252356248463323116
2544424335228224244235224323115296437632342456628633223224236331141763
8242526334357763113154452542324355333112184343335454334265543111144428
2425346433311027432247362742243342552563483319866334346318864386552317
1645545236237364443161844354734442463525331588264233531496273666653133
8533124664331113306010625732432530598625434443058196342556454322632554
3057982375542630562062465345334425385554305512654435284644305424663424
5433232333232325443053146374234272543330521164364436424305196425554643
0501943233653253543444353049107425423253304828823524224452454464362655
6444304718835346528875344264304617664285565286642533045118323428655530
4496853345323043166542232342325544304214663325533752523041156554375443

6426330402263663242427226262525443039228264364253434355253253303816826
4365336483623303715645322543544244303615623643453354554303510625353656
2303466477373033186544343632464425243032115533246555230319826367646303
0226254455344525534445544302916623343243347554230282764644678435722527
4223262433302718663682653443525443302686226822330251664352453256642533
0242164532253525362554555330231464532242976653302213853228776835330212
0745322545457662332533020117343242525330191465535542555244301886456825
3301766453463016116626657655430159642386554301457564430139686572333301
2584644301186425254430101383645526655323093266547433857634757343552553
3752643082274552534453636843262743071062623662563061162544444243305866
3424443041284633325343230387532354230225430113296998343584662968178442
4435324435343296715646695256445344296666497372965166234354526445254296
4156527365343366332963226262352465325253623264296214433422552435442961
1364466546832642960126636645424252959574455295817833467524452886562957
7652553229569755425552295513642556335266329546964379295312623496643571
0295219825567566822456453229511564553225464635429501644354364232444462
9491483743555425422294813863643424243329471983743242532667664652946256
2446655545464553425363732945216245445772462646244232944108432256843294
3883635674294212663324252442294119652846434584643265329402866547433625
5252565255462555429391365352984546662938168662577347234355293776527676
2936176525355646324554429357644345429341265362463336329332382463553433
2643433454242932168246357434354442329311565526335357754429306853623292 9
2382324555234433662667665292814823235276453252927188362462477652665262
9261266233353432429252762335745545473266254643264429242064532252465265
2344332923134436525564556292217433243233623527432921865425424292019432
3426644253375252291913443325254434429181366363352333632917276427754374
3624326524764326429161364233464653282915683876829141663764533344434642
9131165373772777291218743272723766655554291169755472910318423545433632
3344554342445442532997828865629821643763633223225634776297126544974686
5629610824425554329512663343344432294106237276532293118755475254429210
6234626254291132888196552434322332344233288716825333445234425328861585
5332436442433288519442236324324356434228841865237554373343373228831478
5352462566532882268426345422455243544566555528811792334327322335626288
0168363543334455554287921423354233326665352434287828862434533322624242
4244433643287726832425263344435625336544452876297324242423254756226275
4432352287517652433426755532262874864563574287313664283775335328722164
3646433273356543262287119645643327335554326228701565537625223324328697
6363244286814636456332642442867118242454432428667823575528656854574286
4136542653836754286318655246538655455253286286456357428611782732266463
5344642860156453433766532632859206635533654542435433328581783453524274

7442632857256264424325444434452535426285613943424445242328551585254747
3636554285412674677535555285315642334243245544285286224267528516755354
2850238542424234443337645282328491364255424325522848266336655324436444
2344552454284718825555554476435625284620754242524532446255332845186356
5443253355656528441382335435265332843167554556662326454284210922744632
9284196274535482840108533542867283912625454452627283829825443344425535
2254323425425428371884235524342633434428361776245353332557454283515873
5765364554432834146243643653425428339625444323283225645455332755254533
2544234283120723334424353354444332830208243342262862654245428292765524
2445444365345423545434282815442353534745433282729824326432434345335623
5545243328261165723273274282526852432354344342365324734762824154323533
2443424428232743664342562367524552343433428221164623334544282110852423
5544282019822357275242347423428193382424352542342644362542343254242428
1816443423767445572528179854335323281613662324254432328153843337323344
4542435248424523754452433742814108455466434281317626424326435323372812
1662337333525327462811106233225455281017825535242542542452891862345262
3623233555288136586525435527287228274535353426434624237286126524865452
3528512874752853325284198233677445645452352283964564324428246643281132
7931163533956353279215823432355553643279117824253235463242442790136423
5252647332789115532343373227881863433244436233566427871864343235238224
5244278615645322573755343278586235355427841364543636635332783116374343
2244278216627552652436553427811463742342725533278011643644364232779764
3343527788663554322777485442776127324473336322775104423662523277486363
2533277310626453333327729843334232277176425337277096332335432769985337
5252276812763323273353276797475345542766144422422226255227651464634356
8224222764196427524246626352543276320634542453346436452632762166254245
5755436432761216262424573453466455332760276322424562332435273623568332
7591263345553535227586834457275778276358275615744623265234433275511634
2632466527548657653252753556557275211644322535642751966735533527507623
4646274914744452562575752748106352634724274713634243633426527461365484
6378232327451376244625543642744288236264432462433362535445533274312632
4443244252742146452572444534427411262524264535327403843333354533425733
2334634444232436234432739164444524232434253273811662366454232737136344
9333259542736166742533453473634273588426555427341365454674536242733126
4646435343527321363453242654242731566353273086643462327299443435424272
8116454325536427277823255327268652233242725146352568254436327241762362
5773443256662723114343226654327221444325232344434272194672725572720128
2326322245527192485267554354354542624525527182062366727654244533433271
7963664257427161965332322754554245642715158524354355475542714118533554
6103627138433556642712196454553432332544235271111444334323232710208342

3324243533544444279766433422781482465352242454277166535524464435432276
7443265427510826236335527410637347625227396273666652723853271645643226
2271975255652328546865532622656226526225763224232622437682622346755262
2254423426221684236226220466232621938262621844344262174663526216763433
4326215682535526214386526213982534423326212485242621158335326210482532
6209463342620876334263262076652442262065652522620544726262042892620346
3272620256234726201766432622620058426426199662525526198583363261979735
5233342619647334261953445261945825432619346523261924826426191566333261
9086633432226189104343353466261885634332618798232624552618698343533332
6185582345261845775462618396525375632618238852618168263552618011823342
3246326179374626178444332617765343322617648653261755663332617486633432
2261736834457261723752261714825326170365726169563542261685726332616798
2632423526166115342724332626165482762616411823342324632616337462616244
4332616175335332261604833426159566333261581066334322662615736772615674
3474632615595334334332615411823243533322615358234526152663526526151483
6326150374626149565627261484454526147354226146555227261451182334232463
2614437462614344433261427534533226141384426140566333261391066334322962
6138373326137573332261369823225545261356434543261342552613335652613256
3546261313746261304655426129465572612856333626127118233423246326126374
6261254443326124753353322612338342612256633326121866334322261204736226
1196752338261189823354645261175542232611699263242352611554433226114485
3326113762333622611266534332611158625526110374626109118233423246326108
3746261074443326106753353322610548334261045663332610386633432226102782
5332326101344326100462332699483532698483622697644332526964743526953655
2694482472693772824322692664233426913765269037562689644432326886433423
2687463532686672334526855634272684672342526836974222268285362424526814
5265268045344267946625267845354267768232352676387426755642732674664652
5267345282267255282326716634645267066255322669473542668566333266786633
4322266637622665563347266437272663136632465542437266266332332661873453
7542660268265947394265834552657454292656365426553735265446652265356725
5265286463243726511183327434243265077433325264921694276665554733323253
2648364226474834526463665264586242444526449843546666264375425433264268
3353326411283325336563426407825264526395742542638553664263744435263676
7255452635865552624263474532453263368524342632645244526317823223326305
4444326298927445332628964263762326277654462326265763432625573433262496
4263682326235823532622873423544262111826432453452620672436326197824445
5261810442455443326175734422616782435552615774376332614662533426138535
5534526126624323261145353261088532434326956633326886633432226711432246
2534426688252585326511635346232632641163743625432263666344426246643261
1325771254453643342225765664462575964465365525741357743872324662573107

3552455362572954644562625719543445433257016554457446544432325698535736
2525682253343535343456334425262567115334636263625664664425651153624434
4662564564566256312558644535565256213542424347534325611155544562345256
0135663563566334255917525653524326368342558135552454424435255714533423
2332462225565653732555145336453622432725541253454545234325531565564434
4337343255275527833255175422643255095354475642549105665364425254813536
2753346443254711564565533432546554562254516545525533423332325441553228
3226266242254395445444252542175326436455246263225411154344437244254016
5525266453546344253976547254253885336465525371355873588553342536968755
5355253595543664542534115452543636525338655534632532156752545464345542
5311165448243355253010663642226425291157745235253252875542552252712562
5524436342526958344645525257684764425247556355525239647325236252210647
8542843252119545628343285446525425202053474456726674382463251915554443
4348363632518214465437646242423532652517166422556554326364251610643336
6243251513643473453234225148556555522513955464545425129653544253251185
7337752251017525752443242332452599583572534258176436284443242344225716
5353444725646336256125533682444522559644437766254165453534663332554253
2253434634337636346244272521965324524233443683242519585437345246422433
5537464442426822323246327446246242756547544245556462246239444243743345
4846565595283624333546555842461766563444464324636554625624536265227427
4264274274274274264262626333633336333633246023445337357364245455266282 4
5919445534445256310547342458504456344433556545353354643372654543244456
2674595542245711655752655522456865676567245538826333342628453293545375
2563521086455432454236636336635263245536746224531763442646226637357245
2108265446433245118826656255643438334245016825265442627236324497645433
3244811644355643442447159533324452685472446116434245646324453143234242
4443425534254342532423524441075532275442443388443442264225324426255245
4552442544223244276446834244121634575322566822244223244033322342442353
2343335544234235332622439226455544444243336555756243814444245427524472
4371986354666654323356242436147642444542434224354843355745425443333523
4545352664243457527546436834243413765245256456424334844732436366375426
3763544326445287436664246355258243217445424556276294772431786583543662
5257536536255262643827422627327327275272742628365363674323653667258324
3015634423436772582242917635245344635624532428224635342763333437344523
2427196533453783635625542242616445363657878898824251164242745465242496
5377754324231344476258885522422264453442538744210964526454432421354454
2444432432654357844754375625542242094443654352419206254576244355274255
2241874456345241796424562452416144536452342472524151644334832332878622
4141544352257626543524131482436852356454241212433647982724241128442444
5525244333223362446552241094443654352499823254328248118335644264524798

2324442824617833564566353337562451144437332553244198264536346856522856
2431883344233628525342624226825765656424324463445427772419655447884231
1878345423231171884233355225234423323116116522332454623115862554747231
1496442535232311387533245523112743525232311188245356323110864546351023
1091483473544652433231085634632310776443464231068544654452310586355453
3231046643564231031064265567332310268267432310110835553523423100166334
6362443445442399862355333239856222523977852242323969534364254239577524
2342394685263223936625322239266368542391245345335533324332333324422390
5755722389564237238814642443433254222387554237238686535822223855642372
3848642435322383127633232373532382884654445238167323522380106475635443
2379765525432378106258853443237712632344245533237687358377423751167252
2326732374876276253237356437423729833335462237116652367243685744323701
0647552326223697623662223681076322525642367465282366967355454223657623
4562236486237753323631463233254324262236212623544653443236176337275236
0106434474256235956252623585645262357764422522356762272352355753225472
3545336252353955332455723528644535332351124633577245422350115434393443
6234966564542348482682347763756562346754695532345846755462234419624568
4575633224562234378353242234265552622341885548567234056643323395536232
3381272334435332223371083354663222336463552335964655334623347734545423
3325635363453332662965655425423321454432324624547233165452622330773353
2223298834656232328158525435353333642327326455273454323555224564534675
4247232655362323251033273233222324267624526543355245333242555423231754
4323246324434642322465462321156555446236572332320974645324523191365554
3642423723181372434527436272317106523353554231656734223155633422314218
4463472466566466465223136442462231273252754231166427552310382523957732
6238556926237772634532361063574227332354672623446626233565226232566225
2313842227844646462586567535755653332852753325253372524272277126557477
6554222761064445363242275114442534825422749444242452227329863382466327
3562432552283354222722964554554238265565665542456544227118428332333624
2243272270184433242326622442432269973447354422687634436322671763433345
2736255332266105726262643226527456425353326555246522334223226412653435
2382222263154442555362442232262176524362425234243322611544435265625443
3226016444247432242443322597454365822581883343444852524426622578443676
5622561264286565435522551643462466334255432254216435544362527324355562
2531644383683625474252252274455442742456274433334242632251865576246225
0844538656224994433454222248116462533542522471453343343444371022462362
4644742536423643552642245144454635353842522441143462864446224343474224
2954335436322411765462586656652625224035444252475434466455455435446232
4626522391055343557532238134423242552542223720845234735446546364422236
2765374767456444543734345237622351567468623964433522342084634367525234

3755342233116535243354322329642545433223121442524256622654326335223024
5387258542373533233454332229866867562222820667457525237424373572227144
2225424555524222616669844424225485322252544244633363645646744265522224
9643552535222322447632524575244865544222221264646224626422214425422206
7622242219176632332434564275422183742442422343364255257677665238222442
2322172243234273544266789565522216942443547522152242452652634676245223
3222141742442752448655442221310656442433422121466235234224324221125672
3763435463253533344253221096534344332291564736362244244422813443333442
5253227126224434324632261343234644424332257043226455564554433245543325
5255724624334272435545422422422427452324254222411643644523432231245253
4425253222224444623554533245352463221104365245542211121052386554232111
1833534443211108625525432110913624254343635321108116434354344221107584
3732110666463222110512855525326254211041663354533535536432110311644538
8656221102966522366221101964563345221100762434432199964362453221981163
4434326342197206323242325255552445621961063223654332195762484352194126
2455343824321936652557219287445353221911183685246555219019636548727544
2742628218911834452234262188884542728218723823363332272544223632532186
6824629218578225368218416855244647222262821831084444334252182126343347
2628321811463344645354558218010643527344721791464656526545468217814664
5334252627621771269335475552721761265257283242521756823628217416633547
4446275465217315636666573576548217286545652621718846453572170588427216
9873644324216876426755216796443264322166115346224328321659652436352216
4784466362163965283642321627727344521618655432552160772463552159883373
3252158864535356215776523766215613824345468242321557823256521548442744
3321535636552152116344832553221519624324754215076267534214986623645521
4887557645421472063435423533434374584214612633526342454214511623644366
4221441884726543445533755221431463236382526432214213643222627662221411
3825245644246421401062348374622139166236235625235542213876425337213788
3563273213617626436444437255342135106646575532213410832454245321331163
2266753432132866236466213113654546342552621301864232526945682552421291
3844454423343321281565235336353632421276653672212686426464621251573332
3443424263212422634626242432337524426221236634342212213535246643453221
2176252462212056275621191383628243682232118135354424663542211711632428
4425221167663665321158657363432114663352521131065836237622112764235542
1111054575442532110864535563219887439572218965366247321714624253754534
6321686484254221514743474226255522141066366254332131565575333255666521
2116373442326221176423655201351153565287522201341953232555554464258332
0133136522454324646201321268534525674420131185334376644625235432013020
4466454364543344623520129944543244520128175553227256256233420127125366
3543424520126845576443201258533462232012412473645234243201231843334433

374345545320122644436220121154334532665744452012014424543423237452011964344242011874344322201171355283623323252011693536468432011511423343233542011417442344423274345462011314434255623655752011211434434382432011194323364642011010426353632420109124246232374252010813434367523266520107643443220106354620105743636282010412435256426343201036435258201028458552432010174733436201008473443422099134426332252434209812432323324454209728442727543443552523424262235320961642457632452623432095552433209420447373344243536422323209344653209284624252320919454364425209017478643254323253342089124333434543442088124445364244352087157458542655656252086275742353252555444533234543442085976424424320849524543523208364242532082952544335420811733444345435372524208015745665495282732207953345420788524266572077184344245253563243642076124244467524342075105736832543207413434424235332320731453552473735543207219663443324557252352520712655347542942767554733323253207085534546520691633643435452452242068663332420675444252066124452446645232065124234244234252064106254335257206313686752726742520625665582061155233574436254332060632445520598354363632058143533352555544820578425527632056644466420558446565742054955532276420531934262736254434453342052114333242335320515663332050932432444320495425332048105323625423204721542373245263734535356204674454523204510422542444420448425444252043533535204284243653420412582040354233324324556427454353233752352544220392243634462423574642772622038642336220375434442036642452320354533320342562033355220323426203134242030235202954252520282462027452452026342420255424232024533534202346625202211433325453352021766733432020543247201944253201813444343345542320175426332016105453422453201510433256446220141156473332434201354366420129366355333201154245420101835332445444365443220944443208867223324207754446432061253363523822205455362046595336203443532025564622011219981443423243232563199710342572566519969363586552199554734519944356319931046336822221992644265319914464219909364553684198943443198844646198794634237621986544385198564637431984733345431983935838632319826357873198183374432719805474251979936224425319787463425419778546473461976134453338936545197525455222864636243336267232219749554232563197316455382555535654419728448455421971954333634319708434264421969104633442262196884438298519671042332637441966834422475196512424276663682196418433333353632234353196394326244531962115445453446219611154336563434196012463566544323195911354776635241958295446454385487433254342725445519573457195684533562519559533477444195411454543376251953745462261952747654281951104545334625195094343662361949144546525432637419481443543335432538194710423332744319461347742372523531945124756244243321944104637274232194314454742252523321942164343434224232532194184533762519408665353331939126234235326371938114425837353419371 1

4342554527619368643753431935165224543363242332193496344343431933934444
4337193264563741931113327773236619308466543331929104523243546192812434
3344325321927114433425552419261855434643545244446419258444564441924104
4332535271923145443325246336719225452761921155443553733233431920114233
6342434191994524343431918843237434191711443555755261916105552624625191
5934444334519146453374191364454261912845746242191111545255724341910134
4454343324231991442332533323343198144524356542432319713432242445535219
6842652245195134422356552734194144263345635332319354434219255434319115
1811024436435463443343543453342181091845433542354365532218108644524618
1071047434865521810694557534631810514473343756455551810411464636625251
8103569622181021448463642562555181011148264242645181005485461899114852
4324556189815333444333432433189784283627318961944453443363734336351895
1246544833342318942036542342435266527225189313466246236333318923442189
1644353418901545234233455433318893442188813452266435432418871345633325
4323318862544424423722445443245543331885245188410432275224318839435527
2281882354442253425332468652355644344726746418819454345726188010567266
5464187917452436462552675731878124452266544331877244463236424545825574
3433718761344242735325231875943623233318741644333444535543371873104426
3437231872843623333187115443355735724337187012432433263733186910424354
3263186884232234418676436233186611443523524231865124427524662451864947
3633233186320452555273735446352531862124352536453541861114525564644418
6013442744342543318598576538541858195425243263453726264185730436353534
6362463534424453533431856184635742775567638431855194662736234955262533
1854144347432256325418531054538455841852135563836556544185113474336336
8372185026483333426693324423536468431849284343552663535526336273368464
1848165343523373733336184711445385546441846134453338966475184523632344
6555542662746633518449445324375184311633432732331842204442525635344234
4555184184263454218401545562655424523418391954333325332432344251838844
4334241837164424224245563523183612644533445633183512434232354344183413
4443436364324183311476434353741832144664952575543518312865637346742457
3252457524343518301244234238655218292865636464683734486363363342431828
3044445524623366444533466745524518271564233742342442418262344243324232
5246832534421825848444526182417432535233433544231823733434531822334445
3543443436264325747645647565718213255653553344655655824326324327565182
0134363527275624181938435373475446733657534453324555244359751818224465
4555276466463743671817345423343634324423342363644635254354181619552355
2434535436310318151844353433655444265518141943434424268246526361813113
7554455433181294534725721811744526361810164523444244653632189104625755
2421886455274187114447345325318611464622634451851643627244473322321846
4445551833436182154432865854254541811142436434435171112165423233524233

4424353171102253353536436735236524521710955757617108874332457171071847
5543425552622252171069673353666171059653733676171041453463345674425171
0395338527251710216652545682354243317101196425352452735543454171001457
4747334564221799235384332434542346834424417981454846534675563179727563
4464546373742633343634331796115563364553217951454625675652322179415544
4523552625331793265433235255543543624242324217921259542454364217911166
7544232421790106523432426178914535443226325541788195453355263452355632
1787954342324317861355223224656441785145352633325252817841154234563422
1783125343464473641782135384385422625178195362644331780145642253473462
3177912653523252553177814635425553355631777116633524622317761353562447
5295317751255232264637317749545433625177313574456464285317721154462343
2331771155636666543742431770176534387286428335417692252535225375255544
3625217681553522554244342717671857464354435225244417661453334275253444
1765954455235217641953753587275555546271763106464344343176215535773353
3443631761134435353646843176025563637628754364653643224317592163743365
6467332374253175818662335572733733423175718633425756447436555175613634
4363425552175515556337354682344175414557363226323441753165473725472424
6631752953526596317512554232237648335426286243421750552552174995484653
4617489583572534174719643628424234722734317461957344623444636246361745
1265762544564417442155337624543323436582417436546366174213552373634332
2174110536376325417401154745825748173918654253442436234433173876334332
1737134643542345233173616633527652322323317351165338854356173417635266
4434253636317332263352436553633534345631732854533563173113543526635476
3173012556335435432172913655526343634317281264336324645417279547485582
1726106436483623172512583466262344172412563723624445172325544373243362
6545361043633417229665344242172111655473355341720126343334265331719126
5364353464317181866642524342425743217171355554433262631716146855346754
4254171521543633435335352355552171475455354171313655732542575317122366
3376384247563653657561711857465574171095536762531791654328658542446321
7811584644362431772364283353686763344537662176115485695535217517644646
4343555733417413546552662733617395433325241721254263743764617121662362
5464663662454451612886265524216127146332235435343516126128335426247631
6125229435223423242576873433161241773547355333753534161231282335734246
2161229836244627161217643566516120118223535337216119194552327332526555
3221611815665473324525554161175444441611622625436525437444357336316115
2244433333432443374565341611413644244745453516113963666445416112246536
5447455422456644444416111156234232552532431611018455232662523265322161
0978262432161081182686634355161071385424363667531610624444423646324855
4236325321610511826456255541610412444462456252161031644445464435464441
6102138545555325342161011762624345434534354161009622675364169910744553

5233169886725664416971865255944843423253216961565255557343345216951564
2332434544463169419444442535763345476316931764374254234536433169232734
2733724643242342547663325456316912062442554537376363446169016655677256
2686442168924855433664653525625532244168813653635644255516871065243554
3616861974556424357545765341685116234436553416841482355422532244168378
7824461682666455316812565553455745634662345333351680253365887374539574
2344623351679186453224362622653431678156588534462742651677194323424225
4363368341676296433643252432555323334246544416752762623562533434436333
4264443167410625442736316731583468243422432716722162466972654723466233
5167122647433742355553523353516702044424334235433257255166924744322543
6546244336722321668136453562525335166715644322454368653166617855433325
2365723316651664432253525362451664146454374353646316631744455377344233
6351662176553232632574623716612383482534433644253265453166012663654537
6251659196233624233623232526165894354275341657762466371656126436573562
3716556647737165410654434433216531265443243423316521154555368223165112
7543245562441650762752461649148239425238224416481763348625532432344164
7845434362164677236262164516623266253442755516441276532555476816431562
4253754534263164257445516411865246546285232426616401052242634541639116
5455637435163818625443443424427357163714623332424353421636288533752674
3254325784625322541635326635335253432425363332425243265416341082523452
5716332266544535253433428623621632126435654658751631157444624375248341
6302073536546326545444554162989454645716281964344233243256658751627218
3655255534645635673216262162326652553727445253216251552333475537357716
2497654443341623131032363524423216221183567626435162176463535162010634
6243256161966352451618104542624453161776442344161646277161511655734255
2516142166428355484394437534316131364432266523331612156453225676675341
6111674432272387852341610136334433362442169106633456344168962255877616
7144542633662337516676463444165865634358164844244273163763556831621863
3323625242342684161963668343315995653351598682334415977634434415968643
4426515953106315946825435159336531592368515914465515904936315895663331
5881585554346252354215877677246415865662321585146555635363685315846652
4431583366715826556266158156466815805855341579546648157857653315775843
2215763465157559532215748425576661573366715725663451571664255315705824
4515694534615686634523156748734156696554253461565146363453755245415644
7457156376353525156246343156158323415606834563155966733231558663363515
5758453315568733424331555782335651554863542393155374553425155295433564
5215514732615505662531549666335315488742334521547108336226226154635571
5455542721544853433543154346743154211725235523521541563433154048453153
9106952367323153847533153748243153666337231535653364315345444531533115
3252545323153298243225231531782423531530464841529962542355415281253252

4438333152776323266152685325275415257443623315247105441054152368454441
5221272431136275671521115435365332315208724354361519115322475477615187
4465523151754522815167875625415158733274461514963562455315137733326215
1258425415118825342631510773242641597724553315896353538421578823296221
5696354344261557835324215485443426315376456864152765255341516456433145
2137464324828543145110644242324514506565528144967265841448106636953543
1447116244244445314461263553354455314451473635335655526144426423232664
5553433545556635514439485542656144213734464843545314418643972441440945
4536462143913653267532343514381862352324343434243414372665727545255674
6433234525341436154445334535255421435137424745342733143415457262445372
2261433975346653414322573455255343472253625683441431214333234232737376
6556214301253636252663614294647414281263564445532314271842458446366266
5544142613423253255554414251275574544325414241562645454444332314231744
6444675244865551422444438232834364373266732862352523387435425337414213
4423252654845253244235434333857453614205543331419144446325683422314182
2662333536243252557555314171644534234225654361416743254521415544249141
4104453335259141316864555262528655414121797448237553435333141129874444
3662333524233445333253414103346664336265334254337623566842435414937447
3234263536726585643625265433525353148134443552346244147115525485344314
6264424436877638522625446543314521443532245653724427464144196634254244
3545342631431644254844266366751421444284523822244141166643445372554743
1343156343645532535551342185436632424554525331341166435424572654344134
0136664572543523133986255424413382143344344253356364246413371933324222
5245754547513362535442434424424427344366761335195855543545752473453133
4143242333666624313333932234436255553252525242372525364332342413321343
4625564246413315174242434352532553655435544422554455326232524262452313
3028455423323227634645535232327413298343486551328116544344665513271942
4542342232344455513261643626636765435441325235346355274224327632436613
2475445354132315322569886233834132219543567773737674365613211363746422
4325613207763445513191574544234324444413182764476335273555223222826658
5131742744452554244554744444342465246454566553624131645663324425565553
5267522765223347626428242682221315117675468224413142742384362335534534
3824256442131319643427342357552955513129665545542131135324233233444447
2634242424327434326213101475652323353244139576854138156433537434242441
3715334434323444555136206533535533375233637101352564255672765555433453
4544313427645322523355444545545258353133247453226545543723754452431322
6645564544442654535263483441311562544432445643412111236454326434545532
7545233121101985253342455524556331210929645536552553375264532545342631
2108178233466335343453212107146234662442562712106763356431210511643556
8232512104108332232463121036743543121021463562533455523121012197557624

3684852752622121004766234343254473232523452622433352325533244255354129
9145432364543435412989662333633129796336365251296206224243333355435632
4129566533551294126244343535441293126665333363661292118433445552312919
7335443551290238342435323542234433444512891064255525231288229442555345
6546464254541287218534324234326354276321286136224254353443128512824244
3444551284134352564342445128318662353624344463423128211744646434651281
1865335335334252653612803783324423243543425233425532526363453841279137
3346523424431278168243553543226425127724534552433534246322233425127633
4322442544423532453254444282443841275118445342325512746642535127312633
5254253551272124244323454451271564575127015745543243273754126916653534
3334434354126830625446333455324332424432553254126728975543352324244365
2743262324126624442343644343232742553452312652643343655555373425255375 6
5412641784353532436334523126317724454553352553541262146553738562767412
6167443651260106343332623125917834543435233637541258962364644412577565
5365125617834342744345525451255844355363125414445533445726541253154432
3323665244312521283424364235312512983442634446543245233342462523125022
4632646632633436442654124911645433332421248156353352543332421247146353
5255344363124622655344643644364532564412451177633355344124487763355512
4325664252654264364436453335412421843524337633653324412412083453425555
4435635521240326254455343633335252344274853426212391066423765521238266
2544545432332542332667536123726627356233433535723773747231236278243753
5444345354445363553412351133764232332123410662353432712331782453534447
3335231232198276424247426436454123132433324323346565454554524436556441
2301844263352425565724412291082335832441228134525233322534122710823532
2533122619823532253252444272312252344242345424245356325457122419862385
3543532433234122323842354334432357542522471222984554643412213262544434
5852752545452623557326441220982366534512191763455643423456755121818523
8544463423335361217196333533556346553525121645456121517623368474526272
5412149733445435121313635552526273312128724543451211127244352225251210
1664273645264624431291464427533346246128154435244353355521277846423312
6254432673253535244548526365125164377242753542323124166266653343325432
1231683423363463544331226655573121566433111231663533456354568341112237
3811121963736625311120178564325524255243411119156652463445533231111810
7635354333111178664553331111626663625554635352625445262351111578342435
1111414843757252564641111317622624323356553631111212463353333436111111
0463373833311110184323554324453664541110920536743264336254342231110818
5343323684246535541110715434323323684246111069544353454111051053553342
3311104554353111031653452533643343221110212444253533335111012453633333
3243254644365473111009544445523119997537443271198975457734411971055335
3755311966467464119510443543452311941866276555353565553411932044384235

4526343736331192164633256942535323119119553374554544354242511909443245
2491189235433343233233423625723311883645545363627342362372434436324332
6323118721664342724226424256425118611553364233441185156525375636875331
1842743454445387634323246323554411838582233351182125425576655341181305
5456262636334535245445233332511801143332332223117913425422523243511782
7434442534634255323765334645117713433443433454411761553455333233247211
7554457211741133276657234117314443535744432751172134432444444524117195
5436855711701833363325445543263411691544323343557754411681254345423452
3116786627655411661865232533353565553411651153334552647116418447463432
4633443331163235383524263436324332632311622244632356424273354324251161
2844324529495262432324632355441160173344345423744632711591244237454553
4115814442835356455341157214323324635437525273531156186433283234225343
5311557622574211541663437443346363421153167233426633552325115218663533
6656445248331151146454334244623211501863424323246323453411491977253324
3363246552311481944352743334463543231147198237244322325224323114624824
2433223253433342333231145158444434242243351144198544636545454345324114
3238245643234325423526334311422082334432424435732343114111453276434641
1402643333335432355522444645333113910444454526411381963444362335423425
5511371164552736755113617653533223424233351135126344647226621134186542
6244323424246311331074332426431132148232535667232511313183336234444626
5543334354345434311301064624262331129236455454555334334244623311282063
5105542463243326323112729652325333547253543543424255541126114345434362
2112594433434641124116447277678311231464255543786552112278262432112196
5243655511202465358526356243233352662511191162734844255111823834434355
5754365443534311173962544324334223567224326555444334632433411161665254
5245362335511151462434753766432111416643233234444738411131864243272674
3452662111227432354343332344462425442345111110445358655311101344337364
4356411911453372437541182282523446363352663364541173143332556532743444
4753444326834311616442297554335242311519644363524673338654311484323364
3113254345445343224433456452483112954334436311110443242554310109118334
4354425101082355335352355553424525422101072466352422453344323243345310
1061682344343522432331010598253554331010427824257444443265434222425422
1010310835345654210102159243825245433731010114623266436824621010014625
3554434243310991566354554522433310982133866254455343376444510978664332
6310968623453521095108254555253109422825332443426655463223310932473547
3543255373728347354109214762525334355561091782434341090278247324433234
3553354657574710891162546387523108829664363635734452646627455434441087
1684674675474254371086585265108510854624643610841364265554232441083228
3452453626523342435331082783374441081178342426425242435410801054254336
3410796443654107816743352845645376510771184334534743107610443255245410

751464697553645252107422843443225375387534425210731785335755758523376 1
072168242543342326363107134633523553228575444575533232532335410701365 3
666265262410699625436522106825622437452525238222526444510671564532257 3
753342106625632343625432554352382232310651066253525531064156523465263 6
626310634565510621062352462310614244234332436235235243362553332634 2
343324310601962645333427354365231059206432334265363234426210581063328 5
744210571585462354256254210565655421055166264243236822323105421623654 6
437626522433231053117433342223101052136433525455532105111824342532331 0
501283645255526210492283483533333432343354221048764253371047126236536 3
443410461562344266725435410452065345553258624362364104410665445424210 4
311625354544251042116253445472510411563444364544235310401294424225242 5
103919853355253465456235210381664243272645526621037228223326643454432 5
263331036176344244242423364310352963334234234234344444243427222103417 6
452544252542722210331062455334341032116463435444510312754348543425552 4
438543662622103016652434643552324510291077232655541028186542745684665 4
256410272764255555246554242323764475610261664255533364366651025116434 2
563345102443746446323585245556453665433854354266274663410232664376526 6
463545424452523641022418263273526443445422564363644355243364264210212 2
626524442623335432455410201692438354332344471019177345432445853353310 1
829636652382423472437576352243271017148423632443534310161864424443263 5
524322101539434342433423424525224224233536525356544101410635525257210 1
317854475385753526641012276528343235232335452525547241011186726525455 4
694544310101482352644475646109156427524846865521086653565107156622638 6
756525210614545682433756221052364645334327637554645342104286534542435 6
686555525433435641032964744443234225453524326834442102264532834333325 5
454243362454101566433912915652354233244353912814449544244624539127216 2
356437232523353452491261662362252332264449125126365347362549124188367 5
546354425452491231772427447626565542912222655535852854422354783391211 8
652447333563535463912052834242432333432636455344253333625342763442727 2
537432911998264555429118316624275324342422565543554335574911727443353 2
444432326426581053433911617433243233546832429115184334252343523444339 1
142245723433324445523577339113206543423244538825653291121684459628878 8
888891113765242646942543787234477442753386825429110154456423624447429 1
092785425432263333632236424363491082383572543342333263354332910724744 5
635273264437837555669106124455446344569105166437854379654563910416662 4
375526424263910316445335253376472291021744425424344545776910122443525 7
636263573377254910025653446754434354436768927999927444252473443664354 2
556542739981644555573654242739971644553442463564379961485242434534636 9
951865344734474757335799430643785435265457245234272255357993196236344 7
263463953649922362534524754623237423533991264454283263533625253363373 3

9901744455564554357284989136534675244343988148267367863566398711623634
7263498618823464547527552454985166365623624448753984186366554433343433
3398325827337544373436236945344398286534575898127652334324262644278726
4447839802585425655533443353623622369792044444347535267282865978116443
7444263977156545246363362579769636254254975128276425344259744643325233
7625546633426342646235362357365454525697312644755106454297224652344263
4246467524498439712444424756476667626863659997026665474338551046745433
5253539693282676274555575256379797653435526968164444652464371094396719
8292644677267632510996616655544523273527296513846662543466496417624428
2623645429496316653454323645236396212652523657356961264434456455585543
3323275555960224454256444396368599774959196433642474566452443958166234
5234453725259571163455262452956106364235457955176365662374447375395422
6336353365375543744253953126444452424629522274377242546235484336229511
4874462343236229501653732552654354429491596435623532442594816634344336
2632663947179453656768536245294615826468434326663945147523675656257494
4148457872565657294313855525334234394223744566467258554475554329411564
2334442787656940434456245655445255464544242642523254555244363939164323
5453547556639382943626643626765374426333325542937318542573334326432384
8465523525649363672427493487646355335468334424344363293519642675237763
5432543934294564428365664426755787252554293314833353644654429321583343
2345843626931236362332547353437432687693023634632553785343675434659292
9632265365524363643263563562569282844423242464443353666338455429271244
5423332442926188445545255845364429252365243555443367244552453924338542
5544375256425376656106888863229232082646373572686625542922843442446921
1044435635469201682643447844277559192485425436244255653366655691823826
2544333646556532454491718625374566364562832916246345583534326346544462
5291511445423456359141163445767467913206425235833636657547391218653524
5475265327539111364655286567539101082633342629913652345255445698166765
8733346256339723734239383663653544338439618623535524443578233952644426
5656753423786838756549422734253556457347228265393324555445347633334368
2442643536425921484434534745526919826536425875224334244244575464773256
8741844533825646442775687313455243633655687245463556533356529373327232
7356365564644278775528711344545324536638702544535433454624426262325428
6911444246455358681044545342448672044564563652434242432866268254456343
3665443344244434865276235552464433666543263835428649825344542863204435
3446342552252634862121054424436263861126623435355538603362553442326364
8252664326543327236859862455553858148324243555325485710655234527485612
5233225624558551062355436228541765352779455526524853184443726333645224
3385217643427464555265248519653436433850136468668555233849184443435355
2362694284836645443422334434533754334525342477333847174635442655462566

3846138242755773647845136554773535542844196444634456275627283843206443
3445296563552462842354543422254232563445472873446673674284133432357537
3536355426498647433325478401064636427538391646343633355442388381673336
3322346255283718825426563346552645836216435662454210442676552835136436
6643536338342162647372753662534633383312836433447433832194552625554242
3325538311776332335425256544830168354576262755243829196525357456344525
5428281043443487478271265877462554282619657265665726528442782513644274
4555246824216445534427635373855428231163663744433822106255443622821862
3556638201265353646554281924824343454433633336355382818683443481721444
2443863444243544738162064464243333625634553815127634555355428146548364
8131364436453645538122342477375554255564383342811227256367345273625534
6628101844424323536274344389116824533748288783365448723845743245346332
6349445386116353654542885117825354235384114464353382583667466582177446
6554464433584811864264753746737272772061163862823352720516823376525455
4235720486572863472032364544253323424428454524720276224278720112624672
4435527200104435637264719978256452719812623466625363719710663582425671
9698536344427195266352752364323643236332354471941464231077443255271931
2642954725363719276634383719176344227719012634664524564718929826563544
5424544645554453254271882864543325435285433432333454227187376254443542
4347436268242366233542646277186106726243442718522644455242333243368526
4718411443223272747183544235718286232975671817635535471801465266265536
6747179308253228536244362443624364255547178108264373432717796577555437
1763075557555334524442545455345374371751372476466643547174566645717315
8338524432644627172266323373625355463766233233371711955327472434353455
5371701083423677667169406455366326434362265543643533576336653524716814
6588833584452871671945465326362733563437166116453434224471651865345556
5255625244716419564355556264452434371632765364626244537625252554462771
6217653624573343445547161208583445736434563633371604366546372524745765
6642324453755424724374645871598635534337158326577544556565423326832455
4435422715743825344576625654485447557346278687256645566571563067266655
8324642245344363463235715541834735534254233532237337532732236648454467
1541565255363735423471531445523265252756715215845662442375652715111844
5275242371503985263724386952233444447543642853454343471491882635462354
2456234714822666563623434244524243571471365235274657567146366467553564
4435625443362324344527552571452083676444533753227226714415823523785373
4237143418344363444433453445455353445234442335843471422384435426554446
3534946477141184424436876638522837140983534644371391065253224527138246
3434334344253536335574771372965355432653733634446485585557713611646755
4294871351162362335454713423733726534343333342555347133136469645867757
7132127233373225467131226264436433356453335664713010657247525471292263

5529542433523362326571281678524263527585437127216546775365527544532547
1261666454463454233437125574335712486824276671231964547727432332325537
1223642712148345712036657119468567118665244471171162424432437711611446
1054554537115117342442342571145835337113118332532556471124443571117672
5545711076552624710994532532537108685243471076452445710611823233433237
1051873354255243434223471049822435244710316853353655374525271029765332
7537101238434443253753856472435371001962363577422532555347991085343434
3779896335625357979635562535796186538546625566553237951862348766226436
6452794136578553324263793166333435367332445792138255554523555791665276
7790127345634255547894283455454464343243444234423434452352424437278822
6343526262356427428553787198335443762625554533786248533765427482324426
6436378538642334735263756385642462432324632355447848853354577837824635
8782137446275234433781116342632466478013823235276532577915852435357332
4457786652767777168232535426432566776862553853775236243353245274338542
8553774256525344756756265263325527773354474634324633443424624323246323
5544772136537554635368771259243852343274852104342532377017823253564324
4456576927654474526333255277433423527768744343667671182245523323766148
2545253425553765165443232463234534764144454755752368676313667743342352
7762116224253536676111822455233237609442534253759214345434323246324434
6375817646444342353454567572965644722275273455543353346443756158244425
4673526375588323554575432824565235676655654535243268344427533865243652
4343532375233543423245464363627521064533365647511967533544366666545657
5020836425453252562555557491564353256546265674814843544257857557471385
2624555574474618637254255673647447745106734844255744288344254435343253
3452522555557433664395426543434524633454356752422622674215642555534428
6567411084545344237402384562253356365342497552739146436632533376573840
6243335245565476454733543445264252323263737376546363454325423585633626
6563244353437361164255549756735196235335435554373332734118348253433473
3296224363624225634466334327334273226646447356625522528644443227311683
2363754236433273016647432686475263572916653526642367633272822622437842
4223556555554727316256853623262537775452643772332726206544233365565556
2332725765655437241233555243456372312826734236544722284347244652635853
2665743644577215834387202582525523632562472542457457191782663535324553
4337181264464436644371715663373735363272716785367437154823371456336371
3138235452243453712173263263333524342371116823253646842727471011625543
6526479116753655673378982674345677663345676687545775126335235526337410
6225568423731462564263425426721385253342334447114616521454643252275335
4555436164297343764324353353324332233444261638834452426162982366552261
6116823357344643354261601662353437337337326159196536243543243465552615
8377372472423243274423434334342342862362615735653636265544453343544245

3444654326261561477233527364462615586567574461541764555433744356452615
3175525452355637753361523565254545423374453442685644342536363615142652
5453434563334327636635276361042635432362615027653762675554344353334265
7326149866337542614837634343623732522553525343253636243265561471385243
3542435361462874673452272742375565332255546145394433333343244342345326
3244235435342232261444085424234544435343445254285463823725535536143236
4246854638237255355256614216433375634534557361413183236353354342464778
4666747444361402065342436452634475532613922443575334337357573422661382
6653746543626646642362345366137206355243355877738253561363162373333334
3338338463365852333661351984235524264437363226134774336226133185342634
2527632625461329635335354613110664543322361302865463666663553549555435
3644261298653483456128364432432346653344564564528452824425646127106535
3436336126964652734461252862535444624544444233744524336124296534543465
5643444342343425364612315637363477542255612224652834453724352244268434
6121207483983683444434236361201275365652654561193094232348653472353233
3443336333611810664244333561171194352324232611618632343624425522433611
5116637425434461142382535324366765654434545611312722977625546611223635
5233355433545564335561112266444237524325666855436110136726332623875610
9216243463436423636373576108256537643253344344464325553610713553355636
2433610613825233232442461058647486456104155533633643425526103966374375
2610216432337324233244461011843333245233324368461001553663454266453669
9446454225434366467852555525373344373242736244369813646527653264369716
6465264523763343696126653666454746951764444255524464442694296424354354
4557433647263373574693498525434364354556665955282334423533343334324435
3436922276332676653526434457446914465242426346226567675444234642232334
4252424536901684322446225743556891773543535343766755688166524463524224
4336879643810886368688354556868578226556684218456555755332555365266831
4443242544377546821163535476355681226426383652422564636244680257443233
4342326243434283456791282335683444367818634332344433335534677187526352
3334333553467615732334333535424675982668573567414442543465357336732466
3854524353445244568343672864436663671398356524322553652552875452373453
6224325267045653454243536554423243433432334334224666545653669125544326
2553366823852634376444263456265446675645336669553243424665276564343355
4626322525542362266410642323464266317826326355664526226621284352346434
2661176235555333455536366022643626424353627525674365931442343335523363
4243642252362555658149456454282422265722833433352282422632433265621823
3342742243255424326556848645654274445423264432364343543765446531595445
2542674545652258257325523326242466745543651175543342334362652565028747
6522342342333435434543422649865365756648156235335337638436471485342424
4452726462362264342643326348543262645982365554464420624475353332555252

4464314652734634655256421175788423364641126263245255426401564254465244
5272639176435335432724275663822643232625273374435242363719626434234422
3234346636106424676564635288253536433476242524526374333634228324446435
5365236423446331464584725646342632136455366433663631275233637634523625
4663345553263019643663535534343523362998336632266281675343643325523326
2717825454335265352336261163636336353625327633255485333623243463624636
4525624106524363534623126324552363226221264573654256462114842363244353
4362013623655763767561937634543242422444227533276335644425432261876635
3636171743233453232433453616965443534261594343424326142482534234243243
4368444442613966375232361225623655332733864333268223261110853362525261
0138252456442464699625747463681362254463344466716433325547652545366315
4527795247665673422526325262436512825256453553641164534423263631262564
4538243621464244443232542611465552674683435512011432334368335119246533
5443446752443584334351181166343435562511729432345633744325545346226233
3251164564334224342245343232324224263432547534434243351151782452554434
3563435114228347346643462554454343511315825562256644245511222642453625
5423624342932511113655457252935351106443332455485237343564357655454555
5524388765355254545264454434243251091564333325545544351082285425746735
3262538524351072683337382385785552766465333510652733345434233425262576
3295585254252524335635533555542510520643756437322526555425104246346263
4645255644423633451032162754365543353535243251029636252352510126445443
3364346353325262554251001665742466453665225991163524563632598944436442
6597274334352382244273866655656435962064446442435483565333595516245346
3333434455332645264443324523235644335562554259424443335365245765524485
5425932483575265286652354486553359213666347637674759120643634326752875
4274459016658732388754554258945655344477537534553234526266242645775374
7264725881262444645453558718832426334325625542586765576565851484446752
4453475841685246254253542335832182744642535246363425458226825764335355
5546666655553558115645467244365653580196263543263424556453579106524542
7255781766433435543732553577246425563242356343525263225761666254333422
4327257525634263434664545423243436257484451043645732544455563623433323
5442553357234528356544335423534673264436242553357119634544542543255443
6570196655642345445773553569206235335456532895655256831853335632442457
4254387633346322567258542425255643423324423642566246234563463352642543
8764356512641074665632356447832555264654647338757563244245743484253663
6426556313652456552896456213652456852745456116653452523653456456027642
4525749644444424353236225592166332435435423362632255812623535476364557
2464246675265525456562554255611824335664435551363666655664545543844542
5433446344278348347544444244255425531567745473565655555228662523742326
4244562464736254551238542424446336568662554255010644424358554933752536

4624445534442326277434435435485173437564378522745364337445342437434435
5476243355647547168264434233443736546267647243364337772433543563654531
8264434232532434755666666652456544418264434235466365535464428381055657
3443476354315953332624347674542268342655434534434425553565654168446243
6236424325544224354337523536266325652546565536438455252755264254019432
3543542468324243539144442444354323353813445425434778753712444472352626
5362444444273422735552232255253514655277474555425341344427562325535333
4446246233352524276426262552664754453240752334522856455466355365242344
3237335332531268253466334255234453552454453098255434255291384455255542
4352816824436435327334352724724543735253625642534354526148533352636555
3525138545544342323524176536435452462342552321642744657455664465253522
1864463463624644242552115687363343475632520238243226566432544632543351
9294323554534342526252433465263251830656368344254343334276327453865517
4243235424636834552344364242442432436242553351618643755372763642424515
2445342524256254353465263251425653464733875725335755355351332834254445
3453443253356256566675451245642343333752449746444795666653434453446735
4345112487444646365623225446554251076557656591044538655435827634424664
2663334736536555425719644424665422647544756626555574432554423777457353
6626243323324437443737777376763435542554382623433843553736683526552982
9327326555733554316442464437553545386725373323347536144434635243473555
6535566352553534883533352353389992443374565452536442468537374386266252
3473854742466543735365345525542512442442355435423753475554241765043355
2344823655453337565333322533234333233427264284175157547434282855544174
1254574255254241732653443235355798544276786554417218548762638833442662
4171545545238222324264344346563556344366444346443436352526324170245544
6822336334642565254241691154334446443416812573354326552416711554244255
5241661355469554434434165155544533435447644164146444462532472541632555
6765558668737428336346341622654755659686942434436945283416114554877556
3435641601454426345555525415914554744326363234158855444442415734553453
3223232337533345353444346536415665643674155225363654323662486456754415
4195646525235456358556415337564632676232562677444632445362554263541521
7554466354336355564151855873825415022533627454475436275565241491454343
3252524524148145544323526543241471155446527442414618548434826357587553
4145115333526529241441856536278326862554241431652334435335323374142195
3463565563546347924141365838443735458275635483343354233333754140335429
9442534442634633734445326253341391453535578326865413865533934137205733
5432472525252552413629552356558543324475334765555424135385633436253625
6344552432982633356655542413414554476444644324133125334464546324132105
5452382244131325444523822336345265265554523822441301155444234363412922
5534366387526353636283412829563343663466364652643625524534127405234332

6367637211727332726652625434642629412612533445238224412517574557354334
4344341241656356643423282434123205344322332344263538341222144243343446
7524478656412175453465412075375375411921563343247434378747898411886552
6444411711563535342524116205523543433325242424241152055454248435524232
6534114265454456343535252532362423241133354434432257644532636353524546
4435411214556535232425434111115544435544341101355434624424434109195542
2734453662465424108215634452422624342735274107145532324267525341067553
4247410515583344353556463410422554452242663656625625341032065834626784
6465476544102625583425575244232333254354578726255285837524556285478345
5635434410123543582556242626245452544100315544434335526436424345652344
2534991054444424364981256348287621034972755466485433355283543565865249
6855445635495335483944643448378943784421054382852494405633427543324455
4466365365436374425355424931655245444454665434926055444248553235464354
5653233546433332336234354546353333542533491325653578386665568234663422
5772656490365534335568383956433572826462565335534892853446383865344273
6463475362448822523344343252753655923348717542433327338233244861553233
4252455554485225323444323454344234542484226443555332438443424425483305
3776543549554544634326525235448213573643323367448124554435456245443453
4254474801255734344363247918554558434253434252478365662554432224236453
4323645354243566547748563433746424336465424643245554436534656764335323
4762053732767742756442755475315423544235566326465876211442723347421545
4425442537665544274731954543524553236423644721754322344235736343471115
6247545542470755442534691855498972544526743346837594676544284466276434
4262543443526262662553346519674346252253463624346423554663749565243445
3426346316546233545622445546216763525652643573446115535946444236334460
3055527526253738264243443546532345929653356564274353273455674655424582
5553422544266253545385264245720537554344675244786564562055342675576444
6375524551155432252325454185487672534245235624531055524524324521152334
4345554512055524555786662555323450105424543634449145634244265532344820
5453543433325242424244729643455436273654232435535655424463853636454534
4756554352583643565762565524459554454845444146527766255532344349543427
7745735366262433233244373453436263556625542442145463534265553544112553
2553224344401554424742335424243915534445375655255438185452733563563547
6643715558742452765765436325632324274364675662698646104263474352255342
6446525254247644343440543425553638728666743356697264335433636643319532
3342667469833554432275333424247634773463352432634311255774435257243013
5433445456343429245334266344254237576255424288574442444271354627655542
4542614445555253735444255844533634533362832366434456373686654832584587
2742388424452342442553427322745435664283736862442345447423629423545534
2322373637257654335623356626268667287685545878775442217545533322362632

6342111564533543744201755684363666343753419355434546248388565238247734
6523325542418245536543653433355333765654172055445446426265654364416145
5342576437487415225344257362853455962757414134434545556433413186544675
2445643344341288445424433234432525332453554432235254333323543253543333
3332253543235432435433333332273234411715534242543445286323443255423355
5532323323233554375454332446342382357246410135746264475652491554847555
4525255481364363898646344719653232398334798334646375545775548653384336
2667375744536533774516643674853434775344145554332333476543286343742266
3435546233277263434216543373763667377541295534282744655553544532544554
2320011654677655423199306442435355445623654354354363233198217343343244
6752443455331977644624431967625545231954363454325752449746675266276632
5423244342343731941474237353436254319320726734635455527565443192115283
6354234319121544653424683286465465319011755757683223189943235683431882
0444626736236264365523187216245427646735765554333186246323366353653526
5527772631852364366333555243736555532318412676854233353318328642834684
2352255663543534255318296534364333181226455248652564442553433318030463
5685473252732223424245365533179364346635564242544537433526434423844323
1781744448344733445553317712444445285652317622444623343444452452755331
7511642673747443174154325457362442583173176445666735252533531721543646
5562327385317111834243442583170196235335236269424535316913643526442555
3316816642562725272685531673363456232867445529542562442663465631669864
5753633165204323426322233465257531642544332537677554625432834233163863
4543523162136446424334544316121623423242732334332433316018874442642363
3434623159309342435445273744427543333342443158764452343157146335426324
4254315637463554562434553525523525253865662554231552144424434524774753
4552315475644562266224773553546242255235233262522625335223252326824355
6626454544325423153256345623523653376267335362315240833254348452642564
2452523265285335724454315119844576242256355542531506833642314913687365
5625542314810835644646314719853774528634452353331462183583534426353453
4325314524864464334464335544342433314427846443353537373234542324343314
3126573523255443142138546544456252314168555463140248325545554653764435
2336231399642756353313867645433137138533752635232313615834467524542565
3135236352353436437945652553631341383552859762653133117468544253731325
6574731315844563130136546665625542312916445425434523822431281265625423
5223312796862552453126176643235326734344331251568245463527662331241368
2464452638423123106546454454312212874465524732312111445658442433120214
6342455266336453546231192864442652527544445543777375423118316426342464
3727324245725256255423117236644537653352434663262331161864255644273744
2552311598456332633114158267286268756563113146354445536324531123566433
2487456553755424652442435235543111116227683336231102387843446333576268

6553343109116444523822431081184443546443310710642443655431061764366736
6554454433105144436752328666331041482662687535345310334655344447524335
6676345425447635448310213653535245554231011764333553554454564310015673
6655256255423992063543554732442526322398136234545626322397258234333546
2525344343745433961084644533323951182335737432394118263325435339324642
7852742324373237433623921542433263536346239124623344352534535243436552
3901472664247273552389114443733255338896236442463879669445265386188542
5762626735444338513826233434734338429624433424285443866873435435423831
4655468224354353827826334338133824473654436738264344525426375433380136
4236768862633792864466437544322555427664524323782963543743223432276223
6277756433772744463735434636234255484465237697343554233753663543747253
5535432344265225446522633374865254264373324454254352243726233424352253
3363372176547635534556325537111654774626323709654562632369136363537263
2533681383556546585423671482335534736732366206254532334633234654236516
6442387537262632364326466534326454342434343654436632236369443533621566
3434332345332361258344552777787363524232343360782333243591552232424344
3432358766624533571183256786554356136233762557554355317344556327335536
5555263663424323546835446353982767534435220645544539343623544343518643
7534235019746424653433572333634945642343226263637446576544453555523434
2452373363485887663472352245433424443363324324346783552553452183762543
4643554242842344207253344475253345552334388266454234213843756424284334
1208645354345543433242334017424443475534243233392082565425555427244386
3381564344422223353533735444244243224323423453755345645735473362467272
6446475443454632464335186633355422243255423347445325433311835373535423
3211832435374623311444563546845422330267454475455223324353242323332922
4323552382254552622522328276444474452332424343832688423272144425425552
4552656254326254323354424424435542545452325156234232533247343241565252
5753552553323206344525544356255532332211623376274553211845652665724774
5652320267456455363637865535334535331926644345435455232365553743523181
8662332655592332343317681199983161154463544465315247454265646752444355
4247231424534566436876652897627253313297553224254553665544253652333231
2964437755231114645746755265243101654264427374425523913742423324543438
1563344233623632437467434343222465294364367663527362548462264364442361
3662332437264235116235234424234186245443455527553323311875433556433276
4233243113228649853763735342342263452535345434625272462642353444222852
7654665642334255853293244363228428432354254354275262253523822322833246
3543463763345654545336555333432282129433547463446343443737734545855423
7357543444352562634237336757327253845523626964623262252544433434334544
4664434243364567433473554222811562342324243364622801464233635354233227
9176362744436424662322781464252325455542227719623533435365678655222761

1442325755442275456425563343532363254354544535455342764433625652274176
2353343547376765227330424332636562766266652482442657227228625533263436
3638326342444543227120463572453337763257522270155283543325242632269167
4343544363342642268134455355587557226730434273623656366352364525265542
2266357563444733575435672242752464232425422652746353452355446534627456
7654226439854255333624546445455654354445657625542226311435364236532262
2462353343533336262244276522612444543553452253534442765322603944425465
2443234245525334643344364342733225967432342432444626363553753552653534
4233324434234234465343433635343252225843854253446233626443735433544373
2544232734323225724642555735287856537265534225624445362676355843425425
2522255506536536853333424635363245344422523822233352642332422542282953
3333234232736554222535242444724333253257476232525524335477434655443243
3555322529834546443225127833244554554354357545554447225015853774454456
6542249608254453453224545536653425356254453364452334523343334742375342
2483064234322855342335425376243253422474344542445652455642352333363455
2435453324253422465494545356534862634425333573653252344254343452432732
5323224516655455627444442222449444274427224328625445333426254345343625
5323224276553444224167338492240274455262422543435353584664662239156622
5347546264322388636677362237354634255536453644442523524535362328322362
5833854644637536262265254222354744427762244274643646364623382494436262
6422545432234254635862445435445457666466223364463427468525354378253643
6542553336452536542533428752747324365759223233625455344565443224385637
5273556542231454334274625762543544744463433343757366268556542230306464
4444523272643534443322335322294682644437344325464344534344535234836233
3652665622284044545785434662325385654227243252333457692227744436532226
1344435345462552225144456437472647222241444553765284463222316846474676
4355336222227948342453265453736268322628222139755555853455355634234563
8637352355438632220264442743362645883335272876222192675634445264862475
6435275272218164454455442766552221757642556762746434424538252639635247
4343466724442343423465272216256254532345243334624333653221522424332636
4989932622647221430443234333566437775524535456252221349643424554237355
4454762325533533745355645767445353221220444245735565527665532211206443
5232444343272732221017644454962324623622209124442776232532208164333756
3452655422207117454564425322061265456554323422051463256554552344220417
6334223456624525322032564474643433434335243742472202864553435220114544
4634624442522002442622362444253432664775421991244424954326221982673424
3537663475254424624532197307426653374532634243433344337442196736442746
6654323354353542455323526343743543242425423225433454366352636337462195
1483427737534427219422724274655244755348666521931583353633554423821926
4443632191258448733836638352377328838219013832426395442721892765467265

4244626534455622627218817656552576336757632187655554447344372658353652526526535375343277544546744433453426356433218617652821043544443544218
5446652348585343534434243325336543385265363445321843264233632334435447
5434243325433752183155552533365355422182164442433554243233218113444275
3454543218016733898643255335321799557424624217838443335354253645863422
3377665462653554221775172655554772963686465639649863335487956532447636
5243217614443627535634332175115363876765521742944463734635362625542762
4426522173254442433333343442337456534217215644237725245542217118623332
5434234445542170226346263464624254426334216911622436386642168174333756
3455234542216723527235574543634633226542166127366565265422165316443535
2642553333356437643242532164436456636766422435352532624435435244675768
3222163966233243621629623644246216113669445543655221601166454667553215
9208746562552326726265221582444434434424435252345275221579826542555215
6106443355735215512848772465249215413624525442436321531182427685542215
2663276821511766227767765445463215031665557634553355444654246634343321
4917635433244663434332148194323425433623786244214778253324214614634745
3763767521453283335242327543455365335523365544214434635434243765534654
2466343648624432214345456427543343533643535364253534653556553574375214
2216434247632554625252752141156536352442332332140306354342453343424525
2458668726221391462474745434292213810624442434421371966349422553632524
5321363162443342427435443866873435435452135158233573226524562134156536
3524423323321332762454687544454262532553254221321765353535423264734213
1983534323221301883624628443237324321291666337767554454542128176633537
5253632674212714663334485277432126306454352563335654327245443427332125
2266984428736474275555532124198442353355533663753212318623563344343234
2462122128364554567322121158262432656266675212031433242225244375452432 2
5437363432119106524365573211824646426653525343624646254211711522454346
8421161462268222264446211512444243356764211430446243623637233256244442
4533432113317354735455362534653336475337465211217623533334343344232111
1864275273524323542621101746342435327636567210933432342544376434232632
4573272632422108186423855332433662622107174332432336832424321061943234
2435244352324221052565254264542325428363255322104134497665625542210312
6523432665432102746526242542622263546352844332262355326258434345332636
5573435565846336338427210122625644465524343443245421001062624444662991
0833435446429812834366583432297188544335444344643222962563454262723334
2536534354829599456434632941764256532543653422293276427265265627655747
2455675329211654256284542913064232466324354353754345443533429027449334
6524234244244436262652892683452552545538326434432454288106266452366287
2866568642345654774346642664542861362364437666552854963543633574662334
3424347648754375638657624576654228415656262663662753283296545362656745

6986361043627355328210642555865628113642556626432328023622436244434436
2653552627924633464334542743236276654278115323536625527796352442642762
3644328543395335344555442751963523272446443336282743763543442434353543
4373537234328333263227311655664446652721064245484532712465375345432554
3544244433270177432455522234333526918835454443352343335268236273343342
4443322343335267208242543475462642543326697653533582651264535524655426
4138256543533262263155532747245567532622462353343545456532985655226160
6643344774565534246855552334632542493666752543343344434242432602865253
4327464232445375545546325918653624553733434554258208673436457443456364
3257186654637252474576562567655327225515657744332424243254276623546333
4676365865432543325376586453252865332452251126542562464632501065527953
5324918442443687663852273248196233443544343234246247128364554567322468
6454545524588336576924410646556655724378276567242865477463241186554663
2436343553624014756356554567322391064255576562381762353343333745464237
1166234453235236193355524345653438477235198266353534445534325234138247
3536468432332364352568343333386486323232126633623332652311564256748352
4734230286224332554465442455552438333229194333636635255223342228136426
2627655632272082552742243276324365226398323352552344444755442437554535
2442624222534643554472532543544245475244328655422413848564566362322320
6424327642555353324322223656363347225362547553342211255526544654222025
4323428644335544343447454219199455372627644536242218662333221717625266
4342544644521611653743676552157672636421416834435834445554421319624724
3733555335334212762482432111163455262334210126534444463622910636363564
7281172357544253271244457454634326116262285455225882642335241262842434
4366238674676652277333263211317973573555416386515465441435341326612482
351146643”

4.2.8 The Seven Pairs Codes discussion

I discussed the potential importance of “seven pairs” in Quran in the previous chapter, Evidence 4.2.4. Let’s recall the verse related with it:

> 15:87 Surely, We have given you **the seven pairs** with the great Quran. (Quran, B. Saglam, kuranmeali.com)

In the main chapter, so far, we witnessed 8 total key coding pattern based evidences *that are suitable* to test the follow up even and odd coding pattern. Just check all the “even odd” terms including chapters under the main chapter to see those 8 code pairs as even odd codes are presented right after their predecessor code. As we witnessed, we observed 8 total even and odd coding evidences based on these 8 key coding pattern based evidences. Namely, in total we have 8 out 8 successes regarding the coding pairs of key coding pattern

based evidence and their compulsory even odd codings. This appears to be a miraculous design if we pause and think again carefully. The total number of suitable key coding pattern based evidences to test their even odd coding is 8. For all those 8 codes, we witnessed their even odd coding pair. God knows best but this miraculous **8 pairs coding design** might potentially be related with the **seven pairs** mentioned in the verse 15:87.

In the system I presented, I observed one more coding pair than 7. The 8th one might not be the part of **the seven pairs** if this verse if really mentioning about the system of these coding pairs or one of the pairs might also be the results of a random event, which makes the 7 pairs observation stronger and more reliable.

We can compute the probability of observing such 7 pairs of code, as there are no other trials could be done regarding the rules, we have 7 successes out of 7 trials with probability p=(1 / 19x19) = 1/361 = 0.00277. Then using the Binomial test we can calculate the probability of such a miraculous observation as 1.25e-18 as follows:

```
tmp <-binom.test( 7, 7, p = 1/(19*19),
                  alternative = c("greater") )

tmp1 <- formatC(tmp$p.value, format = "e", digits = 2)

print(paste("The probability of", 7, "successes out of", 7 ,
            "(with p=1/361) is:", tmp1) )

## [1] "The probability of 7 successes out of 7 (with p=1/361) is:
1.25e-18"
```

If we want to be more conservative and take p=(2 / 19x19), the probability is calculated as 1.6e-16.

If we want to be extremely conservative and take p=(4 / 19x19), the probability is calculated as 2.05e-14.

We can also compute the probability of observing the 8 pairs of codes so far, as there are no other trials that could be done regarding the rules, we have 8 successes out of 8 trials with a conservative probability p=(2 / 19x19) = 2/361 = 0.005540166. Then using the Binomial test we can calculate the probability of such a miraculous observation as 8.88e-19 as follows:

```
tmp <-binom.test( 8, 8, p = 2/(19*19),
                  alternative = c("greater") )

tmp1 <- formatC(tmp$p.value, format = "e", digits = 2)
```

```
print(paste("The probability of", 8, "successes out of", 8 ,
            "(with p=1/361) is:", tmp1) )

## [1] "The probability of 8 successes out of 8 (with p=1/361) is:
8.88e-19"
```

A much more conservative case with the probability 4/361 would result 2.27e-16.

4.2.9 Pairing at chapter level data with the totals based key coding pattern

Under this main chapter I will present 2 related pairing coding pattern based evidence, which are also based on the key coding patterns we observe from the total numbers of the full text of Quran.

This key coding pattern is based on **the pairing coding pattern** mentioned in Chapter 3.2.1. For convenience and its importance for this chapter, I present the descriptive numbers again here in the following tables.

```
dfnums <- data.frame(c,v,V,w,W,l,L)
# Table:
knitr::kable(dfnums, booktabs = TRUE,
  caption = 'Table of the totals of all the 7 main descriptive numbers
of the text of Quran.')
```

Table 4.8: Table of the totals of all the 7 main descriptive numbers of the text of Quran.

c	v	V	w	W	l	L
114	6236	6348	77797	78245	330709	332837

Let's first remember the main numbers of the text of Quran. There are 4 main numbers of the text, which are number of chapters, number of verses, number of words and number of letters. However, as explained in detail in Chapter 3.2.1, Quran has a different structure, which makes it possible to be defined in two different forms regarding those main numbers of each form. Specifically, if we prefer to describe Quran with numbered verses only then we have these 4 descriptive numbers in order:

$$c, v, w, l$$

$$114 - 6236 - 77797 - 330709$$

In fact most of the scholars mentions Quran with regard to the numbered verses and cites verse number as 6236. However, some scholars like to mention all the verses including the

unnumbered Basmala verses and thus cite the verse number as 6348. In that case the 4 main numbers are as follows in order:

$$c, V, W, L$$

$$114 - 6348 - 78245 - 332837$$

These represent the two different text types of the text of Quran regarding its textual structure. In fact, both of the scholars are correct as long as they emphasize the difference.

Also, I ordered the 4 main numbers naturally from chapters towards letters by following the general rules as described in Chapter 3.2. Again, according to the rules described in Chapter 3.2, there are only two ways we can pair these two main descriptive numbers by concatenating them either way as follows:

$$c, v, w, l, c, V, W, L$$

$$114623677797330709114634878245332837$$

$$c, V, W, L, c, v, w, l$$

$$114634878245332837114623677797330709$$

There are only two possible pairings and both of the number pairs above are **multiple of 19**. This means that they both are in harmony and with the 19 based coding system. As per the rules, I consider them as **the key coding patterns** and will test the same coding pattern over the full text of Quran considering both verse and chapter level data.

Verifying the key coding patterns of Chapter 4.2.9: For testing the mode of big numbers, I always use the special R package, *gmp* (Lucas et al. 2019), for the computation of big numbers. As a double check, one can also manually copy and paste these big numbers into a web application ("Good Calculators" 2019) for a double check if wished. I test both of the big numbers of the key coding patterns below:

```
#First number
tmp <- paste0(c, v, w, l, c, V, W, L, collapse = '')
tmp

## [1] "114623677797330709114634878245332837"

cat("The mod 19 of this long number is ", as.numeric(as.bigz(tmp) %%
19))

## The mod 19 of this long number is  0
```

```r
cat("The precise result of the division is found as follows:")

## The precise result of the division is found as follows:

cat(as.character(div.bigz(tmp, 19)))

## 6032825147227932058664993591859623
```

Similarly, we can prove for the second number.

```r
#First number
suppressWarnings(require(gmp))
tmp2 <- paste0(c, V, W, L, c, v, w, l, collapse = '')
tmp2

## [1] "1146348782453328371146236777973307 09"

cat("The mod 19 of this long number is ", as.numeric(as.bigz(tmp2) %%
19))

## The mod 19 of this long number is  0

cat("The precise result of the division is found as follows:")

## The precise result of the division is found as follows:

cat(as.character(div.bigz(tmp2, 19)))

## 6033414644491201953401246199859511
```

We witnessed that the two big key coding numbers of Chapter 4.2.9 are multiple of 19. Feel free to double check it by running the codes yourself or by just copying and pasting that big number into an independent big number calculator, such as this ("Good Calculators" 2019) and test it yourself.

In the following two subchapters, I present two different evidence codes that are based on the above mentioned 2 key coding patterns of Chapter 4.2.9. I will add the total numbers of trials and successes into the counters here for both of the subchapters. Considering the aboe twp key coding patterns, we observe two evidence codes in the full text of Quran, one at chapter and the other at verse level data and both pairings are from the text type of 6348 verses towards the numbered 6236 verses. Overall, we have 4 trials and 2 successes considering the two key coding patterns and their follow up successor trial codes. Let's add them into the counters as well.

```r
# Counters for all the key coding patterns
key_codings_tested_nums <- key_codings_tested_nums +  4
key_codings_success_nums <- key_codings_success_nums + 2
```

4.2.9.1 Pairing all the numbers per chapter

In Chapter 4.2.9, I showed the pairing key coding pattern based on the total numbers of the text of Quran. As per the rules we have to test those key coding patterns in the full text of Quran considering chapter and verse level numbers. In this subchapter, I will present the evidence code that is the successor code of those key coding patterns in the full text of Quran considering the chapter level data. As we see below, when we pair all the numbers of the chapter level data from the text type of 6348 verse towards to the text type of 6236 verses and the resulting big evidence code number is also multiple of 19.

```r
tmp1 <- paste0(dfVCwl$Chapter_index,dfVCwl$Verse_sum,
               dfVCwl$cwords, dfVCwl$cletters)
cat("Head of numbers from the numbered verses", head(tmp1))

## Head of numbers from the numbered verses 1729143 2286614026249
3200350114985 4176376316332 5120283712206 6165305612726

tmp2 <- paste0(dfVCWL$Chapter_index,dfVCWL$Verse_sum,
               dfVCWL$cWords, dfVCWL$cLetters)
cat("Head of numbers from all the verses", head(tmp2))

## Head of numbers from all the verses 1729143 2287614426268
3201350515004 4177376716351 5121284112225 6166306012745

tmp <- paste0(tmp1, tmp2)
cat("Head of the paired numbers", head(tmp))

## Head of the paired numbers 17291431729143
2286614026249228761442626 8 3200350114985320135051500 4
4176376316332417737671635 1 5120283712206512128411222 5
6165305612726616630601274 5

cat("Tail of the paired numbers", head(tmp))

## Tail of the paired numbers 17291431729143
2286614026249228761442626 8 3200350114985320135051500 4
4176376316332417737671635 1 5120283712206512128411222 5
6165305612726616630601274 5

tmp <- paste0(tmp, collapse = '')
cat("Mod 19 of the number is 0 as seen:")
```

```r
## Mod 19 of the number is 0 as seen:

as.integer(as.bigz(tmp) %% 19)

## [1] 0

cat("The number of digits of the final number is: ", nchar(tmp))

## The number of digits of the final number is:  2415
```

As we witnessed, this big evidence code number is multiple of 19. Here is the “2415” digits length number of this evidence:

“1729143172914322866140262492287614426268320035011498532013505150044176376316332417737671635151202837122065121284112225616530561272661663060127457206334114435720733451445487512425387876124654069129250511115101091839758910110184376081112319467817111241950783612111179573071211217997326134385335451344857356414528303539145383435581599657288215100661290116128184478321612918487851171111558664317112156266621811015836552181111587657119989713935199997539542013513535399201361357541821112117450942111311785113227812795314227912835333231181052448323119105645022464131957542465132357732577896387825789003897262271320563026228132456492793115947902794116348092888143859302889144259492969978431729709824336306081734723061821349131345502171313555421903230372156332313761582337313035788337413075807345488435943455888361335457783238354678232573683730306836847343087371828653899371838693918388873530653889739308439751177486939761181488840851226510840861230512741547943365415579833844253860352242548643541438983636094390840362844593461474446035014934537488208545384922104463564526674636649268647385422423473954624424829560251048305642529491835315334919357155250453731507504637715265160360154651613641565524931213245250316134353623601433536336414525455342146954563461488557835216475579356166656963791756569738317755729575254557305792564582247520465823479206559244471970592545119896013352156060143561579611422696661152309856211177768621218178763111818016312185820641824210916419246111065122891203651329312226612254110566132581124673033313476731337136668523011289685330513086952260113369532641152704421797170452219907128227965712923198472282861109722929011287320200854732120487374562561035745726010547540164676754116869576312431087763224711067750181841775118586078401747967841178815794617978579471838048042133552804313757181291044358130108454821981333822085352833616975083371737698425108445842611246485221094698523113488861761254861865273871972296872076315882692382882796401893013958489311436039020823429021863619115542539116582729221712

3149222753339311401659312441849482710294931121958341629593818196197228
8962076307975301159763413498894404989984239983615899940177100114016910
0124418810111361601011240179102828123102932142103314731034189210493313
4104103715310552397105627116106417771065219610772511410782913310831043
1084146210962799109731118110319801104239911152381111627100112415471125
196611352373113627921146208011472499”

In the following Evidence 4.2.9.2, we will see that this pairing coding pattern also exist at verse level too and not specific to only chapter level, both of which are based on the predecessor pair key coding pattern of the total numbers as shown in Chapter 4.2.9. Also, ee already added the numner of trials to the counters in Chapter 4.2.9.

For the reference, to the best of my knowledge, as all the others, Evidence 4.2.9.1 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 4.2.9.1 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

4.2.9.2 Pairing all the numbers per verse: Evidence

In Chapter 4.2.9, I showed the pairing key coding pattern based on the total numbers of the text of Quran. As per the rules we have to test those key coding patterns in the full text of Quran considering chapter and verse level numbers. In this subchapter, I will present the evidence code that is the successor code of those key coding patterns in the full text of Quran considering the **verse** level data. As we see below, when we pair all the numbers of the verse level data from the text type of 6348 verse towards to the text type of 6236 verses and the resulting big evidence code number is also multiple of 19.

In the previous chapter, Evidence 4.2.9.1, we had witnessed a similar evidence code in the chapter level data. In this subchapter, I will present that a similar pairing key coding pattern based evidence code also exist in the verse level data too. This is despite the fact that the two text types have different total verse counts as 6348 and 6236 and their data lengths do not match to pair and concatenate. I had already described how the unequal data are paired in the rules section. Let’s first see again the table that shows the total numbers of each category per verse in the numbered verses as I will concatenate these numbers of both category.

```
knitr::kable(head(unQuran, n = 9), booktabs = TRUE,
  caption = 'Table head of all 6348 verses of Quran.')
```

Table 4.9: Table head of all 6348 verses of Quran.

Versel	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم
7	1	7	9	44	صراط الذين أنعمت عليهم غير المغضوب عليهم ولا الضالين
8	2	0	4	19	بسم الله الرحمن الرحيم
9	2	1	1	3	الم

```
knitr::kable(head(nQuran,  n = 9), booktabs = TRUE,
  caption = 'Table head of numbered 6236 verses of Quran.')
```

Table 4.9: Table head of numbered 6236 verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم
7	1	7	9	44	صراط الذين أنعمت عليهم غير المغضوب عليهم ولا الضالين
8	2	1	1	3	الم
9	2	2	7	27	ذلك الكتاب لا ريب فيه هدى للمتقين

Now, in a similar manner to Evidence 4.2.9.1, I will concatenate numbers of all categories regarding all and only numbered verses. Since, this evidence is about the total verse numbers 6348 and 6236 of both text types, as an exceptional usage per the defined general rules, I will use the general verse indexes to be able to concatenate the unnumbered Basmala verses as well. Because otherwise, there is no real representative number to be assigned to the unnumbered Basmala verses within the total of 6348 verses and thus we can not correctly concatenate their corresponding counterpart in the numbered verses at the 6236 verses. Otherwise, the one-to-one verse data corresponding in the pairing of the key coding pattern but we cannot represent the additioal 112 unnumbered Basmala verses in the verse level data. Therefore, in order to represent them as well as per the rules, in any such pairing we use the general verse indexes instead of the special verse indexes.s Let's elaborate on this more.

So far, we have observed that the evidences were mainly by concatenating the numbered verses version of the text of Quran and the full version of the text that includes the unnumbered Basmala verses too. This seems to be one of the main patterns in the 19 based coding system of the text of Quran. We have observed this pattern at every level so far, from total numbers of each of the descriptor numbers of the text to per chapter level too. Now, the question is, can we see the same paired concatenation coding pattern in the verse level as well. While pairing, we need to consider what numbers we are going to assign to the

unnumbered Basmala verses at the beginning of the 112 chapters while pairing to its corresponding pair as we did in the predecessor key coding pattern. Since the unnumbered Basmala verses are unnumbered, we should not use any other number, even 0, to really represent them. As a single solution to this point, we can fairly utilize the general verse index of each verse for all the verses, because even the unnumbered verses have a unique general verse index in an order out of the 6348 verses. I mentioned this process as a general rule in Chapter 3.2.1 for *the paired codings* at verse level. This way, we solve the first problem but how about the other issue of concatenating the unequal length verse numbers of both text types (6348 vs 6236)? As per the rules, we use a natural approach as usual. If you try to concatenate two vectors where one of the vectors is longer than the other, then by default, R programming language keeps concatenating by starting over the smaller vector again. In a sense, the larger vector wraps the smaller vector as a circle. As an example, let's say we have two vectors a an b. The longer vector a has 5 elements as this a=(1,2,3,4,5) and the shorter vector b has three elements as this b=(7,8,9). Then, if we concatenate a and b, the natural way is to start using the elements of the shorter vector from the beginning again. A a result, the concatenation of a and b gives us this vector ab=(17, 28, 39, 47, 58). This is the natural way and also the default behavior of R as well. This means I did not even need to write a special code to perform this concatenation task and just simply concatenated them as if they are equal. In this evidence, we will test exactly this and see if the pairing of the descriptive numbers of the text of Quran per verse level data is also under the 19 based coding system of the text of the Quran. Here is the proof that shows success on this evidence code too:

```
# unQuran for 6348 verses
x<- data.table(unQuran)
tmp1 <- paste0(x$chapter, x$VerseI,x$vwords, x$vletters)
# nQuran for 6236 verses
x<- data.table(nQuran)
tmp2 <- paste0(x$chapter, x$VerseI,x$vwords, x$vletters)
tmp<-paste0(tmp1,tmp2)
# To see what is going on in concatenation
head(tmp)

## [1] "1141911419" "1241812418" "1321213212" "1431214312"
"1541915419"
## [6] "1631916319"

tmp1[6235:6238]

## [1] "996235419" "996236420" "996237318" "996238416"

tmp2[6235:6236]
```

```
## [1] "1146235520" "1146236313"

tmp[6235:6238]

## [1] "9962354191146235520" "9962364201146236313" "99623731811419"
## [4] "99623841612418"

#
tmp <- paste0(tmp, collapse = '')
print("Test if mod 19 of the code number is 0:")

## [1] "Test if mod 19 of the code number is 0:"

as.integer(as.bigz(tmp) %% 19)

## [1] 0

#Digitsum is not used as evidence but just presented as a fact.
as.integer(digitsum(tmp) %% 19)

## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 117196
```

In the above analysis, you can see that the digit sum of this big number is also multiple of 19 as a **fact**.

For the reference, to the best of my knowledge, Evidence 4.2.9.2 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 4.2.9.2 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

You can access this big number from the following link: https://github.com/quran2019/Quran19/blob/master/5_5_BigNumber.txt

One can just copy the big number and paste it into a web based big number calculator and test it herself.

As we witnessed, this big evidence code number is multiple of 19. Here is the “117196” digits length number of this evidence:

“114191141912418124181321213212143121431215419154191631916319179441794
428419281329132972721072721084721184721112522121252212833213833213114 7
214114721412532151253215114721611472161049217104921712512181251218114 3

2191143219729220729220197722119772211673222167322273422373422311572241
1572241772225177222561922661922619862271986227251022282510222812532291
2532292399230239923020782312078231136623213662323414523334145233391552
3439155234208223520822351360236136023619702371970237281112382811123815
7023915702391248240124824023101241231012411363242136324219802431980243
1986244198624411432451143245176824617682461051247105124714692481469248
1879249187924984225084225074125174125110552521055252847253847253838254
8382541258255125825519692561969256188425718842571050258105025812532591
2532598302608302607372617372612712126227121262156026315602637302647302
6418902651890265209526620952661877267187726728118268281182686025726960
2572692410827024108270157027115702711354272135427212542731254273945274
9452742083275208327523802762380276187127718712771762278176227824972792
4972791045280104528011572811157281371412823714128219772831977283231012
8423101284936285936285114528611452862410228724102287239128823912881354
2891354289105229010522902915029129150291157129215712924923129349231293
1363294136329428138295281382951046296104629626108297261082972710729827
1072983011929930119299115121001151210027131210127131210117672102176721
0294421039442103251022104251022104187221051872210512552106125521061044
2107104421071044210810442108228921092289210974308211074308211012492111
1249211113652112136521122598211325982113196121141961211417592115175921
1518732116187321163312321173312321171776211817762118187221191872211917
5821201758212031141212131141212130113212230113212212522123125221231456
2124145621241147212511472125241032126241032126104621271046212731112212
8311122128157021291570212912582130125821301867213118672131198321321983
2132221152133221152133301222134301222134146521351465213517762136177621
3616812137168121371874213818742138933213993321391770214017702140271142
1412711421411554214215542142156321431563214331135214431135214419792145
1979214510372146103721461463214714632147301272148301272148155421491554
2149218921502189215045196215145196215134146215234146215232130215332130
2153147321541473215472721557272155197521561975215617662157176621573113
8215831138215817872159178721596322160632216011532161115321611350216213
5021621266216312662163104521641045216494221659422165248921662489216620
9121672091216711572168115721681364216913642169937217093721709352171935
2171431872172431872172311232173311232173125721741257217423962175239621
7517682176176821761150217711502177228921782289217818662179186621791562
2180156221802593218125932181291222182291222182116121831161218314582184
1458218451266218551266218538163218638163218693921879392187167721881677
2188135421891354218916552190165521901561219115612191321232192321232192
4418521934418521931777219417772194652862195652862195178721961787219627
1202197271202197135921981359219825130219925130219962422006242200156522

0115652201221072202221072202146622031466220373290220473290220430121220
5301212205261102206261102206124922071249220724972208249722081457220914
5722098352210835221025103221125103221117652212176522121459221314592213
1252221412522214114922151149221516672216166722161249221712492217177222
1817722218207422192074221920932220209322204921422214921422213012722223
0127222222104222322104222325932224259322245724722255724722251672222616
7222262612322272612322272611822282611822283918222293918222292712222302
7122223016812231168122311466223214662232146522331465223313542234135422
3472922357292235401772236401772236461932237461932237301142238301142238
4520322394520322393314722403314722406428822416428822412512222422512222
4247200224347200224325111224425111224435140224535140224584422468442246
1565224715652247271162248271162248634224963422497312250731225028106225
1281062251938225293822521669225316692253542172254542172254431652255431
6522553011422563011422566024022576024022571577225815772258271222259271
2222599412260941226052208226152208226122872262228722625018922635018922
6324102226424102226424118226524118226543169226643169226667249226767249
2267391482268391482268249722692497226924922270249222701144227111442271
3917422723917422722712322732712322733514822743514822743012522753012522
7513682276136822761665227716652277155722781557227820892279208922792811
2228028112228030134228130134228117792282177922824518622834518622831145
2284114522841987228519872285145422861454228617722287177222871452228814
5222881554228915542289129551229012955122903213822913213822912810322922
8103229227118229327118229349196229449196329413329541932957243296133296
1153329772432971874329811533298113732991874329913503300113733004619733
0113503301155433024619733021347330315543303166633041347330414683305166
6330594333061468330629116330794333072412533082911633082410733092412533
0911503310241073310654331111503311187233126543312261073313187233132612
2331426107331418883315261223315115033161888331620813317115033171565331
8208133181553331915653319259233201553332021863321259233212711333222186
3322227933232711333232696332422793324146233252696332511473326146233261
1483327114733277273328114833281866332972733292410933301866333035138333
1241093331155233323513833322092333315523333176333342092333420803335176
3333513603336208033368373337136033372081333883733382191333920813339733
3340219133402379334173333415353342237933424518733435353343198033444518
7334483433451980334520863346834334694633472086334763033489463348311323
3496303349136033503113233501159335113603351732335211593352154733537323
3537253354154733542511433557253355155433562511433566283357155433573212
9335862833581670335932129335920753360167033601461336120753361136633621
4613362135433631366336393933641354336411523365939336517793366115233663
2115336717793367834336832115336836144336983433699363370361443370271163

371936337129120337227116337228120337329120337313673374281203374331463375136733757293376331463376146233777293377291263378146233781352337929126337918833380135233809473381188333819373382947338211433383937338314623384114333842491338514623385155633862491338624993387155633871144338824993388114733891144338910423390114733902599339110423391135033922590339220777339313503393156933942077339417743395156933951354339617743396341573397135433971470339834157339814653399147033991781340014653400104334011783401149340211443403114934032311334041144340411483405231133405351523406114834061459340735152340715843408145934089403409158434091877341094034102398341118773411311253412239834122812734133112534132188341428127341411493415218834151257341611493416104734171257341713603418104734181569341913603419176834201569342094334211768342112453422943342216613423124534231362342416613424527342513623425529342652734261155342752934271371342811553428231043429137134291570343023104343013543431157034316293432135434329413433629343324105343494134346333435241053435136034366333436125134371360343727107343812513438249934392710734392188344024993440198734412188344110503442198734421364344310503443626344413643444198434456262344540166344619843446251063447401663447752913448251063448218934497529134493715734502189345014533451371573451728345214533452301213453728345318753454301213454216834551875345513533456216834568323457135334572510734588323458207334592510734599473460207334603315134619473461167434623315134621354346316743463197834641354346411473465197834651569346611473466177734671569346715643468177734681154346915643469228734701154347012533471228734711774347212533472361463473177434733012234743614634742295347530122347593734762295347628120347793734771255347828120347823993479125534792410834802399348021993481241083481208634822199348293834832086348311573484938348421100348511573485114534862110034862095348711453487145834882095348843188348914583489729349043188349073034917293491218534927303492301213493218534931157349430121449429125349511574495168244964194496281154497291254497145844981682449816794499281154499371864500145845001991450116794501137045023718645021571450319914503136345041370450471271450515714505882994506136345061879450771271450713554508882994508221074509187945091470451013554510209045112210745112410645121470451235157451320904513178345142410645141149451535157451517634516178345165426545171149451742185451817634518582644519542654519146145204218545201360452158264452183445221461452224994523136045231353452483445241256452524994525271084526135345261988452712564527401924528271084528229245291988452932158453040192453015784531229245311885453232158453215684533157845331555453418854534124345351568453514614536155545364920545371243453714644538146145389444539492054539381774540146445402912145419444541206945423817745421454454 32

9121454310404544206945442094454514544545114345461040454610374547209445
4718804548114345481138454910374549209545501880455020100455111384551251
0245522095455229132455320100455330125455425102455415654555291324555167
3455630125455616654557156545572310545581673455819774559166545592710745
6023105456062745611977456132145622710745621892456362745637284564321456
4114945651892456517634566728456619754567114945672193456817634568311394
5691975456920984570219345704820445713113945713614345722098457218734573
4820445731249457436143457424101457518734575135645761249457630135457724
1014577228745781356457822774579301354579155745802287458017614581227745
8122884582155745822812845831761458336168458422884584321624585281284585
6023545863616845861670458732162458740170458860235458833172458916704589
8374590401704590271284591331724591126445928374592104045932712845933112
2459412644594239645951040459562281459631122459620106459723964597229445
9862281459815674599201064599730460022944600145446011567460121824602730
4602197946031454460313504604218246041146460519794605145446061350460633
1354607114646072697460814544608208146093313546092067461026974610114346
1120814611836461220674612211094613114346137354614836461473246152110946
1521954616735461620724617732461716664618219546181773461920724619124546
2016664620401784621177346212912646221245462222102462340178462311434624
2912646243212946252210246251040462611434626124946273212946271462462810
4046283816346291249462929130463014624630207846313816346316284632291304
6321471463320784633331374634628463436161463514714635199146363313746361
6584637361614637188546381991463811454639165846391892464018854640114846
4111454641145346421892464214494643114846432210046441453464484346451449
4645177846462210046463716246478434647199046481778464822103464937162464
9631465019904650341284651221034651832465263146521457465334128465314604
6548324654147346551457465526136465614604656251314657147346571458465826
1364658156646592513146591361466014584660114346611566466112504662136146
6211444663114346632499466412504664542164665114446651887466624994666261
2946675421646671250466818874668157346692612946695019146701250567024974
6711573567153242467250191567261278567341956733113756742497567443201567
5532425675622815676612785676198656773113756772711756784320156781047567
9622815679740568019865680241075681271175681452075682104756823214156837
4056832511956842410756842492568545207568518805686321415686421575687251
1956873013456882492568829107568918805689239256904215756901570569130134
5691187556922910756922110056932392569317695694157056941352569518755695
1462569621100569624995697176956971664569813525698135656991462569993857
0024995700261065701166457014016257021356570234140570393857031352570426
1065704146857054016257052488570634140570612495707135257071364570814685
7081449570924885709197157101249571068281571113645711261135712144957121

5685713197157134119557146828157143114057152611357152611757161568571616
6657174119557175122857183114057183313657192611757191045572016665720231
0457215122857212811657223313657221580572310455723381585724231045724136
8572528116572511485726158057262410957273815857271254572813685728217757
2911485729271105730241095730166857311254573113635732217757321367573327
1105733472185734166857341262573513635735241045736136757362594573747218
5737311295738126257382092573924104573919895740259457401978574131129574
1341395742209257422596574319895743840574419785744259857453413957451658
5746259657462490574784057471771574825985748104257491658574919785750249
0575015705751177157512612857521042575221895753197857531663575415705754
1467575526128575574057562189575618695757166357571252575814675758452055
7597405759168257601869576020925761125257611372576245205576224116576316
8257632410457642092576451196576513725765208657662411657662711957672410
4576793757685119657681145576920865769167357702711957702610057719375771
9345772114557722185577316735773241005774261005774208657759345775522135
7762185577626128577724100577722995778208657781559577952213577964280578
0261285780136157812299578122865782155957821566578364280578322975784136
1578417705785228657854515357861566578629108578722975787114757881770578
8241025789451535789114257902910867901469579111476791144957922410267921
2525793114267931142679441967941253679514696795311386796144967961666679
7125267971353679811426798944679912536799135668003113868001041680116666
8012510068021353680293768039446803249268041356680492968051041680593668
0625100680617566807937680773268082492680837137680992968091368681093668
1014546811175668111257681273268121243681337137681310416814136868143213
3681514546815114768161257681617686817124368171660681810416818939681932
1336819197668201147682027111682117686821136068221660682214666823939682
3229068241976682428114682527111682510506826136068261967682714666827228
2682822906828177168292811468291562683010506830124668311967683111576832
2282683214636833177168332079683415626834942683512466835239068361157683
6145668371463683715646838207968388436839942683928103684023906840176568
4114566841251056842156468421571684384368432710868442810368446356845176
5684521746846251056846227768471571684714596848271086848311136849635684
9229568502174685017716851227768511248685214596852177368533111368531036
6854229568542710568551771685593268561248685652168571773685723103685810
3668581247685927105685945175686093268603916068615216861838686223103686
2241066863124768631458686445175686495068653916068651554686683868661869
6867241066867186568681458686812536869950686925926870155468702293687118
6968711152687218656872145868731253687321100687425926874734687522936875
8446876115268769566877145868771659687821100687817816879734687916666880
8446880441716881956688122102688216596882492016883178168832912868841666

688417696885441716885126268862210268861669688749201688713596888291286 8
884418768891769688915686890126268901865689116696891165368921359689294 3
689344187689315596894156868948446895186568951344689616536896135368979 4
368972510368981559689821906899844689913606900134469002210069011353690 1
239569022510369021262690321906903231056904136069041148690522100690518 6
369062395690611396907126269071040690823105690830116690911486909125969 1
018636910209669111139691124100691210406912156969133011669132911869141 2
596914281106915209669159416916241006916104169171569691736151691829118 6
918838691928110691928134692094169201038692110416921937692236151692218 7
169238386923727692428134692419756925103869253112869269376926209669271 8
716927261176928727692822956929197569292083693031128693031145693120966 9
311670693226117693223106693322956933401676934208369343912869353114569 3
528122693616706936135169372310669373714269384016769388366939391286939 2
711869402812269404218069411351694135149694237142694217756943836694317 7
569442711869448446945421806945146169463514969463514469471775694737138 6
948177569481977694984469491664695014616950166669513514469519396952371 3
869528326953197769532910469541664695421866955166679551469569397956135 0
695783279571457695829104795810436959218679591246796041979606367961147 9
616277962135079629457963145779631156796410437964114879651246796516737 9
666367966175779676277967135079689457968521796911567969416797011487970 7
367971167379711566797217577972125479731350797317707974521797425105797 5
416797552679767367976281307977156679771254797812547978124879791770797 9
734798025105798020837981526798131138798228130798222947983125479831669 7
984124879841678798573479851664798620837986261117987311387987291107988 2
294798811477989166979891974799016787990115879911664799137157799226111 7
992401617993291107993146279941147799423104799519747995104279961158799 6
157079973715779973615079984016179982811079991462799910487100023104710 0
018877100110427100113627100215707100214727100336150710031568710042811 0
710042087710051048710051995710061887710061045710071362710073814671008 1
472710083214571009156871009835710102087710101565710111995710112912371 0
121045710121772710133814671013217671014321457101493271015835710151139 7
101615657101611447101729123710171359710181772710181471710192176710191 6
577102093271020145871021113971021113971022114471022730710231359710232 7
113710241471710241771710251657710252510771026145871026136671027113971 0
273513271028730710282511371029271137102923967103017717103083771031251 0
771031166671032136671032633710333513271033156371034251137103413537103 5
239671035114671036837710361354710371666710377367103863371038840710391 5
637103938156710401353710402410771041114671041198371042135471042229371 0
437367104342159710448407104412537104538156710456337104624107710461359 7
104719837104716647104822937104813597104942159710491882710501253710501 8

857105163371051940710521359710529387105316647105310447105413597105419797105518827105523102710561885710569417105794071057167171058938710589347105910447105918657106019797106011367106123102710616247106294171062626710631671710639327106493471064730710651865710657347106611367106641671067624710671146710686267106852271069932710691140710707307107011557107173471071114171072416710726257107311467107342571074522710743177107511407107542071076115571076312710771141710771977710786257107884171079425710795227108031771080166671081420710812110071082312710821676710831977710832288710848417108410477108552271085229471086166671086124771087211007108713807108816767108823907108922887108911437109010477109011607109122947109129139710921247710922499710931380710931036710942390710949407109511437109518857109611607109623109710972913971097411657109824997109815657109910367109920897110094071100361537110118857110113637110223109711022289711034116571103187471104156571104391727110520897110511467110636153711061569711071363711071459711082289711081563711091874711094117071110391727111030129711111146711114322271112156971112321417111314597111383271114156371114432007111541170711152093711163012971116177371117432227111727118711832141711118198171119832711191879711204320071120114171121209371121198071122177371122147771123271187112340172711241981711241052711251879711251979711261141711262610471127198071127156471128147771128527711294017271129136471130105271130301327113119797113194771132261047113210427113315647113330122711345277113414697113513647113573171136301327113684071137947711375187113810427113811407113930122711392288711401469711401040711417317114137153711428407114228104711435187114329125711441140711441255711452288711457287114610407114673371147371537114712567114828104711481464711492912571149269971150125571150939711517287115110477115273371152121527115312567115373271154146471154104471155269971155125071156939711567317115710477115723897115812527115884171159732711591669711601044711601141187116112508116118897116273181162178271163238981163634711648418116411477116516698116511477116611488116611518116741981167231018116818898116873381169178281169115281170634811701867811711147811712299811721147811722310381174631081175738117512548117611528117620818117718678117721868117822998117862681179231038117924978118013588118012548118163081181836811821254811821039811832081181831149811842186811842195811856268118513588118624978118619958118712548118712618118883681188104881189103981189198281190114981190167481191219581191176981192135881192197281193199581193125281194126181194219381195104881195135881196198281196219881197167481197188181198176981198165981199197281199166681200125281200104681201219381201331508120213588120235149812032198812032088812041881812041988812051659812051361812061666812061367812071046812071776

812083315081208361408120935149812091874812102088812101367812111988812119378121213618121217748121313678121318688121417768121417828121536140812151038812161874812161244812171367812171043812189378121814558121917748121983581220186881220331348122117828122112508122210388122212538122312448122325814812232076812241043812249378122514558122527115812268358122626107812273134812272078812281250812281039812291253812291146812302076812302594812319378123113548123227115812324520981233261078123313578123420788123418858123510398123522958123611469123694181237259491237146481238135491238323581239452099123922988124013579124026133812411885912411874812422295912423105912439419124316779124414649124413569124532135912451039912462298912461368912472613391247187991248187491248209391249231059124911599125016779125011459125113569125124102912521039912521883912531368912532399912541879912542411091255209391255168091256115991256104491257114591257831912582410291258209791259188391259331709126023999126023969126124110912611883912621680912621240912631044912632811391264831912642912391265209712652310791266331709126623102912672396912671564912681883912681460912691240912692913991270281139127019849127129123912713616091272231079127231134912732310291273291229127415649127416709127514609127543176912762913991276157191277198491277231139127836160912781352912793113491279147791280291229128014709128116709128115719128243176912821786912831571912831664912842311391284156391285135291285166591286147791286145691287147091287229391288157191288124791289178691289229591290166491290178191291156391291105459129216659129211449129314569129316629129422939129419829129512479129522118912962295912962611491297178191297125591298104591298166491299114491299177391300166291300136491301198291301166791302221189130219105913032611491303167991304125591304321689130516649130526125913061773913062413291307136491307241079130816679130812629130919105913094619091310167991310125291311321689131193791312261259131215679131324132913131147913142410791314209391315126291315251039131646190913162711891317125291317843913189379131825112913191567913191871913201147913201674913212093913211891322225103913221146913232711891323147691324843913241356913252511291325178091326187191326261039132716749132723909132818829132819861329114691329301329133014769133018889133113569133114599133217809133216699133326103913331671913342390913342711391335198691335251289133630132913362299913371888913371774913381459913381665913391669913391667913401671913401685913412711391341125491342251289134224117913432299913432386913441774913442710191345166591345156191346166791346371749134716859134716109913481254913482084913492411791349228891350238691350186191351271019135117619135219135227109913533717491353311279135416109913549419135520849135552199913562288913561877913571861913572210291358176191358177891359271099

1359188291360311279136012549136194191361165691362521999136221799136318
7791363146091364221029136415549136517781013655229136618821013662699913
6712541013672911391368165610136828126913692179101369231019137014601013
7014629137115541013711571101372419101372630101373522101373157410137426
9910137414661013752911310137518861013762812610137627104101377231011013
7717871013781462101378104210137915711013793913810138063010138018651013
8115741013811454101382146610138229123101383188610138317711013842710410
1384166810138517871013852284101386104210138641166101387391381013872611
3101388186510138843198101389145410138911451013902912310139016721013911
7711013912711810139216681013921889101393228410139310461013944116610139
4166310139526113101395271141013964319810139611481013971145101397103910
1398167210139817631013992711810139929971014001889101400176010140110461
0140122831014021663101402166610140327114101403198110140411481014041245
1014051039101405156010140617631014061147101407299710140711451014081760
1014081042101409228310140920871014101666101410156310141119811014111249
1014121245101412730101413156010141322811014141147101414125310141511451
0141511391014161042101416135210141720871014171143101418156310141821841
0141912491014191658101420730101420522101421228110142115631014221253101
4221044101423113910142320731014241352101424197610142511431014254214110
1426218410142610361014271658101427421101428522101428156510142915631014
2910421014301044101430259010143120731014311561101432197610143225961014
3342141101433935101434103610143413591014354211014353413610143615651014
3616601014371042101437178710143825901014382293101439156110143914691014
4025961014401038101441935101441114810144213591014421677101443341361014
4362610144416601014441039101445178710144517641014462293101446733101447
1469101447228510144810381014481352101449114810144910481014501677101450
5261014516261014511683101452103910145229131101453176410145311511014547
3310145427118101455228510145572810145613521014561461101457104810145724
1091014585261014582285101459168310145910441014602913110146083010146111
5110146183310146227118101462219410146372810146315601014641461101464145
3101465241091014651460101466228510146615641014671044101467104510146883
0101468271001014698331014699381014702194101470165510147115601014712485
1014721453101472238710147314601014731145101474156411147410361014751045
1114759351014762710011147625981014779381114778281014781655111478198510
1479248511147916641014802387111480311271014811145111481229311148241911
1482114711148310361114831356111484935111484104811148525981114852795111
4868281114861875111487198511148716641114881664111488146211148931127111
4891665111490229311149039146111491114711149123100111492135611149211501
1149310481114932410011149427951114949411114951875111495727111496166411
1496146711149714621114971161111498166511149893511149939146111499114011

150023100111500291131115011150111501120811115022410011150223921115039 41
111503103811150472711150431123111505146711150514591115061161111506103 8
111507935111507186611150811401115081252111509291131115091758111510208 1
111510115511151123921115111973111512103811115121042111513312311151326 9
411151414591115141148111151510381111515207311115161866111516238611151712 5
211151719841115181758111518155611115191155111519247611152019731115201 96
311152110421115211972111522269411152219751115231148111523186311152420 7
311152414521115252386111525188211152619841115261661111527155611152716 6
511152824761115287281115291963111529186511153019721115302181111531197 5
111531146111153218631115321250111533145211153317681115341882111534281 1
111153516611115352283111536166511115362385111537728111537187011153818 65
111538114711153921811115391873111540146111154084111154112501115411244 1
115421768111542156311154328111111543186811154422831115449481115452385 1
115451348111546187011154614601115471147111547114811154818731115485221 1
154984111154915541115501244111550134811155115631115512710911155218681 1
155213431115539481115531130111554134811155430118111555146011155512571 1
155611481115568311115575221115572711011155815541115581574111559134811 1
559114211156027109111560218211156113431115613613711156211301115622378 1
115633011811156393711156412571115641979111565831111565166511156627110 1
115662082111567157411156718861115681142111568103711156921821115696311 1
157036137111570104411157123781115719461115729371115729421115731979111 5
739361115741665111574249411157520821115751244111576188611157616571115 7
710371115775201115786311115781036111579104411157993711158094611158015 5
711158194211158118751115829361115822077111583249411158318721115841244 1
115841043111585165711158512461115865201115861766111587103611158714681 1
158893711158872911158915571115892611011159018751115908351115912077111 5
911042111592187211159215611115931043111593176911159412461115949411115 9
517661115953181115961468111596167311159772912159752211159826110121598 6
311115998351215991664111600104212160016631116011561121601166311160217 6
912160225106111603941121603730111604318121604155711160516731216051459 1
216064191216061668121607522121607124312160863112160883412160916641216 0
913541216101663121610938121611166312161117761216122510612161242012161 3
730121613198012161415571216141873121615145912161517771216161668121616 9
421216171243121617321381216188341216189431216191354121619239112162093 8
121620197612162117761216212389121622420121622196812162319801216231036 1
216241873121624134312162517771216251042121626942121626187312162732138 1
216273213112162894312162819841216292391121629176812163019761216301041 1
216312389121631113812163219681216322711512163310361216332611212163413 4
312163426104121635104212163510461216361873121636321271216373213112163 7
208612163819841216381870121639176812163925105121640104112164084112164 1

1138121641115012164227115121642229612164326112121643145712164426104121
6441553121645104612164511391216463212712164622921216472086121647291101
2164818701216481247121649251051216491554121650841121650146112165111501
2165183312165222961216521772121653145712165373512165415531216549391216
5511391216551772121656229212165610351216572911012165762912165812471216
5814741216591554121659177112166014611216601766121661833121661261141216
6217721216622488121663735121663281111216649391216643011012166517721216
6516621216661035121666156512166762912166752712166814741216681244121669
1771121669124812167017661216706251216712611412167111451216722488121672
3312312167328111121673248412167430110121674166312167516621216751350121
6761565121676371391216775271216771872121678124412167811531216791248121
6791870121680625121680135112168111451216811249121682331231216821347121
6832484121683218112168416631216842210112168513501216851039121686371391
2168623841216871872121687939121688115312168811461216891870121689125612
1690135112169012471216911249121691627121692134712169220721216932181121
6939391216942210112169493512169510391216951455121696238412169647169121
6979391216972110512169811461216981457121699125612169962612170012471217
0010361217016271217011149121702207212170273012170393912170314591217049
3512170417671217051455121705291231217064716912170619791217072110512170
7239412170814571317081560121709626131709261151217101036131710241011217
1111491317112711112171273013171225112121713145913171320901217141767131
7141556121715291231317151558121716197913171653012171723941317171454131
7184191317183512113171915601317199421317202611513172019861317212410113
1721271071317222711113172211551317232511213172345188131724209013172442
1821317251556131725271181317261558131726155813172753013172773413172814
5413172813541317293512113172919101131730942131730157213173119861317317
3013173227107131732239413173311551317331674131734451881317341967131735
4218213173511521317362711813173683813173715581317372810613173873413173
8511931317391354131739135513174019101131740391391317411572131741145313
1742730131742198913174323941317432510113174416741317441974131745196713
1745218213174611521317468321317478381317471358131748281061317481668131
7495119313174918711317501355131750156413175139139141751167213175214531
4175214541317531989141753167613175425101141754197513175519741417552186
1317562182141756261171317578321417571148131758135814175813501317591668
1417593715713176018711417603314313176115641417612911214176241914176217
7814176316721417631678141764145414176410431417651676141765523141766197
5141766725141767218614176716621417682611714176822901417691148141769145
6141770135014177051814177137157141771341381417723314314177244187141773
2911214177317831417741778141774155914177516781417751255141776104314177
6134914177752314177718841417787251417781250141779166214177942114178022

9014178012531417811456141781218614178251814178225107141783341381417839
4314178444187141784156114178517831417851355141786155914178615581417871
2551417872611414178813491417881861141789188414178913541417901250141790
9391417914211417918391417921253141792136014179321861417939451417942510
7141794261091417959431417951464141796156114179612511417971355141797114
2141798155814179810501417992611414179963214180018611418006311418011354
1418011036141802939141802136014180383915180362514180413601518047301418
0594515180573914180626109151806831141807146415180772714180812511518089
3714180911421518098341418101050151810939141811632151811729141812631151
8127281418131036151813833141814136015181452315181541915181572615181662
5151816939151817730151817836151818739151818737151819831151819521151820
7271518207291518219371518211152151822834151822834151823939151823114215
1824729151824126315182572815182562915182683315182674215182752315182772
5151828726151828833151829939151829728151830836151830124515183173715183
1936151832521151832422151833729151833727151834115215183493115183583415
1835113915183611421518365201518371263151837624151838629151838624151839
7421518394171518407251518404181518418331518411046151842728151842420151
8431245151843519151844936151844114115184542215184542015184672715184683
0151847931151847520151848113915184831715184952015184910401518506241518
5083015185162415185162615185241715185252215185341815185341815185410461
5185493715185542015185572815185651915185683515185711411518577321518584
2015185882915185983015185952315186052015186062615186131715186162415186
2104015186262915186383015186352015186462615186441615186552215186572915
1866418151866423151867937151867146215186872815186894015186983515186942
2151870732151870623151871829151871418151872523151872523151873626151873
6251518746241518745241518756291518753191518765201518768411518774161518
7752115187872915187831515187942315187951915188014621518805241518819401
5188152815188242215188252515188362315188353015188441815188463015188552
3151885319151886625151886624151887524151887146915188831915188851915188
9841151889736151890521151890156315189131515189152115189251915189242115
1893524151893420151894528151894319151895525151895314151896530151896627
1518976301518973191518983191518988341518996241518997281519001469151900
6241519015191519015221519027361619029421519031563161903186815190452116
1904736151905421161905830151906420161906840151907319161907731151908314
1619081459151909627161909948151910319161910104415191183416191113471519
1272816191216711519136241619131571151914522161914134916191541916191521
1001619169421619161149161917186816191742216191873616191872716191983016
1919103916192084016192062516192173116192110411619221459161922732161923
9481619231155161924104416192413491619251347161925940161926167116192615
6916192715711619272186161928134916192821981619292110016192919821619301

1491619308441619314221619312090161932727161932156716193310391619331264
1619346251619342291161935104116193510431619367321619363211816193711551
6193728122161938134916193814461619399401619391873161940156916194011531
6194121861619411037161942219816194218781619431982161943525161944844161
9441561161945209016194512631619461567161946166716194712641619477281619
4822911619488311619491043161949176716195032118161950145816195128122161
9517321619521446161952125116195318731619531148161954115316195412431619
5510371619551038161956187816195663416195752516195712571619581561161958
7341619591263161959937161960166716196019651619617281619611258161962831
1619622396161963176716196317711619641458161964177216196573216196514631
6196612511619661661161967114816196717691619681243161968156516196910381
6196913541619706341619702493161971125716197120741619727341619722292161
9739371619732198161974196516197415621619751258161975104216197623961619
7627103161977177116197729109161978177216197819711619791463161979157516
1980166116198018681619811769161981251191619821565161982251101619831354
1619836291619842493161984739161985207416198514511619862292161986114516
1987219816198719911619881562161988104316198910421619891359161990271031
6199024103161991291091619911681161992197116199220891619931575161993321
3116199418681619941768161995251191619951983161996251101619961557161997
6291619971564161998739161998187616199914511619998401620001145162000104
1162001199116200194116200210431620021767162003135916200313561620042410
3162004166916200516811620051248162006208916200611521620073213116200724
9416200817681620081362162009198316200911561620101557162010727162011156
4162011186516201218761620121551162013840162013241071620141041162014944
1620159411620151357162016176716201622841620171356162017229416201816691
6201852016201912481620191566162020115216202019711620212494162021114316
2022136216202273516202311561620239421620247271620241249162025186516202
5177516202615511620262291162027241071620271253162028944162028145116202
9135716202983216203022841720302195162031229417203112571620325201720329
3116203315661720331360162034197117203417761620351143172035115716203673
5172036231101620379421720371149162038124917203816711620391775172039942
1620402291172040843162041125317204123116162042145117204213591620438321
7204373117204441917204421821720452195172045146817204612571720461353172
0479311720471871172048136017204812521720491776172049124517205011571720
5011501720512311017205193617205211491720522510817205316711720531251172
0549421720541253172055843172055104517205623116172056948172057135917205
7125017205873117205813551720592182172059124817206014681720601359172061
1353172061834172062187117206222901720631252172063177117206412451720641
1561720651150172065165717206693617206613481720672510817206772417206812
5117206818671720691253172069115917207010451720701044172071948172071134

817207212501720726301720731355172073218717207412481720741258172075135917207519821720768341720761976172077229017207794217207817711720789451720791156172079519172080165717208025100172081134817208194417208272417208216711720831867172083145517208411591720841568172085104417208513521720861348172086188417208763017208718741720882187172088219217208912581720892511317209019821720901358172091197617209115641720929421720921041172093945172093199617209451917209493517209525100172095145417209694417209618731720971671172097155717209814551720982287172099156817209917811721001352172100157017210118841721011139172102187417210213631721032192172103937172104251131721041248172105135817210513601721061564172106114217210710411721071460172108199617210812461721099351721091456172110145417211093617211118731721111357172112155717211212531721132287172113114017211417811721141454172115157017211513501721161139172116930172117136317211719761721189371721181453172119124817211910371721201360172120114517212111421721211253172122146017212226921721231246172123155817212414561721241460172125936172125114717212613571721262711417212712531721271471172128114017212823921721291454172129146317213013501721301978172131930172131166717213219761721329401721331453172133146117213410371721349461721351145172135945172136125317213618701721372692172137835172138155817213853017213914601721392290172140114717214021721721412711418214111421721421471182142151691721432392182143313172144146318214462717214519781821451658172146166718214611461721479401821471144172148146118214862717214994618214910421721509451821501661172151187018215173017215283518215293917215353018215311481721542290182154197817215521721821551875182156419182156198018215711421821573412718215815691821582210918215931318215938173182160627182160135618216116581821613214218216211461821623315118216311441821637251821646271821641758182165104218216583718216616611821662381182167730182167155418216893918216830129182169114818216928129182170197818217012481821711875182171281231821721980182172147018217334127182173115018217422109182174135018217538173182175124118217613561821761250182177321421821771657182178331511821788281821797251821791963182180175818218015621821818371821818301821822381182182207918218315541821831139182184301291821849371821852812918218523102182186124818218613671821872812318218711521821881470182188166318218911501821892812218219013501821902611118219112411821911359182192125018219213651821931657182193105118219482818219414541821951963182195198318219615621821961892182197830182197301181821982079182198197518219911391821998431822009371822001349182201231021822011149182202136718220212491822031152182203208518220416631822049341822052812218220512511822062611118220611371822071359182207621182208136518220882418220910511822091036182210145418221012431822111983182211156518221218921822128271822213

3011818221310381822141975182214166418221584318221592918221613491822161
3461822171149182217241031822181249182218124818221920851822191776182220
9341822201051182221125118222194018222211371822223514818222362118222393
8182224824182224103418222510361822252918222612431822226259118222715651 8
2227134618222882718222813501822291038182229310182230166418223015531822
3192918223162318223213461822323101822332410318223313511822341248182234
2078182235177618223512491822361051182236197718223794018223783518223835
1481822381549182239938182239114818224010341822405271822412918224111471
8224225911822421465182243134618224352518224413501822441149182245310182
2451466182246155318224694218224762318224710481822483101822486251822491
3511822491868182250207818225024921822511249192251151822521977192252519
1822538351922535171822541549192254145218225511481922551352182256527192
2568301822571147192257134518225814651922581452182259525192259144318226
0114919226013451822611466192261114618226294219226283418226310481922636
2518226462519226462618226518681922659341822662492192266104219226741919
2267115119226815192268830192269519192269932192270517192270113819227114
5219227115571922721352192272524192273830192273145719227413451922741038
1922751452192275835192276144319227618761922771345192277114119227811461
9227812401922798341922791038192280625192280834192281626192281114919228
2934192282629192283104219228393619228411511922849341922858301922851653
1922869321922868351922871138192287114719228815571922881148192289524192
2891246192290145719229083419229110381922918351922928351922921650192293
1876192293145019229411411922941040192295124019229512461922961038192296
1354192297834192297103519229811491922981455192299629192299146019230093
6192300937192301934192301104119230216531923027361923038351923037291923
0411471923041148192305114819230594119230612461923068331923078341923073
1619230883519230829129192309165019230911521923101450192310125119231110
4019231111461923121246192312114619231313541923139331923141035192314186
1192315145519231512561923161460192316831192317937192317103819231810411
9231884319231973619231910361923207291923208291923211148192321934192322
9411923228361923238331923231674192324316192324935192325291291923252598
1923261152192326136219232712511923278391923281146192328728192329114619
2329931192330933192330522192331186119233183319233212561923326331923338
3119233394119233410381923347251923358431923356271923361036192336524192
3378291923379371923389341923384201923398361923394141923401674192340944
1923419351923414161923422598192342624192343136219234310381923448391923
4441719234572819234552319234693119234694319234752219234710451923488331
9234814461923496332023491219235094120235052319235172520235141519235262
7202352631192353524202353419192354937202354124419235542020235573019235
6414202356829192357944202357415192358416202358186819235962420235951919

2360103820236093719236141720236152319236252320236211441923639432023631
0391923641045202364103719236514462023655182023664192023661348202367122
0236741420236852320236852020236941520236973220237063120237011402023714
1920237141920237212442023725182023737302023735152023748292023743102023
7541520237541620237618682023762102023775192023775182023789372023782820
2379523202379310202380114420238031220238110392023813122023821037202382
2112023835182023834142023841348202384620202385414202385519202386520202
3866202023877322023872293202388114020238835130202389419202389213202390
5182023908312023915152023915192023923102023928302023934162023931035202
3942102023947272023955182023952187202396282023961035202397310202397517
2023983122023989292023993122023995212024002112024001135202401414202401
1974202402620202402939202403519202403841202404620202404628202405229320
2405834202406351302024061460202407213202407833202408831202408623202409
5192024091559202410830202410530202411103520241113672024127272024121042
2024132187202413123920241410352024141249202415517202415519202416929202
4166212024175212024171659202418113520241883720241919742024192611520242
0939202420197620242184120242114612024226282024221342202423834202423104
6202424146020242412492024258332024251869202426623202426837202427155920
2427519202428530202428157520242913672024291765202430104220243093520243
1123920243162020243212492024329332024335192024339362024346212024342710
5202435165920243515752024368372024361248202437261152024371244202438197
6202438176820243914612024399372024401342202440828202441104620244141820
2442124920244220712024431869202443517202444837202444166220244551920244
5281042024461575202446123920244717652024471344202448935202448831202449
6202024497302024509332024508362024519362024516272024522710520245212472
0245315752024537322024541248202454315202455124420245562020245617682024
5613562024579372024571244202458828202458103820245941820245993520246020
7120246011422024615172024611462202462166220246217652024632810420246311
3620246412392024649422024651344202465134920246683120246672220246773020
2467621202468836202468145220246962720246915652024701247202470623202471
7322024711870202472315202472124720247362020247382820247413562024748382
0247512442024751250202476103820247617672024779352024779352024781142202
4782085202479146220247918752024801765202480125920248111362024811353202
4829422024821979202483134920248311502024847222124847312024856212124851
1422024861452212486157220248715652124871044202488623212488145820248918
7021248983520249012472124901459202491828212491942202492838212492845202
4931250212493837202494176721249410442024959352124957292024962085212496
1048202497187521249762420249812592124988372024991353212499735202500197
9212500114220250111502125011353212502419212502135721250373121250352621
2504114221250472721250515722125051352212506104421250662221250714582125

0722822125088352125081553212509145921250983821251094221251062921251184
5212511155921251283721251213512125131044212513188021251472921251413572
1251510482125158392125166242125161147212517837212517104021251873521251
8104921251911422125191772212520135321252083721252113572125217302125225
2621252216612125237272125231045212524135221252413562125256222125251350
2125262282212526145521252715532125271882212528838212528114621252962921
2529124721253015592125302083212531135121253184321253218802125328372125
3313572125337332125348392125349372125351147212535114521253610402125365
2521253710492125378312125381772212538731212539837212539135521254073021
2540735212541166121254183721254210452125428342125431356212543732212544
1350212544835212545145521254573221254618822125469392125471146212547737
2125481247212548936212549208321254911422125508432125509342125518372125
5173521255273321255283321255393721255352921255411452125548422125555252
1255583921255683121255615832125577312125571675212558135521255862921255
9735212559125121256083721256012612125618342125611461212562732212562147
2212563835212563104521256473221256414652125659392125651251212566737212
5661041212567936212567166921256811422125687342125699342125696312125707
3521257023832125718332125718402125725292125721143212573842212573199221
2574839212574115721257515832125758332125761675212576630212577629212577
1249212578125121257873221257912612125791037212580146121258020752125811
4722125811142212582104521258293521258314652125837262125841251212584938
2125851041212585938212586166921258611572125877342125871666212588631212
5881252212589238321258962321259084021259052521259111432125911142212592
1992212592135021259311572125938322125948332125948292125956302125951043
2125961249222596104021259773222259722862125981037222598124421259920752
2259911442126001142222600702622126019352226011346212602726222602124321
2603938222603134521260493822260415612126051157222605935212606166622260
6251012126071252222607144821260862322260810412126095252226091772212610
1142222610228521261113502226119382126128322226122210221261382922261337
1442126141043222614176922261541922261562322261610402226164152226172286
2226171252222618124422261822982222619114422261993822226207026222262025 10
8222621134622226211676222622124322262214512222623134522226232094222624156
1222624846222625935222625241002222626251012222626218122226271448222627936
2222628104122226281143222629177222226292089222630228522226301576222631938 2
2263127128222632221022226322089222633371442222633134422226341769222634 10
4522263562322263535148222636415222636178522226371252222637936222638229 8
2226384182222639938222639115122264025108222640146122264116762226412397 2
2264214512222642146022264320942222643114522264484622226449312222645241 0022
2645841222646218122264684122264793622264727106222648114322264816742226
4920892222649218922265015762222650166422265127128222651125922265220892 22

6528412226531344222653187722265410452226547352226553514822265516562226
5617852226561560222657936222657176022265841822265815552226591151222659
1245222660146122266027101222661239722266110432226621460222662176722266
3114522266372922266493122266494122266584122266518602222666841222666186 3
2226672710622266729136222668167422266829122222669218922266993122267016
6422267011452226711259222671104122267284122267212632222673187722267344 1
9922267473523267431422267516562326755212222676156023267652122267717602 3
2677420222678155523267842122267912452326791042222680271012326807302226
8110432326815282222682176723268252522268372923268331522268494123268462 9
2226851860232685728222686186323268662222268729136232687211042226882912
2232688518222689931232689522222690114523269010412226911041232691135622
2692126323269213562226934419923269394023269441923269415662326953142326
9542123269652123269617632326975212326972610423269842023269810302326994
2123269951923270010422327003213823270173023270115622327025282327028372
3270352523270372523270431523270462423270562923270514552327067282327062
5111232707622232707732232708211042327089422327095182327094192327105222
3271010422327111041232711124123271213562327125192327131356232713522232
7149402327148482327151566232715625232716421232716727232717176323271719
8523271826104232718839232719103023271973723272051923272073823272132138
2327214242327221562232722630232723837232723114823272472523272412522327
2562423272583323272614552327269392327272511123272751923272873223272872
8232729942232729727232730419232730725232731104223273152323273212412327
3252123273351923273310452327345222327347332327358482327351249232736625
2327361447232737727232737836232738198523273872823273983923273994123274
0737232740421232741738232741104223274242423274272723274363023274310422
3274411482327441675232745125223274593723274683323274652423274793923274
7838232748519232748114523274972823274984423275072723275012442327517252
3275110482327525232327527302327535212327531047232754104523275462223275
5733232755840232756124923275612472327571447232757829232758836232758522
2327597282327598332327609412327605212327614212327611448232762104223276
2522232763727232763526232764104223276424802327651675232765632232766937
2327666202327675242327676262327688382327687272327691145232769936232770
8442327707262327711244232771517232772104823277283023277373023277316652
3277410472327741043232775622232775630232776840232776104723277712472327
7762823277882923277883423277952222327798372327808332327807312327815212 3
2781522232782144823278214612327835222327838432327845262327848362327852
4802327857242327866322327868342327876202327879342327886262327888402327
8972723278911422327909362327901863232791726232791729232792517242792951
2327938302427932612223279416652427941873232795104324279519942327966302
4279611432327971047242797178123279862824279893723279983424279911502328

0083724280093723280173124280193823280252224280228102232803146124280312
5923280484324280414652328058362428051563232806724242806167023280783424
2807145623280893424280893823280984024280973123281011422428102085232811
1863242811938232812729242812351502428134192428132612124281495124281413
6824281526122242815947242816187324281611492428171994242817169924281811
4324281819852428191781242819228724282093724282017702428211150242821156
6242822937242822783502428239382428231783242824281022428244821724282512
5924282513612428261465242826482032428271563242827145524282816702428281
9872428291456242829145824283093824283022992428317312428313310824283220
8524283221832428339382428337352428343515024283438140242835261212428351
0442428361368242836311062428379472428371147242838114924283815702428391
6992428391148242840198524284072824284122872428411667242842177024284218
8324284315662428431045242844783502428441776242845178324284523102242846
4821724284638173242847136124284784824284848203242848115324284914552428
4950219242850198724285019872428511458242851231032428522299242852763152
4285333108242853391802428542183242854271202428557352428552286242856381
4025285694424285710442528571973242858311062528582292242859114725285916
6624286015702528609472428611148252861125124286272825286216702428631667
2528631765242864188325286494224286510452528651762242866177625286683924
2867231022528679372428683817325286894224286984825286983824287011532528
7013502428715021925287110402428721987252872166824287323103252873218724
2874763152528741565242875391802528752096242876271202528761985242877228
6252877105125287841925287893825287994425287973425288019732528807392528
8122922528819442528821666252882124925288394725288372825288412512528841
1482528851670252885104125288617652528861149252887942252887156925288817
6225288883725288983925288911482528909372528909422528919422528919492528
9283825289213692528931350252893837252894104025289473325289516682528951
6692528962187252896114425289715652528971768252898209625289893725289919
8525289915552529001051252900165725290193825290152225290273425290211492
5290373925290313552529049442529041046252905124925290594325290672825290
6726252907114825290773325290810412529081564252909114925290912472529101
5692529101455252911837252911524252912114825291214442529139422529131352
2529149492529141772252915136925291513612529168372529161148252917733252
9171350252918166925291812612529191144252919527252920176825292011472529
2193725292142025292215555252922114725292316572529232285252924522252924 8
3625292511492529251669252926135525292693525292710462529279422529289432
5292810452529297262529291364252930733252930944252931156425293152625293
2124725293212452529331455262933132529345242629344192529351444262935627
2529361352262936114525293717722629371143252938136126293883825293911482
6293911392529401350262940829252941126126294152125294252726294283225294

3114726294341625294442026294462025294511472629458352529462285262946623
2529478362629477332529481669262948732252949935262949520252950942262950
1038252951104526295173225295213642629526252529539442629531146252954526
2629548322529551245262955521262956419262956940262957132629575202629584
1926295852326295962726295973026296011452629609392629611143262961837262
9628382629625192629631139262963723262964829262964624262965521262965626
2629668322629667262629674162629678352629686202629687342629698352629694
1626297062326297052426297173326297152226297273226297273226297352026297
3125126297410382629746252629757322629757262629766252629769482629771146
2629778312629788322629783172629795212629794202629809402629803122629815
2026298121962629825232629827272629837302629831143262984939262984835262
9858372629855252629865192629864192629877232629873152629886242629883152
6298962626298942026299072626299031426299183526299142326299273426299221
4262993416262993838262994524262994620262995522262995135726299673226299
6316262997125126299752326299862526299831526299972626299982926300094826
3000521263001831263001419263002317263002623263003420263003628263004312
2630045202630052196263005417263006727263006628263007114326300752226300
8835263008319263009525263009623263010419263010417263011315263011419263
0123152630124162630134202630134182630143142630148312630154232630156262
6301621426301662326301783826301752226301862026301862426301913572630194
1726302031626302061926302152326302162026302231526302231826302382926302
3318263024521263024622263025419263025728263026623263026421263027628263
0273162630285202630284192630294172630296212630306282630304192630315222
6303141926303231926303241426303362326303331126303441726303472626303541
9263035829263036416263036521263037418263037418263038831263038724263039
6262630394142630406232630403172630415222630411140263042624263042317263
0434172630435262630446192630446242630456202630457252630463182630464192
6304731826304751626304862226304893626304972826304951626305042126305094
0263051316263051628263052419263052418263053621263053829263054419263054
5212630554192630553152630564142630567242630573112630574142630587262630
5831726305982926305911402630605212630605212630614182630614232630627242
6306242026306341426306331726306431726306452426306511402630653162630663
1726306621026306752626306762326306862426306893626306972526306951826307
0419263070313263071516263071104426307293626307252126307351626307331626
3074940263074725263075628263075414263076418263076317263077829263077114
0263078521263078521263079315263079311263080724263080418263081414263081
5262630823172630823172630831140263083420263084521263084627263085423263
0855222630864202630861138263087317263087931263088524263088731263089316
2630893202630902102630901041263091623263091521263092936263092418263093
5182630937242630943132630944142630951044263095317263096521263096114026

3097316263097423263098725263098114126309941426309993526310031726310052
1263101114026310152026310252126310231826310331126310341826310441826310
4314263105526263105631263106317263106829263107420263107521263108627263
1084222631095222631096202631101138263110414263111931263111317263112731
2631121140263113320263113629263114104126311432126311552126311594226311
6418263116529263117724263117522263118414263118935263119317263119937263
1201140263120519263121423263121104126312211412631228292631239352631235
2126312452126312442026312552026312541626312631826312652226312741826312
7313263128314263128417263129631263129935263130829263130523263131521263
1316252631324222631325242631336202631337292631344142631345222631353172
6313541826313611402631362172631376292631374192631383212631385202631399
4226313962326314052926314072726314152226314141626314293526314241826314
3937263143522263144519263144419263145104126314593426314682926314631926
3147521263147628263148420263148726263149416263149420263150522263150415
2631513132631513162631524172631524172631539352631536252631545232631545
1726315562526315542326315652426315632126315772926315772226315852226315
8521263159418263159199226316021727316062426316141927316131626316252027
3162947263163623273163104526316472727316410432631654162731657282631664
1827316616652631675222731671456263168419273168728263169934273169207426
3170319273170113526317162827317119722631727262731728362631734202731731
1582631744152731741569263175316273175197726317641727317694326317762527
3177208526317851727317824106263179423273179124426318032127318094526318
1722273181144726318252127318211422631831992273183177727318441927318414
6227318562427318582727318631627318672827318794727318711472731881045273
1889332731891043273189834273190728273190523273191166527319113502731921
4562731921253273193728273193136127319420742731948392731951135273195166
9273196197227319613602731978362731971147273198115827319816552731991569
2731993813627320019772732001247273201943273201145927320220852732021243
2732032410627320328110273204124427320413582732059452732051361273206144
7273206135127320711422732071042273208177727320814682732091462273209731
2732108272732109432732117282732111144273212114727321252827321393327321
3839273214834273214114727321552327321515582732161350273216739273217125
3273217631273218136127321812492732198392732192710427322016692732202189
2732211360273221167027322211472732222082273223165527322319782732243813
6273224145727322512472732251444273226145927322694427322712432732271247
2732282811027322894027322913582732299322732301361273230730273231135127
3231932273232104227323210382732331468273233831273234731273234103727323
5943273235124727323611442732364212732375282732378342732388392732387282
7323911472732391145273240155827324014562732417392732411670273242631273
2421142273243124927324313572732442710427324483327324521892732451564273

2461670273246186627324720822732471871273248197827324811402732491457273
2491352273250144427325017632732519442732511561273252124727325211512732
5394028325313273254932283254419273255730283255938273256932283256198527
3257103828325712592732588312832581255273259103728325922922732601247283
2601363273261421283261186727326283428326217672732637282832631037273264
1145283264166427326514562832651765273266167028326610492732671142283267
3814827326813572832681346273269833283269936273270156428327016722732711
8662832713311927327218712832721976273273114028327310422732741352283274
1144273275176328327527108273276156128327615502732771151283277261062832
7841928327811482832791328327929110283280419283280155928328193828328127
1092832821985283282208228328312592832832073283284125528328425100283285
2292283285933283286136328328614572832871867283287157528328817672832881
7732832891037283289186928329016642832902910828329117652832911252283292
1049283292105128329338148283293944283294134628329410482832959362832951
6752832961672283296135228329733119283297188128329819762832982077283299
1042283299188628330011442833002610628330127108283301134928330215502833
0223922833032610628330362928330411482833048342833052911028330515552833
0615592833061265283307271092833071574283308208228330813502833092073283
3092597283310251002833101773283311933283311208228331214572833121566283
3131575283313177528331417732833148402833151869283315188428331629108283
3161364283317125228331763328331810512833187352833199442833191142283320
1048283320145828332116752833217282833221352283322155828332318812833231
9782833242077283324218728332518862833251362283326261062833268402833271
3492833271770283328239228332829109283329629283329261052833308342833302
8102283331155528333121782833321265283332167028333315742833331765283334
1350283334261132833352597283335146728333617732833361875283337208228333
7196628333815662833381559283339177528333916602833408402833401963283341
1884293341132833421364293342104028333436332933431156283344735293344104 3
2833451142293345124528334614582933461042283347728293347127028334815582
9334821902833491978293349743283350218729335031120283351136229335163728
3352840293352188628335317702933531161283354291092933541669283355261052
9335564028335628102293356135628335721782933572711828335816702933581352
2833591765293359134728336026113293360197228336114672933618322833621875
2933621759283363196629336313602833641559293364207628336516602933652711
7283366196329336612442933674192933671887293368132933681457293369104029
3369231032933701156293370627293371104329337115702933721245293372166729
3373104229337323902933741270293374125029337521902933757302933767432933
7617742933773112029337773929337863729337816772933791886293379136929338
0116129338028124293381166929338119882933826402933821243293383135629338
3842293384271182933841045293385135229338521892933861347293386251122933

8719722933871989293388832293388135229338917592933891459293390136029339
0166229339120762933911564293392271172933921991293393124429339312652933
9418872933946382933951457293395135629339623103293396940293397627293397
7282933981570293398178629339916672933995252934002390293400125329340112
5029340113642934027302934021450293403177429340322842934047392934041565
2934051677293405166429340613692934066362934072812429340715732934081988
2934081765293409124329340994729341084230341013293411104530341129293412
2189303412831293413251123034131246293414198930341483329341513523034151
1422934161459303416104429341716623034172298293418156430341832152293419
1991303419136029342012653034208322934216383034215262934221356303422943
2934239403034235262934247283034249432934251786303425115829342652530342
6628293427125330342783929342813643034281460293429145030342911402934302
2843034302083293431156530343113672934321664303432146429343363630343321
8529343415733034341665293435176530343583129343694730343618793034374193
0343727113303438133034381660303439293034392292303440831303440948303441
1246303441114530344283330344218713034431142303443634303444104430344410
4330344522983034451562303446321523034461557303447136030344716723034488
3230344822873034495263034492285303450943303450156730345152630345114573
0345294330345216563034531158303453939303454628303454115130345583930345
5178330345614603034561887303457114030345728115303458208330345810373034
5913673034591971303460146430346094130346121853034611146303462166530346
2145530346383130346324813034646187930346412553034652711330346520863034
6166030346694230346722923034671976303468948303468832303469114530346910
3930347018713134701330347163431347141930347210433134723163034731562313
4739473034741557313474833303475167231347518723034762287313476166730347
7228531347783930347815673134788353034791457313479271053034801656313480
1454303481939313481187030348211513134821554303483178331348317763034841
8873134842911230348528115313485258230348610373134861869303487197131348
7165430348894131348811453034891146313489301113034901455313490218730349
1248131349115663034921255313492156430349320863134937303034949423134941
5653034951976313495104030349683231349621783034971039313497114131349841
9313498259731349913313499165831350041931350019683135013163135012292313
5029473135023112231350383331350327100313504187232350413313505166732350
5831313506839323506186631350783532350724923135082710532350817633135091
4543235096323135101870323510103631351115543235118253135121776323512146
0313513291123235131455313514258232351411423135151869323515167531351616
5432351616663135171145323517146431351830111323518156631351921873235191
1563135201566323520134631352115643235218313135227303235221259313523156
5323523219531352410403235249493135252178323525135131352611413235261459
3135272597323527105231352816583235281145313529196832352918693135302292

3235301775313531311223235317303135322710032353211443235334193235335263
2353413333534146132353583133353512433235361866333536626323537249233353
7281273235381763333538281263235396323335392914332354010363335401780323
5418253335418423235421460333542229832354314553335431676323544114233354
4636323545167533354513583235461666333546261053235471464333547146032354
8156633354813553235491156333549155732355013463335502480323551831333551
1468323552125933355235155323553219533355323102323554949333554176532355
5135133355518853235561459333556187532355710523335571672323558114533355
8167432355918693333559167732356017753333560136132356173033335611679323562
1144333562146432356352633335631769333564419333564146433356514613335652 0
8133356612433333566251223333567626333567145633335682812733335683022333356 9
2812633335692492333570291433333570481963333571178033335712275333572842333 5
7213613333573229833335731766333574167633335748353333575636333357531633335761
3583333576136533335772610533335778353333578146033335788383333579135533335796 2
9333580155733335808333333581248033335811258333358214683333582231033335833 51
5533358362267333584231023333584351373333585176533335852585333586188533358
6702943333587187533335871139333588167233335883012633335891674333589146333 3
5901677333590146333359113613333591126733335921679333592229933335931464333
5931987333594176933335946343333595146433335951243333596208133335961562333 5
9725122333597729333598145633335988333333599302233333599125533360024923336
0084633360148196333601837333602227533360217713333603136133360394033360 4
1766333604145933360583533336051892333606316333360615933333607136534360717
6733360883534360818683333609838343609321233336106293436101050333611833 3
4361111463336121258343612166633361323103343613166133336146226734361416 6
6333615351373436152910533336162585343616135333361770294343617125133361 8
1139343618271073336193012634361919873333620146333436202710933362114633 43
6212074333622126734362216753333623229934362383533336241987343624178233 36
2563434362519873333626124333436261045333627156233436272170333628729343628
2693333629833334362922853333630125533436301762333631846343631935333632837
3436321146333633177134363312483333634940343634125433336351459343635730 33
3636189234363610413333637159333436373214333436384193436381569343639176 734
3639341603436401868343640145434336413212333436418393436421050343642134 93
4364311463436432310034364416663436449453436451661343645207334364616663
4364610513436472910534364713583436481353343648187734364912513436493413
0343650271073436501147343651198734365114593436522710934365224893436532
0743436531752343654167534365472634365583534365582934365617823436561657
3436571987343657103534365810453436589363436592170343659103834366026933
4366015573436612285353661241003436621762353662196834366393535366322853
4366411463536641143343665124835366515633436661254353666135834366773035
3667136234366810413536682591343669321433536691776343670156935367024108

3436713416035367134115343672145435367228127343673839353673281153436741
3493536741881343675231003536751147343676945353676623343677207335367751
8343678105135367834138343679135835367942134368018773536804183436813413
0353681416343682114735368216623436831459353683412343684248935368412483
4368517523536851367343686726353686727343687829353687229434368816573536
8817783436891035353689167634369093635369083734369110383536911665343692
1557353692219935369341935369313573536942410035369411453536951968353695
1455353696228535369618723536971143353697251083536981563353698104435369
9135835369924100353700136235370033132353701259135370119763537021776353
7021983353703241083537032611135370434115353704301203537052812735370525
9735370628115363706123537071881363707213353708114736370831435370962336
3709313353710518363710317353711341383637117303537124213637128303537134
1836371310453537144163637141251353715166236371583635371641236371612543
5371712483637171458353718136736371883835371972736371911573537202294363
7201555353721177836372162835372216763637225233537238373637231255353724
1665363724938353725219936372511463537261357363726729353727114536372783
1353728145536372815583537291872363729517353730251083637304193537311044
3637318303537322410036373272735373333132363733134735373419763637348303
5373519833637351247353736261113637361145353737301203637376233537382597
3637381050363739419363739104436374012363740837363741213363741135636374
2314363742937363743313363743839363744317363744737363745730363745155836
3746830363746835363747104536374762336374812513637489333637498363637496
2236375012543637501145363751145836375111423637528383637522492363753115
7363753730363754155536375483536375562836375573336375652336375610393637
5712553637571353363758938363758103936375911463637591142363760729363760
7283637618313637617323636762155836376262336376351736376351636376441936 3
7644253637658303637651450363766727363766523363767134736376783636376883
0363768521363769124736376952436377011453637701157363771623363771946363
7721050363772104936377310443637737303637748373637741243363775135636377
5833363776937363776125036377783936377763336377873736377862936377915583
6377973136378083536378073036378162336378193636378293336378211423637836
2236378311413637841145363784103736378511423636785114436378624923637861 4
6336378773036378710343636788835363788835363789733373789211363790103937 3
7902133637911353373791213336379210393737923123636793114237379373536379 47
2837379463136379573237379551836379662337379693736379751637379741736379
8425373798728363799145037379912463638005233738003133638018363738014173
6380252137380241936380352437380362136380411573738047353638059463738052
1536380610493738064163638077303738077283638081243373808624363809833373
8097273638101250373810738363811633373811729363812629373812317363813731
3738134143638147303738144173638159363738155243638161142373816628363817

1141373817521363818103737381810363638191144373819625363820146337382042
0363821103437382152536382283537382242037382341937382310383738242113738
2463337382521337382552237382621337382642237382731237382762337382873537
3828419373829631373829416373830518373830314373831937373831312373832417
3738323143738337283738335193738341246373834316373835313373835724373836
4173738364203738374193738373133738386213738385243738397353738397233738
4021537384041937384141637384173437384272837384241537384362437384352137
3844727373844519373845738373845626373846729373846313373847317373847628
3738484143738485193738494173738494213738505243738506233738516283738514
2237385252137385262337385310363738534213738546253738546323738554203738
5572337385652537385652037385742037385742037385810383738584183738596333
7385952237386052237386042037386142237386152437386262337386241937386341
9373863526373864416373864525373865314373865420373866312373866419373867
3143738675203738685193738684193738693163738694193738707243738703153738
7142037387141837387231337387251637387352437387362537387472337387452237
3875419373875418373876734373876416373877415373877311373878521373878315
3738795193738796263738806263738804133738813133738814203738826283738823
1637388351937388341837388442137388441937388562337388573237388642237388
6529373887623373887623373888421373888516373889632373889316373890723373
8902810037389152037389141937389242037389241937389341837389373137389452
2373894520373895420373895315373896524373896419373897419373897314373898
5263738983163738995253738994193739004203739005273739014193739011048373
9025203739025213739034193739035293739044193739044243739053153739053233
7390641837390632337390751637390742137390862537390841737390952237390941
9373910418373910421373911416373911419373912311373912518373913315373913
5283739146263739145243739154133739153183739164203739164193739173163739
1741937391841837391841437391941937391941937392073237392041937392152937
3921418373922623373922419373923516373923418373924316373924314373925281
0037392542237392641937392631737392741937392741837392873137392852037392
9520373929419373930315373930419373931419373931521373932314373932622373
9333163739334213739344193739345223739355273739356263739361048373936420
3739375213739375293739385293739386293739394243739395213739403233739404
1937394132337394142037394242137394241437394341737394321037394441937394
4414373945421373945524373946419373946104737394751837394741737394852837
3948419373949524373949314373950318373950417373951419373951516373952419
3739526203739534143739533153739544193739543163739554193739553153739564
1837395662237395741937395742037395841837395841837395931437395952937396
0422373960316373961317373961419373962418373962414373963520373963317373
9644193739642173739654193739656303739665213739664143739676223739673153
7396842137396862337396952237396931637397062637397041937397142038397141

5373972529383972622373973629383973103737397452138397410443739754193839
7583237397642038397612513739774143839771038373978210383978155037397941
4383979731373980524383980104837398110473839816243739824173839828343739
8341938398373637398431438398472237398541738398510353739865163839868323
7398762038398711443739883153839887363739893163839895203739903153839906
3337399162238399173037399242038399223933739934183839931560373994529383
9943213737399531638399593337399641938399631122373997414383997167037399
8317383998136637399921738399995037400063038400073337400141438400162937
4002315384002114237400362338400363037400431638400493937400541938400515
4938400641938400683338400741538400742038400862238400842138400910373840
0972838401010443840106223840118323840111146384012125138401262638401310
3838401310463840141550384014145438401573138401584838401610483840165263
8401762438401752838401883438401883838401973638401962338402072238402052
2384021103538402173538402283238402242238402311443840235213840247363840
2472138402552038402551938402663338402642138402773038402742038402823933
8402841538402915603840291038384030321373840301145384031933384031114038
4032311223840321038384033167038403363038403413663840346213840359503840
3511403840367333840367373840376293840374113840381142384038313384039630
3840399333840409393840408273840411549384041932384042833384042936384043
4203840434223840444213840446283840457283840451554384046622384046103438
4047114638404752038404862638404862338404910463840496243840501454384050
4173840518483840514183840525263840524233840535283840534203840548383840
5441738405562338405573138405652238405610363840577353840575183840584223
8405841738405952139405962938406072139406010453840615193940613312638406
2421394062166338406342039406323105384064415394064361383840651038394065
3112638406611453940663412238406711403940672410538406810383940682295384
0696303940699313840706213940705233840711140394071929384072737394072621
3840734113940731985384074313394074176138407593339407512603840768273940
7613673840779323940771038384078936394078208038407942239407931120384080
6283940802077384081155439408134132384082103439408213613840835203940831
0403840846233940841259384085624394085114438408641739408672838408741839
4087198138408842339408841638408942039408973038409041739409015583840917
3139409183438409210363940928333840935183940931258384094417394094155739
4095419394095124139409662939409636148394097104539409710403940983312639
4098832394099166339409918773941002310539410026107394101361383941011454
3941023112639410211483941033412239410318763941042410539410417763941052
2953941052597394106931394106114339410752339410722833941089293941081143
3941096213941091568394110198539411015593941111761394111218539411212603
9411213523941131367394113166439411410383941141551394115208039411593239
4116311203941161242394117207739411710453941183413239411814653941191361

394119115039412010403941209283941211259394121115739412211443941227343941237283941231462394124198139412462439412541639412517863941267303941262277394127155839412715743941288343941289323941298333941293415139413012583941309453941311557394131209439413212413941321673394133361483941331777394134104040413412394135832404135629394136187740413614563941372610740413713523941381454404138219839413911484041391042394140187640414027128394141177640414116763941422597404142125339414311434041431567394144228340414413653941451143404145156239414615684041461453394147155940414783739414821854041481663394149135240414915593941501664404150134739415115514041511567394152932404152628394153124240415315623941541045404154301193941551465404155136339415611504041566313941579284041577343941581157404158198739415973440415918693941601462404160134839416162440416139146394162178640416227101394163227740416311413941641574404164145539416593240416572739416634151404166165239416794540416730105394168209440416823933941691673404169104039417017774041702394404171419404171937404172124041721248404173629404173238840417414564041741041404175135240417515614041762198404176228640417710424041771250404178271284041781042404179167640417913614041801253404180198240418115674041811245404182136540418213534041831562404183167340418414534041841153404185837404185104640418616634041868414041871559404187420404188134740418812534041891567404189239340419062840419012534041911562404191136940419230119404192114340419313634041931362404194631404194208240419573440419512414041961987404196733404197186940419721984041981348404198145340419939146404199207640420027101404200301184042011414042011244404202145540420210394042037274042039444042041652404204632404205301054042056234042062393404206723404207104040420717604042082394404208114640420993740420984240421012484042101458404211238840421132123404212104140421294340421315614042131259404214228640421462840421512504042152510440421610424042161567404217136140421712514042181982404218177040421912454142191240422013534142204194042211673414221733404222115341422227334042231046414223177540422484141422416744042254204142258364042261253414226940404227239341422714624042281253414228156740422913694142291667404230114341423019894042311362414231940404232208241423223944042331241414233251024042347334142341989404235219841423514744042361453414236527404237207641423783440423830118414238125640423912444142391878404240103941424020844042419444142419464042426324142421148404243623414242599404244723414244115240424517604142451055404246114641424614614042478424142471679404248145841424819934042493212341424916704042509434142504144042511259414251135140425262841425217714042532510441425311424042541567414254115040425512514142551988404256177041425612554142574194142572291414258124142582610141425941941425993941426073341426013464142617334142611753414

2621775414262301294142631674414263187241426483641426411464142659404142
6528107414266146241426612404142671567414267114341426816674142683213041
4269198941426913564142709404142701751414271239441427119734142722510241
4272123941427319894242731241427414744242741341427552742427510434142768
3442427610384142771256424277199041427818784242781253414279208442427922
9041428094642428019714142811148424281166041428225994242821559414283115
2424283198941428410554242841356414285146142428538152414286167942428630
1144142871993424287341494142881670424288187141428941442428911524142901
3514242902296414291177142429193841429211424242922275414293115042429322
8441429419884242942410741429512554242952911841429622914242962291414297
2610142429712514142989394242981264414299134642429917684143001753424300
1352414301301294243011663414302187242430210414143031146424303144841430
4281074243046294143051240424305155541430611434243067264143073213042430
7936414308135642430817744143091751424309105041431019734243101164414311
1239424311629424312419424312145742431312424313935424314134243141566424
3151043424315828424316103842431620724243171990424317271234243181253424
3181656424319229042431921684243201971424320271154243211660424321156242
4322155942432211474243231989424323227742432413564243242710942432538152
4243251556424326301144343261242432734149434327213424328187143432863042
4329115243432972742433022964343308354243319384343316234243322275434332
8324243332284434333732424334241074343341052424335291184343351145424336
2291434336125042433712514343371149424338126443433820844243391768434339
4194243401352434340937424341166343434173142434210414343421246424343144
8434343934424344629434344126642434515554343451553424346726434346833424
3479364343471146424348177443434821834243491050434349146042435011644343
5073642435162943435194042435214574343525224243539354343537324243541566
4343549394243558284343559364243562072434356104242435727123434357251114
2435816564343581777424359216843435953042436027115434360125342436115624
3436111384243621147434362738424363227743436312494243642710943436494042
4365155643436511404343664194343666264343671243436773443436821343436883
6434369630434369626434370727434370135343437183543437112554343726234343
7273143437383243437313554343747324343741247434375105243437573043437611
4543437618674343771250434377113443437811494343781146434379208443437973
6434380419434380636434381937434381424434382731434382933434383124643438
3144843438493443438410424343851266434385836434386155343438610454343878
3343438772943438811464343881779434389218343438993643439014604343901147
4343917364343911040434392940434392734434393522434393934434394732434394
5294343959394343955294343969364343961569434397104243439773543439825111
4343986274343991777434399626434400530434400622434401125343440162943440
2113843440293743440373843440373443440412494344045224344059404344051148

4344061140434406831434407626434407836434408734434408842434409836434409
1144434410626434410136434411135343441113524344121255434412837434413 73
1434413827434414135543441462643441512474444151243441673044441621343441
7186744441783443441811344444185174344191146444419623434420736444420726
4344216364444218374344224244444221039434423933444423514434424144844442
4628434425104244442552043442683644442662643442710454444277284344287294
4442862543442917794444296294344309364444306294344311147444431835434432
1040444432931434433734444433935434434934444434624434435529444435521434
4365294444366234344371569444437524434438735444438627434439627444439518
4344406264444403144344416224444414204344426294444424224344439374444438
3743444473444444473343444552244444572843444611484444466294344478314444
4772943444883644444831443444984244444983243445011444444505244344511363
4444511250434452135244445273743445383744445383643445482744445452343445
5626444455103444445641944445682944445712444457312444458213444458210444
4598344444594184444605174444602104444616234444615244444627264444627254
4446383744446352044446410394444646194444655144444655194444666284444663
1144446752044446752744446862644446841944446972844446952244447062544447
0104844447162944447172544447262944447252944447383544447331744447493145
4474124444759354544756294444766244544766314444775214544779344444786234
5447820894444795244544791253444480627454480414444481518454481145744448
2314454482114544448342045448319724444844224544841142444485837454485146
3444486733454486166044448772845448714614444886294544881144444489729454
4891374444490314454490241024444918324544911355444492524454492156444449
3125045449373244449473745449417854444958364544951356444496523454496249
4444497103445449721784444988294544981668444499312454499187044450021045
4500105244450141845450114544445022104545021147444503524454503136244450
4725454504125944450552045450522784445066194545061143444507519454507146
1444508311454508167644450952745450983744451041945451084244451152246451
1124445121048464512629444513725464513157244451452946451429106444515317
4645151864454516419464516945454517124645171459454518629464518259945451
9631464519247445452093446452024954545212089464521197645452212534645221
6754545234144645231352454524145746452494345452511454645254519345452619
7246452618814545271142464527281134545281463464528176645452916604645299
4345453014614645302712945453111444645312595454532137446453212544545332
4102464533135545453413554645341875454535156446453514604545367324645363
2138454537178546453710474545381356464538177345453924944645391880454540
2178464540207845454116684645411560454542187046454218654545431052464543
2285454544145446454418794545451147464545271074545461362474546835454547
1259474547188145454822784745481881454549114347454938167454550146147455
0317454551167647455142045455283747455210464545538424745536304645544194

745548354645551247455516754645566294745561144464557157247455722108464 5
582910647455814544645591864474559134846456094547456044172464561145947 4
561241044645622599474562632464563247447456315654645642495474564147346 4
565197647456527117464566167547456612484645671352474567104546456894347 4
568737464569451934745697334645701881474570166346457128113474571156546 4
572176647457274146457394347457310484645742712947457411404645752595474 5
751266464576125447457685046457713554745772186464578187547457811554645 7
914604745791555464580321384745801258464581104747458113654645821773474 5
826354645831880474583301294645842078484584519464585156048458515614645 8
618654845864194645872285484587199446458818794845881993464589271074845 8
921116474590419484590840474591835484591527474592188148459284947459318 8
148459325105474594381674845943715147459531748459520854745964204845969 4
347459710464845971461474598630484598311414745998354845992812447460016 7
548460027110474601114448460119864746022210848460273747460314544846031 8
894746041348484604145247460544172484605125247460624104484606124147460 7
632484607197747460815654846084017947460914734846092813047461027117484 6
102812047461112484846111460474612104548461254249474613737494613166447 4
614733494614239847461516634946151777474616156549461694147461774149461 7
124847461810484946181879474619114049461928127474620126649462072847462 1
850494621301444746222186494622105347462311554946234015947462415554946 2
432129474625125849462521934746261365494626271164746276354946271891474 6
283012949462816654846294194946291976484630519494630104548463115615046 3
131448463241950463211444846331994504633727484634199350463493648463521 1
165046359324846368405046361253484637527504637115148463884950463852048 4
639251055046391045484640371515046405224846412085504641837484642943504 6
427304846431461504643419484644311415046449364846452812450464510364846 4
627110504646145748464719865046478374846487375046488264846491889504649 9
344846501452504650623484651125250465162348465212415046521245484653197 7
504653621484654401795046546214846552813050465541748465628120504656104 1
484657146050465710374846585424950465883449465941950465983149466016645 0
466093349466123985046615254946621777504662622494663941504663729494664 1
248504664524494665187950466562549466628127504666155449466772850466713 4
149466830144504668135449466910535046691249494670401595046705254946713 2
129504671729494672219350467273249467327116504673627494674189150467493 6
494675166550467513534946761976514676213494677104551467721350467841951 4
678213504679314514679213504680114451468031550468172751468131350468293 6
514682315504683932514683415504684125351468441250468511515146852115046 8
652051468651850468710455146874185046885225146885195046898375146897325 0
469073051469052050469141951469193750469293651469262550469310365146933 1
950469414575146945265046958375146954205046968265146964195046979345146 9

752350469862351469893750469962351469962850470012455147009385047016215147016235047026215147025225047034175147039385047041041514704939504705103751470583250470683451470652350470783151470762650470893351470852050470952551470941950471062251471062650471172951471172850471252451471273650471362551471383450471415545147146255047151341514715734504716135451471673050471712495147179325047185255147188275047197295147198375047207325147207325047216275147218315047229365147225295047231353514723425514724419514724729514725213514725829514726213514726113951472721351472713465147282135147286215147293155147295195147303135147305255147313155147316275147324155147329305147334125147337275147342115147349435147355185147357315147364185247361651473751952473721051473873252473839514739520524739213514740937524740213514741625524741213514742319524742414514743526524743410514744420524744417514745419524745315514746523524746317514747937524747518514748628524748621514749938524749625514750623524750622514751522524751125351475293852475252051475393952475383851475483252475462951475552352475573351475662652475619845147575205247575285147584195247588335147596265247597325147607285247605245147617365247617275147628345247626285147636255247639315147647345247648315147657305247657285147669325247666275147678275247678315147688375247686235147697325247696295147708315247708275147715295247717315147724255247727285147737295247739405147748295247745205147751139524775727514776134652477652151477762152477773351477851952477893351477952552477993951478062752478073251478193052478193351478272752478210425147839435247831041514784731524784525524785419534785312524786165347865165247872105347874145247883953478851452478921353478931352479021353479031152479121353479131552479241453479231052479341053479351852479441753479451852479531553479551652479631753479641752479751853479741552479862153479831452479962553479931452480062253480051852480112535348015165248025205348026215248038385348033185248046295348043185248057335348054185248061984534806414524807528534807259952480883353480841552480973253480931752481052453481018655248117275348119475248126285348121651524813931534813114152481483153481416545248157285348151673524816627534816311295248178315348173145248186235348183155248196295348195195248208275348207205248217315348213155248227285348225185248239405348236215248245205348244135248257275348254195248265215348264165248277335348274155248289335348284155248299395348295265248307325348304135248319335348314195248321042534832415524833104153483341452483452553483441853483541953483531253483631253483693253483751653483721353483841453483831153483951453483941753484031353484052053484131153484121053484231553484262053484331053484341953484451853484451853484521153484651653484631753484741754484742253484841554484873153484931454484963153485031454485072853485151854485152 0

5348525165448528285348536215448538405348543185448548355348553185448559
4353485641854485652153485741454485752653485825995448589385348594155448
5952253486031754486062453486118655448616235348629475448624165348631651
5448637295348641141544864623534865165454486593653486616735448666275348
6731129544867416534868314544868729534869315544869314534870519544870104
1534871720544871932534872315544872523534873518544873735534874621544874
8325348754135448754225348764195448764165348774165448778415348784155448
7872953487941554487941653488052654488093853488141354488172453488241954
4882529534883415544883943534884414544884522534885418544885315534886312
5448867295348879325448875195348882135448887365348893115448899355348904
1754489052053489152054489142153489221054489262953489362054489352053489
4419544894935534895315544895518534896211544896662653489731754489762654 4
8984195448985185448994225448994175449007315449005195449016315449016215
4490272855490216544903520554903295449048285549042105449058405549052105
4490683555490631754490794355490731854490852155490842354490952655490941
7544910938554910634544911522554911317544912624554912525544913623554913
4205449144165549144195449157295549155245449166235549166205449179365549
1741954491862755491842154491941655491941954492072955492031754492131455
4921418544922104155492241954492393255492342354492452355492441954492573
5554925631544926832554926419544927422554927412544928416554928627544929
8415549294195449307295549301035544931416554931419544932938554932418544
9337245549334195449345295549341778544935943554935419544936522554936834
5449373155549374195449387295549386315449395195549394195449407365549408
2754494193555494141954494252055494264054494342155494341954494462955494
4626544945520554945521544946935554946419544947518554947519544948626554
9484195449496265549492105449505185549504195449514175549513165449525195
5495241954495362155495351955495441955495441955495516554955941554956295
5495641955495721055495793755495821055495841955495931755495932055496031
8554960419554961423554961523554962417554962419554963634554963314554964
3175549644195549655255549651855496642055496641955496741955496731755496
8524554968419554969620554969419554970419554970419554971421554971313554
9724195549724195549733175549734185549744185549744195549754195549756225
5497642355497641955497741955497762655497863155497841955497941955497962
7554980412564980314554981627564981315554982419564982210554983103556498
3414554984419564984313554985418564985314554986419564986316554987177856
4987527554988419564988527554989834564989217554990419564990213554991631
5649913125549924195649923125549938275649933145549944195649943125549956
4056499531955499641956499642055499762656499752355499852156499852155499
9419564999316555000519565000416555001419565001275550022105650023195550
0341956500341855500431656500462555500541956500541755500651956500652555

5007419565007310555008941565008295550094195650092855501093756501029555
0114195650112115550123205650124175550134195650132105550145235650143165
5501541956501521455501631456501621055501741956501721255501818565018312
5550194195650193135550203175650205255550214195650213115550224195650223
1055502341956502341355502431356502452155502541956502552555502641856502
6947555027419565027215555028622565028419555029419565029524555030626565
0305255550314195650315175550326275650323175650334195650334195650343145
6503431556503531556503541656503621056503642156503741456503731456503831
3565038525565039314565039732565040316565040935565041527565041632565042
5275650423155650432175650435255565044213565044629565045312565045210565 0
4631256504631256504731456504742256504831256504873356504931956504962856
5050420565050421565051523565051630565052521565052528565053316565053417
5650544165650544195650552756505552056505631956505631256505741856505731
1565058625565058417565059417565059417565060525565060422565061310565061
4225650622956506241956506328565063316565064295650647285650652115650655
2056506641756506642056506721056506751956506831656506841856506921456506
9622565070210565070520565071212565071626565072312565072310565073313565
0732105650745255650745165650753115650754175650763105750769395650774135
7507711435650785215750789405650795255750793613456508094757508083756508
1215575081125256508241957508215745650835245750831569565084525575084176
9565085517575085371535650863175750861243565087419575087221095650883155
7508827132565089416575089209956509042157509015645650913145750912811856
5092525575092135556509373257509312575650949355750942010556509563257509
5391805650963155750962510856509752557509721695650986295750981558565099
2105750991256565100312575100281385651014225751011474565102733575102391
9156510362857510322945651044215751042285565105630585105187356510652858
5106231035651074175851072190565108419585108261155651095205851091881565
1103125851101564565111311585111471635651124175851123816756511341758511
3201055651144225851141782565115422585115311395651164195851162392565117
3165851172411556511872858511819735651195205851191040565120420585120104
3565121519585121156456512241858512217735651236225851231572565124520585
1248375651256265851259345651263105851265122156512721059512711435651285
1659512841185565129417595129146057513041959513012515751319395951311360
5751321143595132259057513394059513337166575134361345951341898575135837
5951353113457513612525951362310657513715745951372812957513815695951381
6735751391769595139124557514037153595140239457514112435951411147575142
2210959514217685751432713259514310505751442099595144187257514515645951
4510515751462811859514610485751471355595147188457514812575951481351575
1492010559514919875751503918059515017785751512510860515149220575152216
9605152136857515315586051531362575154125660515452221575155281386051551

3565751561474605156197357515739191605157156357515822946051582191575159
2285605159211015851604196051605625858516118736051612194585162231036051
6239173585163219060516320805851642611561516411435851651881615165934585
1661564615166932585167471636151671146585168381676151682410158516920105
6151693212958517017826151701668585171311396151711154585172239261517214
6058517324115615173124758517419736151741572585175104061517517755851761
0436151769415851771564615177361645851781773625178125258517915726251792
1925851808376251808375851819346251811039585182512216251822310559518341
9625183187159518411436251849455951854118562518518795951861460625186228
8595187125162518715725951881360625188218859518925906351891782595190371
6663519012515951911898635191114459519231134635192221045951932310663519
3146659519428129635194187059519516736351952090595196124563519617905951
9723946351971875595198114763519821855951991768635199114459520010506452
0017595952011872645201114759520210516452029495952031048645203146259520
4188464520413535952051351645205168259520619876452061869595207177864520
7105160520841964520827122605209492206452091159605210136864521016586052
1113626452111159605212522216452129376052131356645213198760521419736452
1483960521515636452151679605216219164521612506052172110164521752960521
8562586552184217360521921946552193013260522039173655220217360522120806
5522128118615222419655222145461522311436552233214661522493465522425906
1522593265522514646152261146655226732615227241016552271772615228321296
5522834153615229166865522925966152301154665230155761523114606652311149
6152321247665232291146152331572665233219261523417756652341782615235941
6652352310761523636164665236125162523741966523746194625238125266523812
6262523921926652392712162524083766524024976252411039665241177962524223
1056752429336252431871675243115362524494567524418656252451879675245104
2625246228867524612686252471572675247734625248218867524883263524941967
5249135363525017826752501863635251125167525111396352521144675252531635
2532210467525393863525414666752549386352551870675255727635256209067525
6145963525717906752571140635258187567525812486352592185675259830635260
1144675260156264526141967526115546452621759675262124264526311476752631
2476452649496752641255645265146267526583164526613536752667306452671682
6752679346452681869675268135264526910516752691558645270271226752701349
6452711159675271104064527216586852724166452731159685273519645274937685
2745186452751987685275415645276839685276213645277167968527721364527812
5068527811396452795296852793146552804196852804176552814217368528151665
5282301326852823136552832173685283417655284281186852844136552851454685
2855156552863214668528673365528725906852873156552881464685288105065528
9732685289210655290177268529072765529134153685291213655292259668529221
3665293419685293727665294155768529431966529511496852956266652962911468

5296417665297219268529752366529817826852983126652992310768529972866530
0125168530062666530146194685301524665302126268530262366530327121685303
1039665304249768530483966530517796853056266753064196853063236753079336
8530741467530811536853085186753091865685309517675310104268531012476753
1112686853114166753127346853128386753138326853139386753141353685314115
2675315186368531510446753161139685316518675317531685317727675318938685
3185216753199386853191142675320727685320104067532114596853215256753221
1406853221262675323124868532351967532483069532416675325156269532528675
3261554695326416675327124269532742067532812476953284236753291255695329
6276753308316953301568675331730695331516675332934695332634675333135269
5333628675334155869533473067533513496953356296753361040695336623685337
4196953376306853384166953383176853395196953395256853405186953409436853
4141569534162668534221369534294268534321369534352068534411396953444146
8534531469534531068534641769534621168534751669534784068534831369534811
4468534941769534941468535041369535041868535151569535141468535273369535
2313685353315695353296853541050695354312685355210695355731685356727695
3566236853572136953575206853582136953585206853597276953595176853603196
9536041868536162669536141668536241769536231168536352369536341568536431
2695364726685365728695365624685366626695366417685367524695367523685368
6236953683166853691039695369417685370839695370621685371626695371317685
3723236953725216853734146953734206853745186953743136853755176953754176
8537612477053764166853774167053774176853788387053784156853799387053791
1476853801152705380314685381104470538131468538251870538221068538372770
5383419685384521705384317685385114270538541668538610407053869406853875
2570538721268538812627053883166853895197053896226953904197053903106953
9116705391210695392287053924156953934167053932969539442070539441769539
5423705395415695396627705396417695397156870539721069539851670539852269
5399634705399522695400628705400214695401730705401421695402629705402624
6954036237054035186954046307054044216954053177054051042695406525705406
7306954079437054075286954086267054084236954099427054095246954105207054
1041769541141470541152469541231070541252169541321170541382869541484070
5414522695415114470541573569541641470541683169541741870541784269541841
4705418940695419313705419944695420297154201451695421312715421722695422
7317154225256954236237154231865695424520715424726695425520715425521695
4265177154261479695427418715427416695428416715428728695429311715429627
6954304157154304216954317267154319446954326247154326206954334177154333
1469543452371543483169543531671543573169543641771543652369543762171543
7525695438317715438521695439521715439420695440420715440134969544131371
5441315695442417715442135370544341971544383570544441671544412547054454
1771544510377054464157154461041705447114771544715717054483147254481349

7054493147254499357054502107254509337054514197254517287054523177254521
0377054534167254531146705454940725454933705455212725455841705456316725
4561351705457622725457134470545831072545893770545921072545911397054604
1572546014527054612972546110497054624177254625277054634157254638397054
6441772546410397054652107254658317054665227254661041705467522725467826
7054682147254688247054694217254691240705470624725470166470547151872547
1114570547242172547211367054731042725473727705474730725474134470547552
8725475135270547642373547631270547752473547741570547841773547851870547
9524735479624705480521735480521705481828735481830705482522735482621705
4837357354836267054848317354849367054858427354857327054869407354866357
0548794473548741971548841973548852271548914517354898407154907227354901
1517154915257354916317154921865735492835715493726735493626715494521735
4949317154951479735495783297154964167454963127154977287454972771549862
7745498287154994217454992107155009447455002117155016207455013137155023
1474550221071550383174550341671550473174550441671550552374550541871550
6525745506416715507521745507417715508420745508210715509134974550931371
5510315745510412715511135374551152171551283574551221171551312547455133
1071551410377455143107155151041745515411715516157174551625725517419745
5173972551813497455183137255199357455196197255209337455205167255217287
4552129725522103774552241372552311467455234127255249337455242107255258
4174552531272552613517455265725072552713447455272972552893774552831272
5529113974552931372553014527455303147255311049745531210725532527745532
7247255338397455335177255341039745534314725535831745535314725536104174
5536210725537826745537412725538824745538518725539124074553941672554016
6474554041872554111457455414177255421136745542314725543727745543422725
5441344745544521725545135274554531573554641974554631073554731274554793
1735548415745548519735549518745549311735550624745550310735551521745551
1144735552830755552417735553621755553420735554626755554524735555936755
5556237355567327555565237355576357555574187355584197555583127355595227
5555929735560840755560315735561115175556152473556263175556238735563835
7555634187355646267555646267355659317555655217355667832975556631474556
7419755567620745568312755568417745569277555694207455702875557041474557
1210755571417745572211755572212745573313755573314745574210755574312745
5754167555753157455764167555765177455774187555774177455784167555783974
5579417755579312745580210755580317745581313755581417745582412755582412
7455835217555833127455842117555845177455853107555853117455863107555864
1374558741175558752174558825755588618745589397555895177455903137555905
2674559161975559172774559251676559211407455932976559310497455944137655
9473274559541276559563574559621076559683574559731276559773374559857250
7655987357455992976559973774560031276560010407456013137656017297456023

1476560283674560321076560352374560472476560410447456055177656056347456
0631476560683774560731476560752374560821076560863074560941276560941974
5610518765610947745611416765611729745612418765612135974561341776561383
0745614314765614627745615422765615933745616521765616521745617315765617
7297456183107656188407456199317656199477456205197656209317456213117656
2111417456223107656221042745623114477562321375562441977562421375562541
7775625213755626420775626213755627524775627213755628623775628310755629
5237756293157556304187756303147556313127756313147556322977563231475563
3315775633313755634524775634310755635387756352975563641877563651875563
7626775637316755638521775638314755639314775639315755640620775640317755
6414177756413167556424207756425187556434147756434177556444177756443117
5564521277564531875564631477564631675564731277564741775564831577564821
2755649517775649738755650417775650316755651397756516247556523127756526
2175565331777565362075565441777565441875565541277565531275565631277565
6316755657517775657414755658311775658418755659413775659316755660521775
6605267556616187756615187556625177756623167556635267756635207556647277
7566431576566541977566562976566611407756664197656671049775667316765668
7327756685267656696357756693167656708357756706247656717337756713167656
7273577567241876567373778567321076567410407856743137656757297856754167
6567683678567621076567752378567731276567810447856784177656796347856792
1376568083778568021476568152378568131676568263078568231676568341978568
3317765684947785684420765685729785685316765686135978568652576568783078
5687416765688627785688211765689933785689519765690521785690626765691729
7856914227656928407856924217656939477856934167656949317856942117656951
1417856953167656961042785696624775697419785697314775698213785698297756
9921378569952177570021378570031877570121378570141877570221378570252377
5703310785703314775704315785704212775705314785705212775706314785706210
7757073147857076247757083137857085187757093107857091047775710297857101
4587757115187857119327757123167857121669775713314795713213775714315795
7142137757153177957152137757163167957162137757175187957172137757184177
9571831477571931179571921377572031879572031477572131679572121277572241
7795722527775723212795723416775724738795724519775725316795725416775726
6247957263147757276217957274147757286207957286257757294187957295187757
3031279573061677573131679573141777573241479573231677573341879573328775
7343167957343107757355267957352977573651879573641777573731679573752677
5738520795738619775739315795739625775740629795740314775741419795741420
7757423167957424177757435267957434207757443167957442137757456247957453
1777574631679574642077574741879574752078574841979574841778574921079574
9397857503137957503167857514167957514177857522107957529327857533127957
5341678575441779575452578575521379575541478575621479575631378575731679

5757519785758316795758936785759317805759287857604208057603127857613168
0576141678576252580576241878576341680576331178576421180576431078576551
9805765414785766626805766414785767422805767277857684218057683117857694
1680576931278577021180577031078577131680577131078577262480577221178577
3314805773297857742980577428785775521805775417785776318805776411785777
4188057774157857785238057783127857793148057793137857802128057804137857
8121280578151578578221080578242178578362480578341678578451880578441578
5785104780578531478578614588057862107857879328057872127857881669805788
2107957894198057892107957902138057903177957912138057913147957922138057
9251779579321380579329795794213805794212795795314805795624795796213805
7963147957973148057972127957982128057984197957995278057992107958004168
0580041979580151981580131279580241681580231679580331481580331479580441
4815804314795805625815805314795806518815806314795807616815807314795808
4178158083167958093168158093107958102881581031379581131081581131479581
2298158123147958134178158133147958145268158144147958156198158153137958
1662581581621179581731481581731379581842081581831379581941781581941579
5820420815820619795821213815821310795822317815822315795823420815823419
7958245208158245187958254178158255187958263981582621079582731681582751
8795828417815828518795829932815829832795830416825830315795831525825831
3177958324148258323147958333138258333157958345198258345187958359368258
3572880583641982583641880583728825837617805838312825838417805839416825
8393158058404188258402118058413118258413148058423108258424168058434148
2584341680584441482584431580584527825845416805846311825846518805847312
8258476198058483108258489348058493108358492118058502118358506308058512
9835851524805852288358525228058534178358532880585441183585452380585541
5835855622805856312835856414805857313835857298058584138358583168058595
1583585942080586042183586072280586141683586173380586241583586283080586
3314835863626805864210835864417805865212835865725805866210835866624805
8672108358674158058683178358682980586931483586921380587051783587041680
5871298358713168058722128358725228058736248358734168058743148358746328
0587521283587531380587641983587641980587721083587783680587841983587841
9815879419835879631815880312835880627815881316835881420815882314835882
6308158833148358833168158843148358846248158853148458853148158863148458
8631481588731684588731281588831084588841681588931384588931481589031484
5890937815891314845891521815892314845892419815893414845893419815894313
8458946238158952118458953138158963138458962108158973138458975188158984
1584589851381589961984589961881590031084590031381590131584590131281590
2419845902313815903518845903415815904518845904414815905210845905626815
9065188459064188159075188459074178159088328459083158259094198459099418
2591031585591031682591131785591121382591231485591221182591331585591331

5825914518855914314825915728855915413825916418855916627825917617855917
9408259184178559181040825919315855919146582592021185592014658259213148
5592141382592241685592241482592341685592331582592431585592431382592541
6855925311825926518855926416825927619855927210825928934855928519835929
4198559294178359302118559304128359316308559313108359325248659322148359
3352286593341683593428865934211835935523865935619835936622865936418835
9374148659374128359382986593852283593931686593941583594042086594031483
5941722865941617835942733865942315835943830865943314835944626865944310
8359454178659453118359467258659463148359476248659472983594841586594842
3835949298759494158359502138759503118359514168759513128359523168759523
1583595352287595331383595441687595431383595563287595593183595631387595
6212835957419875957416835958836875958311835959419875959214835960631875
9604198359616278759616198359624208759624128359636308759634148359643168
7596442083596562487596531584596641987596651984596731487596731584596831
4885968417845969312885969314845970416885970210845971314885971313845972
9378859724138459735218859736198459744198859746188459754198859753148459
7662388597621184597731388597731084597821088597841584597951888597931284
5980513885980313845981618885981212845982313885982212845983312885983212
8459843138859846258459854158859854178459864148859864178459876268859874
1684598841888598841584598941788598931484599031588599041384599194188599
1422855992419885992313855993316885993415855994213895994168559952118959
9528855996315895996212855997314895997312855998413895998616855999627895
9996188560009408960003128560011040896001623856002146589600252685600314
6589600331585600441389600441785600541489600531785600631589600651885600
7313896007314856008311896008114985600941689600910408560102108960105198
5601151989601152385601241789601242085601341289601341785601431089601462
0866015419896015519866016214896016943866017416896017521866018211896018
5208660196198960194158660204188960204208660214128960215218660225228960
2231386602341589602321086602431490602441586602561790602541586602631590
6026311866027314906027520866028310906028620866029311906029417866030314
9060305158660312990603141486603242390603221287603341990603321487603441
5906034314876035311906035416876036312906036268760373159060376198760383
1390603831287603931390603941587604093190604094587604121290604131787604
2416906042632876043311906043313876044214916044212876045419916045314876
0466199160463158760474129160473158760484149160483158760494209160493148
7605031591605031287605151991605132087605231591605241388605341991605341
3886054417916054315886055314916055313886056210916056730886057313916057
7398860584139160583138860596199260593138860606189260603148860613149260
6141888606221192606231188606331092606341588606441592606421188606531292
6065213886066313926066416886067212926067211886068212926068213886069212

926069621886070625926070312886071417926071419886072417926072316886073416926073417886074415926074312886075314926075214886076413926076417886077422926077621886078313926078521886079415926079298960804199360801689608116936081312896082289360825158960832129360835208960843129360844188960856169360854168960866189360863138960873129360873158960886239360884178960895269360894178960903159360904168960914179460914138960923179460923138960935189460933128960943149460943128960951149960954148960961040946096413896097519946097313896098523946098312896099420956099214896100417956100298961016209561013158961025199561026268961039439561034188961045219561049428961055209561054178961064159561064218961074209661075188961085219661084158961093139661093148961102109661103139061114199661115189061124159661124179061134159661133119061143119661144149061155209661153139061166209661163109061174179661175189061185159661183129061194149661194159061202129661205179061212149661216269061223149661223159061234169661232109061242696612421290612561996612552090612631297612652190612741597612751990612894597612862090612931797612993790613063297613051890613131398613112569161324199861326239161332129861333119161343149861341145916135315986135167891613631598613616669161373159861379429161383149861382183916139312996139420916140320996140318916141413996141416916142413996142316916143315996143413916144313996144632916145730996145622916146739996146621916147313100614721392614841910061482139261493131006149213926150314100615031192615141810061513119261523111006152418926153415100615341592615421110061544179261552131006155725926156416100615641492615721110061575199261582131016158179261596211016159299261603121016160417926161419101616152692616231610161624249261634171016163417926164312101616441492616521410161654169261664171016166299261676211016167413926168521101616828926169291026169213936170419102617031493617116102617131293617231210261724149361735151026173520936174520102617421193617541810261754189361764161026176521936177313103617716936178315103617841593617941710361799529361804171046180414936181416104618141694618241910461824159461834131046183417946184313104618441694618531210461853149461863121046186418946187414104618731494618841310461883109461893131056189725946190312105619051995619141910561914209561922141056192418956193291056193315956194315106619421095619562610661954239561964181066196418956197942106619772695619841710761984199561994211076199417966200419107620052096620151810762012119662024151076202520966203314107620331396620431310762042149662055181086205316966206417108620631296620731110862074159662084141096208416966209313109620941496621031010962105199662115181096211517966212312109621251996621341510962134149662145171106214519966215626110621573196621631511062167309662172101116217515966218212111621861996621952011162194159762204191116220317976221

52111162215159762225191126222411976223620112622329976224937112622441297622551811262255159862264191136226414986227125611362274998622862311362285159862293111136229520986230114511362305159862311678114623141498623216661146232289862339421146233289862342183114623441799623541911462355209962364201146236313996237318114199962384161241899623931613212996240413143129962416321541999624262216319996243621179441006244419281310062452132972710062462132108471006247213211125210062483112128331006249311213114710062504182141253100625141521511471006252417216104910062537252171251100625441421811431006255519219729101625641922019771016257172211673101625829222734101625941722311571016260526224177210162614242256191016262417226198610162634142272510210162644162281253101626529229239910162664132302078101626728231136610262684192323414510262692132333915510262703142342082102627131223513601026272414236197010262735202372811110262742112381570102627541823912481026276521240231011036277419241136310362781624219801036279415243198610362809522441143104628141924517681046282414246105110462834162471469104628441524818791046285417249842104628641625074110462873142511055104628841825284710462893142538381046290310254125810562914192551969105629272525618841056293519257105010562944202581253105629541825983010562963152607371066297419261271211066298210262156010662994232637301066300418264189010663017262652095107630241926618771076303419267281181076304417268602571076305520269241081076306211270157010763075202711354107630831327212541076309214273945108631041927420831086311316275238010863123122761871108631341527717621096314419278249710963154162791045109631641428011571096317519281371411096318517282197710963195192832310110963204142849361106321419285114511063225192862410211063237312872391110632473028813541116325419289105211163265152902915011163276192911571111632841529249231111632931729313631116330515294281381126331419295104611263324112962610811263332929727107112633441229830119112633551529911511136336419210027131113633741421011767113633849210294411363395152103251021136340520210418721136341515210512551146342419210610441146343414210710441146344282108228911463452821097430811463464172110124911463475202111136511463483132112259 8”

4.2.10 Overall probability of all the key coding based evidences with only letters information

Considering all the presented and considered key coding based evidences *with letters information*, we have 23 trials and 12 successes so far. Probability of observing them by chance alone can be approximated as follows:

```
tmp1 <- key_codings_success_nums-key_codings_success_nums_NoLetter
tmp2 <- key_codings_tested_nums-key_codings_tested_nums_NoLetter
```

```
tmp <-binom.test( (tmp1),
                  (tmp2), p = (1/19),
                  alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", tmp1,
            "successes out of", tmp2 ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 12 successes out of 23 (with p=1/19) is:
3.54e-10"
```

To see a more conservative probability, I will again double the total number of trials and keep the successes the same and see the overall probability in such a case:

```
tmp <-binom.test( (tmp1),
                  (2*tmp2), p = (1/19),
                  alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", tmp1,
            "successes out of", 2*tmp2 ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 12 successes out of 46 (with p=1/19) is:
3.26e-06"
```

4.2.11 Facts about rewriting coding pattern

4.2.11.1 Fact: Rewriting the full text by main descriptive numbers per verse index

Evidence 4.2.2.1 is the main evidence to rewrite the full text of Quran with the 4 main descriptor numbers of a text. If Evidence 4.2.2.1 was not successful, I would not be able to confidently hypothesize the additional follow up potential evidences such as this one. Because, when we mention a specific verse in Quran we **naturally** refer to it by its chapter and verse index such as this "Quran 74:30". Therefore, any natural test must consider those numbers first as I did so in Evidence 4.2.2.1 and proved that when we rewrite, or in other words decode the text of Quran with its main descriptor numbers, the resulting big number is divisible by 19, which very strongly supports that Quran is intact and has correct order and unchanged as we Muslims already presume and accept so. However, after witnessing that great test, I decided to perform a follow up test. I wanted to test if there is any similar design with respect to the general order index of each verse from 1 to 6348 (column *VerseI* in the table). Then, the question was at which location should I place the general order

verse index for concatenation. The previous natural order was not quite suitable as it does not fit in, for instance, the natural "74:30" like expression of a verse of Quran. I decided to place the general order of verse index at the beginning just like I naturally did myself while generating the table of the text of Quran and placing the general verse indexes, *VerseI*, at the beginning. This make sense because we also sometimes refer to a verse like "the first verse" in Quran without referring the chapter index. In a sense, these general verse order indexes are at the outer domain of chapter indexes and when we give only this index one can find out which chapter and which verse of that chapter by following the order of the verses in Quran. Thus, I locate the general verse indexes, *VerseI*, at the beginning and then follow the general order of concatenations afterwards. As I show in the following, rewriting the full text of Quran as in Evidence 4.2.2.1 but this time regarding the general verse order indexes results another big number that is also divisible by 19.

Considering all the 6348 verse of Quran, here is the illustration of the coding pattern of the big coding representation number as shown below:

> [Last General Verse index, 6348 | Chapter 114 | Total Words in Last Verse of Chapter 114 | Total Letters in Last Verse of Chapter 114] [General Verse index 6347 | Chapter 114 | Total Words in Verse 5 of Chapter 114 | Total Letters in Verse 5 of Chapter 114] . . . . . [General Verse index 2 | Chapter 1 | Total Words in Verse 2 of Chapter 1 | Total Letters in Verse 2 of Chapter 1] [General Verse index 1 | Chapter 1 | Total Words in Verse 1 of Chapter 1 | Total Letters in Verse 1 of Chapter 1]

Here the "|" symbol stands for the concatenation operation of the numbers of its both sides. The neighboring brackets also concatenated.

If we use the real numbers in the above formula, it would be like this:

> [6348 | 114 | 3 | 13] [6347 | 114 | 5 | 20] . . . . . [2 | 1 | 4 | 18] [1 | 1 | 4 | 19]

And, the final number after all the concatenation would look like this:

> 6348114313 6347114520 . . . . . 21418 11419
>
> 63481143136347114520 2141811419

Here is the proof with a reproducible R code that rewrites, namely decodes, the full text of Quran by the 4 different descriptor numbers first and then test this big number.

```
x<- data.table(unQuran)
tmp <- paste0(x$VerseI,x$chapter,x$vwords,x$vletters)
head(tmp)
```

```
## [1] "11419" "21418" "31212" "41312" "51419" "61319"

#Revert the order from right to left as in Arabic.
tmpr <- rev(tmp)
head(tmpr)

## [1] "6348114313" "6347114520" "6346114417" "634511428"  "634411428"
## [6] "6343114414"

tmpr <- paste0(tmpr, collapse = '')
cat(as.numeric(as.bigz(tmpr) %% 19))# "0"

## 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 58714
```

Since I used the number 6348 for general verse indexes of the full text, I also tested the unnumbered version for the number 6236. This **fact** only passes the test for the full text of Quran that is based on 6348 general verse indexes, which is more assuring in fact as we are rewriting or decoding the text of Quran.

You can access this "58714" digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/6_1_1_rewrite.txt

One can just copy the big number and paste it into a web based big number calculator and test it herself.

Also, here is the "58714" digits length big number:

"6348114313634711452063461144176345114286344114286343114414634211441963411135156340113520633911351563381134963371134146336113419633511251563341124126333112296332112411633111241963301115156329111317632811141563271116196326111515632511141963241107306323110731632211051963211104196320109414631910951963181095176317109519631610941463151094166314109419631310841563121083126311108316631010841963091072146308107313630710752063061072116305107520630410741763031074196302107419630110672663001064186299106423629810621062971064196296105315629510541862941054206293105519629210572562911054196290104310628910431462881044186287104314628610441662851044156283104416628210441462811044196280103952627910341562781031662771034196276102521627510241862741022116273102520627210241462711023126270102314626910221362681024196267101286266101413626510129626410
```
```

1416626310141462621014176261101424626010152662591014176258101296257101
1762561014196255100519625410041462531007256252100417625110041562501004
1862491003116248100311624710021362461002136245100213624410041962439962
1624299622624199632624099413623999316623899416623799318623699420623599
4196234982183623398942623298166662319816786230981145622998311622898623
6227981256622698419622597518622497937622397620622297519622197521622097
4196219965206218962126217962106216963156215966266214965176213964156212
9631262119651862109631062099631362089641462079631162069641762059651862
0496313620396314620296415620196518620096419619995421619895417619795942
6196954186195956266194953156193952961929521461919541961909431261899431
3618894413618794414618694312618594312618494313618394413618294419618193
4166180934176179934176178933156177933136176934166175934186174935206173
9351561729331261719316617093419616992296168925216167926216166924176165
9221461649231261639241761629231661619241961609231261599262161589221361
5792211615692416615592213615492211615392415615292311615192418615092314
6149923136148924196147913136146917396145917306144913136143913156142914
1361419141361409132061399131261389131461379131561369131561359131561349
1314613391212613291419613190313613090632612990317612890945612790415612
6903126125906196124902661239041661229031461219021461209021261199041461
1890515611790417611690620611590520611490311611390415611290415611190419
6110892106109893136108895216107894206106894156105895206104895216103899
4361028951961018962061008941760998942060988952360978951960968910406095
8911496094893146093895186092893176091894176090893156089895266088896236
0878931260868961860858961660848931260838921260828928608189166080894196
0798841560788831360778842260768841360758831460748841560738841660728841
7607188417607088625606988212606888212606788212606688313606588312606488
4156063883106062882116061883146060886186059886196058884136057883136056
8821060558831460548841760538841960528731560518751960508731560498742060
4887414604787412604687619604587419604487214604387311604287416604187212
6040879316039873136038873136037873156036873126035873116034874156033874
1960328642360318629603086314602986311602886310602786314602686315602586
6176024863146023864156022865226021864126020864186019866196018862116017
8641660168621460158641960148531060138541260128541760118551960108521060
0985416600885311600785313600685315600585414600485413600385146560028514
6560018510406000859405999856275998854135997853145996853155995852115994
8521359938531659928541959918494159908431559898441759888441859878462659
8684414598584415598484313598384312598284313598184618598084513597984518
5978842105977843135976846235975844195974844195973845215972849375971843
1459708441659698431259688431459678431459668441959658362459648331659638
3630596283420596183627596083631595983419595883836595783419595683313595

583632595483416595383522595283316595183416595083213594983295948834155 9
478362459468372559458341759448362659438383059428373359418372259408342 0
593983316593883295937834145936836225935835235934832859338352259328352 4
593183630593083211592983419592882934592782619592682518592582416592482 3
155923824165922824165921823145920822115919823155918824175917826175916 8
241859158272859148251859138231559128231459118231759108231559098241959 0
881832590781518590681518590581210590481518590381518590281419590181315 5
900813105899816195898814155897813135896813135895812115894813135893814 1
458928131458918131458908131458898131358888131058878131658868131458858 1
314588481314588381314588281314588181316588081312587981419587880419587 7
802105876804195875802125874803145873806245872802125871802958708051758 6
980314586880317586780210586680210586580212586480210586380314586280415 5
861804165860804215859805155858804135857803135856803125855804155854804 1
158538041758528028585180295850802115849803105848803105847803125846803 1
158458027584480414584380414584280310584180311584080418583980416583880 3
125837802858368041958357993658347951958337931358327941458317952558307 9
416582979932582879417582779316582679395825794175824795205823794205822 7
931758217921358207942058197941758187942058177931458167962558157961958 1
479526581379417581279295811793105810792858097931658087941758077961658 0
679518580579625580479414580379314580279416580179519580079416579979527 5
798792125797793145796792135795793145794792135793792135792792135791792 1
357907921357897941957887816695787789325786781458578578104757847851857 8
378624578278210578178212578078212577978314577878523577778418577678318 5
775785215774782957737831457727862457717831657707821157697841657687842 1
576778422576678626576578519576478211576378416576278525576178316576078 4
205759783175758783165757783165756782145755782135754784175753783125752 7
821057517841657507831357497821057487841957477741857467731657457762457 4
477316574377526574277316574177419574077629573977315573877520573777316 5
736775185735775265734773165733774185732774145731773165730773125729774 1
857287762057277762157267762457257731657247773857237721257227741757217 7
316572077318571977311571877417571777518571677316571577317571477315571 3
773145712773165711775185710772957097731057087731357077731457067731457 0
577314570477315570377310570277213570177213570077213569977213569877213 5
697774195696761042569576114156947693156937694756927684056917672956907 6
521568976933568876627568776830568676135956857672956847694756837641956 8
276630568176523568076837567976634567876104456777652356767683656757672 9
567476104056737673756727673556717673356707683556697663556687673256677 6
104956667611405665764195664757275663755265662755175661756185660755215 6
597541356587531156577551756567531256557541256547541756537531756527531 2
565175395650754175649755175648753155647753125646753145645752125644754 1

7564375414564275420564175417564075620563975314563875521563775626563675
4185635753856347552456337531556327529563175312563075418562975523562875
6235627755245626754205625754175624754195623741144562274310562174311562
0745195619749315618743105617743155616745215615744225614743145613744175
6127441856117441656107451856097441256087421056077431456067431456057451
7560474724560374210560274314560174313560074312559974295598745725055977
4312559674210559574412559474413559374295592745165591746195590743135589
7439558874255587744115586743105585743105584742115583745215582744125581
7431355807421055797441755787441655777441855767441655757441655747421055
7374313557274211557174210557074285569742755687431255677441955667378329
5565739315564736265563738355562736315561731151556073840555973522555873
4195557736355556737325555739365554736265553736215552738305551735215550
7362455497351855487341555477331255467341955457213525544721344554372727
5542721136554172114555407216645539721240553872824553772826553672104155
3572831553472103955337283955327252755317210495530721452552972113955287
2937552772134455267213515525728415524729335523721146552272103755217272
8552072933551972935551872134955177241955167115715515711041551471103755
1371125455127183555117113535510713155509711349550871420550771521550671
5255505715235504717315503718315502713145501716205500719445499714215498
7162754977172854967141654957114795494715215493717265492711865549171525
5490717225489711451548871419548770944548670940548570842548470831548370
7355482705225481708285480705215479705245478704175477705245476704235475
7052854747073054737010425472704215471705185470706245469704215468702145
4677052254667052254657021054647041754637041554627041754617029546070415
5459702105458703105457706225456703165455702125454709405453704165452703
1754517041954507021054497031454487031454477011475446704155445704175444
7041654437041954426941754416931354406942054396952154386931754376962154
3669417543569316543469523543369417543269624543169726543069415542969311
5428694165427694185426695175425695205424695205423696235422697315421693
1254206929541969313541869414541769418541669414541569114454146984054136
9211541269310541169414541069520540969942540869626540769943540669525540
5693175404696305403696235402696295401697305400696285399696345398695165
3976915685396696275395694235394694205393694165392692853916916539069419
5389685195388681262538768525538668104053856811425384685215383687275382
6851853816810445380681152537968938537868838537768416537668124753756851
7537468518537368414537268323537168626537068839536968103953686862353676
8524536668626536568728536468312536368523536268417536168626536068319535
9687275358682135357682135356687275355682105354681050535368315535268733
5351685155350684135349684175348683135347685165346684175345683145344681
1395343682135342682135341684155340685185339685195338684165337684195336

671040533567134953346715585333671352533267934533167730533067831532967 1
255532867124753276712425326671554532567156253246783053236712485322671 1
405321671459532067727531967938531867938531767531531667113953156718635 3
146713535313678325312677345311671268531067104253096718655308671153530 7
679335306674195305661779530466249753036627121530266126253016646194530 0
661251529966231075298661782529766219252966629114529566114952946615575 2
936641952926525965291653415352906517725289657325288651464528765259052 8
665321465285651454528465281185283652173528265301325281654217352806541 9
527964529527864125052776416795276648395275641987527464937527364115952 7
264165852716411595270642712252696410515268641869526764168252666413535 2
656414625264649495263641147526264175952616441952606311445259632185525 8
631875525763179052566320905255631870525463146652536322104525263114452 5
163125152506317825249634195248622188524762157252466222885245621879524 4
629455243621871524262231055241621039524062837523962219252386212525237 6
241952366136164523561941523461177552336115725232611247523161146052306 1
115452296116685228613212952276124101522661114652256193252246193452236 1
114352226141952216020805220603917352196021945218605625852176021101521 6
602191521560156352146019735213601356521260522215211601362521060136852 0
960492205208604195207591778520659198752055913515204591884520359104852 0
259105152015918725200591050519959176851985911475197592394519659124551 9
559167351945928129519359231065192593113451915918985190593716651895925 9
051885913605187591251518659146051855941185518459114351835941951825851 2
215181589345180588375179581572517858177351775815645176581043517558104 0
517458197351735824115517258239251715831139517058178251695820105516858 3
816751675847163516658156451655818815164582611551635821905162582310351 6
158187351605841951595722855158572294515757391915156571474515557281385 1
545712565153571558515257216951515725108515057391805149572010551485712 5
751475713555146572811851455715645144572099514357271325142572210951415 7
124351405737153513957176951385715695137571574513657125251355783751345 7
361345133579405132571143513157939513057419512956417512856516512756210 5
126563105125566265124565205123566225122564185121565195120564205119565 2
051185672851175631651165641951155642251145642251135641751125641751115 6
311511056312510956520510856419510756417510656528510556630510456421510 3
566285102567335101564225100563125099562105098566295097565255096563155 0
955663250945693550935673250925652550915631450905642150895641650885631 5
508756419508656317508556517508456525508356524508256419508156215508056 9
475079565255078565215077564135076563105075563115074565255073563135072 5
631250715621250705621050695621450685631650675621050665641750655621150 6
456295063562850625629506156310506056525505956417505856625505756418505 6
563195055562750545641650535631650525652150515652350505642050495631950 4

8563125047563145046563125045563125044562135043562175042565275041565275
0405631650395631450385631350375641450365621050355631550345631450335641
9503255627503155419503055626502955419502855622502755419502655418502555
4195024553135023554195022554195021554195020553175019554195018551850175
5419501655314501555419501455523501355419501255320501155419501055937500
9554195008559415007554195006555195005554195004553165003554195002552105
0015541950005551949995541949985552149975562649965541949955564049945541
9499355827499255419499155631499055419498955834498855419498755177849865
5419498555418498455419498355103549825541949815562749805541249795541949
7855631497755419497655423497555419497455418497355317497255419497155421
4970554194969556204968555244967554194966554204965555254964553174963556
3449625541749615542349605531849595531749585521049575521049565529495555
1649545541949535462149525451949515441749505451849495462649485462649475
4518494654935494554520494454629494354421494254520494154935494054736493
9545194938547294937543154936545224935549434934545294933547244932549384
9315441649305472949295484149285441649275442249265483249255473549245452
3492354932492254104149215431449205472949195441649185462749175493649165
4623491554729491454416491354623491254624491154522491054938490954526490
8545214907549434906548354905548404904548284903545204902547284901546314
9005473148995442248985441948975331748965321148955331548945341948935362
0489253210489153520489053417488953311488853213488753932488653312488553
4184884534144883534154882534194881534134880535264879534154878534154877
5341648765341948755341348745362148735351848725331548715372048705351948
6953315486853314486753311294866531673486553165448645311414863531651486
2539474861531865486053317485953415485853259948575341448565341848555331
8485453318485353621485253516485153518485053314484953314484853415484753
4174846535164845535184844535184843533104842533154841533114840533134839
5351448385341448375351648365331248355341948345252548335210414832521042
4831529334830527324829529394828529334827527334826525214825527274824525
2048235294048225272848215273148205282748195262948185262348175283148165
2627481552728481452831481352931481252628481152727481052524480952732480
8528334807525284806521984480552733480452629480352838480252520480152125
3480052622479952625479852621479752518479652317479552315479452417479352
4104792524144791522134790522134789522134788523947875221047865216478552
4194784517314783519434782517274781519304780516274779515254778515194777
5162147765113464775511139477451829477351729477251425477151529477051831
4769517324768518374767518274766519324765517304764517344763516254762518
3447615173647605172847595162647585141947575152047565162647555152347545
1832475351939475251938475151522475051623474951938474851628474751937474
6515234745514194744514204743515264742513194741516254740519374739515204

7385173247375151947365141847355151847345121147335141247325141547315131
5473051313472951315472851213472751213472651213472551213472451419472350
1353472250936472150627472050732471950729471850525471750124947165013544
7155013414714501554471350625471250524471150729471050622470950525470850
9334707508314706508344705501037470450104147035041747025062147015062147
0050124546995062346985062346975093446965082646955083746945014574693501
0364692509364691504194690507304689508374688505224687501045468650520468
5501151468450125346835093246825093646815072746805011444679503144678504
1946774910454676491976467549166546744918914673492711646724921934671493
2129467049401594669491053466849301444667497284666492812746654918794664
4912484663499414662491777466149239846604916644659494194658485424946574
8146046564828120465548281304654484017946534819774652481241465148125246
5048145246494818894648487374647481986464648271104645482812446444831141
4643481461464248943464148208546404837151463948251054638488494637485274
6364884046354821116463448199346334819944632484194631481561463048519462
9484194628473012946274763546264713654625471258462447155546234711554622
4721864621478504620471266461947114046184710484617477414616471565461547
1663461447733461347737461247104546114712484610472711746094714734608471
5654607476324606472410446054744172460447134846034714544602472210846014
7114446004716754599478354598476304597471046459647420459547317459447381
6745934718814592471881459147835459047419458946271074588461879458746228
5458646186545854615604584462078458346188045824617734581461047458046321
3845794614604578461875457746135545764612544575462595457446271294573469
4345724617664571462811345704618814569464519345684694345674613524566461
6754565461976456446249545634624744562462599456146145945604694545594618
6445584629106455746157245564662945554612455446419455345842455245837455
1451676455045146145494511434548452278454745125945464513624545451147454
4451454454345105245424518704541451668454045217845394524944538451356453
7451785453645732453545156445344513554533452410245324513744531451144453
0451461452945166045284514634527451142452645197245254511454524451457452
3454144522451253452145208945204593445194563145184562945174512451645419
4515443174514445294513447254512441048451144522451044419450944527450844
3114507445194506446194505445204504447254503445244502442104501444184500
4421044994431244984482944974410344496445234495448364494447374493441250
4492445244491448324490443144489447294488446294487447284486447334485448
3744844442244834442044824431444814451844804462744794452444784462344774
4521447644624447544935447444931447344835447244629447144629447044625446
9447284468446264467445204466446284465445144464441039446344837446244726
4461446234460445174459448344458442134457441244564441944554362644544382
7445343837445243135244514313634450431144444943842444843836444743831444

643114844454352244444373444434393744424362944414362244404362644394362744384373544437431569443643529443543529443443934443343734443243104044314
311474430439364429431779442843729442743104544264383644254310424424431448442343933442243424442143636442043736441943114644184311344417431867441643730441543124744144313554413437314412431255441143135344104362644094383644084373444074362644064311404405439404404431249440343738440243113844014312534400435304399431777439843251114397431042439643936439543939439443732439343522439243940439143736439043146043894321834388431146438743833438643155343854312664384439344383431246438243731438143937438043419437943208443784311494377431250437643114543754310524374437324374384383243724362343714383543704372743694363043684321343674312436643419436542155643644227109436342227743624211474361421562436042271154359422168435842165643574227123435642207243554282843544215664353429354352421457435142629435042116443494210504348421774434742936434642726434542155543444262943434214484343424210414341421663434042135243394217684338421264433742125143364222914335422911843344224107433342228443324222754331429384330422296432942115243284218714327423414943264230114432542381524324421356432342198943224215594321421660432042197143194222904318421253431742199043164210384315421043431442134313421243124241943114112394310411973430941175143084113564307413213043064111434305411240430441281074303411146430241187243014130129430041175342994113464298419394297412610142964122914295411255429441198842934111504292411142429141177142904113514289414144288411670428741199342864116794285411461428441105542834111524282412599428141114842804194642794120844278411878427741125642764183442754152742744114744273419894272412510242714123944270419404269411989426841166742674115674266411462426541940426441836426341167442624117754261417334260417334259414194258411242574141942564017704255401251425440156742534025104425240628425140125942504094342494032123424840145842474084242464011464245401760424440723424340623424240632424140944424040103942394012444238403011842374020764236401453423540219842344073342334012414232402082423140136242304011434229401369422840125342274023934226401253422540420422440841422340104642224011534221401673422040135342194012454218401982421740136142164010424215401250421440228642134015614212401041421140238842104012484209409374208402394420740104042064023934205403010542044016524203407274202401455420140114142004027101419940391464198401348419740186941964019874195407344194406314193401363419240301194191401562419040628418940156741884013474187405594186401663418540837418440145341834015624182401365418140156741804012534179401676417840271284177401042417640219841754013524174401456411734062941724012417140419417039177741693916734168392094416739945416639341514165399324164391574416339227741623917864161396244160391462415939739

4415839115741573992841563911504155391465415439104541533912424152399324
1513915514150391664414939135241483921854147391559414639156841453911434
1443922834143391143414239259741413917764140391876413939114841383914544
1373926107413639187741353983241343910404133393614841323912414131391557
4130391258412939833412839834412739155841263973041253941641243919814123
3972841223911444121391259412039104041193913614118393413241173920774116
3931120411539208041143910384113391367411239126041113917614110391985410
9396214108399294107395234106399314105392295410439241054103393412241023
9311264101393613841003923105409939166340983933126409739104540963962940
9539419409438417409338518409238103640913873140903841740893842040883842
3408738418408638417408538624408438623408338520408238103440813815544080
3862840793842240783893640773893240763882740753893340743831340733841140
7238737407138114040703862140693863040683810384067381140406638114540653
8103840643841540633842040623842140613851940603872140593852140583842240
5738735405638522405538623405438838405338528405238526405138848405038145
4404938104640483862640473811464046386224045387284044384214043384204042
3883340413815494040389394039386304038381142403738629403638733403538950
4034381366403338167040323831122403138933403038321374029381560402838239
3402738730402638633402538520402438736402338114440223883240213810354020
3872240193873640183883440173862440163810484015387314014381550401338103
8401238125140113883240103810444009381037400838622400738415400638419400
5374194004373164003376234002373154001374144000376303999372173998373173
9973741439963741939953731639943752939933741839923742039913762239903731
5398937316398837315398737620398637516398537417398437314398337419398237
4173981371047398037524397937414397837210397737414397637420397537419397
4375213973376293972375293971374203970376263969375223968374213967376223
9663752139653741939643741939633752039623741839613731739603742239593731
4395837418395737419395637418395537419395437419395337414395237419395137
4193950373183949375243948375283947375183946374193945374213944374193943
3741739423742139413732339403732339393742439383752939373752139363710483
9353752739343741939333731639323731439313741939303731539293752039283773
1392737419392637419392537281003924373163923375163922376233921375293920
3773239193741939183741839173731639163742039153741339143762639133731539
1237311391137416391037418390937522390837625390737516390637418390537315
3904374193903374193902375203901374193900374203899375253898375263897374
1938963752438953742038943752238933741838923742038913752038903772338893
7632388837421388737623388637422388537623388437421388337519388237628388
1373133880376263879375193878375213877374153876377343875374193874377233
8733752438723731338713742038703772438693731638683751938673731438663731
2386537314386437416386337419386237623386137422386037522385937633385837

1038385737420385637525385537420385437625385337103638523752138513762838
5037524384937417384837414384737317384637729384537738384437727384337624
3842377283841374163840372153839377353838376213837374193836374173835373
1338343712463833377283832374173831379373830375183829376313828377353827
3731238263721338253721338243721138233741938223683538213610343820361463
3819361144381836103738173611413816361142381536936381436730381336731381
2366293811366333810361250380936833380836124338073673038063610493805369
4638043611573803365243802365213801368363800365233799361450379836425379
7365163796366233795367323794367283793361142379236103937913613533790361
0393789367333788368353787367303786362492378536114237843611453783366223
7823693337813662337803683537793615583778367373777368393776369373775361
3563774368373773361044377236105037713662337703611453769361247376836830
3767361347376636727376536830376436419376336517376236155837613683137603
6729375936114637583693837573612553756365233755366283754361555375336115
7375236838375136145837503612543749368363748361251374736104537463683037
4536730374436317374336313374236314374136213374036123739364193738352597
3737353012037363526111373535198337343519763733353313237323524100373135
1044373035251083729351872372835145537273511453726351357372535219937243
5166537233583737223516763721351778372035229437193572737183513673717351
2483716354123715351662371435416371335418371235421371135341383710355183
7093562337083511473707351881370635281153705352812737043534115370335241
0837023517763701352591370035136236993513583698351563369735114336963522
8536953519683694352410036933541936923415573691341038369034936368934103
5368834165736873482936863472636853417523684342489368334145936823411473
6813434130368034187736793413583678341051367734207336763494536753423100
3674341349367334839367234145436713434160367034156936693432143366834104
1366734730366634125436653412483664341146366334935366234176236613422853
6603426933659342170365834104536573419873656341782365534835365434167536
5334207436523427109365134198736503427107364934125136483413533647342910
5364634166636453416613644341666364334114636423410503641343212336403418
6836393417673638344193637331593363633189236353314593634339403633331771
3632338373631338463630331255362933833362833729362733156236263312433625
3363436243319873623332299362233126736213314633620331463361933301263618
3311393617337029436163325853615333513736143362267361333231033612331258
3611338333610336293609338383608338353607331365360633316360533835360433
1766360333136136023322753601334819636003324923599333022335983314563597
3325122359633208135953314643594331769359333146435923316793591331361359
0331677358933167435883316723587331875358633188535853317653584332310235
8333351553582331468358133248035803315573579331355357833146035773326105
3576331358357533636357433167635733322983572338423571331780357033291433

5693328126356833281273567336263566331243356533146135643341935633252635
6232114435613273035603217753559321869355832114535573210523556321459355
5321351355432949355332219535523212593551328313550321346354932115635483
2156635473214643546321666354532167535443211423543321455354232146035413
2825354032103635393263235383217633537322492353632186635353283135343213
3533324193532312710035313131122353031229235293119683528311658352731259
7352631114135253121783524311040352331156535223173035213115643520311566
3519312187351831301113517311145351631165435153118693514312582351331291
1235123117763511311554351031187035093114543508312710535073183535063183
9350531166735043118723503318333502319473501313163500314193499311334983
1419349730103934963083234953019763494309423493302086349230125534913024
8134903014553489301146348830941348730197134863010373485302811534843018
8734833017833482301151348130939348030165634793014573478301567347730228
5347630228734753016723474301557347330156234723010433471306343470301871
3469301145346830948346730229234663016603465302711334643018793463308313
4623016653461302185346030146434593013673458302083345730114034563014603
4553083934543062834533011583452309433451305263450309433449305263448308
3234473013603446303215234453022983444301044344330114234423083334413012
4634403083134393029343830133437304193436299473435291765343429157334332
9636343229166434312915653430292284342929145034282913643427291253342629
5253425291786342429728342329940342229135634212963834202912653419291991
3418291564341729166234162914593415291352341429198934132925112341229218
9341129104534102984234092912433408291988340729281243406291369340529167
7340429739340329177434022973034012912503400292390339929166733982915703
3972962733962923103339529145733942918873393291244339229271173391292076
3390291360338929175933882983233872919723386291347338529135233842927118
3383291356338229640338129166933802911613379291886337829637337729311203
3762974333752921903374291270337329104233722912453371291043337029115633
6929104033682913336729419336628196333652816603364281559336328196633622
8187533612814673360282611333592817653358281670335728217833562828102335
5282610533542829109335328177033522884033512813623350282187334928197833
4828155833472872833462814583345281142334428735334328633334228136433412
8188433402884033392817753338281566333728208233362817733335282597333428
1350333328157433322812653331281555333028834332928629332828239233272813
4933262826106332528188633242820773323281881332228135233212816753320281
0483319289443318281051331728125233162829108331528186933142817733313281
5753312281457331128933331028251003309282073330828208233072827109330628
1559330528291103304281148330328261063302281550330128271083300281144329
9281042329828197632972833119329628167232952893632942813463293283814832
9228104932912817653290281664328928103732882817673287281867328628136332

852822923284281255328328125932822819853281289383280284193279281332782841932772711513276271561327527176332742713523273271140327227187132712718663270271564326927833326827135732672711423266271670326527145632642711453263277283262278343261274213260271247325927103732582783132572710383256279323255277303254279323253279403252271247325127944325027144432492714573248271978324727208232462716703245272189324427271043243271249324227631324127739324027155832392711473238278393237275283236271144323527943323427731323327146832322710423231271351323027136132292713583228272811032272712433226271459322527124732242738136322327165532222711473221271360322027166932192783932182713613217272125332162713503215275233214278343213279333212271147321127728321027827320927146232082717773207271142320627144732052794532042712443203272410632022720853201279433200271977319927156931982711583197278363196271972319527113531942720743193277283192271456319127166531902772831892710433188271045318727947318627316318527624318427419318326199231822652131812672231802632131792642331782651731772662531762641731752631631742641531732642031722672631712662831702631931692693431682641931672652231662641831652641631642672731632662331622652031612641931602621731592641831582652231572672931562652431552662531542652331532693531522641731512631331502652231492641631482642031472652131462682931452610413144265193143269373142269353141265223140265293139269423138263213137266293136261140313526317313426414313326620313226422313126521313026829312926631312826314312726418312626318312526520312426521312326935312222611413121264233120261140311926317311826414311726724311626418311526521311426104131132632031122673131112693131102611383109265223108266273107264203106263173105265263104264183103263113102265213101261140310026317309926414309826725309726316309626521309526104430942631330932651830922693630902621030892631630882652430872631730862642030852642330842652130832611403082263173081264143080267243079263153078265213077268293076264183075266283074269403073265163072269363071265163070264193069267253068266243067265263066263173065261140306426317306326414306226724306123064183060265213059268293058267263057263113056264143055264193054264193053266213052264193051263163050264213049267283048266223047263183046263183045266203044266193043264173042266243041265223040266233039266263038268313037264183036264163035264193034264173033266233032263193031265223030262830292641730282652030272662830262662330252641930242652130232682930223153021265233020263163019261357301826620301726838301626214301526423301422631430132642030122631530112631530102641930092652530082683530072611433006267273005262196300426312300326420300226317300126831300026948299926726299826625299726125129962673229952652229942652429932641629922673429912683529902672629892662629882662429872672329862651929852683729842693

9298326730298226523298126520298026940297926521297826832297726114629762
6625297526732297426103829732652029722673229712673329702662329692683529
6826620296726416296626832296526521296426829296326113929622683829612611
4329602611452959266272958264192957261329562641929552512452954255262953
2594429522513642951251045295025942294925935294825166929472583629462522
8529452511472944254202943251147294225527294125126129402513502939251148
2938251361293725177229362513522935251444293425524293325145529322512472
9312515642930257332929257262928259432927251046292625135529252511492924
2552229232516572922251555292125937292025176829192511442918251669291725
7332916258372915251369291425949291325942291225114829112583729102515692
9092511492908251041290725114829062572829052512492904259442903257392902
2573429012593829002510512899251985289825209628972515652896252187289525
1668289425104028932513502892258382891259422890259372889258392888251762
2887259422886251765288525167028842512512883259472882251666288125229228
8025197328792594428782541928772422862876242712028752439180287424763152
8732423103287224198728712450219287024115328692484828682438173286724231
0228662417762865241045286424188328632416672862247282861241148286024157
0285924114728582431106285724104428562438140285524735285424218328532433
1082852242299285124145828502419872849241455284824482032847241361284624
4821728452417832844247835028432415662842241770284124228728402419852839
2416992838241149283724947283624136828352426121283424351502833249382832
2420852831247312830249382829241456282824167028272415632826241465282524
1259282424281022823249382822249372821241150282024937281924178128182411
4328172419942816241873281524261222814249512813244192812237292811231863
2810231142280923840280823934280723834280623724280523836280423843280323
1461280223522280123731280023837279923834279823628279723104727962363027
9523104327942316652793238302792235172791237262790239362789237272788236
2627872362027862363227852324802784235262783235222782231448278123521278
0238332779235222778238292777231247277623840277523622277423104727732373
0277223104827712312442770238442769231145276823838276723524276623937276
5231675276423104227632372727622310422761234212760239412759237282758238
3627572314472756231249275523733275423104527532352127522352327512372527
5023727274923728274823519274723939274623833274523125227442311482743236
3027422342427412373827402373727392383927382319852737237272736236252735
2384827342352227332351927322312412731231042273023419272923942272823732
2727232511127262314552725236242724237252723238372722231562272123321382
7202351927192310302718232610427172317632716234212715231566271423940271
3231356271223135627112310412710235222709235182708232110427072362227062
3728270523629270423315270323525270223528270123730270023104226992342126
9823420269723521269623521269523314269423419269322441992692221263269122

1041269022114526892293126882229122687222913626862218632685221860268422941268322729268222176726812210432680222710126792212452678221555267722176026762215602675221656267422735267322187726722284126712212592670221664266922218926682216742667222710626662284126652284126642293126632211452662221460266122239726602214612659221151265822418265722936265622178526552235148265422104526532213442652222089265122271282650221576264922208926482211432647229362646222181264522241002644228462643222094264222145126412216762640222510826392293826382222982637221252263622415263522623263422176926332237144263222221022631229382630222285262922177226282210412627221448262622251012625229352624221561262322134526222212432621221346262022701262261922114426182212442617222286261622104026152241926142110432613218292612218322611211350261021114226092152526082162326072112522606211666260521115726042193826032193826022172626012193526002111422599212075259821103725972173225962112492595216302594218332593211157259221199225912111432590218402589212383258821631258721734258621166925852110412584211251258321146525822110452581211472258021146125792112612578211251257721629257621167525752115832574218392573218422572215292571218332570217352569219342568211142256721936256621737256521939256421732256321835256221732256121834256021837255921735255821135525572173125562183125552152525542111452553219372552217332551218372550218432549212083254821124725472111462546211882254521145525442113502543211356254221104525412116612540217302539218372538211772253721104925362110402535211147253421839253321135725322118802531211351253021155925292162925282183825272115532526212282252521622252421135225232172725222152625212113572520211353251921114225182173525172183725162162425152110482514217292513211044251221837251121845251021942250921145925082183525072114582506211044250521157225042111422503217312502214192501201150250020197924992013532498201259249720187524962020852495209352494201767249320125024922083824912082824902012472489201870248820623248720156524862014522485206212484207222483201349248220942248120113624802017652479201462247820114224772093524762010382475201244247420135624732062024722031524712073224702012472469206272468208362467207302466208312465201344246420123924632028104246220166224612051724602020712459204182458208282457209372456201768245520124424542012482453201575245220271052451209362450209332449206202448209352447201765244620157524452051924442083724432018692442201249244120104624402013422439201461243820197624372026115243620837243520165924342062124332051924322012492431201239243020210422429201367242820530242720155924262062324252083324242014602423208342422206282421208412420209392419201974241820113524172052124162092924152051724142010352413202187241220727241120103524102083024092051924082083124072021324062035130240520229324042062024032051924022062024012041400

2400202112399203122398203122397203102396202823952051823942021023932041
6239220310239120515239020518238920419238820114023872073223862052023852
0414238420134823832051823822010372381201039238020114423792052323782093
7237720519237620186823752041523742082923732073023722012442371204192370
2063123692041523682052323672012236620419236519144623641910452363199432
3621952323611941723601910382359196242358194162357199442356194142355194
2023541993723531952423521962723511972523501994123491963323481983323471
9522234619931234519728234419839234319136223421925982341199352340191674
2339198362338199342337198292336191036233519843233419103823331983123321
9125623311918612330199332329191146232819114623271912512326191152232519
2912923241931623231983323221994123211911482320197292319197362318191041
2317199372316191460231519145523141910352313191354231219124623111910402
3101914502309191650230819835230719834230619124623051911482304191147230
3198352302191653230119934230019936229919629229819114922971983422961910
3822951912402294191141229319187622921983522911910382290191457228919524
2288191557228719113822861993222851983022841911512283191042228219934228
1196262280196252279198342278191146227719134522761914432275191452227419
1345227319830227219135222711914522270195172269195192268191522671941922
6618249222651818682264186252263181048226218942226118146622601811492259
1852522581814652257181147225618527225518114822541815492253188352252181
9772251181249225018207822491813512248183102247186232246181553224518310
2244181350224318134622421825912241182922401810342239189382238183514822
3718940223618105122351817762234181248223318241032232181346223118929223
0181664222918103822281882722271815652226181243222518103622241882422231
8621222218113722211812512220189342219182085221818124922171811492216181
3492215188432214181975221318301182212181892221118198322101814542209181
0512208181365220718135922061826111220518281222204181663220318115222021
8136722011823102220018937219918113921981820792197188302196181562219518
1963219418828219318165721921812502191181241219018135021891811502188181
4702187182812321861812482185182812921841830129218318155421821823812181
1883721801817582179187252178183315121771832142217618135621751838173217
4182210921731834127217218198021711818752170181978216918114821681893921
6718730216618166121651810422164186272163181144216218114621611816582160
1862721591831321581815692157181142215618419215517217221541722902153175
3021521783521511718702150179452149179462148171461214717940214617166721
4517197821441714632143172392214217147121411727114214017114721391714602
1381715582137172692213617125321351711452134171037213317145321321719762
1311793021301713502129171454212817114021271712532126171357212517936212
4171456212317124621221714602121171142212017136021191712482118179372117
1713632116171139211517157021141717812113172287211217155721111718732110

171454210917935210817199621071710412106171564210517135821041725113210 3
172192210217187421011718842100171352209917156820981714552097171671209 6
179442095172510020941751920931794520921794220911719762090171982208917 1
258208817218720871763020861713482085171044208417115920831718672082177 2
420811713482080171657207917115620781717712077172290207617834207517135 9
207417124820731713552072171250207117948207017104520691712532068171251 2
067172510820661793620651711502064171245206317125220621718712061171353 2
060171468205917218220581773120571713592056172311620551784320541794220 5
317167120521711492051172311020501711572049171776204817136020471793120 4
617125720451721952044174192043168322042161451204116125320401622912039 1
617752038161249203716942203616735203516114320341619712033161566203216 5
202031162294203016228420291613572028169442027162410720261615512025161 8
652024167272023161156202216136220211624942020161152201916124820181616 6
920171613562016161767201516941201416104120131684020121618762011161564 2
010161557200916198320081617682007163213120061620892005161681200416241 0
320031613592002161043200116199120001611451999161451199816739199716629 1
996162511019951625119199416186819931615751992161971199116291091990162 7
103198916104219881615621987162198198616229219851620741984162493198316 1
354198216156519811617691980161661197916146319781617721977161771197616 2
396197516125819741619651973169371972167341971161257197016634196916103 8
196816124319671611481966161251196516732196416145819631617671962168311 9
611672819601616671959161263195816156119571652519561618781955161037195 4
161153195316187319521614461951162812219501632118194916104319481622911 9
471612641946161567194516209019441684419431619821942162198194116218619 4
016156919391694019381613491937161155193616732193516104119341662519331 6
103919321672719311642219301611491929162110019281613491927161571192616 1
671192516134719241610441923169481922161459192116731192016840191916830 1
918167361917161868191616942191516419191415522191315624191215728191115 8
341910153191909156271908153141907153191906154201905154211904155211903 1
515631902157361901155191900151469189915624189815319189715630189615530 1
895155251894155281893155241892155191891153151890155211889158411888153 1
918871552418861562518851552318841541818831562318821542218811594018801 5
146218791542318781572918771541618761552018751562918741562418731562618 7
215523187115829187015732186915835186815728186715937186615418186515522 1
864156261863158301862151040186115317186015520185915830185815420185715 1
141185615519185515420185415104618531541818521541718511562418501562418 4
915520184815113918471593118461572718451542218441593618431512451842157 2
818411583318401572518391574218381562918371512631836151142183515834183 4
151152183315729183215521183115737183015836182915939182815726182715523 1
826158331825157281824157291823159391822158341821159371820157271819158 3

1181815739181715730181615625181515419181414136018131410361812146311811
1463218101410501809141142180814125118071414641806142610918051494518041
4136018031483918021493918011413541800141861179914261141798141558179714
1355179614156117951494317941425107179314218617921412531791144211790141
2501789141884178814134917871412551786141559178514178317841444187178314
3413817821451817811414561780142290177914166217781472517771452317761410
4317751416781774141778177314291121772143314317711437157177014135017691
4114817681426117176714218617661419751765141676176414145417631416721762
1441917611315641760131871175913166817581313581757138321756132182175513
1974175413251011753131989175213145317511339139175013135517491351193174
8132810617471383817461311521745131967174413167417431323941742137301741
1315721740131910117391313541738137341737131558173613271181735134218217
3413451881733131155173213271071731131986173013942172913351211728131454
1727135301726131558172513155617241320901723132511217221327111172113241
0117201326115171913156017181341917171223941716121979171512291231714121
7671713121459171212730171112114917101210361709126261708121457170712211
0517061247169170512145517041293517031293917021220721701126271700121247
1699121256169812114616971293916961223841695121039169412221011693122181
1692121347169112124916901213511689121870168812115316871218721686123713
9168512135016841216631683122484168212331231681121145168012625167912124
8167812124416771252716761215651675121662167412301101673122811116721224
8816711226114167012176616691217711668121474166712629166612103516651217
7216641293916631273516621217721661128331660121461165912155416581212471
6571229110165612229216551211391654121553165312145716521222961651121150
1650128411649122510516481218701647122086164612321271645121046164412261
0416431226112164212271151641121138164012104116391217681638121984163712
3213116361218731635121042163412134316331210361632121968163112238916301
2197616291223911628129431627123213816261294216251217771624121873162312
1980162212420162112177616201293816191213541618128341617121243161612166
8161512145916141215571613127301612122510616111216631610121663160912166
4160812631160712522160612419160511167316041131816031194116021117691601
1115611600111042159911835159811261101597117291596111468159511176615941
1124615931110431592111872159111207715901118751589111557158811937158711
1036158611520158511165715841112441583112494158211936158111942158011946
1579111044157811631157711103715761118861575112082157411166515731119791
5721193715711123781570113613715691121821568111142156711157415661127110
1565118311564111257156311301181562111130156111134315601127109155911134
8155811155415571152215561111481555111460155411134815531194815521118681
5511115631550111244154911841154811187315471111471546111870154511238515
4411228315431128111154211176815411112501540111461153911218115381118651

5371172815361116651535111661153411188215331114521532111863153111197515
3011197215291119631528112476152711155615261119841525112386152411207315
2311114815221126941521111042152011197315191111551518111758151711125215
1611186615151110381514111459151311311231512111038151111239215101120811
5091129113150811114015071193515061111611505111467150411727150311941150
2112410015011111501500112310014991139146149811166514971114621496111664
1495111875149411279514931110481492111356149111114714901122931489113112
7148811166414871119851486118281485112598148411935148311103614821141914
8110114514801023871479102485147810165514771093814761027100147510104514
7410156414731014601472101453147110156014701021941469108331468108301467
1010441466102285146510241091464101461146310728146210271181461101151146
0102913114591016831458105261457101048145610135214551022851454107331453
1017641452101039145110626145010167714491011481448101038144710146914461
0229314451017871444101660144310341361442101359144110935144010259614391
0156114381025901437101042143610156514351042114341010361433104214114321
0197614311020731430101044142910156314281052214271016581426102184142510
1143142410135214231011391422101253142110228114201073014191012491418101
5631417102087141610104214151011451414101147141310156014121012451411101
9811410101666140910228314081017601407102997140610176314051010391404101
1481403102711414021016631401101046140010188913991027118139810167213971
0114513961043198139510261131394104116613931022841392101668139110177113
9010291231389101454138810186513871039138138610104213851017871384102710
4138310188613821014661381101574138010630137910157113781014621377102310
1137610281261375102911313741026991373105221372104191371915541370914601
3699217913689165613679125413669188213659177813649221021363918771362952
1991361994113609311271359927109135891761135791861135692288135592084135
4916109135393717413529156113519271011350923861349924117134891254134791
6851346916671345916651344917741343922991342925128134192711313409167113
3991669133891459133791888133693013213359198613349239013339261031332917
8013319135613309147613299114613289188213279167413269187113259251121324
9843132392711813229251031321920931320911471319915671318993713179125213
1694619013159126213149241071313924132131292612513119321681310916791309
9191051308916671307913641306917731305916641304912551303926114130292211
8130191982130091662129991144129891045129791781129692295129591247129492
2931293914561292916651291915631290916641289917861288915711287914701286
9147712859135212849231131283915711282943176128191670128092912212799311
3412789361601277919841276929139127591460127491564127392310212729231071
2719291231270928113126991240126891883126792396126693317012659209712649
8311263910441262916801261924110126092399125991883125892410212579114512
5691159125592093125491879125391368125291039125191356125091677124992310

5124891874124792613312469229812459321351244914641243994112428229512418
1885124081357123984520912388135412378259412368114612358103912348207812
3382610712328271151231893712308207612298125312288125012278331341226883
5122581455122481043122381244122281038122181782122081868121981774121889
3712178136712168187412158361401214817761213813671212813611211819881210
8208812098351491208833150120781046120681666120581659120481881120382198
1202813581201821931200812521199819721198817691197816741196819821195810
4811948126111938199511928135811918219511908114911898103911888836118781
2541186824971185862611848218611838208111828125411818630118081358117982
3103117882299117781867117681152117587331174823101117381151117281147117
1811471170863411698178211688188911678419116671148116571669116478411163
7238911627731116171250116071044115977321158712521157710471156793911557
2699115471464115371256115277331151772811507125511497291251148728104114
7737153114671040114572288114471140114375181142784011417731114071469113
9730122113871042113779471136730132113571364113475271133715641132726104
1131719791130710521129740172112871477112771980112671141112571879112471
9811123727118112271773112172093112074320011197832111873214111177432221
1167301291115741170111471563111371459111271569111171146111073917211097
1874110872289110771363110673615311057208911047156511037411651102723109
1101718851100794010997103610987249910977291391096711601095711431094723
9010937138010927124710917229410907104710897228810887167610877211001086
7166610857522108478411083719771082731210817420108073171079742510787625
1077711411076711551075711401074752210737114610727416107177341070773010
6979321068762610677624106671136106571865106479341063716711062794110617
2310210607197910597104410587938105779401056718851055718821054713591053
7166410527135910517633105071253104974215910487229310477198310467241071
0457381561044784010437736104271354104171146104071353103971563103876331
0377166610367837103572396103472511310337351321032713661031725107103071
7711029727113102877301027711391026714581025716571024714711023713591022
7114410217113910207932101972176101871772101772912310167156510157835101
4732145101373814610127104510117199510107208710097156810087147210077136
2100671887100571048100472811010037361501002715701001710421000723104999
7146299874016199773715799671158995719749947114799372911099272611199171
6649907167898971669988722949877311389867208398577349847124898371254982
7281309817526980725105979717709787125497771566976773697574169747521973
7135097271757971716739707114896971156968794596776279667636965712469647
1043963714579627135096171496074199596218695862910495768329566939955616
6695461664953619779526371389516351449506146194968449486177594761775946
6351499456421809446271189436836942637142941613519406281229396391289386
4016793762310693661670935631145934620839336229593262611793162096930631

1289296197592867279276187192669379256103892462813492368389226361519216
1041920694191962811091862911891761569916624100915620969146125991363011
6912610409116113991061863909611489086231059076126290662395905622100904
6136090362190902625103901613539006134489968448986155989769438966165389
5618658946156889364418789261359891616698906126288961769888629128887649
2018866221028856441718846166688361781882616598816956880684487967348786
2110087761458876611528756229387462592873612538726186587161869870615548
6969508686145886762410686668388656391608646451758636124786262310386165
2186069328596271058586103685761773856612488556177185462295853631113852
6145985162277850621748496635848627108847615718466251058456176584462810
3843684384261564841614568406239083969428386207983761463836611578356124
6834615628336177183262282831619678306105082962811482862290827614668266
1360825627111824619768236939822616608216176882061147819632133818610418
1761243816612578156145481461368813637137812673281161756810693680969298
0862492807693780662510080561041804613568036944802613538016166680063113
8799612537986114279761252796614497956146979464197935114279252410279151
1477905291087895451537885177078752297786515667855228678451361783564280
7825155978152299780526128779552213778520867775241007765218577559347745
2610077351673772511457715937770527119769520867685511967675241047665241
1676551372764520927635168276254520576151252760518697595740758514677575
1663756521897555261287545157075351978752510427515177175052490749516587
4852598747584074652596745534139744519787435198974252092741531129740525
9473952410473851262737547218736513677355136373451668733527110732521777
3151254730524109729511487285136872753815872651580725528116724523104723
5104572253313672155122872051666719526117718531140717541195716515687155
2611371456828171351971712514497115136471051249709524887085146870751352
7065341407055401627045261067035938702513567015166470052499699514626985
1352697517696965211006955187569451570693523926925291076915301346905421
5768951880688524926875251196865321416855452076845241076835740682510476
8152711768051986679562281678543201677531137676561278675553242674524976
7354196724501916714157367041250669426129668418876674542166664249966541
1446644125066341143662413616614156666041458659425131658426136657414736
5641460655414576544832653434128652463165142210365041990649437162648417
7864748436464221006454144964441453643411486424189264141145640418856394
1658638419916374361616364331376354147163446286334207863242913063143816
3630414626294124962841040627432129626411436254221026244291266234401786
2241245621417736204166661942072618421956174732616473561542110961448366
1341143612420676114208161042697609433135608414546074114660641350605419
7960442182603414546024730601415676004229459942010659846228159742396596
4311225954104059441264593427128592483759143317259044017058941670588460

2355874321625864361685854281285844228858341761582415575814227758042287
5794301355784135657742410157641249575418735744361435734482045724209857
1431139570421935694197556841763567411495664728565418925644321563462756
2427107561419775604231055594166555841673557415655564301255554291325544
2510255342010055242095551411385504188054941037548411435474209454641040
5454145454442069543429121542438177541494454041464539449205538414615374
1243536415555354156853441885533415785324321585314229253044019252941988
5284271085274125652641353525424995244834523413605224146152145826452044
2185519454265518417635174114951641783515435157514424106513420905124147
0511422107510413555094187950848829950747127150641363505415715044137050
3419915024371865014167950041458499428115498416824974291254964419495311
5749433012149332185492373049137294903431884893145848832095487311454863
2110048531157484393848332086482321994813241084803239947931255478328120
4773937476322954753301224743361464733177447231253471322874703115446931
5644683177746731569466311474653197846431354463316744623331514613947460
3207345932510745838324573135345632168455318754543301214533728452314534
5133715745032189449375291448325106447340166446319844453626444313644433
1050442319874413218844032499439327107438312514373136043636334353241054
3439414333629432313544313157043032310442931371428311554273529426352742
5313624243166142331245422394342131768420315694193136041831047417312574
1631149415321884143281274133311254123239841131877410394040931584408314
5940733515240631148405323113404311444033114940231043401317814003146539
9314703983341573973135439631774395315693943207739331350392325993913104
2390311473893114438832499387315563863249138531462384311433833937382394
7381318833803135237932912637831462377372937633314637531367374328120373
3291203723271163713936370336144369383436833211536731779366311523653939
3643135436331366362314613613207536031670359332129358362835731554356325
1143553725354315473533732352311593513136035033113234936303483946347320
8634638343453198034434518734335353423237934137333403219133932081338383
7337313603363208033531763334320923333155233233513833132410933031866329
3727328311483273114732631462325326963243227932332711332232186321325923
2031553319315653183208131731150316318883153261223143261073133187231236
5431131150310324107309324125308329116307394330631468305316663043134730
3315543023461973013135030031137299318742983115329737242963132953419294
2491962932271182922281032912321382902129551289215542882145228721772286
2145428521987284211452832451862822177928123013428022811227922089278215
5727721665276213682752301252742351482732271232722391742712114427022492
2692249726823914826726724926624316926522411826422410226325018926222287
2612522082602941259227122258215772572602402562301142552431652542542172
5321669252293825122810625027312492634248227116247215652462844245235140

2442251112432472002422251222412642882402331472392452032382301142372461
9323624017723527292342135423321465232214662312168123022712222923918222
8226118227226123226216722252572472242259322322210422223012722124921422
0220932192207421821772217212492162166721521149214212522132145921221765
2112251032102835209214572082249720721249206226110205230121204273290203
2146620222210720121565200262419922513019821359197227120196217871952652
8619421777193244185192232123191215611902165518921354188216771872939186
2381631852512661842145818321161182229122181225931802156217921866178222
8917721150176217681752239617421257173231123172243187171293517029371692
1364168211571672209116622489165294216421045163212661622135016121153160
2632159217871582311381572176615621975155272715421473153232130152234146
1512451961502218914921554148230127147214631462103714521979144231135143
2156314221554141227114140217701392933138218741372168113621776135214651
3423012213322211513221983131218671302125812921570128231112127210461262
2410312521147124214561232125212223011312123114112021758119218721182177
6117233123116218731152175911421961113225981122136511121249110274308109
2228910821044107210441062125510521872104225102103294410221767101227131
1002115199230119982271079722610896210469522813894213639324923192215719
1229150902105289213548822391872241028621145852936842231018321977822371
4181211578021045792249778217627721871762238075220837429457321254722135
4712157070224108692602576822811867218776622095652189064273063215606222
7121612737602830592125358210505721884562196955212585428385328475221055
5127415028424921879482146947210514621768452114344219864321980422136341
2231014021248392157038228111372197036213603522082342391553323414532213
6631220783022399292125328225102272198626261925217722421157232734222167
3212197720272919211431821251172104916211471521253142114713283312212521
1284710272792138241971944613195141941312312122141811419”

4.2.11.2 Fact: Rewriting the full text of Quran at general verse index level by replacing the number of letters of the word with the words

In Fact 4.2.6, we will literally replaced each word with the number of letters of each word and rewrote the text of Quran. That further reassures the rewriting of code 4.2.2.1 and showed that not only the total number of letters per verse but also the order of each word in a verse pattern has 19 the similar 19 based coding. That coding as a fact answers any potential objections such that “why is there no coding that shows the order of the word are also under 19 based design?”. That fact, Fact 4.2.6, answers that question by proving that there is also a coding at the number of letters per word resolution and we can rewrite Quran also with the same pattern of code 4.2.2.1 but now with the information of the order of words per verse in the 6236 numbered verses text type of Quran.

In the coding of this chapter, I will show that, the exact same coding pattern of Fact 4.2.6, if we use general verse indexes from 1 to 6236 instead of the special verse indexes, then the coding again results a big representation number of the full text of Quran, which is multiple of 19. This shows that the same rewriting coding pattern exist with both of the verse indexing types, the primarily used special verse indexes, which show the index of a verse in each chapter and also the secondary verse indexing type, which is the general verse indexes from 1 to 6236.

Here is the proof of this fact:

```
x <- nQuran
tmpwr <- c()
for(i in 1:nrow(x)){
  word<-unlist(str_split(x$text[i]," "))
  tmpwr <- c(tmpwr,paste0( rev(sapply(word, nchar) ), collapse = "") )
}

cat("Tail of the representation numbers of each verse with number of
letters per its words: ", tail(tmpwr))

## Tail of the representation numbers of each verse with number of
letters per its words:  5342 53 53 6722 54254 652

cat("Head of the representation numbers of each verse with number of
letters per its words: ", head(tmpwr))

## Head of the representation numbers of each verse with number of
letters per its words:  6643 8235 66 534 6544 865

tmp <- paste0(x$VerseI,x$chapter,x$vwords,tmpwr)
cat("Tail of this big number at verse level: ", tail(tmp))

## Tail of this big number at verse level:  623111445342 6232114253
6233114253 623411446722 6235114554254 62361143652

cat("Head of this big number at verse level: ", head(tmp))

## Head of this big number at verse level:  1146643 2148235 31266
413534 5146544 613865

tmpr <- paste0(rev(tmp), collapse = '')
as.bigz(tmpr) %% 19
```

```
## Big Integer ('bigz') :
## [1] 0

cat("The number of digits on this big number is", nchar(tmpr))

## The number of digits on this big number is 122464
```

Also, here is the “122464” digits length big number:

“6236114365262351145542546234114467226233114253623211425362311144534262301135334236229113552823622811353342362271134322262261134534262251125342336224112443326223112254622211243422622111153235262201113557621911143345621811163343426217111533333621611075338344621511076432655621411056433362131094335362121095426436211109552433621010954264362091094624262081094842262071084625262061083543620510836736204107277620310736256202107556225620110727462001075743336199107463446198107464456197106732632646196106453286195106466476194106246619310535466192105442666191105464556190105552543618910575633323618810435326187104355461861044734461851043743618410446253618310446263618210445424618110445434618010444433617910396757865536178103433726177103166176102562562617510246372617410226561731025636236172102463326171102363361701023743616910227661681012536167101432536166101254616510147324616410145423616310147424616210147665616110157754361601014725361591012726158101176157100555342615610046224615510076224344615410045534615310045334615210045472615110034256150100342561491002496148100249614710024961469963335436145996343543614499675654561439943433614299374561419943274614099375661399947553613898213333354434467524344366137989632586552613698166225464329632552613598166346667552647353613498116623236554361339834346132986544424613198126636963253261309755432461299793224446846128976332354612797554253612697554273612596565423612496284612396255612296355561219668642336120965343436119964532561189637326117965533256116963334611596344561149646332611396363261129645723611196542273611096363461099636446108964327361079653434461069548544610595463536104959533486553610395464626102956542753610195365461009525460999528660989435346097943544609694445226095944452360949434266093943444609294343660919444243609093443546089934436460889344364608793355560869334456085934454360849345355608393562237608293533342608193333660809316607992245607892563363607792644244360769245444607592268607492353460739246362607292344860719247633607092355260699264343436068922676067922746066924732460659226760649227460639245424606292345260619247533606092343760599234366058913643605791766455766056917744443460559136526054913744605391452336052914524260519137676050913534604991353660489135376047913636604691353 76

0459135366044912666043903535604290675275660419037556040909876755232603
9904526260389035256037906523252603690242603590462536034903653603390277
6032902666031904524360309053322560299044454602890634422560279053275360
2690333560259045424602490454426023892466022893526602189555335602089485
5260198943543601889535426601789564524601689962475555460158953363460148
9633533360138943356601289434676011895743636010895662236009891053544462
3460088911535563623746007893932600689543353600589364760048946245600389
3726600289565555600189662542460008936335999896433323599889633332259978
9333659968926659958923559948916599388465225992883652599188466465990884
4423598988365359888844344598788443545986884436459858844364598488643536
4598388266598288266598188266598088363459798835345978884544259778835325
9768825659758835545974886324342597388642343359728844324597188354459708
8255596988355459688847442596787357359668756533259658735375964874666259
6387443345962874424259618764344225960874654459598726859588734255957874
6424595687266595587943543432359548734365953873445595287364559518734355
9508734345949874633359488645684594786245594686346459458636235944863343
5943863536594286353759418664332235940863743593986454335938865853245937
8644323593686432765935866453322593486265593386462535932862775931853532
5930854442259298544625592885552552592785255592685464425925853434592485
3652592385366359228545423592185453325920851465375244386552591985146444
4462298552591885104323568324591785966562345359168564962335915854452259
1485363559138537535912852655911852765910853637590984953338655359088434
5659078445345590684465525905846626534590484462335903844324659028434365
9018433365900843643589984652332358988454222358978456423358968425558958
4354458948464454245893844643658928445554589184565424589084974334374258
8984345558888445425588784335458868434555885843563588483665263258838336
7358828366625565881834656358808366525545879836575374587883483445877838
6552565258768348344587583352658748361083335587383454255872835646245871
8336735870834437258698328558688325458678345253586683653742358658376244
3425864834654258638368542435862838652633235861837763644358608374423243
5859834546558588338535857832545856834425358558364364235854835835435853
8324458528357453358518356626458508367537355849832835848829356443423584
7826532522584682553253584582474235844823537584382443635842824437258418
2362658408226558398237535838824662358378264324225836824554458358276432
7425834825542345833823564583282346458318236745830823663582981882442363
5828815624335827815833225826812645825815454235824815553235823814663458
2281366358218134245820816452332581981444435818813436581781343658168125
6581581364358148145234581381355458128134645811813464581081345458098134
3358088134845807813464580681346458058134645804813464580381346458028136
6458018134535800804662557998024657988044555579780275579680355457958065

3544357948025757938025457928054253357918036445790803935578980246578880
2465787802575786802555785803347578480435525783804355357828045376578180
5423335780804533257798036525778803462577780454425776804432257758045273
5774802445773802455772802565771803532577080343357698035435768803434576
7802435766804442457658044343576480342457638036235762804664257618044453
5760803642575980253575879952436263555757795624345756793733575579462335 7
5479564627575379462535752799525434324575179462635750793664574979332457
4879433655747795327535746794664457457939355744792675743794754457427945
3365741794555557407936535739796562435573879643532257377957644557367946
4345735792545734793442573379244573279365557317945336573079642322357297
9533534572879636635257277944442572679382457257945425572479553335572379
4453457227957284657217925757207935545719792765718793743571779249571679
2495715792495714792495713792495712781653526544254355835711789433433453
5710781454623237239543570978105362663682570878554324570778653446257067
8255570578266570478275570378357257027855363657017845733570078357656997
8555254569878254569778365356967865344625695783646569478247569378464425
6927845565569178465655690786665243568978563532568878265568778463255686
7855382756857835565684784545656837835665682783556568178355656807826856
7978267567878455435677783732567678273567578473245674783652567378282567
2774644456717738535670776626334566977385356687756457456677738535666774
8443566577664357456647736365663775542725662773853566177563333566077587
5335659773853565877483435657774623356567738535655773354565477464445653
7765243425652776342237565177662423756507738535649777539654656487727556
4777455435646773853564577384656447735335643774442756427754326356417738
5356407739445639773762563877374356377738535636775532535635772545634773
4335633773454563277346456317734645630773464562977356456287734245627772
4956267724956257724956247724956237724956227610553395242456217611553424
4236356207695334335325619769675445673561876854667552561776754525535616
7656433556157695244333455614766664533561376865443332561276135546325573
4465611767555424456107696566365555609764744456087667634465607765663265
6067687463255556057666656565604761073444273465603765635365602768646532
4656017677544243560076105344424464559976766633675598767733476555977676
8443445596768663326725595766675863559476754536635593761055765427535592
7611643252373325591757642353455907557573455897554443255887564324235587
7553427555867545242558575352455845755543325583753534558275433335581754 6
5335580753656557975363355787533245577754743355767555342355757535555574
7535435573753554557275266557175475235570754552255697545564556875464525
5677562552425566753743556575554372556475643357455637547533556275332355
6175553574556075365455597525455587535345557754734455567555574255557565
4236355547555437555537547643555275474425551741174632442363555074343355

4974353355487456622355477495442442425546743523554574373555447456723355
4374485635542743653554174454445540744824455397447423553874572225553774
4325255367428255357438425534743653553745543325532747525243355317425555
5307435545529743436552874342655277426355267457543232334434254243444444
9362569655536556655755435536355535525743345552474255552374433425522744
3253552174236552074553332551974643332455187437425517743432551674232551
5744333255147433345513743433551274256551174557333551074442425509743625
5508742555507744642555067445434550574443835504744435455037447234550274
2555501743643550074256549974246549874244549774252549674364254957378444
2494542435327634447656734274427643265266445236242754522375453526555424
4343254947395334335325493736643256549273847445254549173654765454907311
5536355556354897385565754354887355632654877346652548673656649554857375
4762355484739562332762548373664533554827365462225481738454325525480735
5445354797366644225478735534245477734535254767336425475721343255354662
2554747213443432444252354737274434354547272114324262542254717211445428
6243354707216446432364338425354697212642333426232546872843334232546772
8424334425466721044655433345465728442533735464721045533243375463728439
7382354627254568454617210456438483454607214434434432455345459721145352
4422445458729453334834545772134434252343424545672134523453554434545572
8554486545454729444225345545372114742565243454527210443554224454517274
4364345450729435424254544972945432553454487213455364235334254477115538
3399543472425446711055353555235445711058253322345444711264323534768354
4371853833553544271135543533436426544171354654407113535442275423354397
1454475438715553355437715674625436715552655435717554445454347185634334
3543371365354327165352325431719635435567543071465645429716533484542871
7636353254277145632542671148966862753564454257155355354247176444323542
3711864242334324337623454227157646254217174433323542071144462324424346
3541970965453367554187096335572635417708645637655416708833444235415707
7387343541470563733541370843424425541270546362541170564554541070464255
4097057632654087046926540770556926540670772634535405701063574227335404
7046726540370553442540270664422654017045466540070286539970552726539870
5663255397702735396704553453957045433539470453725393702545392704542453
9170255539070334353897065255235388703547538770257538670955425263853857
0454435384703665538370466435382702555381703554538070354553797011335633
2468453787047242537770442385376704454353756946344537469363453736948354
5372695642545371693764537069663324353696946362536869373653676958354353
6669482255365696625443536469762544235363694444353626936235361694634353
6069483525359695523435358695455245357695743335356696654233535569775555
2253546934625353692545352693733535169453425350694745253496946233534869
1163252565424534769876263574534669256534569353253446945423534369564343

5342699664565424534169654426553406996553357365339695553665338693746533
7696535755533669654523453356965365375334697727533353336965464455332696
8104354533169552333533069155355445454743555329696544734532869487445327
6948444532669462535325692625324691653236858332353226812637553885543532
1685825375320681053743246245319681153425533345531868563552531768764234
6253166854423553156810623296443553146811636355336755313689836363243531
2688652875325311684444453106812633273355532530968563332530868563432530
7684633253066839865305686644372530468865246664530368106433446243530268
6533525530168583355530068663345552996876433363529868373252976856355452
9668463355295686555722529468383852936876425352529268267529168276529068
7633245452896827352886810686255537352876837355286687763644352856855323
2528468443335283684445452826835445281685442335280684742452796838335278
6811943522342325277682765276682765275684434452746855352352736856353252
7268463615271671044634542625270671344222865246225269671544284352334626
2526867135244345544444526767944354354252666776425337526567865525422526
4671262588534642252636712643443443444526267125324244264335261671542382
6326332433526067154333636265553445259678434525345258671243855426225252
5767114245342622652566714654257265533425255677663324352546796443262565
2536794453645525252675665685251671165232424326525067184423423243256452
3552496713453653444524452486784353545352476776444556524667126437858766
4452456710435545554252446718423255526323256334524367116634447753452426
7943233544552416617825546552365545455240662485255525524423242555544452
3966278255444255396625353635554435238661264475510645425237664643233355
3446963453565442375244774424354435554252366612642545725542523566236275
2452446585647635542523466177566666644652523352336621433985652434637334
3525232662966533524254325434462445633533523166116636574343252306615445
6552432425425229652543342434323427555553633445228653442442446752445555
4353728655564454552276517454425574246553435226657455454552256514458559
5432342552246525433455234442443644334232552236532426736576635354357352
3577352532752226514425634433554335221652844224433542576427456626262475
2206521433432444243435352326521965305244335654322443774337672685445218
6542433443424334443444565235362724465667653542521764566854521664124453
5364446252156416826423374777724652146484345487452136419444377538348722
5542521264987442332452116411666356367475210641643354354344352425209641
1644655576565208642765344675244663455543733546352076410463564665652066
4184434536264326225535205641643547667468564435204641344454632553535203
6414644563525682245202649655565683520164114635454554252006417432335352
5238223451996311634553344435198632182454336425554232722751976318826343
4327375255425196631762949754545673536519563206294685463443236265251946
3188542423442362237545193631483576444366334519263226346752542653564637

5645191631162363452553519063126523444253765189631779245634545345943518
8622183573523432256564254451876215655474327528644518662226423345543366
3264355425185621864378543527435452251846299456434735183621864256532364
5255422518262238542545555336464722755351816210652542543351806286633634
6517962214433253767755445723425178621266655238223451776136675355655732
5545393436294343345555425176619844442375517561176533424675244763451746
1156423347844286565173611244265352554251726114833353644654425171611183
3435843765170611685425734354353435169613243358544442456723335544373243
4335168612485425644545443637232543351676111555352753425166619622624343
5165619622625542516461116635238223351636020652633625254346255425162603
9444243775263763765375353534552237843542516160216244466237455763723535
1606056445544346286277463683725436263523322263736838449785355425159602
1826636273762852752464515860218342576262735282524625157601544545446545
4243515660196524343564433444333515560136633435554624515460526555644324
2243285733456348765435432644436523672443425153601346355473737625152601
3625686575367251516049642345363634475567525542456266642535375566462554
2515059176636822246726664251495919634576676665233244251485913662854233
2442514759187556744426563363625146591082555655525145591082567446635144
5918634424634236455542514359108444652584514259178244334333447327451415
9114445455525451405923623533756455342253235925139591262353426243551385
9166227564826446263513759287445863444434663632558665323513659234434553
6243865934465256513559318264233533363753462535425528566513459188256477
4246862659751335937644246735356534834422649864745325344251325925432354
2344444332463453443513159138645635824252513059126443443645535129591454
6246266543255128594174288576656247232464267456252546263255442512759116
6352382233512658518243234353544346752447346762357272726536432656564325
1255894342536435124588725646525123581582732373543775651225817824333473
6327546351215815642555442737442512058104444425376511958106523455343511
8581963537434225434553235117582463456476567544623563362751165823444352
3533346336663554251155831463555564554476343447726333554251145817874444
3464555726451135820644467576686737355425112583864745434646274242345466
8683436262453235111584743342735362523423433243623436235424252382244223
5110581543235545537546351095818449546352533564652510858264494446573646
5236232855323510758214635264623246536262765106582344435525756637272262
4755105581844428454365264343251045722652542543534323363634451035722445
3525435525566455542510257396455455672534563572885465426774356663525101
5714645457672684645100572843426552465643367655864785635099571265243436
5765509857154523255363523555097572144332623242362352524250965725652542
5433555546645442536509557396436636426446354255425643487265654366465094
5720655765665343882555565093571243435444798250925713656342535442650915

7286456455432656634233446425533509057156462565523444265089572065543337
6776563543385088572764266353245448663525755109435087572265234675244569
6354983350865712433274444422508557374635643473265244555324245268544426
3335084571745343537275443442508357156427335767562335082571543374563853
7655508157126443526562545080578644468325079573646354234344362434435232
4535243268342507857943337765250775711432335468325076579663682233507556
4634450745656233250735624650725634245071566782324507056565225506956665
2324506856444645067565823245066564642850655656342550645676244444506356
3655506256474355061564645750605646466505956482255058564834250575635425
0565634535055565462445054564664350535646344505256576573505156683266550
5056454575049566655642504856783252855047564645750465637325045562735044
5666557425043565832755042563627504156665665450405696222774235039567833
5553503856583275503756352750365646573503556453535034563537503356462475
0325636475031565423265030565874425029565535385028564872250275627850265
6984654446650255656535650245656335450235644342502256352350215635425020
5656526650195637245018563723501756266501656264501556268501456358350135
6264501256463625011562565010562545009562535008562545007563532500656565
2665005564554350045666344625003564653450025637665001562345000564633449
9956373649985656346249975654247649965646554499556385649945636334993563
7254992563723499156364249905628549895628949885657527649875657527649865
6356549855635454984563364498356435334982562554981563573498056374349795
5686233549785546544497755646343649765546544497555633536249745546544497
3554627349725546544497155345449705546544496955454554968554654449675537
5549665546544496555184964554654449635535634962554654449615557374249605
5465444959553875495855465444495755933536256449565546544495555937462733 6
4954554654449535555522549525546544495155365549505546544494955255494855
4654449475555343449465546544494555524456494455683444349435546544494255
6885784494155465444940558333424264939554654449385567456544937554654449
3655873532464493555465444934551763627685262726442493355465444932554733
5493155465444930551032232682254929554654449285568623354927554352249265
5465444925556852763492455465444923554865449225546544492155462464920553
7734919554654449185548382491755465444916556324254491555575273491455465
4449135548525491255573654491155365649105567636574909554725349085547457
4907553666490655366549055526449045527349035526349025516490154654334249
0054544272489954455434898545525334897546423764489654664535348955454632
3489454932563526348935454428248925464476624891544565548905455436248895
4952532623748885475438475488754555234488654742356544885543456488454554
4544883549456664264488254567664488154732445244880549473235563487954463
3448785474235654487754875654563487654445344875544466648745485325452648
7354768346534872545562374871549342252455487054104433355356486954364448

6854742356544867544453448665465355544865549533254563486454645343448635
4742356544862544453448615464233744860546333474485954545337485854932335
6556485754554656485654565334485554965656335448545483338453648535485457
2674485254833353344485154553354485054753272544849546533776484854753763
4348475445566484653373748455326548445335374843534663448425365432334841
5326448405356524348395346344483853332648375324948365395425432344835533
4354834534644448335346224483253454244831534664348305344342482953575734
4828534542448275345424482653473334825534665248245343343482353632373348
2253543533482153334848205374323422481953533535481853355548175334464816
5331434265374244352623427432538557548155316765553655523822448145316534
3522342325263481353116633352422548125316442424343623223348115396586762
5248105318543442323474282323480953376448085344272480753255425464343625
2344274853224806534443348055346354480453367548035336574802536634233480
1535335324800535426424799533635479853374347975344434479653432394795535
3263247945354243547935354253447925335324791533663479053363247895335444
7885354332247875345243478653533622478553333647845256655347835210433447
4345478252106264335553478152962345442347805276345635477952954656244347
7852963454333247775278256462477652563552477552764234624774525646224773
5294675373324772527922355247715276226852477052882233252476952665245747
6852662256247675285322476247665269244624765527632546247645285353533447
6352964235323347625266465434761527652333547605258335547595275453555475
8528534324484757525634694756521943343232527363666856475552734863364754 5
2664357447535286446453647525255427247515212642545462276475052662423547
4952663445347485263433534747525632254746523854474552346547445244643474
3524422247425245342474152276474052276473952276473852352247375225547365
2164735517645255447345198374355534733517652624247325196243324424731516
7364434730515846344729515533444728516532227472751135245342525324472651
1144333344263472551844333435472451765553234723514847647225157447747215
1864543234472051775342834719518637743254718518336332434717519753433232
4716517655623347155174342867471451652445547135184653724347125176665346
4711517823345347105168243274709514833547085153255547075166336354706515
8453347055186623334547045194455432664703519456325445470251563355470151
6444434470051963435645246995168734424698519642333664469751563563469651
4646346955148453469451586273469351382946925166252554691519633544525469
0515542724689517824436546885156532346875145346468651554225468551283468
4514323446835145334468251353746815135534680513564467951249467851249467
7512494676512494675501344274553363434674509453354543467350666543346725
0763356634671507442643646705056655346695012645433446235466850134243432
6368544667501343542323353224666501542262644323256346655064646234664505
6335746635074446632466250644362346615054375646605094225625434659508653

335424658508754337234657501044234624534656501066273442344655504445446 5
450644242546535064323544652501245553632423346515065443254650506633524 4
649509433235545464850844433242464750846362952464650146324444252575446 4
550104323222567464450943532346646435043664464250754633544641508644427 6
446405054336646395010634276362646385054335546375011432247547764636501 2
423377356364463550943235352463450944645425246335074335444463250114338
444525246315036714630491063456834424629491964275253427352262454628491 6
433552382245647246274918825442787722655584462649274442472526463627446 5
462247446254921444264362865853273542462449324442468443425445436334324 2
575542462349408263237365387366344323424344623323425542462249106546637 4
844621493083427667434334344763733677827346204974455424461949288258755 4
625753445524262444274618491865237646274452554246174912445344543543461 6
499626742752461549174453664555443755246144923625742454626353376255424 6
134916444246643362554246124854555486554363564436754447267253632626742 4
644555635364444611481455435364465442461048285433246224627665432666565 4
334609482853344633664784536458466255324608484055455662425245344476272 6
564544266662655246074819563445623234474624346064812644333232443460548 1
253452275556346044814532344344256254603481875783645433348554546024875 5
448564601481954757562246382824334600482755543752445643336333633345 9
948285563263634445636294343367282459848315362528283243572244626658537 3
854597481455444254346834459648958646542345954820445526623446396522524 5
944837563432434233424423432623286377767282545934825547444343434533634 2
474852459248864777657459148566573459048855446844458948215543465445555 2
579910954588481954433474546752449854587481955446844726884274424586484 5
446458548157564544342424254584485542534583473076225466375554245434254 4
275542458247675669245814713763656634366445804712753457553653457947153 4
434352442555245784711763674655424577472176445253423266442555245764787 5
949439457547127455329789434574471174422362532457347107566442653457247 7
866863445714715745532743255553457047163533753423273652456947774326744 5
684777564555456747107752626253456647123444535345444565472735524634636 2
546445454444555456447147745995743323545634715663347334626363456247666 3
566456147247763435543455554253345254560474474535524234267224443268332 6
452326333254734534559471377432333243344558471434386452332425455747223 4
674377567524486554424556471134283554433455547167954352553375264455447 8
754425534553476743556455247107564625542455147435574550473557454947387 3
344256455446443375334433465933645554454847187544442465536655334547471 8
557434243433368656454647873442555454546278534344243626243536352543354 5
444618643663535534535544454346224323336423563368344244454246184425642 2
452544432345414615442662342644652454046206444344335432455352545394618 6
534346554674244534538461765354442464326555453746106566525264453646328 2

5234456523273735443674363624644535461485447332744324453446184443282226
4357654445334613645525274354345324612823253562765453146254345434363434
3253384423354530462764444528435456396627653554445294696237853544528461
7654642523232552554527462876332524323448442633428427354526461865453552
7275244555452546458244335225554354354542623364433346654643567764524469
6534465554523461362353382445524522461685555554445544434521461943382623
4624325555445204624854242944373244264323262451946244433334234233242435
2432245184625663645233634244226372266245174614433534553565444516469686
5355344515461866237332622432433345144629642325233256823325254543252624
5134615663564453636852451246666426545114612451045866368283450945882538
2544508451682346266664446545450745146233573545365445064511825234525344 5
0545229333332624244327243234450445126459545345544503451365235247865544
5024511642633554634501451464255634325324450045108456446834449945186254
4332733626264244984516642755235325654444974521532232433536354663226449
6452464432535434543433454442644954513623433265684444944517623764865662
7753244934576454553449245157353658344235244491451362554375253624490452
4735473543254552323735258448945138387287667354448845116432643653244874
5146534544525655244864516745322355238223444854514664285355533444484451
1432434556334483451944464326234524434624482451144354646234448145144556
2373244444448045444334479451266434454644344784520644665352532624437574
4774596444233534476456856822447545666426544744512447344374644724457566
5447144765233244470441064666354624469445553454468444348444674458742644
6644354244654454427244644466624232446344566332446244764243424461445643 7
4446044264445944462464458442644457443642445644866234323445544106234424
4234454445675324453448626453824452447663685344514412654852633233445044
5642754449448733663224448443752444744744326284446446833384444544782533
5244444476627354444344865366533444244454944441444645544404434554439445
5425244384466344554437445644644443644663523444354458262344344466254344 4
3344946534352344324494433443424431448446535444430446736643442944664565
3442844654635244274474453633442644663634444254454435444244464564364423
4456222244224410763454233244214486426368244204476623324441944663352444
1844543244441744863364273441644267441544124414436644345441343862352225
4412438644652644411431363532374255434410431365635636832464409431166335
3362434408438645637654407438535268254406438834363224405431165637442362
4404435644624403437646456344024396433544264401436825473440043663344243
9943664428243984366455434397437643945443964315645646625632554439543568
4564394435667554393439643553242439243773345574391431062346263624390431
1434255452764389439643753242438843177463743367523843443874374333763438
6431064373536444385438652646434384431074474633224383431453224325222376
4382439534344334438143475484380436694764437943764547464378431178332325

4454377431144342432332437643186442474332432342554375437623645443744312
7443333363264373431365785242332534372437642375443714312824345537464437
0431364632652426254369436646244436843864334457436743775474524366436744
2544365431144233542445436443976245256343634312648354323533436243764762
8543614311423624632334360431273376643323643594356556843584317656324774
3653542543574325633355455533566627553346343564310482336334643554396243
3545443544394545375424353437654254643524356454343514396344557334350437
8533548434943146263356453554343484321663433653733424242625434743116634
3365352434643882342572434543156322324327263264344431277556564258643434
3943623624443424312435424633534434143777443424340439457245226433943484
3443384320623333345747344625374337431162852344735433643126444274362354
3354311654434453344334431066566832644333437734443743324388253326343314
3672326343304386442454643294374456224432843665556343274326743264312432
5421564433523822244443244227643546242244647362432524465432342224334255
5424422434524334322421144354256662432142156434543342468334320422747364
3453334375346342557363431942214233542324223234232584318421642234434328
6233343174227442823737655825543326426566431642204233266438442322344343
1542863332434431442154435445265653644313429425264354431242148323435533
5445431142672563643104211674546675864309421062524855764308421774455534
3366532634307429423262755430642742453624305421544353224356543243044268
5265343034214433243233527434302421042564452634301421644353342523683534
3004213653555232544342994217446342444525654334298421244394278655742974
2126257255264434296422264437446444344334435624295422944424423453626344
6228655544434294422465234362365286563435368342934222443835454542422523
5532429242224262234463433422363432429142965342464442904222443626523447
4656362536428942114635385644442884218444364355262324266428742346554465
3274735445554244343743436454286423043235266535443332445545523236342854
2384245424544628333735625572534654232523342844213433354354686242834219
6633533667366233684428242154554344435323734281421643233643525642624280
4219433232952424453643342794222625524332535535255546542784212553354464
2664277421966242352394469526844276421065352382224275421066442544444274
4213427342124272411243333442424342714119432334344335363626642704117442
2332252432326242694113443434644736442684132442953557642233445633236443
2346442674111454335427424266411242325325524342654128423255637453334243
7252436334426441116533643653242634118432355432445366454426241304426535
3362626535522565446656342614117443533242532232424260411344254234326524
2594194545365524258412646334267344223524455262652425741224323365642455
5645533534256411262376263368342554119644254375356266755342544111662356
3726442534111422363553634252411743455444425463653425141138244544333443
4250414442442494116524465244636628342484119644676363855824455242474116

8267376426644554424641146753453435454342454110654495555742444111653664
6255442434125654642523232553536323653642424111822383346634241419827655
4454240412063542425463735542743423941186533533244465552764238411265378
5536233423741863534544423641556556423541146535657535884442344119623466
6625475425457423341256763432544244333264452934423241236263465432543635
3632562423141953535736342304119665357665542255263642294116655424563443
6352422841158445274445525444227411482362752535752422641953338655242254
1862736525422441168494943543453342422341176454553363463426642224176236
5654221417645554442204146625421941124218401785452324435437623421740126
2336454554442164015825234525358564421540256524435263444552553375264421
4406644356421340126546624585444212409654773344421140328545343344434425
3344225452442464421040146672543542432542094089444645642084011644445264
3442074017843443243223454324206407642333242054066522624204406687272420
3409645264755420240106344275323420140125224543454424200403066448325255
7257246242242242542419940208342532753432554243241984014823552662332424
1974021824644472655647553344419640764555444195401264233232444441944020
6254453334257375334441934013647628523564441924011625444325624191401372
5638656765341904012625445324684418940236623567223362255444275241884012
8634457243254187404755341864086737545441854010534647842341844011744662
5655341834016423843653585624541824013624344545525441814012633242423853
4180401952535434333857552734179401363526644545654178401063534525454177
4012744243453428417640225528343536236242347432417540156636432232255574
1744010538636223341734023444656643423253353434324172401263263466343241
7140964563234441704023423533623436355544335854169401074442352544168402
3453234445544343554442754167403054224345424424333253224383245441664016
3223443424232653416540763543334164401464443526543333416340117335433234
4416240276436332352535243263526553324161403944224242543552345523428534
3424764522434416040136442522543344415940186524225424335445544158401942
3833683555655255441574074466653415640646746441554013643346685645341544
0303242333746526343255255533752644153401566242452425654541524066436544
1514015443428267362637415040136442532433245414940156635533443426234148
4016635524234254527441474088335264641464014423534623555424145401565366
2435443344414440134243378686545414340157735265244465524142401265245357
2374414140166633886233643474414040276445755554324455927446435654139401
0554553343541384021434742777773245283354413740136265355344252413640146
4233252645554413540666426541344012413339178235455444653258441323916834
4352557454356413139206845463475633453455441303999444645634129393483643
4353549445543536347463344355441283996343423254127391562355488464445641
2639226424433243235238224524412539176366669735564245341243968235424123
3914827465342544444122397844745241213911825455668624120399432333244411

939116235528554541183914944245643553744117391082483555234116391282532 2
263342411539972454224241143915833343242352342411339166254662324254247 4
112391362266232274374111392166235644244262636552241103915645322543544 2
644109391572352575256525741083911652443525524107392262644223364334632 5
272441063911825234525344105392576224234736322735552255234104391773522 5
343854684524103391882342534762546443441023911642683257324101391463462 5
425432624100392674532243365553456232553654409939185533535236535564634 0
983984444545240973910644373632240963936954442562256236223462432527246 6
832644095391262544322343340943915322344342684444409339126545575444454 0
923988434362340913987252463540903915844244264433343408939774373424088 3
945533408739196262354724458534443408639755323554085391175322632554408 4
391265246666254740833910623266525340823913642584736354440813934322344 3
422443343376424554355756434408039204425432674323337443440793931755322 5
525542664242526536244223407839207442437524535233455340773910522456442 4
407639137426455557575407539124463437727764074391764252443353523523407 3
391967233737655822424274072396425442407139943434243240703958343540693 9
952544243240683922445844544463265455542240673924745462665522345646554 4
234066393455235542524634324432334432453327244065393164436437643243533 3
463564343436240643936642332524444523324742656723554325325406339236623 4
442654536563545683406239166642642436442442406139334422424273222544244 3
836264266653340603910525455646340593966642654058384334740573858332240 5
638109233324622405538764443464054384455340533848453405238468634051384 7
533405038482434049386633723404838653354340473854445340463810326326333 3
404538157232744342425234044386824653404338464844042389625423554404138 9
324438332404038844343342403938972663223240383836344037384432240363876 6
636824035381166433234342403438653533240333867442584032381072535323264 0
313811524543332454030381164374352425402938105443524533402838454244027 3
845483402638464744025385337334024387422263240233856462340223845566402 1
387556454640203857353440193863473334018388723536754017385783554016385 5
468340153888646676540143814435356343254434013381075534464264012386545 3
544011381154743342455401038634552340093874442563400838472664007384542 9
400638843454526400538156334245242324234004389424537644400338686443540 0
238117533325253440013866864324000387435366639993897475754743998381377 4
252986554239973816525545523563665339963831634344344255244255435535525 6
352399538934552332639943832553375453225865533355725353554333993381562 5
845434632332399238236436435553353532544535239913877625343399038664674 6
398938542266398838786536533987381143525556234398638863343346398538104 2
325435433984387435332239833877566345398238872643354398138672552339803 8
107286368332397938766345523978381546324222225254539773810633265245239 7
638124432637524563975388443254643974381044384445263973381043463252623 9

7238653255239713845271397037482363969373835396837653523539673736453966
3743344396537684473439643728939633736473962374334439613748353396037393
4395937587644395837464263957374844439563767245223955373753395437384439
5337374439523765423333951375632233950374744239493736353948374844339473
7453453946371074544454463945375642753944374453239433726439423746332394
1374636539403747543393937575243393837663585239373756465839363743386393
5376623438393437552447393337443773932376633424393137582335393037443573
9293748245392837575332392737483433926373647392537465653924373752392337
4825339223746562392137483433920374862339193748443391837452343917374724
6391637484433915373756391437576344391337584646391237553532391137483533
9103748625390937484433908374643439073747266390637386939053738693904374
8268390337565279390237564344390137104554735447390037582467389937486233
8983738443897373734389637472463895373447389437566332389337784436423892
3747228389137464543890372882432642432334553623332353343889373457388837
5822223887376633434388637588427388537762662553884374635538833746273388
2373547388137474543880374623238793766346343878373636387737343438763746
2443875374834338743756434538733766455323872375443323871374852338703737
6238693748623386837484433867375823343866374724638653747256386437565257
3863375853643862374844338613758533538603746464385937574524385837466333
8573745654385637564622385537742553223854376647465385337484453852376632
4443851374847338503766424343849374863438483756533238473767336633846373
6343845376824345384437563253384337564245384237464233841377746544438403
7483443839377423344338383758335538373735353836374356638353776423342383
4373835383337542454383237383338313736423830373635382937453353828374844
3382737664235338263746664382537584532382437655664738233710843323335438
2237494433821375762553820374533938193767343533818371054425253333817375
6622538163766274453815375833553814374852238133747232381237374638113776
4374323810377653855638093776244533380837653352638073776245425380637465
3238053727838043778465444380337643332638023748344380137462543800373742
3799371243273522433837983774466323379737444453796379422765362379537545
2253794376756643379337773636823792373552379137249379037249378937238378
8368653254463787361052242443443786361466335423568345378536116344465233
4378436104333336462378336114364234444343782361144244263724378136963524 3
5533780367633358237793676544327377836664654437773666565383776361263366
4335344377536883543325377436124533222535633773367645255337723610634837
3843377136964686364337703611653656773453769365643563768365644433767368
6645443437663656437337653614433376223325433764364845837633654224437623
6652454337613676734282376036763255523759361164235343426375836106542454
3423757361384632362525253756361064372245243755367653358337543686365436
2375336764253373752362444234254422555553453633437513611645344232633750

3611655363253343749366336343374836962334363337473666242363746368752653
3437453615632364535423552374436768335663743368665336463742369624634534
3741361362463543473453740368646534273739361062466424463738361064347865
3437373666543233736361162546256243373536128253426263423734368624543423
7333613633623242436337323678263233373136864323543373036475433729365443
3337283615634733236424425372736865544223372636763462263725361186323437
4243724369634253465372336124438862336353722365663533721366753445372036
1563423264353342537193611653656855623718368852654353717361444273375256
4333716361244656645424437153686262285537143612623935336326371336106373
3672533712368623635233711367636424537103636653709363643370836383337073
6267370636123705352556343534433644253325354533704353055335238232643334
3652553375264370335266443364433733635355435452837023519535245454246453
7357370135195533423272545268442370035335345832234335728233252545432557
6236993524535843434358434533525542369835106443683442369735254283666423
5264434354644733696351842446244375424335636953514445334524273543694351
1454253443563693351344763252458343692352165234484555545627566236913516
4564243354262465369035844342767368935164255737376744552368835174442752
4444658753368735223775433637652736244223368635743455423685351368785652
5336336843512443332365573368335443323682351662253342442737533681354634
3368035453733679354765336783534644555436764554442333342535334353336773
5554333367635644463236753511652543745423674351843536674382536626236733
5285262425652444444265452656254367235286642753548494462343454433753367
1353444332423424342435333424365242242553670352442544437665665544554543
2366935176453527333655644536683525634425544342542343444323436673513445
3865644355366635136527444473372366535156563666324325423664351164444234
3633663352264233266264342254465423662351966342243433434254423661352443
2342425245545448468435366034154225432833624543659341044267322533658349
4427342463657341044263352333656341644333446343354223655348436434323654
3476454322365334174323343342333262236523424443334322327272643626542365
1341443446725535254365034114245638327336493434433325345545333266433524
3332556544364834186344545555334454263647341363646525253653646341065568
4256436453420833533263255243543223644349662576256364334235723535436543
2345657373364234136254454354322364134873376436364034146263373342426336
3934346523525555276643766255428275328585436383415642523527485853363734 3
2644485854533544378233435364425543636341083438235323635347642533736343
4126254465543733633341266422352655236323411663554245423631349634363622
3630341744223452442682622362934226534543456233323334743362834264242332
5335238235624325552362734214323422423742535252333626341082537355343625
3419443532242868667344636243417565455465346454563623348635353733622341
6432443355785357736213420434427432454253624333620342766252565224524645

4343425454361934196525452665757624226361834276424524333443424353263735
5836173412463357524642361634136256344243554361534294334322624542534326
6253632344361434166762762523224435361334164334425363352554361234166643
5423244455543611341143243576246361034104453586555360934324423433243523
8235342548432662554360834186634436243443523243607341766362535238222435
3606331555449834599109453605331855337646725768375336043314543364336357
3436033395464555423602331754345345446625542360133854762544360033877865
3463599331276455265264335983385345244635973375348342359633155463534354
2625535953312644333245243359433666555735933319534822377293626942335923
3225544535243825585672542359133125567372498563590331455347624564552358
9331466445542535842358833305323342467423637537537373625423587331153334
3524523586337054334244266234452333774444285844262547543425838547534463
4334235462554235853325532344542355352342332623235843335554462245463643
6324344343634245442435833362554434457437255252832258254255425635665455
5354443543646626354235823323557783253362328285355423581331255443553108
3335803385442338435793365654363578338665735423577338543446363576331359
4537278544235753336463574338544655423573331753344754446233432357233135
5443453746653571332264434324524324343253323570334864344443852383423844
3345235555424254444446444443356933245523643352634246433535333568333055
5343954996999101099999999999982356733145534274426242635663325675354544 4
6456565684536243565332064434245653626244542356433145437555556344335633
3175433456355643254235623314544834366644433561331655767766442725423560
3313532344625875735593316576556247263275535583316544468444626554335573
3165534254232956845355633186535254325446254823555331876353644645235783
4355433175445644334444233335533323536245372672542573362763552333554334
7456255344665345244564466534543551331453555353894844235503324534432353 4
3424342426422235493315536245252526622354833136434752324654354733145336
3665272543354633265362523462654477342432454335453313536452362694335443
3656785535433316756765743443526235423322563445264574625446554235413385
5845285354033175646435583347725335393329662336836231082442445757762945
3538332855446524264454852866234342763537332864344585478337476733425244
3235363365544353535331256334232442535343314553421083343542353332574645
3532321162375542532353132764253373530321764773442555354344352932186453
2272562526233435283211735473542323527321067653654463526321474375242336
4543525321378234423533433524329656636629352332216244545344646264575543
5223212653464486553352132862533534352032136534432342343351932116745445
7266351832158234464435357443517321464354673354536351632166652463524532
6433515321663547664436582333514321164323345372351332146452243345254635
1232146258853442344235113284325243235103210327344324435093266685433508
3217533363324425362543507322474433242325352432636834435063218654242524

5324226623505328822332653504321335033127444243334334434372255563442350
2313165636663243245232534244246455423501312244237435543545264463543500
3119443532252645524522334993116652436425234243334983125463434334265452
6562544223349731114442543535234963121444245424442465425243349531106524
2682233494311562623524668326434933174436256349231156444253765453333491
3115654467634343443349031216436734645242544263343489313044333344252536
5455523822334243348831116474242542534873116452324245233534334863118632
3252356248463323485312544424335228224244235224323484312964376323424566
2863322322423633483311763824252633435776348231154452542324355333481311
8434333545433426554348031144428242534643334793127432247362742243342552
5634833478318663343463477318643865523476311645545236237364443475311844
3547344424635253347431882642335347331962736666534723138533471314664334
7031133469301062573243253468308625434444346730196342556454322632554346 6
3098237554263465302062465345334425385554346430126544352846443463302466
3424543323233323232544346230146374234272543334613011643644364243460309
6425554643459301943233653253543444353458301074254232533457302882352422
4452454464362655644434563018835346528875344264345530176642855652866425
3345430118323428655534533096853345323452301665422323423255443451301466
3325533752523450301565543754436426334493022636632424272262625254434483
0228264364253434355252325334473016826436533648362334463015645322543544 2
4434453015623643453354554344430106253536562344330664773734423018654434
3632464425243441301155332465552344030982636764634393022625445534452553
4445544343830166233432433475542343730276464467843572252742232624333436
3018663682653443525443343530862268223343430166435245325664253343330216
4532253525362554555334323014645322429766533431301385322877683533430302
0745322545457662332533429301173432425253342830146553554255524434273086
4568253342630664534634253011662665765543424309642386554342330575644342
2309686572333342130584644342030864252544341930138364552665532341830326
6547433857634757343552553375264341730227455253445363684326274341630106
2623662563415301162544444243341430866342444341330128463332534323412308
7532354234113025434103013340929983435846634082917844244353244353433407
2915646695256445344340629664973734052916623435452644525434042915652736
5343366333403292262623524653252536232643402291443342255243544340129136
4466546832643400291266366454242533992957445533982917833467524452886563
3972976525532339629975542555233952913642556335266333942969643793393291
2623496643571033922919825567566822456453233912915645532254646354339029
1644354364232444463389291483743555425422338829138636434242433338729198
3743242532667664653386292562446655545464553425363733385292162454457724
6264624423338429108432256843338329883635674338229126633242524423381291
9652846434584643265333802928665474336255252565255462555433792913653529

845466633782916866257734723435533772976527676337629176525355646324554 4
337529764434543374291265362463336333732923824635534332643433454243372 2
916824635743435442333712915655263353577544337029685362333692923823245 5
523443366266766533682914823235276453253367291883624624776526652633662 9
126623335343243365292762335745545473266254643264433642920645322524652 6
523443333632913443652556455633622917433243233623527433361298654254243 3
602919432342664425337525233592913443325254434433582913663633523336333 5
729276427754374362432652476432643356291364233464653283355296838768335 4
291663764533344434643353291165373772777335229187432727237666555543351 2
969755473350293184235454336323344554342445442533349297828865633482921 6
437636332232256347763347291265449746865633462910824425554333452912663 3
433444323344291062372765323343291187554752544334229106234626254334129 1
333402819655243432233234423333392816825333445234425333382815855332436 4
424333337281944223632432435643423336281865237554373343373233352814785 3
524625665333342826842634542245524354456655553333281792334327322335626 3
332281683635433344555543331282142335423332666535243433302828862434533 3
226242424244433643332928268324252633444356253365444533282829732424242 3
254756226275443235233272817652433426755532263326288645635743325281366 4
283775335333242821643646433273356543262332328196456433273355543262332 2
281565537625223324333212876363244332028146364563326424433192811824245 4
432433182878235755331728685457433162813654265383675433152818655246538 6
554552533314288645635743313281782732266463534464331228156453433766532 6
333112820663553365454243543333310281783453524274744263330928256264424 3
254444344525354263308281394342444524233307281585254747363655433062812 6
746775355553305281564233424324554433042886224267533032867553543302282 3
854242423444333764528233301281364255424325523300282663366553244364442 3
445524543299281882555555447643562532982820754242524532446255333297281 8
635654432533556565329628138233543526533329528167554556662326454329428 1
092274463293293289627453548329228108533542867329128126254544526273290 2
829825443344425535225432342542543289281884235524342633434432882817762 4
535333255745432872815873576536455443328628146243643653425432852896254 4
432332842825645455332755254533254423432832820723334424353354444333282 2
820824334226286265424543281282765524244544436534542354543432802815442 3
535347454333279282982432643243434533562355452433327828116572327327432 7
728268524323543443423653247347632762815432353324434244327528274366434 2
562367524552343433432742811646233345443273281085242355443272281982235 7
275242347423432712833824243525423426443625423432542424327028164434237 6
744557253269289854335323326828136623242544323326728384333732334445424 3
524842452375445243374326628108455466434326528176264243264353233732642 8
166233733352532746326328106233225455326228178255352425425424532612818 6

2345262362323355532602813658652543552732592822827453535342643462423732
5828126524865452353257281287475285332532562819823367744564545235232552
8964564324432542846643325328133252271163533956353325127158234323555536
4332502717824253235463242443249271364235252647333248271155323433732324
7271863433244436233566432462718643432352382245244324527156453225737553
4332442786235355432432713645436366353332422711637434322443241271662755
2652436553432402714637423427255333239271164364436423323827764334353237
2786635543232362748544323527127324473336323234271044236625233233278636
3253333232271062645333333231279843334232323027764253373229279633233543 3
2282798533752523227271276332327335332262797475345543225271444224222262
5523224271464634356822422322327196427524246626352543322227206345424533
4643645263322127166254245575543643322027216262424573453466455333219272
7632242456233243527362356833321827126334555353523217276834457321627782
7635832152715744623265234433321427116342632466532132786576532532122755
6557321127116443225356432102796673553353209277623464632082714744452562
5757532072710635263472432062713634243633426532052713654846378232332042
7137624462554364320327288236264432462433362535445533320227126324443244
2532012714645257244453443200271262524264535331992738433333545334257332
3346344442324362344331982716444452423243425331972711662366454233196271
3634493332595431952716674253345347363431942788426555431932713654546745
3624319227126464643534353191271363453242654243190275663533189278664346
2331882794434354243187271164543255364318627782325533185278652233243184
2714635256825443633183271762362577344325666318227114343226654331812714
4432523234444343180279467272557317927128232632224553178272485267554354 3
5454262452553177272062366672765424453343331762796366425743175271965332 3
2275455424564317427158524354355475543173271185335546103631722784335566
4317127196454553432332544235317027114443343232331692720834233242435335
4444431682776643342316727148246535224245431662716653552446443543231652
7744326543164271082623633553163271063734762523162279627366665316127385
3316027645643231592619752556523285468655331582656226531572676322423315
6263768315526467553154265442343153266842362315226466233151263826315026
4434431492646635314826763433433147266825355314626386531452698253442333
1442648524314326583353314226482533141264633431402676334263313926665244
2313826565252313726447263136262893135264632731342656234731332676643262
3132265842643131266625255313026583363312926973552333431282647334312726
3445312626582543312526465233124264826431232656633331222686633432231212
6104343353466312026563433311926982326245531182698343533333117265823453
1162657754631152696525375633114263885311326682635531122611823342324633
1112637463110264443331092665343323108264865331072656633331062686633432
2310526683445731042637523103264825331022636573101265635423100265726333

0992698263242353098261153427243326309726482763096261182334232463309526
3746309426444333093267533533230922648334309126566333309026106633432266
3089263677308826743474633087269533433433308626118232435333230852658234
5308426663526530832648363308226374630812656562730802644545307926354230
7826555227307726118233423246330762637463075264443330742675345332307326
3844307226566333307126106633432296307026373330692657333230682698232255
4530672664345433066262553065263565306426563546306326374630622646554306
1264655730602656333630592611823342324633058263746305726444333056267533
5332305526383430542656633330532686633432230522647362305126675233830502
6982335464530492655422330482699263242353047265443323046264853330452676
2333623044266653433304326586255304226374630412611823342324633040263746
3039264444333038267533533230372648334303626566333303526866334322303426 7
8253323303326344330322646233303126483533030264836230292664433253028264
7435302726365530262648247302526772824323024266642334302326376530222637
5630212664443233020266433423301926463533018266723345301726563427301626
6723425301526697422230142685362424530132645265301226453443011264662530
1026453543009266823235300826387430072656427330062666465253005264528230
0426552823300326663464530022666255323001264735430002656633329992686633
4322299826376229972656334729962637272995261366324655424372994266633233
2993268734537542992262682991264739429902634552989264542929882636542987
2637352986264665229852656725529842686463243729832611833274342432982267
7433325298126216942766655547333232532980263642297926483452978263665297
7268624244452976269843546666297526754254332974266833533297326128332533
6563429722678252645297126574254297026553664296926444352968267672554529
6726865552624296626745324532965266852434296426645244529632678232233296
2265444432961268927445332960269642637623295926765446232958265763432957
2657343329562696426368232955265823532954268734235442953261182643245345
2952266724363295126782444552950261044245544332949265734422948267824355
5294726774376332946266625334294526853555345294426662432329432645353294
2268853243432941265663332940268663343222939261143224625344293826882525
8532937261163534623263293626116374362543229352666634442934264664329332
6132932251254453643342229312556644629302596446536552929251357743872324
6629282510735524553629272595464456262926259543445433292525165544574465
4443232924258535736252923252253343535343456334425262922251153346362636
2921254664429202511536244344662919255645662918251255864453556529172513
5424243475343291625115554456234529152513566356356633429142517525653524
3263683429132513555245442443529122514533423233246222911255653732910251
4533645362243272909251253454545234329082515655644344337343290725755278
3329062575422643290525953544756429042510566536442529032513536275334644
3290225115645655334329012555456229002516545525533423332328992515532283

2262662422898259544544425289725175326436455246263228962511543444372442
8952516552526645354634428942576547254289325853364655289225135587358855
3342891259687555355289025955436645428892511545254363652888258655534632
8872515675254546434554288625116544824335528852510663642226428842511577
4523525328832575542552288225125625524436342881259583446455288025768476
4428792575563555287825964732523628772510647854284328762519545628343285
4465254287525205347445672667438246328742515554443434836363287325214465
4376462424235326528722516642255655432636428712510643336624328702513643
4734532342286925855655552286825955464545428672596535442532866258573377
5228652517525752443242332452864259583572534286325176436284443242344228
6225165353444725646336286125125533682444522860259644437766285925165453
5346633325542858252253434634337636346244272857251965324524233443683242
8562595854373452855242243355374644424268223232854242744624624275654754
4245556462285324394442437433454846565595283624333546555842852247665634
4446432463655462562453626522742742642742742742742642626263336333633363
3285124234453373573642454552662828502419445534445256310547342849245044
5634443355654535335464337265454324445626745955422848241165575265552284
7248656765672846243882633334262845329354537525635210864554328452423663
6336635263245536746228442417634426462266373572843241082654464332842241
8826656255643438334284124168252654426272363284024764543332839241164435
5643442838241595333244526854728372411643424564632836243143234242444342
5534254342532423528352410755322754428342438844344226422532442625524545
5244254422328332476446834283224216345753225668222442232831243332234244
2353234333554423423533262283024226455544444243336555756282924144442454
2752447282824198635466665432335624282724147642444542434228262448433557
4542544333352345453526642434575275464368342825241376524525645642824244
8447324363663754263763544326445287436664246355258282324174454245562762
9477282224786583543662525753653625526264382742262732732727527274262836
5363674323653667258328212415634423436772582282024176352453446356245328
1924224635342763333437344523281824196533453783635625542281724164453636
5787889882816241164242745465281524965377754328142413444762588855228132
4264453442538744210964526454432812243544542444432432654357844754375625
5422811249444365435281024206254576244355274255228092474456345280824964
2456245280724144536452342472528062416443348323328786228052415443522576
2654352804241482436852356454280324124336479827242802242844244455252443
3322336244655228012494443654352800249823254328279924118335644264527982
4982324442827972417833564566353337562796241144437332553279524198264536
3468565228562794241883344233628525342627932426825765656424324463445427
7727922496554478842791237834542327902318842333552252344233278923116522
3324546278823862554747278723964425352327862387533245527852374352523278

4238824535632783238645463510278223148347354465243327812356346327802376
4434642779238544654452778238635545332777236643564277623106426556733277
5236826743277423108355535234277323166334636244344544277223862355333277
1235622252770237852242327692395343642542768237752423427672368526322766
2366253222765236636854276423245345335533324332333324422763235755722762
2356423727612314642443433254222760235542372759238653582222758235642372
7572386424353227562312763323237353275523884654445275423673235227532310
6475635443275223765525432751231062588534432750231263234424553327492387
3583774274823116725223267327472387627625327462356437427452398333354622
7442316652367243685744327432310647552326227422376236622274123107632252
5642740234652827392396735545422738237623456227372386237753327362314632
3325432426227352312623544653443273423763372752733231064344742562732235
6252627312356452627302376442252272923762272352728237532254727272353362
5272623955332455727252386445353327242312463357724542272323115434393443
6272223665645427212348268272023763756562719237546955327182384675546227
1723196245684575633224562271623783532422715236555262271423885548567271
3235664332712235536232711231272334435332227102310833546632227092346355
2708239646553346270723773454542706232563536345333266296565542542705231
4544323246245472704236545262270323773353222702238834656232701231585254
3535333364270023326455273454323555224564534675424726992355362326982310
3327323322269723267624526543355245333242555426962317544323246324434642
6952346546269423156555446236572332693239746453245269223136555436424237
2691231372434527436272690231065233535542689235673422688235633422687232
1844634724665664664652268623644246226852373252754268423664275526832338
2526822357732626812355692626802377263453267923106357422733267823467262
6772346626267623565226267523566225267423384226732244646462586567535755
6533328527533252533725242726722212655747765542267122106444536324267022
1144425348254266922944424245226682229863382466327356243255228335422667
2229645545542382655656655424565442666221842833233362422432726652218443
3242326622442432664229734473544266322763443632662221763433345273625533
2661221057262626432660222745642535332655524652233422326592212653435238
2222658221544425553624422326572217652436242523424332656221544435265625
4433265522164442474322424433265422745436582653221883343444852524426626
5222844367656265122126428656543552650221643462466334255432649222164355
4436252732435556264822164438368362547425264722274455442742456274433334
2426326462286557624626452284453865626442294433454222643221164625335425
2642221453343343444371026412223624644742536423643552642640221444546353
5384252639221143462864446263822434742637229543354363263622176546258665
6652625263522354442524754344664554554354462324626526342210553435575326
3322134423242552542263222208452347354465463644226312227653747674564445

4373434523762630221567468623964433526292220846343675252343755342628221
1653524335432627229642545433262622214425242566226543263352625222453872
5854237353323345433262422866867562262322206674575252374243735726222214
4222542455552426212216669844424225485326202225442446333636456467442655
2261922964355253526182222447632524575244865544226172212646462246264261
6224425426152267622242614221766323324345642754261322374244242234336425
5257677665238222442232612222243234273544266789565522611229424435475261
0222242452652634676245223322609221742442752448655442260822106564424334
2607221466235234224324260622256723763435463253533344253260522965343443
3260422156473636224424442603221344333344252532602221262244343246326012
2134323464442433260022704322645556455443324554332552557246243342724355
4542242242242745232425422599221164364452343259822124525344252532597222
2444462355453324535246325962210436524554225952110523865542325942183353
4443259321862552543259221136242543436353259121116434354344225902158437
3258921664632225882112855525326254258721166335453353553643258621116445
3886562258521966522366225842196456334522583217624344325822196436245322
5812111634434326342580212063232423252555524456257921106322365433257821
7624843525772112624553438243257621665255725752187445353225742111836852
4655525732119636548727544274262825722111834452234262571218845427282570
2123823363332272544223632532569216824629256821782253682567211685524464
7222262825662110844443342525652112634334726283256421146334464535455825
6321106435273447256221146465652654546825612114664533425262762560211269
3354755527255921126525728324252558216823628255721166335474446275465255
6211563666657357654825552186545652625542188464535725532158842725522187
3644324255121764267552550219644326432254921115346224328325482196524363
5225472178446636254621965283642325452177273445254421865543255254321772
4635525422188337332525412186453535625402176523766253921138243454682423
2538217823256525372184427443325362156365525352111634483255322534219624
3247542533217626753425322186623645525312187557645425302120634354235334
3437458425292112633526342454252821116236443664225272118847265434455337
5522526211463236382526432252521136432226276622252421138252456442464252
3211062348374622522211662362356252355422521217642533725202188356327325
1921176264364444372553425182110664657553225172110832454245325162111632
2667534325152186623646625142113654546342552625132118642325269456825524
2512211384445442334332511211565235336353632425102166536722509218642646
4625082115733323443424263250721226346262424323375244262250621663434225
0521135352466434532250421762524622503215627562502211383628243682232501
2113535442466354225002111632428442522499217663665324982186573634324972
1663352524962110658362376224952176423554249421105457544253249321864535
5632492218874395722491219653662473249021146242537545346324892186484254

2248821147434742262555224872110663662543324862115655753332556665248521
1163734423262248421764236552483201153565287522248220195323255555446425
8332481201365224543246462480201268534525674424792018533437664462523543
2478202044664543645433446235247720944543244524762017555322725625623342
4752012536635434245247420845576443247320853346223247220124736452342432
4712018433344333743455453247020644436224692015433453266574445246820144
2454342323745246720643442424662074344322246520135528362332325246420935
3646843246320114233432335424622017442344423274345462461201443425562365
5752460201143443438243245920943233646424582010426353632424572012424623
2374252456201343436752326652455206434432245420354624532074363628245220
1243525642634324512064352582450208458552432449207473343624482084734434
2244720134426332252434244620124323233244542445202844272754344355252342
4262235324442016424576324526234324432055243324422020443733442435364223
2324412044653244020846242523243920945436442524382017478643254323253342
4372012433343454344243620124445364244352435201574585426556562524342027
5742353252555444533234543442433209764244243243220952454352324312064242
5324302095254433542429201733444345435372524242820157456654952827322427
2053345424262085242665724252018434424525356324364242420124244467524342
4232010573683254324222013434424235332324212014535524737355432420201966
3443324557252352524192026553475429427675547333232532418208553454652417
2016336434354524522424162066333242415205444252414201244524466452324132
0124234244234252412201062543352572411201368675272674252410205665582409
2015523357443625433240820632445524072083543636324062014353335255554482
4052084255276324042064446642403208446565742402209555322764240120193426
2736254434453342400201143332423353239920566333239820932432444323972054
2533239620105323625423239520215423732452637345353562394207445452323932
0104225424444423922084254442523912053353523902084243653423892025823882 0
3542333243245564274543532337523525442238720224363446242357464277262238
6206423362238520543444238420642452323832045333238220256238120355223802
0342623792034242378202352377205425252376202462375204524523742034242373
2054242323722053353423712046625237020114333254533523692076673343236820
5432472367204425323662013444343345542323652054263323642010545342245323
6320104332564462236220115647333243423612054366423602093663553333235920 5
4245423582018353324454443654432235720444432356208672233242355207544464
3235420125336352382222353204553623522065953362351204435323502055646223
4920122348191443423243232563234719103425725665234619936358655223451954
7345234419435632343191046336822222342196442653234119446422340199364553
6842339194344323381944646233719946342376223361954438523351964637432334
1973334543233319935838632323321963578732331198337443272330195474252329
1993622442532328197463425423271985464734623261913445333893654523251925

4552228646362433362672322232419955423256323231916455382555535654423221
9844845542232119954333634323201984342644223191910463344226223181984438
2985231719104233263744231619834422475231519124242766636822314191843333
3353632234353231319943262445323121911544545344622311191154336563434231
0191246356654432323091911354776635242308192954464543854874332543427254
4552307193457230619845335625230519953347744423041911454543376252303197
4546226230219747654282301191045453346252300199434366236229919144546525
4326374229819144354333543253822971910423332744322961913477423725235322
9519124756244243322294191046372742322293191445474225252332229219164343
4342242325322291198453376252290198665353332289191262342353263722881911
4425837353422871911434255452762286198643753432285191652245433632423322
2841996344343432283199344444337228219645637422811911332777323662280198
4665433322791910452324354622781912434334432532227719114433425552422761
9185543464354524444642275198444564442274191044332535272273191454433252
4633672272195452762271191554435537332334322701911423363424342269199452
4343432268198432374342267191144355575526226619105552624625226519934444
3345226419645337422631964454262262198457462422261191154525572434226019
1344454343324232259191442332533323343225819144524356542432322571913432
2424455352225619842652245225519134422356552734225419144263345635332322
5319544342225219554343225119152250182443643546344334354345334222491818
4543354235436553222248186445246224718104743486552224618945575346322451
8144733437564555522441811464636625252243185696222242181448463642562555
2241181148264242645224018548546223918114852432455622381815333444333432
4332237188428362732236181944453443363734336352235181246544833342322341
8203654234243526652722522331813466246236333322321834422231186443534223
0181545234233455433322291834422228181345226643543242227181345633325432
3322261825444244237224454432455433322251824522241810432275224322231894
3552722822221835444225342533246865235564434472674642221189454345726222
0181056726654642219181745243646255267573221818124452266544332217182444
6323642454582557434337221618134424273532523221518943623233322141816443
3344453554337221318104426343723221218843623333221118154433557357243372
2101812432433263733220918104243543263220818842322344220718643623322061
8114435235242322051812442752466245220418947363323322031820452555273735
4463525322021812435253645354220118114525564644422001813442744342543321
9918857653854219818195425243263453726264219718304363535346362463534424
4535334321961818463574277556763843219518194662736234955262533219418144
3474322563254219318105453845584219218135563836556544219118134743363368
3722190182648333342669332442353646843218918284343552663535526336273368
4642188181653435233737333362187181144538554644218618134453338966475218
5182363234465555426627466335218418944532437521831811633432732332182182

0444252563534423445552181188426345422180181545562655424523421791819543
3332533243234425217818844433424217718164424224245563523217618126445334
4563321751812434232354344217418134443436364324217318114764343537421721
8144664952575543521711828656373467424573252457524343521701812442342386
5522169182865636464683734486363363342432168183044445524623366444533466
7455245216718156423374234244242166182344243324232524683253442216518848
4445262164181743253523343354423216318733434532162183344453543443436264
3257476456475657216118325565355334465565582432632432756521601813436352
7275624215918384353734754467336575344533245552443597521581822446545552
7646646374367215718345423343634324423342363644635254354215618195523552
4345354363103215518184435343365544426552154181943434424268246526362153
1811375544554332152189453472572215118744526362150181645234442446536322
1491810462575524221481864552742147181144473453253214618114646226344521
4518164362724447332232214418644455521431834362142181544328658542545421
4118114243643443521401721654232335242334424353213917225335353643673523
6524522138175575762137178743324572136171847554342555262225221351796733
5366621341796537336762133171453463345674425213217953385272521311716652
5456823542433213017196425352452735543454212917145747473345642221281723
5384332434542346834424421271714548465346755632126172756344645463737426
3334363433212517115563364553221241714546256756523222123171554445235526
2533212217265433235255543543624242324221211712595424543642212017116675
4423242211917106523432426211817145354432263255421171719545335526345235
5632211617954342324321151713552232246564421141714535263332525282113171
1542345634222112171253434644736421111713538438542262521101795362644332
1091714564225347346232108171265352325255321071714635425553355632106171
1663352462232105171353562447529532104171255232264637321031795454336252
1021713574456464285321011711544623432332100171556366665437424320991717
6534387286428335420981722525352253752555443625220971715535225542443427
2096171857464354435225244420951714533342752534442094179544552352209317
1953753587275555546272092171064643443432091171553577335334436320901713
4435353646843208917255636376287543646536432243208817216374336564673323
7425320871718662335572733733423208617186334257564474365552085171363443
6342555220841715556337354682344208317145573632263234420821716547372547
2424663208117953526596320801725542322376483354262862434220791755255220
7817954846534620771795835725342076171964362842423472273432075171957344
6234446362463620741712657625445644207317215533762454332343658242072176
5463662071171355237363433222070171053637632542069171154745825748206817
1865425344243623443320671776334332206617134643542345233206517166335276
5232232332064171165338854356206317176352664434253636320621722633524365
5363353434563206117854533563206017135435266354763205917125563354354322

0581713655526343634320571712643363246454205617954748558220551710643648
3623205417125834662623442053171256372362444520521725544373243362654536
1043633420511796653442422050171165547335534204917126343334265332048171
2653643534643204717186664252434242574322046171355554433262632045171468
5534675442542044172154363343533535235555220431775455354204217136557325
4257532041172366337638424756365365756204017857465574203917955367625320
3817165432865854244632203717115846443624320361723642833536867633445376
6220351711548569553522034171764464643435557334203317135465526627336203
2179543332524203117125426374376462030172166236254646636624544520291686
2655242202816146332235435343520271612833542624763202616229435223423242
5768734332025161773547355333753534202416128233573424622023169836244627
2022167643566520211611822353533722020161945523273325265553222019161566
5473324525554201816544444201716226254365254374443573363201616224443333
3432443374565342015161364424474545352014169636664454201316246536544745
5422456644444442012161562342325525324320111618455232662523265322201016 7
8262432200916118268663435520081613854243636675320071624444423646324855
4236325322006161182645625554200516124444624562522004161644445464435464
4420031613854555532534220021617626243454345343542001169622675364200016
1074455352331999168672566441998161865255944843423253219971615652555573
4334521996161564233243454446319951619444442535763345476319941617643742
5423453643319931632734273372464324234254766332545631992162062442554537
3763634461991161665567725626864421990162485543366465352562553224419891
6136536356442555198816106524355436198716197455642435754576534198616116
2344365534198516148235542253224419841678782446198316666455319821625655
5345574563466234533335198116253365887374539574234462335198016186453224
3626226534319791615658853446274265197816194323424225436336834197716296
4336432524325553233342465444197616276262356253343443633342644431975161
0625442736319741615834682434224327197316216246697265472346623351972162
2647433742355553523353519711620444243342354332572551970162474432254365
4624433672232196916136453562525335196816156443224543686531967161785543
3325236572331966161664432253525362451965161464543743536463196416174445
5377344233635196316176553232632574623719621623834825344336442532654531
9611612663654537625196016196233624233623232526195916943542753419581676
2466371957161264365735623719561666477371955161065443443321954161265443
2434233195316115455536822319521612754324556244195116762752461950161482
3942523822441949161763348625532432344194816845434362194716772362621946
1616623266253442755519451612765325554768194416156242537545342631943165
7445519421618652465462852324266194116105224263454194016116545563743519
3916186254434434244273571938161462333242435342193716288533752674325432
5784625322541936163266353352534324253633324252432654193516108252345257

1934162266544535253433428623621933161264356546587519321615744462437524
8341931162073536546326545444554193016894546457192916196434423324325665
8751928162183655255534645635673219271621623266525537274452532192616155
2333475537357719251697654443341924161310323635244232192316118356762643
5192216764635351921161063462432561920166635245191916104542624453191816
7644234419171646277191616116557342552519151621664283554843944375343191
4161364432266523331913161564532256766753419121616744322723878523419111
6136334433362442191016106633456344190916962255877619081614454263366233
7519071676463444190616865634358190516844244273190416763556831903161863
3323625242342684190216963668343319011556533519001568233441899157634434
4189815864344265189715310631896156825435189515365318941536851893154465
5189215493631891155663331890151585554346252354218891576772464188815566
2321887151465556353636853188615665244318851536671884156556266188315564
6681882155855341881155466481880155765331879155843221878153465187715595
3221876158425576661875153667187415566345187315664255318721558244518711
5453461870156634523186915487341868159655425346186715146363453755245418
6615474571865157635352518641546343186315583234186215683456318611566733
2318601566336351859155845331858158733424331857157823356518561586354239
3185515745534251854159543356452185315473261852155662531851156663353185
0158742334521849151083362262261848153557184715554272184615853433543184
5154674318441511725235523521843155634331842154845318411510695236732318
4015475331839154824318381566337231837156533643183615544453183515115325
2545323183415982432252318331578242353183215464841831159625423554183015
1253252443833318291576323266182815853252754182715744362331826157105441
0541825156845444182415127243113627567182315115435365332318221587243543
6182115115322475477618201574465523181915545228181815787562541817158733
2744618161596356245531815157733326218141558425418131588253426318121577
3242641811157724553318101596353538421809158823296221808159635434426180
7157835324218061585443426318051576456864180415765255341803156456433180
2141374643248285431801141064424232451800146565528179914672658417981410
6636953543179714116244244445317961412635533544553179514147363533565552
6179414264232326645553433545556635517931494855426561792141373446484354
5317911486439724417901494545364621789141365326753234351788141862352324
3434342434178714266572754525567464332345253417861415444533453525542178
5141374247453427331784141545726244537222617831497534665341782142573455
2553434722536256834417811421433323423273737665562178014125363625266361
7791446474177814126356444553231777141842458446366266554417761413423253
2555544177514127557454432541774141562645454444332317731417446444675244
8655517721444443823283436437326673286235252338743542533741771143442325
2654845253244235434333857453617701455433317691414444632568342231768142

2662333536243252557555317671416445342342256543617661474325452176514544
2491764141044533352591763141686455526252865541762141797448237553435333
1761142987444436623335242334453332534176014334666433626533425433762356
6842435417591437447323426353672658564362526543352535317581413444355234
6244175714115525485344317561426442443687763852262544654331755142144353
2245653724427464175414196634254244354534263175314164425484426636675175
2141444284523822244175114166643445372554743175013156343645532535551749
1318543663242455452533174813166435424572654344174713136664572543523174
6138625542441745132143344344253356364246417441319333242225245754547517
4313253544243442442442734436676174213195855543545752473453174113143242
3336666243174013393223443625555325252524237252536433234241739131343462
5564246417381351742424343525325536554355444225544553262325242624523173
7132845542332322763464553523232741736138343486551735131165443446655173
4131942454234223234445551733131643626636765435441732132353463552742243
2763243661731137544535417301315322569886233834172913195435677737376743
6561728131363746422432561727137763445517261315745442343244444172513276
4476335273555223222826658517241342744452554244554744444342465246454566
5536241723134566332442556555352675227652233476264282426822217221311767
5468224417211327423843623355345343824256442172013196434273423575529555
1719139665545542171813353242332334444472634242424327434326217171314756
5232335324417161357685417151315643353743424244171413153344343234445551
7131320653353553337523363710171213256425567276555543345345443171113276
4532252335544454554525835317101324745322654554372375445243170913266455
6454444265453526348344170813156254443244564341707122364543264345455327
5452331706121985253342455524556331705122964553655255337526453254534263
1704121782334663353434532170312146234662442562717021276335643170112116
4355682325170012108332232463169912674354316981214635625334555231697122
1975576243684852752622169612476623434325447323252345262243335232553324
4255354169512145432364543435416941296623336331693129633636525169212206
2242433333554356324169112665335516901212624434353544168912126665333363
6616881211843344555231687129733544355168612238342435323542234433444516
8512106425552523168412229442555345654646425454168312218534324234326354
2763216821213622425435344316811212824244344455168012134352564342445167
9121866235362434446342316781211744646434651677121865335335334252653616
7612378332442324354342523342553252636345384167512137334652342443167412
1682435535432264251673122453455243353424632223342516721233432244254442
3532453254444282443841671121184453423255167012664253516691212633525425
3551668121242443234544516671256457516661215745543243273754166512166535
3433344343541664123062544633345532433242443255325416631228975543352324
2443652743262324166212244423436443423274255345231661122643343655555373

4252553756541660121784353532436334523165912177244545533525535416581214
6553738562767416571267443651656121063433326231655121783454343523363754
1654129623646444165312756553651652121783434274434552545165112844355363
1650121444553344572654164912154432332366524431648121283424364235316471
2298344263444654324523334246252316461222463264663263343644265416451211
6454333324216441215635335254333242164312146353525534436316421222655344
6436443645325644164112117763335534416401287763355516391225664252654264
3644364533354163812184352433763365332441637122083453425555443563552163
6123262544553436333352523442748534262163512106642376552163412266254454
5432332542332667536163312266273562334335357237737472316321227824375354
4434535444536355341631121133764232332163012106623534327162912178245353
4447333523162812198276424247426436454162712324333243233465654545545244
3655644162612184426335242556572441625121082335832441624121345252333225
3416231210823532253316221219823532253252444272316211223442423454242453
5632545716201219862385354353243323416191223842354334432357542522471618
1298455464341617123262544434585275254545262355732644161612982366534516
1512176345564342345675516141218523854446342333536161312196333533556346
5535251612124545616111217623368474526272541610129733445435160912136355
5252627331608128724543451607121272443522252516061216642736452646244316
0512146442753334624616041215443524435335552160312784642331602122544326
7325353524454852636516011216437724275354232316001216626665334332543215
9912168342336346354433159812665557315971256643315961116635334563545683
4159511373815941196373662531593111785643255242552434159211156652463445
5332315911110763535433315901186645533315891126663625554635352625445262
3515881178342435158711148437572525646415861117622624323356553631585111
2463353333436158411104633738333158311184323554324453664541582112053674
3264336254342231581111853433236842465355415801115434323323684246157911
9544353454157811105355334233157711554353157611165345253364334322157511
1244425353333515741124536333333243254644365473157311954444552315721197
5374432715711197545773441570111055335375531569116467464156811104435434
5231567111866276555353565553415661120443842354526343736331565111646332
5694253532315641119553374554544354242515631194432452491562112354333432
3323342362572331561113645545363627342362372434436324332632315601121664
3427242264242564251559111155336423344155811156525375636875331557112743
4544453876343232463235544155611858223335155511125425576655341554113055
4562626363345352454452333325155311114333233222315521113425422523243515
5111274344425346342553237653346451550111343344343345441549111553455333
2332472154811544572154711113327665723415461114443535744432751545111344
3244444452415441195543685571543111833363325445543263415421115443233435
5775441541111254345423452315401186627655415391118652325333535655534153

811115333455264715371118447463432463344333153611235383524263436324332 6
323153511224463235642427335432425153411284432452949526243232463235544 1
533111733443454237446327153211124423745455341531111444283535645534153 0
112143233246354375252735315291118643328323422534353152811762257421527 1
116634374433463634215261116723342663355232515251118663533665644524833 1
524111464543342446232152311186342432324632345341522111977253324336324 6
552315211119443527433344635432315201119823724432232522432315191124824 2
433223253433342333231518111584444342422433515171119854463654545434532 4
151611238245643234325423526334315151120823344324244357323431514111145 3
276434641513112643333335432355522444645333151211104444545264151111196 3
444362335423425551510111164552736755150911176535332234242333515081112 6
344647226621507111865426244323424246315061110743324264315051114823253 5
667232515041131833362344446265543334354345434315031110646242623315021 1
236455454555334334244623315011120635105542463243326323150011296523253 3
354725354354342425554149911114345434362214981194433434641497111164472 7
767831496111464255543786552149511782624321494119652436555149311246535 8
526356243233352662514921111627348442551491112383443435557543654435343 1
490113962544324334223567224326555444334632433414891116652545245362335 5
148811146243475376643214871116643233234444738414861118642432726743452 6
621485112743235434333234446242544234514841110445358655314831113443373 6
443564148211114533724375414811122825234463633526633645414801131433325 5
653274344447534443268343147911164422975543352423147811196443635246733 3
865431477118432336431476112543454453432244334564524831475119543344363 1
474111044324255431473101183344354425147210235533535235555342452542214 7
110246635242245334432324334531470101682344343522432331469109825355433 1
468102782425744444326543422242542214671010835345654214661015924382524 5
433731465101462326643682462146410146253554434243314631015663545545224 3
331462102133866254455343376444514611086643326314601086234535214591010 8
254555253145810228253324434266554632233145710247354735432553737283473 5
414561014762525334355561455107824343414541027824732443323435533546575 7
471453101162546387523145210296643636357344526466274554344414511016846 7
467547425437145010585265144910108546246436144810136426555423244144710 2
283452453626523342435331446107833744414451017834242642524243541444101 0
542543363414431064436541442101674335284564537651441101184334534743144 0
101044325524541439101464697553645252143810228434432253753875344252143 7
101785335755758523376143610168242543342326363143510346335235532285754 4
457553323253233541434101365366626526241433109625436522143210256224374 5
252523822252644451431101564532257375334214301025632343625432554352382 2
323142910106625352553142810156523465263662631427104565514261010623532 4
623142510424423433243623523523243362553332634234332431424101962645333 4

2735436523142310206432334265363234426214221010633285744214211015854623
5425625421420105655421419101662642432368223231418102162365464376265224
3323141710117433342223101416101364335254555321415101182434253233141410
1283645255526214131022834835333334323433542214121076425337141110126236
5363443414101015623442667254354140910206534555325862436236414081010665
4454242140710116253545442514061011625344547251405101563444364544235314
0410129442422524251403101985335525346545623521402101664243272645526621
4011022822332664345443252633314001017634424424242336431399102963334234
2342343444442434272221398101764525442525427222139710106245533434139610
1164634354445139510275434854342555244385436626221394101665243464355232
4513931010772326555413921018654274568466542564139110276425555524655424
2323764475613901016642555333643666513891011643425633451388104374644632
3585245556453665433854354266274663413871026643765266463545424452523641
3861041826327352644344542256436364435524336426421385102262652444262333
5432455413841016924383543323444713831017734543244585335331382102963665
2382423472437576352243271381101484236324435343138010186442444326355243
2213791039434342433423424525224224233536525356544137810106355252572137
7101785447538575352664137610276528343235232335452525547241375101867265
2545546945443137410148235264447564613731015642752484686552137210665356
5137110156622638675652521370101454568243375622136910236464533432763755
4645342136810286534542435668655552543343564136710296474444323422545352
4326834442136610264532834333325545424336245413651056643313649156523542
3324435313639144495442446245313629216235643723252335345241361916623622
5233226444136091263653473625413599188367554635442545241358917724274476
2656554213579226555358528544223547833135691865244733356353546313559528
3424243233343263645534425333362534276344272725374321354998264555421353
9316624275324342422565543554335574135292744335324444323264265810534331
3519174332432335468324213509184334252343523444331349922457234333244455
2357733134892065434232445388256532134791684459628878888881346937652426
4694254378723447744275338682542134591544564236244474213449278542543226
3333632236424363413439238357254334233326335433213429247445635273264437
8375556613419124455446344561340916643785437965456313399166624375526424
2631338916445335253376472213379174442542434454577613369224435257636263
5733772541335925653446754434354436768927913349274442524734436643542556
5427313339164455557365424273133291644553442463564371331914852424345346
3613309186534473447475733571329930643785435265457245234272255357132891
9623634472634639536413279236253452475462323742353313269264454283263533
6252533633733132591744455564554357284132491365346752443431323914826736
7863566313229116236347263413219188234645475275524541320916636562362444
8753131991863665544333434333313189258273375443734362369453443131798653

4575813169276523343242626442787264447831315925854256555334433536236223
6131492044444347535267282865131391164437444263131291565452463633625713
1199636254254131091282764253442513099464332523376255466334263426462353
6235736545452561308912644755106454213079246523442634246467524498431306
9244442475647666762686365991305926665474338551046745433525353130493282
6762745555752563797976534355261303916444465246437109431302919829264467
7267632510913019166555445232735272130091384666254346641299917624428262
3645429412989166534543236452363129791265252365735612969264434456455585
5433323275555129592244542564443963685997741294919643364247456645244312
9391662345234453725251292911634552624521291910636423545712909176365662
3744473753128992263363533653755437442531288912644445242462128792274377
2425462354843362212869148744623432362212859165373255265435442128491596
4356235324425128391663434433626326631282917945365676853624521281915826
4684343266631280914752367565625741279914845787256565721278913855525334
2343127792374456646725855447555432127691564233444278765612759434456245
6554452554645442426425232545552443631274916432354535475566312739294362
6643626765374426333325542127293185425733343264323848465523525641271936
7242749348764635533546833442434436321270919642675237763543254312699294
5644283656644267557872525542126891483335364465442126791583343234584362
6126692363623325473534374326876126592363463255378534367543465126492963
2265365524363643263563562561263928444232424644433536663384554212629124
4542333244212619188445545255845364421260923652435554433672445524531259
9338542554437525642537665610688886322125892082646373572686625542125798
4344244612569104443563546125591682643447844277551254924854254362442556
5336665561253923826254433364655653245441252918625374566364562832125192
4634558353432634654446252125091144542345635124991163445767467124892064
2523583363665754731247918653524547526532753124691364655286567531245910
8263334262124491365234525544561243916676587333462563312429237342393836
6365354433843124191862353552444357823312409264442656567534237868387565
4123992273425355645734722826531238932455544534763333436824426435364251
2379148443453474552612369982653642512358224334244244575464773256123481
8445338256464427756123381345524363365561232845463556533356529373327232
7356365564644278775521231813445453245366312308254453543345462442626232
5421229811444246455351228810445453424412278204456456365243424243212268
2682544563433665443344244434122582762355524644336665432638354212248982
5344542122382044353446342552252634122281210544244362631221812662343535
5531220833625534423263648252664326543327236121988624555531218814832424
3555325412178106552345274121681252332256245512158106235543622121481765
3527794555265241213818444372633364522433121281764342746455526524121189
6534364331210813646866855523312098184443435355236269421208836645443422

3344345337543345253424773331207817463544265546256631206813824275577364
7120581365547735355421204819644463445627562728312038206443344529656355
2462120283545434222542325634454728734466736742120183343235753735363554
2649864743332547120081064636427531199816463436335544238119881673336 33
2234625521197818825426563346552645119682164356624542104426765521195813
6436664353633119482162647372753662534633311938128364334474331192819455
2625554242332553119181776332335425256544119081683545762627552431189819
6525357456344525542118881043443487471187812658774625542118681965726566
5726528442711858136442744555246118482164455344276353738554211838116366
3744433118281062554436221181886235566311808126535364655421179824824343
4544336333363553821178868344341177821444244386344424354473117682064464
2433336256345531175812763455535542117486548364117381364436453645531172
8234247737555425556438334211718227256367345273625534662117081844424323
5362743443116981168245337482116887833654411678238457432453463326349445
3116681163536545428116581178253542353116481144643533825116386674665116
2817744665544644335841161818642647537467372727116071163862823352115971
6823376525455423511587865728634115772364544253323424428454524115677622
4278115571262467244355211547104435637264115377825645211527126234666253
6311517106635824256115079853634442114972663527523643236432363323544114
8714642310774432552114771264295472536311467766343831145776344227114471
2634664524564114372982656354454245446455544532542114272864543325435285
4334323334542211417376254443542434743626824236623354264627114071067262
4344211397226444552423332433685264113871144322327274113775442351136786
2329756113577635535411347146526626553667411337308253228536244362443624
3642555411327108264373432113179657755543113073075557555334524442545455
3453743112971372476466643541128756664511277158338524432644621126726632
3373625355463766233233311257195532747243435345553112471083423677661123
7406455366326434362265543643533576336653524112271465888335844528112171
9454653263627335634311207116453434224411197186534555652556252441118719
5643555562644524343111772765364626244537625252554462711167176536245733
4344554111572085834457364345636333111474366546372524745765664232445375
5424724374645811137863553433111273265775445565654233268324554435422111
1743825344576625654485447557346278687256645566511107306726665583246422
4534436346323511097418347355342542335322373375327322366484544611087156
5255363735423411077144552326525275611067158456624423756521105711844527
5242311047398526372438695223344444754364285345434341103718826354623542
4562341102722666563623434244524243511017136523527465756110073664675535
6444356254433623243445275525109972083676444533753227226109871582352378
5373423109774183443634444334534454553534452344423358434109672384435426
5544463534946471095718442443687663852283109479835346443109371065253224

5210927246343433434425353633557471091729653554326537336344464855855571
0907116467554294810897116236233545410887237337265343433333425553410877
1364696458677571086712723337322546108572262644364333564533356641084710
6572475254108372263552954243352336232651082716785242635275854310817216
5467753655275445325410807166645446345423343107975743351078786824276610
7771964547727432332325531076736421075748345107473665107374685610727665
2444107171162424432437107071144610545545310697117342442342510687583533
1067711833253255641066744435106577672554510647765526241063794532532531
0627685243410617645244510607118232334332310597187335425524343422341058
7982243524410577168533536553745252105679765332753105572384344432537538
5647243531054719623635774225325553410537108534343437105279633562535105
1796355625351050718653854662556655323104971862348766226436645210487136
5785533242631047716633343536733244510467138255554523555104576652767104
4712734563425554104374283455454464343243444234423434452352424437210427
2263435262623564274285531041719833544376262555453310407248533765427482
3244266436310397386423347352637563856424624323246323554410387885335457
1037778246358103671374462752344331035711634263246641034713823235276532
5103371585243535733244510327665276710317168232535426432566103078625538
5310297236243353245274338542855310287256525344756756265263325527102773
5447463432463344342462432324632355441026713653755463536810257259243852
3432748521043425323102471782325356432444565102372765447452633325527743
3423527102277443436610217118224552332310207148254525342555310197165443
2324632345341018714445475575236861017713667743342352710167116224253536
6101571182245523323101479442534253101372143454343232463244346310127176
4644434235345456101172965644722275273455543353346443101071582444254673
5263100978832355451008732824565235676655654535243268344421007738652436
5243435323752335434232454643636210067106453336564100571967533544366666
5456510047208364254532525625555510037156435325654626561002714843544257
8575510017138526245555744100071863725425567364744799971067348442559987
2883442544353432533452522555559977366439542654343452463345435675242262
2699671564255553442865699571084545344239947238456225335636534249755299
3714643663253337659927406243335245565476454733543445264252323263991737
6546363454325423585633626656324435343990711642555497569897196235335435
5543733329887118348253433498772962243636242256344663343273342986726646
4473566255225286444432298571683236375423643329847166474326864752635983
7166535266423676332982722622437842422355655554981731625685362326253775
7545264377233298072065442333655655562332979776565543978712335552434563
9777128267342365449767284347244652635853266574364457975758343897472582
5255236325624725424574597371782663535324553433972712644644366443971715
6633737353632729707785367439697482339687563363967713823545224345396671

7326326333352434239657168232536468427274964711625543652649637116753655
6733962798267434569617663345696076875457959712633523552633958710622556
8423957714625642634254269567138525334233444955714954621454643252275335
4555439536297343764324353353324332233444295268834452429516982366552295
0616823357344643354294961662353437337337329486196536243543243465552947
6377372472423243274423434334342342862362946635653636265544453343544245
3444654326294561477233527364462944686567574494361764555433744356452942
6175525452355637753394163565254545423374453442685644342536363940642652
5453434563334327636635276361042635432362939627653762675554344353334265
7329386866337542937637634343623732522553525343253636243265593661385243
3542435393562874673452272742375565332255549346394433333343244342345326
3244235435342232293364085424234544435343445254285463823725535539326236
4246854638237255355256931616433375634534557393063183236353354342464778
4666747444392962065342436452634475532928622443575334337357573422692762
6653746543626646642362345369266206355243355877738253592563162373333334
3338338463365852333692461984235524264437363229236774336229226185342634
2527632625492169635335354920610664543322391962865463666663553549555435
3644291868653483459176364432432346653344564564528452824425649166106535
3436339156964652734491462862535444624544444233744524339136296534543465
5643444342343425364912615637363477542255911624652834453724352244268434
9106207483983683444434236390961275365652654590863094232348653472353233
3443336333907610664244333590661194352324232905618632343624425522433904
6116637425434490362382535324366765654434545902612722977625546901623635
5233355433545564335590062266444237524325666855438996136726332623875898
6216243463436423636373578976256537643253344344464325553896613553355636
2433895613825233232442489468647486458936155533633643425528926966374375
2891616432337324233244489061843333245233324368488961553663454266453688
8644645422543436646785255552537334437324273624438876136465276532643886
6166465264523763343885612665366645474884617644442555244644428836296424
3543544557433647263373574882649852543436435455666595528233442353334333
4324435343881622763326766535264344574488064465242426346226567675444234
6422323344252424538796168432244622574355878617735435353437667558776166
5244635242244338766964381088638756883545568874678226556873621845655575
5332555365268726144432425443775487161163535476355870622642638365242256
4636244869625744323343423262434342834586861282335683444386761863433234
4433335534866618752635233343335534865615732334333535424864698266857358
6361444254346535733862624663854524353445244568343861686443666386063983
5652432255365255287545237345362243252859645653454243536554423243433432
3343342246665456538586125544326255338576238526343764442634562654485665
6453385569553243424854627656434335546263225255423622853610642323464285

2617826326355664526228516128435234643428506176235555333455536384962264
3626424353627525674384863144234333552336342436422523625558476149456454
2824222846622833433352282422632433284562182333427422432554243284466848
6458436274445423264432364343543765448426159544525426745458416258257325
5233262424667455438406175543342334362652583962874765223423423334354345
4342283868653657568376156235335337638438366148534242444527283562362264
3426433263485432628346982365554483362062447535333255525244832614652734
6346552583161175788423364830612626324525542829615642544652445272828617
6435335432724275682762264323262527337443524238266196264342344223234346
8256106424676564824628825353643347624252452637433382362283244464355365
2364234482261464584725646342821613645536643366382062752336376345236254
6633455532819619643663535534343523381869833663226817616753436433255233
2816617825454335265352338156116363633635381463276332554853336232434636
2463645258136106524363534812612632455236322811612645736542564810614842
3632443534380961362365576376758086376345432424224442275332763356444254
3228076766353638066174323345323243345380569654435342804694343424328036
2482534234243243436844444280269663752323801625623655332733864333268223
2800610853362525279961382524564424647986962574746379761362254463344467
9661643332554765254537956315452779524766567342252632526243794612825256
4535537936116453442326379261262564453824379161464244443232542790614655
5267468343578951143233436833788524653354434467524435843343787511663434
3556278652943234563374432554534622623332785545643342243422453432323242
2426343254753443424337845178245255443435634378352283473466434625544543
4378251582556225664424578152264245362554236243429327805136554572529353
7795644333245548523734356435765545455555243887653552545452644544342432
7785156433332554554437775228542574673532625385243776526833373823857855
5276646533377555273334543423342526257632955852542525243356355335555427
7452064375643732252655542773524634626346452556444236334772521627543655
4335353524327715963625235277052644544333643463533252625542769516657424
6645366522768511635245636327675944436442676652743343523822442738666556
5643765520644464424354835653337645516245346333343445533264526444332452
3235644335562554276352444333536524576552448554276252483575265286652354
4865533761513666347637674776052064363432675287542744759516658732388754
5542758545655344477537534553234526266242645775374726472757512624446454
5357565188324263343256255427555765576567545148444675244534775351685246
2542535423375252182744642535246363425475152682576433535555466666555535
7505156454672443656537495196263543263424556453748510652454272574751766
4334355437325537465246425563242356343525263227455166625433342243272744
5256342634346645454232434362743584451043647425254445556362343332354425
5337415345283565443354235346732644362425533740519634544542543255443673

9519665564234544577355373852062353354565328956552737531853335632442457
4254387633346322736525854242525564342332442364273552462345634633526425
4387643734512641074665632373354783255526465464733875756324424574348425
3663642657325136524565528964731513652456852745473051665345252365345647
2952764245257496444444243532362272852166332435435423362632272751262353
5476364726524642466752655254565625542725511824335664437245136366665566
4547235384454254334463442783483475444442442554272251567745473565655572
1528662523742326424456246473625472052385424244463365686625542719510644
4243585718533752536462444553444232627743443543717551734375643785227453
6433744534243743443554762433556477165168264434233443736715526764724336
4337772433543563671453182644342325324347556666666524567135418264434235
4663655354644283810556573443476371251595333262434767471152683426554345
3443442555356567105684462436236424325544224354337523536266325652546565
5364384552527552642709519432354354246832424370851444424443543233707513
4454254347787706512444472352626705524444442734227355522322552704514655
2774745554270351344427562325537025344462462333525242764262625526647544
7015407523345228564554663553652423443237335332700526825346633425523445
3552454469959825543425698513844552555424369751682443643532733436965247
2454373525362564253435469551485333526365553694513854554434232369351765
3643545246234256925216427446574556644652536915186446346362464424256905
1568736334347563268952382432265664325446325433688529432355453434252625
2433465263268753065636834425434333427632745386568654243235424636834552
3443642424424324362425533685518643755372763642424684524453425242562543
5346526326835256534647338757253357553553682532834254445345344325335625
6566675468154564234333375244974644479566665343445344673543468052487444
6463656232254465542679576557656678510445386554367752763442466426633347
3653655542676519644424665422647544767556265555744325544237774573536626
2433233244374437377773767634355426745438262343384355373668352655298293
2732655573356735316442464437553545386725373323347672561444346352434735
5565355663525535348835333523533899924433745654671553644246853737438626
6252347385474246654373536534552554267052442442355435423753475554266945
0433552344823655453337565333322533234333233427264286684157547434282855
5466741254574255254266642653443235355798544276786554665418548762638833
4426626644545545238222324264344346563556344366444346443436352526326634
2455446822336334642565254266241154334446443661412573354326552660411554
2442555265941355469554434436584155544533435447646574146444462532472565
6425556765558668737428336346365542654755659686942434436945283654414554
8775563435665341454426345555525652414554744326363236514855444442650434
5534533223232337533345353444346536649465643676484225363654323662486456
7546474195646525235456358556646437564632676232562677444632445362554263

5645417554466354336355566444855873825643422533627454475436275565264241
4543433252524526414145544323526543264041155446527442639418548434826357
5875536384115333526529263741856536278326862554263641652334435335323376
3541953463565563546347926344365838443735458275635483343354233333756334
3354299442534442634633734445326253363241453535578326865631465533936304
2057335432472525252552629429552356558543324475334765555426284385633436
2536256344552432982633356655542627414554476444644326264125334464546326
2541055452382246244325444523822336345265265554523822462341155444234363
6224225534366387526353636283621429563343663466364652643625524536204405
2343326367637211727332726652625434642629619412533445238224618417574557
3543344344361741656356643423282436164205344322332344263538361542144243
3434467524478656614475453465613475375375612421563343247434378747898611
4865526444610411563535342526094205523543433325242424260842055454248435
5242326536074265454456343535252532362423260643354434432257644532636353
5245464435605414556535232425436044115544435544360341355434624424436024
1955422734453662465426014215634452422624342735276004145532324267525359
9475534247598415583344353556463597422554452242663656625625359642065834
6267846465476545954625583425575244232333254354578726255285837524556285
4783455635434594423543582556242626245452545934315544434335526436424345
6523442535924105444442436591412563482876210359042755466485433355283543
5658652589485544563558843354839446434483789437844210543828525874405633
4275433244554466365365436374425355425864165524544445466543585460554442
4855323546435456532335464333323362343545463533335425335844325653578386
6655682346634225772656583436553433556838395643357282646256533553582428
5344638386534427364634753624581422523344343252753655923358041754243332
7338233245794155323342524555545784225323444323454344234542577422644355
5332438443424425576430537765435495545446343265252354575413573643323367
4574424554435456245443453425447573412557343443632572418554558434253434
2525714365662554432224236453432364535424356655704485634337464243364654
2464324555443653465676433532356942053732767742756442755568431542354423
5566326465876211442723356742154544254425376655442756641954543524553236
4236456541754322344235736343564411562475455425634755442535624185549897
2544526743356143759560465442845594276434426254344352626266255335584196
7434625225346362435574235546637495652434453426355641654623354562244555
5541676352565264357345544155359464442363345534305552752625373826424344
3546532355242965335656427435327345567465542551425553422544266253545385
2642550420537554344675244786565494205534267557644463755254841155432252
3255474185487672534245235625464105552452432545411523344345555444205552
4555786662555323543410542454363454241456342442655323541420545354343332
5242424254042964345543627365423243553565542539438536364545344756554352

5836435657625655253849554454845537414652776625553235364495434277745735
3662624332332443734534362635566255425354145463534265553553441255325532
2434533415544247423354242532415534445375655255531418545273356356354766
5304155587424527657655294325632324274364675662698646104263475284225534
2644652525424764435274405434255536387286667433566972643354336366526419
5323342667469833554525427533342424763477346335243263524412557744352572
5234135433445456343522424533426634425423757625542521485744424452041354
6276555424551941444555525373544518458445336345333628323664344563736866
5483258458727423884244523517442553427322745435664283736862442345447423
6295164545534232237363725765433562335662626866728768554587877545154175
4553332236263263514411564533543745134175568436366634375351243554345462
4838856523824773465233255425114245536543653433355333765655104205544544
6426265654364509414553425764374875084225344257362853455962757507413443
4545556433506418654467524456433443505488445424433234432525332453554432
2352543333235432535433333332253543235432435433333332273234504471553424
2543445286323443255423355553232332323355437545433244634238235724650341
3574626447565250241554847555452525550141364363898646345004196532323983
3479833464994375545775548653384336266737574453653377498416643674853434
7753497414555433233347654964286343742266343554623327726343495416543373
7636673775494429553428274465555354453254455424933116546776554249233064
4243535544562365435435436323491321734334324467524434553490376446244489
3762554524883436345432575244974667526627663254232443423437487314742373
5343625448632072673463545552756544485311528363542344843215446534246832
8646546548331175575768322482394323568344813204446267362362643655248032
1624542764673576555433479324632336635365352655277726478323643663335552
4373655553247731267685423335347632864283468423522556635435342554753965
3436433474322645524865256444255343347333046356854732527322234242453655
3472336434663556424254453743352643442384432471317444483447334455534703
1244444528565246932244462334344445245275534683116426737474446731543254
5736244258466317644566673525253354653154364655623273854643118342434425
8463319623533523626942453546231364352644255534613166425627252726855460
3336345623286744552954256244266346564593986457536345832043234263222334
6525754573254433253767755462543283423456386345435245531364464243345444
5432162342324273233433243345331887444264236334346245233093424354452737
4442754333334244451376445234450314633542632442544493374635545624345535
2552352525386566255424483214442443452477475345524473756445622662247735
5354624225523523326252262533522325232682435566264545443254244632563456
2352365337626733536244534083325434845264256424525232652853357244544443
1984457624225635554254433683364244231368736556255424413108356446446440
3198537745286344523533439321835835344263534534325438324864464334464335

5443424334373278464433535373723454232434343631265735232554443531385465
4445625243436855546433324832554555465376443523362432396427563534313675
6454343031385337526352324293158344675245425654283236352353436437945652
5536427313835528597626542631174685442537425356574742435844564233136546
6656255424223164454254345238224421312656254235223420396862552454193176
6432353267343443418315682454635276623417313682464526384241631065464544
5441531287446552473241431144565844243413321463424552663364535462412328
6444265252754444554377737542411331642634246437273242457252562554241032
3664453765335243466326234093186425564427374425524083984563326340731582
6728626875656406314635444553632454053356643324874565537554246524424352
3554404311622768333624033238784344633357626865533440231164445238224401
3118444354644340031064244365543993176436673665544544339831444367523286
6633973148266268753534539633465534444752433566763454254476354483953136
5353524555423943176433355355445456439331567366552562554239232063543554
7324425263223913136234545626322390325823433354625253443437454338931084
6445333238831182335737432387311826332543533863246427852742324373237433
6238531542433263536346238432462334435253453524343655238331472664247273
5523823114443733255338139623644246380396694452653793188542576262673544
4337831382623343473433773296244334242854438668734354354237631465546822
4354353753782633433743338244736544367382643445254263754333733136423676
8862633723286446643754432255542766452432371329635437432234322762236277
7564337032744463735434636234255484465236939734355423368336635437472535
5354323442652254465226333673865254264366332445425435224372623342435225
3336336531765476355345563255364311654774626323633965456263236231363635
3726325336131383556546585423603148233553473673235932062545323346332346
5423583166442387537262632357332646653432645434243434365443663223563694
4353355315663434332345332354325834455277778736352423234335337823332435
2315522324243443432351376662453350311832567865543493136233762557554348
3317344556327335536555526366342423473683544634639827675344345320645 54
4539343623544343443864375342343319746424653433572333634234564234322626
3637446576544453555523434245237336341358876634032352245433424443363324
3243393783552553383218376254346435542428423373207253344475253345552333
6388266454233531384375642428433343208645354345543433242333331742444347
5534243233323208256542555542724438633131564344422223353533033544424424
3224323423453755345645735473293246727264464754434546324643283186633355
4222432554232737445325432631183537353542325311832435374623243144456354
6845422323326745447545522332435324232333223224323552382254552622522321
3276444474452332424343832688423203214442542555245526562543193254323354
4244244355425454523183156234232533247343173156525257535525533163206344
5255443562555323315311623376274553143184565266572477456523133267456455

3636378655353345353312326644345435455232365553743523113186623326555923
3234331036811999830931154463544465308324745426564675244435542472307324
5345664368766528976272533063297553224254553665544253652333230539644377
5523043146457467552652430331654264427374425523023137424233245434301315
6334423362363243003467434343222465294364367663527362548462264364442299
3136623324372642298311623523442422973186245443455527553322963118754335
5643295376423324294313293249853763735342342263452535345434625272462642
3534442292227654665642334255853293244363291228432354254354275262253523
8223290232463543463763345654545336555333432892129433547463446343443737
7345458554237357543444352562634237336757327253845523626964623262252544
4334343345444664434243364567433473554228821562342324243364628721464233
6353542332862176362744436424662328521464252325455542284219623533435365
6786552283211442325755442822456425563343532363254354544535455342764433
6256528121762353343547376765280230424332636562766266652482442657279228
6255332634363638326342444543278220463572453337763257522772155283543325
2426327621674343544363342642752134455355587557274230434273623656366352
3645252655422732357563444733575435672242752464232425427222746353452355
4465346274567654271239854255333624546445455654354445657625542270211435
3642365326922462353343533336262244276526822444543553452253534442765326
7239444254652443234245525334643344364342733266267432342432444626363553
7535526535344233324434234234465343433635343252265243854253446233626443
7354335443732544232734323264224642555735287856537265534263224445362676
3558434254252522622506536536853333424635363245344422523822233352642332
4261222829533333234232736554226025242444724333253257476232525524335477
4346554432433555325929834546443258227833244554554354357545554447257215
8537744544566542562608254453453224545536653425356254453364452334523343
3347423753425523064234322855342335425376243253425424344542445652455642
3523333634552435453324253425325494545356534862634425333573653252344254
3434524327325323252216655455627444442225129444274427250228625445333426
2543453436255323249276553444248267338492472274455262422543435353584664
6624621566225347546264324528636677362442354634255536453644442523524535
3623283243225833854644637536262265254224224744427762244274643646364623
3824944362626422545432412254635862445435445457666466240264463427468525
3543782536436542553336452536542533428752747324365759239233625455344565
4432243856375273556542382454334274625762543544744463433343757366268556
5423723064644444523272643534443322335323624682644437344325464344534344
5352348362333652665623524044545785434662325385654227243252333457692342
7444365323321344435345625523221444564374726472231214445537652844632 30
2168464746764355336229227948342453265453736268322628228239755555853455
3556342345638637352355438632272264442743362645883335272876222622675634

4452648624756435275272252164454455442766552224257642556762746434424538
2526396352474343466724442343423465272232256254532345243334624333653222
2224243326364989932622647221230443234333566437775524535456252220249643
4245542373554454762325533533745355645767445353219220444245735565527665
5321822064435232444343272732217217644454962324623622162124442776232532
1521643337563452655422142117454564425321321265456554323421221463256554
5523442112176334223456624525321022564474643433434335243742472092864553
4352082145444634624442520722442622362444253432664775420621244424954326
2205226734243537663475254424624532042307426653374532634243433344337442
0327364427466654323354353542455323526343743543242425423225433454366352
6363374620221483427737534427201222724274655244755348666520021583353633
5544238199264443631982258448733836638352377328838197213832426395442719
6227654672654244626534455622627195217656552576336757631942655555444734
4372658353652526526535375343277544546744433453426356433193217652821043
5444435441922446652348585343534434243325336543385265363445319123264233
6323344354475434243325433751902155552533365355421892164442433554243233
1882134442753454543187216733898643255335318629557424624185238443335354
2536458634223377665462653554218425172655554772963686465639649863335487
9565324476365243183214443627535634331822115363876765518122944463734635
3626255427624426521802254442433333343442337456534179215644237725245542
1782186233325434234445541772226346263464624254426334176211622436386641
7521743337563455234542174223527235574543634633226541732127366565265421
7223164435352642553333356437643242531712436456636766422435352532624435
4352446757683221702966233243616929623644246168213669445543655216721166
4546675531662208746562552326726265216522444434434424435252345275216429
8265425551632106443355735162212848772465249161213624525442436316021182
4276855421592663276815821766227767765445463157231665557634553355444654
2466343433156217635433244663434331552194323425433623786244154278253324
1532146347453763767515223283335242327543455365335523365544151234635434
2437655346542466343648624432150245456427543343533643535364253534653556
5535743751492216434247632554625252751482156536352442332331472306354342
4533434245252458668726214621462474745434292145210624442434414421966349
4225536325245314323162443342427435443866873435435451422158233573226524
5614121565363524423323314022762454687544454262532553254213921765353535
4232647341382983534323213721883624628443237324313621666337767554454541
3521766335375253632674134214663334485277431332306454352563335654327245
4434273313222266984428736474275555531312198442353355533663753130218623
5633443432342461292128364554567321282158262432656266751272314332422252
4437545243225437363431262106524365573125224646426653525343624646254124
2115224543468412321462268222264446122212444243356764121230446243623637

2332562444424533431202317354735455362534653336475337465119217623533334
3433442311821864275273524323542611721746342435327636567116233432342544
3764342326324573272632421152186423855332433662621142174332432336832424
3113219432342435244352324211222565254264542325428363255321112134497665
6255421102126523432665431092746526242542622263546352844332262355326258
4343453326365573435565846336338427108222625644465524343443245410721062
6244446610621083343544641052128343665834321042188544335444344643221032
2563454262723334253653435481022994564346310121764256532543653422100227
6427265265627655747245567539921165425628454982306423246632435435375434
5443533497227449334652423424424443626265962268345255254553832643443245
4952106266452366942286656864234565477434664266454932136236443766655922
4963543633574662334342434764875437563865762457665429121565626266366275
3902296545362656745698636104362735538921064255586568821364255662643238
7223622436244434436265355268622463346433454274323627665485211532353662
5584296352442648322364432854339533534455544822196352327244644333628812
3763543442434353543437353723432833326328021165566444665792106424548453
7822465375345432554354424443377217743245552223433357621883545444335234
3335752236273343342444332234333574220824254347546264254337329765353358
7221264535524655471213825654353326270215553274724556753692246235334354
5456532985655268260664334477456553424685555233463254249366675254334334
4434242436722865253432746423244537554554636621865362455373343455465220
8673436457443456364364218665463725247457656632765532726221565774433242
4243612276623546333467636586543254336027658645359286533245258212654256
2464635721065527953535621844244368766385227355219623344354434323424654
2128364554567325328645454555228833657695121064655665575027827656749286
5477463482186554663243634355364721475635655456732462106425557656452176
2353343333745464442116623445323543219335552434565343847742219826635353
4445534325412138247353646843402236435256834333338648632339212663362333
2653821564256748352473437228622433255446544245555243833336219433363663
5255223342352136426262765563342208255274224327632436533239832335255234
4444755442437554535244262423223464355447253254354424547524432865543121
3848564566362330220642432764255535332432922365636334722536254755334282
1255526544654227225432342864433554434344745426219945537262764453624225
2662333224217625266434254464452321165374367655222767263642121683443583
4445554420219624724373355533533419276248243182116345526233417212653444
4463621621063636356471521172357544253142124445745463431321162622854552
1228826423351121262842434436610286746766592773332638213719735735554613
8655146544413534312662148235114664 3”

4.3 Final probability of all the key coding based evidences

Considering **all** the presented and considered key coding based evidences in the main chapter, we have 36 trials and 19 successes so far. Probability of observing them by chance alone can be approximated as follows:

```
tmp <-binom.test( (key_codings_success_nums),
                  (key_codings_tested_nums), p = (1/19),
                  alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", key_codings_success_nums,
            "successes out of", key_codings_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 19 successes out of 36 (with p=1/19) is:
1.82e-15"
```

To see a more conservative probability, I will again double the total number of trials and keep the successes the same and see the overall probability in such a case:

```
tmp <-binom.test( (key_codings_success_nums),
                  (2*key_codings_tested_nums), p = (1/19),
                  alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", key_codings_success_nums,
            "successes out of", 2*key_codings_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 19 successes out of 72 (with p=1/19) is:
3.97e-09"
```

Now, I will add these trials and successes so far we observed in this main chapter on key coding patterns based 19 System to the global counters for overall system probability calculations in the end of the book.

```
global_tested_nums <- global_tested_nums + key_codings_tested_nums
global_success_nums <- global_success_nums + key_codings_success_nums
```

4.4 Relevant Verse Meanings and their key codes

In this chapter, I will share some of the interesting verses from Quran, which are likely to be associated with the 19 system we witness over the text of Quran. Because their meanings remind also the 19 System, maybe as addition to their core understood meanings.

4.4.1 Verse Numbered book?

Chapter 83 and verse 20 might potentially be referring to a mathematical system in the book but it is not directly clear when first read from the classical translations. Therefore I will share it in Arabic first, then its transliteration and one of the classical translations and a direct independent computer translation using Google Translate.

83:20 كِتَـٰبٌ مَّرْقُومٌ

As we see, in its original Arabic text, this a two words and simple looking verse. Let me share its transliteration to make the words clear:

83:20 Kitabun marqoom

As we see the first word is Kitabun, which means "a book". The second word should be looked more carefully to be able consider its potential other meanings too as it has multiple meanings.

Here is a classical translation from of Dr.Ghali from quran.com:

83:20 (It is) a Book imprinted,

83:21 witnessed by those nearest ˹to Allah˺.

As we see the word "marqoom" is translated as "imprinted". The others also have similar translations in that site.

However, there are some people who translates this word in question, "marqoom", as "numbered" as well.

Here is a classic translation by Y.N Öztürk from kuranmeali.com:

83:20 A numbered book it is.

In fact, when I paste the verse "كِتَـٰبٌ مَّرْقُومٌ" in to Google Translate, it returned the following translation:

"Numbered book"

So, computer automatically translated the word in question as "numbered". I then asked the AGI of Google, Google BARD, the question that made the issue more clear (on 11/22/2023).

My question: "What is the root word of مَّرْقُومٌ and what meaning does it have in order ?"

BARD answer between triple quotes:

""""

The root word of مَّرْقُومٌ (marqūm) is رَقَمَ (raqama), which has a broad range of meanings related to marking, writing, and inscribing. Here's a breakdown of the root word and its significance:

Root Word: رَقَمَ (raqama)

Meaning:

- To mark, to write, to inscribe
- To stamp, to impress
- To brand, to label
- To sign, to seal
- To number, to enumerate

Significance in the Word مَّرْقُومٌ (marqūm):

The passive participle مَّرْقُومٌ (marqūm) is derived from the root word رَقَمَ (raqama), capturing the essence of being marked, written, or inscribed. This reflects the underlying meaning of the root word, which encompasses various forms of marking and recording information.

In essence, the root word رَقَمَ (raqama) provides the foundation for understanding the meaning and usage of the word مَّرْقُومٌ (marqūm). It highlights the act of leaving a mark or impression, whether through writing, inscribing, or otherwise.

""""

So, as we see the root word R-Q-M has also meaning "*To number, to enumerate*".

Therefore, it is also possible that the translation of the verse 83:20 be in the meaning like "a numbered book". God knows best and I am just trying to write what I understand from what I read as someone who does not know Arabic. So, feel free to do you own research too if you have doubts. However, there are already translators who translate with this "numbered" meaning. For example famous Turkish scholar Yaşar N. Öztürk has the following translation for the verse. In the original Turkish, he translates as "*Rakamlanmış bir kitaptır o.*" and I translate it to English as "*a numbered book, it.*". My research also confirms their alternative translations. So, I will *also* consider this second meaning and understand that the verse in question might also be referring to "a numbered book" and so tried to see if there is any *clear* 19 based key coding in it that might also exist in the full text of Quran. Then I observed two clear 19 based key codings that exist over this verse and also in the full text of Quran as will be describe below.

The natural numbers of this verse is as follows.

It is chapter 83, verse 20, the number of words and letters are 2 and 9, respectively.

- Chapter: 83
- Verse: 20
- Words: 2
- Letters: 9

First key code of the verse 83:20:

When we concatenate those numbers in their natural order we get this coding number, which. is multiple of 19:

[chapter index | verse index | number of words | number of letters]

832029

As you might recall from previously presented evidence, Evidence 4.2.2.1, this same key coding pattern also exist over the full text of Quran with the verse level data (in all 6348 verses), which I referred to as the rewriting coding pattern. Moreover, this same key coding pattern also exist in chapter level data (in 6236 numbered verses) as presented in Evidence 4.2.2.3. So, this might mean that in the verse where the book is defined as "numbered", we might also be seeing an example of how it is being numbered by seeing its key coding coding over the text of that particular verse itself.

Second key code of the verse 83:20:

Let's sum the 4 of the natural numbers of the text of verse 83:20.

chapter index + verse index + number of words + number of letters

83 + 20 + 2 + 9 = 114!

As we see there is a clear 19 based coding relation with the sum of all its 4 natural numbers. The sum resulting number 114 is not only multiple of 19 but there are also 114 chapters in Quran. This seems like a more clear sign that might point to the 19 System of the text of Quran we observe. So, again, this might mean that in the verse where the book is defined as "numbered", we might also be seeing an example of haw it is being numbered by seeing its key coding coding over the text of that particular verse itself.

Also, when we consider this observed coding in this verse as a key coding pattern, then we would expect it to exist over the full text of Quran too. In fact, we observed it in Evidence 4.2.3.1, where we use the exact same key coding pattern and rewrite the full text of Quran and the resulting big coding number is also multiple of 19. Moreover, I already presented in

the chapter of Evidence 4.2.3.1 that the sum of the number of chapters, verses, words and letters is 417544 and it was used as the key coding pattern of Evidence 4.2.3.1. The same key coding pattern also observed in the verse 83:20 as I just presented. This fact further supports this key coding pattern and make it more important key coding pattern that exist over the full text of Quran.

So, as we witnessed, the two key coding patterns of this special verse, 83:20, I considered relevant to 19 System of the text of Quran, also exist in the full text of Quran too. It is as if we see in this special verse how the book was numbered.

Having said that, there are many other mathematical miracles in the text of Quran and the verse might also refer them as well. Thus, we might have witnessed just one aspect of this verse and it is not necessarily have to be the only interpretation as there might be layers of truth.

One final note on the verse 83:20 is that the same exact verse also appears in the verse 83:9. However, that book is for the "deniers" or "non-believers" as clear from the neighboring verses. For example the following verse 83:10 is this: 83:10 "Woe on that day to the deniers,". So, we only observe the key coding patterns of 19 in the verse 83:20 where the book is mentioned for believers. The following verse of 83:20 is this: 83:21 "witnessed by those nearest ˹to Allah˺.".

4.4.2 Verse 10:38

Because of its meaning, chapter 10 and verse 38 might potentially be referring to a mathematical system in the book and presenting the coding patterns of the text in its verse. Let's first see the translation of this verse.

> 10:38 Or do they say, 'He has devised it'? Say, 'Then produce a sura like it, and call on anyone you can beside God if you are telling the truth.'

As we see in this verse there is a challenge to disbelievers who claim Prophet Muhammed made it up. The challenge in this verse is to produce a chapter like it.

So the question is what might be the attributes of the chapter. The verse number is 38 (19x2) and it is small sign that take our attention the potential 19 System of the text. Therefore, I looked at the natural text numbers of the verse and witnessed two clear 19 coding patterns that we had already witnessed the exact same coding patterns in the **one** chapter Al-Fatiha, where I presented the key coding patterns from the chapter Al-Fatiha and witnessed that the same coding patterns are also exist in the full text of Quran. Hence I had categorized that as part of the Main 19 System. See Evidence 4.1.2.3 and Evidence 4.1.2.5 for details. Below are the key coding patterns in this challenge verse.

Key coding pattern 1 in the verse 10:38: Chapter 10, verse 38 has 16 words. When concatenated we get *103816* coding number and it is multiple of 19. The exact key coding pattern also exist in the first chapter of Quran, Al-Fatiha, and also in the full text of Quran as presented in Evidence 4.1.2.3. As a side not, the remaining of 103816 after dividing to 19 is 5464 and the digit sum of 5464 is also exactly 19.

We also observe the exact same key coding pattern in chapter 11 verse 17, which has 39 words. When concatenated we get *111739* coding number and it is multiple of 19.

> 11:17 Can they be compared to those who have **clear proof** from their Lord, recited by a witness from Him, and before it the Book of Moses, as a guide and mercy? These people believe in it, whereas those groups that deny its truth are promised the Fire. So have no doubt about it [Prophet]: it is the Truth from your Lord, though most people do not believe so.

Key coding pattern 2 in the verse 10:38: The digit sum of the coding number *103816* is also exactly 19 (1+0+3+8+1+6=19). The exact key coding pattern also exist in the first chapter of Quran, Al-Fatiha, and also in the full text of Quran as presented in Evidence 4.1.2.5.

Then the question is, can the challenge be to bring up a chapter like Al-Fatihah, from which we observe key coding patterns and observe all of them in the full text of Quran too?

5 Universal Evidences

The key coding pattern based system, in particular the **Al-Fatiha based 19 system** of the full text of Quran has been presented in Chapter 4.1.2. As a PhD level expert in Information Coding, my expert level conclusion is that it already shows that there is miraculous 19 based design in the full text of Quran with respect to chapters, verses and words together. It does not include letters information and thus it is less dependent to the various old or new manuscripts that might have slightly different writing styles when it comes to letters. This is because, some words might be written with slightly different letters though all refers to the same word. Some of the people who has no interest in understanding the presented system in this book might not even read those evidences by stating the above mentioned argument as their excuse. Some people also might argue about the text I used in the analysis of this book. Therefore, if there are 19 based codes, which together suggest a 19 based system, which are also valid over all the common Hafs manuscripts on earth, then such a system would be mostly free of those kinds of critiques. I therefore searched for such a system in case it exists and discovered the evidences you will witness in this chapter. Such a system would then be considered as composed of the universal evidences and thus I

named the codings of this chapter as the *Universal Evidences* of the presented 19 system in this book.

In this chapter, Chapter 5, I will present only the universal evidences that might be considered to be *manuscript free* as they exist almost over all the common Hafs manuscripts, which is the common one and used by around 97% of Muslims in the world. This means, the evidences are mostly without letter information and based on only on some special words.

Again, all the evidences in this book have been discovered by myself unless otherwise noted. If I share any already known additional evidences, I certainly cite and inform the source along with that particular evidence.

The additional evidences I will present in this chapter are again bound by the universal rules described in Chapter 3. However, for each sub-chapter of this chapter, I describe the special rules of each evidence, which are additional to the universal rules. Because each of the additional evidences of this chapter have their own additional special rules since the research question is different. The main distinction of the evidences of this main chapter is that they are the most universal and thus the strongest evidences as they are least dependent of the used text. Therefore, I separated this chapter from the other chapters. The common trait of all the special evidences I present in this chapter is that, all answer very meaningful questions.

Reminder about the rules of this chapter: Although all the evidences are based on the full text of Quran, they indicate a design pattern in a special part of the text. Therefore, all the universal rules defined in Chapter 3 applies but also for each evidence, if there is a special coding pattern it will be described with its rule along with the reasoning of doing it.

5.1 Evidences on Allah and Al-Rahman word positions and frequencies

Al-Fatiha based 19 system of the full text of Quran that is presented in Chapter 4.1.2 will be true as long as all the words in the full text I used are fully correct up to last word of it. In case, if the word counts is any different, then all the relevant codes with such case would be most likely invalid Therefore, although we observe a miraculous system, it is intensely dependent on the full text I used and thus all the words of the text I used should be reviewed by independent reviewers to make sure all the words in the text are correct and my word counts are also correct. I have already seen two independent websites that agrees with my counts considering the text I used as described in Chapter 3.1. Since it is very sensitive to the full text, some people might be hesitant to accept what they witness. Some people even think that it is not possible to count the words correctly in classic Arabic language, which I cannot agree. Therefore, from that point of view, the evidences of this chapter, Chapter 5.1, are **the strongest evidences** of this book as they are prone to those

kinds of text based skepticism. Because, in the evidences of this chapter, we only count two special words that certainly exist in all the full texts of Quran, namely all the common Hafs manuscripts, old or new. Therefore, there is almost no reason to be skeptical about the evidences of this chapter with respect to the text I used. Therefore, the evidences of this chapter, Chapter 5.1, presents the strongest 19 based system of the full text of Quran, which I discovered and presented in this book.

In all the evidences of the sub-chapters of this main chapter, I will present evidences that suggest **the verse positions** of the word God, in Arabic الله (**Allah**), and the other unique name of God, Al-Rahman, (**الرحمن**) (the Entirely Merciful) are individually and together have 19 based design within the full text of Quran with similar coding patterns. This also suggest that the order of the verses should be as is with the current Allah and Al-Rahman words in it over the full text of Quran. These evidences stand out as if a backbone of the 19 based design of the full text of Quran. These evidences suggest that the distribution of the names of God (in Arabic, Allah and Al-Rahman) is not random and under precise 19 based design. These evidences indicates that **Allah** and/or **Al-Rahman** words in Quran should be in their current exact locations and not changed. These observations further support the main hypothesis of this book that the text of Quran is intact and unchanged and it is under 19 based design.

You might wonder the reason why the name *Al-Rahman* along with the word *Allah* is in this system. I had started hypothesizing evidences with only the word *Allah* but then I recalled the verse 17:110, which specifically mentions another name of God, Al-Rahman (The Most Compassionate/The Entirely Merciful), along with Allah word as this:

> "Say to them (O Prophet!):"Call upon Him as Allah or call upon Him as al-Rahman; call Him by whichever name you will, all His names are beautiful. …", (17:110), Quran.

Therefore, I thought that there might be 19 based coding evidences of the word Al-Rahman along with the word Allah together regarding this verse and thus made the hypothesis based on that.

Therefore, in the sub-chapters of this chapter, in Evidence 5.1, I will provide the evidences that show the positions and counts of Allah and Al-Rahman words over all the verses of Quran are under 19 based design individually and also together with the same coding pattern.

Let's first get the position and frequency of the word Allah in each verse with respect to general verse index, chapter index, verse indexes at each chapter and the frequency in each verse. These are all natural numbers that exist in the full text of Quran.

As per the universal rule, I always use both types of the text of Quran in this book, I will again get the related numbers for both of them. To recall, the main text type is for all the 6348 verses including unnumbered Basmala verses and the second one is the text type of only the 6236 numbered verses.

Below, I first obtain the counts and indexes for the *Allah* word from the text and present the two tables with the computed numbers for both of text types. These are dynamic tables and you can access any data in it easily in the e-Book version over the web.

```
require(data.table, quietly = T)
require(DT, quietly = T)
require(stringr)

#Allah word in Arabic is assigned to search within Quran
tmppattern <- "الله"

x <- unQuran #6348 verses
#find verse indexes
require(tokenizers)
tmp <- x$text
tmp<- as.character(tmp)
j <- rep(0,length(tmp))
for(i in 1:length(tmp)){
  #tmpw <-strsplit(tmp[i], " ")
  #tmpw <- unlist(tmpw)
  tmpw <- unlist(tokenize_words(tmp[i]))
  j[i] <-sum(tmpw == tmppattern)
  rm(tmpw)
}
#if correct, this should result
#2265 Allah words used in total within Quran.
sum(j)

## [1] 2265

#Get the verse indexes where Allah word is used
i <- which( j!=0)
x <- x[,c(1:3)]
y <- cbind(x,j)
y <- y[i,]
colnames(y)<-c("Gen_verseI","Chapter",
```

```
                "verse","countW")
yunQ <- y
rm(y)
## do the same for 6236 numbered verses
x <- nQuran #6236 verses
#find verse indexes
tmp <- x$text
tmp<- as.character(tmp)
j <- rep(0,length(tmp))
for(i in 1:length(tmp)){
  #tmpw <-strsplit(tmp[i], " ")
  #tmpw <- unlist(tmpw)
  tmpw <- unlist(tokenize_words(tmp[i]))
  j[i] <-sum(tmpw == tmppattern)
  rm(tmpw)
}
#if correct, this should result
#2153 Allah words used in total within Quran.
sum(j)
```

```
## [1] 2153
```

```
#Get the verse indexes where Allah word is used
i <- which( j!=0)
x <- x[,c(1:3)]
y <- cbind(x,j)
y <- y[i,]
#
colnames(y)<-c("Gen_verseI","Chapter",
                "verse","countW")
ynQ <- y
rm(y)

datatable(yunQ,
          caption = 'Allah word positions and counts in 6348 verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel')),
          rownames= FALSE)
```

```r
datatable(ynQ,
          caption = 'Allah word positions and counts in 6236 verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel')),
          rownames= FALSE)

#initialize the special counters to this chapter for probability
calculations
AllahWordEvidenceTrials <- 0
AllahWordEvidenceSuccesses <- 0
```

Similarly, here we obtain the similar table for the word Al-Rahman only as follows:

```r
#Al-Rahman word in Arabic is assigned to search within Quran
tmppattern <- "الرحمن"

x <- unQuran #in 6348 verses
#find verse indexes
tmp <- x$text
tmp<- as.character(tmp)
j <- rep(0,length(tmp))
for(i in 1:length(tmp)){
  #tmpw <-strsplit(tmp[i], " ")
  #tmpw <- unlist(tmpw)
  tmpw <- unlist(tokenize_words(tmp[i]))
  j[i] <-sum(tmpw == tmppattern)
  rm(tmpw)
}
#if correct, this should result
# 157 Al-Rahman words used in total within Quran.
sum(j)

## [1] 157

#Get the verse indexes where Allah word is used
i <- which( j!=0)
x <- x[,c(1:3)]
y <- cbind(x,j)
y <- y[i,]
colnames(y)<-c("Gen_verseI","Chapter",
               "verse","countW")
```

```r
yunQ2 <- y
rm(y)
## do the same for 6236 numbered verses
x <- nQuran #in 6236 verses
#find verse indexes
tmp <- x$text
tmp<- as.character(tmp)
j <- rep(0,length(tmp))
for(i in 1:length(tmp)){
  #tmpw <-strsplit(tmp[i], " ")
  #tmpw <- unlist(tmpw)
  tmpw <- unlist(tokenize_words(tmp[i]))
  j[i] <-sum(tmpw == tmppattern)
  rm(tmpw)
}
#This should result
# 45 Al-Rahman words used in total within Quran.
sum(j)
```

```
## [1] 45
```

```r
#Get the verse indexes where Allah word is used
i <- which( j!=0)
x <- x[,c(1:3)]
y <- cbind(x,j)
y <- y[i,]
#
colnames(y)<-c("Gen_verseI","Chapter",
               "verse","countW")
ynQ2 <- y
rm(y)
##
datatable(yunQ2,
          caption = 'Al-Rahman word positions and counts in 6348
verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel')),
          rownames= FALSE)
```

```
datatable(ynQ2,
          caption = 'Al-Rahman word positions and counts in 6236
verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel')),
          rownames= FALSE)
```

Now in the following, we obtain another similar table, that is obtained considering any verse that includes **either** Allah or Al-Rahman words or both in it assuming that they are equivalent based on the verse 17:110.

```
#Allah and Al-Rahman word in Arabic is assigned to search within Quran
tmppattern <- "الله"
tmppattern2 <- "الرحمن"
x <- unQuran #in 6348 verses
#find verse indexes
tmp <- x$text
tmp<- as.character(tmp)
j <- rep(0,length(tmp))
for(i in 1:length(tmp)){
  #tmpw <-strsplit(tmp[i], " ")
  #tmpw <- unlist(tmpw)
  tmpw <- unlist(tokenize_words(tmp[i]))
  j[i] <- sum(tmpw == tmppattern) + sum(tmpw == tmppattern2)
  rm(tmpw)
}
#Allah and/or Al-Rahman words used in total within Quran.
sum(j)

## [1] 2422

#Get the verse indexes where Al-Rahman word is used
i <- which( j!=0)
x <- x[,c(1:3)]
y <- cbind(x,j)
y <- y[i,]
colnames(y)<-c("Gen_verseI","Chapter",
               "verse","countW")
yunQ4 <- y
rm(y)
```

```r
## do the same for 6236 numbered verses
x <- nQuran #in 6236 verses
#find verse indexes
tmp <- x$text
tmp<- as.character(tmp)
j <- rep(0,length(tmp))
for(i in 1:length(tmp)){
  #tmpw <-strsplit(tmp[i], " ")
  #tmpw <- unlist(tmpw)
  tmpw <- unlist(tokenize_words(tmp[i]))
  j[i] <-sum(tmpw == tmppattern) + sum(tmpw == tmppattern2)
  rm(tmpw)
}
#Allah and Al-Rahman words used in total within Quran.
sum(j)
```

```
## [1] 2198
```

```r
#Get the verse indexes where Allah word is used
i <- which( j!=0)
x <- x[,c(1:3)]
y <- cbind(x,j)
y <- y[i,]
#
colnames(y)<-c("Gen_verseI","Chapter",
               "verse","countW")
ynQ4 <- y
rm(y)
##
datatable(yunQ4,
          caption = 'Allah and/or Al-Rahman word positions and counts
in 6348 verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel')),
          rownames= FALSE)

datatable(ynQ4,
          caption = 'Allah and/or Al-Rahman word positions and counts
in 6236 verses',
          extensions = c('Buttons'),
```

```
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel')),
          rownames= FALSE)
```

Now we can use these three tables in the following sections for the coding evidences to be presented.

For the reference, to the best of my knowledge, All the evidences presented in the subsections of this Chapter 5.1 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out that the evidences under Evidence 5.1 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

In summary, this is the main chapter that includes the three sub-chapters underneath of it. I collected them in this main chapter because in each of the three sub-chapters, I use all the three tables in coding tests below. This means they have the common numbers to be tested. Each sub-chapter tests for a different coding pattern. The evidences in this chapter suggest that *the positions* of Allah and Al-Rahman words over all the verses of Quran are under 19 based design individually and also together. To recall, the reason I consider the word Al-Rahman along with Allah word is because of the verse 17:110 in Quran.

> "Say to them (O Prophet!):"Call upon Him as Allah or call upon Him as al-Rahman; call Him by whichever name you will, all His names are beautiful. ...", (17:110), Quran.

5.1.1 Evidences and probability on Allah and Al-Rahman words with concatenation of chapter and special verse indexes

The evidence we will witness is the 19 based coding for the exact positions of the words "Allah" and/or "Al-Rahman" in the full text of Quran regarding chapter indexes and special verse indexes. In fact, mentioning these two indexes are the natural way of referring any verse in the text of Quran. For example, when we refer to a specific verse, we say 17:110, which means Chapter 17 and Verse 110. Therefore, the evidences in this sub-chapter use the most natural numbers to refer to a position of a verse in the text of Quran. The coding pattern of the evidences of this sub-chapter is performed by concatenating each chapter index and special verse index with Allah and/or Al-Rahman words in it. This evidence suggests that the chapter indexes and the special verse indexes with Allah words and/or Al-Rahman words in them are under 19 based design together. We witness that the same 19 based design pattern also exists considering only the word "Allah", and only the word "Al-Rahman" and also in their combination (verse with Allah or Al-Rahman words). Since as a global rule, I try any coding pattern in both of the text types of Quran (all 6348 verses and only 6236 numbered verses), in total we perform 6 trials. As we will witness that 4 out of 6

trials are successful with the same coding pattern. This means the probability of such an observation is around 1 in 10000 (or 0.0001) if we consider only these evidences independent from the rest of the coding in this book. Here is the calculation of this specific probability.

```
tmp <-binom.test(4, 6,p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(formatC(tmp$p.value, format = "e", digits = 2),
               format = "e", digits = 2)

cat(paste("The probability of 4 success out of
          6 tests (with p=1/19) is:", tmp))

## The probability of 4 success out of
##           6 tests (with p=1/19) is: 1.06e-04
```

Let's also add these numbers to the special counters that we will use them in the probability calculations of the system in this chapter.

```
#counters to compute the overall probability
AllahWordEvidenceTrials <- AllahWordEvidenceTrials + 6
AllahWordEvidenceSuccesses <- AllahWordEvidenceSuccesses + 4
```

Let's try something else for more skeptical people. One may argue that, why not also considering the frequencies of the words along with the positions. There is no such code exist. But if we consider them, we should consider that as a second basket of events. Because all the events we observed with position indexes only but not with the frequencies of the words. Therefore, even we would perform twice the number of current trials, we need to consider all being in one of the baskets of the two event categories. Let's first include those second group of trials to start answering this potential objection. We then have the following probability, which is alone still statistically significant, as follows:

```
tmp <-binom.test(AllahWordEvidenceSuccesses,
                 AllahWordEvidenceTrials*2,
                 p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(formatC(tmp$p.value, format = "e", digits = 2),
               format = "e", digits = 2)

cat(paste("The probability of all the ", AllahWordEvidenceSuccesses,
          "success out of all the", AllahWordEvidenceTrials*2,
            " tests (with p=1/19) is:", tmp))
```

```
## The probability of all the  4 success out of all the 12  tests
(with p=1/19) is: 2.70e-03
```

As we observed that the probability of this is still statistically significant as it is less than 0.05. In such a skeptical case, as mentioned just before, it would be more fair to consider all the observed evidences exist in one of the two events categories, namely 2 baskets of events. Here we also want to know what is the probability of observing all the 4 successes in the group of events with either the position information only or in the group of events with the position and word frequency together? If the chances are like basket1/basket2, then 4/0 and 0/4 is of our concern. The rest of possibilities would be like 3/1,2/2,1/3. Therefore, approximately,the probability of observing all successes in one of the two basket categories is like 2/5. Therefore we multiply this probability with the one we found above, which only shows observing 4 out of 12 trials. Then the approximate probability of the overall observation should be around **0.00108** for this extreme case scenario, which was computed for more skeptical people.

Now, Let's witness the evidences regarding each of the three cases from the tables we had obtained in the main chapter.

5.1.1.1 The Evidence of Allah words positions over the 6236 numbered verses:

The coding pattern of this evidence concatenates each chapter index and special verse index if there is at least one Allah words in it. As you will witness, the same pattern exist in both text categories (all 6348 verses and 6236 numbered verses) of Quran. In this sub-section, I will present the proof of the first evidence that is in the text type of the numbered 6236 verses of the full text of Quran.

Let me first illustrate the default concatenation coding pattern, as always in the natural order, applied in this evidence as follows:

> [Chapter i1 | Verses j1 (chapter and verse indexes of the first verse that has Allah word or words in it)] [Chapter i2 | Verses j2 (chapter and verse indexes of the second verse that has Allah word or words in it)] . . . . . [Chapter iN | Verse jN (chapter and verse indexes of the last verse with an Allah word or words in it)]

Here, i1 is chapter index and j1 is the special verse index of the first verse that has Allah word in it. Also, i2 is chapter index and j2 is the special verse index of the second verse that has Allah word in it. Lastly, iN is the chapter index and jN is the special verse index of the last verse that has Allah word in it. If we use the real numbers in the above formula, it would be like the following regarding the text type of the 6236 numbered verses:

> [1 | 1] [2 | 7] . . . . . [112 | 2]

And, the final number after all the concatenation would look like this:

1127 1122

I also provide my single summary that better illustrates this evidence, which I had also tweeted, as follows:

Here is the reproducible proof of the coding in the text type of the numbered 6236 verses:

```
#The required numbers for this evidence are in the ynQ object.
x<- ynQ  # 6236 numbered verses
tmp <- paste0(x$Chapter,x$verse)
# head and tail sides of numbers of each verse
cat("The head of the table for Allah word positions: ",head(tmp))

## The head of the table for Allah word positions:  11 27 29 210 215
217

cat("The tail of the table for Allah word positions: ",tail(tmp))

## The tail of the table for Allah word positions:  988 1046 1101 1102
1121 1122

tmp <- paste0(tmp, collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0
```

```r
cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 5732
```

As we witnessed, the resulting 5732 digits length big number is multiple of 19.

Also, below is the 5732 digits length big number of this evidence. One can just copy the big coding number below and paste it into a web based big number calculator and test it herself.

“1127292102152172202232262272552602612642672702732742752762772792802832852882892902912942972982101210221032106210721092110211421152116211821
2021322137213821392140214321442148214921532154215821592161216421652167
2169217021732174217621812182218521872189219021922194219521962197219821
9922002203220422062207220922102211221322142215221722182219222022222223
2224222522262227222822292230223122332235223722392242224322442245224622
4722492251225222532255225722582259226022612262226522662267227022722273
2275227622782279228122822283228422863234353739310311313315318319321323
3283293303313323333373393403423453473493503513523543553593613623633643
7037337537637737837938138338638738939239439539739839931013102310331073
1083109311231133116311731193120312231233126313031323135314031413142314
4314531463148315031523154315531563157315831593160316231633164316531663
1673169317031713173317431763177317931803181318231833187319131953198319
9320041454941141241341441541641741942342442642842943043243343443543643
7439440442443446447448449450452454456458459461463464469470472473474475
4764774784794804814824834844854864874884894904924934944954964974994100
4102410341044105410641074108410941104111411341144116411841194122412341
2541264127412841294130413141334134413541374140414141424143414641474148
4149415041524153415541574158416041644165416641674168416941704171417341
7651525354565758595115125135145155165175185205215235275285315335345355
3853954054154254354454554754854955055155255455555655755605645675715725 7
3574576580585587588589591592594595596597598510051015103510451055106510
8510951105112511551165117511963614617619621631633634635636637639640646
6476506536566626646706716806886906916936956102610761086109611161146116
6118611961216124612561286136613761386140614261446145614861506151615261
5761596164726728730732733737743744745749750754756759762765769770771773
7747857867877897997101710571317140715871647169717871857186718771887189
7190719471968182878108138168178188198208228238248258278288298308338348
3683783984084284384484584684784884985185285385585885086186286386486686
8869870871872874875919293949596979991491591691791891992092292492592692
7928929930931932934936937938940941943946948951952955959960961963964967
9689709719729749759779789799809819839859899909939949969979999100910291

0491059106910791099111911291159116911791189119912091219123912791291031
0410510610111016101710181021102210271030103110321034103510361037103810
4410451046104910551058105910601062106410661068106910711072108110821085
1095101001010410106101071010911211411611131114111811191120112611291130
1131113311341141114311501154115611611163116411731178118411861192111011
1113111151223123812391240125212661267126812761279128012831286128712881
2901291129212961299121071210813213813111313131613171320132113251326132
7132813311333133413361337133813391421431441451461481491410141114121419
1420142114221424142514271428143214341438144214461447145115691596161169
1618162016231626162816311633163516361637163816411645164816511652165316
6116701671167216731674167516761677167916831687168816901691169216931694
1695169616104161051610616107161081611216114161151611616128172217331739
1794179717991711018418151816181718211824182618381839184318451869193019
3619481949195819761981208201420612098201142122216621672198222223226227
2282292210221122122214221522162217221822232225222822302232223422352236
2237223822392240224722522254225822592260226122622263226422652268226922
7022712272227322742275227622782314232323242332233823912311623117242245
2472492410241324142415241724182420242124222425243024312432243324352436
2437243824392440244124422443244424452448245024512452245324542455245824
5924612462246325172541255525682570257126892693261082611026126261312614
4261502616326179262132622727827927242726273027362743274527462747276027
6127622763276427652779278727882813282728302849285028562860286828702871
2872287628772878288028812882288728882932952962910291129162917291929202
9222923292429252929293629402941294229442945295029602961296229632965296
7296829693053063083093010301130173029303030373038303930403043304830503
0543056305930603163193111311231163118312031213122312331253126312731283
1293130313131323133313432433133233333433533633933123315331733183319332
1332233233324332533273329333033333334335333633373338333933403341334634
3473348335033513352335333543355335633573359336233633364336633693370337
1337334834223424342734473513523533543553583511351335153517351835223527
3528352935313532353835403541354335443545364736743723373537403774378637
1023712637128371523715937160371693826386539139239339439639739103911391
4391639173918392039213922392339263929393239353936393739383942394339453
9473952395339563957396039613962396339643966396739684024044010401240144
0164017402040214022402840294031403340344035404340444045404840554056406
1406240634064406640694074407740784079408140854114411541194121412241284
1304133415242342542642842104213421542164217421942214223422442274231423
6424042444246424742514253436343644387441844194442452455456458451045124
5144519452245234526453245354624644654684610461346174621462346264628463
1463246334714734744774794710471147124716471947214723472647284729473247

3347344738482483484485486487481048114814481548164817481848194820482148
2348244825482648274829491493497498499491049124913491449154916491749185
0265150515151585227524353235326535857557957105711571457165717571857205
7215722572457255727572857295815825845855865875885895810581158125813581
4581558165817581858195820582158225925935945955965975985913591659185919
5921592259235924604606607608609601060116012601361361461561661761861116
1136114624625629621062116316326346356366376396311646647641164126413641
4641664176516526536546556576510651165126616626636646666686610661167967
2667287037137147115712572472572772127218721972227223732074317456766769
7611763079258129877882491139589614982985988104611011102112111 22”

You can also access this 5732 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Evidence_7.3.1.A.txt

5.1.1.2 The Evidence of Allah words positions over all the 6348 verses:

The same exact coding pattern of the previous evidence also exist in all the 6348 verses. As a general rule of this book, I always try any coding pattern of any independent evidence in both of the text types (All the 6348 verses and 6236 numbered verses) of Quran. Now as per the rule, I try the same coding pattern in all the 6348 verses of Quran as well. Although the coding pattern is the same as the previous evidence, I will again illustrate the default concatenation coding pattern applied in this evidence as follows:

> [Chapter i1 | Verses j1 (chapter and verse indexes of the first verse that has Allah word in it)] [Chapter i2 | Verses j2 (chapter and verse indexes of the second verse that has Allah word in it)] . . . . . [Chapter iN | Verse jN (chapter and verse indexes of the last verse with an Allah word in it)]

Here, i1 is chapter index and j1 is the special verse index of the first verse that has Allah word in it. Also, i2 is chapter index and j2 is the special verse index of the second verse that has Allah word in it. Lastly, iN is the chapter index and jN is the special verse index of the last verse that has Allah word in it. If we use the real numbers in the above formula, it would be like this regarding the text type of the 6348 verses:

> [1 | 1] [2 |] . . . . . [114 |]

As always, we do not use any number for the index of the unnumbered Basmala verses as per the universal rule of this book. Therefore in the illustration above, we only placed the chapter index as 2 but left the verse index as empty for the second verse in Quran with Allah word in it. The last Basmala verse is the last verse in Quran with Allah word in it. As we see above the last entry again only has the chapter index, which is 114, but no special verse index. Then the final coding number after all the concatenation would look like this:

112 114

I also provide my single summary that better illustrates this evidence, which I had also tweeted, as follows:

As I prove below, the same coding pattern of the previous evidence in the text type of 6236 numbered verses also exist in the text type of all the 6348 verses too.

```
#The required numbers for this evidence are in the yunQ object.
x<- yunQ #all 6348 verses
tv <-c()
for(j in 1:nrow(x)) {
  if(x$verse[j] != 0){#for all the numbered verses
    tmp <- paste0(x$Chapter[j], x$verse[j])
  }else{#For unnumbered Basmala verses
    tmp <- paste0(x$Chapter[j]) }
  tv <- c(tv,tmp)
}
# head and tail sides of numbers of each verse
cat("The head of the table for Allah word positions: ",head(tv))

## The head of the table for Allah word positions:  11 2 27 29 210 215

cat("The tail of the table for Allah word positions: ",tail(tv))

## The tail of the table for Allah word positions:  111 112 1121 1122
113 114
```

```r
tmp <- paste0(tv, collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 5964
```

The resulting 5964 digits length big number is multiple of 19.

Considering the previous evidence in the 6236 numbered verses and this evidence in the 6348 verses, we witnessed two evidences with the same exact coding pattern in both of the text types (6348 and 6236) of Quran, which suggest that the exact positions of the word Allah are under 19 based coding system of the text of Quran. In these evidences, in total we observed 3244 verses that include Allah words in them considering their exact chapter and special verse indexes. Since this special word, Allah, spread through the text of Quran as if a skeleton of the text, it also somewhat supports the accuracy and intactness of all the verses and chapters of Quran. Because, if any one of the 6348 or 6236 verses were removed, the considered verses would be shifted and these codings would most likely not hold anymore. Only the last 5 verses would not be fully supported by these evidences as they are in the tail of the text and does not contain Allah word in it other than the first unnumbered Basmala verse in the beginning of the last chapter. However,that Basmala suggest that there should be a chapter following it too and thus still supports the existence of the last chapter too.

As an interesting **fact**, since these two evidences of the same coding pattern are related to each other, I generally test the relation between them too just to see if there is a *fact*. As we see the digit length of these numbers 5732 and 5964 have a 19 based coding relation. When we concatenate them, the resulting number is 57325964 and it is also multiple of 19, which is just an interesting *fact*.

Also, here is the 5964 digits length big coding number of this evidence:

“1122729210215217220223226227255260261264267270273274275276277279280283285288289290291294297298210121022103210621072109211021142115211621182120213221372138213921402143214421482149215321542158215921612164216572169217021732174217621812182218521872189219021922194219521962197219821992200220322042206220722092210221122132214221522172218221922022222223222422252226222722282229223022312233223522372239224222432244224522462247224922512252225322552257225822592260226122622265226622672270227222732275227622782279228122822283228422863323435373931031131331531831932132332832933033133233333733934034234534734935035135235435535936136236336

4370373375376377378379381383386387389392394395397398399310131023103310
7310831093112311331163117311931203122312331263130313231353140314131423
1443145314631483150315231543155315631573158315931603162316331643165316
6316731693170317131733174317631773179318031813182318331873191319531983
1993200441454941141241341441541641741942342442642842943042433434435 43
6437439440442443446447448449450452454456458459461463464469470472473474
4754764774784794804814824834844854864874884894904924934944954964974994
1004102410341044105410641074108410941104111411341144116411841194122412
3412541264127412841294130413141334134413541374140414141424143414641474
1484149415041524153415541574158416041644165416641674168416941704171417
3417655152535456575859511512513514515516517518520521523527528531533534
5355385395405415425435445455475485495505515525545555565575605645675715
7257357457658058558758858959159259459559659759851005101510351045105510
6510851095110511251155116511751196636146176196216316336346356366376396
4064664765065365666266467067168068869069169369561026107610861096111611
4611661186119612161246125612861366137613861406142614461456148615061516
1526157615961647726728730732733737743744745749750754756759762765769770
7717737747857867877897997101710571317140715871647169717871857186718771
8871897190719471968818287810813816817818819820822823824825827828829830
8338348368378398408428438448458468478488498518528538558588608618628638
6486686886987087187287487591929394959697999149159169179189199209229249
2592692792892993093193293493693793894094194394694895195295595996096196
3964967968970971972974975977978979980981983985989990993994996997999910
0910291049105910691079109911191129115911691179118911991209121912391279
1291010310410510610111016101710181021102210271030103110321034103510361
0371038104410451046104910551058105910601062106410661068106910711072108
1108210851095101001010410106101071010911112114116111311141118111911201
1261129113011311133113411411143115011541156116111631164117311781184118
6119211101111131111512122312381239124012521266126712681276127912801283
1286128712881290129112921296129912107121081313213813111313131613171320
1321132513261327132813311333133413361337133813391414214314414514614814
9141014111412141914201421142214241425142714281432143414381442144614471
4511515691596161611691618162016231626162816311633163516361637163816411
6451648165116521653166116701671167216731674167516761677167916831687168
8169016911692169316941695169616104161051610616107161081611216114161151
6116161281717221733173917941797179917110181841815181618171821182418261
8381839184318451869191930193619481949195819761981202082014206120982011
4212122216621672198222222232262272282292210221122122214221522162217221
8222322252228223022322234223522362237223822392240224722522254225822592
2602261226222632264226522682269227022712272227322742275227622782323142

3232324233223382391231162311724242245247249241024132414241524172418242
0242124222425243024312432243324352436243724382439244024412442244324442
4452448245024512452245324542455245824592461246224632525172541255525682
5702571262689269326108261102612626131261442615026163261792621326227272
7827927242726273027362743274527462747276027612762276327642765277927872
7882828132827283028492850285628602868287028712872287628772878288028812
8822887288829293295296291029112916291729192920292229232924292529292936
2940294129422944294529502960296129622963296529672968296930305306308309
3010301130173029303030373038303930403043304830503054305630593060313163
1931113112311631183120312131223123312531263127312831293130313131323133
3134323243333133233333433533633933123315331733183319332133223323332433
2533273329333033333334333533363337333833393340334133463347334833503351
3352335333543355335633573359336233633364336633693370337133733434834223
4243427344735351352353354355358351135133515351735183522352735283529353
1353235383540354135433544354536364736743737233735374037743786371023712
6371283715237159371603716938382638653939139239339439639739103911391439
1639173918392039213922392339263929393239353936393739383942394339453947
3952395339563957396039613962396339643966396739684040240440104012401440
1640174020402140224028402940314033403440354043404440454048405540564061
4062406340644066406940744077407840794081408541411441154119412141224128
4130413341524242342542642842104213421542164217421942214223422442274231
4236424042444246424742514253434363436443874444184419444245452455456458
4510451245144519452245234526453245354646246446546846104613461746214623
4626462846314632463347471473474477479471047114712471647194721472347264
7284729473247334734473848482483484485486487481048114814481548164817481
8481948204821482348244825482648274829494914934974984994910491249134914
4915491649174918505026515150515151585252275243535323532653585455565757
5579571057115714571657175718572057215722572457255727572857295858158258
4585586587588589581058115812581358145815581658175818581958205821582259
5925935945955965975985913591659185919592159225923592460604606607608609
6010601160126013616136146156166176186111611361146262462562962106211636
3163263463563663763963116464664764116412641364146416647656516526536546
5556576510651165126666166266366466666866106611676796726672868697070371
7137147115712572724725727721272187219722272237373207474317456757676676
9761176307778797925808181298283848586878778888248990919113929394959589
6961497989829859889910010110210310410461051061071081091101101110211111
211211122113114”

You can access this 5964 digits length big number from the following link. One can just copy the big number and paste it into a web based big number calculator and test it herself.

https://github.com/quran2019/Quran19/blob/master/Evidence_7.3.1.A2.txt

5.1.1.2.1 Fact: All the indices of Allah words positions together:

In the previous evidences, we observed the design with chapter and special verse indexes. There is also another interesting coding I will present in this section only as a **fact**, which shows the similar coding pattern also exist considering all the position indexes, namely, general verse index, chapter and special verse indexes together.

In the code below, you will see that, when we concatenate the general verse index, chapter and special verse indexes of Allah words in the natural order, considering all the 6348 verses, then the resulting big number is also multiple of 19. Here is the code for this fact:

```
#The required numbers for this evidence are in the yunQ object.
x<- yunQ #all 6348 verses
tv <-c()
for(j in 1:nrow(x)) {
  if(x$verse[j] != 0){#for all the numbered verses
    tmp <- paste0(x$VerseI[j],x$Chapter[j], x$verse[j])
  }else{#For unnumbered Basmala verses
    tmp <- paste0(x$VerseI[j], x$Chapter[j])
  }
  tv <- c(tv,tmp)
}
# head and tail sides of numbers of each verse
cat("The head of the table for Allah word positions: ",head(tv))

## The head of the table for Allah word positions:  11 2 27 29 210 215

cat("The tail of the table for Allah word positions: ",tail(tv))

## The tail of the table for Allah word positions:  111 112 1121 1122
113 114

tmp <- paste0(tv, collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 5964
```

Also, here is the 5964 digits length big number of this fact:

“1122729210215217220223226227255260261264267270273274275276277279280283
2852882892902912942972982101210221032106210721092110211421152116211821
2021322137213821392140214321442148214921532154215821592161216421652167
2169217021732174217621812182218521872189219021922194219521962197219821
9922002203220422062207220922102211221322142215221722182219222022222223
2224222522262227222822292230223122332235223722392242224322442245224622
4722492251225222532255225722582259226022612262226522662267227022722273
2275227622782279228122822283228422863323435373931031131331531831932132
3328329330331332333337339340342345347349350351352354355359361362363363
4370373375376377378379381383386387389392394395397398399310131023103310
7310831093112311331163117311931203122312331263130313231353140314131423
1443145314631483150315231543155315631573158315931603162316331643165316
6316731693170317131733174317631773179318031813182318331873191319531983
1993200441454941141241341441541641741942342442642842943043243343443543
6437439440442443446447448449450452454456458459461463464469470472473474
4754764774784794804814824834844854864874884894904924934944954964974994
1004102410341044105410641074108410941104111411341144116411841194122412
3412541264127412841294130413141334134413541374140414141424143414641474
1484149415041524153415541574158416041644165416641674168416941704171417
3417655152535456575859511512513514515516517518520521523527528531533534
5355385395405415425435445455475485495505515525545555565575605645675715
7257357457658058558758858959159259459559659759851005101510351045105510
6510851095110511251155116511751196636146176196216316336346356366376396
4064664765065365666266467067168068869069169369561026107610861096111611
4611661186119612161246125612861366137613861406142614461456148615061516
1526157615961647726728730732733737743744745749750754756759762765769770
7717737747857867877897997101710571317140715871647169717871857186718771
8871897190719471968818287810813816817818819820822823824825827828829830
8338348368378398408428438448458468478488498518528538558588608618628638
6486686886987087187287487591929394959697999149159169179189199209229249
2592692792892993093193293493693793894094194394694895195295595996096196
3964967968970971972974975977978979980981983985989990993994996997999910
0910291049105910691079109911191129115911691179118911991209121912391279
1291010310410510610111016101710181021102210271030103110321034103510361
0371038104410451046104910551058105910601062106410661068106910711072108
1108210851095101001010410106101071010911112114116111311141118111911201
1261129113011311133113411411143115011541156116111631164117311781184118
6119211101111131111512122312381239124012521266126712681276127912801283

1286128712881290129112921296129912107121081313213813111313131613171320
1321132513261327132813311333133413361337133813391414214314414514614814
9141014111412141914201421142214241425142714281432143414381442144614471
4511515691596161611691618162016231626162816311633163516361637163816411
6451648165116521653166116701671167216731674167516761677167916831687168
8169016911692169316941695169616104161051610616107161081611216114161151
6116161281717221733173917941797179917110181841815181618171821182418261
8381839184318451869191930193619481949195819761981202082014206120982011
4212122216621672198222222232262272282292210221122122214221522162217221
8222322252228223022322234223522362237223822392240224722522254225822592
2602261226222632264226522682269227022712272227322742275227622782323142
3232324233223382391231162311724242245247249241024132414241524172418242
0242124222425243024312432243324352436243724382439244024412442244324442
4452448245024512452245324542455245824592461246224632525172541255525682
5702571262689269326108261102612626131261442615026163261792621326227272
7827927242726273027362743274527462747276027612762276327642765277927872
7882828132827283028492850285628602868287028712872287628772878288028812
8822887288829293295296291029112916291729192920292229232924292529292936
2940294129422944294529502960296129622963296529672968296930305306308309
3010301130173029303030373038303930403043304830503054305630593060313163
1931113112311631183120312131223123312531263127312831293130313131323133
3134323243333133233333433533633933123315331733183319332133223323332433
2533273329333033333334333533363337333833393340334133463347334833503351
3352335333543355335633573359336233633364336633693370337133733434834223
4243427344735351352353354355358351135133515351735183522352735283529353
1353235383540354135433544354536364736743737233735374037743786371023712
6371283715237159371603716938382638653939139239339439639739103911391439
1639173918392039213922392339263929393239353936393739383942394339453947
3952395339563957396039613962396339643966396739684040240440104012401440
1640174020402140224028402940314033403440354043404440454048405540564061
4062406340644066406940744077407840794081408541411441154119412141224128
4130413341524242342542642842104213421542164217421942214223422442274231
4236424042444246424742514253434363436443874444184419444245452455456458
4510451245144519452245234526453245354646246446546846104613461746214623
4626462846314632463347471473474477479471047114712471647194721472347264
7284729473247334734473848482483484485486487481048114814481548164817481
8481948204821482348244825482648274829494914934974984994910491249134914
4915491649174918505026515150515151585252275243535323532653585455565757
5579571057115714571657175718572057215722572457255727572857295858158258
4585586587588589581058115812581358145815581658175818581958205821582259

592593594595596597598591359165918591959215922592359246060460660760860960106011601260136161361461561661761861116113611462624625629621062116363163263463563663763963116464664764116412641364146416641765651652653654655657651065116512666616626636646666686610661167679672667286869707037171371471157125727247257277212721872197222722373732074743174567576676697611763077787979258081812982838485868787788882489909191139293949595896961497989829859889910010110210310410461051061071081091101101110211111211211122113114”

5.1.1.3 The Evidence of Al-Rahman words positions over all the 6348 verses

Now, we will witness that the same coding pattern of the previous evidence also exist in all the 6348 verses of Quran considering only Al-Rahman words just like we had witnessed for Allah word positions. Basically we will concatenate the chapter and verse indexes of the verses with Al-Rahman words and the resulting big number is also multiple of 19.

Although the pattern is the same as the previous evidence, I will again illustrate the default concatenation coding pattern applied in this evidence as follows:

> [Chapter i1 | Verses j1 (chapter and verse indexes of the first verse that has Al-Rahman word in it)] [Chapter i2 | Verses j2 (chapter and verse indexes of the second verse that has Al-Rahman word in it)] . . . . . [Chapter iN | Verse jN (chapter and verse indexes of the last verse with an Al-Rahman word in it)]

Here, i1 is chapter index and j1 is the verse index of the first verse that has Al-Rahman word in it. Also, i2 is chapter index and j2 is the verse index of the second verse that has Al-Rahman word in it. Lastly, iN is chapter index and jN is the verse index of the last verse that has Al-Rahman word in it. If we use the real numbers in the above formula, it would be like this regarding the text type of the 6348 verses:

> [1 | 1] [1 | 3] . . . . . [114 |]

As always, we do not use any number for the index of the unnumbered Basmala verses as per the universal rule of this book. Therefore in the illustration above, we only placed the chapter index as 114 but left the verse index as empty for the last verse in Quran with Al-Rahman word in it, which is the last Basmala verse is the last chapter in Quran. Then the final coding number after all the concatenation would look like this:

> 1113 114

I also provide my single summary that better illustrates this evidence, which I had also tweeted, as follows:

Here is the reproducible proof of the evidence:

```
#The required numbers for this evidence are in the yunQ2 object.
x<- yunQ2 #all 6348 verses
tv <-c()
for(j in 1:nrow(x)) {
  if(x$verse[j] != 0){#for all the numbered verses
    tmp <- paste0(x$Chapter[j], x$verse[j])
  }else{#For unnumbered Basmala verses
    tmp <- paste0(x$Chapter[j])
  }
  tv <- c(tv,tmp)
}
# head and tail sides of numbers of each verse
cat("The head of the table for Al-Rahman word positions: ",head(tv))

## The head of the table for Al-Rahman word positions:  11 13 2 2163 3
4

cat("The tail of the table for Al-Rahman word positions: ",tail(tv))

## The tail of the table for Al-Rahman word positions:  109 110 111
112 113 114

tmp <- paste0(tv, collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero
```

```
## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 406
```

As we witnessed, the resulting 406 digits length big number is multiple of 19. Also, below is the 406 digits length big number of this evidence. One can just copy the big number and paste it into a web based big number calculator and test it herself.

“1113221633456781011121314151617171101819194519581961196919751978198519871988199319962020520902010921212621362142211122223242525592560256326265272730282930313233343536361136153623365237383940414124243431943204336434544454647484950503351525354555515657585959226061626364656667673671967206729686970717273747576777878377838798081828384858687888990919293949596979899100101102103104105106107108109110111112113114”

You can access this 406 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Evidence_7.3.1.B.txt

5.1.1.3.1 Fact: The sums concatenation of Al-Rahman words positions

In the previous evidence, we observed that when we concatenate the chapter and verse indexes of Al-Rahman words, the resulting big coding number is multiple of 19. A potentially interesting fact is that if we concatenate the sum of each position indexes of chapters and verses and concatenate instead of directly concatenating, the resulting big number is still multiple of 19. However, this is just an interesting fact but not an evidence as the pattern is not withing the defined rules of this book.

```
#The required numbers for this evidence are in the yunQ2 object.
x<- yunQ2[,c(2,3)] #all 6348 verses
tmp <-c()
for(i in 1:nrow(x) ) tmp <- c(tmp,sum(x[i,]) )
# head and tail sides of numbers of each verse
cat("The head of the table for Al-Rahman word each position's sums:
",head(tmp))

## The head of the table for Al-Rahman word each position's sums:  2 4
2 165 3 4

cat("The tail of the table for Al-Rahman word each positions's sums:
",tail(tmp))
```

```
## The tail of the table for Al-Rahman word each positions's sums:
109 110 111 112 113 114

tmp <- paste0(tmp, collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 332
```

Below is the 332 digits length big number of this fact.

"2421653456781011121314151617127181964778088949710410610711211520251101292147576313322232425848588263127572829303132333435364751598837383940414342436263798844454647484950835152535455565657585981606162636465666770868796686970717273747576777811511679808182838485868788899091929394959697989910010110210310410510610710810911011111211311 4"

5.1.1.4 The Evidence on Allah and/or Al-Rahman words positions together:

Now, in this evidence, we will witness that the same coding pattern of the previous 3 evidences on Allah word positions and Al-Rahman word positions also exist in the numbered 6236 verses of Quran if we consider these two words together, namely, Allah and/or Al-Rahman words together in them too. The rationale of this test was explained in the beginning of this chapter along with its special rules.

Let me illustrate the default concatenation coding pattern applied in this evidence too. As always in the natural order as follows:

> [Chapter i1 | Verses j1 (chapter and verse indexes of the first verse with an Allah and/or Al-Rahman word in it)] [Chapter i2 | Verses j2 (chapter and verse indexes of the second verse with an Allah and/or Al-Rahman word in it)] . . . . . [Chapter iN | Verse jN (chapter and verse indexes of the last verse with an Allah and/or Al-Rahman word in it)]

Here, i1 is chapter index and j1 is the verse index of the first verse that has Allah and/or Al-Rahman word in it. Also, i2 is chapter index and j2 is the verse index of the second verse that has Allah and/or Al-Rahman word in it. Lastly, iN is chapter index and jN is the verse index of the last verse that has Allah and/or Al-Rahman word in it. If we use the real numbers in the above formula, it would be like this regarding the text type of the 6236 verses:

[1 | 1] [1 | 3] . . . . . [112 | 2]

And, the final number after all the concatenation would look like this:

1127 1122

I also provide my single summary that better illustrates this evidence, which I had also tweeted, as follows:

Here is the proof of this evidence, which shows that the positions of either Allah or Al-Rahman words together were coded with the exact same coding pattern of the previous evidences.

```
#The required numbers for this evidence are in the ynQ4 object.
x<- ynQ4 #6236 numbered verses
tmp <- paste0(x$Chapter,x$verse)
# head and tail sides of numbers of each verse
cat("The head of the table for Allah and/or Al-Rahman word positions:
",head(tmp))

## The head of the table for Allah and/or Al-Rahman word positions:
11 13 27 29 210 215

cat("The tail of the table for Allah and/or Al-Rahman word positions:
",tail(tmp))
```

```
## The tail of the table for Allah and/or Al-Rahman word positions:
988 1046 1101 1102 1121 1122

tmp <- paste0(tmp, collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 5887
```

As we witnessed, the resulting 5887 digits length big number is multiple of 19. Now considering the four codings evidences, we witnessed that Allah and Al-Rahman words are under 19 based system, which together further proves the intactness of Quran along with all the rest of the evidences.

Also, below is the 5887 digits length big number of this evidence. One can just copy the big number and paste it into a web based big number calculator and test it herself.

"1113272921021521722022322622725526026126426727027327427527627727928028328528828929029129429729821012102210321062107210921102114211521162118212021322137213821392140214321442148214921532154215821592161216321642165216721692170217321742176218121822185218721892190219221942195219621972198219920022032204220622072209221022112213221422152217221822192220222222232224222522262227222822292230223122332235223722392242224322442245224622472249225122522253225522572258225922602261226222652266226722702272227322752276227822792281228222832284228632343537393103113133153183193213233283293303313323333373393403423453473493503513523543553593613623633643703733753763773783793813833863873893923943953973983993101310231033107310831093112311331163117311931203122312331263130313231353140314131423144314531463148315031523154315531563157315831593160316231633164316531663167316931703171317331743176317731793180318131823183318731913195319831993200414549411412413414415416417419423424426428429430432433434435436437439440442443446447448449450452454456458459461463464469470472473474475476477478479480481482483484485486487488489490492493494495496497499410041024103410441054106410741084109411041114113411441164118411941224123412541264127412841294130413141334134413541374140414141424143414641474148414941504152415341554157415841604164416541664167416841694170417141734176515253545657585951151251351451551651751852052152352752853153353453553853954054154254354454554754854955055155255455555655756056456757157257357457658058558758858959159259459559659759851005101510351045105

1065108510951105112511551165117511963614617619621631633634635636637639
6406466476506536566626646706716806886906916936956102610761086109611161
1461166118611961216124612561286136613761386140614261446145614861506151
6152615761596164726728730732733737743744745749750754756759762765769770
7717737747857867877897997101710571317140715871647169717871857186718771
8871897190719471968182878108138168178188198208228238248258278288298308
3383483683783984084284384484584684784884985185285385585886086186286386
4866868869870871872874875919293949596979991491591691791891992092292492
5926927928929930931932934936937938940941943946948951952955959960961963
9649679689709719729749759779789799809819839859899909939949969979999100
9102910491059106910791099111911291159116911791189119912091219123912791
2910310410510610111016101710181021102210271030103110321034103510361037
1038104410451046104910551058105910601062106410661068106910711072108110
8210851095101001010410106101071010911211411611131114111811191120112611
2911301131113311341141114311501154115611611163116411731178118411861192
1110111113111151223123812391240125212661267126812761279128012831286128
7128812901291129212961299121071210813213813111313131613171320132113251
3261327132813311333133413361337133813391421431441451461481491410141114
1214191420142114221424142514271428143214341438144214461447145115691596
1611691618162016231626162816311633163516361637163816411645164816511652
1653166116701671167216731674167516761677167916831687168816901691169216
9316941695169616104161051610616107161081611216114161151611616128172217
3317391794179717991711018418151816181718211824182618381839184318451869
1930193619451948194919581961196919751976197819811985198719881993199620
5208201420612090209820109201142122212621362142216621672198211122222232
2622722822922102211221222142215221622172218222322252228223022322234223
5223622372238223922402247225222542258225922602261226222632264226522682
2692270227122722273227422752276227823142323232423322338239123116231172
4224524724924102413241424152417241824202421242224252430243124322433243
5243624372438243924402441244224432444244524482450245124522453245424552
4582459246124622463251725412555255925602563256825702571265268926932610
8261102612626131261442615026163261792621326227278279272427262730273627
4327452746274727602761276227632764276527792787278828132827283028492850
2856286028682870287128722876287728782880288128822887288829329529629102
9112916291729192920292229232924292529292936294029412942294429452950296
0296129622963296529672968296930530630830930103011301730293030303730383
0393040304330483050305430563059306031631931113112311631183120312131223
1233125312631273128312931303131313231333134324331332333334335336339331
2331533173318331933213322332333243325332732933303333333433353336333733
3383339334033413346334733483350335133523353333543355335633573359336233 6

3336433663369337033713373348342234243427344735135235335435535835113513
3515351735183522352735283529353135323538354035413543354435453611361536
2336473652367437233735374037743786371023712637128371523715937160371693
8263865391392393394396397391039113914391639173918392039213922392339263
9293932393539363937393839423943339453947395239533956395739603961396239 6
3396439663967396840240440104012401440164017402040214022402840294031403
3403440354043404440454048405540564061406240634064406640694074407740784
0794081408541241144115411941214122412841304133415242342542642842104213
4215421642174219422142234224422742314236424042444246424742514253431943
2043364345436343644387441844194442452455456458451045124514451945224523
4526453245354624644654684610461346174621462346264628463146324633471473
4744774794710471147124716471947214723472647284729473247334734473848248
3484485486487481048114814481548164817481848194820482148234824482548264
8274829491493497498499491049124913491449154916491749185026503351505151
5158522752435323532653585515755795710571157145716571757185720572157225
7245725572757285729581582584585586587588589581058115812581358145815581
6581758185819582058215822592593594595596597598591359165918591959215922
5923592460460660760860960106011601260136136146156166176186111611361146
2462562962106211631632634635636637639631164664764116412641364146416641
7651652653654655657651065116512661662663664666668661066116736796719672
0672667286729703713714711571257247257277212721872197222722373207431745
6766769761176307837783879258129877882491139589614982985988104611011102
11211122”

You can access this 5887 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Evidence_7.3.1.C.txt

5.1.2 Evidence on Allah and Al-Rahman word positions regarding general verse indexes

This evidence suggest that the *general* verse indexes of the verses which includes Allah words and also Allah and/or Al-Rahman words together are also under 19 based design. Basically, we will only look at the general verse indexes alone. Although these general verse indexes are not primary, they are still real numbers and corresponds to chapter and special verse indexes as both might help us locate a particular verse. However, general verse indexes can only be considered as secondary and cannot be the same as chapter and special verse indexes as they are the default natural way of referring to a particular verse. Remember that in the evidences of this main chapter, Chapter 5.1, we always use the numbers from the three tables, Allah only, Al-Rahman only, and also Allah and/or Al-Rahman words together. In this sub-chapter, when we consider the general verse indexes,

we will witness that the same coding pattern also exist regarding Allah word only and also Allah and/or Al-Rahman words together.

As we will witness, 2 out of 6 trials are successful considering the general verse indexes with the same coding pattern. This means the probability of such an observation alone is 0.036 and still statistically significant if we consider only these evidences independently.

```
tmp <-binom.test(2, 6,p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)

cat(paste("The probability of 2 success out of
          6 tests (with p=1/19) is:", tmp))

## The probability of 2 success out of
##           6 tests (with p=1/19) is: 3.61e-02
```

Let's also add these numbers to the counters that we will use them in the probability calculations of the system in this book.

```
#counters to compute the overall probability
AllahWordEvidenceTrials <- AllahWordEvidenceTrials + 6
AllahWordEvidenceSuccesses <- AllahWordEvidenceSuccesses + 2
```

Now, in the following, I will present the evidences regarding each of the two numbers from the tables we had obtained in the main chapter.

5.1.2.1 Evidence on Allah word positions over the general verse indexes:

This evidence tests whether the general verse indexes, in which there is Allah words in it, has also 19 based coding. As we will see below, there is the same coding pattern considering the numbered 6236 verses. When we concatenate each general verse indexes in the 6236 numbered verses, the resulting big number is also multiple of 19. Here, the general verse index replaces the chapter and special verse indexes in the previous main evidences. Because, we use the chapter and special verse indexes to locate and refer to a verse. The general verse index also has that capability if used instead of the chapter and special verse indexes. Therefore, we tested these but it is never the main evidence regarding Allah word positions. Because, we naturally use the chapter and special verse indexes but not the general verse indexes in general. Current evidence suggest that the positions of verses with Allah words in the numbered 6236 verses are also under the 19 based design with respect to the general verse indexes too.

Let me also illustrate the default concatenation coding pattern applied in this evidence.

[General Verse index j1] [General Verse index j2] . . . . . [General Verse index jN (last verse with an Allah word in it)]

Here, j1 is the general verse index of the first verse that has Allah word in it. Also, j2 is the general verse index of the second verse that has Allah word in it. Lastly, jN is the general verse index of the last verse that has Allah word in it. If we use the real numbers in the above formula, it would be like this regarding the text type of the 6236 verses:

[1] [14] . . . . . [6223]

And, the final number after all the concatenation would look like this:

114 6223

I also provide my single summary that better illustrates this evidence, which I had also tweeted, as follows:

Here is the reproducible proof of this evidence:

```
# ynQ is for Allah word for numbered verses
y <- ynQ #from 6236 numbered verses
tmp<- y$Gen_verseI
# head side of numbers of each verse
head(tmp)

## [1]  1 14 16 17 22 24
```

```r
tail(tmp)

## [1] 6138 6185 6214 6215 6222 6223

tmp <- paste0(tmp, collapse = "")
#mod 19  must be zero
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

One more **interesting fact** on this big number is that the length of this big number is **5719** and it is also multiple of 19 as 19x301. A further fact is that if we look at the verse 57:19, the *general verse index* of it is 5149, which is also multiple of 19. Moreover the digit sum of 5149 is also exactly 19. Since the evidence of these *facts* is about the general verse indexes, these small facts looked also interesting to me and thus shared them too.

Also, below is the 5719 digits length big number of this evidence. One can just copy the big number and paste it into a web based big number calculator and test it herself.

“114161722242730333462676871747780818283848687909295969798101104105108
109110113114116117121122123125127139144145146147150151155156160161165
166168171172174176177180181183188189192194196197199201202203204205206
207210211213214216217218220221222224225226227229230231232233234235236
238240242244246249250251252253254256258259260262264265266267268269
732742772792802822832852862882892902912932952972983003023033043063083
131231431632132232332432532633033233333533834034234334434534734835235
355356357363366368369370371372374376379380382385387388390391392394395
964004014024054064094104124134154164194234254284334344354374384394414
344544744844945045145245345545645745845946046246346446646746947047247
474475476480484488491492493494498502504505506507508509510512516517519
215225235255265275285295305325335355365395405415425435455475495515525
455655756256356556656756856957057157257357457557657757857958058158258
585586587588589590592593595596597598599600601602603604606607609611612
156166186196206216226236246266276286306336346356366396406416426436456
664865065165365765865966066166266366466666967067167267367567667767868
068168268368468568668768969069269669770070270370470770870970711711712
147167177187197207217237247257267297337367407417427437457497547567577
876076176376476576676776977077277377477577777877978178478578678879280
806808810820822823824825826828829835836839842845851853859860869877879
808828848918968978989009039059079089109139149179259269279299319339349
793994094194694895398098298498698799199799899910031004100810101013101 6

1019102310241025102710281039104010411043105310551059108510941112111811
2311321139114011411142114311441148115011611162116711701173117611771178
1179118011821183118411851187118811891190119311941196119711991200120212
0312041205120612071208120912111212121312151218122012211222122312241226
1228122912301231123212341235123612371238123912401241124212441249125012
5112521253125412551257125912601261126212631264126512661267126912711272
1273127512761278128112831286128712901294129512961298129913021303130513
0613071309131013121313131413151316131813201324132513281329133113321334
1335133713391340134113421344134613471350135113521353135413551356135813
6213641367136813691370137513801381138213851386139113941395139613981399
1400140114021408140914101413141914221423142414261428143014321433143514
3614451446144914591464146814701471147314751477147914861487149114921493
1499150215031504150615071514151615231527152915341536153715461551155715
5915651574158615881619163416351636164816621663166416721675167616791682
1683168416861687168816921695170317041709171517181720172317241727172817
3217331734173517381740174117431744174517461752175317541755175617581759
1760176117621769177017711772177417751777177817821784178817921796179718
0118711898190219101919192119241927192919321934193619371938193919421946
1949195219531954196219711972197319741975197619771978198019841988198919
9119921993199419951996199720052006200720082009201320152016201720292051
2062206821232126212821392144215521562157216121642166217821792183218522
0922802286229822992308232623312356236224092446246225052549255025812597
2598260126022603260426052606260726092610261126122613261826202623262526
2726292630263126322633263426352642264726492653265426552656265726582659
2660266326642665266626672668266926702671267326872692692727052711276427
8927902793279627982800280128042805280628082809281128122813281628212822
2823282428262827282828292830283128322833283428352836283928412842284328
4428452846284928502852285328542872289629102923292529262302130253040304 2
3058306330763082309531113145315931673168318331853189319532023204320532
0632193220322132223223322432383246324732653279328233013302330833123320
3322332333243328332933303332333333343339334033433345334633503351335633
5733593360336233633364336533693376338033813382338433853390340034013402
3403340534073408340934143415341734183419342034263438343934463447344834
4934523457345934633465346834693475347834803481348534873489349034913492
3494349534963497349834993500350135023503350735343535353635373538353935
4235453548355035513552355435553556355735583560356235633566356735683569
3570357135723573357435793580358135833584358535863587358835893590359235
9535963597359936023603360436063614362836303633365336613662366336643665
3668367136733675367736783682368736883689369136923698370037013703370437
0537523779381138233828386238743890391439163940394739483957399640354059

4060406140624064406540684069407240744075407640784079408040814084408740
9040934094409540964100410141034105411041114114411541184119412041214122
4124412541264135413741434145414741494150415341544155416141624164416641
6741684176417741784181418841894194419541964197419942024207421042114212
4214421842324233423742394240424642484251427042754277427842804282428542
8742884289429142934295429642994303430843124316431843194323432543884389
4412443244334456447544784479448144834485448744924495449644994505450845
1245144515451845204523452745314533453645384541454245434546454845494552
4554455545564557456145644566456845714573457445774578457945834585458645
8745884589459045934594459745984599460046014602460346044606460746084609
4610461246134615461946204621462246244625462646274628462946304656472547
2647334762477848074810484250805084508550865089509150925093509550965097
5099510051025103510451055106510851095110511151125113511451155116511751
1851195120512151225123512451255126512851295130513151325133513451395142
5144514551475148514951505154515651575158515951605161516251635166516751
6851695170517151745176517751815182518651875188518951905192519351945195
5197519952055206521052115212521352155216521852195220522152225224522752
2852295230523152325233523552375239524052505267526953785422542354345444
5451545254545459546554665469547054955526555155975600560256215737582959
5559916056610661206132613561386185621462156222622 3”

You can access this 5719 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Evidence_7.3.2.A.txt

5.1.2.2 Evidence on Allah and/or Al-Rahman words positions together over the general verse indexes:

This evidence tests whether the general verse indexes, in which there is Allah and/or Al-Rahman words together have 19 based design. As we will see, there is a 19 based design considering all the 6348 verses. When we concatenate each of the resulting general verse indexes in the 6348 numbered verses, the big coding number is multiple of 19. This suggests the positions of verses with Allah and/or Al-Rahman words together are under the 19 based design with respect to the general verse indexes too.

Let me also illustrate the default concatenation coding pattern applied in this evidence.

> [General Verse index j1] [General Verse index j2] . . . . . [General Verse index jN (last verse with an Allah word in it)]

Here, j1 is the general verse index of the first verse that has Allah and/or Al-Rahman words in it. Also, j2 is the general verse index of the second verse that has Allah and/or Al-Rahman

words in it. Lastly, jN is the general verse index of the last verse that has Allah and/or Al-Rahman words in it. If we use the real numbers in the above formula, it would be like this regarding the text type of the 6236 verses:

[1] [3] . . . . . [6342]

And, the final number after all the concatenation would look like this:

13 6342

Here is the reproducible proof of this evidence:

```
# yunQ4 is for Allah and/or Al-Rahman words together
y <- yunQ4 #from all the 6348 verses
tmp<- y$Gen_verseI
# head side of numbers of each verse
head(tmp)

## [1]  1  3  8 15 17 18

tail(tmp)

## [1] 6325 6331 6332 6333 6336 6342

tmp <- paste0(tmp, collapse = "")
as.bigz(tmp) %% 19
```

```
## Big Integer ('bigz') :
## [1] 0
```

Also, below is the 6318 digits length big number of this evidence. One can just copy the big number and paste it into a web based big number calculator and test it herself.

“1381517182325283134356368697275788182838485878891939697989910210510610911011111141151171181221231241261281401451461471481511521561571611621661671691711721731751771781811821841891901931951971982002022032042052062072082112122142152172182192212222232252262272282302312322332342352362372382392412432452472502512522532542552572592602612632652662672682692702732742752782802812832842862872892902912922942952972993003023043053063083103133143163183232432532632732832332433533734034234434534634734935035435635735835935635683703713723733743763783813823843873893903923933943963973984024034044074084114124144154174184214254274304354364374394404414434454474494504514524534544554574584594604614624644654664684694714724744754764774784824864904934944954964975015055075085095105115125135155195205225245255265285295305315325335355365385395425435445455465485505525545555575595605655665685695705715725735745755765775785795805815825835845855865885895905915925935955965985996006016026036046056066076096106126146156186196216226236246256266276296306316336366376386396426436446456466486496516536546566606616626636646656666676696726736746756766776796806816826846856866876886896906916936946967007017047067077087117127137147157167177187207217227237247257277287297307337377407447457467477497537587607617627647657677687697707717737747767777787797817827837857887897907927947978088118138158258278288298308318338348408418448478508568588648658748828848858878898969019029039059089109129139159189199229309319329349369389399429449459469519539589609869889909929939971003100410051009101010141016101910221025102910301031103310341045104610471049105910611065109111001118112411291138114511461147114811491150115411561167116811691174117711801183118411851186118711891190119111921194119511961197120012011203120412061207120912101211121212131214121512161218121912201222122512271228122912301231123312351236123712381239124112421243124412451246124712481249125112561257125812591260126112621264126612671268126912701271127212731274127612781279128012821283128512881290129312941297130113021303130513061309131013121313131413161317131913201321132213231325132713311332133513361338133913411342134413461347134813491351135313541357135813591360136113621363136513691371137213751376137713781383138813891390139313941399140214031404140614071408140914101416141714181421142714301431143214341436143814401441144314441453145414571467147214761478147914811482148414861488149514961500150115021508151115121513151515161523152515315
```
```

2153615381543154515461555156015661568157415831595159716061629164416451
6461658167216731674168216851686168916921693169416961697169817021705171
3171417181720172617291731173417351738173917431744174517461749175117521
7541755175617571762176417651766176717681770177117721773177417811782178
3178417861787178917901794179618001804180818091813181518841911191519161
9241933193519381941194319461948195019511952195319561960196319661967196
8197619851986198719881989199019911992199419982002200320052006200720082
0092010201120192020202120222023202720292030203120432044206620772083213
8214121432154215621602171217221732177218021822194219521992201222522672
2972303231223152316232523282336234223432345234823522354235523602363236
6237123742380242724562464247524802502252425282538254425682569260026142
6152617261826212622262326242625262626272629263026312632263326382640264
3264526472649265026512652265326542655266226672669267326742675267626772
6782679268026832684268526862687268826892690269126932694270827172718272
6273227852810281128132815281828202822282328262827282828302831283328342
8352838284328442845284628482849285028512852285328542855285628572858286
1286328642865286628672868287128722874287528762878289529192933293729382
9412946294829492956296130453049306430663082308731003106311931353169318
3318431923193320832103214322032273229323032313244324532463247324832493
2633271327232783291330533083327332833343338334633483349335033543355335
6335833593360336533663367337033723373337733783383338433863387338933903
3913392339634033407340834093411341234173427342834293430343234343435343
6343734423443344534463447344834543466346734743475347634773480348534873
4913493349634973498350435073509351035143516351835193520352135233524352
5352635273528352935303531353235333537356435653566356735683569357035733
5763579358135823583358535863587358835893591359335943597359835993600360
1360236033604360536103611361236143615361636173618361936203621362336263
6273628363036333634363536373638364636603662366536853693369436953696369
7369837013704370637083710371137153720372137223724372537313733373437363
7373738373937503754376237863791381338233846385838633897390939253949395
1397539823983399240064032407140954096409740984099410141024105410641094
1114112411341154116411741184121412441274130413141324133413741384140414
2414741484151415241554156415741584159416141624163417141734175418141834
1854187418841914192419341994200420242044205420642144215421642194226422
7423242334234423542374240424542484249425042524256425742594271427242764
2784279428542874290430943124315431743184320432243254327432843294331433
3433543364339434343484352435643584359436343654366438543864402441144294
4304453445644744475449845164518452145224524452645284530453545384539454
2454845514554455645584559456245644567457145754577458045824585458645874
5904591459345944597459946004601460246064609461146134616461846194622462

3462446284629463146324633463446354636463946404643464446454646464746484
6494650465246534654465546564658465946604662466646674668466946714672467
3467446754676467746784704471147244774477547824785481248284835485848614
8934898495449555033513051355139514051415144514651475148515051515152515
4515551575158515951605161515625164515651665167516851695170517151725173 5
1745175517651775178517951805181518251835185518651875188518951905191519
6519952015202520452055206520752085212521452155216521752185219522052215
2225225522652275228529523052335235523652375241524252465247524852495250 5
0525152535254525552565258526052615267526852725273527452755277527852805
2815282528352845285528752905291529252935294529552965297529953015303530
4530653095315532553265332533453355337539054435446548854915492550355135
5175521552255245529553555365539554055465566556755985623562456655671567
4567656955697574857855786578958145836587959085909592959665992601560336
0406053607760806111613261456148617061826191619962006214622062266228623
1623462356244625662686277628162876291629763026310631463216322632363256
3316332633363366342”

You can access this 6318 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Evidence_7.3.2.B.txt

5.1.2.2.1 Facts related to the previous evidence:

Below are the two codings that might be related to the previous evidence of the Allah and/ or Al-Rahman words positions together over the general verse indexes. I do not consider them as evidence as the patterns are not within the rules but still looks interesting upon the previous evidence.

Fact 1:

In the above evidence, there is this further **fact**: If we concatenate the digit sum of the same general verse indexes, then the resulting big number is again multiple of 19 as shown below.

```
# yunQ4 is for Allah and/or Al-Rahman words together
y <- yunQ4 #from all the 6348 verses
tmp<- y$Gen_verseI
# head side of numbers of each verse
head(tmp)

## [1]  1  3  8 15 17 18
```

```r
tmp <- sapply(tmp, digitsum)
tmp <- paste0(tmp, collapse = "")
# Test if mod 19 is 0:
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

Also, below is the 3216 digits length big number of this fact

“1386895710478914159121591011121315161012151617183671023679105679115101
1112137812138913141691011131516101113181013151718245678910457810111256
7910111256789101112131479111378910111214168911131415161791213141710111
3141617191112131516182035789114781012891011121381011137911121314168121
4151617141710111213141618121315182012141516181920678111267910121371113
7121314168911131517910111213141617181011121415161819121315161718191418
1316171819206101213146789111579111213151689101113141617111213141517101
2141517191116171920121314151617181920211314151617181921221415161719202
2236789101112131579111215169101112131415179101215161718121314151618191
2141517121314151617181921151617181920221415161819202122231516181921781
1131415910111213141516910111213141617181013171115161718201520131415171
8202122141517182021222316171820232416182023161012141517181911121415121
3161913192118191918202123252310111214171012131518191312131416182021151
7181915172215232518202125456102681158124578101112141581211211813131112
1314157111315161713161013141516171911121315161718346791012456789101213
5710121314679111213141589101112131415169141516179101113151617181011121
3141618191113141619121516195679101357891112146789111389121315169101214
1516171012131617181011121315191213161718191520211316172278911121314612
1314814891012141691012131314171814182021141517192119206781489101213111
3111517131516161218201717202213181516172016171817202124181920222324101
3121317101619121516192015161718211415171819201618192021221516171819171
8192022232517212391317181315211216171616182115172022151617182116192223
2423232425262719202123274578910113412456711135691014161314810121491112
1317111316172151117208811121215141112141712141511141713161315171618149
1317181521228131416171112131415161719111213141912151719211314151617181
6212318192021222324161920212223242517182021171718171422111214161912141
5181920131416171821171819202223151617181920212223171920212223241819212
2232524211721221621232422181216131513184101412191516151613610714168913
1415161718141314201511141516131716181911151617192012171819131516202117
1820212315161721101415169101516171810121415161713141617181916192018192
0211520221719222324121517913151718101113141516171819111213141818192021

2223151821241718192122232425182021242526910111213141011121415161718191
1121417181912151617192019151720222122232425261114161811121612131416171
4161719202122151918242015162124202721192518242223231091218192021226710
1114789111213148111489101115169111617111215161718191213141315171416182
0211516172368101112111213161415111213141610151819111317182014151921221
9211516101315169111416171811131516191419141820211618192021101019111619
1920251618121315171912172021152115182022231719221721231719222324181921
2225271011121619121417192014151620211415161718192214171819202122231517
1819202123241618222324251819202122232425151317222321241522202519242922
2311914181011141617181112131516181920121314161718192021131415161718192
0212214151617192021222315162124891112131415101213141516179101114151617
1810131516171213171819201213151617182013142021161718192122151617181920
2216171819202122232591112141714151613151618171619251920131418131416211
8192214202223271617221922242527242526291822292223252625121210142014912
1619141717258131016181215161619222217231824111014121314161314151815”

Fact 2:

In the above evidence for Allah words positions, we tested the general verse indexes. As another **fact**, if we test the corresponding special verse indexes of Allah word positions with the same concatenation pattern by concatenating each special verse indexes with Allah words in it over the 6236 numbered verses, the digit sum of the resulting big number is 12730 and it is multiple of 19 as 19x670. Here is the proof:

```
y <- ynQ #numbered verses
tmp<- y$verse
# head side of numbers of each verse
head(tmp)

## [1]  1  7  9 10 15 17

tmp <- paste0(tmp, collapse = "")
digitsum(tmp)

## [1] 12730

digitsum(tmp) %% 19 #mod 19 must be zero

## [1] 0
```

You can access this 3275 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Fact_7.3.2.fact.txt

5.1.3 Probability of the Evidences on Allah and Al-Rahman word positions and frequencies

In this section I will compute the probability of witnessing all the evidences on Allah and Al-Rahman word positions presented so far..

As I mentioned before, I had two special counters to keep the total number of tests and total number of successes. Using the two special counters and Binomial test, we can approximately calculate the probability of witnessing all those evidences of the 19 based coding system that exists on Allah and Al-Rahman word positions. These evidences **support** the overall **conclusion** of this book such that the text of Quran was designed from the beginning and it is intact and unchanged for the last 1387 years (considering the date this book was first published in 2019) since Quran was first written in 632 according to the historical reports. Here is the probability of observing all of those 6 evidences by chance alone:

```
tmp <-binom.test(AllahWordEvidenceSuccesses,
                 AllahWordEvidenceTrials,
                 p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)

cat(paste("The probability of all the ", AllahWordEvidenceSuccesses,
"success out of all the", AllahWordEvidenceTrials, " tests (with
p=1/19) is:", tmp))

## The probability of all the  6 success out of all the 12  tests
(with p=1/19) is: 1.49e-05
```

As we see this is statistically significant probability and thus we conclude that the evidences we witnessed would not occur by chance and thus this suggests that it should have been designed by the Author of Quran and this conclusion supports the hypothesis that he protected it as he promised. Of course, this is my rational conclusion based on this probability and only God knows best.

Let's try something else for more skeptical people. One may argue that, why not also considering the frequencies of the words along with the positions. There is no such code exist. But if we also consider them, we should consider that as a second basket of events. Because all the events we observed with position indexes only but not with the frequencies of the words. Therefore, even if we would perform twice the number of current trials, we need to consider all the events being in one of the baskets of the two event categories. Let's first include those second group of trials to start answering this potential objection. We then have the following probability, which is twice the probability of the previous

calculated probability for one group of events, which is still statistically significant as follows:

```
tmp <- as.numeric(tmp)*2

cat(paste("The probability of all the ", AllahWordEvidenceSuccesses,
"success out of the two groups of trials (with p=1/19) is:", tmp))

## The probability of all the  6 success out of the two groups of
trials (with p=1/19) is: 2.98e-05
```

As we observed that the probability of this is still statistically significant as it is less than 0.05. In this case, as mentioned just before, we doubled the initial probability as it would be more fair to consider all the observed evidences exist in one of the two events categories, namely 2 baskets of events. Here we might also want to know what is the probability of observing all the 6 successes in the basket of events with either, the position information only or in the basket of events with the position and word frequency together? If the chances are like basket1/basket2, then 6/0 and 0/6 is of our concern. The rest of possibilities would be like 5/1,1/5, 4/2,2/4, 3/3. Therefore, approximately,the probability of observing all successes in one of the two basket categories is like 2/7. Therefore we multiple this probability with the one we found above, which only shows observing 6 out of 24 trials. Then the overall observation probability would be **8.5142857^{-6}** for this extreme case scenario, which was computed for more skeptical people.

Now, I add these trials and successes on Allah and Al-Rahman word positions to the global counters for overall system probability calculations in the end of the book. Since these are the first evidences to add to the global counters we just assign the values directly.

```
global_tested_nums <- global_tested_nums + AllahWordEvidenceTrials
global_success_nums <- global_success_nums +
AllahWordEvidenceSuccesses
```

Also, here is the approximate overall probability of all the evidences observed so far in this book with the assumption that all are independent for simplicity of computations:

```
tmp <-binom.test(global_success_nums,
                 global_tested_nums, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", global_success_nums,
            "success out of", global_tested_nums ,
            "(with p=1/19) is:", tmp))
```

```
## [1] "The probability of 26 success out of 52 (with p=1/19) is:
7.26e-20"
```

5.1.4 Facts about Allah word positions and frequencies

The codings of this chapter are not considered within the general system presented in this book as the observed codings are not aligned with the general rules of the book mostly and not based on a systematic rule. However, the codings looks interesting enough to be presented at least as facts. One can also consider all the codings presented in these sections as only **facts** but not evidences currently. In this chapter, I will present three different isolated codes in three different sub-sections of this section, using **chapter indexes**, **verse indexes** and the number of **Allah word counts** in each of those verses. The reason I present them in three sub-section is because they each have different coding patterns. Therefore, I will not include, the number of successes and trials of these three sub-sections into the global counters as they are not presented as evidences of this book but just existing facts for their potential usage. This means, the three codes we will observe in the sections below will not affect the global probability of the general system that we will measure in the end.

The three isolated codes in the following three sub-sections have a particular importance. Because, in the false 19 based claim of Rashad Khalifa, they use the similar three columns of information but individually (**chapter indexes**, **verse indexes** and the number of **Allah word counts**). By removing one of the verses from Quran (!), they make sure (!) each of these three columns are multiple of 19 individually! They clearly manipulate the text on a specific verse to make sure the numbers match to their made up false system claim. The three codings in the following three sub-sections suggest that there is already a 19 based coding relation considering the similar three columns of data, namely, chapter indexes, special verse indexes and the total number of Allah words at each verse. Nonetheless, as I presented in the main evidences in Chapter 5.1, we already showed rule based codings as evidences with respect to the positions of the word Allah only, Al-Rahman only, and also Allah and/or Al-Rahman words together. Those evidences should already be sufficient to convince those who were deceived by the false 19 claim and deny the 2 verses in the end and become a denier. In the facts of this section I will show further coding that also uses the number of words in those positions as they have used in their false claim which is based on data manipulation and thus considered as falsehood academically. Manipulating the text is scientifically unacceptable. Because, no matter what the manipulators find in the end, their system claim belongs to the manipulated text but not to the original text itself. Because, once you open up the door for manipulation, then you have to exhaustively search for all the space of the other possible manipulations that could be generated by the manipulations and prove that what you show is statistically significantly different than all the rest of the possible manipulated codings in that space! Considering the size of the text of Quran, it is

impossible to perform this task. This proves the point that, scientifically speaking, it is non-sense to consider any claim that manipulates the text, which represents Quran that is classified as the Hafs reading and used by the 97% of Muslims around the world. Anyone who searches for coding patterns in the text of Quran, must use one of the already available valid text copies that has been accepted and already being used by Muslims. Any approach that manipulates even a single verse or word or letter of the text is just non-sense and unacceptable. Let's get back to the main topic and see the codings in the following sub-sections.

5.1.4.1 Sum coding on Allah word positions and frequencies regarding Chapters, Verses and Words

In this isolated coding, which might be considered as a fact, we will see that the chapter indexes, verse indexes and Allah word counts together have a 19 based coding in the numbered verses of the text of Quran with respect to their total sum. In the table of Allah word positions in 6236 verses above, I provided the chapter indexes, verse indexes in that chapter and Allah word counts in each verse. We will use those numbers in this evidence too. The pattern of this evidence is similar to Evidence 6.5.2.

The sum of each of these numbers are 33697, 100228 and 2153, respectively. The total number of all these three numbers is equal to **136078** and it is multiple of 19 (in particular 19x7162).

```
tmp <- sum(ynQ[,c(2,3,4)])
cat("The total number is ", tmp)

## The total number is  136078

as.bigz(tmp) %% 19 # mod 19 is zero

## Big Integer ('bigz') :
## [1] 0
```

This further shows the positions and frequencies of Allah words have 19 based coding relation together in the numbered verses of Quran.

5.1.4.2 Digit sum coding on Allah word positions and frequencies regarding Chapters, Verses and Words

In this isolated coding, which might be considered as a fact, I will show that the chapter indexes, verse indexes and Allah word counts together have a 19 based relation in the numbered verses of the text of Quran with respect to the digit sum of all the numbers in those three columns of data. In the table of Allah word positions in 6236 verses above, I

provided the chapter indexes, verse indexes in that chapter and Allah word counts in each verse. We will use those numbers in this evidence and test their digit sum.

```
x <- ynQ
tmp <- paste0(x$Chapter, x$verse,x$countW)
tmp <- paste0(tmp, collapse = "")
cat("The length of number the big number is ", nchar(tmp) )

## The length of number the big number is  7298

tmp <- digitsum(tmp)
cat("The digit sum of the big number is ", tmp)

## The digit sum of the big number is  24586

# Test if mod 19 is zero:
tmp %% 19

## [1] 0
```

You can access this 7298 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Evidence_7.7.3.txt

As we observed, not only the sum of the numbers are multiple of 19 as we see in the previous coding, but also their digit sum has 19 based coding.

As a side note, for the big number obtained with the exact same pattern of this evidence for the word **Al-Rahim**, which is one of the three names of God in the Basmala verse, we observe that the big number is multiple of 19 and also the digit sum of it is also multiple of 19 too.

5.1.4.3 Random coding example with 0 indexing over Chapters, Verses and Words

As an additional note, you may have noticed that I removed the zero indexes while concatenating as they correspond to unnumbered Basmala verses. In this book, I never used zero index for the unnumbered Basmala verses as there is **no number** in the text, including zero also makes difference in the divisibility of concatenated numbers. However, if anyone argues on this point, there is this example: When zero is used, there is also this coding in 6348 verses as follows. Basically, when we concatenate chapter index, verse index and word count for each verse with Allah word and then concatenate all in their natural order again, the resulting big number is also multiple of 19. But I do **not** consider this example neither as evidence nor as a fact but just a random coding, which is expected to

happen by chance alone 1 in every 19 trials. I just present it as an example for the sake of argument.

```
y <- yunQ
head(y) # head of the table

##    Gen_verseI Chapter verse countW
##         <int>   <num> <num>  <num>
## 1:          1       1     1      1
## 2:          8       2     0      1
## 3:         15       2     7      1
## 4:         17       2     9      1
## 5:         18       2    10      1
## 6:         23       2    15      1

tmp<- paste0(y$Chapter,
             y$verse,y$countW)
# head side of numbers of each verse
head(tmp)

## [1] "111"  "201"  "271"  "291"  "2101" "2151"

tmp <- paste0(tmp, collapse = "")
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

5.1.4.4 Fact on Allah word positions and frequencies regarding Chapters, Verses and Words

In these isolated code, we see that the **chapter index**, **verse index** and **Allah word counts** have 19 based coding in combination of both of the text types of Quran together. It means, the coding is obtained by using both texts at the same time. Basically, I will concatenate all the numbers in natural order as I did in this book earlier for some other evidences.

This is the way we will obtain the number to be tested: We will concatenate chapter index, verse index and word count in the natural order for each text type. We will obtain two vectors for both text types. We will then pair these two vectors by concatenating to each other. This evidence pattern is similar to what I presented in Evidence 4.2.9.1 and Evidence 4.2.9.2. Note that in Evidence 4.2.9.2 the length of the two vectors that are paired were not equal. Thus, the smaller vector had started over again pairing from its beginning to pair with the longer vector. The similar pattern also exist in this code. We have two unequal length vectors but when paired they show 19 based coding where the positions of Allah

words have 19 based relation together in both text type of Quran. Again, as it does not align with the general rules I set in the book, it might currently be considered as a fact. Here is the proof of this coding:

```
#Concatenate for 6348 verses
# Some verse indexes are 0 and they should be removed
#as there is no number to represent them even 0
x<- yunQ
tv <-c()
for(j in 1:nrow(x)) {
  if(x$verse[j] != 0){#for all the numbered verses
    tmp <- paste0(x$Chapter[j], x$verse[j],x$countW[j])
  }else{#For unnumbered Basmala verses
    tmp <- paste0(x$Chapter[j], x$countW[j] )
  }
  tv <- c(tv,tmp)
}
cat("Length of the vector from 6348
    verses is ", length(tv))

## Length of the vector from 6348
##     verses is  1678

#concatenate for 6236 verse
y <- ynQ
tmp<- paste0(y$Chapter,
             y$verse,y$countW)
cat("Length of the vector from 6348
    verses is ", length(tmp))

## Length of the vector from 6348
##     verses is  1566

#Pair both vectors
tmp <- paste0(tv,tmp)
#concatenate all the numbers
tmp <- paste0(tmp, collapse = "")
#Test if mod 19 is 0
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

```r
cat("number of digits on this
    big number is", nchar(tmp))

## number of digits on this
##     big number is 15465
```

One can just copy the below big number and paste it into a web based big number calculator and test it herself.

Here is the “15465” digits length big coding number of this code:

“1111112127127129129121012101215121512171217122022202223122312262226222
7222722551255126012601261226122641264126712671270127012731273127427427
2275127512761276127712771279127912803280328312831285128512881288128922
8922902290229122912294129412971297129812981210122101221021210212103121
0312106121061210722107221092210922110221102211412114121152211522116121
1612118121181212022120221321213212137121371213822138221391213912140321
4032143321433214412144121482214822149121491215312153121541215412158221
5822159121591216112161121641216412165321653216712167121691216912170121
7012173221732217422174221761217612181121811218212182121852218522187421
8742189121891219022190221921219212194221942219522195221962219622197121
9712198121981219922199222001220012203222032220412204122061220612207122
0712209122091221022210222112221122213222132221422214222151221512217222
1722218222182221912219122202222022222222222222312223122241222412225122
2512226122261222712227122281222812229422294223022230222314223142233222
3322235322353222371223712239122391224212242122432224322244222442224512
2451224622246222472224722249322493225142251422521225211225342253422551
2255122571225712258222582222593222593226012260122611226112262122621226512
2651226612266122671226712270122701227222272222732227322275222752227612
2761227812278122791227912281122811228252282522831228312284122841228612
2861321313413213513413713513913713101391311131013131311131513131318131
5131933181321131933231321132833231329132833301329133123301332233123331
3322337233313392337234013392342134013451342134713451349234713501349235
1135013522351135413522355135413591355136113591362236113631362236423631
3701364237323701375137323761375137723761378337723792378338113792383138
1138613831387138613891387139213891394139213951394139713951398139713992
3981310113992310213101131033310213107131033310823107131091310823112331
0913113131123311613113131171311161311913117131201311913122131201312323
1221312623123231301312623132131301313523132131401313523141131401314213
1413144231421314513144231461314513148131461315013148131521315013154131
5213155231541315613155231572315613158131572315933158131602315933162231
6

0231631316223164131631316513164131661316513167131661316913167131701316
9131712317013173131712317423173131762317423177131762317933177131801317
9331812318013182131812318313182131871318313191131871319513191131982319
5131992319823200131992412320014514149141241134514121491413241134141412
1415141324161414141734151419141614231417342424191426142314281424242914
2614301428143234291433143014343432343524331436243434371435243924362440
1437144214392443144014461442144714431448144614491447145014481452244914
5414501456145224583454145924561461145834631459246434611469246314701464
3472146924731470147424721475147314761474247714751478247614791477148014
7824811479148214801483148114842482148514831486148424872485148824861489
1487249024882492248914931490249444922495449314961494449714954499249614
1004497141021499241031410044104241021410514103141062410424107141051410
8241062410914107141102410824111141091411334110241141411114116141133411
8141141411924116141222411814123141192412514122241261412314127241251412
8141261412914127241302412814131241291413314130241342413124135141331413
7141342414024135141412413714142241402414314141241461414224147241431414
8241461414914147241501414824152141491415314150141552415214157141531415
8241552416014157141641415824165241601416614164141671416524168141661416
9141671417014168141713416914173141701417624171351141731523417625325154
4511561523573532582544591561511357351235825131591514151135151512351615
1315172514151815151520151615211517252325181527152015281521153115232533
1527153415281535151311538153315392534154015351541353815421539254315401 5
4425413545154215472543154835442549354515501547255115483552154935543550
1555155115562552155715543560255515642556256715571571156025723564257315
6715741571157615723580157315851574158725761588258015892585159115872592
1588259425892595259115961592159735942598259525100159615101159735103259
8251041510015105151011510615103251081510415109151051511015106151121510
8151151510915116251101511715112151192511516315116261415117161715119261
9261621163163116141633161716341619263516211636163116371633163916341640
2635164626361647163716501639165326402656164626621647166416501670165326
7136561680166216881664169016701691367136933680169526881610216901610716
9136108269336109169526111161021611416107161161610826118161091611916111
1612116114161243611616125261181612816119161361612116137161243613816125
2614026128161421613616144361371614516138161481614026150161421615116144
3615216145161571614816159161501616416151172616152172826157173016159173
2161641733171737272617431728274417301745173217491733175027372754274317
5617441759174517621749176517502769175427701756177117591773376217741765
1785176917861770178717711789477337992774171011785171051786171311787171
4017894715817992716417101171691710517178171311718517140171861715817187
1716417188171691718917178171901718517194171861719617187181271881821718

918727190181037194181337196181618181738128181821819187282018103822181 3
382318161824181738251818182718191828182018291822183018231833282418341 8
251836182718371828183918291840183018422833284328341844283618451837184 6
283918471840184818422849284328511844285238451853284628551847185818481 8
603849286118511862185238631853286418551866285818681860386928611870186 2
187118631872186418741866287528681911869292287019338711941872195187419 6
187529729119919229141933915194191629519171961918297291929919202914192 2
191519242916292519171926191829271919292829202929192219303924293119251 9
322926193429271936392829372929193819303940493119411932294319342946193 6
394819372951293819521940495519411959494319602946196119481963195129641 9
521967195519682959497019602971396119722963197429641975196719771968297 8
297019791971398019722981297429831975198519771989197829901979199319801 9
942981299619831997198519993989191001990191022993191042994291051996191 0
619971910719993910919100191113910229112191042911529105191162910619117 1
910719118291091911919111391203911219121191152912319116291271911719129 1
911821032911911041912031051912111061912311011191271101619129110171101 1
018310321021110411022110511027110611030110111103111016110321101711034 1
101831035110211103611022110371102711038110301104411031110451103211046 1
103411049110351105511036110581103711059210381106021044110621104511064 1
104611066110491106821055110691105811071210592107211060210812106211082 1
106411085110661109511068210100110691101042107121010611072110107110812 1
010911082111211085111411095111611010011113110104211141101061111821010 7
111191101091112011111126111211129111411130111611131311131111331111411 3
411118211411111911143111201115011126111541112911156111301116111131311 6
311133111642113411173211411117811143111841115011186111541119211156111 1
011116111111311163111115111642122311173212381111781123911184112401118 61
125211192112662111011126711111311268111115112761121127911223112802123 8
112831123911286212401128721252112881126621290212671129111268112921127 6
112961127911299112802121071128311210821286213211287213811288113113129 0
213131129111316212921131721296113201129911321112107113252121082132611 3
113271132113282138113313131131333113131133411316213361131721337113201 1
338113211133911325214211326114311327114411328214511331314611333114811 3
341149113361141011337114113133811412213391141911411420114211421214311 4
221144114241145114251146114273148114281149114321141011434114113143811 4
122144211419114461142011447214212145121422115691142411596114251161114 2
731691142811618214321162011434116231143811626114421162811446116311144 7
216331145121635115116362156911637115961163811611641116111645116911648 1
161821651116201165211623116531162611661116281167011631116711163311672 1
163511673116362167411637116751163811676116411167711645116791164811683 1
165111687116521168811653116901166111691316701169211671116931167211694 1

1673116952167411696116751161042167611610511677116106116791161071168311
6108116871161123168811611421690116115216913161162169211612811693117221
1694117331169521739116961179411610421797116105117991161061171101161071
1841161081181511611231816116114218172161152182111611621824116128118261
1711838117221183911733118431173911845117941186911797119301179911936117
1101194811811949118411958118151197611816119811181722081182112014118241
2061118261209811838120114118391212221843121661184512167118691219811912
2211930122311936122611948122711949122811958122911976122101198112211120
1221212081221422014122151206112216120981221722011412218321122231212222
2251216612228121671223012198122321221223412221223512231223622261223722
2712238222812239122912240522101224712211122522221212254122142225832215
1225912216122602221722261222183226222223122632222512264122281226522230
1226812232122691223412270222351227112236222721223722273122382227422239
1227522240522761224712278122522231412254123231225832324122591233212260
2233812261223912226222311612263223117122641242122652245122681247122691
2491227022410222711241312272124141227312415122742241712275224181227612
4202227812421223124222231412425223231243012324124311233212432123381243
3323912243532311612436123117124371241243812421243912451244012471244112
4912442124102244312413124441241412445224151244812417124501241812451124
2022452224212245312422224541242522455124301245812431124591243212461224
3332462224353246312436125171243712541124381255512439125682244012570224
4112571124421268912443126931244412610812445226110124481261261245012613
1124511261441245222615012453126163124541261791245512621312458126227124
5912781246122791246222724124631272612512730125171273612541127431255512
7451256822746125702274712571127601261276112689127621269312763226108127
6412611012765126126127791261311278712614412788126150128131261631282712
6179128301262131284912622712850227128561278128601279128681272412870127
2612871227301287222736128761274312877327451287812746128801274712881127
6012882227611288712762128881276322931276412952276512961277912910327871
2911127881291612812917328131291922827129202283012922128491292312850229
2412856129251286012929128681293612870129401287122941128722294212876129
4412877329451287812950128801296012881129611288222962228871296312888129
6512912967129312968129522969129613051291033062291113081291613091291733
0101291923011129202301712922130291292313030229241303712925130381292913
0392293613040129401304312941130481294213050129441305412945130561295013
0591296013060129611316129622319129631311112965131121296713116229681311
8129691312023013121130513122230623123130813125130913126130101312723011
1312813017131292302913130230302313113037131321303813133130392313423040
1324130431331230481332130501333130541334130561335230591336130601339231
1331213161331523191331723111133181311213319231162332133118133222312023

3231312113324231222332533123133271312513329231261333013127233332312813
3342312923335231302333623131133374313213338331331333923134233402321334
1132413346133133471331233481332133502333133511334133521335233532336133
5413392335523312133561331523357233172335913318133622331923363133213336
4133222336613323133692332423370133253337113327133733332923481333013422
1333323424133342342713335234471333623511333743521333833532333923541334
0235513341135823346135111334713513133481351513350235171335113518133521
3522133532352713354135282335523529133561353113357235321335913538133622
3540133631354113364135432336613544133692354523370136472337113674133733
3723134137351348137401342213774134241378613427137102134471371261351371
2813511371521352137159135323716013541371691355138262358238651351113911
3513139213515139333517139423518139613522139713527139101352823911135291
3914135311391613532139171353813918135401392023541139211354323922235441
3923435452392613613929136472393213674139351371393623723139372373513938
4374013942137741394313786139451371021394713712613952137128139532371521
3956137159139571371601396013716913961138139621382623963138651396413913
9661391139671392139681393340213942404139614010139714012139101401413911
1401613914140171391614020139171402123918140221392024028239211402913922
2403113923440332392614034239291403533932140431393514044239362404513937
2404813938440551394214056139431406123945140621394714063139521406433953
2406613956140691395714074239601407713961140782396214079139631408113964
1408513966141141396714115139681411914014121140214122140414128140101413
0140121413314014141521401614231401714251402014261402124281402214210240
2824213140291421534031142161403324217140342421914035342211404314223240
4424224340451422714048142311405514236140561424014061242441406214246240
6314247140643425114066142532406914363140742436414077143871407824418140
7914419140811444214085145214114551411414562411514581411914510141211451
2141221451414128145191413014522141331452324152145261421453214231453514
2514621426146414281465142102468142131461024215346131421614617242171462
1142191462314221146261422324628142243463114227146321423114633142361471
1424014731424414742424624771424714791425114710142532471114314712143631
4716143641471914387147211441472314418147261441914728144421472914514732
2452147331455147342456247381458148214510148314512148414514148514519148
6145221487145232481034526148112453214814145351481524614816146214817146
4148181465148191468148201461024821246131482324617248241462114825146231
4826246261482724628148293463114913463214932463314972471498147114992473
1491014742491224771491324791491424710149151471114916147121491714716149
1814719150261472115150147231515114726151581472815227147291524324732253
2314733153261473425358147381575148157914821571024831571114841571414851
5716148615717148715718148103572014811257211481415722148152572414816157

2524817157271481815728148191572924820158134821258214823258414824158514
8251586248262587248272588248293589149158102491358112493258121497258132
4981581414992581514910158161491225817149132581814914258191491515820149
1615821249171582244918159225015931502615943511595151501596251511597351
5815982521591315227159161524325918353159191532315921153261592215358159
2325415924155160425616062571607157516082579160915710260102571116011157
1416012257161601315717161315718161415720161525721161615722161715724161
8157252611115727161131572816114357292624158162515813629158216210258416
2111585163115862632158726341588263515891636258102637158112639158121631
1158132646158141647158151641115816164121581716413258181641415819164161
5820164171582126514582246521591653359226541593165525943657359516510359
6265112597365123598266115913166215916166315918366425919166615921166825
9221661025923266111592416791601672616042672816062703160717131608271416
0917115160102712516011172416012272516013172716117212161317218161417219
1615272221616172232617173206618174312611117456161131766161143769162176
1116241763026251792516291812916210287716211188241631911326311958163219
6141634198216351985163629881637110461639111011631111102164111211646111
2216471111641112716412129164132210164141215164161217164171220265122316
5142262652122726533255165412601655226126573264165103267165112270165123
2731661274266112751662127616631277166422791666128036682283166102285166
1112881671289267912902672612912672812941681297169129817012101270312102
1711210317131210617141210727115121092712511102721211417241211527251 21
1617271211817212121202721812132172191213717222121382722322139173121403
7320621433741214417431221482745612149175121531761215417661215827691215
9176111216117630221641771216537812167179121691792512170180121732811217
4281291217618212181183121821841218528512187486121891871219028771219218
8121942882412195289121962901219719112198191132219929212200193122032941
2204195122061958122071961220919614122102971221129812213298212214298512
2151988122172991221821001221911011222021021222221031222311041222411046
1222511051222611061222711071222811081222941091223021101223141101122332
1102122353111122371112122391112112242111221224321131224421141224 51”

You can also access this 15465 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Evidence_7.7.1.txt

As another fact, for the big number obtained with the exact same pattern of this evidence for the word **Al-Rahman**, which is one of the three names of God in the Basmala verse, we observe that digit sum of the similar big number is multiple of 19 too.

5.1.5 Fact on Allah word with All word forms of its usage in Quran

In the codes below, I will present interesting codes as **facts**, which are observed when we consider the usage of Allah word with **all** the forms of its usage considering all the 6348 verses of Quran. Basically, I look at the appearance of this word, "الله", over all Quran considering all the 6348 verses.

5.1.5.1 Fact on the sum of all the numbers about Allah word with All word forms of its usage in Quran

The **fact** is that, when we count the appearances of Allah word in all of its forms, not only isolated forms, including its root form, then sum of all the related indexes and the counts is multiple of 19. By all the indexes, I mean general verse indexes, chapter and also special verse indexes. Below is the proof of this fact:

```
#Considering 6348 verses

require(stringr)
#Allah word in root form
tmppattern <- "الله"
x <- unQuran #6348 verses
#find verse indexes
tmp <- x$text
tmp<- as.character(tmp)
j <- rep(0,length(tmp))
#i<-28 # example with 2 Allah words in it
for(i in 1:length(tmp)){
  #tmpw <-strsplit(tmp[i], " ")
  #tmpw <- unlist(tmpw)
  tmpw <- unlist(tokenize_words(tmp[i]))
  j[i] <-sum( str_detect(tmpw, tmppattern) )
  rm(tmpw)
}
#
sum(j) # 2820 looks correct as in the below sanity check over Words
object

## [1] 2820

## find indices
#Get the verse indexes where Allah word is used
i <- which( j!=0)
```

```r
x <- x[,c(1:3)]
y <- cbind(x,j)
y <- y[i,]
colnames(y)<-c("Gen_verseI","Chapter",
               "verse","countW")
yunQall <- y
rm(y)
#Head of the table containing position indexes and counts.
head(yunQall)
```

```
##    Gen_verseI Chapter verse countW
##         <int>   <num> <num>  <num>
## 1:          1       1     1      1
## 2:          2       1     2      1
## 3:          8       2     0      1
## 4:         15       2     7      1
## 5:         16       2     8      1
## 6:         17       2     9      1
```

```r
tmp <- sum(yunQall)
print(paste("Sum of all the indixes and word count is:", tmp))
```

```
## [1] "Sum of all the indixes and word count is: 4801699"
```

```r
as.bigz(tmp) %% 19
```

```
## Big Integer ('bigz') :
## [1] 0
```

```r
#
tmp <- tmp/19
print(paste("The quotient of the division of the sum by 19 is:", tmp))
```

```
## [1] "The quotient of the division of the sum by 19 is: 252721"
```

The **first fact** is that, as we see, the sum of this table is 4801699 and it is multiple of 19. The second **second fact** is that, the digit sum of the quotient, 252721, is exactly 19.

5.1.5.2 Fact on the concatenation of all the numbers about Allah word with All forms of its usage in Quran

The **fact** is that, considering all the 6348 verses of Quran, when the chapter indexes, verse indexes and the number of Allah words (in all possible word usage forms, namely any word

that includes this pattern: "الله"), are concatenated from right to left, similar to what we observed in the rewriting coding pattern, the resulting big number is also multiple of 19. Also, when we obtain the second big coding number in a similar way from the 6236 numbered verses, in this case, the digit sum of this big number is multiple of 19. If we only look at the chapter indexes and special verse indexes in the 6348 verses, similar to the coding pattern of Evidence 5.1.1, then as a fact, the digit sum of the resulting big number is also multiple of 19.

As these are isolated codes, which do not have general rules yet, I present them as *facts* since they are still interesting. However, other researcher might discover a rule based system that might cover them in the future and thus I presented here as just interesting coding facts but not the evidences of the book.

5.2 Evidence on Chapter At-Tawbah

There was a speculation over the last two verses (verse 128 and verse 129) of the 9th chapter of Quran, also named as At-Tawbah, by Rashad Khalifa several years after 1974 when he first claimed about his (fake) 19 based system in Quran. He has manipulated the text of Quran to be able to match it to his made up numbers by removing those two verses. Scientifically, this is unacceptable and a shameless act. Because, once the data is changed, the result is not a discovery of an existing system but an invention of one's own made up and thus fake system claim. In his claim, he shamelessly removed the last two verses of the the 9th chapter of Quran, which are verses 9:128 and 9:129 in order to match the original text data to his made up system claim.

Most of the evidences of the 19 based system I discovered and published online as e-book in 2019 in this book already proves a 19 based system over all the original text and thus suggests the intactness and preservation of the text of Quran without touching any part of the data. However, I hypothesized that Almighty God might have designed additional particular evidences on Chapter 9 considering this speculation. And, without much surprise I witnessed the evidences that clearly suggest the 19 based system for all the verses and content of Chapter 9 in particular.

5.2.1 Evidence of At-Tawbah with special verse indexes:

This clear coding evidence is on the verse indexes of Chapter 9. In Evidence 5.5.1, we witnessed that when we concatenate the special verse indexes of the full text of Quran, the resulting big number is multiple of 19. The same coding pattern also exist in Chapter 9 in particular. When we concatenate its **special verse** indexes from 1 to 129, the resulting big number is multiple of 19. Here is the illustration of the coding pattern I just described:

[Verses 1 (first verse of the chapter At-Tawbah)] [Verses 2 of the chapter At-Tawbah] . . . . . [Verses 128 of the chapter At-Tawbah] [Verse 129 (last verse of the chapter At-Tawbah)]

If we use the real numbers in the above formula, it would be like this:

[1] [2] . . . . . [128] [129]

And, the final number after all the concatenation would look like this:

12 128129

Here is the proof as follows:

```
#Evidence on special verse indexes of Chapter 9
x<- unQuran
x<- x[x$chapter==9,]
tmp9v <- paste0(x$verse, collapse = "")
as.bigz(tmp9v) %% 19 # test if mod 19 is zero

## Big Integer ('bigz') :
## [1] 0
```

Here is the “279” digits length big number of this evidence:

“1234567891011121314151617181920212223242526272829303132333435363738394041424344454647484950515253545556575859606162636465666768697071727374757677787980818283848586878889909192939495969798991001011021031041051061071081091101111121131141151161171181191201211221231241251261271281291”

The coding holds considering both text types, either 6348 or 6236 verses of Quran. Because, the chapter At-Tawbah has the unique feature that it is the only chapter in Quran that does not have Basmala verse in the beginning of a chapter. Therefore, concatenation of the special verse indexes of both text types results the same big number.

As we witnessed the special verse indexes has the exact same coding pattern with Evidence 5.5.1, which shows considering all the chapters together we observe the same coding exist in the full text of Quran. This is interesting but **this coding information was already known** as I somewhat recall it from an internet forum but do not know who found it first and thus, I am not able to precisely cite it in particular. However, as a single evidence it was not as convincing as it should be. Then, I further hypothesized that we might observe the same pattern with the general verse indexes of Chapter 9 as well. Because it then shows that the 19 based coding system of Chapter 9 is not only available in special verse indexes

but also in the **general verse indexes** that connects the positions of the verses of chapter 9, over all verses of Quran. After testing that hypothesis, I firstly discovered the below new evidence as presented in the following sub-chapter.

5.2.2 Evidence of At-Tawbah with general verse indexes:

When we concatenate all 129 general verse indexes of the chapter At-Tawbah within the 6348 verses of the full text of Quran, the resulting big number is also multiple of 19. Here is the illustration of the coding pattern I described:

> [First General Verse index of the chapter At-Tawbah] [Second General Verse index of the chapter At-Tawbah] . . . . . [Last General Verse index of the chapter At-Tawbah]

If we use the real numbers in the above formula, it would be like this:

> [1243] [1244] . . . . . [1370] [1371]

And, the final number after all the concatenation would look like this:

> 12431244 13701371

Here is the proof considering all the 6348 verses as follows (It also works considering the 6236 numbered verses since both results the same number as there is no Basmala verse at the beginning of this unique chapter.):

```
#Evidence on general verse indexes of Chapter 9
x<- unQuran # in 6348 verses
x<- x[x$chapter==9,]
#head of the indexes to be concatenated
head(x$VerseI)

## [1] 1243 1244 1245 1246 1247 1248

tmp9V <- paste0(x$VerseI, collapse = "")
as.bigz(tmp9V) %% 19 # test if mod 19 is zero

## Big Integer ('bigz') :
## [1] 0
```

Here is the “516” digits length big number of this evidence:

“1243124412451246124712481249125012511252125312541255125612571258125912601261126212631264126512661267126812691270127112721273127412751276127712781279128012811282128312841285128612871288128912901291129212931294

2951296129712981299130013011302130313041305130613071308130913101311131
2131313141315131613171318131913201321132213231324132513261327132813291
3301331133213331334133513361337133813391340134113421343134413451346134
7134813491350135113521353135413551356135713581359136013611362136313641
3651366136713681369137013 71”

As we witnessed, all the 129 verses of Chapter 9 has 19 based coding with the same coding pattern both in special and also in general verse indexes.

5.2.3 Evidence of At-Tawbah with word content in its verses:

After discovering the previous evidence, I then further hypothesized that the same coding pattern might exist also in the content of Chapter 9, considering words information. Therefore, I tested the same coding pattern this time by concatenation of **the number of words** per its verse and discovered the following similar evidence with the words numbers as well. Here is the illustration of the coding pattern I described:

> [The number of words in the first verse of the chapter At-Tawbah] [The number of words in the second verse of the chapter At-Tawbah] . . . . . [The number of words in the last verse of the chapter At-Tawbah]

If we use the real numbers in the above coding, it would be like this:

> [9] [14] . . . . . [14] [15]

And, the final number after all the concatenation would look like this:

> 914 1415

Here is the proof considering all the 6348 verses as follows:

```
#Evidence on number of words of verses of Chapter 9
x<- unQuran
x<- x[x$chapter==9,]
#head of the number of words to be concatenated
head(x$vwords)

## [1]  9 14 32 22 26 18

#tail of the number of words to be concatenated
tail(x$vwords)

## [1] 18 12 16 21 14 15
```

```
tmp9w <- paste0(x$vwords, collapse = "")
as.bigz(tmp9w) %% 19 # test if mod 19 is zero

## Big Integer ('bigz') :
## [1] 0
```

Here is the "253" digits length big number of this evidence:

"91432222618231613101318201111241823241610820332318122829232315142919363129164315231314141517161516142212221710111619222612161713161916322624241246129151120252782518161811141317262319301814161627252217161616122423271537162022181727319521822171812162114 15"

As we witnessed the number of words of verses of Chapter 9 has also the similar 19 based coding pattern. The probability of observing these three evidence is significantly low. However, I searched all the 114 chapters of Quran and **only Chapter 9 has these three 19 based codings at the same time**. Moreover, the digit sum of all the big numbers of these three evidences together is also multiple of 19. This **connects all these three evidences** independently to each other. This further supports the 19 based system among these three coding evidences of the same coding pattern.

5.2.4 Evidence on At-Tawbah with the combination of its individual evidences:

The digit sum of all the 3 big coding numbers of the previous three evidences together is also multiple of 19. Notice that the **digit sum is the only coding option** to be able to test the relation among the combination of these three numbers if we hypothesize that there might be further a relation among them. Because each of these three big numbers are already multiple of 19 and thus either concatenation or sum of them already must be multiple of 19. The only test we could perform among them is the digit sum of these three big numbers and we observe that it is also multiple of 19 as follows:

```
#Digit sum of the three big numbers of Chapter 9

tmp <- paste0(tmp9v,tmp9V,tmp9w)
cat("The length of the digits of the
    three big numbers: ", nchar(tmp))

## The length of the digits of the
##     three big numbers:  1048

tmpd <- digitsum(tmp)
cat("Digit sum number is: ", tmpd)

## Digit sum number is:  3534
```

```
# test if mod 19 is zero
tmpd %% 19

## [1] 0
```

As we witnessed, the three evidences have also another independent 19 based coding among themselves based on their digit sum. These three evidences and the fourth additional one that connects them, strongly suggest the 19 based system in the verses and content of Chapter 9. And it is the only chapter with these 3 codings together with this pattern that further supports the conclusion that they have 19 based coding system. No wonder it is Chapter 9. Because, there has been a speculation over its last two verses (128, 129) by the Rashad Khalifa's fake and made up 19 system claim, which is based on manipulation of the text data but still has some followers. Considering this, I hypothesized that God might have placed a special 19 based design in the verses of Chapter 9. And, without much surprise, I discovered these evidences on Chapter 9, which suggest that it is under a clear 19 based system and supports the already existing coding over all the 129 verses of chapter 9. Also, remember these evidences themselves are also additional upon all the main evidences of this book that suggest that the *full text* of Quran, which already incorporates the Chapter 9 with its 129 verses, is intact and unchanged.

Here is the "1048" digits length big number of this evidence:

"1234567891011121314151617181920212223242526272829303132333435363738394041424344454647484950515253545556575859606162636465666768697071727374757677787980818283848586878889909192939495969798991001011021031041051061071081091101111121131141151161171181191201211221231241251261271281291243124412451246124712481249125012511252125312541255125612571258125912601261126212631264126512661267126812691270127112721273127412751276127712781279128012811282128312841285128612871288128912901291129212931294129512961297129812991300130113021303130413051306130713081309131013111312131313141315131613171318131913201321132213231324132513261327132813291330133113321333133413351336133713381339134013411342134313441345134613471348134913501351135213531354135513561357135813591360136113621363136413651366136713681369137013719143222261823161310131820111124182324161082033231812282923231514291936312916431523131414151716151614221221171011161922261216171316191632262424124612915112025278251816181114131726231930181416162725221716161612242327153716202218172731952182217181216211415"

5.2.5 Probability of all the Evidences on At-Tawbah

There are at most 5 categories of the text as general verse index, chapter index, special verse index, words, letters. While calculating the probability considering the same coding

pattern, we need to take all of them into account for all the 6348 verses and also 6236 numbered verses. This makes in total 10 trials for the same coding pattern. Because there is no unnumbered Basmala only in the beginning of this unique chapter, there are two successes from special verse indexes and two success from number of words. There is one success from general verse index. This makes in total 5 successes. So, we can look at the probability as 5 successes in 10 trials considering all the possible combinations. Or, we might count special verse indexes, number of words and letters as a single trial as they provide the same numbers. The second approach seems unfair but even then we have 3 successes in 7 trials.

Let's first look at the more fair scenario where we counted 5 successes in 10 trials considering all. Then we compute this probability:

```
tmp <-binom.test(5,
                 10, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(formatC(tmp$p.value, format = "e", digits = 2), format
= "e", digits = 2)
print(paste("The probability of", 5,
            "success out of", 10 ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 5 success out of 10 (with p=1/19) is:
8.14e-05"
```

If we also consider the combination of the three evidences as an additional evidence then there is only one way of the combination of all the three evidences of one test type, which makes an additional one success and two trials. So, in total we have 6 trials and 12 successes regarding all the non-overlapping evidences of the chapter At-Tawbah. Here is the overall probability of all the non-overlapping evidences observed of the chapter At-Tawbah:

```
tmp <-binom.test(6,
                 12, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", 4,
            "success out of", 8 ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 4 success out of 8 (with p=1/19) is:
1.49e-05"
```

As the last process to do, let's add the number of successful evidences and the number of trials to be tested regarding this evidence in the global counters so that in the end of the book we can calculate the global probability using the counters. I will also add the last code that combines all the three rule based codes as it stands quite strong observation, meaningful and unique. Because, it was the only meaningful coding pattern we could test all of them together.

```
global_tested_nums <- global_tested_nums + 12
global_success_nums <- global_success_nums + 6
```

Also, here is the overall probability of all the evidences, including the latest evidence on At-Tawbah observed so far in this book:

```
tmp <-binom.test(global_success_nums,
                 global_tested_nums, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", global_success_nums,
            "success out of", global_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 32 success out of 64 (with p=1/19) is:
4.13e-24"
```

For the reference, to the best of my knowledge, Evidence 5.2 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 5.2 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

5.2.6 Facts on At-Tawbah chapter:

In the following, I will provide some further 19 based relations of Chapter 9 and the last two verses of Chapter 9. I present them only as facts but not as evidences.

Fact

The only remaining number we could test is the number of letters of Chapter 9. We do not observe similar concatenation coding pattern on the number of letters of Chapter 9 but in this case we observed that **the total number of letters of Chapter 9 is 11115** and it is also multiple of 19.

Other Facts

Since the speculations were over the two verses, verse 128 and 129 of Chapter 9, I also tried some potential evidences and observed many interesting coding facts. I will present them here just as **facts**. Because, to claim them to be evidence I need to test all of them over all the last two verses of each chapter and I have no motivation for that yet. Because the presented evidences on At-Tawbah already proves that Chapter 9 has 19 based design and thus intact. However, for curious readers, I leave my findings here as **facts**. Let's first see all of their numbers:

Chapter index: 9, Verse index:128, Number of words: 14, Number of letters:60

This makes total representation number as: 91281460

Chapter index: 9, Verse index:129, Number of words: 15, Number of letters:54

This makes total representation number as: 91291554

Fact 1 The sum of these two numbers is multiple of 19 as follows:

```
#Digit sum of the three big numbers of Chapter 9
tmp <- 91281460+91291554 # 182573014
tmp %% 19 # test if mod 19 is zero

## [1] 0
```

Fact 2 The sum of each of these 8 numbers is multiple of 19 as follows:

9+128+14+60 + 9+129+15+54 = 418 and 418/19 = 22

The sum of these numbers without the number of letters:

9+128+14 + 9+129+15 = 304 and 304/19 = 16

This means the sum of the number of letters also multiple of 19 but it is not any multiple, it is 114 that means the number of chapters! 60 + 54 = 114

The relation between the the number of letters and number of chapters does not seem to be coincidence. Because, additionally 60 represents the chapters with **even** number of verses and 54 represents the chapters with **odd** number of verses. (I recall reading 60 + 54 = 114 and the even/odd relation on an internet forum previously but I am not aware of proper source to cite this particular coding.)

Fact 3 Concatenation of just with chapter and verse indexes is multiple of 19: 9:128 and 9:129 makes 91289129 / 19 = 4804691

Fact 4 Concatenation of just with verse indexes and number of words verse:

Verse 128 has 14 words and verse 129 has 15 words.

Concatenation of them makes 1281412915 and 1281412915 / 19 = 67442785.

Fact 5 We generally refer to these two verses as 9:128 and 129. Sum of them is 9+128+129 = 266 and 266/19= 14.

Let me remind again, these are just interesting **facts** and presented here for mainly curious readers who may delve into it to test if any coding evidence exist with respect to all the other consecutive verses in Quran.

5.3 Evidence on the word Al-Zikr

As I mentioned earlier, Muslims believe that Quran is intact and unchanged and cannot be changed too. They believe so because of the following verse (15:9):

> "We, indeed We, it is We who have sent down the Reminder, and indeed it is We who will preserve it.", Quran, 15:9

In Arabic, this is the original verse:

> " إنا نحن نزلنا الذكر وإنا له لحافظون ", Quran, 15:9

Notably, God uses the word "The Reminder/Recitation" to refer to Quran, and promise to preserve it but not the book form of Quran as a manuscript. Here, "The Reminder" (Al-Zikr) means the memorized form of Quran that is verbally recited. There are more than tens of thousands of Hafiz (memorizers of the whole Quran) people around the world today who fully memorized Quran as an historical tradition and conveyed the message, as the primary medium of transmission of the Quran, as intact until today as God promised.

Back to the main point, God promises to preserve "The Reminder", Al-zikr (in Arabic: الذكر), and the *written form of that word* has been used exactly 19 times in overall Quran. Just to remind that it is the written form of that word without any *haraka* signs around the word, which is similar to the way Quran first written as *harakas* are helper markers later added to Arabic writing to help reading easier for especially non-Arabic speakers. Again to remind, the text I used for the analysis do not have any *haraka* signs and suitable to the native Arabic readers who do not need those haraka signs to read Quran. In that respect, it is similar to the way the Quran was being written at the very beginning. Feel free to copy and paste the Arabic word (in Arabic: الذكر) in the search box of the table in Chapter 5.3.1 and witness the word count of it in Quran yourself. In this book, the claim is that we can use 19 based coding system of the text of Quran to test and witness that Quran has been preserved. Therefore, it is remarkable and thus certainly an evidence that the written form of the specific word Al-Zikr (the Reminder) has been used 19 times over all Quran verses.

Because, as I mentioned earlier, as a knowledge source for the protection of Quran Muslims cites verse 15:9 and the word that is promised to be protected is Al-Zikr. I claim that we can objectively measure if it was protected or not by utilizing 19 based coding system. Because, if there is a measurable 19 based coding system then that observation suggests that the design was not distorted as otherwise we would not be able to observe such a system. Therefore, counting the number of the word Al-Zikr as exactly 19 is a remarkable observation and consider it as a strong evidence as it is significantly unlikely to observe a word being used 19 times in Quran. I measured it to support my statement on its probability. If you look at the Table 5.1 at Chapter 5.3.1, you can see all the 14870 unique words (written form without haraka markers) and their counts in the full text of Quran. There are 24 unique words used 19 times in Quran. We can easily calculate the probability of observing a word in Quran being used 19 times with those numbers. It is 24/14870 = 0.0016, namely its probability is 1.6 out of 1000 or more simply 1 out of 625, which is statistically very low and thus, cannot be attributed to chance from the scientific point of view as anything below 5% or more stringently 1% is usually not considered by chance in scientific studies. Note that we are not interested in any other word but the only word that was used while promising the protection of Quran (Al-Zikr).

Moreover, as a further **fact**, the written form of the word Zikr (Reminder) alone, without the "Al" definite article (The), was used 38 times (19x2) over all Quran verses. Feel free to copy and paste the Arabic word of Zikr (ذكر) in the search box of the table and see the word count of it in Quran yourself.

As an additional **fact**, this special verse 15:9, which declares that Quran (the Reminder) will be protected, is the 1824th verse out of all the 6348 verses of Quran and 1824 is also multiple of 19. This fact seems as another sign that might refer to the relation between the protection of Quran and 19 based system in its text.

In my opinion, this is a very unique and a remarkable evidence that deserves to contribute to the global counters for global probability calculation of the overall 19 based system. Because out of all the 14870 unique words in Quran, observing the word, Al-Zikr, which is used while promising to protect Quran, exactly 19 times and we hypothesize that the text of Quran has 19 based design that proves its protection is remarkable.

Let's add this remarkable evidence to the global counters. I will add only one success regarding the code on Al-Zikr only and treat the other codes as *facts* to have a more conservative global probability in the end. I will also assume its probability as 1/19 instead of 1/625 measured exact probability.

```
global_tested_nums <- global_tested_nums + 1
global_success_nums <- global_success_nums + 1
```

5.3.1 The unique words table to test word counts

Let's recall the unique words table. We can use this table to count the frequency of some specific words of interest. There are already existing **claims** that some words coincides with their known numbers in nature such as 365 for 'day', 12 for 'moon' and so on. I wanted to try those myself but realized that it is not that appealing to me as someone who does not know Arabic in sufficient detail. However, I mainly left this dynamic table for Arabic speaking people so that they can try their own tests based on the existing claims. In the online version of this book, one can paste the word of interest into the search box and find the frequencies of the pasted word in Quran easily.

In the following subsection, I will present some interesting word counts, which I observed from this words frequency table.

```
datatable(uwordsTable,
          caption = 'Table of the unique words of Quran',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel',
'csv')),
          rownames= FALSE)
```

Figure 5.1: Table

5.3.1.1 Facts on other related words

I will keep this section short by providing some related words and their frequencies. I will let you infer the potential relation to the book.

The word "get down" (أنزل) used 95 times (19 x 5).

The word "our revelations" (بآياتنا) used 57 times (19 x 3).

The word "promise (Vaad)" (وعد) used 38 times (19 x 2).

We knew, God **promised** to preserve the Reminder, revelations, which was sent down. Feel free to copy and paste the Arabic words in the search box of the table and see the word count of them yourself in Quran.

5.4 Evidences on words content

This evidence, considers the content of the chapters or verses with respect to the total number of words in them. I discovered this pattern in both, chapter and verse level data, as

there is similar design pattern. So, this chapter consist of two main 19 based coding examples, one in chapter level and the other in the verse level.

5.4.1 Evidence on chapter level words content

The first 19 based design is at the chapter level. You can check the dynamic table from Fact 6.6 to be able to see all the numbers at chapter level if you wish. We first get the indexes of the chapters with multiple of 19. We want to know which chapters have multiple of 19 word content and if there is 19 based design among all of them.

```
tmp <- dfVCWL$cWords #in 6348 verses
i1 <- which( (as.numeric(tmp) %% 19) == 0)
print("Indexes of the chapters with multiple of 19 word sum:")

## [1] "Indexes of the chapters with multiple of 19 word sum:"

print(i1)

## [1]  10  21  41  76  87  95  96 112
```

The way we get the indexes to be tested as follows: Firstly, from chapters of all the 6348 verse, we obtain the indexes of the chapters whose number of words are multiple of 19. As obtained above, these 8 chapters have total number of words with multiple of 19:

"10, 21, 41, 76, 87, 95, 96, 112"

When we concatenate these indexes, with the usual concatenation coding pattern, the indexes of the chapters with the number of words that is multiple of 19 considering all the 6348 verse category, we observe that this long number is multiple of 19. Here is the illustration of the coding pattern I described:

> [The first chapter with number of words as multiple of 19] [The second chapter with number of words as multiple of 19] . . . . [The last chapter with number of words as multiple of 19]

If we use the real numbers in the above formula, it would be like this:

> [10] [21] . . . . [112]

And, the final number after all the concatenation would look like this:

> 10214176879596112

Here is the proof:

```
tmp <- paste0(i1,collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0
```

Also, here is the 17 digits length big number:

"10214176879596112"

Now, we witnessed a 19 based meaningful code example. It is alone, would not be sufficient to consider as evidence. However, as we will see in the following, there is similar pattern at the verse level data too as follows:

5.4.2 Evidence on verse level content

In this evidence, similar to the previous pattern but at verse level data of the text, we select the verses with total number of words as multiple 19. When we concatenate the general verse indexes (general order) of the verses with the number of words that is multiple of 19 considering the all the 6348 verse category, we observe that the resulting long number is also multiple of 19. Here is the illustration of the coding pattern I described:

> [The first general verse order with the number of words as multiple of 19] [The second general verse order with the number of words as multiple of 19] . . . . [The last general verse order with the number of words as multiple of 19]

If we use the real numbers in the above formula, it would be like this:

> [21] [27] . . . . [5598]

And, the final number after all the concatenation would look like this:

> 2127 5598

Here is the proof:

```
tmp <- unQuran$vwords #in 6348 verses
i <- which( (as.numeric(tmp) %% 19) == 0)

cat("The number of verses with
    word content as multiple of 19 is ",
    length(i))

## The number of verses with
##     word content as multiple of 19 is  159
```

```r
cat("The general verse indexes of the verses
    with the number of words that are
    multiple of 19 considering all the 6348 verses: ")

## The general verse indexes of the verses
##     with the number of words that are
##     multiple of 19 considering all the 6348 verses:

cat(i)

## 21 27 37 43 44 56 83 114 132 145 156 186 225 285 345 442 446 465
503 529 542 561 569 605 631 638 650 680 713 727 743 744 753 824 831
929 953 995 1011 1013 1045 1047 1060 1083 1124 1127 1131 1193 1196
1199 1211 1277 1301 1309 1335 1411 1432 1487 1520 1526 1529 1530 1531
1573 1623 1630 1632 1638 1716 1731 1740 1745 1753 1755 1766 1943 1974
1992 2001 2009 2034 2090 2091 2108 2132 2145 2170 2172 2175 2195 2211
2214 2252 2419 2438 2500 2592 2738 2817 2840 2850 2856 2868 2872 2874
2880 2899 3183 3196 3200 3224 3248 3282 3293 3298 3349 3363 3366 3387
3408 3414 3419 3487 3495 3529 3624 3651 3657 3695 3734 3735 4110 4124
4196 4218 4269 4273 4287 4294 4310 4317 4320 4323 4325 4526 4565 4594
4633 4634 4647 4653 4676 4806 5168 5174 5206 5214 5275 5598

# Concatenate the indexes in the natural order
tmp <- paste0(i,collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0
```

Also, here is the 591 digits length big number:

“212737434456831141321451561862252853454424464655035295425615696056316
386506807137277437447538248319299539951011101310451047106010831124112 7
113111931196119912111277130113091335141114321487152015261529153015311 5
731623163016321638171617311740174517531755176619431974199220012009203 4
209020912108213221452170217221752195221122142252241924382500259227382 8
172840285028562868287228742880289931833196320032243248328232933298334 9
336333663387340834143419348734953529362436513657369537343735411041244 1
964218426942734287429443104317432043234325452645654594463346344647465 3
467648065168517452065214527555 98”

As we witnessed with the above two evidences, the content of chapters or verses with respect to the total number of words in them have two related 19 based codings in them. As

a side note, there is also this further fact that when we sum the length of both big numbers if the two evidences, the sum is 591+17 = 608 and it is also multiple of 19.

As the last process to do, let's add the number of successful evidences and the number of total numbers to be tested regarding this evidence in the global object so that in the end of the book we can calculate the global probability using the counters. We could also test in special verse indexes, considering the chapters level code and this verse level code, we might say 6 trials and 2 successes observed.

```
global_tested_nums <- global_tested_nums + 6
global_success_nums <- global_success_nums + 2
```

For the reference, to the best of my knowledge, Evidence 5.4 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 5.4 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

5.4.2.1 Fact on general verse order with word and also letter content

In Evidence 5.4.2, we witnessed that the concatenation of the general verse indexes of the verses with multiple of 19 word content yield a big number, which is multiple of 19 considering all the 6348 verses. In this **fact**, we will observe that if we look at the pattern from the other side, general verse index, and concatenate the word content of the general verse indexes with multiple of 19, then we again witness a big number as multiple of 19 considering the 6236 numbered verses. Remember that it is a general rule of this book to apply all coding patterns to both of the text types, all 6348 verses and 6236 numbered verses and this fact exist in the 6236 verses. Here is the illustration of the coding pattern I described:

> [The number of words of the First general verse index that is multiple of 19] [The number of words of the Second general verse index that is multiple of 19] . . . . [The number of words of the Last general verse index that is multiple of 19]

If we use the real numbers in the above formula, it would be like this:

> [7] [15] . . . . [2]

And, the final number after all the concatenation would look like this:

> 715 2

Here is the proof:

```
x<- nQuran #in 6236 numbered verses
tmp <- x$VerseI
i <- which( (as.numeric(tmp) %% 19) == 0)

cat("The number of verses with
    the general verse index as multiple of 19 is ",
    length(i))

## The number of verses with
##     the general verse index as multiple of 19 is  328

tmp<-x$vwords[i]
tmp <- paste0(tmp, collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0
```

Also, here is the 503 digits length big number:

"715101810173032431583927671414264513917152789291715254882014371824131
534206491614971515161641138136722221910166181222242911918222826114210 1
511201918155161726733624191616157125656101412271991325131314231123239 9
141181489847129668151891291314232710101914810263533198879861166311545 4
511121171313151213101312138221082116142313121022181372598693654435464 6
745341117141239192017812102498913987651113161544153112124937666525426 9
148345244213471219241518141812351055447811116435646243332654643539952 5
44264123944242"

Fact on the letter content: In this **fact**, we will observe that, in the same indexes described above, namely the general indexes of the verses that has multiple of 19 word content), if we concatenate the number of letters from right to left as with the rewriting coding pattern, then we observe the resulting big number is again multiple of 19. Here is the illustration of the coding pattern I described:

> [The number of letters of the Last general verse index that has multiple of 19 word content] . . . . [The number of letters of the Second general verse index that has multiple of 19 word content] [The number of letters of the First general verse index that has multiple of 19 word content]

If we use the real numbers in the above formula, it would be like this:

> [29] . . . . [14] [8]

And, the final number after all the concatenation would look like this:

$$29 \ldots . 148$$

Here is the proof:

```
x<- nQuran # 6236 numbered verses
tmp <- x$VerseI
i <- which( (as.numeric(tmp) %% 19) == 0)
cat("The number of verses with
    the general verse index as multiple of 19 is ",
    length(i))

## The number of verses with
##     the general verse index as multiple of 19 is  328

tmp<-x$vletters[i]
tmpr <- rev(tmp)
tmpr <- paste0(tmpr, collapse = "")
as.bigz(tmpr) %% 19 #mod 19 must be zero if multiple of 19

## Big Integer ('bigz') :
## [1] 0
```

Also, here is the 691 digits length big number:

“814101814421214618321017171991941371622151424111919131816161713341320
191312313646313517172025402413476564697210187511635510191610231920271 8
643231116991429222736193617534814155172607562421929284236534032351074 3
553470768214653627644122201528331520212415162024251336233938972762778 5
506761102617578393792326443604362657546523044535817182923214017202343 2
435353337388710815012243404785304210197514538513982533523273339271629 3
743603446653834102814492565848108604483103574639242829196339586268101 1
012712335104777320747363814760391414711312688883744122110954481266940 8
089883033661464716667069593432566044280921398052928716262813720410268 8
312537321076981476618796685424911618235611871301225946715070 29”

5.4.2.2 Fact on verse level word content with letters

In Evidence 5.4.2, we witnessed that the concatenation of the general verse indexes of the verses with multiple of 19 yield a big number, which is multiple of 19 considering all the 6348 verses. In this **fact**, we will observe that if we concatenate the number of letters from right the left as with the rewriting coding pattern, then we observe the resulting big

number is again multiple of 19. As the general rule, when we have letter content we only try rewriting direction while concatenating in the usual codings. Moreover the same coding pattern exist in both 6348 verses and also in 6236 numbered verses because the word contents are the same. Here is the illustration of the coding pattern I described:

> [The number of letters of the last verse that has multiple of 19 word content] . . . .
> [The number of letters of the second verse that has multiple of 19 word content]
> [The number of letters of the first verse that has multiple of 19 word content]

If we use the real numbers in the above formula, it would be like this:

> [250] . . . . [86] [77]

And, the final number after all the concatenation would look like this:

> 250 8677

Here is the proof:

```
x<- unQuran # 6348 verses
tmp <- x$vwords
i <- which( (as.numeric(tmp) %% 19) == 0)
tmp<-x$vletters[i]
tmpr <- rev(tmp)
tmpr <- paste0(tmpr, collapse = "")
as.bigz(tmpr) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0
```

Also, here is the 337 digits length big number:

“250877387731678476778693941677672152897190738893898982878185837668878
787687671918988726366787614885781367772928573315871731408785948592797 6
747775836317380787876967682718391716582757489671018679846876807975726 3
847385768186105828488728295798081777983156146957477756776787889158718 6
909116379757717788917884878087247163757983617769868070867 7”

The exact same coding pattern also exist in the 6236 numbered verses since the multiple of 19 word content are the same in both texts and so the letters.

5.5 Evidences and facts on indexes

In this chapter, we will see answer to this question: "Are there 19 based codes in particular to the chapter or verse indexes of the text of Quran?". The short answer is yes. We observe that the special verse indexes have clear 19 based coding. There are also other meaningful facts that might suggest the relation of general verse indexes to chapter and verse indexes too, which I present separately as **facts** in the subsections of this main chapter.

5.5.1 Evidence: the order of each and every verses

Quran was known to be revealed to Prophet Muhammad in around 22 years. All Muslims has this historical information that the order of the revelation was different than in the book of Quran we have in our hands today. I believe that the final order is also no coincidence, especially considering the odd situation with the unnumbered Basmala verses and also the bizarre absence of Basmala verse before Chapter 9 contrary to all the other chapters. Moreover, I interpret Verse 75:17 literally and consider it as a support on this matter too.

> "It is for Us to collect it and relate it.", Quran, 75:17

So, I believe, Quran was built as a book in this order with current verse and chapter orders deliberately from the beginning by God. However, as always, God knows best and this is what I understand.

All the previously presented evidences already supports this hypothesis. I also wanted to test whether there is any further 19 based coding with respect to the order of the verses alone If there is, it further assures that the order and size of all the verses (consequently, the order of chapters too) are intact and thus protected until today since around 632. We had already observed strong evidences so far but, I specifically wanted to test the order of verses alone as well, as it is the backbone of the structure of the text of Quran.

So, how could we test it? What should be the most meaningful rule to test that can convince ourselves such that there is a strong and miraculous evidence on the order of all the verses of Quran. So, I set the most simple and meaningful rule for this test, which is the most concise with no redundant number in it and yet sufficient to the test the order of the verses. We simply concatenated all the special verse indexes per chapter in their order in the book. Since we already know the order of the verses, we can just concatenate the special verse indexes regarding their current order from first to last verse and obtain the code to test. By special verse indexes, I mean the verse indexes we observe in each chapter, namely the verse indexes special to each chapter. So, the rule is very simple and also meaningful. We just concatenate all the indexes of the special verses indexes per chapter in their order in the Quran, starting from the first chapter till the last one that is 114. This big number does

not contain any redundant and unnecessary number to perform the test on the goal of interest, which is the order and size of verses and chapters as well.

Since, as per the universal rule, we have to apply all the coding patterns in both of the text types (6236 numbered and also all the 6348 verses) of Quran, we have to test this coding pattern in 6348 verses too. As there is no indexes of the unnumbered verses, we end up with the same big number to be tested for all the 6438 verses as well. This means, as the consequence of the universal rule, we have two tests and so have two successes with this evidence when we consider the special verse indexes.

Here is the illustration of the coding pattern I described:

> [The special verse index of the First verse of Quran (in first chapter)] [The special verse index of the Second verse of Quran (in first chapter)] . . . . [The special verse index of the Last verse of Quran (in last chapter)]

If we use the real numbers in the above formula, it would be like this:

> [1] [2] . . . . [6]

And, the final number after all the concatenation would look like this:

> 12 6

Here is the reproducible test and proof of this evidence that supports the hypothesis that the order of chapters and verses and also the size of verses of each chapter is correct and intact and protected from the beginning till now for more than 1387 years. As seen below, this big number is multiple of by 19, which stands as another important coding for the 19 based coding system of the text of Quran. Here is the proof of this evidence:

```
cat("The head part of the special verse indexes:")

## The head part of the special verse indexes:

head(nQuran$verse)

## [1] 1 2 3 4 5 6

cat("The tail part of the special verse indexes:")

## The tail part of the special verse indexes:

tail(nQuran$verse)

## [1] 1 2 3 4 5 6
```

```
tmpVc <- paste0(nQuran$verse, collapse = '')
cat("Test for mod 19:")

## Test for mod 19:

as.integer(as.bigz(tmpVc) %% 19)

## [1] 0

cat("The number of digits of the final number is: ", nchar(tmpVc))

## The number of digits of the final number is:  12471
```

Also, I need to mention that I thought I had first found this coding myself in 2019 as it was perfectly fitting to my general rules that I described in the beginning of the book, which is "concatenation of natural numbers in natural order". However, a few years later, I realized that this particular coding was already presented in another study too. I am not sure who first discovered it but since it is the only book publication that I saw this particular coding, I cite that publication, which is (Akdemir 2018) on page 126 (Last downloaded Nov 2022), for this particular code. This code is the only code that I needed to cite in my book as part of the general 19 based system I discovered and present in this book.

As the last thing to do, let's add the number of successful evidences and the number of trials to be tested regarding this evidence in the global counter so that in the end of the book we can calculate the global probability using the counters. Since we always consider the two text categories, this success is valid for both of them. So, we can say that, we have two out of two successes.

However, since I consider all the main indexes, we could also consider the chapter indexes from 1 to 114. Although 114 is multiple of 19, the current coding pattern, concatenation of its (6236 or 6348) indexes from 1 to 114 is not multiple of 19. Therefore, I will add two more trials into the global counters to be fair and as always be conservative on this point. Let me be more conservative and count the words and letters cases as well, which adds another 4 trials to the counters. We add them to the global counters as follows:

```
global_tested_nums <- global_tested_nums + 8
global_success_nums <- global_success_nums + 2
```

Finally, here is the 12471 digits length big number:

"1234567123456789101112131415161718192021222324252627282930313233343536
37383940414243444546474849505152535455565758596061626364656667686970717
2737475767778798081828384858687888990919293949596979899100101102103104
1051061071081091101111121131141151161171181191201211221231241251261

7128129130131132133134135136137138139140141142143144145146147148149150
151152153154155156157158159160161162163164165166167168169170171172173
741751761771781791801811821831841851861871881891901911921931941951961
719819920020120220320420520620720820921021121221321421521621721821922
221222223224225226227228229230231232233234235236237238239240241242243
442452462472482492502512522532542552562572582592602612622632642652662
726826927027127227327427527627727827928028128228328428528612345678910
112131415161718192021222324252627282930313233343536373839404142434445
647484950515253545556575859606162636465666768697071727374757677787980
818283848586878889909192939495969798991001011021031041051061071081091
101111121131141151161171181191201211221231241251261271281291301311321
341351361371381391401411421431441451461471481491501511521531541551561
571581591601611621631641651661671681691701711721731741751761771781791
011121314151617181920212223242526272829303132333435363738394041424344
546474849505152535455565758596061626364656667686970717273747576777879
081828384858687888990919293949596979899100101102103104105106107108109
101111121131141151161171181191201211221231241251261271281291301311321
341351361371381391401411421431441451461471481491501511521531541551561
571581591601611621631641651661671681691701711721731741751761234567891
011121314151617181920212223242526272829303132333435363738394041424344
546474849505152535455565758596061626364656667686970717273747576777879
081828384858687888990919293949596979899100101102103104105106107108109
101111121131141151161171181191201234567891011121314151617181920212223
242526272829303132333435363738394041424344454647484950515253545556575
960616263646566676869707172737475767778798081828384858687888990919293
949596979899100101102103104105106107108109110111112113114115116117118
912012112212312412512612712812913013113213313413513613713813914014114
214314415416417418419150151152153154155156157158159160161162163164165
234567891011121314151617181920212223242526272829303132333435363738394
041424344454647484950515253545556575859606162636465666768697071727374
767778798081828384858687888990919293949596979899100101102103104105106
071081091101111121131141151161171181191201211221231241251261271281291
013113213313413513613713813914014114214314415416417418419150151152153
154155156157158159160161162163164165166167168169170171172173174175176
771781791801811821831841851861871881891901911921931941951961971981992
020120220320420520612345678910111213141516171819202122232425262728293
031323334353637383940414243444546474849505152535455565758596061626364
666768697071727374751234567891011121314151617181920212223242526272829
031323334353637383940414243444546474849505152535455565758596061626364

5666768697071727374757677787980818283848586878889909192939495969798991
0010110210310410510610710810911011111211311411511611711811912012112212
3124125126127128129123456789101112131415161718192021222324252627282930
3132333435363738394041424344454647484950515253545556575859606162636465
6667686970717273747576777879808182838485868788899091929394959697989910
0101102103104105106107108109123456789101112131415161718192021222324252
6272829303132333435363738394041424344454647484950515253545556575859606
1626364656667686970717273747576777879808182838485868788899091929394959
6979899100101102103104105106107108109110111112113114115116117118119120
1211221231234567891011121314151617181920212223242526272829303132333435
3637383940414243444546474849505152535455565758596061626364656667686970
7172737475767778798081828384858687888990919293949596979899100101102103
1041051061071081091101111234567891011121314151617181920212223242526272
8293031323334353637383940414243123456789101112131415161718192021222324
2526272829303132333435363738394041424344454647484950515212345678910111
2131415161718192021222324252627282930313233343536373839404142434445464
7484950515253545556575859606162636465666768697071727374757677787980818
2838485868788899091929394959697989912345678910111213141516171819202122
2324252627282930313233343536373839404142434445464748495051525354555657
5859606162636465666768697071727374757677787980818283848586878889909192
9394959697989910010110210310410510610710810911011111211311411511611711
8119120121122123124125126127128123456789101112131415161718192021222324
2526272829303132333435363738394041424344454647484950515253545556575859
6061626364656667686970717273747576777879808182838485868788899091929394
9596979899100101102103104105106107108109110111123456789101112131415161
7181920212223242526272829303132333435363738394041424344454647484950515
2535455565758596061626364656667686970717273747576777879808182838485868
7888990919293949596979899100101102103104105106107108109110123456789101
1121314151617181920212223242526272829303132333435363738394041424344454
6474849505152535455565758596061626364656667686970717273747576777879808
1828384858687888990919293949596979812345678910111213141516171819202122
2324252627282930313233343536373839404142434445464748495051525354555657
5859606162636465666768697071727374757677787980818283848586878889909192
9394959697989910010110210310410510610710810911011111211311411511611711
8119120121122123124125126127128129130131132133134135123456789101112131
4151617181920212223242526272829303132333435363738394041424344454647484
9505152535455565758596061626364656667686970717273747576777879808182838
4858687888990919293949596979899100101102103104105106107108109110111112
1234567891011121314151617181920212223242526272829303132333435363738394
0414243444546474849505152535455565758596061626364656667686970717273747

5767778123456789101112131415161718192021222324252627282930313233343536
3738394041424344454647484950515253545556575859606162636465666768697071
7273747576777879808182838485868788899091929394959697989910010110210310
4105106107108109110111112113114115116117118123456789101112131415161718
1920212223242526272829303132333435363738394041424344454647484950515253
5455565758596061626364123456789101112131415161718192021222324252627282
9303132333435363738394041424344454647484950515253545556575859606162636
4656667686970717273747576771234567891011121314151617181920212223242526
2728293031323334353637383940414243444546474849505152535455565758596061
6263646566676869707172737475767778798081828384858687888990919293949596
9798991001011021031041051061071081091101111121131141151161171181191201
2112212312412512612712812913013113213313413513613713813914014114214314
4145146147148149150151152153154155156157158159160161162163164165166167
1681691701711721731741751761771781791801811821831841851861871881891901
9119219319419519619719819920020120220320420520620720820921021121221321
4215216217218219220221222223224225226227123456789101112131415161718192
0212223242526272829303132333435363738394041424344454647484950515253545
5565758596061626364656667686970717273747576777879808182838485868788899
0919293123456789101112131415161718192021222324252627282930313233343536
3738394041424344454647484950515253545556575859606162636465666768697071
7273747576777879808182838485868788123456789101112131415161718192021222
3242526272829303132333435363738394041424344454647484950515253545556575
8596061626364656667686912345678910111213141516171819202122232425262728
2930313233343536373839404142434445464748495051525354555657585960123456
7891011121314151617181920212223242526272829303132333412345678910111213
1415161718192021222324252627282930123456789101112131415161718192021222
3242526272829303132333435363738394041424344454647484950515253545556575
8596061626364656667686970717273123456789101112131415161718192021222324
2526272829303132333435363738394041424344454647484950515253541234567891
0111213141516171819202122232425262728293031323334353637383940414243444
5123456789101112131415161718192021222324252627282930313233343536373839
4041424344454647484950515253545556575859606162636465666768697071727374
7576777879808182831234567891011121314151617181920212223242526272829303
1323334353637383940414243444546474849505152535455565758596061626364656
6676869707172737475767778798081828384858687888990919293949596979899100
1011021031041051061071081091101111121131141151161171181191201211221231
2412512612712812913013113213313413513613713813914014114214314414514614
7148149150151152153154155156157158159160161162163164165166167168169170
1711721731741751761771781791801811821234567891011121314151617181920212
2232425262728293031323334353637383940414243444546474849505152535455565

7585960616263646566676869707172737475767778798081828384858687881234567
8910111213141516171819202122232425262728293031323334353637383940414243
4445464748495051525354555657585960616263646566676869707172737475123456
7891011121314151617181920212223242526272829303132333435363738394041424
3444546474849505152535455565758596061626364656667686970717273747576777
8798081828384851234567891011121314151617181920212223242526272829303132
3334353637383940414243444546474849505152535412345678910111213141516171
8192021222324252627282930313233343536373839404142434445464748495051525
3123456789101112131415161718192021222324252627282930313233343536373839
4041424344454647484950515253545556575859606162636465666768697071727374
7576777879808182838485868788891234567891011121314151617181920212223242
5262728293031323334353637383940414243444546474849505152535455565758591
2345678910111213141516171819202122232425262728293031323334353637123456
7891011121314151617181920212223242526272829303132333435123456789101112
1314151617181920212223242526272829303132333435363738123456789101112131
4151617181920212223242526272829123456789101112131415161718123456789101
1121314151617181920212223242526272829303132333435363738394041424344451
2345678910111213141516171819202122232425262728293031323334353637383940
4142434445464748495051525354555657585960123456789101112131415161718192
0212223242526272829303132333435363738394041424344454647484912345678910
1112131415161718192021222324252627282930313233343536373839404142434445
4647484950515253545556575859606162123456789101112131415161718192021222
3242526272829303132333435363738394041424344454647484950515253545512345
6789101112131415161718192021222324252627282930313233343536373839404142
4344454647484950515253545556575859606162636465666768697071727374757677
7812345678910111213141516171819202122232425262728293031323334353637383
9404142434445464748495051525354555657585960616263646566676869707172737
4757677787980818283848586878889909192939495961234567891011121314151617
1819202122232425262728291234567891011121314151617181920212212345678910
1112131415161718192021222324123456789101112131234567891011121314123456
7891011123456789101112345678910111213141516171812345678910111212345678
9101112123456789101112131415161718192021222324252627282930123456789101
1121314151617181920212223242526272829303132333435363738394041424344454
6474849505152123456789101112131415161718192021222324252627282930313233
3435363738394041424344454647484950515212345678910111213141516171819202
1222324252627282930313233343536373839404142434412345678910111213141516
1718192021222324252627281234567891011121314151617181920212223242526272
8123456789101112131415161718192012345678910111213141516171819202122232
4252627282930313233343536373839404142434445464748495051525354555612345
6789101112131415161718192021222324252627282930313233343536373839401234

5678910111213141516171819202122232425262728293031123456789101112131415
1617181920212223242526272829303132333435363738394041424344454647484950
1234567891011121314151617181920212223242526272829303132333435363738394
0123456789101112131415161718192021222324252627282930313233343536373839
4041424344454612345678910111213141516171819202122232425262728293031323
3343536373839404142123456789101112131415161718192021222324252627282912
3456789101112131415161718191234567891011121314151617181920212223242526
2728293031323334353612345678910111213141516171819202122232425123456789
1011121314151617181920212212345678910111213141516171234567891011121314
1516171819123456789101112131415161718192021222324252612345678910111213
1415161718192021222324252627282930123456789101112131415161718192012345
6789101112131415123456789101112131415161718192021123456789101112345678
1234567812345678910111213141516171819123451234567812345678123456789101
1123456789101112345678123123456789123451234123456712312345612312345123
412345123456”

Discussion on this and other similar evidences:

Can you imagine that people of that time could design such an evidence themselves even if they wanted to? They did not even had abundance of papers and pen but using mainly animal skins as papers. Imagine right now, you are given this task and a big prize. Can you manually, using only papers and pen, divide this big very big number into 19 and make sure it is multiple of 19? As you might admit, this seems practically impossible to perform by the people of that time with their limited knowledge.

Another point is that this evidence supports the idea that not only the order of chapters, but also the total number of verses per chapter is also intact and thus unchanged since the beginning till now. This evidence is so simple and elegant and thus stands up against any argument on the verse order of the text of Quran.

5.5.1.1 Fact: Rewriting chapter indexes

This code is against the general rules but kept here as an achieve to make sure future investigators would have a better reason to include it as evidence in case they consider it. Because I do not consider it as an evidence as dies not align with my general rules set. In this code when the chapter indexes of each chapter are concatenated from right to left in the numbered verses of Quran, the resulting big number is multiple of 19 as below. Since this approach is against the rules I set in this book, I just present it as a code, which might be useful fo related discussions in the future.

```
tmp <- paste0(dfVCwl$Chapter_index)
tmpr<-rev(tmp)
head(tmpr)

## [1] "114" "113" "112" "111" "110" "109"

tmpr <- paste0(tmpr, collapse = '')
cat(as.numeric(as.bigz(tmpr) %% 19))

## 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 234
```

Here is the 234 digits length big number:

"114113112111110109108107106105104103102101100999897969594939291908988
87868584838281807978777675747372717069686766656463626160595857565554 53
52515049484746454443424140393837363534333231302928272625242322212019 18
17161514131211109876543 21"

5.5.2 Facts: The general verse indexes and others

In this section, I will present codings as **facts** that show the 19 based codes between the general verse indexes and others indexes, which are chapters and special verse indexes. As a general rule we do not test the combinations of the four main descriptive numbers. On the other hand, general verse indexes are outside of these four main descriptive numbers. Thus, we might have specific hypotheses for it. The following sub-sections presents the mentioned facts.

5.5.2.1 Fact: Pairing general verse and chapters

This fact shows a coding among the general verse indexes and the corresponding chapter indexes of both text types of Quran, namely, all 6348 verses and only 6236 numbered verses.

I will present a fact similar to the paired coding pattern of Evidence 4.2.9.2, but this time, with only **general verse** indexes and **chapter** indexes. This fact is also similar to the general pairing approach we have in Evidence 4.2.9, Evidence 4.2.9.1 and also Evidence 4.2.9.2.

```
tmp1 <- paste0(unQuran$VerseI, unQuran$chapter)
tmp2 <- paste0(nQuran$VerseI, nQuran$chapter)
```

```r
tmp <- paste0(tmp1,tmp2)

# To see what is going on in
# concatenation at the unmatched indexes
head(tmp)

## [1] "1111" "2121" "3131" "4141" "5151" "6161"

tmp1[6235:6238]

## [1] "623599" "623699" "623799" "623899"

tmp2[6235:6236]

## [1] "6235114" "6236114"

tmp[6235:6238]

## [1] "6235996235114" "6236996236114" "62379911"      "62389921"

#
tmp <- paste0(tmp, collapse = '')
cat(as.integer(as.bigz(tmp) %% 19))

## 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 71090
```

Here is the 71090 digits length big number:

"111121213131414151516161717182829292102102112112122122132132142142152
152162162172172182182192192202202212212222222232232242242252252262262
2
7227228228229229230230231231232232233233234234235235236236237237238238
2392392402402412412422422432432442442452452462462472472482482492492502
502512512522522532532542542552552562562572572582582592592602602612612
6
2262263263264264265265266266267267268268269269270270271271272272273273
2742742752752762762772772782782792792802802812812822822832832842842852
852862862872872882882892892902902912912922922932932942942952952962962
9
7297298298299299210021002101210121022102210321032104210421052105210621
0621072107210821082109210921102110211121112112211221132113211421142115
2115211621162117211721182118211921192120212021212121212221222123212321
2421242125212521262126212721272128212821292129213021302131213121322132
2133213321342134213521352136213621372137213821382139213921402140214121
```
```

4121422142214321432144214421452145214621462147214721482148214921492150
2150215121512152215221532153215421542155215521562156215721572158215821
5921592160216021612161216221622163216321642164216521652166216621672167
2168216821692169217021702171217121722172217321732174217421752175217621
7621772177217821782179217921802180218121812182218221832183218421842185
2185218621862187218721882188218921892190219021912191219221922193219321
9421942195219521962196219721972198219821992199220022002201220122022202
2203220322042204220522052206220622072207220822082209220922102210221122
1122122212221322132214221422152215221622162217221722182218221922192220
2220222122212222222222232223222422242225222522262226222722272228222822
2922292230223022312231223222322233223322342234223522352236223622372237
2238223822392239224022402241224122422242224322432244224422452245224622
4622472247224822482249224922502250225122512252225222532253225422542255
2255225622562257225722582258225922592260226022612261226222622263226322
6422642265226522662266226722672268226822692269227022702271227122722272
2273227322742274227522752276227622772277227822782279227922802280228122
8122822282228322832284228422852285228622862287228722882288228922892290
2290229122912292229222932293229422942295329532963296329732973298329832
9932993300330033013301330233023303330333043304330533053306330633073307
3308330833093309331033103311331133123312331333133314331433153315331633
1633173317331833183319331933203320332133213322332233233323332433243325
3325332633263327332733283328332933293330333033313331333233233333333333
3433343335333533363336333733373338333833393339334033403341334133423342
3343334333443344334533453346334633473347334833483349334933503350335133
5133523352335333533354335433553355335633563357335733583358335933593360
3360336133613362336233633363336433643365336533663366336733673368336833
6933693370337033713371337233723373337333743374337533753376337633773377
3378337833793379338033803381338133823382338333833384338433853385338633
8633873387338833883389338933903390339133913392339233933393339433943395
3395339633963397339733983398339933993400340034013401340234023403340334
0434043405340534063406340734073408340834093409341034103411341134123412
3413341334143414341534153416341634173417341834183419341934203420342134
2134223422342334233424342434253425342634263427342734283428342934293430
3430343134313432343234333433343434343435343534363436343734373438343834
3934393440344034413441344234423443344334443444344534453446344634473447
3448344834493449345034503451345134523452345334533454345434553455345634
5634573457345834583459345934603460346134613462346234633463346434643465
3465346634663467346734683468346934693470347034713471347234723473347334
7434743475347534763476347734773478347834793479348034803481348134823482
3483348334843484348534853486348634873487348834883489348934903490349134

913492349234933493349434944495349544964496449744974498449844994499450
0450045014501450245024503450345044504450545054506450645074507450845
0945094510451045114511451245124513451345144514451545154516451645174517
4518451845194519452045204521452145224522452345234524452445254525452645
2645274527452845284529452945304530453145314532453245334533453445344535
4535453645364537453745384538453945394540454045414541454245424543454345
4445444545454545464546454745474548454845494549455045504551455145524552
4553455345544554455545554556455645574557455845584559455945604560456145
6145624562456345634564456445654565456645664567456745684568456945694570
4570457145714572457245734573457445744575457545764576457745774578457845
7945794580458045814581458245824583458345844584458545854586458645874587
4588458845894589459045904591459145924592459345934594459445954595459645
9645974597459845984599459946004600460146014602460246034603460446044605
4605460646064607460746084608460946094610461046114611461246124613461346
1446144615461546164616461746174618461846194619462046204621462146224622
4623462346244624462546254626462646274627462846284629462946304630463146
3146324632463346334634463446354635463646364637463746384638463946394640
4640464146414642464246434643464446444645464546464646464746474648464846
4946494650465046514651465246524653465346544654465546554656465646574657
4658465846594659466046604661466146624662466346634664466446654665466646
6646674667466846684669466946704670567146715672467256735673567456745675
5675567656765677567756785678567956795680568056815681568256825683568356
8456845685568556865686568756875688568856895689569056905691569156925692
5693569356945694569556955696569656975697569856985699569957005700570157
0157025702570357035704570457055705570657065707570757085708570957095710
5710571157115712571257135713571457145715571557165716571757175718571857
1957195720572057215721572257225723572357245724572557255726572657275727
5728572857295729573057305731573157325732573357335734573457355735573657
3657375737573857385739573957405740574157415742574257435743574457445745
5745574657465747574757485748574957495750575057515751575257525753575357
5457545755575557565756575757575758575857595759576057605761576157625762
5763576357645764576557655766576657675767576857685769576957705770577157
7157725772577357735774577457755775577657765777577757785778577957795780
5780578157815782578257835783578457845785578557865786578757875788578857
8957895790579067915791679257926793579367946794679567956796679677976797
6798679867996799680068006801680168026802680368036804680468056805680668
0668076807680868086809680968106810681168116812681268136813681468146815
6815681668166817681768186818681968196820682068216821682268226823682368
2468246825682568266826682768276828682868296829683068306831683168326832
6833683368346834683568356836683668376837683868386839683968406840684168

4168426842684368436844684468456845684668466847684768486848684968496850
6850685168516852685268536853685468546855685568566856685768576858685868
5968596860686068616861686268626863686368646864686568656866686668676867
6868686868696869687068706871687168726872687368736874687468756875687668
7668776877687868786879687968806880688168816882688268836883688468846885
6885688668866887688768886888688968896890689068916891689268926893689368
9468946895689568966896689768976898689868996899690069006901690169026902
6903690369046904690569056906690669076907690869086909690969106910691169
1169126912691369136914691469156915691669166917691769186918691969196920
6920692169216922692269236923692469246925692569266926692769276928692869
2969296930693069316931693269326933693369346934693569356936693669376937
6938693869396939694069406941694169426942694369436944694469456945694669
4669476947694869486949694969506950695169516952695269536953695469546955
6955795669567957695779586958795969597960796079617961796279627963796379
6479647965796579667966796779677968796879697969797079707971797179727972
7973797379747974797579757976797679777977797879787979797979798079807981 79
8179827982798379837984798479857985798679867987798779887988798979897990
7990799179917992799279937993799479947995799579967996799779977998799879
9979997100071000710017100171002710027100371003710047100471005710057100
6710067100771007710087100871009710097101071010710117101171012710127101
3710137101471014710157101571016710167101771017710187101871019710197102
0710207102171021710227102271023710237102471024710257102571026710267102
7710277102871028710297102971030710307103171031710327103271033710337103
4710347103571035710367103671037710377103871038710397103971040710407104
1710417104271042710437104371044710447104571045710467104671047710477104
8710487104971049710507105071051710517105271052710537105371054710547105
5710557105671056710577105771058710587105971059710607106071061710617106
2710627106371063710647106471065710657106671066710677106771068710687106
9710697107071070710717107171072710727107371073710747107471075710757107
6710767107771077710787107871079710797108071080710817108171082710827108
3710837108471084710857108571086710867108771087710887108871089710897109
0710907109171091710927109271093710937109471094710957109571096710967109
7710977109871098710997109971100711007110171101711027110271103711037110
4711047110571105711067110671107711077110871108711097110971110711107111
1711117111271112711137111371114711147111571115711167111671117711177111
8711187111971119711207112071121711217112271122711237112371124711247112
5711257112671126711277112771128711287112971129711307113071131711317113
2711327113371133711347113471135711357113671136711377113771138711387113
9711397114071140711417114171142711427114371143711447114471145711457114
6711467114771147711487114871149711497115071150711517115171152711527115

371153711547115471155711557115671156711577115771158711587115971159711597116
071160711617116181162711628116371163811647116481165711658116671166811668116
781167811688116881169811698117081170811718117181172811728117381173811738117
481174811758117581176811768117781177811788117881179811798118081180811808118
181181811828118281183811838118481184811858118581186811868118781187811878118
881188811898118981190811908119181191811928119281193811938119481194811948119
581195811968119681197811978119881198811998119981200812008120181201812018120
281202812038120381204812048120581205812068120681207812078120881208812088120
981209812108121081211812118121281212812138121381214812148121581215812158121
681216812178121781218812188121981219812208122081221812218122281222812228122
381223812248122481225812258122681226812278122781228812288122981229812298123
081230812318123181232812328123381233812348123481235812358123681236812369123
781237912388123891239812399124081240912418124191242812429124391243912439124
491244912459124591246912469124791247912489124891249912499125091250912509125
191251912529125291253912539125491254912559125591256912569125791257912579125
891258912599125991260912609126191261912629126291263912639126491264912649126
591265912669126691267912679126891268912699126991270912709127191271912719127
291272912739127391274912749127591275912769127691277912779127891278912789127
991279912809128091281912819128291282912839128391284912849128591285912859128
691286912879128791288912889128991289912909129091291912919129291292912929129
391293912949129491295912959129691296912979129791298912989129991299912999130
091300913019130191302913029130391303913049130491305913059130691306913069130
791307913089130891309913099131091310913119131191312913129131391313913139131
491314913159131591316913169131791317913189131891319913199132091320913209132
191321913229132291323913239132491324913259132591326913269132791327913279132
891328913299132991330913309133191331913329133291333913339133491334913349133
591335913369133691337913379133891338913399133991340913409134191341913419134
291342913439134391344913449134591345913469134691347913479134891348913489134
991349913509135091351913519135291352913539135391354913549135591355913559135
691356913579135791358913589135991359913609136091361913619136291362913629136
391363913649136491365913651013669136610136791367101368913681013699136910
101370913701013719137110137210137210137310137310137410137410137510137510
101376101376101377101377101378101378101379101379101380101380101381101381
011013821013821013831013831013841013841013851013851013861013861013871013
871013881013881013891013891013901013901013911013911013921013921013931013
931013941013941013951013951013961013961013971013971013981013981013991013
991014001014001014011014011014021014021014031014031014041014041014051014
051014061014061014071014071014081014081014091014091014101014101014111014
111014121014121014131014131014141014141014151014151014161014161014171014
171014181014181014191014191014201014201014211014211014221014

1422101423101423101424101424101425101425101426101426101427101427101428
1014281014291014291014301014301014311014311014321014321014331014331014
3410143410143510143510143610143610143710143710143810143810143910143910
1440101440101441101441101442101442101443101443101444101444101445101445
1014461014461014471014471014481014481014491014491014501014501014511014
5110145210145210145310145310145410145410145510145510145610145610145710
1457101458101458101459101459101460101460101461101461101462101462101463
1014631014641014641014651014651014661014661014671014671014681014681014
6910146910147010147010147110147110147210147210147310147310147410147411
1475101475111476101476111477101477111478101478111479101479111480101480
1114811014811114821114821114831114831114841114841114851114851114861114
8611148711148711148811148811148911148911149011149011149111149111149211
1492111493111493111494111494111495111495111496111496111497111497111498
1114981114991114991115001115001115011115011115021115021115031115031115
0411150411150511150511150611150611150711150711150811150811150911150911
1510111510111511111511111512111512111513111513111514111514111515111515
1115161115161115171115171115181115181115191115191115201115201115211115
2111152211152211152311152311152411152411152511152511152611152611152711
1527111528111528111529111529111530111530111531111531111532111532111533
1115331115341115341115351115351115361115361115371115371115381115381115
3911153911154011154011154111154111154211154211154311154311154411154411
1545111545111546111546111547111547111548111548111549111549111550111550
1115511115511115521115521115531115531115541115541115551115551115561115
5611155711155711155811155811155911155911156011156011156111156111156211
1562111563111563111564111564111565111565111566111566111567111567111568
1115681115691115691115701115701115711115711115721115721115731115731115
7411157411157511157511157611157611157711157711157811157811157911157911
1580111580111581111581111582111582111583111583111584111584111585111585
1115861115861115871115871115881115881115891115891115901115901115911115
9111159211159211159311159311159411159411159511159511159611159611159711
1597121598111598121599111599121600111600121601111601121602111602121603
1116031216041116041216051116051216061216061216071216071216081216081216
0912160912161012161012161112161112161212161212161312161312161412161412
1615121615121616121616121617121617121618121618121619121619121620121620
1216211216211216221216221216231216231216241216241216251216251216261216
2612162712162712162812162812162912162912163012163012163112163112163212
1632121633121633121634121634121635121635121636121636121637121637121638
1216381216391216391216401216401216411216411216421216421216431216431216
4412164412164512164512164612164612164712164712164812164812164912164912
1650121650121651121651121652121652121653121653121654121654121655121655

1216561216561216571216571216581216581216591216591216601216601216611216
6112166212166212166312166312166412166412166512166512166612166612166712
1667121668121668121669121669121670121670121671121671121672121672121673
1216731216741216741216751216751216761216761216771216771216781216781216
7912167912168012168012168112168112168212168212168312168312168412168412
1685121685121686121686121687121687121688121688121689121689121690121690
1216911216911216921216921216931216931216941216941216951216951216961216
9612169712169712169812169812169912169912170012170012170112170112170212
1702121703121703121704121704121705121705121706121706121707121707121708
1217081317091217091317101217101317111217111317121217121317131217131317
1412171413171512171513171612171613171712171713171813171813171913171913
1720131720131721131721131722131722131723131723131724131724131725131725
1317261317261317271317271317281317281317291317291317301317301317311317
3113173213173213173313173313173413173413173513173513173613173613173713
1737131738131738131739131739131740131740131741131741131742131742131743
1317431317441317441317451317451317461317461317471317471317481317481317
4913174913175013175013175113175114175213175214175313175314175413175414
1755131755141756131756141757131757141758131758141759131759141760131760
1417611317611417621417621417631417631417641417641417651417651417661417
6614176714176714176814176814176914176914177014177014177114177114177214
1772141773141773141774141774141775141775141776141776141777141777141778
1417781417791417791417801417801417811417811417821417821417831417831417
8414178414178514178514178614178614178714178714178814178814178914178914
1790141790141791141791141792141792141793141793141794141794141795141795
1417961417961417971417971417981417981417991417991418001418001418011418
0114180214180214180314180315180414180415180514180515180614180615180714
1807151808141808151809141809151810141810151811141811151812141812151813
1418131518141418141518151518151518151618151618151817151817151818151818151518
1915181915182015182015182115182115182215182215182315182315182415182415
1825151825151826151826151827151827151828151828151829151829151830151830
1518311518311518321518321518331518331518341518341518351518351518361518
3615183715183715183815183815183915183915184015184015184115184115184215
1842151843151843151844151844151845151845151846151846151847151847151848
1518481518491518491518501518501518511518511518521518521518531518531518
5415185415185515185515185615185615185715185715185815185815185915185915
1860151860151861151861151862151862151863151863151864151864151865151865
1518661518661518671518671518681518681518691518691518701518701518711518
7115187215187215187315187315187415187415187515187515187615187615187715
1877151878151878151879151879151880151880151881151881151882151882151883
1518831518841518841518851518851518861518861518871518871518881518881518

8915188915189015189015189115189115189215189215189315189315189415189415
1895151895151896151896151897151897151898151898151899151899151900151900
1519011519011519021519021619031519031619041519041619051519051619061519
0616190715190716190815190816190915190916191015191016191115191116191215
1912161913151913161914151914161915161915161916161916161917161917161918
1619181619191619191619201619201619211619211619221619221619231619231619
2416192416192516192516192616192616192716192716192816192816192916192916
1930161930161931161931161932161932161933161933161934161934161935161935
1619361619361619371619371619381619381619391619391619401619401619411619
4116194216194216194316194316194416194416194516194516194616194616194716
1947161948161948161949161949161950161950161951161951161952161952161953
1619531619541619541619551619551619561619561619571619571619581619581619
5916195916196016196016196116196116196216196216196316196316196416196416
1965161965161966161966161967161967161968161968161969161969161970161970
1619711619711619721619721619731619731619741619741619751619751619761619
7616197716197716197816197816197916197916198016198016198116198116198216
1982161983161983161984161984161985161985161986161986161987161987161988
1619881619891619891619901619901619911619911619921619921619931619931619
9416199416199516199516199616199616199716199716199816199816199916199916
2000162000162001162001162002162002162003162003162004162004162005162005
1620061620061620071620071620081620081620091620091620101620101620111620
1116201216201216201316201316201416201416201516201516201616201616201716
2017162018162018162019162019162020162020162021162021162022162022162023
1620231620241620241620251620251620261620261620271620271620281620281620
2916202916203016203017203116203117203216203217203316203317203416203417
2035162035172036162036172037162037172038162038172039162039172040162040
1720411620411720421620421720431620431720441720441720451720451720461720
4617204717204717204817204817204917204917205017205017205117205117205217
2052172053172053172054172054172055172055172056172056172057172057172058
1720581720591720591720601720601720611720611720621720621720631720631720
6417206417206517206517206617206617206717206717206817206817206917206917
2070172070172071172071172072172072172073172073172074172074172075172075
1720761720761720771720771720781720781720791720791720801720801720811720
8117208217208217208317208317208417208417208517208517208617208617208717
2087172088172088172089172089172090172090172091172091172092172092172093
1720931720941720941720951720951720961720961720971720971720981720981720
9917209917210017210017210117210117210217210217210317210317210417210417
2105172105172106172106172107172107172108172108172109172109172110172110
1721111721111721121721121721131721131721141721141721151721151721161721
1617211717211717211817211817211917211917212017212017212117212117212217

2122172123172123172124172124172125172125172126172126172127172127172128
1721281721291721291721301721301721311721311721321721321721331721331721
3417213417213517213517213617213617213717213717213817213817213917213917
2140172140172141172141182142172142182143172143182144172144182145172145
1821461721461821471721471821481721481821491721491821501721501821511721
5118215217215218215317215318215417215418215517215518215618215618215718
2157182158182158182159182159182160182160182161182161182162182162182163
1821631821641821641821651821651821661821661821671821671821681821681821
6918216918217018217018217118217118217218217218217318217318217418217418
2175182175182176182176182177182177182178182178182179182179182180182180
1821811821811821821821821821831821831821841821841821851821851821861821
8618218718218718218818218818218918218918219018219018219118219118219218
2192182193182193182194182194182195182195182196182196182197182197182198
1821981821991821991822001822001822011822011822021822021822031822031822
0418220418220518220518220618220618220718220718220818220818220918220918
2210182210182211182211182212182212182213182213182214182214182215182215
1822161822161822171822171822181822181822191822191822201822201822211822
2118222218222218222318222318222418222418222518222518222618222618222718
2227182228182228182229182229182230182230182231182231182232182232182233
1822331822341822341822351822351822361822361822371822371822381822381822
3918223918224018224018224118224118224218224218224318224318224418224418
2245182245182246182246182247182247182248182248182249182249182250182250
1822511822511922521822521922531822531922541822541922551822551922561822
5619225718225719225818225819225918225919226018226019226118226119226218
2262192263182263192264182264192265182265192266182266192267192267192268
1922681922691922691922701922701922711922711922721922721922731922731922
7419227419227519227519227619227619227719227719227819227819227919227919
2280192280192281192281192282192282192283192283192284192284192285192285
1922861922861922871922871922881922881922891922891922901922901922911922
9119229219229219229319229319229419229419229519229519229619229619229719
2297192298192298192299192299192300192300192301192301192302192302192303
1923031923041923041923051923051923061923061923071923071923081923081923
0919230919231019231019231119231119231219231219231319231319231419231419
2315192315192316192316192317192317192318192318192319192319192320192320
1923211923211923221923221923231923231923241923241923251923251923261923
2619232719232719232819232819232919232919233019233019233119233119233219
2332192333192333192334192334192335192335192336192336192337192337192338
1923381923391923391923401923401923411923411923421923421923431923431923
4419234419234519234519234619234619234719234719234819234819234919234920
2350192350202351192351202352192352202353192353202354192354202355192355

2023561923562023571923572023581923582023591923592023601923602023611923
6120236219236220236319236320236419236420236519236520236620236620236720
2367202368202368202369202369202370202370202371202371202372202372202373
2023732023742023742023752023752023762023762023772023772023782023782023
7920237920238020238020238120238120238220238220238320238320238420238420
2385202385202386202386202387202387202388202388202389202389202390202390
2023912023912023922023922023932023932023942023942023952023952023962023
9620239720239720239820239820239920239920240020240020240120240120240220
2402202403202403202404202404202405202405202406202406202407202407202408
2024082024092024092024102024102024112024112024122024122024132024132024
1420241420241520241520241620241620241720241720241820241820241920241920
2420202420202421202421202422202422202423202423202424202424202425202425
2024262024262024272024272024282024282024292024292024302024302024312024
3120243220243220243320243320243420243420243520243520243620243620243720
2437202438202438202439202439202440202440202441202441202442202442202443
2024432024442024442024452024452024462024462024472024472024482024482024
4920244920245020245020245120245120245220245220245320245320245420245420
2455202455202456202456202457202457202458202458202459202459202460202460
2024612024612024622024622024632024632024642024642024652024652024662024
6620246720246720246820246820246920246920247020247020247120247120247220
2472202473202473202474202474202475202475202476202476202477202477202478
2024782024792024792024802024802024812024812024822024822024832024832024
8420248421248520248521248620248621248720248721248820248821248920248921
2490202490212491202491212492202492212493202493212494202494212495202495
2124962024962124972024972124982024982124992024992125002025002125012025
0121250221250221250321250321250421250421250521250521250621250621250721
2507212508212508212509212509212510212510212511212511212512212512212513
2125132125142125142125152125152125162125162125172125172125182125182125
1921251921252021252021252121252121252221252221252321252321252421252421
2525212525212526212526212527212527212528212528212529212529212530212530
2125312125312125322125322125332125332125342125342125352125352125362125
3621253721253721253821253821253921253921254021254021254121254121254221
2542212543212543212544212544212545212545212546212546212547212547212548
2125482125492125492125502125502125512125512125522125522125532125532125
5421255421255521255521255621255621255721255721255821255821255921255921
2560212560212561212561212562212562212563212563212564212564212565212565
2125662125662125672125672125682125682125692125692125702125702125712125
7121257221257221257321257321257421257421257521257521257621257621257721
2577212578212578212579212579212580212580212581212581212582212582212583
2125832125842125842125852125852125862125862125872125872125882125882125

8921258921259021259021259121259121259221259221259321259321259421259421
2595212595212596212596222597212597222598212598222599212599222600212600
2226012126012226022126022226032126032226042126042226052126052226062126
0622260721260722260821260822260921260922261021261022261121261122261221
2612222613212613222614212614222615222615222616222616222617222617222618
2226182226192226192226202226202226212226212226222226222226232226232226
2422262422262522262522262622262622262722262722262822262822262922262922
2630222630222631222631222632222632222633222633222634222634222635222635
2226362226362226372226372226382226382226392226392226402226402226412226
4122264222264222264322264322264422264422264522264522264622264622264722
2647222648222648222649222649222650222650222651222651222652222652222653
2226532226542226542226552226552226562226562226572226572226582226582226
5922265922266022266022266122266122266222266222266322266322266422266422
2665222665222666222666222667222667222668222668222669222669222670222670
2226712226712226722226722226732226732226742226742326752226752326762226
7623267722267723267822267823267922267923268022268023268122268123268222
2682232683222683232684222684232685222685232686222686232687222687232688
2226882326892226892326902226902326912226912326922226922326932226932326
9423269423269523269523269623269623269723269723269823269823269923269923
2700232700232701232701232702232702232703232703232704232704232705232705
2327062327062327072327072327082327082327092327092327102327102327112327
1123271223271223271323271323271423271423271523271523271623271623271723
2717232718232718232719232719232720232720232721232721232722232722232723
2327232327242327242327252327252327262327262327272327272327282327282327
2923272923273023273023273123273123273223273223273323273323273423273423
2735232735232736232736232737232737232738232738232739232739232740232740
2327412327412327422327422327432327432327442327442327452327452327462327
4623274723274723274823274823274923274923275023275023275123275123275223
2752232753232753232754232754232755232755232756232756232757232757232758
2327582327592327592327602327602327612327612327622327622327632327632327
6423276423276523276523276623276623276723276723276823276823276923276923
2770232770232771232771232772232772232773232773232774232774232775232775
2327762327762327772327772327782327782327792327792327802327802327812327
8123278223278223278323278323278423278423278523278523278623278623278723
2787232788232788232789232789232790232790232791232791232792232792242793
2327932427942327942427952327952427962327962427972327972427982327982427
9923279924280023280024280123280124280223280224280323280324280423280424
2805232805242806232806242807232807242808232808242809232809242810232810
2428112328112428122328122428132428132428142428142428152428152428162428
1624281724281724281824281824281924281924282024282024282124282124282224

2822242823242823242824242824242825242825242826242826242827242827242828
2428282428292428292428302428302428312428312428322428322428332428332428
3424283424283524283524283624283624283724283724283824283824283924283924
2840242840242841242841242842242842242843242843242844242844242845242845
2428462428462428472428472428482428482428492428492428502428502428512428
5124285224285224285324285324285424285424285524285524285624285625285724
2857252858242858252859242859252860242860252861242861252862242862252863
2428632528642428642528652428652528662428662528672428672528682428682528
6924286925287024287025287124287125287224287225287324287325287424287425
2875242875252876242876252877242877252878252878252879252879252880252880
2528812528812528822528822528832528832528842528842528852528852528862528
8625288725288725288825288825288925288925289025289025289125289125289225
2892252893252893252894252894252895252895252896252896252897252897252898
2528982528992528992529002529002529012529012529022529022529032529032529
0425290425290525290525290625290625290725290725290825290825290925290925
2910252910252911252911252912252912252913252913252914252914252915252915
2529162529162529172529172529182529182529192529192529202529202529212529
2125292225292225292325292325292425292425292525292525292625292625292725
2927252928252928252929252929252930252930252931252931252932252932252933
2529332629342529342629352529352629362529362629372529372629382529382629
3925293926294025294026294125294126294225294226294325294326294425294426
2945252945262946252946262947252947262948252948262949252949262950252950
2629512529512629522529522629532529532629542529542629552529552629562629
5626295726295726295826295826295926295926296026296026296126296126296226
2962262963262963262964262964262965262965262966262966262967262967262968
2629682629692629692629702629702629712629712629722629722629732629732629
7426297426297526297526297626297626297726297726297826297826297926297926
2980262980262981262981262982262982262983262983262984262984262985262985
2629862629862629872629872629882629882629892629892629902629902629912629
9126299226299226299326299326299426299426299526299526299626299626299726
2997262998262998262999262999263000263000263001263001263002263002263003
2630032630042630042630052630052630062630062630072630072630082630082630
0926300926301026301026301126301126301226301226301326301326301426301426
3015263015263016263016263017263017263018263018263019263019263020263020
2630212630212630222630222630232630232630242630242630252630252630262630
2626302726302726302826302826302926302926303026303026303126303126303226
3032263033263033263034263034263035263035263036263036263037263037263038
2630382630392630392630402630402630412630412630422630422630432630432630
4426304426304526304526304626304626304726304726304826304826304926304926
3050263050263051263051263052263052263053263053263054263054263055263055

2630562630562630572630572630582630582630592630592630602630602630612630
6126306226306226306326306326306426306426306526306526306626306626306726
3067263068263068263069263069263070263070263071263071263072263072263073
2630732630742630742630752630752630762630762630772630772630782630782630
7926307926308026308026308126308126308226308226308326308326308426308426
3085263085263086263086263087263087263088263088263089263089263090263090
2630912630912630922630922630932630932630942630942630952630952630962630
9626309726309726309826309826309926309926310026310026310126310126310226
3102263103263103263104263104263105263105263106263106263107263107263108
2631082631092631092631102631102631112631112631122631122631132631132631
1426311426311526311526311626311626311726311726311826311826311926311926
3120263120263121263121263122263122263123263123263124263124263125263125
2631262631262631272631272631282631282631292631292631302631302631312631
3126313226313226313326313326313426313426313526313526313626313626313726
3137263138263138263139263139263140263140263141263141263142263142263143
2631432631442631442631452631452631462631462631472631472631482631482631
4926314926315026315026315126315126315226315226315326315326315426315426
3155263155263156263156263157263157263158263158263159263159263160263160
2731612631612731622631622731632631632731642631642731652631652731662631
6627316726316727316826316827316926316927317026317027317126317127317226
3172273173263173273174263174273175263175273176263176273177263177273178
2631782731792631792731802631802731812631812731822631822731832631832731
8427318427318527318527318627318627318727318727318827318827318927318927
3190273190273191273191273192273192273193273193273194273194273195273195
2731962731962731972731972731982731982731992731992732002732002732012732
0127320227320227320327320327320427320427320527320527320627320627320727
3207273208273208273209273209273210273210273211273211273212273212273213
2732132732142732142732152732152732162732162732172732172732182732182732
1927321927322027322027322127322127322227322227322327322327322427322427
3225273225273226273226273227273227273228273228273229273229273230273230
2732312732312732322732322732332732332732342732342732352732352732362732
3627323727323727323827323827323927323927324027324027324127324127324227
3242273243273243273244273244273245273245273246273246273247273247273248
2732482732492732492732502732502732512732512732522732522732532732532832
5427325428325527325528325627325628325727325728325827325828325927325928
3260273260283261273261283262273262283263273263283264273264283265273265
2832662732662832672732672832682732682832692732692832702732702832712732
7128327227327228327327327328327427327428327527327528327627327628327727
3277283278283278283279283279283280283280283281283281283282283282283283
2832832832842832842832852832852832862832862832872832872832882832882832

8928328928329028329028329128329128329228329228329328329328329428329428
3295283295283296283296283297283297283298283298283299283299283300283300
2833012833012833022833022833032833032833042833042833052833052833062833
0628330728330728330828330828330928330928331028331028331128331128331228
3312283313283313283314283314283315283315283316283316283317283317283318
2833182833192833192833202833202833212833212833222833222833232833232833
2428332428333252833325283332628333262833327283332728333282833328283332928332928
3330283330283331283331283332283332283332283333283333283334283334283335283335
2833362833362833372833372833382833382833392833392833402833402833412833
4129334228334229334328334329334428334429334528334529334628334629334728
3347293348283348293349283349293350283350293351283351293352283352293353
2833532933542833542933552833552933562833562933572833572933582833582933
5928335929336028336029336128336129336228336229336328336329336428336429
3365283365293366283366293367293367293368293368293369293369293370293370
2933712933712933722933722933732933732933742933742933752933752933762933
7629337729337729337829337829337929337929338029338029338129338129338229
3382293382293383293384293384293385293385293386293386293387293387293388
2933882933892933892933902933902933912933912933922933922933932933932933
9429339429339529339529339629339629339729339729339829339829339929339929
3400293400293401293401293402293402293403293403293404293404293405293405
2934062934062934072934072934082934082934092934092934102934103034112934
1130341229341230341329341330341429341430341529341530341629341630341729
3417303418293418303419293419303420293420303421293421303422293422303423
2934233034242934243034252934253034262934263034272934273034282934283034
2929342930343029343030343129343130343229343230343329343330343429343430
3435293435303436293436303437303437303438303438303439303439303440303440
3034413034413034423034423034433034433034443034443034453034453034463034
4630344730344730344830344830344930344930345030345030345130345130345230
3452303453303453303454303454303455303455303456303456303457303457303458
3034583034593034593034603034603034613034613034623034623034633034633034
6430346430346530346530346630346630346730346730346830346830346930346930
3470303470313471303471313472303472313473303473313474303474313475303475
3134763034763134773034773134783034783134793034793134803034803134813034
8131348230348231348330348331348430348431348530348531348630348631348730
3487313488303488313489303489313490303490313491303491313492303492313493
3034933134943034943134953034953134963034963134973034973134983134983134
9931349931350031350031350131350131350231350231350331350331350431350432
3505313505323506313506323507313507323508313508323509313509323510313510
3235113135113235123135123235133135133235143135143235153135153235163135
1632351731351732351831351832351931351932352031352032352131352132352231

3522323523313523323524313524323525313525323526313526323527313527323528
3135283235293135293235303135303235313135313235323135323235333235333235
3432353433353532353533353632353633353732353733353832353833353932353933
3540323540333541323541333542323542333543323543333544323544333545323545
3335463235463335473235473335483235483335493235493335503235503335513235
5133355232355233355332355333355432355433355532355533355632355633355732
3557333558323558333559323559333560323560333561323561333562323562333563
3235633335643335643335653335653335663335663335673335673335683335683335
6933356933357033357033357133357133357233357233357333357333357433357433
3575333575333576333576333577333577333578333578333579333579333580333580
3335813335813335823335823335833335833335843335843335853335853335863335
8633358733358733358833358833358933358933359033359033359133359133359233
3592333593333593333594333594333595333595333596333596333597333597333598
3335983335993335993336003336003336013336013336023336023336033336033336
0433360433360533360533360633360633360733360734360833360834360933360934
3610333610343611333611343612333612343613333613334361433361434361533361 5
3436163336163436173336173436183336183436193336193436203336203436213336
2134362233362234362333362334362433362434362533362534362633362634362733
3627343628333628343629333629343630333630343631333631343632333632343633
3336333436343336343436353336353436363336363436373336373436383436383436
3934363934364034364034364134364134364234364234364334364334364434364434
3645343645343646343646343647343647343648343648343649343649343650343650
3436513436513436523436523436533436533436543436543436553436553436563436
5634365734365734365834365834365934365934366034366034366134366135366234
3662353663343663353664343664353665343665353666343666353667343667353668
3436683536693436693536703436703536713436713536723436723536733436733536
7434367435367534367535367634367635367734367735367834367835367934367935
3680343680353681343681353682343682353683343683353684343684353685343685
3536863436863536873436873536883436883536893436893536903436903536913436
9135369234369235369335369335369435369435369535369535369635369635369735
3697353698353698353699353699353700353700353701353701353702353702353703
3537033537043537043537053537053537063537063637073537073637083537083637
0935370936371035371036371135371136371235371236371335371336371435371436
3715353715363716353716363717353717363718353718363719353719363720353720
3637213537213637223537223637233537233637243537243637253537253637263537
2636372735372736372835372836372935372936373035373036373135373136373235
3732363733353733363734353734363735353735363736353736363737353737363738
3537383637393637393637403637403637413637413637423637423637433637433637
4436374436374536374536374636374636374736374736374836374836374936374936
3750363750363751363751363752363752363753363753363754363754363755363755

3637563637563637573637573637583637583637593637593637603637603637613637
6136376236376236376336376336376436376436376536376536376636376636376736
3767363768363768363769363769363770363770363771363771363772363772363773
3637733637743637743637753637753637763637763637773637773637783637783637
7936377936378036378036378136378136378236378236378336378336378436378436
3785363785363786363786363787363787363788363788363789363789373790363790
3737913637913737923637923737933637933737943637943737953637953737963637
9637379736379737379836379837379936379937380036380037380136380137380236
3802373803363803373804363804373805363805373806363806373807363807373808
3638083738093638093738103638103738113638113738123638123738133638133738
1436381437381536381537381636381637381736381737381836381837381936381937
3820363820373821363821373822363822373823373823373824373824373825373825
3738263738263738273738273738283738283738293738293738303738303738313738
3137383237383237383337383337383437383437383537383537383637383637383737
3837373838373838373839373839373840373840373841373841373842373842373843
3738433738443738443738453738453738463738463738473738473738483738483738
4937384937385037385037385137385137385237385237385337385337385437385437
3855373855373856373856373857373857373858373858373859373859373860373860
3738613738613738623738623738633738633738643738643738653738653738663738
6637386737386737386837386837386937386937387037387037387137387137387237
3872373873373873373874373874373875373875373876373876373877373877373878
3738783738793738793738803738803738813738813738823738823738833738833738
8437388437388537388537388637388637388737388737388837388837388937388937
3890373890373891373891373892373892373893373893373894373894373895373895
3738963738963738973738973738983738983738993738993739003739003739013739
0137390237390237390337390337390437390437390537390537390637390637390737
3907373908373908373909373909373910373910373911373911373912373912373913
3739133739143739143739153739153739163739163739173739173739183739183739
1937391937392037392037392137392137392237392237392337392337392437392437
3925373925373926373926373927373927373928373928373929373929373930373930
3739313739313739323739323739333739333739343739343739353739353739363739
3637393737393737393837393837393937393937394037394037394137394137394237
3942373943373943373944373944373945373945373946373946373947373947373948
3739483739493739493739503739503739513739513739523739523739533739533739
5437395437395537395537395637395637395737395737395837395837395937395937
3960373960373961373961373962373962373963373963373964373964373965373965
3739663739663739673739673739683739683739693739693739703739703739713739
7138397237397238397337397338397437397438397537397538397637397638397737
3977383978373978383979373979383980373980383981373981383982373982383983
3739833839843739843839853739853839863739863839873739873839883739883839

8937398938399037399038399137399138399237399238399337399338399437399438
3995373995383996373996383997373997383998373998383999373999384000374000
3840013740013840023740023840033740033840043740043840053740053840063840
0638400738400738400838400838400938400938401038401038401138401138401238
4012384013384013384014384014384015384015384016384016384017384017384018
3840183840193840193840203840203840213840213840223840223840233840233840
2438402438402538402538402638402638402738402738402838402838402938402938
4030384030384031384031384032384032384033384033384034384034384035384035
3840363840363840373840373840383840383840393840393840403840403840413840
4138404238404238404338404338404438404438404538404538404638404638404738
4047384048384048384049384049384050384050384051384051384052384052384053
3840533840543840543840553840553840563840563840573840573840583840583840
5938405939406038406039406138406139406238406239406338406339406438406439
4065384065394066384066394067384067394068384068394069384069394070384070
3940713840713940723840723940733840733940743840743940753840753940763840
7639407738407739407838407839407938407939408038408039408138408139408238
4082394083384083394084384084394085384085394086384086394087384087394088
3840883940893840893940903840903940913840913940923840923940933840933940
9438409439409539409539409639409639409739409739409839409839409939409939
4100394100394101394101394102394102394103394103394104394104394105394105
3941063941063941073941073941083941083941093941093941103941103941113941
1139411239411239411339411339411439411439411539411539411639411639411739
4117394118394118394119394119394120394120394121394121394122394122394123
3941233941243941243941253941253941263941263941273941273941283941283941
2939412939413039413039413139413139413239413239413339413339413439413440
4135394135404136394136404137394137404138394138404139394139404140394140
4041413941414041423941424041433941434041443941444041453941454041463941
4640414739414740414839414840414939414940415039415040415139415140415239
4152404153394153404154394154404155394155404156394156404157394157404158
3941584041593941594041603941604041613941614041623941624041633941634041
6439416440416539416540416639416640416739416740416839416840416939416940
4170394170404171404171404172404172404173404173404174404174404175404175
4041764041764041774041774041784041784041794041794041804041804041814041
8140418240418240418340418340418440418440418540418540418640418640418740
4187404188404188404189404189404190404190404191404191404192404192404193
4041934041944041944041954041954041964041964041974041974041984041984041
9940419940420040420040420140420140420240420240420340420340420440420440
4205404205404206404206404207404207404208404208404209404209404210404210
4042114042114042124042124042134042134042144042144042154042154042164042
1640421740421740421840421840421940421940422040422040422140422140422240

4222414223404223414224404224414225404225414226404226414227404227414228
4042284142294042294142304042304142314042314142324042324142334042334142
3440423441423540423541423640423641423740423741423840423841423940423941
4240404240414241404241414242404242414243404243414244404244414245404245
4142464042464142474042474142484042484142494042494142504042504142514042
5141425240425241425340425341425440425441425540425541425640425641425741
4257414258414258414259414259414260414260414261414261414262414262414263
4142634142644142644142654142654142664142664142674142674142684142684142
6941426941427041427041427141427141427241427241427341427342427441427442
4275414275424276414276424277414277424278414278424279414279424280414280
4242814142814242824142824242834142834242844142844242854142854242864142
8642428741428742428841428842428941428942429041429042429141429142429241
4292424293414293424294414294424295414295424296414296424297414297424298
4142984242994142994243004143004243014143014243024143024243034143034243
0441430442430541430542430641430642430741430742430841430842430941430942
4310414310424311414311424312424312424313424313424314424314424315424315
4243164243164243174243174243184243184243194243194243204243204243214243
2142432242432242432342432342432442432442432542432542432642432643432742
4327434328424328434329424329434330424330434331424331434332424332434333
4243334343344243344343354243354343364243364343374243374343384243384343
3942433943434042434043434142434143434242434242434343424343434344424344 43
4345424345434346424346434347424347434348424348434349424349434350424350
4343514243514343524243524343534243534343544243544343554243554343564243
5643435742435743435842435843435942435943436042436043436142436143436242
4362434363424363434364424364434365424365434366434366434367434367434368
4343684343694343694343704343704343714343714343724343724343734343734343
7443437443437543437543437643437643437743437743437843437843437943437943
4380434380434381434381434382434382434383434383434384434384434385434385
4343864343864343874343874343884343884343894343894343904343904343914343
9143439243439243439343439343439443439443439543439543439643439643439743
4397434398434398434399434399434400434400434401434401434402434402434403
4344034344044344044344054344054344064344064344074344074344084344084344
0943440943441043441043441143441143441243441243441343441343441443441443
4415434415444416434416444417434417444418434418444419434419444420434420
4444214344214444224344224444234344234444244344244444254344254444264344
2644442743442744442843442844442943442944443043443044443143443144443243
4432444433434433444434434434444435434435444436434436444437434437444438
4344384444394344394444404344404444414344414444424344424444434344434444
4443444444444543444544444643444644444743444744444843444844444943444944
4450434450444451434451444452434452444453434453444454434454444455434455

4444564444564444574444574444584444584444594444594444604444604444614444
6144446244446244446344446344446444446444446544446544446644446644446744
4467444468444468444469444469444470444470444471444471444472444472444473
4444734444744444744544754444754544764444764544774444774544784444784544
7944447945448044448045448144448145448244448245448344448345448444448445
4485444485454486444486454487444487454488444488454489444489454490444490
4544914444914544924444924544934444934544944444944544954444954544964444
9645449744449745449844449845449944449945450044450045450144450145450244
4502454503444503454504444504454505444505454506444506454507444507454508
4445084545094445094545104445104545114445114645124445124645134445134645
1444451446451544451546451645451646451745451746451845451846451945451946
4520454520464521454521464522454522464523454523464524454524464525454525
4645264545264645274545274645284545284645294545294645304545304645314545
3146453245453246453345453346453445453446453545453546453645453646453745
4537464538454538464539454539464540454540464541454541464542454542464543
4545434645444545444645454545454646454645454647454745454747454845454847 45
4945454947455045455047455145455147455245455247455345455347455446455447
4555464555474556464556474557464557474558464558474559464559474560464560
4745614645614745624645624745634645634745644645644745654645654745664645
6647456746456747456846456847456946456947457046457047457146457147457246
4572474573464573474574464574474575464575474576464576474577464577474578
4645784745794645794745804645804745814645814745824645824745834645834745
8446458448458546458548458646458648458746458748458846458848458946458948
4590474590484591474591484592474592484593474593484594474594484595474595
4845964745964845974745974845984745984845994745994846004746004846014746
0148460247460248460347460348460447460448460547460548460647460648460747
4607484608474608484609474609484610474610484611474611484612474612484613
4746134946144746144946154746154946164746164946174746174946184746184946
1947461949462047462049462147462149462247462249462347462349462447462449
4625474625494626474626494627474627494628474628494629484629494630484630
4946314846315046324846325046334846335046344846345046354846355046364846
3650463748463750463848463850463948463950464048464050464148464150464248
4642504643484643504644484644504645484645504646484646504647484647504648
4846485046494846495046504846505046514846515046524846525046534846535046
5448465450465548465550465648465650465748465750465848465850465949465950
4660494660504661494661504662494662504663494663504664494664504665494665
5046664946665046674946675046684946685046694946695046704946705046714946
7150467249467250467349467350467449467450467549467550467649467651467749
4677514678504678514679504679514680504680514681504681514682504682514683
5046835146845046845146855046855146865046865146875046875146885046885146

8950468951469050469051469150469151469250469251469350469351469450469451
4695504695514696504696514697504697514698504698514699504699514700504700
5147015047015147025047025147035047035147045047045147055047055147065047
0651470750470751470850470851470950470951471050471051471150471151471250
4712514713504713514714504714514715504715514716504716514717504717514718
5047185147195047195147205047205147215047215147225047225147235047235147
2451472451472551472551472651472651472751472751472851472851472951472951
4730514730514731514731514732514732514733514733514734514734514735514735
5147365147365247375147375247385147385247395147395247405147405247415147
4152474251474252474351474352474451474452474551474552474651474652474751
4747524748514748524749514749524750514750524751514751524752514752524753
5147535247545147545247555147555247565147565247575147575247585147585247
5951475952476051476052476151476152476251476252476351476352476451476452
4765514765524766514766524767514767524768514768524769514769524770514770
5247715147715247725147725247735147735247745147745247755147755247765147
7652477751477752477851477852477951477952478051478052478151478152478251
4782524783514783524784514784524785524785534786524786534787524787534788
5247885347895247895347905247905347915247915347925247925347935247935347
9452479453479552479553479652479653479752479753479852479853479952479953
4800524800534801524801534802524802534803524803534804524804534805524805
5348065248065348075248075348085248085348095248095348105248105348115248
1153481252481253481352481353481452481453481552481553481652481653481752
4817534818524818534819524819534820524820534821524821534822524822534823
5248235348245248245348255248255348265248265348275248275348285248285348
2952482953483052483053483152483153483252483253483352483353483452483453
4835534835534836534836534837534837534838534838534839534839534840534840
5348415348415348425348425348435348435348445348445348455348455348465348
4653484753484754484853484854484953484954485053485054485153485154485253
4852544853534853544854534854544855534855544856534856544857534857544858
5348585448595348595448605348605448615348615448625348625448635348635448
6453486454486553486554486653486654486753486754486853486854486953486954
4870534870544871534871544872534872544873534873544874534874544875534875
5448765348765448775348775448785348785448795348795448805348805448815348
8154488253488254488353488354488453488454488553488554488653488654488753
4887544888534888544889534889544890534890544891534891544892534892544893
5348935448945348945448955348955448965348965448975348975448985348985448
9954489954490054490054490154490154490254490255490354490355490454490455
4905544905554906544906554907544907554908544908554909544909554910544910
5549115449115549125449125549135449135549145449145549155449155549165449
1655491754491755491854491855491954491955492054492055492154492155492254

4922554923544923554924544924554925544925554926544926554927544927554928
5449285549295449295549305449305549315449315549325449325549335449335549
3454493455493554493555493654493654493754493754493854493855493954493955
4940544940554941544941554942544942554943544943554944544944554945544945
5549465449465549475449475549485449485549495449495549505449505549515449
5155495254495255495355495355495455495455495555495555495655495655495755
4957554958554958554959554959554960554960554961554961554962554962554963
5549635549645549645549655549655549665549665549675549675549685549685549
6955496955497055497055497155497155497255497255497355497355497455497455
4975554975554976554976554977554977554978554978554979554979554980554980
5649815549815649825549825649835549835649845549845649855549855649865549
8656498755498756498855498856498955498956499055499056499155499156499255
4992564993554993564994554994564995554995564996554996564997554997564998
5549985649995549995650005550005650015550015650025550025650035550035650
0455500456500555500556500655500656500755500756500855500856500955500956
5010555010565011555011565012555012565013555013565014555014565015555015
5650165550165650175550175650185550185650195550195650205550205650215550
2156502255502256502355502356502455502456502555502556502655502656502755
5027565028555028565029555029565030555030565031555031565032555032565033
5650335650345650345650355650355650365650365650375650375650385650385650
3956503956504056504056504156504156504256504256504356504356504456504456
5045565045565046565046565047565047565048565048565049565049565050565050
5650515650515650525650525650535650535650545650545650555650555650565650
5656505756505756505856505856505956505956506056506056506156506156506256
5062565063565063565064565064565065565065565066565066565067565067565068
5650685650695650695650705650705650715650715650725650725650735650735650
7456507456507556507556507656507657507756507757507856507857507956507957
5080565080575081565081575082565082575083565083575084565084575085565085
5750865650865750875650875750885650885750895650895750905650905750915650
9157509256509257509356509357509456509457509556509557509656509657509756
5097575098565098575099565099575100565100575101565101575102565102575103
5651035751045651045751055651055851065651065851075651075851085651085851
0956510958511056511058511156511158511256511258511356511358511456511458
5115565115585116565116585117565117585118565118585119565119585120565120
5851215651215851225651225851235651235851245651245851255651255851265651
2658512756512759512856512859512956512959513057513059513157513159513257
5132595133575133595134575134595135575135595136575136595137575137595138
5751385951395751395951405751405951415751415951425751425951435751435951
4457514459514557514559514657514659514757514759514857514859514957514959
5150575150595151575151605152575152605153575153605154575154605155575155

605156575156605157575157605158575158605159575159605160585160605161585
1616051625851626051635851636051645851646151655851656151665851666151675
8
5167615168585168615169585169615170585170615171585171615172585172615173
5851736151745851746151755851756151765851766151775851776151785851786251
7958517962518058518062518158518162518258518262518359518362518459518462
5185595185625186595186625187595187625188595188625189595189635190595190
6351915951916351925951926351935951936351945951946351955951956351965951
9663519759519763519859519863519959519963520059520064520159520164520259
5202645203595203645204595204645205595205645206595206645207595207645208
6052086452096052096452106052106452116052116452126052126452136052136452
1460521464521560521564521660521664521760521764521860521865521960521965
5220605220655221605221655222615222655223615223655224615224655225615225
6552266152266552276152276552286152286552296152296552306152306652316152
3166523261523266523361523366523461523466523561523566523661523666523762
5237665238625238665239625239665240625240665241625241665242625242675243
6252436752446252446752456252456752466252466752476252476752486252486752
4963524967525063525067525163525167525263525267525363525367525463525467
5255635255675256635256675257635257675258635258675259635259675260635260
6752616452616752626452626752636452636752646452646752656452656752666452
6667526764526767526864526867526964526967527064527067527164527167527264
5272685273645273685274645274685275645275685276645276685277645277685278
6452786852796452796852806552806852816552816852826552826852836552836852
8465528468528565528568528665528668528765528768528865528868528965528968
5290655290685291655291685292655292685293665293685294665294685295665295
6852966652966852976652976852986652986852996652996853006653006853016653
0168530266530268530366530368530466530468530566530568530667530668530767
5307685308675308685309675309685310675310685311675311685312675312685313
6753136853146753146853156753156853166753166853176753176853186753186853
1967531968532067532068532167532168532267532268532367532368532467532469
5325675325695326675326695327675327695328675328695329675329695330675330
6953316753316953326753326953336753336953346753346953356753356953366753
3669533768533769533868533869533968533969534068534069534168534169534268
5342695343685343695344685344695345685345695346685346695347685347695348
6853486953496853496953506853506953516853516953526853526953536853536953
5468535469535568535569535668535669535768535769535868535869535968535969
5360685360695361685361695362685362695363685363695364685364695365685365
6953666853666953676853676953686853686953696853696953706853706953716853
7169537268537269537368537369537468537469537568537569537668537670537768
5377705378685378705379685379705380685380705381685381705382685382705383
6853837053846853847053856853857053866853867053876853877053886853887053

896853897053906953907053916953917053926953927053936953937053946953947053953956953957053966953967053976953977053986953987053996953997054006954007054016954017054026954027054036954037054046954047054056954057054066954067054076954077054086954087054096954097054106954107054116954117054126954127054136954137054146954147054156954157054166954167054176954177054186954187054196954197054206954207154216954217154226954227154236954237154246954247154256954257154266954267154276954277154286954287154296954297154306954307154316954317154326954327154336954337154346954347154356954357154366954367154376954377154386954387154396954397154406954407154416954417154426954427154437054437154447054447154457054457154467054467154477054477154487054487254497054497254507054507254517054517254527054527254537054537254547054547254557054557254567054567254577054577254587054587254597054597254607054607254617054617254627054627254637054637254647054647254657054657254667054667254677054677254687054687254697054697254707054707254717054717254727054727254737054737254747054747254757054757254767054767354777054777354787054787354797054797354807054807354817054817354827054827354837054837354847054847354857054857354867054867354877054877354887154887354897154897354907154907354917154917354927154927354937154937354947154947354957154957354967154967454977154977454987154987454997154997455007155007455017155017455027155027455037155037455047155047455057155057455067155067455077155077455087155087455097155097455107155107455117155117455127155127455137155137455147155147455157155157455167155167455177255177455187255187455197255197455207255207455217255217455227255227455237255237455247255247455257255257455267255267455277255277455287255287455297255297455307255307455317255317455327255327455337255337455347255347455357255357455367255367455377255377455387255387455397255397455407255407455417255417455427255427455437255437455447255447455457255457455467355467455477355477455487355487455497355497455507355507455517355517455527355527555537355537555547355547555557355557555567355567555577355577555587355587555597355597555607355607555617355617555627355627555637355637555647355647555657355657555667355667555677455677555687455687555697455697555707455707555717455717555727455727555737455737555747455747555757455757555767455767555777455777555787455787555797455797555807455807555817455817555827455827555837455837555847455847555857455857555867455867555877455877555887455887555897455897555907455907555917455917555927455927655937455937655947455947655957455957655967455967655977455977655987455987655997455997656007456007656017456017656027456027656037456037656047456047656057456057656067456067656077456077656087456087656097456097656107456107656117456117656127456127656137456137656147456147656157456157656167456167656177456177656187456187656197456197656207456207656217456217656227456227656237456237656247456247656257456257656267456267656277456277656287456287656297456297656307456307656317456317656327456327656337456337656347456347656357456357656367456367656377456377656387456387656397456397656407456407656417456417656427456427656437456437656447456447656457456457656467456467656477456477656487456487656497456497656507456507656517456517656527456527656537456537656547456547656557456557656567456567656577456577656587456587656597456597656607456607656617456617656627456627656637456637656647456647656657456657656667456667656677456677656687456687656697456697656707456707656717456717656727456727656737456737656747456747656757456757656767456767656777456777656787456787656797456797656807456807656817456817656827456827656837456837656847456847656857456857656867456867656877456877656887456887656897456897656907456907656917456917656927456927656937456937656947456947656957456957656967456967656977456977656987456987656997456997657007457007657017457017657027457027657037457037657047457047657057457057657067457067657077457077657087457087657097457097657107457107657117457117657127457127657137457137657147457147657157457157657167457167657177457177657187457187657197457197657207457207657217457217657227457227657237457237657247457247657257457257657267457267657277457277657287457287657297457297657307457307657317457317657327457327657337457337657347457347657357457357657367457367657377457377657387457387657397457397657407457407657417457417657427457427657437457437657447457447657457457457657467457467657477457477657487457487657497457497657507457507657517457517657527457527657537457537657547457547657557457557657567457567657577457577657587457587657597457597657607457607657617457617657627457627657637457637657647457647657657457657657667457667657677457677657687457687657697457697657707457707657717457717657727457727657737457737657747457747657757457757657767457767657777457777657787457787657797457797657807457807657817457817657827457827657837457837657847457847657857457857657867457867657877457877657887457887657897457897657907457907657917457917657927457927657937457937657947457947657957457957657967457967657977457977657987457987657997457997658007458007658017458017658027458027658037458037658047458047658057458057658067458067658077458077658087458087658097458097658107458107658117458117658127458127658137458137658147458147658157458157658167458167658177458177658187458187658197458197658207458207658217458217658227458227658237458237658247458247658257458257658267458267658277458277658287458287658297458297658307458307658317458317658327458327658337458337658347458347658357458357658367458367658377458377658387458387658397458397658407458407658417458417658427458427658437458437658447458447658457458457658467458467658477458477658487458487658497458497658507458507658517458517658527458527658537458537658547458547658557458557658567458567658577458577658587458587658597458597658607458607658617458617658627458627658637458637658647458647658657458657658667458667658677458677658687458687658697458697658707458707658717458717658727458727658737458737658747458747658757458757658767458767658777458777658787458787658797458797658807458807658817458817658827458827658837458837658847458847658857458857658867458867658877458877658887458887658897458897658907458907658917458917658927458927658937458937658947458947658957458957658967458967658977458977658987458987658997458997659007459007659017459017659027459027659037459037659047459047659057459057659067459067659077459077659087459087659097459097659107459107659117459117659127459127659137459137659147459147659157459157659167459167659177459177659187459187659197459197659207459207659217459217659227459227659237459237659247459247659257459257659267459267659277459277659287459287659297459297659307459307659317459317659327459327659337459337659347459347659357459357659367459367659377459377659387459387659397459397659407459407659417459417659427459427659437459437659447459447659457459457659467459467659477459477659487459487659497459497659507459507659517459517659527459527659537459537659547459547659557459557659567459567659577459577659587459587659597459597659607459607659617459617659627459627659637459637659647459647659657459657659667459667659677459677659687459687659697459697659707459707659717459717659727459727659737459737659747459747659757459757659767459767659777459777659787459787659797459797659807459807659817459817659827459827659837459837659847459847659857459857659867459867659877459877659887459887659897459897659907459907659917459917659927459927659937459937659947459947659957459957659967459967659977459977659987459987659997459997660007460007660017460017660027460027660037460037660047460047660057460057660067460067660077460077660087460087660097460097660107460107660117460117660127460127660137460137660147460147660157460157660167460167660177460177660187460187660197460197660207460207660217460217660227460227660237460237660247460247660257460257660267460267660277460277660287460287660297460297660307460307660317460317660327460327660337460337660347460347660357460357660367460367660377460377660387460387660397460397660407460407660417460417660427460427660437460437660447460447660457460457660467460467660477460477660487460487660497460497660507460507660517460517660527460527660537460537660547460547660557460557660567460567660577460577660587460587660597460597660607460607660617460617660627460627660637460637660647460647660657460657660667460667660677460677660687460687660697460697660707460707660717460717660727460727660737460737660747460747660757460757660767460767660777460777660787460787660797460797660807460807660817460817660827460827660837460837660847460847660857460857660867460867660877460877660887460887660897460897660907460907660917460917660927460927660937460937660947460947660957460957660967460967660977460977660987460987660997460997661007461007661017461017661027461027661037461037661047461047661057461057661067461067661077461077661087461087661097461097661107461107661117461117661127461127661137461137661147461147661157461157661167461167661177461177661187461187661197461197661207461207661217461217661227461227661237461237661247461247661257461257661267461267661277461277661287461287661297461297661307461307661317461317661327461327661337461337661347461347661357461357661367461367661377461377661387461387661397461397661407461407661417461417661427461427661437461437661447461447661457461457661467461467661477461477661487461487661497461497661507461507661517461517661527461527661537461537661547461547661557461557661567461567661577461577661587461587661597461597661607461607661617461617661627461627661637461637661647461647661657461657661667461667661677461677661687461687661697461697661707461707661717461717661727461727661737461737661747461747661757461757661767461767661777461777661787461787661797461797661807461807661817461817661827461827661837461837661847461847661857461857661867461867661877461877661887461887661897461897661907461907661917461917661927461927661937461937661947461947661957461957661967461967661977461977661987461987661997461997662007462007662017462017662027462027662037462037662047462047662057462057662067462067662077462077662087462087662097462097662107462107662117462117662127462127662137462137662147462147662157462157662167462167662177462177662187462187662197462197662207462207662217462217662227462227662237462237662247462247662257462257662267462267662277462277662287462287662297462297662307462307662317462317662327462327662337462337662347462347662357462357662367462367662377462377662387462387662397462397662407462407662417462417662427462427662437462437662447462447662457462457662467462467662477462477662487462487662497462497662507462507662517462517662527462527662537462537662547462547662557462557662567462567662577462577662587462587662597462597662607462607662617462617662627462627662637462637662647462647662657462657662667462667662677462677662687462687662697462697662707462707662717462717662727462727662737462737662747462747662757462757662767462767662777462777662787462787662797462797662807462807662817462817662827462827662837462837662847462847662857462857662867462867662877462877662887462887662897462897662907462907662917462917662927462927662937462937662947462947662957462957662967462967662977462977662987462987662997462997663007463007663017463017663027463027663037463037663047463047663057463057663067463067663077463077663087463087663097463097663107463107663117463117663127463127663137463137663147463147663157463157663167463167663177463177663187463187663197463197663207463207663217463217663227463227663237463237663247463247663257463257663267463267663277463277663287463287663297463297663307463307663317463317663327463327663337463337663347463347663357463357663367463367663377463377663387463387663397463397663407463407663417463417663427463427663437463437663447463447663457463457663467463467663477463477663487463487663497463497663507463507663517463517663527463527663537463537663547463547663557463557663567463567663577463577663587463587663597463597663607463607663617463617663627463627663637463637663647463647663657463657663667463667663677463677663687463687663697463697663707463707663717463717663727463727663737463737663747463747663757463757663767463767663777463777663787463787663797463797663807463807663817463817663827463827663837463837663847463847663857463857663867463867663877463877663887463887663897463897663907463907663917463917663927463927663937463937663947463947663957463957663967463967663977463977663987463987663997463997664007464007664017464017664027464027664037464037664047464047664057464057664067464067664077464077664087464087664097464097664107464107664117464117664127464127664137464137664147464147664157464157664167464167664177464177664187464187664197464197664207464207664217464217664227464227664237464237664247464247664257464257664267464267664277464277664287464287664297464297664307464307664317464317664327464327664337464337664347464347664357464357664367464367664377464377664387464387664397464397664407464407664417464417664427464427664437464437664447464447664457464457664467464467664477464477664487464487664497464497664507464507664517464517664527464527664537464537664547464547664557464557664567464567664577464577664587464587664597464597664607464607664617464617664627464627664637464637664647464647664657464657664667464667664677464677664687464687664697464697664707464707664717464717664727464727664737464737664747464747664757464757664767464767664777464777664787464787664797464797664807464807664817464817664827464827664837464837664847464847664857464857664867464867664877464877664887464887664897464897664907464907664917464917664927464927664937464937664947464947664957464957664967464967664977464977664987464987664997464997665007465007665017465017665027465027665037465037665047465047665057465057665067465067665077465077665087465087665097465097665107465107665117465117665127465127665137465137665147465147665157465157665167465167665177465177665187465187665197465197665207465207665217465217665227465227665237465237665247465247665257465257665267465267665277465277665287465287665297465297665307465307665317465317665327465327665337465337665347465347665357465357665367465367665377465377665387465387665397465397665407465407665417465417665427465427665437465437665447465447665457465457665467465467665477465477665487465487665497465497665507465507665517465517665527465527665537465537665547465547665557465557665567465567665577465577665587465587665597465597665607465607665617465617665627465627665637465637665647465647665657465657665667465667665677465677665687465687665697465697665707465707665717465717665727465727665737465737665747465747665757465757665767465767665777465777665787465787665797465797665807465807665817465817665827465827665837465837665847465847665857465857665867465867665877465877665887465887665897465897665907465907665917465917665927465927665937465937665947465947665957465957665967465967665977465977665987465987665997465997666007466007666017466017666027466027666037466037666047466047666057466057666067466067666077466077666087466087666097466097666107466107666117466117666127466127666137466137666147466147666157466157666167466167666177466177666187466187666197466197666207466207666217466217666227466227666237466237666247466247666257466257666267466267666277466277666287466287666297466297666307466307666317466317666327466327666337466337666347466347666357466357666367466367666377466377666387466387666397466397666407466407666417466417666427466427666437466437666447466447666457466457666467466467666477466477666487466487666497466497666507466507666517466517666527466527666537466537666547466547666557466557666567466567666577466577666587466587666597466597666607466607666617466617666627466627666637466637666647466647666657466657666667466667666677466677666687466687666697466697666707466707666717466717666727466727666737466737666747466747666757466757666767466767666777466777666787466787666797466797666807466807666817466817666827466827666837466837666847466847666857466857666867466867666877466877666887466887666897466897666907466907666917466917666927466927666937466937666947466947666957466957666967466967666977466977666987466987666997466997667007467007667017467017667027467027667037467037667047467047667057467057667067467067667077467077667087467087667097467097667107467107667117467117667127467127667137467137667147467147667157467157667167467167667177467177667187467187667197467197667207467207667217467217667227467227667237467237667247467247667257467257667267467267667277467277667287467287667297467297667307467307667317467317667327467327667337467337667347467347667357467357667367467367667377467377667387467387667397467397667407467407667417467417667427467427667437467437667447467447667457467457667467467667477467477667487467487667497467497667507467507667517467517667527467527667537467537667547467547667557467557667567467567667577467577667587467587667597467597667607467607667617467617667627467627667637467637667647467647667657467657667667467667667677467677667687467687667697467697667707467707667717467717667727467727667737467737667747467747667757467757667767467767667777467777667787467787667797467797667807467807667817467817667827467827667837467837667847467847667857467857667867467867667877467877667887467887667897467897667907467907667917467917667927467927667937467937667947467947667957467957667967467967667977467977667987467987667997467997668007468007668017468017668027468027668037468037668047468047668057468057668067468067668077468077668087468087668097468097668107468107668117468117668127468127668137468137668147468147668157468157668167468167668177468177668187468187668197468197668207468207668217468217668227468227668237468237668247468247668257468257668267468267668277468277668287468287668297468297668307468307668317468317668327468327668337468337668347468347668357468357668367468367668377468377668387468387668397468397668407468407668417468417668427468427668437468437668447468447668457468457668467468467668477468477668487468487668497468497668507468507668517468517668527468527668537468537668547468547668557468557668567468567668577468577668587468587668597468597668607468607668617468617668627468627668637468637668647468647668657468657668667468667668677468677668687468687668697468697668707468707668717468717668727468727668737468737668747468747668757468757668767468767668777468777668787468787668797468797668807468807668817468817668827468827668837468837668847468847668857468857668867468867668877468877668887468887668897468897668907468907668917468917668927468927668937468937668947468947668957468957668967468967668977468977668987468987668997468997669007469007669017469017669027469027669037469037669047469047669057469057669067469067669077469077669087469087669097469097669107469107669117469117669127469127669137469137669147469147669157469157669167469167669177469177669187469187669197469197669207469207669217469217669227469227669237469237669247469247669257469257669267469267669277469277669287469287669297469297669307469307669317469317669327469327669337469337669347469347669357469357669367469367669377469377669387469387669397469397669407469407669417469417669427469427669437469437669447469447669457469457669467469467669477469477669487469487669497469497669507469507669517469517669527469527669537469537669547469547669557469557669567469567669577469577669587469587669597469597669607469607669617469617669627469627669637469637669647469647669657469657669667469667669677469677669687469687669697469697669707469707669717469717669727469727669737469737669747469747669757469757669767469767669777469777669787469787669797469797669807469807669817469817669827469827669837469837669847469847669857469857669867469867669877469877669887469887669897469897669907469907669917469917669927469927669937469937669947469947669957469957669967469967669977469977669987469987669997469997670007470007670017470017670027470027670037470037670047470047670057470057670067470067670077470077670087470087670097470097670107470107670117470117670127470127670137470137670147470147670157470157670167470167670177470177670187470187670197470197670207470207670217470217670227470227670237470237670247470247670257470257670267470267670277470277670287470287670297470297670307470307670317470317670327470327670337470337670347470347670357470357670367470367670377470377670387470387670397470397670407470407670417470417670427470427670437470437670447470447670457470457670467470467670477470477670487470487670497470497670507470507670517470517670527470527670537470537670547470547670557470557670567470567670577470577670587470587670597470597670607470607670617470617670627470627670637470637670647470647670657470657670667470667670677470677670687470687670697470697670707470707670717470717670727470727670737470737670747470747670757470757670767470767670777470777670787470787670797470797670807470807670817470817670827470827670837470837670847470847670857470857670867470867670877470877670887470887670897470897670907470907670917470917670927470927670937470937670947470947670957470957670967470967670977470977670987470987670997470997671007471007671017471017671027471027671037471037671047471047671057471057671067471067671077471077671087471087671097471097671107471107671117471117671127471127671137471137671147471147671157471157671167471167671177471177671187471187671197471197671207471207671217471217671227471227671237471237671247471247671257471257671267471267671277471277671287471287671297471297671307471307671317471317671327471327671337471337671347471347671357471357671367471367671377471377671387471387671397471397671407471407671417471417671427471427671437471437671447471447671457471457671467471467671477471477671487471487671497471497671507471507671517471517671527471527671537471537671547471547671557471557671567471567671577471577671587471587671597471597671607471607671617471617671627471627671637471637671647471647671657471657671667471667671677471677671687471687671697471697671707471707671717471717671727471727671737471737671747471747671757471757671767471767671777471777671787471787671797471797671807471807671817471817671827471827671837471837671847471847671857471857671867471867671877471877671887471887671897471897671907471907671917471917671927471927671937471937671947471947671957471957671967471967671977471977671987471987671997471997672007472007672017472017672027472027672037472037672047472047672057472057672067472067672077472077672087472087672097472097672107472107672117472117672127472127672137472137672147472147672157472157672167472167672177472177672187472187672197472197672207472207672217472217672227472227672237472237672247472247672257472257672267472267672277472277672287472287672297472297672307472307672317472317672327472327672337472337672347472347672357472357672367472367672377472377672387472387672397472397672407472407672417472417672427472427672437472437672447472447672457472457672467472467672477472477672487472487672497472497672507472507672517472517672527472527672537472537672547472547672557472557672567472567672577472577672587472587672597472597672607472607672617472617672627472627672637472637672647472647672657472657672667472667672677472677672687472687672697472697672707472707672717472717672727472727672737472737672747472747672757472757672767472767672777472777672787472787672797472797672807472807672817472817672827472827672837472837672847472847672857472857672867472867672877472877672887472887672897472897672907472907672917472917672927472927672937472937672947472947672957472957672967472967672977472977672987472987672997472997673007473007673017473017673027473027673037473037673047473047673057473057673067473067673077473077673087473087673097473097673107473107673117473117673127473127673137473137673147473147673157473157673167473167673177473177673187473187673197473197673207473207673217473217673227473227673237473237673247473247673257473257673267473267673277473277673287473287673297473297673307473307673317473317673327473327673337473337673347473347673357473357673367473367673377473377673387473387673397473397673407473407673417473417673427473427673437473437673447473447673457473457673467473467673477473477673487473487673497473497673507473507673517473517673527473527673537473537673547473547673557473557673567473567673577473577673587473587673597473597673607473607673617473617673627473627673637473637673647473647673657473657673667473667673677473677673687473687673697473697673707473707673717473717673727473727673737473737673747473747673757473757673767473767673777473777673787473787673797473797673807473807673817473817673827473827673837473837673847473847673857473857673867473867673877473877673887473887673897473897673907473907673917473917673927473927673937473937673947473947673957473957673967473967673977473977673987473987673997473997674007474007674017474017674027474027674037474037674047474047674057474057674067474067674077474077674087474087674097474097674107474107674117474117674127474127674137474137674147474147674157474157674167474167674177474177674187474187674197474197674207474207674217474217674227474227674237474237674247474247674257474257674267474267674277474277674287474287674297474297674307474307674317474317674327474327674337474337674347474347674357474357674367474367674377474377674387474387674397474397674407474407674417474417674427474427674437474437674447474447674457474457674467474467674477474477674487474487674497474497674507474507674517474517674527474527674537474537674547474547674557474557674567474567674577474577674587474587674597474597674607474607674617474617674627474627674637474637674647474647674657474657674667474667674677474677674687474687674697474697674707474707674717474717674727474727674737474737674747474747674757474757674767474767674777474777674787474787674797474797674807474807674817474817674827474827674837474837674847474847674857474857674867474867674877474877674887474887674897474897674907474907674917474917674927474927674937474937674947474947674957474957674967474967674977474977674987474987674997474997675007475007675017475017675027475027675037475037675047475047675057475057675067475067675077475077675087475087675097475097675107475107675117475117675127475127675137475137675147475147675157475157675167475167675177475177675187475187675197475197675207475207675217475217675227475227675237475237675247475247675257475257675267475267675277475277675287475287675297475297675307475307675317475317675327475327675337475337675347475347675357475357675367475367675377475377675387475387675397475397675407475407675417475417675427475427675437475437675447475447675457475457675467475467675477475477675487475487675497475497675507475507675517475517675527475527675537475537675547475547675557475557675567475567675577475577675587475587675597475597675607475607675617475617675627475627675637475637675647475647675657475657675667475667675677475677675687475687675697475697675707475707675717475717675727475727675737475737675747475747675757475757675767475767675777475777675787475787675797475797675807475807675817475817675827475827675837475837675847475847675857475857675867475867675877475877675887475887675897475897675907475907675917475917675927475927675937475937675947475947675957475957675967475967675977475977675987475987675997475997676007476007676017476017676027476027676037476037676047476047676057476057676067476067676077476077676087476087676097476097676107476107676117476117676127476127676137476137676147476147676157476157676167476167676177476177676187476187676197476197676207476207676217476217676227476227676237476237676247476247676257476257676267476267676277476277676287476287676297476297676307476307676317476317676327476327676337476337676347476347676357476357676367476367676377476377676387476387676397476397676407476407676417476417676427476427676437476437676447476447676457476457676467476467676477476477676487476487676497476497676507476507676517476517676527476527676537476537676547476547676557476557676567476567676577476577676587476587676597476597676607476607676617476617676627476627676637476637676647476647676657476657676667476667676677476677676687476687676697476697676707476707676717476717676727476727676737476737676747476747676757476757676767476767676777476777676787476787676797476797676807476807676817476817676827476827676837476837676847476847676857476857676867476867676877476877676887476887676897476897676907476907676917476917676927476927676937476937676947476947676957476957676967476967676977476977676987476987676997476997677007477007677017477017677027477027677037477037677047477047677057477057677067477067677077477077677087477087677097477097677107477107677117477117677127477127677137477137677147477147677157477157677167477167677177477177677187477187677197477197677207477207677217477217677227477227677237477237677247477247677257477257677267477267677277477277677287477287677297477297677307477307677317477317677327477327677337477337677347477347677357477357677367477367677377477377677387477387677397477397677407477407677417477417677427477427677437477437677447477447677457477457677467477467677477477477677487477487677497477497677507477507677517477517677527477527677537477537677547477547677557477557677567477567677577477577677587477587677597477597677607477607677617477617677627477627677637477637677647477647677657477657677667477667677677477677677687477687677697477697677707477707677717477717677727477727677737477737677747477747677757477757677767477767677777477777677787477787677797477797677807477807677817477817677827477827677837477837677847477847677857477857677867477867677877477877677887477887677897477897677907477907677917477917677927477927677937477937677947477947677957477957677967477967677977477977677987477987677997477997678007478007678017478017678027478027678037478037678047478047678057478057678067478067678077478077678087478087678097478097678107478107678117478117678127478127678137478137678147478147678157478157678167478167678177478177678187478187678197478197678207478207678217478217678227478227678237478237678247478247678257478257678267478267678277478277678287478287678297478297678307478307678317478317678327478327678337478337678347478347678357478357678367478367678377478377678387478387678397478397678407478407678417478417678427478427678437478437678447478447678457478457678467478467678477478477678487478487678497478497678507478507678517478517678527478527678537478537678547478547678557478557678567478567678577478577678587478587678597478597678607478607678617478617678627478627678637478637678647478647678657478657678667478667678677478677678687478687678697478697678707478707678717478717678727478727678737478737678747478747678757478757678767478767678777478777678787478787678797478797678807478807678817478817678827478827678837478837678847478847678857478857678867478867678877478877678887478887678897478897678907478907678917478917678927478927678937478937678947478947678957478957678967478967678977478977678987478987678997478997679007479007679017479017679027479027679037479037679047479047679057479057679067479067679077479077679087479087679097479097679107479107679117479117679127479127679137479137679147479147679157479157679167479167679177479177679187479187679197479197679207479207679217479217679227479227679237479237679247479247679257479257679267479267679277479277679287479287679297479297679307479307679317479317679327479327679337479337679347479347679357479357679367479367679377479377679387479387679397479397679407479407679417479417679427479427679437479437679447479447679457479457679467479467679477479477679487479487679497479497679507479507679517479517679527479527679537479537679547479547679557479557679567479567679577479577679587479587679597479597679607479607679617479617679627479627679637479637679647479647679657479657679667479667679677479677679687479687679697479697679707479707679717479717679727479727679737479737679747479747679757479757679767479767679777479777679787479787679797479797679807479807679817479817679827479827679837479837679847479847679857479857679867479867679877479877679887479887679897479897679907479907679917479917679927479927679937479937679947479947679957479957679967479967679977479977679987479987679997479997680007480007680017480017680027480027680037480037680047480047680057480057680067480067680077480077680087480087680097480097680107480107680117480117680127480127680137480137680147480147680157480157680167480167680177480177680187480187680197480197680207480207680217480217680227480227680237480237680247480247680257480257680267480267680277480277680287480287680297480297680307480307680317480317680327480327680337480337680347480347680357480357680367480367680377480377680387480387680397480397680407480407680417480417680427480427680437480437680447480447680457480457680467480467680477480477680487480487680497480497680507480507680517480517680527480527680537480537680547480547680557480557680567480567680577480577680587480587680597480597680607480607680617480617680627480627680637480637680647480647680657480657680667480667680677480677680687480687680697480697680707480707680717480717680727480727680737480737680747480747680757480757680767480767680777480777680787480787680797480797680807480807680817480817680827480827680837480837680847480847680857480857680867480867680877480877680887480887680897480897680907480907680917480917680927480927680937480937680947480947680957480957680967480967680977480977680987480987680997480997681007481007681017481017681027481027681037481037681047481047681057481057681067481067681077481077681087481087681097481097681107481107681117481117681127481127681137481137681147481147681157481157681167481167681177481177681187481187681197481197681207481207681217481217681227481227681237481237681247481247681257481257681267481267681277481277681287481287681297481297681307481307681317481317681327481327681337481337681347481347681357481357681367481367681377481377681387481387681397481397681407481407681417481417681427481427681437481437681447481447681457481457681467481467681477481477681487481487681497481497681507481507681517481517681527481527681537481537681547481547681557481557681567481567681577481577681587481587681597481597681607481607681617481617681627481627681637481637681647481647681657481657681667481667681677481677681687481687681697481697681707481707681717481717681727481727681737481737681747481747681757481757681767481767681777481777681787481787681797481797681807481807681817481817681827481827681837481837681847481847681857481857681867481867681877481877681887481887681897481897681907481907681917481917681927481927681937481937681947481947681957481957681967481967681977481977681987481987681997481997682007482007682017482017682027482027682037482037682047482047682057482057682067482067682077482077682087482087682097482097682107482107682117482117682127482127682137482137682147482147682157482157682167482167682177482177682187482187682197482197682207482207682217482217682227482227682237482237682247482247682257482257682267482267682277482277682287482287682297482297682307482307682317482317682327482327682337482337682347482347682357482357682367482367682377482377682387482387682397482397682407482407682417482417682427482427682437482437682447482447682457482457682467482467682477482477682487482487682497482497682507482507682517482517682527482527682537482537682547482547682557482557682567482567682577482577682587482587682597482597682607482607682617482617682627482627682637482637682647482647682657482657682667482667682677482677682687482687682697482697682707482707682717482717682727482727682737482737682747482747682757482757682767482767682777482777682787482787682797482797682807482807682817482817682827482827682837482837682847482847682857482857682867482867682877482877682887482887682897482897682907482907682917482917682927482927682937482937682947482947682957482957682967482967682977482977682987482987682997482997683007483007683017483017683027483027683037483037683047483047683057483057683067483067683077483077683087483087683097483097683107483107683117483117683127483127683137483137683147483147683157483157683167483167683177483177683187483187683197483197683207483207683217483217683227483227683237483237683247483247683257483257683267483267683277483277683287483287683297483297683307483307683317483317683327483327683337483337683347483347683357483357683367483367683377483377683387483387683397483397683407483407683417483417683427483427683437483437683447483447683457483457683467483467683477483477683487483487683497483497683507483507683517483517683527483527683537483537683547483547683557483557683567483567683577483577683587483587683597483597683607483607683617483617683627483627683637483637683647483647683657483657683667483667683677483677683687483687683697483697683707483707683717483717683727483727683737483737683747483747683757483757683767483767683777483777683787483787683797483797683807483807683817483817683827483827683837483837683847483847683857483857683867483867683877483877683887483887683897483897683907483907683917483917683927483927683937483937683947483947683957483957683967483967683977483977683987483987683997483997684007484007684017484017684027484027684037484037684047484047684057484057684067484067684077484077684087484087684097484097684107484107684117484117684127484127684137484137684147484147684157484157684167484167684177484177684187484187684197484197684207484207684217484217684227484227684237484237684247484247684257484257684267484267684277484277684287484287684297484297684307484307684317484317684327484327684337484337684347484347684357484357684367484367684377484377684387484387684397484397684407484407684417484417684427484427684437484437684447484447684457484457684467484467684477484477684487484487684497484497684507484507684517484517684527484527684537484537684547484547684557484557684567484567684577484577684587484587684597484597684607484607684617484617684627484627684637484637684647484647684657484657684667484667684677484677684687484687684697484697684707484707684717484717684727484727684737484737684747484747684757484757684767484767684777484777684787484787684797484797684807484807684817484817684827484827684837484837684847484847684857484857684867484867684877484877684887484887684897484897684907484907684917484917684927484927684937484937684947484947684957484957684967484967684977484977684987484987684997484997685007485007685017485017685027485027685037485037685047485047685057485057685067485067685077485077685087485087685097485097685107485107685117485117685127485127685137485137685147485147685157485157685167485167685177485177685187485187685197485197685207485207685217485217685227485227685237485237685247485247685257485257685267485267685277485277685287485287685297485297685307485307685317485317685327485327685337485337685347485347685357485357685367485367685377485377685387485387685397485397685407485407685417485417685427485427685437485437685447485447685457485457685467485467685477485477685487485487685497485497685507485507685517485517685527485527685537485537685547485547685557485557685567485567685577485577685587485587685597485597685607485607685617485617685627485627685637485637685647485647685657485657685667485667685677485677685687485687685697485697685707485707685717485717685727485727685737485737685747485747685757485757685767485767685777485777685787485787685797485797685807485807685817485817685827485827685837485837685847485847685857485857685867485867685877485877685887485887685897485897685907485907685917485917685927485927685937485937685947485947685957485957685967485967685977485977685987485987685997485997686007486007686017486017686027486027686037486037686047486047686057486057686067486067686077486077686087486087686097486097686107486107686117486117686127486127686137486137686147486147686157486157686167486167686177486177686187486187686197486197686207486207686217486217686227486227686237486237686247486247686257486257686267486267686277486277686287486287686297486297686307486307686317486317686327486327686337486337686347486347686357486357686367486367686377486377686387486387686397486397686407486407686417486417686427486427686437486437686447486447686457486457686467486467686477486477686487486487686497486497686507486507686517486517686527486527686537486537686547486547686557486557686567486567686577486577686587486587686597486597686607486607686617486617686627486627686637486637686647486647686657486657686667486667686677486677686687486687686697486697686707486707686717486717686727486727686737486737686747486747686757486757686767486767686777486777686787486787686797486797686807486807686817486817686827486827686837486837686847486847686857486857686867486867686877486877686887486887686897486897686907486907686917486917686927486927686937486937686947486947686957486957686967486967686977486977686987486987686997486997687007487007687017487017687027487027687037487037687047487047687057487057687067487067687077487077687087487087687097487097687107487107687117487117687127487127687137487137687147487147687157487157687167487167687177487177687187487187687197487197687207487207687217487217687227487227687237487237687247487247687257487257687267487267687277487277687287487287687297487297687307487307687317487317687327487327687337487337687347487347687357487357687367487367687377487377687387487387687397487397687407487407687417487417687427487427687437487437687447487447687457487457687467487467687477487477687487487687497487497687507487507687517487517687527487527687537487537687547487547687557487557687567487567687577487577687587487587687597487597687607487607687617487617687627487627687637487637687647487647687657487657687667487667687677487677687687487687687697487697687707487707687717487717687727487727687737487737687747487747687757487757687767487767687777487777687787487787687797487797687807487807687817487817687827487827687837487837687847487847687857487857687867487867687877487877687887487887687897487897687907487907687917487917687927487927687937487937687947487947687957487957687967487967687977487977687987487987687997487997688007488007688017488017688027488027688037488037688047488047688057488057688067488067688077488077688087488087688097488097688107488107688117488117688127488127688137488137688147488147688157488157688167488167688177488177688187488187688197488197688207488207688217488217688227488227688237488237688247488247688257488257688267488267688277488277688287488287688297488297688307488307688317488317688327488327688337488337688347488347688357488357688367488367688377488377688387488387688397488397688407488407688417488417688427488427688437488437688447488447688457488457688467488467688477488477688487488487688497488497688507488507688517488517688527488527688537488537688547488547688557488557688567488567688577488577688587488587688597488597688607488607688617488617688627488627688637488637688647488647688657488657688667488667688677488677688687488687688697488697688707488707688717488717688727488727688737488737688747488747688757488757688767488767688777488777688787488787688797488797688807488807688817488817688827488827688837488837688847488847688857488857688867488867688877488877688887488887688897488897688907488907688917488917688927488927688937488937688947488947688957488957688967488967688977488977688987488987688997488997689007489007689017489017689027489027689037489037689047489047689057489057689067489067689077489077689087489087689097489097689107489107689117489117689127489127689137489137689147489147689157489157689167489167689177489177689187489187689197489197689207489207689217489217689227489227689237489237689247489247689257489257689267489267689277489277689287489287689297489297689307489307689317489317689327489327689337489337689347489347689357489357689367489367689377489377689387489387689397489397689407489407689417489417689427489427689437489437689447489447689457489457689467489467689477489477689487489487689497489497689507489507689517489517689527489527689537489537689547489547689557489557689567489567689577489577689587489587689597489597689607489607689617489617689627489627689637489637689647489647689657489657689667489667689677489677689687489687689697489697689707489707689717489717689727489727689737489737689747489747689757489757689767489767689777489777689787489787689797489797689807489807689817489817689827489827689837489837689847489847689857489857689867489867689877489877689887489887689897489897689907489907689917489917689927489927689937489937689947489947689957489957689967489967689977489977689987489987689997489997690007490007690017490017690027490027690037490037690047490047690057490057690067490067690077490077690087490087690097490097690107490107690117490117690127490127690137490137690147490147690157490157690167490167690177490177690187490187690197490197690207490207690217490217690227490227690237490237690247490247690257490257690267490267690277490277690287490287690297490297690307490307690317490317690327490327690337490337690347490347690357490357690367490367690377490377690387490387690397490397690407490407690417490417690427490427690437490437690447490447690457490457690467490467690477490477690487490487690497490497690507490507690517490517690527490527690537490537690547490547690557490557690567490567690577490577690587490587690597490597690607490607690617490617690627490627690637490637690647490647690657490657690667490667690677490677690687490687690697490697690707490707690717490717690727490727690737490737690747490747690757490757690767490767690777490777690787490787690797490797690807490807690817490817690827490827690837490837690847490847690857490857690867490867690877490877690887490887690897490897690907490907690917490917690927490927690937490937690947490947690957490957690967490967690977490977690987490987690997490997691007491007691017491017691027491027691037491037691047491047691057491057691067491067691077491077691087491087691097491097691107491107691117491117691127491127691137491137691147491147691157491157691167491167691177491177691187491187691197491197691207491207691217491217691227491227691237491237691247491247691257491257691267491267691277491277691287491287691297491297691307491307691317491317691327491327691337491337691347491347691357491357691367491367691377491377691387491387691397491397691407491407691417491417691427491427691437491437691447491447691457491457691467491467691477491477691487491487691497491497691507491507691517491517691527491527691537491537691547491547691557491557691567491567691577491577691587491587691597491597691607491607691617491617691627491627691637491637691647491647691657491657691667491667691677491677691687491687691697491697691707491707691717491717691727491727691737491737691747491747691757491757691767491767691777491777691787491787691797491797691807491807691817491817691827491827691837491837691847491847691857491857691867491867691877491877691887491887691897491897691907491907691917491917691927491927691937491937691947491947691957491957691967491967691977491977691987491987691997491997692007492007692017492017692027492027692037492037692047492047692057492057692067492067692077492077692087492087692097492097692107492107692117492117692127492127692137492137692147492147692157492157692167492167692177492177692187492187692197492197692207492207692217492217692227492227692237492237692247492247692257492257692267492267692277492277692287492287692297492297692307492307692317492317692327492327692337492337692347492347692357492357692367492367692377492377692387492387692397492397692407492407692417492417692427492427692437492437692447492447692457492457692467492467692477492477692487492487692497492497692507492507692517492517692527492527692537492537692547492547692557492557692567492567692577492577692587492587692597492597692607492607692617492617692627492627692637492637692647492647692657492657692667492667692677492677692687492687692697492697692707492707692717492717692727492727692737492737692747492747692757492757692767492767692777492777692787492787692797492797692807492807692817492817692827492827692837492837692847492847692857492857692867492867692877492877692887492887692897492897692907492907692917492917692927492927692937492937692947492947692957492957692967492967692977492977692987492987692997492997693007493007693017493017693027493027693037493037693047493047693057493057693067493067693077493077693087493087693097493097693107493107693117493117693127493127693137493137693147493147693157493157693167493167693177493177693187493187693197493197693207493207693217493217693227493227693237493237693247493247693257493257693267493267693277493277693287493287693297493297693307493307693317493317693327493327693337493337693347493347693357493357693367493367693377493377693387493387693397493397693407493407693417493417693427493427693437493437693447493447693457493457693467493467693477493477693487493487693497493497693507493507693517493517693527493527693537493537693547493547693557493557693567493567693577493577693587493587693597493597693607493607693617493617693627493627693637493637693647493647693657493657693667493667693677493677693687493687693697493697693707493707693717493717693727493727693737493737693747493747693757493757693767493767693777493777693787493787693797493797693807493807693817493817693827493827693837493837693847493847693857493857693867

5622765623745623775624755624775625755625775626755626775627755627775628
7556287756297556297756307556307756317556317756327556327756337556337756
3475563477563575563577563675563677563775563777563875563877563975563977
5640755640775641755641775642755642775643755643775644755644775645755645
7756467556467756477556477756487556487756497556497756507556507756517556
5177565275565277565375565377565475565477565575565577565675565677565775
5657775658755658775659755659775660755660775661755661775662755662775663
7556637756647556647756657656657756667656667756677656677756687656687756
6976566977567076567077567176567177567276567277567376567378567476567478
5675765675785676765676785677765677785678765678785679765679785680765680
7856817656817856827656827856837656837856847656847856857656857856867656
8678568776568778568876568878568976568978569076569078569176569178569276
5692785693765693785694765694785695765695785696765696785697775697785698
7756987856997756997857007757007857017757017857027757027857037757037857
0477570478570577570578570677570678570777570778570877570878570977570978
5710775710785711775711785712775712785713775713795714775714795715775715
7957167757167957177757177957187757187957197757197957207757207957217757
2179572277572279572377572379572477572479572577572579572677572679572777
5727795728775728795729775729795730775730795731775731795732775732795733
7757337957347757347957357757357957367757367957377757377957387757387957
3977573979574077574079574177574179574277574279574377574379574477574479
5745775745795746775746795747775747795748785748795749785749795750785750
7957517857517957527857527957537857537957547857547957557857557957567857
5679575778575779575878575879575978575980576078576080576178576180576278
5762805763785763805764785764805765785765805766785766805767785767805768
7857688057697857698057707857708057717857718057727857728057737857738057
7478577480577578577580577678577680577778577780577878577880577978577980
5780785780805781785781805782785782805783785783805784785784805785785785
8057867857868057877857878057888785788805789795789805790795790805791795 7
9180579279579280579379579380579479579480579579579580579679579680579779
5797805798795798805799795799805800795800805801795801815802795802815803
7958038158047958048158057958058158067958068158077958078158087958088158
0979580981581079581081581179581181581279581281581379581381581479581481
5815795815815816795816815817795817815818795818815819795819815820795820
8158217958218158227958228158237958238158247958248158257958258158267958
2681582779582781582879582881582979582981583079583082583179583182583279
5832825833795833825834795834825835795835825836805836825837805837825838
8058388258398058398258408058408258418058418258428058428258438058438258
4480584482584580584582584680584682584780584782584880584882584980584983
5850805850835851805851835852805852835853805853835854805854835855805855

835856805856835857805857835858805858835859805859835860805860835861805861835862805862835863805863835864805864835865805865835866805866835867805867835868805868835869805869835870805870835871805871835872805872835873
805873835874805874835875805875835876805876835877805877835878805878835879805879835880805880835881805881835882805882835883805883835884805884835885805885835886805886835887805887835888805888835889805889835890805890835891805891835892805892835893805893835894805894835895805895835896805896835897805897835898805898835899805899835900805900835901805901835902805902835903805903835904805904835905805905835906805906835907805907835908
815908845909825909845910825910855911825911855912825912855913825913855914825914855915825915855916825916855917825917855918825918855919825919855920825920855921825921855922825922855923825923855924825924855925825925855926825926855927825927855928825928855929825929855930825930855931825931855932825932855933825933855934825934855935825935855936825936855937825937855938825938855939825939855940825940855941825941855942825942855943
835943865944835944865945835945865946835946865947835947865948835948865949835949865950835950865951835951865952835952865953835953865954835954865955835955865956835956865957835957865958835958865959835959865960835960
875961835961875962835962875963835963875964835964875965835965875966845966
687596784596787596884596888596984596988597084597088597184597188597284597288597384597388597484597488597584597588597684597688597784597788597884597888597984597988598084598088598184598188598284598288598384598388598484598488598584598588598684598688598784598788598884598888598984598988599084599088599184599188599284599288599384599388599484599488599584599588599684599688599784599788599884599888599984599988600084600088600184600188600284600288600384600388600484600488600584600588600684600688600784600788600884600888600984600988601084601088601184601188601284601288601384601388601484601488601584601588601684601688601784601788601884601888601984601988602084602088602184602188602284602288602384602388602484602488602584602588602684602688602784602788602884602888602984602988603084603088603184603188603284603288603384603388603484603488603584603588603684603688603784603788603884603888603984603988604084604088604184604188604284604288604384604388604484604488604584604588604684604688604784604788604884604888604984604988605084605088605184605188605284605288605384605388605484605488605584605588605684605688605784605788605884605888605984605988606084606088606184606188606284606288606384606388606484606488606584606588606684606688606784606788606884606888606984606988607084607088607184607188607284607288607384607388607484607488607584607588607684607688607784607788607884607888607984607988608084608088608184608188608284608288608384608388608484608488608584608588608684608688608784608788608884608888608984608988609084609088609184609188609284609288609384609388609484609488609584609588609684609688609784609788609884609888609984609988610084610088610184610188610284610288610384610388610484610488610584610588610684610688610784610788610884610888610984610988611084611088611184611188611284611288611384611388611484611488611584611588611684611688611784611788611884611888611984611988612084612088612184612188612284612288612384612388612484612488612584612588612684612688612784612788612884612888612984612988613084613088613184613188613284613288613384613388613484613488613584613588613684613688613784613788613884613888613984613988614084614088614184614188614284614288614384614388614484614488614584614588614684614688614784614788614884614888614984614988615084615088615184615188615284615288615384615388615484615488615584615588615684615688615784615788615884615888615984615988616084616088616184616188616284616288616384616388616484616488616584616588616684616688616784616788616884616888616984616988617084617088617184617188617284617288617384617388617484617488617584617588617684617688617784617788617884617888617984617988618084618088618184618188618284618288618384618388618484618488618584618588618684618688618784618788618884618888618984618988619084619088619184619188619284619288619384619388619484619488619584619588619684619688619784619788619884619888619984619988620084620088620184620188620284620288620384620388620484620488620584620588620684620688620784620788620884620888620984620988621084621088621184621188621284621288621384621388621484621488621584621588621684621688621784621788621884621888621984621988622084622088622184622188622284622288622384622388622484622488622584622588622684622688622784622788622884622888622984622988623084623088623184623188623284623288623384623388623484623488623584623588623684623688623784623788623884623888623984623988624084624088624184624188624284624288624384624388624484624488624584624588624684624688624784624788624884624888624984624988625084625088625184625188625284625288625384625388625484625488625584625588625684625688625784625788625884625888625984625988626084626088626184626188626284626288626384626388626484626488626584626588626684626688626784626788626884626888626984626988627084627088627184627188627284627288627384627388627484627488627584627588627684627688627784627788627884627888627984627988628084628088628184628188628284628288628384628388628484628488628584628588628684628688628784628788628884628888628984628988629084629088629184629188629284629288629384629388629484629488629584629588629684629688629784629788629884629888629984629988630084630088630184630188630284630288630384630388630484630488630584630588630684630688630784630788630884630888630984630988631084631088631184631188631284631288631384631388631484631488631584631588631684631688631784631788631884631888631984631988632084632088632184632188632284632288632384632388632484632488632584632588632684632688632784632788632884632888632984632988633084633088633184633188633284633288633384633388633484633488633584633588633684633688633784633788633884633888633984633988634084634088634184634188634284634288634384634388634484634488634584634588634684634688634784634788634884634888634984634988635084635088635184635188635284635288635384635388635484635488635584635588635684635688635784635788635884635888635984635988636084636088636184636188636284636288636384636388636484636488636584636588636684636688636784636788636884636888636984636988637084637088637184637188637284637288637384637388637484637488637584637588637684637688637784637788637884637888637984637988638084638088638184638188638284638288638384638388638484638488638584638588638684638688638784638788638884638888638984638988639084639088639184639188639284639288639384639388639484639488639584639588639684639688639784639788639884639888639984639988640084640088640184640188640284640288640384640388640484640488640584640588640684640688640784640788640884640888640984640988641084641088641184641188641284641288641384641388641484641488641584641588641684641688641784641788641884641888641984641988642084642088642184642188642284642288642384642388642484642488642584642588642684642688642784642788642884642888642984642988643084643088643184643188643284643288643384643388643484643488643584643588643684643688643784643788643884643888643984643988644084644088644184644188644284644288644384644388644484644488644584644588644684644688644784644788644884644888644984644988645084645088645184645188645284645288645384645388645484645488645584645588645684645688645784645788645884645888645984645988646084646088646184646188646284646288646384646388646484646488646584646588646684646688646784646788646884646888646984646988647084647088647184647188647284647288647384647388647484647488647584647588647684647688647784647788647884647888647984647988648084648088648184648188648284648288648384648388648484648488648584648588648684648688648784648788648884648888648984648988649084649088649184649188649284649288649384649388649484649488649584649588649684649688649784649788649884649888649984649988650084650088650184650188650284650288650384650388650484650488650584650588650684650688650784650788650884650888650984650988651084651088651184651188651284651288651384651388651484651488651584651588651684651688651784651788651884651888651984651988652084652088652184652188652284652288652384652388652484652488652584652588652684652688652784652788652884652888652984652988653084653088653184653188653284653288653384653388653484653488653584653588653684653688653784653788653884653888653984653988654084654088654184654188654284654288654384654388654484654488654584654588654684654688654784654788654884654888654984654988655084655088655184655188655284655288655384655388655484655488655584655588655684655688655784655788655884655888655984655988656084656088656184656188656284656288656384656388656484656488656584656588656684656688656784656788656884656888656984656988657084657088657184657188657284657288657384657388657484657488657584657588657684657688657784657788657884657888657984657988658084658088658184658188658284658288658384658388658484658488658584658588658684658688658784658788658884658888658984658988659084659088659184659188659284659288659384659388659484659488659584659588659684659688659784659788659884659888659984659988660084660088660184660188660284660288660384660388660484660488660584660588660684660688660784660788660884660888660984660988661084661088661184661188661284661288661384661388661484661488661584661588661684661688661784661788661884661888661984661988662084662088662184662188662284662288662384662388662484662488662584662588662684662688662784662788662884662888662984662988663084663088663184663188663284663288663384663388663484663488663584663588663684663688663784663788663884663888663984663988664084664088664184664188664284664288664384664388664484664488664584664588664684664688664784664788664884664888664984664988665084665088665184665188665284665288665384665388665484665488665584665588665684665688665784665788665884665888665984665988666084666088666184666188666284666288666384666388666484666488666584666588666684666688666784666788666884666888666984666988667084667088667184667188667284667288667384667388667484667488667584667588667684667688667784667788667884667888667984667988668084668088668184668188668284668288668384668388668484668488668584668588668684668688668784668788668884668888668984668988669084669088669184669188669284669288669384669388669484669488669584669588669684669688669784669788669884669888669984669988670084670088670184670188670284670288670384670388670484670488670584670588670684670688670784670788670884670888670984670988671084671088671184671188671284671288671384671388671484671488671584671588671684671688671784671788671884671888671984671988672084672088672184672188672284672288672384672388672484672488672584672588672684672688672784672788672884672888672984672988673084673088673184673188673284673288673384673388673484673488673584673588673684673688673784673788673884673888673984673988674084674088674184674188674284674288674384674388674484674488674584674588674684674688674784674788674884674888674984674988675084675088675184675188675284675288675384675388675484675488675584675588675684675688675784675788675884675888675984675988676084676088676184676188676284676288676384676388676484676488676584676588676684676688676784676788676884676888676984676988677084677088677184677188677284677288677384677388677484677488677584677588677684677688677784677788677884677888677984677988678084678088678184678188678284678288678384678388678484678488678584678588678684678688678784678788678884678888678984678988679084679088679184679188679284679288679384679388679484679488679584679588679684679688679784679788679884679888679984679988680084680088680184680188680284680288680384680388680484680488680584680588680684680688680784680788680884680888680984680988681084681088681184681188681284681288681384681388681484681488681584681588681684681688681784681788681884681888681984681988682084682088682184682188682284682288682384682388682484682488682584682588682684682688682784682788682884682888682984682988683084683088683184683188683284683288683384683388683484683488683584683588683684683688683784683788683884683888683984683988684084684088684184684188684284684288684384684388684484684488684584684588684684684688684784684788684884684888684984684988685084685088685184685188685284685288685384685388685484685488685584685588685684685688685784685788685884685888685984685988686084686088686184686188686284686288686384686388686484686488686584686588686684686688686784686788686884686888686984686988687084687088687184687188687284687288687384687388687484687488687584687588687684687688687784687788687884687888687984687988688084688088688184688188688284688288688384688388688484688488688584688588688684688688688784688788688884688888688984688988689084689088689184689188689284689288689384689388689484689488689584689588689684689688689784689788689884689888689984689988690084690088690184690188690284690288690384690388690484690488690584690588690684690688690784690788690884690888690984690988691084691088691184691188691284691288691384691388691484691488691584691588691684691688691784691788691884691888691984691988692084692088692184692188692284692288692384692388692484692488692584692588692684692688692784692788692884692888692984692988693084693088693184693188693284693288693384693388693484693488693584693588693684693688693784693788693884693888693984693988694084694088694184694188694284694288694384694388694484694488694584694588694684694688694784694788694884694888694984694988695084695088695184695188695284695288695384695388695484695488695584695588695684695688695784695788695884695888695984695988696084696088696184696188696284696288696384696388696484696488696584696588696684696688696784696788696884696888696984696988697084697088697184697188697284697288697384697388697484697488697584697588697684697688697784697788697884697888697984697988698084698088698184698188698284698288698384698388698484698488698584698588698684698688698784698788698884698888698984698988699084699088699184699188699284699288699384699388699484699488699584699588699684699688699784699788699884699888699984699988700084700088700184700188700284700288700384700388700484700488700584700588700684700688700784700788700884700888700984700988701084701088701184701188701284701288701384701388701484701488701584701588701684701688701784701788701884701888701984701988702084702088702184702188702284702288702384702388702484702488702584702588702684702688702784702788702884702888702984702988703084703088703184703188703284703288703384703388703484703488703584703588703684703688703784703788703884703888703984703988704084704088704184704188704284704288704384704388704484704488704584704588704684704688704784704788704884704888704984704988705084705088705184705188705284705288705384705388705484705488705584705588705684705688705784705788705884705888705984705988706084706088706184706188706284706288706384706388706484706488706584706588706684706688706784706788706884706888706984706988707084707088707184707188707284707288707384707388707484707488707584707588707684707688707784707788707884707888707984707988708084708088708184708188708284708288708384708388708484708488708584708588708684708688708784708788708884708888708984708988709084709088709184709188709284709288709384709388709484709488709584709588709684709688709784709788709884709888709984709988710084710088710184710188710284710288710384710388710484710488710584710588710684710688710784710788710884710888710984710988711084711088711184711188711284711288711384711388711484711488711584711588711684711688711784711788711884711888711984711988712084712088712184712188712284712288712384712388712484712488712584712588712684712688712784712788712884712888712984712988713084713088713184713188713284713288713384713388713484713488713584713588713684713688713784713788713884713888713984713988714084714088714184714188714284714288714384714388714484714488714584714588714684714688714784714788714884714888714984714988715084715088715184715188715284715288715384715388715484715488715584715588715684715688715784715788715884715888715984715988716084716088716184716188716284716288716384716388716484716488716584716588716684716688716784716788716884716888716984716988717084717088717184717188717284717288717384717388717484717488717584717588717684717688717784717788717884717888717984717988718084718088718184718188718284718288718384718388718484718488718584718588718684718688718784718788718884718888718984718988719084719088719184719188719284719288719384719388719484719488719584719588719684719688719784719788719884719888719984719988720084720088720184720188720284720288720384720388720484720488720584720588720684720688720784720788720884720888720984720988721084721088721184721188721284721288721384721388721484721488721584721588721684721688721784721788721884721888721984721988722084722088722184722188722284722288722384722388722484722488722584722588722684722688722784722788722884722888722984722988723084723088723184723188723284723288723384723388723484723488723584723588723684723688723784723788723884723888723984723988724084724088724184724188724284724288724384724388724484724488724584724588724684724688724784724788724884724888724984724988725084725088725184725188725284725288725384725388725484725488725584725588725684725688725784725788725884725888725984725988726084726088726184726188726284726288726384726388726484726488726584726588726684726688726784726788726884726888726984726988727084727088727184727188727284727288727384727388727484727488727584727588727684727688727784727788727884727888727984727988728084728088728184728188728284728288728384728388728484728488728584728588728684728688728784728788728884728888728984728988729084729088729184729188729284729288729384729388729484729488729584729588729684729688729784729788729884729888729984729988730084730088730184730188730284730288730384730388730484730488730584730588730684730688730784730788730884730888730984730988731084731088731184731188731284731288731384731388731484731488731584731588731684731688731784731788731884731888731984731988732084732088732184732188732284732288732384732388732484732488732584732588732684732688732784732788732884732888732984732988733084733088733184733188733284733288733384733388733484733488733584733588733684733688733784733788733884733888733984733988734084734088734184734188734284734288734384734388734484734488734584734588734684734688734784734788734884734888734984734988735084735088735184735188735284735288735384735388735484735488735584735588735684735688735784735788735884735888735984735988736084736088736184736188736284736288736384736388736484736488736584736588736684736688736784736788736884736888736984736988737084737088737184737188737284737288737384737388737484737488737584737588737684737688737784737788737884737888737984737988738084738088738184738188738284738288738384738388738484738488738584738588738684738688738784738788738884738888738984738988739084739088739184739188739284739288739384739388739484739488739584739588739684739688739784739788739884739888739984739988740084740088740184740188740284740288740384740388740484740488740584740588740684740688740784740788740884740888740984740988741084741088741184741188741284741288741384741388741484741488741584741588741684741688741784741788741884741888741984741988742084742088742184742188742284742288742384742388742484742488742584742588742684742688742784742788742884742888742984742988743084743088743184743188743284743288743384743388743484743488743584743588743684743688743784743788743884743888743984743988744084744088744184744188744284744288744384744388744484744488744584744588744684744688744784744788744884744888744984744988745084745088745184745188745284745288745384745388745484745488745584745588745684745688745784745788745884745888745984745988746084746088746184746188746284746288746384746388746484746488746584746588746684746688746784746788746884746888746984746988747084747088747184747188747284747288747384747388747484747488747584747588747684747688747784747788747884747888747984747988748084748088748184748188748284748288748384748388748484748488748584748588748684748688748784748788748884748888748984748988749084749088749184749188749284749288749384749388749484749488749584749588749684749688749784749788749884749888749984749988750084750088750184750188750284750288750384750388750484750488750584750588750684750688750784750788750884750888750984750988751084751088751184751188751284751288751384751388751484751488751584751588751684751688751784751788751884751888751984751988752084752088752184752188752284752288752384752388752484752488752584752588752684752688752784752788752884752888752984752988753084753088753184753188753284753288753384753388753484753488753584753588753684753688753784753788753884753888753984753988754084754088754184754188754284754288754384754388754484754488754584754588754684754688754784754788754884754888754984754988755084755088755184755188755284755288755384755388755484755488755584755588755684755688755784755788755884755888755984755988756084756088756184756188756284756288756384756388756484756488756584756588756684756688756784756788756884756888756984756988757084757088757184757188757284757288757384757388757484757488757584757588757684757688757784757788757884757888757984757988758084758088758184758188758284758288758384758388758484758488758584758588758684758688758784758788758884758888758984758988759084759088759184759188759284759288759384759388759484759488759584759588759684759688759784759788759884759888759984759988760084760088760184760188760284760288760384760388760484760488760584760588760684760688760784760788760884760888760984760988761084761088761184761188761284761288761384761388761484761488761584761588761684761688761784761788761884761888761984761988762084762088762184762188762284762288762384762388762484762488762584762588762684762688762784762788762884762888762984762988763084763088763184763188763284763288763384763388763484763488763584763588763684763688763784763788763884763888763984763988764084764088764184764188764284764288764384764388764484764488764584764588764684764688764784764788764884764888764984764988765084765088765184765188765284765288765384765388765484765488765584765588765684765688765784765788765884765888765984765988766084766088766184766188766284766288766384766388766484766488766584766588766684766688766784766788766884766888766984766988767084767088767184767188767284767288767384767388767484767488767584767588767684767688767784767788767884767888767984767988768084768088768184768188768284768288768384768388768484768488768584768588768684768688768784768788768884768888768984768988769084769088769184769188769284769288769384769388769484769488769584769588769684769688769784769788769884769888769984769988770084770088770184770188770284770288770384770388770484770488770584770588770684770688770784770788770884770888770984770988771084771088771184771188771284771288771384771388771484771488771584771588771684771688771784771788771884771888771984771988772084772088772184772188772284772288772384772388772484772488772584772588772684772688772784772788772884772888772984772988773084773088773184773188773284773288773384773388773484773488773584773588773684773688773784773788773884773888773984773988774084774088774184774188774284774288774384774388774484774488774584774588774684774688774784774788774884774888774984774988775084775088775184775188775284775288775384775388775484775488775584775588775684775688775784775788775884775888775984775988776084776088776184776188776284776288776384776388776484776488776584776588776684776688776784776788776884776888776984776988777084777088777184777188777284777288777384777388777484777488777584777588777684777688777784777788777884777888777984777988778084778088778184778188778284778288778384778388778484778488778584778588778684778688778784778788778884778888778984778988779084779088779184779188779284779288779384779388779484779488779584779588779684779688779784779788779884779888779984779988780084780088780184780188780284780288780384780388780484780488780584780588780684780688780784780788780884780888780984780988781084781088781184781188781284781288781384781388781484781488781584781588781684781688781784781788781884781888781984781988782084782088782184782188782284782288782384782388782484782488782584782588782684782688782784782788782884782888782984782988783084783088783184783188783284783288783384783388783484783488783584783588783684783688783784783788783884783888783984783988784084784088784184784188784284784288784384784388784484784488784584784588784684784688784784784788784884784888784984784988785084785088785184785188785284785288785384785388785484785488785584785588785684785688785784785788785884785888785984785988786084786088786184786188786284786288786384786388786484786488786584786588786684786688786784786788786884786888786984786988787084787088787184787188787284787288787384787388787484787488787584787588787684787688787784787788787884787888787984787988788084788088788184788188788284788288788384788388788484788488788584788588788684788688788784788788788884788888788984788988789084789088789184789188789284789288789384789388789484789488789584789588789684789688789784789788789884789888789984789988790084790088790184790188790284790288790384790388790484790488790584790588790684790688790784790788790884790888790984790988791084791088791184791188791284791288791384791388791484791488791584791588791684791688791784791788791884791888791984791988792084792088792184792188792284792288792384792388792484792488792584792588792684792688792784792788792884792888792984792988793084793088793184793188793284793288793384793388793484793488793584793588793684793688793784793788793884793888793984793988794084794088794184794188794284794288794384794388794484794488794584794588794684794688794784794788794884794888794984794988795084795088795184795188795284795288795384795388795484795488795584795588795684795688795784795788795884795888795984795988796084796088796184796188796284796288796384796388796484796488796584796588796684796688796784796788796884796888796984796988797084797088797184797188797284797288797384797388797484797488797584797588797684797688797784797788797884797888797984797988798084798088798184798188798284798288798384798388798484798488798584798588798684798688798784798788798884798888798984798988799084799088799184799188799284799288799384799388799484799488799584799588799684799688799784799788799884799888799984799988800084800088800184800188800284800288800384800388800484800488800584800588800684800688800784800788800884800888800984800988801084801088801184801188801284801288801384801388801484801488801584801588801684801688801784801788801884801888801984801988802084802088802184802188802284802288802384802388802484802488802584802588802684802688802784802788802884802888802984802988803084803088803184803188803284803288803384803388803484803488803584803588803684803688803784803788803884803888803984803988804084804088804184804188804284804288804384804388804484804488804584804588804684804688804784804788804884804888804984804988805084805088805184805188805284805288805384805388805484805488805584805588805684805688805784805788805884805888805984805988806084806088806184806188806284806288806384806388806484806488806584806588806684806688806784806788806884806888806984806988807084807088807184807188807284807288807384807388807484807488807584807588807684807688807784807788807884807888807984807988808084808088808184808188808284808288808384808388808484808488808584808588808684808688808784808788808884808888808984808988809084809088809184809188809284809288809384809388809484809488809584809588809684809688809784809788809884809888809984809988810084810088810184810188810284810288810384810388810484810488810584810588810684810688810784810788810884810888810984810988811084811088811184811188811284811288811384811388811484811488811584811588811684811688811784811788811884811888811984811988812084812088812184812188812284812288812384812388812484812488812584812588812684812688812784812788812884812888812984812988813084813088813184813188813284813288813384813388813484813488813584813588813684813688813784813788813884813888813984813988814084814088814184814188814284814288814384814388814484814488814584814588814684814688814784814788814884814888814984814988815084815088815184815188815284815288815384815388815484815488815584815588815684815688815784815788815884815888815984815988816084816088816184816188816284816288816384816388816484816488816584816588816684816688816784816788816884816888816984816988817084817088817184817188817284817288817384817388817484817488817584817588817684817688817784817788817884817888817984817988818084818088818184818188818284818288818384818388818484818488818584818588818684818688818784818788818884818888818984818988819084819088819184819188819284819288819384819388819484819488819584819588819684819688819784819788819884819888819984819988820084820088820184820188820284820288820384820388820484820488820584820588820684820688820784820788820884820888820984820988821084821088821184821188821284821288821384821388821484821488821584821588821684821688821784821788821884821888821984821988822084822088822184822188822284822288822384822388822484822488822584822588822684822688822784822788822884822888822984822988823084823088823184823188823284823288823384823388823484823488823584823588823684823688823784823788823884823888823984823988824084824088824184824188824284824288824384824388824484824488824584824588824684824688824784824788824884824888824984824988825084825088825184825188825284825288825384825388825484825488825584825588825684825688825784825788825884825888825984825988826084826088826184826188826284826288826384826388826484826488826584826588826684826688826784826788826884826888826984826988827084827088827184827188827284827288827384827388827484827488827584827588827684827688827784827788827884827888827984827988828084828088828184828188828284828288828384828388828484828488828584828588828684828688828784828788828884828888828984828988829084829088829184829188829284829288829384829388829484829488829584829588829684829688829784829788829884829888829984829988830084830088830184830188830284830288830384830388830484830488830584830588830684830688830784830788830884830888830984830988831084831088831184831188831284831288831384831388831484831488831584831588831684831688831784831788831884831888831984831988832084832088832184832188832284832288832384832388832484832488832584832588832684832688832784832788832884832888832984832988833084833088833184833188833284833288833384833388833484833488833584833588833684833688833784833788833884833888833984833988834084834088834184834188834284834288834384834388834484834488834584834588834684834688834784834788834884834888834984834988835084835088835184835188835284835288835384835388835484835488835584835588835684835688835784835788835884835888835984835988836084836088836184836188836284836288836384836388836484836488836584836588836684836688836784836788836884836888836984836988837084837088837184837188837284837288837384837388837484837488837584837588837684837688837784837788837884837888837984837988838084838088838184838188838284838288838384838388838484838488838584838588838684838688838784838788838884838888838984838988839084839088839184839188839284839288839384839388839484839488839584839588839684839688839784839788839884839888839984839988840084840088840184840188840284840288840384840388840484840488840584840588840684840688840784840788840884840888840984840988841084841088841184841188841284841288841384841388841484841488841584841588841684841688841784841788841884841888841984841988842084842088842184842188842284842288842384842388842484842488842584842588842684842688842784842788842884842888842984842988843084843088843184843188843284843288843384843388843484843488843584843588843684843688843784843788843884843888843984843988844084844088844184844188844284844288844384844388844484844488844584844588844684844688844784844788844884844888844984844988845084845088845184845188845284845288845384845388845484845488845584845588845684845688845784845788845884845888845984845988846084846088846184846188846284846288846384846388846484846488846584846588846684846688846784846788846884846888846984846988847084847088847184847188847284847288847384847388847484847488847584847588847684847688847784847788847884847888847984847988848084848088848184848188848284848288848384848388848484848488848584848588848684848688848784848788848884848888848984848988849084849088849184849188849284849288849384849388849484849488849584849588849684849688849784849788849884849888849984849988850084850088850184850188850284850288850384850388850484850488850584850588850684850688850784850788850884850888850984850988851084851088851184851188851284851288851384851388851484851488851584851588851684851688851784851788851884851888851984851988852084852088852184852188852284852288852384852388852484852488852584852588852684852688852784852788852884852888852984852988853084853088853184853188853284853288853384853388853484853488853584853588853684853688853784853788853884853888853984853988854084854088854184854188854284854288854384854388854484854488854584854588854684854688854784854788854884854888854984854988855084855088855184855188855284855288855384855388855484855488855584855588855684855688855784855788855884855888855984855988856084856088856184856188856284856288856384856388856484856488856584856588856684856688856784856788856884856888856984856988857084857088857184857188857284857288857384857388857484857488857584857588857684857688857784857788857884857888857984857988858084858088858184858188858284858288858384858388858484858488858584858588858684858688858784858788858884858888858984858988859084859088859184859188859284859288859384859388859484859488859584859588859684859688859784859788859884859888859984859988860084860088860184860188860284860288860384860388860484860488860584860588860684860688860784860788860884860888860984860988861084861088861184861188861284861288861384861388861484861488861584861588861684861688861784861788861884861888861984861988862084862088862184862188862284862288862384862388862484862488862584862588862684862688862784862788862884862888862984862988863084863088863184863188863284863288863384863388863484863488863584863588863684863688863784863788863884863888863984863988864084864088864184864188864284864288864384864388864484864488864584864588864684864688864784864788864884864888864984864988865084865088865184865188865284865288865384865388865484865488865584865588865684865688865784865788865884865888865984865988866084866088866184866188866284866288866384866388866484866488866584866588866684866688866784866788866884866888866984866988867084867088867184867188867284867288867384867388867484867488867584867588867684867688867784867788867884867888867984867988868084868088868184868188868284868288868384868388868484868488868584868588868684868688868784868788868884868888868984868988869084869088869184869188869284869288869384869388869484869488869584869588869684869688869784869788869884869888869984869988870084870088870184870188870284870288870384870388870484870488870584870588870684870688870784870788870884870888870984870988871084871088871184871188871284871288871384871388871484871488871584871588871684871688871784871788871884871888871984871988872084872088872184872188872284872288872384872388872484872488872584872588872684872688872784872788872884872888872984872988873084873088873184873188873284873288873384873388873484873488873584873588873684873688873784873788873884873888873984873988874084874088874184874188874284874288874384874388874484874488874584874588874684874688874784874788874884874888874984874988875084875088875184875188875284875288875384875388875484875488875584875588875684875688875784875788875884875888875984875988876084876088876184876188876284876288876384876388876484876488876584876588876684876688876784876788876884876888876984876988877084877088877184877188877284877288877384877388877484877488877584877588877684877688877784877788877884877888877984877988878084878088878184878188878284878288878384878388878484878488878584878588878684878688878784878788878884878888878984878988879084879088879184879188879284879288879384879388879484879488879584879588879684879688879784879788879884879888879984879988880084880088880184880188880284880288880384880388880484880488880584880588880684880688880784880788880884880888880984880988881084881088881184881188881284881288881384881388881484881488881584881588881684881688881784881788881884881888881984881988882084882088882184882188882284882288882384882388882484882488882584882588882684882688882784882788882884882888882984882988883084883088883184883188883284883288883384883388883484883488883584883588883684883688883784883788883884883888883984883988884084884088884184884188884284884288884384884388884484884488884584884588884684884688884784884788884884884888884984884988885084885088885184885188885284885288885384885388885484885488885584885588885684885688885784885788885884885888885984885988886084886088886184886188886284886288886384886388886484886488886584886588886684886688886784886788886884886888886984886988887084887088887184887188887284887288887384887388887484887488887584887588887684887688887784887788887884887888887984887988888084888088888184888188888284888288888384888388888484888488888584888588888684888688888784888788888884888888888984888988889084889088889184889188889284889288889384889388889484889488889584889588889684889688889784889788889884889888889984889988890084890088890184890188890284890288890384890388890484890488890584890588890684890688890784890788890884890888890984890988891084891088891184891188891284891288891384891388891484891488891584891588891684891688891784891788891884891888891984891988892084892088892184892188892284892288892384892388892484892488892584892588892684892688892784892788892884892888892984892988893084893088893184893188893284893288893384893388893484893488893584893588893684893688893784893788893884893888893984893988894084894088894184894188894284894288894384894388894484894488894584894588894684894688894784894788894884894888894984894988895084895088895184895188895284895288895384895388895484895488895584895588895684895688895784895788895884895888895984895988896084896088896184896188896284896288896384896388896484896488896584896588896684896688896784896788896884896888896984896988897084897088897184897188897284897288897384897388897484897488897584897588897684897688897784897788897884897888897984897988898084898088898184898188898284898288898384898388898484898488898584898588898684898688898784898788898884898888898984898988899084899088899184899188899284899288899384899388899484899488899584899588899684899688899784899788899884899888899984899988900084900088900184900188900284900288900384900388900484900488900584900588900684900688900784900788900884900888900984900988901084901088901184901188901284901288901384901388901484901488901584901588901684901688901784901788901884901888901984901988902084902088902184902188902284902288902384902388902484902488902584902588902684902688902784902788902884902888902984902988903084903088903184903188903284903288903384903388903484903488903584903588903684903688903784903788903884903888903984903988904084904088904184904188904284904288904384904388904484904488904584904588904684904688904784904788904884904888904984904988905084905088905184905188905284905288905384905388905484905488905584905588905684905688905784905788905884905888905984905988906084906088906184906188906284906288906384906388906484906488906584906588906684906688906784906788906884906888906984906988907084907088907184907188907284907288907384907388907484907488907584907588907684907688907784907788907884907888907984907988908084908088908184908188908284908288908384908388908484908488908584908588908684908688908784908788908884908888908984908988909084909088909184909188909284909288909384909388909484909488909584909588909684909688909784909788909884909888909984909988910084910088910184910188910284910288910384910388910484910488910584910588910684910688910784910788910884910888910984910988911084911088911184911188911284911288911384911388911484911488911584911588911684911688911784911788911884911888911984911988912084912088912184912188912284912288912384912388912484912488912584912588912684912688912784912788912884912888912984912988913084913088913184913188913284913288913384913388913484913488913584913588913684913688913784913788913884913888913984913988914084914088914184914188914284914288914384914388914484914488914584914588914684914688914784914788914884914888914984914988915084915088915184915188915284915288915384915388915484915488915584915588915684915688915784915788915884915888915984915988916084916088916184916188916284916288916384916388916484916488916584916588916684916688916784916788916884916888916984916988917084917088917184917188917284917288917384917388917484917488917584917588917684917688917784917788917884917888917984917988918084918088918184918188918284918288918384918388918484918488918584918588918684918688918784918788918884918888918984918988919084919088919184919188919284919288919384919388919484919488919584919588919684919688919784919788919884919888919984919988920084920088920184920188920284920288920384920388920484920488920584920588920684920688920784920788920884920888920984920988921084921088921184921188921284921288921384921388921484921488921584921588921684921688921784921788921884921888921984921988922084922088922184922188922284922288922384922388922484922488922584922588922684922688922784922788922884922888922984922988923084923088923184923188923284923288923384923388923484923488923584923588923684923688923784923788923884923888923984923988924084924088924184924188924284924288924384924388924484924488924584924588924684924688924784924788924884924888924984924988925084925088925184925188925284925288925384925388925484925488925584925588925684925688925784925788925884925888925984925988926084926088926184926188926284926288926384926388926484926488926584926588926684926688926784926788926884926888926984926988927084927088927184927188927284927288927384927388927484927488927584927588927684927688927784927788927884927888927984927988928084928088928184928188928284928288928384928388928484928488928584928588928684928688928784928788928884928888928984928988929084929088929184929188929284929288929384929388929484929488929584929588929684929688929784929788929884929888929984929988930084930088930184930188930284930288930384930388930484930488930584930588930684930688930784930788930884930888930984930988931084931088931184931188931284931288931384931388931484931488931584931588931684931688931784931788931884931888931984931988932084932088932184932188932284932288932384932388932484932488932584932588932684932688932784932788932884932888932984932988933084933088933184933188933284933288933384933388933484933488933584933588933684933688933784933788933884933888933984933988934084934088934184934188934284934288934384934388934484934488934584934588934684934688934784934788934884934888934984934988935084935088935184935188935284935288935384935388935484935488935584935588935684935688935784935788935884935888935984935988936084936088936184936188936284936288936384936388936484936488936584936588936684936688936784936788936884936888936984936988937084937088937184937188937284937288937384937388937484937488937584937588937684937688937784937788937884937888937984937988938084938088938184938188938284938288938384938388938484938488938584938588938684938688938784938788938884938888938984938988939084939088939184939188939284939288939384939388939484939488939584939588939684939688939784939788939884939888939984939988940084940088940184940188940284940288940384940388940484940488940584940588940684940688940784940788940884940888940984940988941084941088941184941188941284941288941384941388941484941488941584941588941684941688941784941788941884941888941984941988942084942088942184942188942284942288942384942388942484942488942584942588942684942688942784942788942884942888942984942988943084943088943184943188943284943288943384943388943484943488943584943588943684943688943784943788943884943888943984943988944084944088944184944188944284944288944384944388944484944488944584944588944684944688944784944788944884944888944984944988945084945088945184945188945284945288945384945388945484945488945584945588945684945688945784945788945884945888945984945988946084946088946184946188946284946288946384946388946484946488946584946588946684946688946784946788946884946888946984946988947084947088947184947188947284947288947384947388947484947488947584947588947684947688947784947788947884947888947984947988948084948088948184948188948284948288948384948388948484948488948584948588948684948688948784948788948884948888948984948988949084949088949184949188949284949288949384949388949484949488949584949588949684949688949784949788949884949888949984949988950084950088950184950188950284950288950384950388950484950488950584950588950684950688950784950788950884950888950984950988951084951088951184951188951284951288951384951388951484951488951584951588951684951688951784951788951884951888951984951988952084952088952184952188952284952288952384952388952484952488952584952588952684952688952784952788952884952888952984952988953084953088953184953188953284953288953384953388953484953488953584953588953684953688953784953788953884953888953984953988954084954088954184954188954284954288954384954388954484954488954584954588954684954688954784954788954884954888954984954988955084955088955184955188955284955288955384955388955484955488955584955588955684955688955784955788955884955888955984955988956084956088956184956188956284956288956384956388956484956488956584956588956684956688956784956788956884956888956984956988957084957088957184957188957284957288957384957388957484957488957584957588957684957688957784957788957884957888957984957988958084958088958184958188958284958288958384958388958484958488958584958588958684958688958784958788958884958888958984958988959084959088959184959188959284959288959384959388959484959488959584959588959684959688959784959788959884959888959984959988960084960088960184960188960284960288960384960388960484960488960584960588960684960688960784960788960884960888960984960988961084961088961184961188961284961288961384961388961484961488961584961588961684961688961784961788961884961888961984961988962084962088962184962188962284962288962384962388962484962488962584962588962684962688962784962788962884962888962984962988963084963088963184963188963284963288963384963388963484963488963584963588963684963688963784963788963884963888963984963988964084964088964184964188964284964288964384964388964484964488964584964588964684964688964784964788964884964888964984964988965084965088965184965188965284965288965384965388965484965488965584965588965684965688965784965788965884965888965984965988966084966088966184966188966284966288966384966388966484966488966584966588966684966688966784966788966884966888966984966988967084967088967184967188967284967288967384967388967484967488967584967588967684967688967784967788967884967888967984967988968084968088968184968188968284968288968384968388968484968488968584968588968684968688968784968788968884968888968984968988969084969088969184969188969284969288969384969388969484969488969584969588969684969688969784969788969884969888969984969988970084970088970184970188970284970288970384970388970484970488970584970588970684970688970784970788970884970888970984970988971084971088971184971188971284971288971384971388971484971488971584971588971684971688971784971788971884971888971984971988972084972088972184972188972284972288972384972388972484972488972584972588972684972688972784972788972884972888972984972988973084973088973184973188973284973288973384973388973484973488973584973588973684973688973784973788973884973888973984973988974084974088974184974188974284974288974384974388974484974488974584974588974684974688974784974788974884974888974984974988975084975088975184975188975284975288975384975388975484975488975584975588975684975688975784975788975884975888975984975988976084976088976184976188976284976288976384976388976484976488976584976588976684976688976784976788976884976888976984976988977084977088977184977188977284977288977384977388977484977488977584977588977684977688977784977788977884977888977984977988978084978088978184978188978284978288978384978388978484978488978584978588978684978688978784978788978884978888978984978988979084979088979184979188979284979288979384979388979484979488979584979588979684979688979784979788979884979888979984979988980084980088980184980188980284980288980384980388980484980488980584980588980684980688980784980788980884980888980984980988981084981088981184981188981284981288981384981388981484981488981584981588981684981688981784981788981884981888981984981988982084982088982184982188982284982288982384982388982484982488982584982588982684982688982784982788982884982888982984982988983084983088983184983188983284983288983384983388983484983488983584983588983684983688983784983788983884983888983984983988984084984088984184984188984284984288984384984388984484984488984584984588984684984688984784984788984884984888984984984988985084985088985184

8989608993609089609093609189609194609289609294609389609394609489609494
6095896095946096896096946097896097946098896098946099896099956100896100
9561018961019561028961029561038961039561048961049561058961059561068961
0695610789610796610889610896610989610996611089611096611190611196611290
6112966113906113966114906114966115906115966116906116966117906117966118
9061189661199061199661209061209661219061219661229061229661239061239661
2490612496612590612596612690612697612790612797612890612897612990612997
6130906130976131906131986132916132986133916133986134916134986135916135
9861369161369861379161379861389161389861399161399961409161409961419161
4199614291614299614391614399614491614499614591614599614691614699614791
6147100614892614810061499261491006150926150100615192615110061529261521
0061539261531006154926154100615592615510061569261561006157926157100615
8926158101615992615910161609261601016161926161101616292616210161639261
6310161649261641016165926165101616692616610161679261671016168926168101
6169926169102617093617010261719361711026172936172102617393617310261749
3617410261759361751026176936176102617793617710361789361781036179936179
1036180936180104618193618110461829461821046183946183104618494618410461
8594618510461869461861046187946187104618894618810461899461891056190946
1901056191956191105619295619210561939561931056194956194106619595619510
6619695619610661979561971066198956198107619995619910762009662001076201
9662011076202966202107620396620310762049662041076205966205108620696620
6108620796620710862089662081096209966209109621096621010962119662111096
2129662121096213966213109621496621411062159662151106216966216110621796
6217111621896621811162199662191116220976220111622197622111162229762221
1262239762231126224976224112622597622511262269862261136227986227113622
8986228113622998622911362309862301136231986231114623298623211462339862
3311462349862341146235996235114623699623611462379911623899216239993162
4099416241995162429961624399716244100826245100926246100102624710011262
4810012262491001326250100142625110015262521001626253100172625410018262
5510019262561012026257101212625810122262591012326260101242626110125262
6210126262631012726264101282626510129262661013026267101312626810232262
6910233262701023426271102352627210236262731023726274102382627510239262
7610240262771034126278103422627910343262801034426281104452628210446262
8310447262841044826285104492628610450262871045126288104522628910453262
9010454262911055526292105562629310557262941055826295105592629610560262
9710661262981066226299106632630010664263011066526302107662630310767263
0410768263051076926306107702630710771263081077226309107732631010874263
1110875263121087626313108772631410978263151097926316109802631710981263
1810982263191098326320109842632111085263221108626323110872632411088263
2511189263261119026327111912632811192263291119326330111942633111295263

3211296263331129726334112982633511299263361131002633711310126338113102
2633911310326340113104263411131052634211410626343114107263441141082634
5114109263461141102634711411126348114112 2”

5.5.2.2 Fact: The general and special verse indexes

This **fact**, shows a coding between the general verse indexes and 6236 numbered special verse indexes as below. Basically when you concatenate the general and special verse indexes and merge in the writing order from right to left then the the resulting big number is multiple of 19.

```
## General verse indexes and verses
x<- data.table(nQuran)
tmp <- paste0(x$VerseI,x$verse)
head(tmp) # see the head of the number

## [1] "11" "22" "33" "44" "55" "66"

tail(tmp) # see the tail of the number

## [1] "62311" "62322" "62333" "62344" "62355" "62366"

tmpr <- rev(tmp)
tmpr <- paste0(tmpr, collapse = '')
as.integer(as.bigz(tmpr) %% 19)

## [1] 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 36308
```

Here is the 36308 digits length big number:

“6236662355623446233362322623116230562294622836227262261622546224362232
6222162215622046219362182621716216362152621416213662125621146210362092
6208162073620626205162047620366202562014620036199261981619746196361952
6194161935619246191361902618916188961878618676185661845618346182361812
6180161793617826177161768617576174661735617246171361702616916168116167
1061669616586164761636616256161461603615926158161571161561061559615486
1537615266151561504614936148261471614686145761446614356142461413614021
6139161388613776136661355613446133361322613116130561294612836127261261
6125196124186123176122166121156120146119136118126117116116106115961148
6113761126611156110461093610826107161068610576104661035610246101361002

609916098860977609666095560944609336092260911609011608910608896087860 8
676085660845608346082360812608016079216078206077196076186075176074166 0
731560721460711360701260691160681060679606686065760646606356062460613 6
060260591605815605714605613605512605411605310605296051860507604966048 5
604746046360452604416043206042196041186040176039166038156037146036136 0
351260341160331060329603186030760296602856027460263602526024160233060 2
229602128602027601926601825601724601623601522601421601320601219601118 6
010176009166008156007146006136005126004116003106002960018600075999659 9
855997459963599525994159932659922559912459902359892259882159872059861 9
598518598417598316598215598114598013597912597811597710597695975859747 5
973659725597145970359692596815967195966185965175964165963155962145961 1
359601259591159581059579595685955759546595355952459513595025949159481 7
594716594615594514594413594312594211594110594095939859387593765936559 3
545934359332593215931225930215929205928195927185926175925165924155923 1
459221359211259201159191059189591785916759156591455913459123591125910 1
590925590824590723590622590521590420590319590218590117590016589915589 8
145897135896125895115894105893958928589175890658895588845887358862588 5
158843658833558823458813358803258793158783058772958762858752758742658 7
325587224587123587022586921586820586719586618586517586416586315586214 5
861135860125859115858105857958568585575854658535585245851358502584915 8
481958471858461758451658441558431458421358411258401158391058389583785 8
367583565834558334583235831258301582929582828582727582626582525582424 5
823235822225821215820205819195818185817175816165815155814145813135812 1
258111158101058099580885807758066580555804458033580225801158004257994 1
579840579739579638579537579436579335579234579133579032578931578830578 7
295786285785275784265783255782245781235780225779215778205777195776185 7
751757741657731557721457711357701257691157681057679576685765757646576 3
557624576135760257591575846575745575644575543575442575341575240575139 5
750385749375748365747355746345745335744325743315742305741295740285739 2
757382657372557362457352357342257332157322057311957301857291757281657 2
715572614572513572412572311572210572195720857197571865717557164571535 7
142571315712405711395710385709375708365707355706345705335704325703315 7
023057012957002856992756982656972556962456952356942256932156922056911 9
569018568917568816568715568614568513568412568311568210568195680856797 5
678656775567645675356742567315672505671495670485669475668465667455666 4
456654356644256634156624056613956603856593756583656573556563456553356 5
432565331565230565129565028564927564826564725564624564523564422564321 5
642205641195640185639175638165637155636145635135634125633115632105631 9
563085629756286562755626456253562425623156223156213056202956192856182 7
561726561625561524561423561322561221561120561019560918560817560716560 6

1556051456041356031256021156011056009559985598755976559655595455943559
3255921559140559039558938558837558736558635558534558433558332558231558
1305580295579285578275577265576255575245574235573225572215571205570195
5691855681755671655661555651455641355631255621155611055609555985558755
5765556555554555435553255521555156555055554954554853554752554651554550
5544495543485542475541465540455539445538435537425536415535405534395533
3855323755313655303555293455283355273255263155253055242955232855222755
2126552025551924551823551722551621551520551419551318551217551116551015
5509145508135507125506115505105504955038550275501655005549945498354972
5496154952054941954931854921754911654901554891454881354871254861154851
0548495483854827548165480554794547835477254761547528547427547326547225
5471245470235469225468215467205466195465185464175463165462155461145460
1354591254581154571054569545585454754536545255451454503544925448154472
8544627544526544425544324544223544122544021543920543819543718543617543
5165434155433145432135431125430115429105428954278542675425654245542345
4223542125420154194454184354174254164154154054143954133854123754113654
1035540934540833540732540631540530540429540328540227540126540025539924
5398235397225396215395205394195393185392175391165390155389145388135387
1253861153851053849538385382753816538055379453783537725376153755253745
1537350537249537148537047536946536845536744536643536542536441536340536
2395361385360375359365358355357345356335355325354315353305352295351285
3502753492653482553472453462353452253442153432053421953411853401753391
6533815533714533613533512533411533310533295331853307532965328553274532
6353252532415323525322515321505320495319485318475317465316455315445314
4353134253124153114053103953093853083753073653063553053453043353033253
0231530130530029529928529827529726529625529524529423529322529221529120
5290195289185288175287165286155285145284135283125282115281105280952798
5278752776527655275452743527325272152713052702952692852682752672652662
5526524526423526322526221526120526019525918525817525716525615525514525
4135253125252115251105250952498524875247652465524545244352432524215241
1252401152391052389523785236752356523455233452323523125230152291252281
1522710522695225852247522365222552214522035219252181521718521617521516
5214155213145212135211125210115209105208952078520675205652045520345202
3520125200151991151981051979519685195751946519355192451913519025189151
8811518710518695185851847518365182551814518035179251781517714517613517
5125174115173105172951718517075169651685516745166351652516415163135162
1251611151601051599515885157751566515555154451533515225151151502451492
3514822514721514620514519514418514317514216514115514014513913513812513
7115136105135951348513375132651315513045129351282512715126225125215124
2051231951221851211751201651191551181451171351161251151151141051139511

2851117511065109551084510735106251051510429510328510227510126510025509
9245098235097225096215095205094195093185092175091165090155089145088135
0871250861150851050849508385082750816508055079450783507725076150759650
7495507394507293507192507091506990506889506788506687506586506485506384
5062835061825060815059805058795057785056775055765054755053745052735051
7250507150497050486950476850466750456650446550436450426350416250406150
3960503859503758503657503556503455503354503253503152503051502950502849
5027485026475025465024455023445022435021425020415019405018395017385016
3750153650143550133450123350113250103150093050082950072850062750052650
0425500324500223500122500021499920499819499718499617499516499415499314
4992134991124990114989104988949878498674985649845498344982349812498014
9797849787749777649767549757449747349737249727149717049706949696849686
7496766496665496564496463496362496261496160496059495958495857495756495
6554955544954534953524952514951504950494949484948474947464946454945444
9444349434249424149414049403949393849383749373649363549353449343349333
2493231493130493029492928492827492726492625492524492423492322492221492
1204920194919184918174917164916154915144914134913124912114911104910949
0984908749076490654905449043490324902149015549005448995348985248975148
9650489549489448489347489246489145489044488943488842488741488640488539
4884384883374882364881354880344879334878324877314876304875294874284873
2748722648712548702448692348682248672148662048651948641848631748621648
6115486014485913485812485711485610485594854848537485264851548504484934
8482484714846624845614844604843594842584841574840564839554838544837534
8365248355148345048334948324848314748304648294548284448274348264248254
1482440482339482238482137482036481935481834481733481632481531481430481
3294812284811274810264809254808244807234806224805214804204803194802184
8011748001647991547981447971347961247951147941047939479284791747906478
9547884478734786247851478449478348478247478146478045477944477843477742
4776414775404774394773384772374771364770354769344768334767324766314765
3047642947632847622747612647602547592447582347572247562147552047541947
5318475217475116475015474914474813474712474611474510474494743847427474
1647405473944738347372473614735604734594733584732574731564730554729544
7285347275247265147255047244947234847224747214647204547194447184347174
2471641471540471439471338471237471136471035470934470833470732470631470
5304704294703284702274701264700254699244698234697224696214695204694194
6931846921746911646901546891446881346871246861146851046849468384682746
8164680546794467834677246761467545467444467343467242467141467040466939
4668384667374666364665354664344663334662324661314660304659294658284657
2746562646552546542446532346522246512146502046491946481846471746461646
4515464414464313464212464111464010463994638846377463664635546344463334

6322463114630184629174628164627154626144625134624124623114622104621946
2084619746186461754616446153461424613146122946112846102746092646082546
0724460623460522460421460320460219460118460017459916459815459714459613
4595124594114593104592945918459074589645885458744586345852458414583384
5823745813645803545793445783345773245763145753045742945732845722745712
6457025456924456823456722456621456520456419456318456217456116456015455
9144558134557124556114555104554945538455274551645505454944548345472454
6145453545443445433345423245413145403045392945382845372745362645352545
3424453323453222453121453020452919452818452717452616452515452414452313
4522124521114520104519945188451774516645155451444513345122451114510374
5093645083545073445063345053245043145033045022945012845002744992644982
5449724449623449522449421449320449219449118449017448916448815448714448
6134485124484114483104482944818448074479644785447744476344752447414473
5944725844715744705644695544685444675344665244655144645044634944624844
6147446046445945445844445743445642445541445440445339445238445137445036
4449354448344447334446324445314444304443294442284441274440264439254438
2444372344362244352144342044331944321844311744301644291544281444271344
2612442511442410442394422844217442064419544184441734416244151441489441
3884412874411864410854409844408834407824406814405804404794403784402774
4017644007543997443987343977243967143957043946943936843926743916643906
5438964438863438762438661438560438459438358438257438156438055437954437
8534377524376514375504374494373484372474371464370454369444368434367424
3664143654043643943633843623743613643603543593443583343573243563143553
0435429435328435227435126435025434924434823434722434621434520434419434
3184342174341164340154339144338134337124336114335104334943338433274331
6433054329443283432724326143255343245243235143225043214943204843194743
1846431745431644431543431442431341431240431139431038430937430836430735
4306344305334304324303314302304301294300284299274298264297254296244295
2342942242932142922042911942901842891742881642871542861442851342841242
8311428210428194280842797427864277542764427534274242731427254427153427
0524269514268504267494266484265474264464263454262444261434260424259414
2584042573942563842553742543642533542523442513342503242493142483042472
9424628424527424426424325424224424124234240224239214238204237194236184235
1742341642331542321442311342301242291142281042279422684225742246422352
4222442213422024219142188542178442168342158242148142138042127942117842
1077420976420875420774420673420572420471420370420269420168420067419966
4198654197644196634195624194614193604192594191584190574189564188554187
5441865341855241845141835041824941814841804741794641784541774441764341
7542417441417340417239417138417037416936416835416734416633416532416431
4163304162294161284160274159264158254157244156234155224154214153204152

194151184150174149164148154147144146134145124144114143104142941418414
0741396413854137441363413524134141337541327441317341307241297141287041
2769412668412567412466412365412264412163412062411961411860411759411658
4115574114564113554112544111534110524109514108504107494106484105474104
4641034541024441014341004240994140984040973940963840953740943640933540
9234409133409032408931408830408729408628408527408426408325408224408123
4080224079214078204077194076184075174074164073154072144071134070124069
1140681040679406684065740646406354062440613406024059140588840578740568
6405585405484405383405282405181405080404979404878404777404676404575404
4744043734042724041714040704039694038684037674036664035654034644033634
0326240316140306040295940285840275740265640255540245440235340225240215
1402050401949401848401747401646401545401444401343401242401141401040400
9394008384007374006364005354004344003334002324001314000303999293998283
9972739962639952539942439932339922239912139902039891939881839871739861
6398515398414398313398212398111398010397993978839777397663975539744397
3339722397113970182396918139681803967179396617839651773964176396317539
6217439611733960172395917139581703957169395616839551673954166395316539
5216439511633950162394916139481603947159394615839451573944156394315539
4215439411533940152393915139381503937149393614839351473934146393314539
3214439311433930142392914139281403927139392613839251373924136392313539
2213439211333920132391913139181303917129391612839151273914126391312539
1212439111233910122390912139081203907119390611839051173904116390311539
0211439011133900112389911138981103897109389610838951073894106389310538
9210438911033890102388910138881003887993886983885973884963883953882943
8819338809238799138789038778938768838758738748638738538728438718338708
2386981386880386779386678386577386476386375386274386173386072385971385
8703857693856683855673854663853653852643851633850623849613848603847593
8465838455738445638435538425438415338405238395138385038374938364838354
7383446383345383244383143383042382941382840382739382638382537382436382
3353822343821333820323819313818303817293816283815273814263813253812243
8112338102238092138082038071938061838051738041638031538021438011338001
2379911379810379793796837957379463793537924379133790237891378883378782
3786813785803784793783783782773781763780753779743778733777723776713775
7037746937736837726737716637706537696437686337676237666137656037645937
6358376257376156376055375954375853375752375651375550375449375348375247
3751463750453749443748433747423746413745403744393743383742373741363740
3537393437383337373237363137353037342937332837322737312637302537292437
2823372722372621372520372419372318372217372116372015371914371813371712
3716113715103714093713083712073711063710053709043708033707023706013705
4037044437034337024237014137004036993936983836973736963636953536943436
9333369232

3691313690303689293688283687273686263685253684243683233682223681213680
2036791936781836771736761636751536741436731336721236711136701036699366
8836677366663665536644366633366223661136605436595336585236575136565036 5
5493654483653473652463651453650443649433648423647413646403645393644383
6433736423636413536403436393336383236373136363036352936342836332736322
6363125363024362923362822362721362620362519362418362317362216362115362
0143619133618123617113616103615936148361373612636115361043609336082360
7136067336057236047136037036026936016836006735996635986535976435966335
9562359461359360359259359158359057358956358855358754358653358552358451
3583503582493581483580473579463578453577443576433575423574413573403572
3935713835703735693635683535673435663335653235643135633035622935612835
6027355926355825355724355623355522355421355320355219355118355017354916
3548153547143546133545123544113543103542935418354073539635385353743536
3353523534135333035322935312835302735292635282535272435262335252235242
1352320352219352118352017351916351815351714351613351512351411351310351
2935118351073509635085350743506335052350413503343502333501323500313499
3034982934972834962734952634942534932434922334912234902134892034881934
8718348617348516348415348314348213348112348011347910347893477834767347
5634745347343472334712347013469603468593467583466573465563464553463543
4625334615234605134595034584934574834564734554634544534534434524334514
2345041344940344839344738344637344536344435344334344233344132344031343
9303438293437283436273435263434253433243432233431223430213429203428193
4271834261734251634241534231434221334211234201134191034189341783416734
1563414534134341233411234101340969340868340767340666340565340464340363
3402623401613400603399593398583397573396563395553394543393533392523391
5133905033894933884833874733864633854533844433834333824233814133804033
7939337838337737337636337535337434337333337232337131337030336929336828
3367273366263365253364243363233362223361213360203359193358183357173356
1633551533541433531333521233511133501033499334883347733466334553344433
4333342233411334088333987333886333785333684333583333482333381333280333
1793330783329773328763327753326743325733324723323713322703321693320683
3196733186633176533166433156333146233136133126033115933105833095733085
6330755330654330553330452330351330250330149330048329947329846329745329
6443295433294423293413292403291393290383289373288363287353286343285333
2843232833132823032812932802832792732782632772532762432752332742232732
1327220327119327018326917326816326715326614326513326412326311326210326
1932608325973258632575325643255332542325313252933251923250913249903248
8932478832468732458632448532438432428332418232408132398032387932377832
3677323576323475323374323273323172323071322970322869322768322667322566
3224653223643222633221623220613219603218593217583216573215563214553213

5432125332115232105132095032084932074832064732054632044532034432024332
0142320041319940319839319738319637319536319435319334319233319132319031
3189303188293187283186273185263184253183243182233181223180213179203178
1931771831761731751631741531731431721331711231701131691031689316783166
7316563164531634316233161231601315922731582263157225315622431552233154
2223153221315222031512193150218314921731482163147215314621431452133144
2123143211314221031412093140208313920731382063137205313620431352033134
2023133201313220031311993130198312919731281963127195312619431251933124
1923123191312219031211893120188311918731181863117185311618431151833114
1823113181311218031111793110178310917731081763107175310617431051733104
1723103171310217031011693100168309916730981663097165309616430951633094
1623093161309216030911593090158308915730881563087155308615430851533084
1523083151308215030811493080148307914730781463077145307614430751433074
1423073141307214030711393070138306913730681363067135306613430651333064
1323063131306213030611293060128305912730581263057125305612430551233054
1223053121305212030511193050118304911730481163047115304611430451133044
1123043111304211030411093040108303910730381063037105303610430351033034
1023033101303210030319930309830299730289630279530269430259330249230239
1302290302189302088301987301886301785301684301583301482301381301280301
1793010783009773008763007753006743005733004723003713002703001693000682
9996729986629976529966429956329946229936129926029915929905829895729885
6298755298654298553298452298351298250298149298048297947297846297745297
6442975432974422973412972402971392970382969372968362967352966342965332
9643229633129623029612929602829592729582629572529562429552329542229532
1295220295119295018294917294816294715294614294513294412294311294210294
1929408293972938629375293642935329342293312932772931762930752929742928
7329277229267129257029246929236829226729216629206529196429186329176229
1661291560291459291358291257291156291055290954290853290752290651290550
2904492903482902472901462900452899442898432897422896412895402894392893
3828923728913628903528893428883328873228863128853028842928832828822728
8126288025287924287823287722287621287520287419287318287217287116287015
2869142868132867122866112865102864928638286272861628605285942858328572
2856128556428546328536228526128516028505928495828485728475628465528455
4284453284352284251284150284049283948283847283746283645283544283443283
3422832412831402830392829382828372827362826352825342824332823322822312
8213028202928192828182728172628162528152428142328132228122128112028101
9280918280817280716280615280514280413280312280211280110280092799827987
2797627965279542794327932279212791118279011727891162788115278711427861
1327851122784111278311027821092781108278010727791062778105277710427761
0327751022774101277310027729927719827709727699627689527679427669327659

2276491276390276289276188276087275986275885275784275683275582275481275
3802752792751782750772749762748752747742746732745722744712743702742692
7416827406727396627386527376427366327356227346127336027325927315827305
7272956272855272754272653272552272451272350272249272148272047271946271
8452717442716432715422714412713402712392711382710372709362708352707342
7063327053227043127033027022927012827002726992626982526972426962326952
2269421269320269219269118269017268916268815268714268613268512268411268
3102682926818268072679626785267742676326752267412673782672772671762670
7526697426687326677226667126657026646926636826626726616626606526596426
5863265762265661265560265459265358265257265156265055264954264853264752
2646512645502644492643482642472641462640452639442638432637422636412635
4026343926333826323726313626303526293426283326273226263126253026242926
2328262227262126262025261924261823261722261621261520261419261318261217
2611162610152609142608132607122606112605102604926038260272601626005259
9425983259722596125951122594111259311025921092591108259010725891062588
1052587104258610325851022584101258310025829925819825809725799625789525
7794257693257592257491257390257289257188257087256986256885256784256683
2565822564812563802562792561782560772559762558752557742556732555722554
7125537025526925516825506725496625486525476425466325456225446125436025
4259254158254057253956253855253754253653253552253451253350253249253148
2530472529462528452527442526432525422524412523402522392521382520372519
3625183525173425163325153225143125133025122925112825102725092625082525
0724250623250522250421250320250219250118250017249916249815249714249613
2495122494112493102492924918249072489624885248742486324852248412483135
2482134248113324801322479131247813024771292476128247512724741262473125
2472124247112324701222469121246812024671192466118246511724641162463115
2462114246111324601122459111245811024571092456108245510724541062453105
2452104245110324501022449101244810024479924469824459724449624439524429
4244193244092243991243890243789243688243587243486243385243284243183243
0822429812428802427792426782425772424762423752422742421732420722419712
4187024176924166824156724146624136524126424116324106224096124086024075
9240658240557240456240355240254240153240052239951239850239749239648239
5472394462393452392442391432390422389412388402387392386382385372384362
3833523823423813323803223793123783023772923762823752723742623732523722
4237123237022236921236820236719236618236517236416236315236214236113236
0122359112358102357923568235572354623535235242351323502234912348982347
9723469623459523449423439323429223419123409023398923388823378723368623
3585233484233383233282233181233080232979232878232777232676232575232474
2323732322722321712320702319692318682317672316662315652314642313632312
6223116123106023095923085823075723065623055523045423035323025223015123

0050229949229848229747229646229545229444229343229242229141229040228939
2288382287372286362285352284342283332282322281312280302279292278282277
2722762622752522742422732322722222712122702022691922681822671722661622
6515226414226313226212226111226010225992258822577225662255522544225332
2522225112250110224910922481082247107224610622451052244104224310322421
0222411012240100223999223898223797223696223595223494223393223292223191
2230902229892228882227872226862225852224842223832222822221812220802219
7922187822177722167622157522147422137322127222117122107022096922086822
0767220666220565220464220363220262220161220060219959219858219757219656
2195552194542193532192522191512190502189492188482187472186462185452184
4421834321824221814121804021793921783821773721763621753521743421733321
7232217131217030216929216828216727216626216525216424216323216222216121
2160202159192158182157172156162155152154142153132152122151112150102149
9214882147721466214552144421433214222141121401112139110213810921371082
1361072135106213410521331042132103213110221301012129100212899212798212
6972125962124952123942122932121922120912119902118892117882116872115862
1148521138421128321118221108121098021087921077821067721057621047521037
4210273210172210071209970209869209768209667209566209465209364209263209
1622090612089602088592087582086572085562084552083542082532081522080512
0795020784920774820764720754620744520734420724320714220704120694020683
9206738206637206536206435206334206233206132206031205930205829205728205
6272055262054252053242052232051222050212049202048192047182046172045162
0441520431420421320411220401120391020389203782036720356203452033420323
2031220301202912820281272027126202612520251242024123202312220221212021
1202020119201911820181172017116201611520151142014113201311220121112011
1102010109200910820081072007106200610520051042004103200310220021012001
1002000991999981998971997961996951995941994931993921992911991901990891
9898819888719878619868519858419848319838219828119818019807919797819787
7197776197675197574197473197372197271197170197069196968196867196766196
6651965641964631963621962611961601960591959581958571957561956551955541
9545319535219525119515019504919494819484719474619464519454419444319434
2194241194140194039193938193837193736193635193534193433193332193231193
1301930291929281928271927261926251925241924231923221922211921201920191
9191819181719171619161519151419141319131219121119111019109190981908719
0761906519054190431903219021190199190098189997189896189795189694189593
1894921893911892901891891890881889871888861887851886841885831884821883
8118828018817918807818797718787618777518767418757318747218737118727018
7169187068186967186866186765186664186563186462186361186260186159186058
1859571858561857551856541855531854521853511852501851491850481849471848
4618474518464418454318444218434118424018413918403818393718383618373518

3634183533183432183331183230183129183028182927182826182725182624182523
1824221823211822201821191820181819171818161817151816141815131814121813
1118121018119181081809718086180751806418053180421803118025218015118005
0179949179848179747179646179545179444179343179242179141179040178939178
8381787371786361785351784341783331782321781311780301779291778281777271
7762617752517742417732317722217712117702017691917681817671717661617651
5176414176313176212176111176010175991758817577175661755517544175331752
2175111750431749421748411747401746391745381744371743361742351741341740
3317393217383117373017362917352817342717332617322517312417302317292217
2821172720172619172518172417172316172215172114172013171912171811171710
1716917158171471713617125171141710317092170811707111170611017051091704
1081703107170210617011051700104169910316981021697101169610016959916949
8169397169296169195169094168993168892168791168690168589168488168387168
2861681851680841679831678821677811676801675791674781673771672761671751
6707416697316687216677116667016656916646816636716626616616516606416596
3165862165761165660165559165458165357165256165155165054164953164852164
7511646501645491644481643471642461641451640441639431638421637411636401
6353916343816333716323616313516303416293316283216273116263016252916242
8162327162226162125162024161923161822161721161620161519161418161317161
2161611151610141609131608121607111606101605916048160371602616015160041
5993159821597115961231595122159412115931201592119159111815901171589116
1588115158711415861131585112158411115831101582109158110815801071579106
1578105157710415761031575102157410115731001572991571981570971569961568
9515679415669315659215649115639015628915618815608715598615588515578415
5683155582155481155380155279155178155077154976154875154774154673154572
1544711543701542691541681540671539661538651537641536631535621534611533
6015325915315815305715295615285515275415265315255215245115235015224915
2148152047151946151845151744151643151542151441151340151239151138151037
1509361508351507341506331505321504311503301502291501281500271499261498
2514972414962314952214942114932014921914911814901714891614881514871414
8613148512148411148310148291148181148071147961147851147741147631147521474114 7
3109147210814711071470106146910514681041467103146610214651011464100146
3991462981461971460961459951458941457931456921455911454901453891452881
4518714508614498514488414478314468214458114448014437914427814417714407
6143975143874143773143672143571143470143369143268143167143066142965142
8641427631426621425611424601423591422581421571420561419551418541417531
4165214155114145014134914124814114714104614094514084414074314064214054
1140440140339140238140137140036139935139834139733139632139531139430139
3291392281391271390261389251388241387231386221385211384201383191382181
3811713801613791513781413771313761213751113741013739113728137171370613 6

9513684136731366213651136412913631281362127136112613601251359124135812
3135712213561211355120135411913531181352117135111613501151349114134811
3134711213461111345110134410913431081342107134110613401051339104133810
3133710213361011335100133499133398133297133196133095132994132893132792
1326911325901324891323881322871321861320851319841318831317821316811315
8013147913137813127713117613107513097413087313077213067113057013046913
0368130267130166130065129964129863129762129661129560129459129358129257
1291561290551289541288531287521286511285501284491283481282471281461280
4512794412784312774212764112754012743912733812723712713612703512693412
6833126732126631126530126429126328126227126126126025125924125823125722
1256211255201254191253181252171251161250151249141248131247121246111245
1012449124381242712416124051239412383123721236112357512347412337312327
2123171123070122969122868122767122666122565122464122363122262122161122
0601219591218581217571216561215551214541213531212521211511210501209491
2084812074712064612054512044412034312024212014112004011993911983811973
7119636119535119434119333119232119131119030118929118828118727118626118
5251184241183231182221181211180201179191178181177171176161175151174141
1731311721211711111701011699116881167711666116551164411633116221161111
6020611592051158204115720311562021155201115420011531991152198115119711
5019611491951148194114719311461921145191114419011431891142188114118711
4018611391851138184113718311361821135181113418011331791132178113117711
3017611291751128174112717311261721125171112417011231691122168112116711
2016611191651118164111716311161621115161111416011131591112158111115711
1015611091551108154110715311061521105151110415011031491102148110114711
0014610991451098144109714310961421095141109414010931391092138109113710
9013610891351088134108713310861321085131108413010831291082128108112710
8012610791251078124107712310761221075121107412010731191072118107111710
7011610691151068114106711310661121065111106411010631091062108106110710
6010610591051058104105710310561021055101105410010539910529810519710509
6104995104894104793104692104591104490104389104288104187104086103985103
8841037831036821035811034801033791032781031771030761029751028741027731
0267210257110247010236910226810216710206610196510186410176310166210156
1101460101359101258101157101056100955100854100753100652100551100450100
3491002481001471000469994599844997439964299541994409933999238991379903
6989359883498733986329853198430983299822898127980269792597824977239762
2975219742097319972189711797016969159681496713966129651196410963996289
6179606959595849573956295519541659531649521639511629501619491609481599
4715894615794515694415594315494215394115294015193915093814993714893614
7935146934145933144932143931142930141929140928139927138926137925136924
1359231349221339211329201319191309181299171289161279151269141259131249

1212391112291012190912090811990711890611790511690411590311490211390111
2900111899110898109897108896107895106894105893104892103891102890101889
1008889988798886978859688495883948829388192880918799087889877888768787
5868748587384872838718287081869808687986778866778657686475863748627386
1728607185970858698576885667855668546585364852638516285061849608485984
7588465784556844558435484253841528405183950838498374883647835468344583
3448324383142830418294082839827388263782536824358233482233821328203181
9308182981728816278152681425813248122381122810218092080819807188061780
5168041580314802138011280011799107989797879677956794579347923791279017
8912078811978711878611778511678411578311478211378111278011177911077810
9777108776107775106774105773104772103771102770101769100768997679876697
7659676495763947629376192760917599075889757887568775586754857538475283
7518275081749807487974778746777457674475743747427374172740717397073869
7376873667735667346573364732637316273061729607285972758726577255672455
7235472253721527205171950718497174871647715467144571344712437114271041
7094070839707387063770536704357033470233701327003169930698296972869627
6952669425693246922369122690216892068819687186861768516684156831468213
6811268011679106789677867676756674567346723671267016691766681756671746
6617366517266417166317066216966116866016765916665816565716465616365516
2654161653160652159651158650157649156648155647154646153645152644151643
1506421496411486401476391466381456371446361436351426341416331406321396
3113863013762913662813562713462613362513262413162313062212962112862012
7619126618125617124616123615122614121613120612119611118610117609116608
1156071146061136051126041116031106021096011086001075991065981055971045
9610359510259410159310059299591985909758996588955879458693585925849158
3905828958188580875798657885577845768357582574815738057279571785707756
9765687556774566735657256471563705626956168560675596655865557645566355
5625546155360552595515855057549565485554754546535455254451543505424954
1485404753946538455374453643535425344153340532395313853037529365283552
7345263352532524315233052229521285202751926518255172451623515225142151
3205121951118510175091650815507145061350512504115031050295018500749964
9854974496349524941493200492199491198490197489196488195487194486193485
1924841914831904821894811884801874791864781854771844761834751824741814
7318047217947117847017746917646817546717446617346517246417146317046216
9461168460167459166458165457164456163455162454161453160452159451158450
1574491564481554471544461534451524441514431504421494411484401474391464
3814543714443614343514243414143314043213943113843013742913642813542713
4426133425132424131423130422129421128420127419126418125417124416123415
1224141214131204121194111184101174091164081154071144061134051124041114
0311040210940110840010739910639810539710439610339510239410139310039299

3919839097389963889538794386933859238491383903828938188380873798637885
3778437683375823748137380372793717837077369763687536774366733657236471
3637036269361683606735966358653576435663355623546135360352593515835057
3495634855347543465334552344513435034249341483404733946338453374433643
3354233441333403323933138330373293632835327343263332532324313233032229
3212832027319263182531724316233152231421313203121931118310173091630815
3071430613305123041130310302930183007299629852974296329522941293286292
2852912842902832892822882812872802862792852782842772832762822752812742
8027327927227827127727027626927526827426727326627226527126427026326926
2268261267260266259265258264257263256262255261254260253259252258251257
2502562492552482542472532462522452512442502432492422482412472402462392
4523824423724323624223524123424023323923223823123723023622923522823422
7233226232225231224230223229222228221227220226219225218224217223216222
2152212142202132192122182112172102162092152082142072132062122052112042
1020320920220820120720020619920519820419720319620219520119420019319919
2198191197190196189195188194187193186192185191184190183189182188181187
1801861791851781841771831761821751811741801731791721781711771701761691
7516817416717316617216517116417016316916216816116716016615916515816415
7163156162155161154160153159152158151157150156149155148154147153146152
1451511441501431491421481411471401461391451381441371431361421351411341
4013313913213813113713013612913512813412713312613212513112413012312912
2128121127120126119125118124117123116122115121114120113119112118111117
1101161091151081141071131061121051111041101031091021081011071001069910
5981049710396102951019410093999298919790968995889487938692859184908389
8288818780867985788477837682758174807379727871777076697568746773667265
7164706369626861676066596558645763566255615460535952585157505649554854
4753465245514450434942484147404639453844374336423541344033393238313730
3629352834273326322531243023292228212720261925182417231622152114201319
1218111710169158147136125114103928177665544332211”

5.5.2.3 Fact: The general verse indexes and chapters

The coding pattern of this fact is the same as the previous section. This **fact**, shows the coding between the general verse indexes and their corresponding chapter indexes below. Basically when you concatenate the general and the corresponding chapter indexes and merge in the Arabic writing order from right to left then the resulting big number is multiple of 19. First, between the 6236 numbered general verse indexes and their corresponding chapter indexes:

```
## General verse indexes and chapters
# 2 ordered numbers; thus 2 tests; two success
```

```r
#numbered verses, nQuran object
x<- data.table(nQuran)
tmp <- paste0(x$VerseI,x$chapter)
tmpr <- rev(tmp)
head(tmpr)

## [1] "6236114" "6235114" "6234114" "6233114" "6232114" "6231114"

tail(tmpr)

## [1] "61" "51" "41" "31" "21" "11"

tmpr <- paste0(tmpr, collapse = '')
cat(as.numeric(as.bigz(tmpr) %% 19))

## 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 35035
```

You can access this “35035” digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/6.1.3.2.A_Evidence_bignumber.txt

Also, here is the 35035 digits length big number:

“62361146235114623411462331146232114623111462301136229113622811362271136226113622511262241126223112622211262211116220111621911162181116217111621611062151106214110621310962121096211109621010962091096208109620710862061086205108620410762031076202107620110762001076199107619810761971066196106619510661941066193105619210561911056190105618910561881046187104618610461851046184104618310461821046181104618010461791036178103617710361761026175102617410261731026172102617110261701026169102616810161671016166101616510161641016163101616210161611016160101615910161581016157100615610061551006154100615310061521006151100615010061491006148100614710061469961459961449961439961429961419961409961399961389861379861369861359861349861339861329861319861309761299761289761279761269761259661249661239661229661219661209661199661189661179661169661159661149661139661129661119661109661099661089661079661069561059561049561039561029561019561009560999560989460979460969460959460949460939460929460919460909360899360889360879360869360859360849360839360829360819360809360799260789260779260769260759260749260739260729260719260709260699260689260679260669260659260649260639260629260619260609260599260589160579160569160559160549160

0539160529160519160509160499160489160479160469160459160449160439060429
0604190604090603990603890603790603690603590603490603390603290603190603
0906029906028906027906026906025906024906023896022896021896020896019896
0188960178960168960158960148960138960128960118960108960098960088960078
9600689600589600489600389600289600189600089599989599988959978959968959 9
5895994895993885992885991885990885989885988885987885986885985885984885
9838859828859818859808859798859788859778859768859758859748859738859728
8597188597088596988596888596787596687596587596487596387596287596187596
0875959875958875957875956875955875954875953875952875951875950875949875
9488659478659468659458659448659438659428659418659408659398659388659378
6593686593586593486593386593286593185593085592985592885592785592685592
5855924855923855922855921855920855919855918855917855916855915855914855
9138559128559118559108559098459088459078459068459058459048459038459028
4590184590084589984589884589784589684589584589484589384589284589184589
0845889845888845887845886845885845884835883835882835881835880835879835
8788358778358768358758358748358738358728358718358708358698358688358678
3586683586583586483586383586283586183586083585983585883585783585683585
5835854835853835852835851835850835849835848825847825846825845825844825
8438258428258418258408258398258388258378258368258358258348258338258328
2583182583082582981582881582781582681582581582481582381582281582181582
0815819815818815817815816815815815814815813815812815811815810815809815
8088158078158068158058158048158038158028158018158008057998057988057978
0579680579580579480579380579280579180579080578980578880578780578680578
5805784805783805782805781805780805779805778805777805776805775805774805
7738057728057718057708057698057688057678057668057658057648057638057628
0576180576080575980575879575779575679575579575479575379575279575179575
0795749795748795747795746795745795744795743795742795741795740795739795
7387957377957367957357957347957337957327957317957307957297957287957277
9572679572579572479572379572279572179572079571979571879571779571679571
5795714795713795712785711785710785709785708785707785706785705785704785
7037857027857017857007856997856987856977856967856957856947856937856927
8569178569078568978568878568778568678568578568478568378568278568178568
0785679785678785677785676785675785674785673785672775671775670775669775
6687756677756667756657756647756637756627756617756607756597756587756577
7565677565577565477565377565277565177565077564977564877564777564677564
5775644775643775642775641775640775639775638775637775636775635775634775
6337756327756317756307756297756287756277756267756257756247756237756227
6562176562076561976561876561776561676561576561476561376561276561176561
0765609765608765607765606765605765604765603765602765601765600765599765
5987655977655967655957655947655937655927655917555907555897555887555877

5558675558575558475558375558275558175558075557975557875557775557675557
5755574755573755572755571755570755569755568755567755566755565755564755
5637555627555617555607555597555587555577555567555557555547555537555527
5555174555074554974554874554774554674554574554474554374554274554174554
0745539745538745537745536745535745534745533745532745531745530745529745
5287455277455267455257455247455237455227455217455207455197455187455177
4551674551574551474551374551274551174551074550974550874550774550674550
5745504745503745502745501745500745499745498745497745496745495735494735
4937354927354917354907354897354887354877354867354857354847354837354827
3548173548073547973547873547773547673547572547472547372547272547172547
0725469725468725467725466725465725464725463725462725461725460725459725
4587254577254567254557254547254537254527254517254507254497254487254477
1544671544571544471544371544271544171544071543971543871543771543671543
5715434715433715432715431715430715429715428715427715426715425715424715
4237154227154217154207154197054187054177054167054157054147054137054127
0541170541070540970540870540770540670540570540470540370540270540170540
0705399705398705397705396705395705394705393705392705391705390705389705
3887053877053867053857053847053837053827053817053807053797053787053777
0537670537569537469537369537269537169537069536969536869536769536669536
5695364695363695362695361695360695359695358695357695356695355695354695
3536953526953516953506953496953486953476953466953456953446953436953426
9534169534069533969533869533769533669533569533469533369533269533169533
0695329695328695327695326695325695324695323685322685321685320685319685
3186853176853166853156853146853136853126853116853106853096853086853076
8530668530568530468530368530268530168530068529968529868529768529668529
5685294685293685292685291685290685289685288685287685286685285685284685
2836852826852816852806852796852786852776852766852756852746852736852726
8527167527067526967526867526767526667526567526467526367526267526167526
0675259675258675257675256675255675254675253675252675251675250675249675
2486752476752466752456752446752436752426752416652406652396652386652376
6523666523566523466523366523266523166523066522966552286552276552266552 2
5655224655223655222655221655220655219655218655217645216645215645214645
2136452126452116452106452096452086452076452066452056452046452036452026
4520164520064519963519863519763519663519563519463519363519263519163519
0635189635188625187625186625185625184625183625182625181625180625179625
1786251776151766151756151746151736151726151716151706151696151686151676
1516661516561516461516360516260516160516060515960515860515760515660515
5605154605153605152605151605150595149595148595147595146595145595144595
1435951425951415951405951395951385951375951365951355951345951335951325
9513159513059512959512859512759512658512558512458512358512258512158512

0585119585118585117585116585115585114585113585112585111585110585109585
1085851075851065851055851045751035751025751015751005750995750985750975
7509657509557509457509357509257509157509057508957508857508757508657508
5575084575083575082575081575080575079575078575077575076575075565074565
0735650725650715650706565069565068565067565066565065565064565063565062 5
6506156506056505956505856505756505656505556505456505356505256505156505
0565049565048565047565046565045565044565043565042565041565040565039565
0385650375650365650355650345650335650325650315650305650295650285650275
6502656502556502456502356502256502156502056501956501856501756501656501
5565014565013565012565011565010565009565008565007565006565005565004565
0035650025650015650005649995649985649975649965649955649945649935649925
6499156499056498956498856498756498656498556498456498356498256498156498
0564979554978554977554976554975554974554973554972554971554970554969554
9685549675549665549655549645549635549625549615549605549595549585549575
5495655495555495455495355495255495155495055494955494855494755494655494
5554944554943554942554941554940554939554938554937554936554935554934554
9335549325549315549305549295549285549275549265549255549245549235549225
5492155492055491955491855491755491655491555491455491355491255491155491
0554909554908554907554906554905554904554903554902554901544900544899544
8985448975448965448955448945448935448925448915448905448895448885448875
4488654488554488454488354488254488154488054487954487854487754487654487
5544874544873544872544871544870544869544868544867544866544865544864544
8635448625448615448605448595448585448575448565448555448545448535448525
4485154485054484954484854484754484653484553484453484353484253484153484
0534839534838534837534836534835534834534833534832534831534830534829534
8285348275348265348255348245348235348225348215348205348195348185348175
3481653481553481453481353481253481153481053480953480853480753480653480
5534804534803534802534801534800534799534798534797534796534795534794534
7935347925347915347905347895347885347875347865347855347845247835247825
2478152478052477952477852477752477652477552477452477352477252477152477
0524769524768524767524766524765524764524763524762524761524760524759524
7585247575247565247555247545247535247525247515247505247495247485247475
2474652474552474452474352474252474152474052473952473852473752473652473
5514734514733514732514731514730514729514728514727514726514725514724514
7235147225147215147205147195147185147175147165147155147145147135147125
1471151471051470951470851470751470651470551470451470351470251470151470
0514699514698514697514696514695514694514693514692514691514690514689514
6885146875146865146855146845146835146825146815146805146795146785146775
1467651467550467450467350467250467150467050466950466850466750466650466
5504664504663504662504661504660504659504658504657504656504655504654504

6535046525046515046505046495046485046475046465046455046445046435046425
0464150464050463950463850463750463650463550463450463350463250463150463
0494629494628494627494626494625494624494623494622494621494620494619494
6184946174946164946154946144946134946124846114846104846094846084846074
8460648460548460448460348460248460148460048459948459848459748459648459
5484594484593484592484591484590484589484588484587484586484585484584484
5834745824745814745804745794745784745774745764745754745744745734745724
7457147457047456947456847456747456647456547456447456347456247456147456
0474559474558474557474556474555474554474553474552474551474550474549474
5484745474745464745454645444645434645424645414645404645394645384645374
6453646453546453446453346453246453146453046452946452846452746452646452
5464524464523464522464521464520464519464518464517464516464515464514464
5134645124645114645104545094545084545074545064545054545044545034545024
5450145450045449945449845449745449645449545449445449345449245449145449
0454489454488454487454486454485454484454483454482454481454480454479454
4784544774544764544754544744544734444724444714444704444694444684444674
4446644446544446444446344446244446144446044445944445844445744445644445
5444454444453444452444451444450444449444448444447444446444445444444444
4434444424444414444404444394444384444374444364444354444344444334444324
4443144443044442944442844442744442644442544442444442344442244442144442
0444419444418444417444416444415444414434413434412434411434410434409434
4084344074344064344054344044344034344024344014344004343994343984343974
3439643439543439443439343439243439143439043438943438843438743438643438
5434384434383434382434381434380434379434378434377434376434375434374434
3734343724343714343704343694343684343674343664343654343644343634343624
3436143436043435943435843435743435643435543435443435343435243435143435
0434349434348434347434346434345434344434343434342434341434340434339434
3384343374343364343354343344343334343324343314343304343294343284343274
3432643432542432442432342432242432142432042431942431842431742431642431
5424314424313424312424311424310424309424308424307424306424305424304424
3034243024243014243004242994242984242974242964242954242944242934242924
2429142429042428942428842428742428642428542428442428342428242428142428
0424279424278424277424276424275424274424273424272414271414270414269414
2684142674142664142654142644142634142624142614142604142594142584142574
1425641425541425441425341425241425141425041424941424841424741424641424
5414244414243414242414241414240414239414238414237414236414235414234414
2334142324142314142304142294142284142274142264142254142244142234142224
1422141422041421941421840421740421640421540421440421340421240421140421
0404209404208404207404206404205404204404203404202404201404200404199404
1984041974041964041954041944041934041924041914041904041894041884041874

0418640418540418440418340418240418140418040417940417840417740417640417
5404174404173404172404171404170404169404168404167404166404165404164404
1634041624041614041604041594041584041574041564041554041544041534041524
0415140415040414940414840414740414640414540414440414340414240414140414
0404139404138404137404136404135404134404133394132394131394130394129394
1283941273941263941253941243941233941223941213941203941193941183941173
9411639411539411439411339411239411139411039410939410839410739410639410
5394104394103394102394101394100394099394098394097394096394095394094394
0933940923940913940903940893940883940873940863940853940843940833940823
9408139408039407939407839407739407639407539407439407339407239407139407
0394069394068394067394066394065394064394063394062394061394060394059394
0583840573840563840553840543840533840523840513840503840493840483840473
8404638404538404438404338404238404138404038403938403838403738403638403
5384034384033384032384031384030384029384028384027384026384025384024384
0233840223840213840203840193840183840173840163840153840143840133840123
8401138401038400938400838400738400638400538400438400338400238400138400
0383999383998383997383996383995383994383993383992383991383990383989383
9883839873839863839853839843839833839823839813839803839793839783839773
8397638397538397438397338397238397138397037396937396837396737396637396
5373964373963373962373961373960373959373958373957373956373955373954373
9533739523739513739503739493739483739473739463739453739443739433739423
7394137394037393937393837393737393637393537393437393337393237393137393
0373929373928373927373926373925373924373923373922373921373920373919373
9183739173739163739153739143739133739123739113739103739093739083739073
7390637390537390437390337390237390137390037389937389837389737389637389
5373894373893373892373891373890373889373888373887373886373885373884373
8833738823738813738803738793738783738773738763738753738743738733738723
7387137387037386937386837386737386637386537386437386337386237386137386
0373859373858373857373856373855373854373853373852373851373850373849373
8483738473738463738453738443738433738423738413738403738393738383738373
7383637383537383437383337383237383137383037382937382837382737382637382
5373824373823373822373821373820373819373818373817373816373815373814373
8133738123738113738103738093738083738073738063738053738043738033738023
7380137380037379937379837379737379637379537379437379337379237379137379
0373789373788363787363786363785363784363783363782363781363780363779363
7783637773637763637753637743637733637723637713637703637693637683637673
6376636376536376436376336376236376136376036375936375836375736375636375
5363754363753363752363751363750363749363748363747363746363745363744363
7433637423637413637403637393637383637373637363637353637343637333637323
6373136373036372936372836372736372636372536372436372336372236372136372

0363719363718363717363716363715363714363713363712363711363710363709363
7083637073637063637053537043537033537023537013537003536993536983536973
5369635369535369435369335369235369135369035368935368835368735368635368
5353684353683353682353681353680353679353678353677353676353675353674353
6733536723536713536703536693536683536673536663536653536643536633536623
5366135366034365934365834365734365634365534365434365334365234365134365
0343649343648343647343646343645343644343643343642343641343640343639343
6383436373436363436353436343436333436323436313436303436293436283436273
4362634362534362434362334362234362134362034361934361834361734361634361
5343614343613343612343611343610343609343608343607343606333605333604333
6033336023336013336003335993335983335973335963335953335943335933335923
3359133359033358933358833358733358633358533358433358333358233358133358
0333579333578333577333576333575333574333573333572333571333570333569333
5683335673335663335653335643335633335623335613335603335593335583335573
3355633355533355433355333355233355133355033354933354833354733354633354
5333544333543333542333541333540333539333538333537333536333535333534333
5333235323235313235303235293235283235273235263235253235243235233235223
2352132352032351932351832351732351632351532351432351332351232351132351
0323509323508323507323506323505323504323503313502313501313500313499313
4983134973134963134953134943134933134923134913134903134893134883134873
1348631348531348431348331348231348131348031347931347831347731347631347
5313474313473313472313471313470313469303468303467303466303465303464303
4633034623034613034603034593034583034573034563034553034543034533034523
0345130345030344930344830344730344630344530344430344330344230344130344
0303439303438303437303436303435303434303433303432303431303430303429303
4283034273034263034253034243034233034223034213034203034193034183034173
0341630341530341430341330341230341130341030340929340829340729340629340
5293404293403293402293401293400293399293398293397293396293395293394293
3932933922933912933902933892933882933872933862933852933842933832933822
9338129338029337929337829337729337629337529337429337329337229337129337
0293369293368293367293366293365293364293363293362293361293360293359293
3582933572933562933552933542933532933522933512933502933492933482933472
9334629334529334429334329334229334129334028333928333828333728333628333
5283334283333283333228333128333028333928333828333728333628333528333428333
3232833322833312833302833192833182833172833162833152833142833132833122
8331128331028330928330828330728330628330528330428330328330228330128330
0283299283298283297283296283295283294283293283292283291283290283289283
2882832872832862832852832842832832832822832812832802832792832782832772
8327628327528327428327328327228327128327028326928326828326728326628326
5283264283263283262283261283260283259283258283257283256283255283254283

2532832522732512732502732492732482732472732462732452732442732432732422
7324127324027323927323827323727323627323527323427323327323227323127323
0273229273228273227273226273225273224273223273222273221273220273219273
2182732172732162732152732142732132732122732112732102732092732082732072
7320627320527320427320327320227320127320027319927319827319727319627319
5273194273193273192273191273190273189273188273187273186273185273184273
1832731822731812731802731792731782731772731762731752731742731732731722
7317127317027316927316827316727316627316527316427316327316227316127316
0273159263158263157263156263155263154263153263152263151263150263149263
1482631472631462631452631442631432631422631412631402631392631382631372
6313626313526313426313326313226313126313026312926312826312726312626312
5263124263123263122263121263120263119263118263117263116263115263114263
1132631122631112631102631092631082631072631062631052631042631032631022
6310126310026309926309826309726309626309526309426309326309226309126309
0263089263088263087263086263085263084263083263082263081263080263079263
0782630772630762630752630742630732630722630712630702630692630682630672
6306626306526306426306326306226306126306026305926305826305726305626305
5263054263053263052263051263050263049263048263047263046263045263044263
0432630422630412630402630392630382630372630362630352630342630332630322
6303126303026302926302826302726302626302526302426302326302226302126302
0263019263018263017263016263015263014263013263012263011263010263009263
0082630072630062630052630042630032630022630012630002629992629982629972
6299626299526299426299326299226299126299026298926298826298726298626298
5262984262983262982262981262980262979262978262977262976262975262974262
9732629722629712629702629692629682629672629662629652629642629632629622
6296126296026295926295826295726295626295526295426295326295226295126295
0262949262948262947262946262945262944262943262942262941262940262939262
9382629372629362629352629342629332629322529312529302529292529282529272
5292625292525292425292325292225292125292025291925291825291725291625291
5252914252913252912252911252910252909252908252907252906252905252904252
9032529022529012529002528992528982528972528962528952528942528932528922
5289125289025288925288825288725288625288525288425288325288225288125288
0252879252878252877252876252875252874252873252872252871252870252869252
8682528672528662528652528642528632528622528612528602528592528582528572
5285625285524285424285324285224285124285024284924284824284724284624284
5242844242843242842242841242840242839242838242837242836242835242834242
8332428322428312428302428292428282428272428262428252428242428232428222
4282124282024281924281824281724281624281524281424281324281224281124281
0242809242808242807242806242805242804242803242802242801242800242799242
7982427972427962427952427942427932427922427912327902327892327882327872

3278623278523278423278323278223278123278023277923277823277723277623277
5232774232773232772232771232770232769232768232767232766232765232764232
7632327622327612327602327592327582327572327562327552327542327532327522
3275123275023274923274823274723274623274523274423274323274223274123274
0232739232738232737232736232735232734232733232732232731232730232729232
7282327272327262327252327242327232327222327212327202327192327182327172
3271623271523271423271323271223271123271023270923270823270723270623270
5232704232703232702232701232700232699232698232697232696232695232694232
6932326922326912326902326892326882326872326862326852326842326832326822
3268123268023267923267823267723267623267523267423267322267222267122267
0222669222668222667222666222665222664222663222662222661222660222659222
6582226572226562226552226542226532226522226512226502226492226482226472
2264622264522264422264322264222264122264022263922263822263722263622263
5222634222633222632222631222630222629222628222627222626222625222624222
6232226222226212222620222619222618222617222616222615222614222613222612
2261122261022260922260822260722260622260522260422260322260222260122260
0222599222598222597222596222595212594212593212592212591212590212589212
5882125872125862125852125842125832125822125812125802125792125782125772
1257621257521257421257321257221257121257021256921256821256721256621256
5212564212563212562212561212560212559212558212557212556212555212554212
5532125522125512125502125492125482125472125462125452125442125432125422
1254121254021253921253821253721253621253521253421253321253221253121253
0212529212528212527212526212525212524212523212522212521212520212519212
5182125172125162125152125142125132125122125112125102125092125082125072
1250621250521250421250321250221250121250021249921249821249721249621249
5212494212493212492212491212490212489212488212487212486212485212484212
4832024822024812024802024792024782024772024762024752024742024732024722
0247120247020246920246820246720246620246520246420246320246220246120246
0202459202458202457202456202455202454202453202452202451202450202449202
4482024472024462024452024442024432024422024412024402024392024382024372
0243620243520243420243320243220243120243020242920242820242720242620242
5202424202423202422202421202420202419202418202417202416202415202414202
4132024122024112024102024092024082024072024062024052024042024032024022
0240120240020239920239820239720239620239520239420239320239220239120239
0202389202388202387202386202385202384202383202382202381202380202379202
3782023772023762023752023742023732023722023712023702023692023682023672
0236620236520236420236320236220236120236020235920235820235720235620235
5202354202353202352202351202350202349202348192347192346192345192344192
3431923421923411923401923391923381923371923361923351923341923331923321
9233119233019232919232819232719232619232519232419232319232219232119232

0192319192318192317192316192315192314192313192312192311192310192309192
3081923071923061923051923041923031923021923011923001922991922981922971
9229619229519229419229319229219229119229019228919228819228719228619228
5192284192283192282192281192280192279192278192277192276192275192274192
2731922721922711922701922691922681922671922661922651922641922631922621
9226119226019225919225819225719225619225519225419225319225219225119225
0182249182248182247182246182245182244182243182242182241182240182239182
2381822371822361822351822341822331822321822311822301822291822281822271
8222618222518222418222318222218222118222018221918221818221718221618221
5182214182213182212182211182210182209182208182207182206182205182204182
2031822021822011822001821991821981821971821961821951821941821931821921
8219118219018218918218818218718218618218518218418218318218218218118218
0182179182178182177182176182175182174182173182172182171182170182169182
1681821671821661821651821641821631821621821611821601821591821581821571
8215618215518215418215318215218215118215018214918214818214718214618214
5182144182143182142182141182140172139172138172137172136172135172134172
1331721321721311721301721291721281721271721261721251721241721231721221
7212117212017211917211817211717211617211517211417211317211217211117211
0172109172108172107172106172105172104172103172102172101172100172099172
0981720971720961720951720941720931720921720911720901720891720881720871
7208617208517208417208317208217208117208017207917207817207717207617207
5172074172073172072172071172070172069172068172067172066172065172064172
0631720621720611720601720591720581720571720561720551720541720531720521
7205117205017204917204817204717204617204517204417204317204217204117204
0172039172038172037172036172035172034172033172032172031172030172029162
0281620271620261620251620241620231620221620211620201620191620181620171
6201616201516201416201316201216201116201016200916200816200716200616200
5162004162003162002162001162000161999161998161997161996161995161994161
9931619921619911619901619891619881619871619861619851619841619831619821
6198116198016197916197816197716197616197516197416197316197216197116197
0161969161968161967161966161965161964161963161962161961161960161959161
9581619571619561619551619541619531619521619511619501619491619481619471
6194616194516194416194316194216194116194016193916193816193716193616193
5161934161933161932161931161930161929161928161927161926161925161924161
9231619221619211619201619191619181619171619161619151619141619131619121
6191116191016190916190816190716190616190516190416190316190216190115190
0151899151898151897151896151895151894151893151892151891151890151889151
8881518871518861518851518841518831518821518811518801518791518781518771
5187615187515187415187315187215187115187015186915186815186715186615186
5151864151863151862151861151860151859151858151857151856151855151854151

8531518521518511518501518491518481518471518461518451518441518431518421
5184115184015183915183815183715183615183515183415183315183215183115183
0151829151828151827151826151825151824151823151822151821151820151819151
8181518171518161518151518141518131518121518111518101518091518081518071
5180615180515180415180315180214180114180014179914179814179714179614179
5141794141793141792141791141790141789141788141787141786141785141784141
7831417821417811417801417791417781417771417761417751417741417731417721
4177114177014176914176814176714176614176514176414176314176214176114176
0141759141758141757141756141755141754141753141752141751141750131749131
7481317471317461317451317441317431317421317411317401317391317381317371
3173613173513173413173313173213173113173013172913172813172713172613172
5131724131723131722131721131720131719131718131717131716131715131714131
7131317121317111317101317091317081317071217061217051217041217031217021
2170112170012169912169812169712169612169512169412169312169212169112169
0121689121688121687121686121685121684121683121682121681121680121679121
6781216771216761216751216741216731216721216711216701216691216681216671
2166612166512166412166312166212166112166012165912165812165712165612165
5121654121653121652121651121650121649121648121647121646121645121644121
6431216421216411216401216391216381216371216361216351216341216331216321
2163112163012162912162812162712162612162512162412162312162212162112162
0121619121618121617121616121615121614121613121612121611121610121609121
6081216071216061216051216041216031216021216011216001215991215981215971
2159611159511159411159311159211159111159011158911158811158711158611158
5111584111583111582111581111580111579111578111577111576111575111574111
5731115721115711115701115691115681115671115661115651115641115631115621
1156111156011155911155811155711155611155511155411155311155211155111155
0111549111548111547111546111545111544111543111542111541111540111539111
5381115371115361115351115341115331115321115311115301115291115281115271
1152611152511152411152311152211152111152011151911151811151711151611151
5111514111513111512111511111510111509111508111507111506111505111504111
5031115021115011115001114991114981114971114961114951114941114931114921
1149111149011148911148811148711148611148511148411148311148211148111148
0111479111478111477111476111475111474111473101472101471101470101469101
4681014671014661014651014641014631014621014611014601014591014581014571
0145610145510145410145310145210145110145010144910144810144710144610144
5101444101443101442101441101440101439101438101437101436101435101434101
4331014321014311014301014291014281014271014261014251014241014231014221
0142110142010141910141810141710141610141510141410141310141210141110141
0101409101408101407101406101405101404101403101402101401101400101399101
3981013971013961013951013941013931013921013911013901013891013881013871

0138610138510138410138310138210138110138010137910137810137710137610137
5101374101373101372101371101370101369101368101367101366101365101364913
6391362913619136091359913589135791356913559135491353913529135191350913
4991348913479134691345913449134391342913419134091339913389133791336913
3591334913339133291331913309132991328913279132691325913249132391322913
2191320913199131891317913169131591314913139131291311913109130991308913
0791306913059130491303913029130191300912999129891297912969129591294912
9391292912919129091289912889128791286912859128491283912829128191280912
7991278912779127691275912749127391272912719127091269912689126791266912
6591264912639126291261912609125991258912579125691255912549125391252912
5191250912499124891247912469124591244912439124291241912409123991238912
3791236912358123481233812328123181230812298122881227812268122581224812
2381222812218122081219812188121781216812158121481213812128121181210812
0981208812078120681205812048120381202812018120081199811988119781196811
9581194811938119281191811908118981188811878118681185811848118381182811
8181180811798117881177811768117581174811738117281171811708116981168811
6781166811658116481163811628116181160711597115871157711567115571154711
5371152711517115071149711487114771146711457114471143711427114171140711
3971138711377113671135711347113371132711317113071129711287112771126711
2571124711237112271121711207111971118711177111671115711147111371112711
1171110711097110871107711067110571104711037110271101711007109971098710
9771096710957109471093710927109171090710897108871087710867108571084710
8371082710817108071079710787107771076710757107471073710727107171070710
6971068710677106671065710647106371062710617106071059710587105771056710
5571054710537105271051710507104971048710477104671045710447104371042710
4171040710397103871037710367103571034710337103271031710307102971028710
2771026710257102471023710227102171020710197101871017710167101571014710
1371012710117101071009710087100771006710057100471003710027100171000799
9799879977996799579947993799279917990798979887987798679857984798379827
9817980797979787977797679757974797379727971797079697968796779667965796
4796379627961796079597958795779567955795469536952695169506949694869476
9466945694469436942694169406939693869376936693569346933693269316930692
9692869276926692569246923692269216920691969186917691669156914691369126
9116910690969086907690669056904690369026901690068996898689768966895689
4689368926891689068896888688768866885688468836882688168806879687868776
8766875687468736872687168706869686868676866686568646863686268616860685
9685868576856685568546853685268516850684968486847684668456844684368426
8416840683968386837683668356834683368326831683068296828682768266825682
4682368226821682068196818681768166815681468136812681168106809680868076
8066805680468036802680168006799679867976796679567946793679267916790678

9578857875786578557845783578257815780577957785777577657755774577357725
7715770576957685767576657655764576357625761576057595758575757565755575
4575357525751575057495748574757465745574457435742574157405739573857375
7365735573457335732573157305729572857275726572557245723572257215720571
9571857175716571557145713571257115710570957085707570657055704570357025
7015700569956985697569656955694569356925691569056895688568756865685568
4568356825681568056795678567756765675567456735672567156705669466846674
6664665466446634662466146604659465846574656465546544653465246514650464
9464846474646464546444643464246414640463946384637463646354634463346324
6314630462946284627462646254624462346224621462046194618461746164615461
4461346124611461046094608460746064605460446034602460146004599459845974
5964595459445934592459145904589458845874586458545844583458245814580457
9457845774576457545744573457245714570456945684567456645654564456345624
5614560455945584557455645554554455345524551455045494548454745464545454
4454345424541454045394538453745364535453445334532453145304529452845274
5264525452445234522452145204519451845174516451545144513451245114510450
9450845074506450545044503450245014500449944984497449644954494449334923
4913490348934883487348634853484348334823481348034793478347734763475347
4347334723471347034693468346734663465346434633462346134603459345834573
4563455345434533452345134503449344834473446344534443443344234413440343
9343834373436343534343433343234313430342934283427342634253424342334223
4213420341934183417341634153414341334123411341034093408340734063405340
4340334023401340033993398339733963395339433933392339133903389338833873
3863385338433833382338133803379337833773376337533743373337233713370336
9336833673366336533643363336233613360335933583357335633553354335333523
3513350334933483347334633453344334333423341334033393338333733363335333
4333333323331333033293328332733263325332433233322332133203319331833173
3163315331433133312331133103309330833073306330533043303330233013300329
9329832973296329532943293229229122902289228822872286228522842283228222
8122802279227822772276227522742273227222712270226922682267226622652265
2226322622261226022592258225722562255225422532252225122502249224822472
2462245224422432242224122402239223822372236223522342233223222312230222
9222822272226222522242223222222212220221922182217221622152214221322122
2112210220922082207220622052204220322022201220021992198219721962195219
4219321922191219021892188218721862185218421832182218121802179217821772
1762175217421732172217121702169216821672166216521642163216221612160215
9215821572156215521542153215221512150214921482147214621452144214321422
1412140213921382137213621352134213321322131213021292128212721262125212
4212321222121212021192118211721162115211421132112211121102109210821072
1062105210421032102210121002992982972962952942932922912902892882872862

852842832822812802792782772762752742732722712702692682672662652642632622612602592582572562552542532522512502492482472462452442432422412402392382372362352342332322312302292282272262252242232222212202192182172162152142132122112102928271615141312111”

Second related coding exist also for all the 6348 verses. We look at the same pattern if exist in all the 6348 verses and see that it exists too. As you will witness below, between the 6348 general verse indexes and their corresponding chapter indexes, we witness the same 19 based design coding patter as follows:

```
# unQuran object
x<- data.table(unQuran)
tmp <- paste0(x$VerseI,x$chapter)
tmpr <- rev(tmp)
head(tmpr)

## [1] "6348114" "6347114" "6346114" "6345114" "6344114" "6343114"

tail(tmpr)

## [1] "61" "51" "41" "31" "21" "11"

tmpr <- paste0(tmpr, collapse = '')
as.integer(digitsum(tmpr) %% 19)

## [1] 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 35715
```

As just shown, the general verse indexes have an interesting 19 based coding with their chapter indexes of the text of Quran. You can access this “35715” digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/6.1.3.2.B_Evidence_bignumber_6348verses.txt

Also, here is the big number:

“63481146347114634611463451146344114634311463421146341113634011363391136338113633711363361136335112633411263331126332112633111263301116329111632811163271116326111632511163241106323110632211063211106320109631910963181096317109631610963151096314109631310863121086311108631010863091076308107630710763061076305107630410763031076302107630110663001066299 10

6629810662971066296105629510562941056293105629210562911056290104628910
4628810462871046286104628510462841046283104628210462811046280103627910
3627810362771036276102627510262741026273102627210262711026270102626910
2626810262671016266101626510162641016263101626210162611016260101625910
1625810162571016256101625510062541006253100625210062511006250100624910
0624810062471006246100624510062441006243996242996241996240996239996238
9962379962369962359962349862339862329862319862309862299862289862279862
2698622597622497622397622297622197622097621996621896621796621696621596
6214966213966212966211966210966209966208966207966206966205966204966203
9662029662019662009661999561989561979561969561959561949561939561929561
9195619094618994618894618794618694618594618494618394618294618193618093
6179936178936177936176936175936174936173936172936171936170936169926168
9261679261669261659261649261639261629261619261609261599261589261579261
5692615592615492615392615292615192615092614992614892614791614691614591
6144916143916142916141916140916139916138916137916136916135916134916133
9161329161319061309061299061289061279061269061259061249061239061229061
2190612090611990611890611790611690611590611490611390611290611190611089
6109896108896107896106896105896104896103896102896101896100896099896098
8960978960968960958960948960938960928960918960908960898960888960878960
8689608589608489608389608289608189608089607988607888607788607688607588
6074886073886072886071886070886069886068886067886066886065886064886063
8860628860618860608860598860588860578860568860558860548860538860528760
5187605087604987604887604787604687604587604487604387604287604187604087
6039876038876037876036876035876034876033876032866031866030866029866028
8660278660268660258660248660238660228660218660208660198660188660178660
1686601586601485601385601285601185601085600985600885600785600685600585
6004856003856002856001856000855999855998855997855996855995855994855993
8559928559918459908459898459888459878459868459858459848459838459828459
8184598084597984597884597784597684597584597484597384597284597184597084
5969845968845967845966845965835964835963835962835961835960835959835958
8359578359568359558359548359538359528359518359508359498359488359478359
4683594583594483594383594283594183594083593983593883593783593683593583
5934835933835932835931835930835929835928825927825926825925825924825923
8259228259218259208259198259188259178259168259158259148259138259128259
1182591082590982590881590781590681590581590481590381590281590181590081
5899815898815897815896815895815894815893815892815891815890815889815888
8158878158868158858158848158838158828158818158808158798158788058778058
7680587580587480587380587280587180587080586980586880586780586680586580
5864805863805862805861805860805859805858805857805856805855805854805853
8058528058518058508058498058488058478058468058458058448058438058428058

4180584080583980583880583780583680583579583479583379583279583179583079
5829795828795827795826795825795824795823795822795821795820795819795818
7958177958167958157958147958137958127958117958107958097958087958077958
0679580579580479580379580279580179580079579979579879579779579679579579
5794795793795792795791795790795789795788785787785786785785785784785783
7857827857817857807857797857787857777857767857757857747857737857727857
7178577078576978576878576778576678576578576478576378576278576178576078
5759785758785757785756785755785754785753785752785751785750785749785748
7857477757467757457757447757437757427757417757407757397757387757377757
3677573577573477573377573277573177573077572977572877572777572677572577
5724775723775722775721775720775719775718775717775716775715775714775713
7757127757117757107757097757087757077757067757057757047757037757027757
0177570077569977569877569777569676569576569476569376569276569176569076
5689765688765687765686765685765684765683765682765681765680765679765678
7656777656767656757656747656737656727656717656707656697656687656677656
6676566576566475566375566275566175566075565975565875565775565675565575
5654755653755652755651755650755649755648755647755646755645755644755643
7556427556417556407556397556387556377556367556357556347556337556327556
3175563075562975562875562775562675562575562475562375456227456217456207 4
5619745618745617745616745615745614745613745612745611745610745609745608
7456077456067456057456047456037456027456017456007455997455987455977455
9674559574559474559374559274559174559074558974558874558774558674558574
5584745583745582745581745580745579745578745577745576745575745574745573
7455727455717455707455697455687455677455667355657355647355637355627355
6173556073555973555873555773555673555573555473555373555273555173555073
5549735548735547735546735545725544725543725542725541725540725539725538
7255377255367255357255347255337255327255317255307255297255287255277255
2672555257255247255237255227255217255207255197255187255177255167155157 1
5514715513715512715511715510715509715508715507715506715505715504715503
7155027155017155007154997154987154977154967154957154947154937154927154
9171549071548971548871548770548670548570548470548370548270548170548070
5479705478705477705476705475705474705473705472705471705470705469705468
7054677054667054657054647054637054627054617054607054597054587054577054
5670545570545470545370545270545170545070544970544870544770544670544570
5444705443705442695441695440695439695438695437695436695435695434695433
6954326954316954306954296954286954276954266954256954246954236954226954
2169542069541969541869541769541669541569541469541369541269541169541069
5409695408695407695406695405695404695403695402695401695400695399695398
6953976953966953956953946953936953926953916953906953896853886853876853
8668538568538468538368538268538168538068537968537868537768537668537568

5374685373685372685371685370685369685368685367685366685365685364685363
6853626853616853606853596853586853576853566853556853546853536853526853
5168535068534968534868534768534668534568534468534368534268534168534068
5339685338685337685336675335675334675333675332675331675330675329675328
6753276753266753256753246753236753226753216753206753196753186753176753
1667531567531467531367531267531167531067530967530867530767530667530566
5304665303665302665301665300665299665298665297665296665295665294665293
6652926552916552906552896552886552876552866552856552846552836552826552
8165528065527964527864527764527664527564527464527364527264527164527064
5269645268645267645266645265645264645263645262645261645260635259635258
6352576352566352556352546352536352526352516352506352496352486252476252
4662524562524462524362524262524162524062523962523862523762523661523561
5234615233615232615231615230615229615228615227615226615225615224615223
6152226152216052206052196052186052176052166052156052146052136052126052
1160521060520960520860520759520659520559520459520359520259520159520059
5199595198595197595196595195595194595193595192595191595190595189595188
5951875951865951855951845951835951825851815851805851795851785851775851
7658517558517458517358517258517158517058516958516858516758516658516558
5164585163585162585161585160585159575158575157575156575155575154575153
5751525751515751505751495751485751475751465751455751445751435751425751
4157514057513957513857513757513657513557513457513357513257513157513057
5129565128565127565126565125565124565123565122565121565120565119565118
5651175651165651155651145651135651125651115651105651095651085651075651
0656510556510456510356510256510156510056509956509856509756509656509556
5094565093565092565091565090565089565088565087565086565085565084565083
5650825650815650805650795650785650775650765650755650745650735650725650
7156507056506956506856506756506656506556506456506356506256506156506056
5059565058565057565056565055565054565053565052565051565050565049565048
5650475650465650455650445650435650425650415650405650395650385650375650
3656503556503456503356503255503155503055502955502855502755502655502555
5024555023555022555021555020555019555018555017555016555015555014555013
5550125550115550105550095550085550075550065550055550045550035550025550
0155500055499955499855499755499655499555499455499355499255499155499055
4989554988554987554986554985554984554983554982554981554980554979554978
5549775549765549755549745549735549725549715549705549695549685549675549
6655496555496455496355496255496155496055495955495855495755495655495555
4954554953544952544951544950544949544948544947544946544945544944544943
5449425449415449405449395449385449375449365449355449345449335449325449
3154493054492954492854492754492654492554492454492354492254492154492054
4919544918544917544916544915544914544913544912544911544910544909544908

5449075449065449055449045449035449025449015449005448995448985448975348
9653489553489453489353489253489153489053488953488853488753488653488553
4884534883534882534881534880534879534878534877534876534875534874534873
5348725348715348705348695348685348675348665348655348645348635348625348
6153486053485953485853485753485653485553485453485353485253485153485053
4849534848534847534846534845534844534843534842534841534840534839534838
5348375348365348355348345248335248325248315248305248295248285248275248
2652482552482452482352482252482152482052481952481852481752481652481552
4814524813524812524811524810524809524808524807524806524805524804524803
5248025248015248005247995247985247975247965247955247945247935247925247
9152479052478952478852478752478652478552478451478351478251478151478051
4779514778514777514776514775514774514773514772514771514770514769514768
5147675147665147655147645147635147625147615147605147595147585147575147
5651475551475451475351475251475151475051474951474851474751474651474551
4744514743514742514741514740514739514738514737514736514735514734514733
5147325147315147305147295147285147275147265147255147245147235047225047
2150472050471950471850471750471650471550471450471350471250471150471050
4709504708504707504706504705504704504703504702504701504700504699504698
5046975046965046955046945046935046925046915046905046895046885046875046
8650468550468450468350468250468150468050467950467850467749467649467549
4674494673494672494671494670494669494668494667494666494665494664494663
4946624946614946604946594946584846574846564846554846544846534846524846
5148465048464948464848464748464648464548464448464348464248464148464048
4639484638484637484636484635484634484633484632484631484630484629484628
4746274746264746254746244746234746224746214746204746194746184746174746
1647461547461447461347461247461147461047460947460847460747460647460547
4604474603474602474601474600474599474598474597474596474595474594474593
4745924745914745904745894645884645874645864645854645844645834645824645
8146458046457946457846457746457646457546457446457346457246457146457046
4569464568464567464566464565464564464563464562464561464560464559464558
4645574645564645554645544645534545524545514545504545494545484545474545
4645454545454445454345454245454145454045453945453845453745453645453545
4534454533454532454531454530454529454528454527454526454525454524454523
4545224545214545204545194545184545174545164545154445144445134445124445
1144451044450944450844450744450644450544450444450344450244450144450044
4499444498444497444496444495444494444493444492444491444490444489444488
4444874444864444854444844444834444824444814444804444794444784444774444
7644447544447444447344447244447144447044446944446844446744446644446544
4464444463444462444461444460444459444458444457444456444455434454434453
4344524344514344504344494344484344474344464344454344444344434344424344

4143444043443943443843443743443643443543443443443343443243443143443043
4429434428434427434426434425434424434423434422434421434420434419434418
4344174344164344154344144344134344124344114344104344094344084344074344
0643440543440443440343440243440143440043439943439843439743439643439543
4394434393434392434391434390434389434388434387434386434385434384434383
4343824343814343804343794343784343774343764343754343744343734343724343
7143437043436943436843436743436643436543424364424363424362424361424360424
3594243584243574243564243554243544243534243524243514243504243494243484
2434747243464243454243444243434243424243414243404243394243384243374243
3642433542433442433342433242433142433042432942432842432742432642432542
4324424323424322424321424320424319424318424317424316424315424314424313
4243124243114143104143094143084143074143064143054143044143034143024143
0141430041429941429841429741429641429541429441429341429241429141429041
4289414288414287414286414285414284414283414282414281414280414279414278
4142774142764142754142744142734142724142714142704142694142684142674142
6641426541426441426341426241426141426041425941425841425741425640425540
4254404253404252404251404250404249404248404247404246404245404244404243
4042424042414042404042394042384042374042364042354042344042334042324042
3140423040422940422840422740422640422540422440422340422240422140422040
4219404218404217404216404215404214404213404212404211404210404209404208
4042074042064042054042044042034042024042014042004041994041984041974041
9640419540419440419340419240419140419040418940418840418740418640418540
4184404183404182404181404180404179404178404177404176404175404174404173
4041724041714041703941693941683941673941663941653941643941633941623941
6139416039415939415839415739415639415539415439415339415239415139415039
4149394148394147394146394145394144394143394142394141394140394139394138
3941373941363941353941343941333941323941313941303941293941283941273941
2639412539412439412339412239412139412039411939411839411739411639411539
4114394113394112394111394110394109394108394107394106394105394104394103
3941023941013941003940993940983940973940963940953940943840933840923840
9138409038408938408838408738408638408538408438408338408238408138408038
4079384078384077384076384075384074384073384072384071384070384069384068
3840673840663840653840643840633840623840613840603840593840583840573840
5638405538405438405338405238405138405038404938404838404738404638404538
4044384043384042384041384040384039384038384037384036384035384034384033
3840323840313840303840293840283840273840263840253840243840233840223840
2138402038401938401838401738401638401538401438401338401238401138401038
4009384008384007384006384005374004374003374002374001374000373999373998
3739973739963739953739943739933739923739913739903739893739883739873739
8637398537398437398337398237398137398037397937397837397737397637397537

3974373973373972373971373970373969373968373967373966373965373964373963
3739623739613739603739593739583739573739563739553739543739533739523739
5137395037394937394837394737394637394537394437394337394237394137394037
3939373938373937373936373935373934373933373932373931373930373929373928
3739273739263739253739243739233739223739213739203739193739183739173739
1637391537391437391337391237391137391037390937390837390737390637390537
3904373903373902373901373900373899373898373897373896373895373894373893
3738923738913738903738893738883738873738863738853738843738833738823738
8137388037387937387837387737387637387537387437387337387237387137387037
3869373868373867373866373865373864373863373862373861373860373859373858
3738573738563738553738543738533738523738513738503738493738483738473738
4637384537384437384337384237384137384037383937383837383737383637383537
3834373833373832373831373830373829373828373827373826373825373824373823
3738223638213638203638193638183638173638163638153638143638133638123638
1136381036380936380836380736380636380536380436380336380236380136380036
3799363798363797363796363795363794363793363792363791363790363789363788
3637873637863637853637843637833637823637813637803637793637783637773637
7636377536377436377336377236377136377036376936376836376736376636376536
3764363763363762363761363760363759363758363757363756363755363754363753
3637523637513637503637493637483637473637463637453637443637433637423637
4136374036373936373835373735373635373535373435373335373235373135373035
3729353728353727353726353725353724353723353722353721353720353719353718
3537173537163537153537143537133537123537113537103537093537083537073537
0635370535370435370335370235370135370035369935369835369735369635369535
3694353693353692343691343690343689343688343687343686343685343684343683
3436823436813436803436793436783436773436763436753436743436733436723436
7134367034366934366834366734366634366534366434366334366234366134366034
3659343658343657343656343655343654343653343652343651343650343649343648
3436473436463436453436443436433436423436413436403436393436383436373336
3633363533363433363333363233363133363033362933362833362733362633362533
3624333623333622333621333620333619333618333617333616333615333614333613
3336123336113336103336093336083336073336063336053336043336033336023336
0133360033359933359833359733359633359533359433359333359233359133359033
3589333588333587333586333585333584333583333582333581333580333579333578
3335773335763335753335743335733335723335713335703335693335683335673335
6633356533356433356333562332561332560332559332558332557332556332555332
3554323553323552323551323550323549323548323547323546323545323544323543
3235423235413235403235393235383235373235363235353235343235333235323135
3131353031352931352831352731352631352531352431352331352231352131352031
3519313518313517313516313515313514313513313512313511313510313509313508

3135073135063135053135043135033135023135013135003134993134983134973034
9630349530349430349330349230349130349030348930348830348730348630348530
3484303483303482303481303480303479303478303477303476303475303474303473
3034723034713034703034693034683034673034663034653034643034633034623034
6130346030345930345830345730345630345530345430345330345230345130345030
3449303448303447303446303445303444303443303442303441303440303439303438
3034373034362934352934342934332934322934312934302934292934282934272934
2629342529342429342329342229342129342029341929341829341729341629341529
3414293413293412293411293410293409293408293407293406293405293404293403
2934022934012934002933992933982933972933962933952933942933932933922933
9129339029338929338829338729338629338529338429338329338229338129338029
3379293378293377293376293375293374293373293372293371293370293369293368
2933672933662833652833642833632833622833612833602833592833582833572833
5628335528335428335328335228335128335028334928334828334728334628334528
3344283343283342283341283340283339283338283337283336283335283334283333
2833322833312833302833292833282833272833262833252833242833232833222833
2128332028331928331828331728331628331528331428331328331228331128331028
3309283308283307283306283305283304283303283302283301283300283299283298
2832972832962832952832942832932832922832912832902832892832882832872832
8628328528328428328328328228328128328028327928327828327727327627327527
3274273273273272273271273270273269273268273267273266273265273264273263
2732622732612732602732592732582732572732562732552732542732532732522732
5127325027324927324827324727324627324527324427324327324227324127324027
3239273238273237273236273235273234273233273232273231273230273229273228
2732272732262732252732242732232732222732212732202732192732182732172732
1627321527321427321327321227321127321027320927320827320727320627320527
3204273203273202273201273200273199273198273197273196273195273194273193
2731922731912731902731892731882731872731862731852731842731832631822631
8126318026317926317826317726317626317526317426317326317226317126317026
3169263168263167263166263165263164263163263162263161263160263159263158
2631572631562631552631542631532631522631512631502631492631482631472631
4626314526314426314326314226314126314026313926313826313726313626313526
3134263133263132263131263130263129263128263127263126263125263124263123
2631222631212631202631192631182631172631162631152631142631132631122631
1126311026310926310826310726310626310526310426310326310226310126310026
3099263098263097263096263095263094263093263092263091263090263089263088
2630872630862630852630842630832630822630812630802630792630782630772630
7626307526307426307326307226307126307026306926306826306726306626306526
3064263063263062263061263060263059263058263057263056263055263054263053
2630522630512630502630492630482630472630462630452630442630432630422630

4126304026303926303826303726303626303526303426303326303226303126303026
3029263028263027263026263025263024263023263022263021263020263019263018
2630172630162630152630142630132630122630112630102630092630082630072630
0626300526300426300326300226300126300026299926299826299726299626299526
2994262993262992262991262990262989262988262987262986262985262984262983
2629822629812629802629792629782629772629762629752629742629732629722629
7126297026296926296826296726296626296526296426296326296226296126296026
2959262958262957262956262955252954252953252952252951252950252949252948
2529472529462529452529442529432529422529412529402529392529382529372529
3625293525293425293325293225293125293025292925292825292725292625292525
2924252923252922252921252920252919252918252917252916252915252914252913
2529122529112529102529092529082529072529062529052529042529032529022529
0125290025289925289825289725289625289525289425289325289225289125289025
2889252888252887252886252885252884252883252882252881252880252879252878
2528772428762428752428742428732428722428712428702428692428682428672428
6624286524286424286324286224286124286024285924285824285724285624285524
2854242853242852242851242850242849242848242847242846242845242844242843
2428422428412428402428392428382428372428362428352428342428332428322428
3124283024282924282824282724282624282524282424282324282224282124282024
2819242818242817242816242815242814242813242812232811232810232809232808
2328072328062328052328042328032328022328012328002327992327982327972327
9623279523279423279323279223279123279023278923278823278723278623278523
2784232783232782232781232780232779232778232777232776232775232774232773
2327722327712327702327692327682327672327662327652327642327632327622327
6123276023275923275823275723275623275523275423275323275223275123275023
2749232748232747232746232745232744232743232742232741232740232739232738
2327372327362327352327342327332327322327312327302327292327282327272327
2623272523272423272323272223272123272023271923271823271723271623271523
2714232713232712232711232710232709232708232707232706232705232704232703
2327022327012327002326992326982326972326962326952326942326932226922226
9122269022268922268822268722268622268522268422268322268222268122268022
2679222678222677222676222675222674222673222672222671222670222669222668
2226672226662226652226642226632226622226612226602226592226582226572226
5622265522265422265322265222265122265022264922264822264722264622264522
2644222643222642222641222640222639222638222637222636222635222634222633
2226322226312226302226292226282226272226262226252226242226232226222226
2122262022261922261822261722261622261522261421261321261221261121261021
2609212608212607212606212605212604212603212602212601212600212599212598
2125972125962125952125942125932125922125912125902125892125882125872125
8621258521258421258321258221258121258021257921257821257721257621257521

2574212573212572212571212570212569212568212567212566212565212564212563
2125622125612125602125592125582125572125562125552125542125532125522125
5121255021254921254821254721254621254521254421254321254221254121254021
2539212538212537212536212535212534212533212532212531212530212529212528
2125272125262125252125242125232125222125212125202125192125182125172125
1621251521251421251321251221251121251021250921250821250721250621250521
2504212503212502212501202500202499202498202497202496202495202494202493
2024922024912024902024892024882024872024862024852024842024832024822024
8120248020247920247820247720247620247520247420247320247220247120247020
2469202468202467202466202465202464202463202462202461202460202459202458
2024572024562024552024542024532024522024512024502024492024482024472024
4620244520244420244320244220244120244020243920243820243720243620243520
2434202433202432202431202430202429202428202427202426202425202424202423
2024222024212024202024192024182024172024162024152024142024132024122024
1120241020240920240820240720240620240520240420240320240220240120240020
2399202398202397202396202395202394202393202392202391202390202389202388
2023872023862023852023842023832023822023812023802023792023782023772023
7620237520237420237320237220237120237020236920236820236720236620236519
2364192363192362192361192360192359192358192357192356192355192354192353
1923521923511923501923491923481923471923461923451923441923431923421923
4119234019233919233819233719233619233519233419233319233219233119233019
2329192328192327192326192325192324192323192322192321192320192319192318
1923171923161923151923141923131923121923111923101923091923081923071923
0619230519230419230319230219230119230019229919229819229719229619229519
2294192293192292192291192290192289192288192287192286192285192284192283
1922821922811922801922791922781922771922761922751922741922731922721922
7119227019226919226819226719226618226518226418226318226218226118226018
2259182258182257182256182255182254182253182252182251182250182249182248
1822471822461822451822441822431822421822411822401822391822381822371822
3618223518223418223318223218223118223018222918222818222718222618222518
2224182223182222182221182220182219182218182217182216182215182214182213
1822121822111822101822091822081822071822061822051822041822031822021822
0118220018219918219818219718219618219518219418219318219218219118219018
2189182188182187182186182185182184182183182182182181182180182179182178
1821771821761821751821741821731821721821711821701821691821681821671821
6618216518216418216318216218216118216018215918215818215718215618215517
2154172153172152172151172150172149172148172147172146172145172144172143
1721421721411721401721391721381721371721361721351721341721331721321721
3117213017212917212817212717212617212517212417212317212217212117212017
2119172118172117172116172115172114172113172112172111172110172109172108

172107172106172105172104172103172102172101172100172099172098172097172096172095172094172093172092172091172090172089172088172087172086172085172084172083172082172081172080172079172078172077172076172075172074172073172072172071172070172069172068172067172066172065172064172063172062172061172060172059172058172057172056172055172054172053172052172051172050172049172048172047172046172045172044172043162042162041162040162039162038162037162036162035162034162033162032162031162030162029162028162027162026162025162024162023162022162021162020162019162018162017162016162015162014162013162012162011162010162009162008162007162006162005162004162003162002162001162000161999161998161997161996161995161994161993161992161991161990161989161988161987161986161985161984161983161982161981161980161979161978161977161976161975161974161973161972161971161970161969161968161967161966161965161964161963161962161961161960161959161958161957161956161955161954161953161952161951161950161949161948161947161946161945161944161943161942161941161940161939161938161937161936161935161934161933161932161931161930161929161928161927161926161925161924161923161922161921161920161919161918161917161916161915161914151913151912151911151910151909151908151907151906151905151904151903151902151901151900151899151898151897151896151895151894151893151892151891151890151889151888151887151886151885151884151883151882151881151880151879151878151877151876151875151874151873151872151871151870151869151868151867151866151865151864151863151862151861151860151859151858151857151856151855151854151853151852151851151850151849151848151847151846151845151844151843151842151841151840151839151838151837151836151835151834151833151832151831151830151829151828151827151826151825151824151823151822151821151820151819151818151817151816151815151814141813141812141811141810141809141808141807141806141805141804141803141802141801141800141799141798141797141796141795141794141793141792141791141790141789141788141787141786141785141784141783141782141781141780141779141778141777141776141775141774141773141772141771141770141769141768141767141766141765141764141763141762141761131760131759131758131757131756131755131754131753131752131751131750131749131748131747131746131745131744131743131742131741131740131739131738131737131736131735131734131733131732131731131730131729131728131727131726131725131724131723131722131721131720131719131718131717121716121715121714121713121712121711121710121709121708121707121706121705121704121703121702121701121700121699121698121697121696121695121694121693121692121691121690121689121688121687121686121685121684121683121682121681121680121679121678121677121676121675121674121673121672121671121670121669121668121667121666121665121664121663121662121661121660121659121658121657121656121655121654121653121652121651121650121649121648121647121646121645121644121643121642121641

4112164012163912163812163712163612163512163412163312163212163112163012
1629121628121627121626121625121624121623121622121621121620121619121618
1216171216161216151216141216131216121216111216101216091216081216071216
0612160511160411160311160211160111160011159911159811159711159611159511
1594111593111592111591111590111589111588111587111586111585111584111583
1115821115811115801115791115781115771115761115751115741115731115721115
7111157011156911156811156711156611156511156411156311156211156111156011
1559111558111557111556111555111554111553111552111551111550111549111548
1115471115461115451115441115431115421115411115401115391115381115371115
3611153511153411153311153211153111153011152911152811152711152611152511
1524111523111522111521111520111519111518111517111516111515111514111513
1115121115111115101115091115081115071115061115051115041115031115021115
0111150011149911149811149711149611149511149411149311149211149111149011
1489111488111487111486111485111484111483111482111481101480101479101478
1014771014761014751014741014731014721014711014701014691014681014671014
6610146510146410146310146210146110146010145910145810145710145610145510
1454101453101452101451101450101449101448101447101446101445101444101443
1014421014411014401014391014381014371014361014351014341014331014321014
3110143010142910142810142710142610142510142410142310142210142110142010
1419101418101417101416101415101414101413101412101411101410101409101408
1014071014061014051014041014031014021014011014001013991013981013971013
9610139510139410139310139210139110139010138910138810138710138610138510
1384101383101382101381101380101379101378101377101376101375101374101373
1013721013719137091369913689136791366913659136491363913629136191360913
5991358913579135691355913549135391352913519135091349913489134791346913
4591344913439134291341913409133991338913379133691335913349133391332913
3191330913299132891327913269132591324913239132291321913209131991318913
1791316913159131491313913129131191310913099130891307913069130591304913
0391302913019130091299912989129791296912959129491293912929129191290912
8991288912879128691285912849128391282912819128091279912789127791276912
7591274912739127291271912709126991268912679126691265912649126391262912
6191260912599125891257912569125591254912539125291251912509124991248912
4791246912459124491243912428124181240812398123881237812368123581234812
3381232812318123081229812288122781226812258122481223812228122181220812
1981218812178121681215812148121381212812118121081209812088120781206812
0581204812038120281201812008119981198811978119681195811948119381192811
9181190811898118881187811868118581184811838118281181811808117981178811
7781176811758117481173811728117181170811698116881167811667116571164711
6371162711617116071159711587115771156711557115471153711527115171150711
4971148711477114671145711447114371142711417114071139711387113771136711

3571134711337113271131711307112971128711277112671125711247112371122711
2171120711197111871117711167111571114711137111271111711107110971108711
0771106711057110471103711027110171100710997109871097710967109571094710
9371092710917109071089710887108771086710857108471083710827108171080710
7971078710777107671075710747107371072710717107071069710687106771066710
6571064710637106271061710607105971058710577105671055710547105371052710
5171050710497104871047710467104571044710437104271041710407103971038710
3771036710357103471033710327103171030710297102871027710267102571024710
2371022710217102071019710187101771016710157101471013710127101171010710
0971008710077100671005710047100371002710017100079999799879979967995799
4799379927991799079897988798779867985798479837982798179807979797879777
9767975797479737972797179707969796879677966796579647963796279617960795
9695869576956695569546953695269516950694969486947694669456944694369426
9416940693969386937693669356934693369326931693069296928692769266925692
4692369226921692069196918691769166915691469136912691169106909690869076
9066905690469036902690169006899689868976896689568946893689268916890688
9688868876886688568846883688268816880687968786877687668756874687368726
8716870686968686867686668656864686368626861686068596858685768566855685
4685368526851685068496848684768466845684468436842684168406839683868376
8366835683468336832683168306829682868276826682568246823682268216820681
9681868176816681568146813681268116810680968086807680668056804680368026
8016800679967986797679667956794679357925791579057895788578757865785578
4578357825781578057795778577757765775577457735772577157705769576857675
7665765576457635762576157605759575857575756575555754575357525751575057 4
9574857475746574557445743574257415740573957385737573657355734573357325
7315730572957285727572657255724572357225721572057195718571757165715571
4571357125711571057095708570757065705570457035702570157005699569856975
6965695569456935692569156905689568856875686568556845683568256815680567
9567856775676567556745673567246714670466946684667466646654664466346624
6614660465946584657465646554654465346524651465046494648464746464645464
4464346424641464046394638463746364635463446334632463146304629462846274
6264625462446234622462146204619461846174616461546144613461246114610460
9460846074606460546044603460246014600459945984597459645954594459345924
5914590458945884587458645854584458345824581458045794578457745764575457
4457345724571457045694568456745664565456445634562456145604559455845574
5564555455445534552455145504549454845474546454545444543454245414540453
9453845374536453545344533453245314530452945284527452645254524452345224
5214520451945184517451645154514451345124511451045094508450745064505450
4450345024501450044994498449744964495349434933492349134903489348834873
4863485348434833482348134803479347834773476347534743473347234713470346

9346834673466346534643463346234613460345934583457345634553454345334523
4513450344934483447344634453444344334423441344034393438343734363435343
4343334323431343034293428342734263425342434233422342134203419341834173
4163415341434133412341134103409340834073406340534043403340234013400339
9339833973396339533943393339233913390338933883387338633853384338333823
3813380337933783377337633753374337333723371337033693368336733663365336
4336333623361336033593358335733563355335433533352335133503349334833473
3463345334433433342334133403339333833373336333533343333333233313330332
9332833273326332533243323333223321332033193318331733163315331433133312 3
3113310330933083307330633053304330333023301330032993298329732963295329
4229322922291229022892288228722862285228422832282228122802279227822772
2762275227422732272227122702269226822672266226522642263226222612260225
9225822572256225522542253225222512250224922482247224622452244224322422
2412240223922382237223622352234223322322231223022292228222722262225222
4222322222221222022192218221722162215221422132212221122102209220822072
2062205220422032202220122002199219821972196219521942193219221912190218
9218821872186218521842183218221812180217921782177217621752174217321722
1712170216921682167216621652164216321622161216021592158215721562155215
4215321522151215021492148214721462145214421432142214121402139213821372
1362135213421332132213121302129212821272126212521242123212221212120211
9211821172116211521142113211221112110210921082107210621052104210321022
1012100299298297296295294293292291290289288287286285284283282281280279
2782772762752742732722712702692682672662652642632622612602592582572562
5525425325225125024924824724624524424324224124023923823723623523423323
2231230229228227226225224223222221220219218217216215214213212211210292
8271615141312111”

5.6 Fibonacci based Evidences

Under this main chapter, I will present evidences over the text of Quran, that suggest that there is also 19 based evidences exist when we generate codes with a similar coding pattern to Fibonacci. Numbers of Fibonacci sequence is generated with the sum of the two preceding numbers and the initial two numbers of the sequence are 0 and 1. So, based on the general Fibonacci sequence coding pattern, I infer the new coding pattern that can be applied to all the integer numbers. It is needless to summarize the importance of Fibonacci sequence numbers, which we observe its pattern in nature and daily life. Fibonacci Numbers has also the unique relationship with the Golden Ratio. If we take any two successive Fibonacci Numbers and calculate their ratio, the results are approximately the Golden Ratio. Fibonacci Numbers and the Golden Ratio is what we clearly observe in the nature from the body parts of humans to DNA double helix or plants structures like flower

petals to finance and so on. It is like one of the natural design patterns of creation. Therefore, hypothesizing that the Fibonacci coding pattern might also exist in the text structure of Quran within the 19 based coding system is a reasonable hypothesis as everything in nature was created by the same Creator with respect to his measures.

There were weak sources of information that caused me to contemplate about the Fibonacci coding pattern and also the 19 based system of Quran. I had been busy updating my book during the year 2022 and did not have time to try other potential codings in Quran. However, firstly, I randomly saw the below simple 19 based coding in a social media post and when I performed an internet search, I was able to find this online book material as potentially the first source of that code published in it (Adams 2020). However, I am still not sure about the first source of this code as I did not see an explanation about who found this code first in that book. Anyways, even in that online book, where this code was presented first, the following important questions were not addressed at all. Mainly, there was no explanation for why this a bit unusual coding pattern applied or what is this coding pattern about and why there is that additional 0 at the beginning of the number of the total verses number 6236. Therefore, the coding operation used looks like a bit stretching without such explanations, which does not exist in the book.

The shared code was the following: 6236 is the total number of numbered verses of Quran. If we take 06236 and sum each consecutive number of it with the previous one then we obtain 6859, which is exactly 19x19x19. Here is the each operation to get this number.

0+6 = 6

6+2 = 8

2+3 = 5

3+6 = 9

These numbers make 6859 and it is exactly equal to 19x19x19.

What could be the probability of such an observation? The probability of a number being multiple of 19x19x19 is 1/(19x19x19) = 1/6859. However, let's say we have 8 similar operations to generate similar numbers in total (total number of chapters, verses, words and letters in both 6236 and 6348 verses) that could be tried similarly. Therefore, it is fair to say the probability of such random observation alone could be like 8/6859 = 0.0011. This is around 1.1 in 1000 trials and it looks still statistically very significant and would not be considered to be observed by chance from scientific point of view. Since this is not a random book but the book that is claimed to be from the Creator of everything and followed by around 1.8 billion people, then it is more likely to be by design.

However, since there was no explanation for the reason of the initial 0 used in the coding operation and also an unusual coding pattern applied, the code did not seem much interesting to me initially. Because, in my book all the 19 based codes that I designated as evidence has a reason and explanation for why that coding pattern was used. Namely, all the evidences are rule based and have a meaningful explanation for why that pattern is used. For example, one of the universal rules I established in my book for concatenation operation is that,"natural numbers (of the text) are concatenated in natural order". If there is an exception, I need to make the explanation of the reason for such special cases. Getting back to the main topic, the code I saw still looked interesting to me as is because it is not only multiple of 19 but it is also exactly equal to 19x19x19. I thought, this is very unlikely, maybe there is something I could have not seen yet and that thought stuck in my mind and caused me to contemplate more about it.

In the same book of that code but at an unrelated section, there are some coding examples with Fibonacci numbers as well. However the two parts are not related in that book but independent. Regarding Fibonacci numbers, this information is shared in that book: "The sum of the first 37 primes is the 19th Fibonacci number". This number is 2584 (19x136) and it is also multiple of 19, from which we also see that the 19th Fibonacci number is also multiple of 19.

These are interesting information but just an interesting code like an isolated evidence or a strong fact as is without a rule based relation to 19 based system of the text of Quran. Then I decided to investigate more on the Fibonacci numbers and inferred a new Fibonacci coding pattern that can be applied to any single arbitrary integer number, which then allowed me to discover 19 based coding evidences with the Fibonacci coding pattern that exist over the text of Quran. In the number generation process of Fibonacci, the two preceding numbers are summed and a new Fibonacci number is generated. Also, it has to start with 0 as the initial number before starting with 1 for integers. However, we now want to apply Fibonacci coding pattern to any arbitrary number. In the digits of any integer number, the next digit is already known, therefore I just use apply the Fibonacci pattern among the digits of any integer number and generate a new number based in this pattern.

Therefore, this is an example that shows how I found that Fibonacci coding pattern can be applied to any number. Let's say we have the number 6236 and we want to apply the new Fibonacci coding pattern over it. We separate each digits of the selected number but start with 0 as we see in the Fibonacci sequence. Then we have these separate numbers sequence:

0 6 2 3 6

Then we apply the basic Fibonacci operation over these numbers, such that the two preceding numbers are summed and a new Fibonacci number is generated. Then we get each of these numbers:

0 + 6 = 6

6 + 2 = 8

2 + 3 = 5

3 + 6 = 9

And concatenation of each of these sums yields this new single number, 6859, as the final result. This example turns out to be the exact coding that initially caused me to think about Fibonacci and 19 based system. After inferring this Fibonacci coding pattern that can be applied to any arbitrary number then the 0 that was put at the beginning of 6236 became more meaningful. Also, the question of why we sum the two consecutive numbers was also answered. Therefore, my conclusion is that the code 6859 that is equal to 19x19x19 is also an evidence alone, as it is based on a meaningful coding pattern that we observe in nature, which is Fibonacci numbers. However, I usually consider simpler codes as clues and test them in a big number that corresponds to the clue but represent the Quran in more detail. Therefore, the next step was to test this hypothesis over the full text of Quran at verse level data. Then, I discovered new evidences as I will present in the following sub-chapters.

Further facts on Fibonacci numbers and 19:

Before proceeding to the evidences let me share some more facts about Fibonacci numbers itself and its natural relation to number 19. I already mentioned above that the 19th Fibonacci number is 2584 and it is multiple of 19. This is true when we start counting from the first number 0 in the Fibonacci numbers. There are also the following facts:

The sum of all the numbers until the 19th Fibonacci number is 6764 and it is also multiple of 19. Here are all the 19 Fibonacci numbers that yields the sum as 6764:

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584

The other fact is that, again starting from 0 as the first index of Fibonacci, not only the 19th Fibonacci number is multiple of 19 but also all the series of Fibonacci numbers at its index 19^n (n=1,2,3,..) are also multiple of 19. For example, Fibonacci(19), Fibonacci(19x19), Fibonacci(19x19x19) and so on are all multiple of 19. Not all, but only some numbers with same property has this divisibility by 19 property and one of them is the number 19. For example, number 17 does not have this property with Fibonacci sequence.

5.6.1 Fibonacci Evidence on Verses

I had already shown that when we applied the Fibonacci coding pattern, which I derived and explained in the previous section, then the number of the numbered verses of Quran, 6236, yields the coding number 6859 and it is multiple of 19. Even more it is exactly equal to 19x19x19.

Now, my hypothesis is as follows: That simple code was left as clue and it also exist in the full text of Quran considering verse level numbers all the special verse indexes.

This hypothesis is more interesting as we already have one additional information about the big coding number we obtain from the special verse indexes. In the evidence presented in Chapter 5.5.1, I already presented that the 12471 digits length big number that is obtained from the concatenation of all the special verse indexes in the natural order is multiple of 19. Now, in this chapter the hypothesis I describe tells that we will apply the Fibonacci coding pattern that I derived to this 12471 digits length big number and it should also be multiple of 19. When I tested this hypothesis I witnessed that this hypothesis is also true. I will present and prove below this coding that I considered as evidence since it is based on the clue Fibonacci coding over the number 6236.

Let's first write the function that will apply the Fibonacci coding pattern, which I derived and explained in the previous section, to any input integer number. I named this function as *codeFibSeq*.

```
codeFibSeq <- function(x){
  # This function applies the Fibonacci coding pattern (as I
described) to the input number
  # It outputs a single number as the result.
  # x should be character especially for long numbers.
  b <- c()
  a <- unlist(strsplit(as.character(x), split=""))
  b <- c(b,a[1])
  lena<- length(a) - 1
  for( i in 1:lena ){
    tmpb <- as.numeric(a[i])+as.numeric(a[i+1])
    b<- c(b, tmpb )
  }
  return(paste0(b, collapse = "") )
}

# Example usage of this function on 6236.
```

```r
# The result of the below example run must be 6859.
codeFibSeq(6236)

## [1] "6859"
```

We now have the function to apply the Fibonacci coding pattern and generate the result as a single coding number. As seen above, when we input the number 6236, the result is 6859 and it is the base code example we already know and shows that the function works as intended.

Now, in this evidence we will input the special verse indexes of all the 6236 numbered verses as a single number concatenated in their natural order. Recall that this 12471 digits length big number itself is also multiple of 19 and is also another code evidence that was presented in Chapter 5.5.1. It also works for all the 6348 verses as there is no number for the special verse indexes and they both result the same big number after concatenation.

```r
# The 6236 special verse indexes concatenated
tmp <- paste0(nQuran$verse, collapse = "")
# The length of this number is 12471 as seen:
nchar(tmp)

## [1] 12471

# As we know this itself was an evidence and multiple of 19.
as.bigz(tmp) %% 19 # As shown here again.

## Big Integer ('bigz') :
## [1] 0

#Now we input this 12471 length big number to the codeFibSeq function
tmp <-codeFibSeq(tmp) # The Fibonacci coding pattern is applied
nchar(tmp) # Length of this resulting coding number

## [1] 16594

# As we see, this 16594 digits length coding number is also multiple
of 19
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

As we witnessed, when we applied the Fibonacci coding pattern to the 12471 digits length big number of all the special verse indexes, which itself is multiple of 19, and generated the

“16594” digits length big number as its Fibonacci coding representation, then the resulting coding number is also multiple of 19 as hypothesized and thus tested. I consider this coding as evidence as I explained before it is based on the same coding that we observed the number 6236 itself and considered it as a clue or key coding pattern. They together suggest a design and hence considered within the overall 19 based system presented in this book.

As the general rule of the system of my book, I apply all the codings to both text type, namely, 6236 unnumbered verses only and also all the 6348 verses. However, since the additional 112 Basmala verses do not have numbers, the special verse indexes of the 6348 verses are also the exactly the same numbers of the numbered verses. Therefore, we can rightfully state that, this successful coding that we observed in the 6236 numbered verses also exist in all the 6348 verses too.

Then, we can count how many trials we could try with this coding, considering total level, chapter level and verse level numbers of the verse data of the text data. Because, this book has also the general rule as such, when we use a coding as a clue, we only test its correspondence in a bigger number at different level of the similar data. Namely, if the clue is based on verse number like the 6236 verses, then we test the verse numbers at the different levels like the verse indexes over verse level data.

In the total level numbers, we observed the successful key coding on the number 6236 and used it as the clue but not in the number 6348. The follow up codes that were based on it are considered as the evidences and counted in the global counters of this book for general probability calculations. In verse level data, we observed it on both of them as both numbers were same. In chapter level, we don’t observe this key coding pattern. Therefore we can say that we performed 4 trials and observed 2 successes of this ke coding coding pattern. The probability of such observation alone is 0.015 (with 2 success, 4 trials, p=1/19). One may wonder, why we do we not observe this coding pattern in the chapter level data of the verse numbers. Maybe, it is because we have verse number as the clue and it is best to observe the evidence over the verse level data. Namely, maybe the chapter level data is not relevant here but I choose to be very conservative in the probability calculations and thus include the chapter level verse data as well in the probability calculations and thus I count 4 trials instead of 2. Now, let’s also add these numbers into the global counters.

```
global_tested_nums <- global_tested_nums + 4
global_success_nums <- global_success_nums + 2
```

For the reference, to the best of my knowledge, Evidence 5.6.1 is also first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out Evidence 5.6.1 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

Also, here is the “16594” digits length big number:

“1357911138357911131517101122334455667788991011223344556677889910101112
3344556677889910101111121344556677889910101111121213145566778899101011
1112121313141566778899101011111212131314141516778899101011111212131314
1415151617889910101111121213131414151516161718991010111112121313141415
1516161717181010111212313414515616717818919102112222332442552662772882
9992101032133234335436537638739831093111043144245346447548649741084119
4121054155256357458559651075118512951310651662673684695610661176128613
9614107617727837947105711671277138714971510871882893810481158126813781
4881598161098199291039114912591369147915891699171010911010210113101241
0135101461015710168101791018112022132242352462572682792810291131232333
4345356367378389391031011422433444455466477488499410104111153254355456
5576587598510951110512116426536646756866976108611961210613117527637747
8579671077118712971310714118628738848958106811781288139814108151197298
3994910591169127913891499151091611108210931010410115101261013710147357
9111315171011223344556677889910112233445566778899101011123344556677889
9101011111213445566778899101011111212131455667788991010111121213131415
6667788991010111112121313141415167788991010111112121313141415151617889
9101011111212131314141515161617189910101111121213131414151516161717181
0101112123134145156167178189191021122223324425526627728829921010321332
3433543653763873983109311104314424534644754864974108411941210541552563
5745855965107511851295131065166267368469561066117612861396141076177278
3794710571167127713871497151087188289381048115812681378148815981610981
9929103911491259136914791589169917101091101021011310124101351014610157
1016810179101811201357911131517101122334455667788991011223344556677889
9101011123344556677889910101111121344556677889910101111121213145566778
8991010111112121313141566778899101011111212131314141516778899101011111
2121313141415151617889910101111121213131414151516161718991010111112121
3131414151516161717181010111212313414515616717818919102112222332442552
6627728829921010321332343354365376387398310931110431442453464475486497
4108411941210541552563574855965107511851295131065166267368469561066117
6128613961410761772783794710571167127713871497151087188289381048115812
6813735791113151710112233445566778899101122334455667788991010111233445
5566778899101011111213445566778899101011111212131455667788991010111112
1213131415667788991010111112121313141415167788991010111112121313141415
1516178899101011111212131314141515161617189910101111121213131414151516
1617171810101112123134145156167178189191021122223324425526627728829921
0103213579111315171011223344556677889910112233445566778899101011123344
5566778899101011111213445566778899101011111212131455667788991010111112

1213131415667788991010111112121313141415167788991010111112121313141415
1516178899101011111212131314141515161617189910101111121213131414151516
1617171810101112123134145156167178189191021122223324425526627728829921
0103213323433543653763873983109311104314424534644754864974108411941210
5415525635745855965107511851295131065166267368469561066117612861396141
0761772783794710571163579111315171011223344556677889910112233445566778
8991010111233445566778899101011111213445566778899101011111212131455667
7888991010111112121313141566778899101011111212131314141516778899101011
1121213131414151516178899101011111212131314141515161617189910101111121
2131314141515161617171810101112123134145156167178189191021122223324425
5266277288299210103213323433543653763873983109311104314424534644754864
9741084119412105415525635745855965107511851295131065166267368469561066
1176128613961410761772783794710571167127713871497151087188289381048115
8126813781488159816109819929103911491259136914791589169917101091101021
0113101241013510146101571016810179101811202213224235246257267357911131
5171011223344556677889910112233445566778899101011123344556677889910101
1111213445566778899101011111212131455667788991010111112121313141566778
8991010111112121313141415167788991010111112635791113151710112233445566
7788991011223344556677889910101112334455667788991010111112134455667788
9910101111121213145566778899101011111212131314156677889910101111121213
1314141516778899101011111212131314141515161788991010111112121313141415
1516161718991010111112121313141415151616171718101011121231341451561671
7818919102112222332442552662772882992101032133234335436537638739831093
1110357911131517101122334455667788991011223344556677889910101112334455
6677889910101111121344556677889910101111121213145566778899101011111212
1313141566778899101011111212131314141516778899101011111212131314141515
1617889910101111121213131414151516161718991010111112121313141415151616
1717181010111212313414515616717818919103579111315171011223344556677889
9101122334455667788991010111233445566778899101011111213445566778899101
0111112121314556677889910101111121213131415667788991010111112121313141
4151677889910101111121213131414151516178899101011111212131314141515161
6171899101011111212131314141515161617171810101112123134145156167178189
1910211222233244255266277288299210103213323433543579111315171011223344
5566778899101122334455667788991010111233445566778899101011111213445566
7788991010111112121314556677889910101111121213131415667788991010111112
1213131414151677889910101111121213131414151516178899101011111212131314
1415151616171899101011111212131314141515161617171810101112123134145156
1671781891910211222357911131517101122334455667788991011223344556677889
9101011123344556677889910101111121344556674357911131517101122334455667
7889910112233445566778899101011123344556677889910101111121344556677889

910101111121213145566733579111315171011223344556677889910112233445567
7889910101112334455667788991010111112134455667788991010111112121314556
6778899101011111212131314156677889910101111121213131414151677889910101
1111212131314141515161788991010111112121313141415151616171899101011111
2121313141415151616171718103579111315171011223344556677889910112233445
5667788991010111233445566778899101011111213445566778899101011111212131
4556677889910101111121213131415667788991010111112121313141415167788991
0101111121213131414151516178899101011111212131314141515161617189910101
1111212131314141515161617171810101112123134145156167178189191021122223
3244255266277288299210103213323433543653763873983109357911131517101122
3344556677889910112233445566778899101011123344556677889910101111121344
5566778899101011111212131455667788991010111112121313141566778899101011
1112121313141415167788991010111112121313141415151617889910101111121213
1314141515161617189910101111121213131414151516161717181010111212313414
5156167178189191021122235791113151710112233445566778899101122334455667
7889910101112334455667788991010111112134455667788991010111112121314556
6778899101011111212131314156677889910101111121213131414151677889910101
1111212131314141515161788991010111112121313141415151616171899101011111
2121313141415151616171718101011121231341451561671781891910211357911131
5171011223344556677889910112233445566778899101011123344556677889910101
1111213445566778899101011111212131455667788991010111112121313141566778
8991010111112121313141415167788991010111112121313141415151617889910101
1111212131314141515161617189910101111121213131414151516161793579111315
1710112233445566778899101122334455667788991010111233445566778899101011
1112134455667788991010111112121314556677889910101111121213131415667788
9910101111121213131414151677889910101111121213131414151516178899101011
1112121313141415151616171899101011111212131314141515161617171810101112
1231341451561671781891910211222233244255266277288299210103213323433543
6537638739831093111043144245346447548635791113151710112233445566778899
1011223344556677889910101112334455667788991010111112134455667788991010
1111121213145566778899101011111212131314156677889910101111121213131414
1516778899101011111212131314141515161788991010111112121313141415151616
1718991010111112121313141415151616171718101011121231341451561671781891
9102112222333579111315171011223344556677889910112233445566778899101011
1233445566778899101011111213445566778899101011111212131455667788991010
1111121213131415667788991010111112121313141415167788991010111112121313
1414159357911131517101122334455667788991011223344556677889910101112334
4556677889910101111121344556677889910101111121213145566778899101011111
2121313141566778899101011111212131314141516778899101011111212131314141
5151617889910101111121213131414151516161718991010111112121313141415151

6161717181010111212313414515616717818919102112222332442552662772882993
5791113151710112233445566778899101122334455667788991010111233445566778
8991010111112134455667788991010111112121314556677889910101111121213131
4156677889910535791113151710112233445566778899101122334455667788991010
1112334455667788991010111112134455667788991010111112121314556677889910
1011111212131314156677889910101111121213131414151677889910101111121213
1314835791113151710112233445566778899101122334455667788991010111233445
5667788991010111112134455667788991010111112121314556677889910101111121
2131314156677889910101111121213131414151677889910101111121213131414151
5161788991010111112121313141415151616171899101011111212131314141515161
6171718101011121231341451561671781891910211222233244255266277288299210
1032133234335436537638739831093111043144245346447548649741084119412105
4155256357458559651075118512951310651662673684695610661176128613961410
7617727837947105711671277138714971510871882893810481158126813781488159
8161098199291039114912591369147915891699171010911010210113101241013510
1461015710168101791018112022132242352462572682792810291131232333434535
6367378389391031011422433444455466477488498357911131517101122334455667
7889910112233445566778899101011233445566778899101011111213445566778899
1010111112121314556677889910101111121213131415667788991010111112121313
1414151677889910101111121213131414151516178899101011111212131314141515
1616171899101011111243579111315171011223344556677889910112233445566778
8991010111233445566778899101011111213445566778899101011111212131455667
7788991010111112121313141566778899101011111212131314141516778899101011
1112121313141415151617889910101111121213131414151516935791113151710112
2334455667788991011223344556677889910101112334455667788991010111112134
4556677889910101111121213145566778899101011111212131314156677889910101
1111212131314141510357911131517101122334455667788991011223344556677889
9101011123344556677889910101111121344556677889910101111121213145566778
8991010111112121313141561357911131517101122334455667788991011223344556
6778899101011123344556675357911131517101122334455667788991011223344556
6778899101011123135791113151710112233445566778899101122334455667788991
0101112334455667788991010111112134455667788991010111112121314556677889
9101011111212131314156677889910101111121213131414151677889910435791113
1517101122334455667788991011223344556677889910101112334455667788991010
1111121344556677889910101111121213145566778895357911131517101122334455
6677889910112233445566778899101011123344556677889910101111121344556677
8896357911131517101122334455667788991011223344556677889910101112334455
6677889910101111121344556677889910101111121213145566778899101011111212
1313141566778899101011111212131314141516778899101011111212131314141515
1617889910101143579111315171011223344556677889910112233445566778899101

0111233445566778899101011111213445566778899101011111212131455667788991
0101111121213131415667788991010111112121313141415167788991010111112121
3131414151516178899101011111212131314141515161617189910101111121213131
4141515161617171810101112123134145156167178189191021122223324425526627
7288299210103213323433543653763873983109311104314424534644754864974108
4119412105415525635745855965107511851295131065166267368469561066117612
8613961410761772783794710571167127713871497151087188289381048115812681
3781488159816109819929103357911131517101122334455667788991011223344556
6778899101011123344556677889910101111121344556677889910101111121213145
5667788991010111112121313141566778899101011111212131314141516778899101
0111112121313141415151617889910101111121213131414151516935791113151710
1122334455667788991011223344556677889910101112334455667788991010111112
1344556677889910101111121213145566778899101011111212131314156677889910
1011111212131314141516778899101011111263579111315171011223344556677889
9101122334455667788991010111233445566778899101011111213445566778899101
0111112121314556677889910101111121213131415667788991010111112121313141
4151677889910101111121213131414151516178899101011111212136357911131517
1011223344556677889910112233445566778899101011123344556677889910101111
1213445566778899101011111212131455667788953579111315171011223344556677
8899101122334455667788991010111233445566778899101011111213445566778899
1010111112121314556677843579111315171011223344556677889910112233445566
7788991010111233445566778899101011111213445566778899101011111212131455
6677889910101111121213131415667788991010111112121313141415167788991010
1111112121313141415151617889910101111121213131414151516161710357911131 5
1710112233445566778899101122334455667788991010111233445566778899101011
1112134455667788991010111112121314556677889910101111121213131410357911
1315171011223344556677889910112233445566778899101011123344556677889910
8357911131517101122334455667788991011223344556677889910101112334455667
7863579111315171011223344556677889910112233445566778899101011123344556
6778899101011935791113151710112233445566778899101122334455667788991010
1110357911131517101122334455667788993579111315171011223344556677889910
1122334455667788991010111233445566778899101011111213445566778896357911
1315171011223344556677889910112233445566778899101011123344556677889910
1011111213445566778899101011111212131455667788991010111112121313141561
3579111315171011223344556677889910112233445566778899101011123344556677
8899101011111213445566778899101011111212131035791113151710112233445566
7788991011223344556677889910101112334455667788991010111112134455667788
9910101111121213145566778899101011111212131314156677833579111315171011
2233445566778899101122334455667788991010111233445566778899101011111213
4455667788991010111112121314556677889910635791113151710112233445566778

8991011223344556677889910101112334455667788991010111112134455667788991
0101111121213145566778899101011111212131314156677889910101111121213131
4141516778899101011111212131314141593579111315171011223344556677889910
1122334455667788991010111233445566778899101011111213445566778899101011
1112121314556677889910101111121213131415667788991010111112121313141415
1677889910101111121213131414151516178899101011111212131314141515161617
1899101011111212131314141573579111315171011223344556677889910112233445
5667788991010111035791113151710112233445566778899101122334335791113151
7101122334455667788991011223344556535791113151710112233443579111315171
0112233445535791113151710112235791113151710112235791113151710112233445
5667788993579111315171011223335791113151710112233357911131517101122334
4556677889910112233445566778899101011123135791113151710112233445566778
8991011223344556677889910101112334455667788991010111112134455667788991
0101111121213145566733579111315171011223344556677889910112233445566778
8991010111233445566778899101011111213445566778899101011111212131455667
3357911131517101122334455667788991011223344556677889910101112334455667
7889910101111121344556677853579111315171011223344556677889910112233445
5667788991093579111315171011223344556677889910112233445566778899109357
9111315171011223344556677889910112135791113151710112233445566778899101
1223344556677889910101112334455667788991010111112134455667788991010111
1121213145566778899101011735791113151710112233445566778899101122334455
6677889910101112334455667788991010111112134135791113151710112233445566
7788991011223344556677889910101112334235791113151710112233445566778899
1011223344556677889910101112334455667788991010111112134455667788991010
1111112121314513579111315171011223344556677889910112233445566778899101
0111233445566778899101011111213413579111315171011223344556677889910112
2334455667788991010111233445566778899101011111213445566778899107357911
1315171011223344556677889910112233445566778899101011123344556677889910
1011111213445563357911131517101122334455667788991011223344556677889910
1011103579111315171011223344556677889910103579111315171011223344556677
8899101122334455667788991010111233445566778897357911131517101122334455
6677889910112233445566763579111315171011223344556677889910112233433579
1131517101122334455667788357911131517101122334455667788991010357911131
5171011223344556677889910112233445566778735791113151710112233445566778
8991011223344556677889910101112313579111315171011223344556677889910112
1357911131517101122334455663579111315171011223344556677889910112232357
9111315171011223579111315935791113159357911131517101122334455667788991
0103579635791113159357911131593579111315171011223579111315171011223579
1113159354357911131517103579635753579111383543579117354357963575357963
57911”

5.6.2 Fibonacci Codes as Facts only

Under this chapter I will present further facts on the Fibonacci coding pattern. They look appealing but I preferred to present those codes currently just as **facts** but not as evidences as their potential rules are not fully clear to me yet.

5.6.2.1 Fibonacci Code on Chapters

If we apply the same Fibonacci coding pattern to the chapter indexes of the 6348 verses of the verse level data, then we again observe a resulting big number as multiple of 19 as I show below:

```
# Chapter indexes of each of 6348 verses
tmp <- paste0(unQuran$chapter, collapse = "")

#Now we input this 11430 digits length big number to the codeFibSeq
function
tmp <-codeFibSeq(tmp) # The Fibonacci coding pattern is applied
nchar(tmp) # Length of this resulting number

## [1] 15676

as.bigz(tmp) %% 19 # As we see, this 15676 digits length number is
multiple of 19

## Big Integer ('bigz') :
## [1] 0
```

5.6.2.2 Fibonacci Code on Words

If we apply the same Fibonacci coding pattern to words numbers of the 6236 verses of the verse level data, then we again observe a resulting big number as multiple of 19 as I prove below:

```
# Number of Words in each of 6236 verses
tmp <- paste0(nQuran$vwords, collapse = "")

#Now we input this 9580 digits length big number to the codeFibSeq
function
tmp <-codeFibSeq(tmp) # The Fibonacci coding pattern is applied
nchar(tmp) # Length of this resulting number

## [1] 11902
```

```r
as.bigz(tmp) %% 19 # As we see, this 11902 digits length number is
multiple of 19

## Big Integer ('bigz') :
## [1] 0
```

5.7 Overall probability of all the evidences so far

Below I will calculate the probability of all the evidences so far in this book using the global counters I have been counting.

```r
tmp <-binom.test(global_success_nums,
                 global_tested_nums, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", global_success_nums,
            "success out of", global_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 39 success out of 83 (with p=1/19) is:
9.65e-28"
```

Again, if some cautious people think that we should have used more tests, although we tried **all** of them regarding the rules, I will not even look at the possible further successes in that case and keep the success number same but double the number of trials and see what would then be the overall probability so far. This should calm down those skeptical people.

```r
tmp <-binom.test(global_success_nums,
                 global_tested_nums*2,
                 p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
cat(paste("The probability of all the ", global_success_nums,
          "success out of all the", global_tested_nums*2,
          " tests (with p=1/19) is:", tmp))

## The probability of all the  39 success out of all the 166  tests
(with p=1/19) is: 2.49e-15
```

If still not convinced, for extremely cautious people, let's also increase the trials by 4 fold and keep the successes the same as below!

```r
tmp <-binom.test(global_success_nums,
                 global_tested_nums*4,
```

```
                  p = (1/19),
                  alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
cat(paste("The probability of all the ", global_success_nums,
          "success out of all the", global_tested_nums*4,
          " tests (with p=1/19) is:", tmp))

## The probability of all the  39 success out of all the 332  tests
(with p=1/19) is: 2.99e-06
```

5.8 Ha-Mim evidences

Under this main chapter, I will present codes around some of the *Disjointed letters* or also know as *mysterious letters* or, as in Arabic, *Huroof-al-Muqattaat*. In particular, I will present various codes of the Ha-Mim and also Ayn-Sin-Gaf *Disjointed letters*. I will also provide the rules that define how we construct **all** the possible codes regarding the rules. Since the codes I will present can be defined under meaningful rules, they suggest a 19 based system design of the Ha-Mim letters (ح م) and also Ayn-Sin-Gaf (عسق) letters over the full text of Quran. I also discovered all the Ha-Mim and Ayn-Sin-Gaf codes that are based on over the full text of Quran and, to the best of my knowledge, only some local codes, namely the codes over several local chapters only, were known before. I will calculate the probability of observing all those codes that suggest a system, which might show that the observed system is statistical unlikely to occur by chance alone and thus it suggests that it might have been designed by the author of the text, God. However, as a general reminder, since my decision is based statistical calculations, we can never be sure and cannot use definitive conclusions. We observe what we see and decide with a scientific methodology by calculating the probability of the observations with the best of our ability. This is true for all scientific problems that requires statistical calculations for the best decision. So, God knows best and my conclusions are based with the best of my ability regarding what I observe and measure statistically.

Since there is no alternative writing versions of these letters (Ha-Mim and Ayn-Sin-Gaf), all the standard manuscripts (mushafs) of the Hafs recitation **must** have the same number of Ha-Mim and also Ayn-Sin-Gaf letters. Therefore, the evidences presented about Ha-Mim and Ayn-Sin-Gaf letters are considered universal as they are valid for all the common Hafs manuscripts.

Let's first get the numbers of *disjointed letters* over all the text of Quran, considering both text category, all the 6348 verses and also for only 6236 numbered verses.

```r
require(stringr)
tmp <- unlist(str_split(Words,""))
length(unique(tmp) )

## [1] 36

unique(tmp)

##  [1] ""ت" "إ" "و" "ك" "ع" "د" "ي" "ن" "ح" "ر" "ه" "ل" "ا" "م" "س" "ب"
"ق" "ط" "ص"
"ج" "ظ" "ش" "ء" "ئ" "خ" "آ" "ز" "ة" "ؤ" "ى" "ف" "ض" "غ" "أ" "ذ" [20] ##
ث""

LettersEachun<- table(tmp)
#
tmp <- unlist(str_split(words,""))
length(unique(tmp) )

## [1] 36

unique(tmp)

##  [1] ""ت" "إ" "و" "ك" "ع" "د" "ي" "ن" "ح" "ر" "ه" "ل" "ا" "م" "س" "ب"
"ق" "ط" "ص"
"ج" "ظ" "ش" "ء" "ئ" "خ" "آ" "ز" "ة" "ؤ" "ى" "ف" "ض" "غ" "أ" "ذ" [20] ##
ث""

y<- table(tmp)
lettersEachn <- y

##
x<- unQuran #for 6348 verses first
HrfMat <- matrix(0, nrow(x), 36)
colnames(HrfMat) <- names(y)
tmpmat <- HrfMat
for(j in 1:length(y)){
  tmph <- names(y)[j]
  tmph
  for(i in 1:nrow(tmpmat)){
    tmp <- unlist(str_split(x$text[i],""))
    tmpmat[i,j] <- length(which(tmp == tmph) )
  } }
hrfMat6348 <- tmpmat # verse level numbers of each letters
```

```r
tmp <- rowsum(tmpmat, x$chapter, reorder = F)
#chapter level numbers of each letters in 6348 verses
HrfMatun <- tmp

###
x<- nQuran #for 6236 numbered verses
HrfMat <- matrix(0, nrow(x), 36)
colnames(HrfMat) <- names(y)
tmpmat <- HrfMat
for(j in 1:length(y)){
  tmph <- names(y)[j]
  tmph
  for(i in 1:nrow(tmpmat)){
    tmp <- unlist(str_split(x$text[i],""))
    tmpmat[i,j] <- length(which(tmp == tmph) )
  } #ends i
} #ends j
hrfMat6236 <- tmpmat # verse level numbers of each letters
tmp <- rowsum(tmpmat, x$chapter, reorder = F)
#chapter level numbers of each letters in 6236 numbered verses
hrfMatn <- tmp
```

The counts of each letters:

```r
print("Table of the counts of all the letters in all the 6348 verses")
```

```
## [1] "Table of the counts of all the letters in all the 6348 verses"
```

```r
LettersEachun
```

```
## tmp
##     ح   ج   ث   ت   ة   ب   ا   ئ   إ   ؤ   أ   آ   ء
1414  10520 2344  11603 43878 1182  5108  673   9119  1511  1578  ##
4364  3317
غ   ع   ظ   ط   ض   ص   ش   س   ز   ر   ذ   د   خ     ##
853   1273  1686  2072  2124  6124  1599  12627 4932  5991  2497  ##
1221  9405
ي   ى   و   ه   ن   م   ل   ك   ق   ف     ##
22085 2592  24813 14962 27382 27071 38639 10497 7034  8747  ##
```

```
#
print("Table of the counts of all the letters in the 6236 numbered
verses")

## [1] "Table of the counts of all the letters in the 6236 numbered
verses"

lettersEachn

## tmp
##     ح  ج  ث  ت  ة  ب  ا  ئ  إ  ؤ  أ  آ  ء
1414  10520 2344  11491 43542 1182  5108  673   9119  1511  1578  ##
4140  3317
غ  ع  ظ  ط  ض  ص  ش  س  ز  ر  ذ  د  خ     ##
853   1273  1686  2072  2124  6012  1599  12403 4932  5991  2497  ##
1221  9405
ي  ى  و  ه  ن  م  ل  ك  ق  ف     ##
21973 2592  24813 14850 27270 26735 38191 10497 7034  8747  ##
```

5.8.1 Sum of Ha-Mim letters in the full text of Quran

As already known, the total number of Ha-Mim letters is multiple of 19 in the chapters 40,41,42,43,44,45,46, where the chapters has the first isolated verse that only contains the Ha-Mim disjointed letters. This fact holds when we consider all the verses in those local 7 chapters just mentioned. This counting includes unnumbered Basmala verses too. This code has been a known fact for a long time and as far as I am aware of, Rashad Khalifa is cited as the first who found this fact. Although he is the “inventor” of an older 19 based claims about Quran, which is false as he manipulated the text, he also appears to have found a few interesting codes as this one, which is not in the full text of Quran but just in those 7 chapters for this code and thus this particular one does not include any manipulation of the text and might be taken serious. I said “inventor” because he manipulated the Quran text to match the text to his made up code claims and thus invented, namely made up. Mainly, he removed the last two verses of chapter 9 and made some letters changes in the text to match his made up false code claims. Scientifically, it is non-sense but this particular *local* Ha-Mim code, finding the sum of Ha-Mim letters in those 7 special chapters as multiple of 19, is based on the normal unchanged text as it is not within the parts he shamelessly manipulated. Therefore I have to cite it though I would prefer not to because of his manipulations in his main claim. Also, I am normally not much interested in codes that is not derived from the full text of Quran. However, these kinds of small or local codes might be considered as a sign or clue and can direct us to look at similar codings in the full text of Quran. Another somewhat interesting fact with this small code is that the quotient of the total divided by 19 is equal to 113, which is the digit sum of each of the components that

makes the total sum. These facts at least takes our attention to the Ha-Mim letters. In this book, I am mostly interested only in the codes that is derived from the full text of Quran and thus support the system over the full text of Quran and consequently its overall preservation from different aspect of the text. I am not that interested in codes that can be observed in parts of the text. However, these kinds of codes might be treated as potential signs or clues and we can look at similar coding patterns over the full text of Quran based on these clues. I followed this approach and discovered that the total number of Ha-Mim letters in the full text of Quran is **30875** and it is also multiple of 19 when we consider the numbered 6236 verses. As per the universal rule of this book, I *always* test all the codes in both text types, namely all the 6348 verses and also in 6236 numbered verses. I will provide the proof below but let me first prove the known fact, which is the sum of Ha-Mim letters in the 7 chapters (40 to 46), is really multiple of 19 and correct. Here is the proof for that:

```
require(stringr)
tmp <- unlist(str_split(unQuran$text[4172], "")[1]) #Ha mim
tmp

## [1] "ح" "م"

ix <- c(40:46)
ix

## [1] 40 41 42 43 44 45 46

i1<-match(tmp,colnames(HrfMatun))
i1

## [1] 13 31

#Keep only chapter level numbers of Ha-Mim in all the 6348 verses
#  of chapters 40 to 46
x <- HrfMatun[ix,i1]
tmp <- sum(x)
cat("The total number of Ha-Mim letters in chapters 40 to 46 is ",
tmp)

## The total number of Ha-Mim letters in chapters 40 to 46 is  2147

tmp %% 19 # it is multiple of 19

## [1] 0
```

Moreover, the digit sum of the each components of the sum is 113. It also the quotient resulted from the division of the sum by 19.

I considered this as a clue and hypothesized that the sum of Ha-Mim letters might also be multiple of 19 in the full text of Quran. I then tested and witnessed that the hypothesis was validated considering the full text of Quran over the 6236 numbered verses. Since, as a general rule, I test all codes in this book always in both text types (6348 and 6236), by the rule, I was able to discover this evidence because the local clue was observed considering the unnumbered verses, namely 6348 verses text type.

Below is the proof that the total number of Ha-Mim letters in the full text of Quran, regarding 6236 numbered verses, is multiple of 19.

```
x<-lettersEachn[i1]
x[1]

##    ح
4140 ##

x[2]

##     م
26735 ##

tmp <- sum(x)
cat("The total number of Ha-Mim letters in the numbered 6236 verses ",
tmp)

## The total number of Ha-Mim letters in the numbered 6236 verses
30875

# Test if mod 19 is zero:
tmp %% 19

## [1] 0
```

5.8.2 Ha-Mim-Ayn-Sin-Gaf Evidence and facts

In Evidence 5.8.1, we witnessed that the sum of Ha and Mim letters in the full text of Quran is multiple of 19. We consider it as evidence because, first, the sum is the most basic and logical code to test, second, we initially observed this sum coding pattern locally on the chapters 40,41,42,43,44,45,46, where the chapters has the first isolated verse that only contains the Ha-Mim letters. So, basically I assumed that the code we observe is left as clue and used the same coding pattern as the rule and discovered the code over the full text of

Quran and thus considered it as an evidence. However, there is one more interesting verse with other disjoint letters among those local chapters of Ha-Mim. In chapter 42, the first independent verse is Ha-Mim and the second independent verse is Ayn-Sin-Gaf (عسق). Therefore, I have also tested the same sum coding pattern, with all these 5 disjoint letters together. I took the sum of all Ha-Mim and added the sum of Ayn-Sin-Gaf in the chapter 42 and observed that the grand total is also multiple of 19 in those 7 chapters. As a side note, since the Ha-Mim sum was already multiple of 19 in those 7 chapters, therefore the sum of Ayn-Sin-Gaf in the chapter 42 must also be multiple of 19 so that the grand total of the combination of Ha-Mim and Ayn-Sin-Gaf becomes multiple of 19 too. This is what I observed, namely, the sum of Ayn-Sin-Gaf in the chapter 42 is also multiple of 19. However, since these 5 disjoint letters comes in combination we are interested in the sum of the combination but not Ayn-Sin-Gaf alone. Similar to the previous evidence of Ha-Mim, when I use the locally observed code as a clue and test the same coding pattern over the full text of Quran, then I discovered the evidence I present in this chapter. Namely, the sum of Ha-Mim and Ayn-Sin-Gaf disjoint letters over the full text of Quran is also multiple of 19 just like we observed it locally in their chapters.

As per the universal rule of this book, I test all the codes in both text types, namely all the 6348 verses and also in 6236 numbered verses only. I will provide the proof below but let me first prove the known fact that the sum of Ha-Mim letters in the 7 chapters (40 to 46) and Ayn-Sin-Gaf in the chapter 42 is multiple of 19 and correct. Here is the proof for the local code:

```
require(stringr)
tmp <- unlist(str_split(unQuran$text[4172], "")[1]) #Ha mim
tmp

## [1] "م" "ح"

ix <- c(40:46)
ix

## [1] 40 41 42 43 44 45 46

i1<-match(tmp,colnames(HrfMatun))
i1

## [1] 13 31

#Keep only chapter level numbers of Ha-Mim in all the 6348 verses
#  of chapters 40 to 46
x <- HrfMatun[ix,i1]
tmp <- sum(x)
```

```r
cat("The total number of Ha-Mim letters in chapters 40 to 46 is ",
tmp)

## The total number of Ha-Mim letters in chapters 40 to 46 is  2147

tmp %% 19 # it is multiple of 19

## [1] 0
```

Now,let's see the sum of Ayn-Sin-Gaf in the chapter 42, which is multiple of 19 too.

```r
require(stringr)
tmp <- unlist(str_split(unQuran$text[4314], "")[1]) #Ayn-Sin-Gaf
tmp

## [1] "ق" "س" "ع"

i42 <- c(42)
ig<-match(tmp,colnames(HrfMatun))
ig

## [1] 25 19 28

#Keep only chapter level numbers of Ha-Mim in all the 6348 verses of
chapters 40 to 46
x <- HrfMatun[i42,ig]
tmp <- sum(x)
cat("The total number of Ayn-Sin-Gaf letters in chapter 42 ", tmp)

## The total number of Ayn-Sin-Gaf letters in chapter 42  209

# Test if mod 19 is zero
tmp %% 19

## [1] 0
```

Now, we observed **locally** that the sum of those 5 disjoint letters are multiple of 19 in their associated local chapters considering 6348 verses text category We then test this code in the full text of Quran. Because, I considered this as a clue and hypothesized that the sum of Ha-Mim and also Ayn-Sin-Gaf together might also be multiple of 19 in the full text of Quran too. When tested, it is validated considering the full text of Quran of the all the 6348 verses.

Below is the proof that the total number of Ha-Mim-Ayn-Sin-Gaf letters in the full text of Quran, regarding all the 6348 verses, is multiple of 19 as shown below:

```r
which(names(LettersEachun) == "ح")
```

```
## [1] 13

#13
which(names(LettersEachun) == "م")

## [1] 31

#39
which(names(LettersEachun) == "ع")

## [1] 25

#25
which(names(LettersEachun) == "س")

## [1] 19

#19
which(names(LettersEachun) == "ق")

## [1] 28

#28

ih <- c(13,31,25,19,28) #The indexes of Ha-Mim-Ayn-Sin-Gaf letters in
the LettersEachun object.

#Considering 6348 verses the sum is multiple of 19
tmp  <- LettersEachun[ih]
tmp[1]  #Ha

##    ح
4364 ##

tmp[2]  #Mim

##     م
27071 ##

tmp[3]  #Ayn

##    ع
9405 ##

tmp[4]  #Sin
```

```
##    س
6124 ##

tmp[5]  #Gaf

##    ق
7034 ##

tmp <- sum(LettersEachun[ih]) # Should be 53998
cat("The total number of Ha-Mim-Ayn-Sin-Gaf letters in all the 6348
verses is ", tmp)

## The total number of Ha-Mim-Ayn-Sin-Gaf letters in all the 6348
verses is  53998

# Test mod 19
tmp %% 19

## [1] 0

#Proof of an additional Fact:
# Considering 6236 verses, the digit sum of the sum is exactly 19
lettersEachn[ih]

## tmp
##     ق   س   ع   م   ح
7034  6012  9405  26735 4140  ##

tmp <- sum(lettersEachn[ih])
digitsum(tmp) %% 19  # Should be 53326

## [1] 0
```

As we observed, the total number of Ha-Mim-Ayn-Sin-Gaf letters in the full text of Quran in all the 6348 verses is **53998**, which is multiple of 19 as 19x2842. I consider this as evidence since we observed the same key coding pattern locally first and also observed it in the full text of Quran based on that.

Fact 1: Digit sum of the sum in 6236 verses. When we look at the total number of Ha-Mim-Ayn-Sin-Gaf letters in the numbered 6236 verses, it is 53326. As a supporting **fact**, but not as evidence, the digit sum of it is exactly 19 in this case.

Fact 2, Concatenation in 6348 verses:

When we concatenate each of the individual total numbers of Ha-Mim-Ayn-Sin-Gaf letters in all the 6348 verses with their natural orders as appears in the Chapter 42 Verse 1 as Ha-Mim and Chapter 42 Verse 2 as Ayn-Sin-Gaf, then the resulting number is 436427071940561247034 and it is also multiple of 19 as shown below:

```
ih <- c(13,31,25,19,28) #The  indexes of Ha-Mim-Ayn-Sin-Gaf letters.
#Considering 6348 verses the concatenation is multiple of 19

tmp  <- LettersEachun[ih]
tmp[1]  #Ha

##    ح
4364 ##

tmp[2]  #Mim

##     م
27071 ##

tmp[3]  #Ayn

##    ع
9405 ##

tmp[4]  #Sin

##    س
6124 ##

tmp[5]  #Gaf

##    ق
7034 ##

tmp <- paste0(tmp, collapse = '')
#The  concatenated number:
tmp

## [1] "436427071940561247034"

#Mod 19 test
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

5.8.3 Rules and Probability of the codes with chapter level Ha-Mim counts

I only presented the two codes as evidences (Code 5.8.1, Code 5.8.2,) and considered them as part of the general 19 based system that I present in this book. The rule to get the coding pattern of these two codes are simple and straight forward. We observe the most simple coding pattern, which is the sum of all the numbers, in the local chapters of the two disjoint letters categories as we observe in Quran, which are Ha-Mim and Ha-Mim-Ayn-Sin-Gaf together. Therefore we hypothesized that they might be left as clues and we tested the same coding patterns over the full text of Quran and observed them in the full text of Quran as well. Since the numbers, are small we can compute the probability directly as below.

For Ha-Mim, we have 2 trials and 1 success with p=1/19. Therefore the probability of observing this is 2/19. Similarly, For Ha-Mim-Ayn-Sin-Gaf together, we have 2 trials and 1 success and thus the probability of observing this is 2/19. Observing these two event together is 2/19 x 2/19 = 0.011, which is around 1.1%, or roughly 1 in 91.

Let's now add the 4 trials and of 2 success of the above two evidences into the global counters.

```
global_tested_nums <- global_tested_nums + 4
global_success_nums <- global_success_nums + 2
```

I designated the rest of the interesting related codes just as facts and will not compute the probabilities of them as they are not part of the main system I present in this book. There might be an interesting rule based system that these codes might be part of but I might not have been able to discover yet. Therefore, I am presenting them here in case they might help to other researchers. On the other hand, they are still very interesting as facts here too.

5.8.4 Facts on disjointed letters

I will present some potentially interesting codes as *facts* about Ha-Mim letters under this main chaapter.

5.8.4.1 Fact: Digit sum of chapter level numbers

We have observed in Evidence 5.8.1 that the total number of Ha-Mim letters of the full text of Quran is multiple of 19. In this code, we will witness that the digit sum of the chapter level numbers that makes up the total sum is also multiple of 19. Basically we count the number of each Ha and Mim letters in each chapter of the 114 chapters considering again the text type with 6236 numbered verses. The sum of those counts make the grand total of 30875 and it was multiple of 19 as we already know Evidence 5.8.1. In this code, we will see that the digit sum of all the digits of the chapter level data that makes this big number is also multiple of 19 as shown below:

```
x<-hrfMatn[,i1]
tmp <- digitsum(x)
cat("The digit sum of the number of Ha-Mim letters in all chapters ",
tmp)

## The digit sum of the number of Ha-Mim letters in all chapters  1805

tmp %% 19 # it is multiple of 19

## [1] 0

tmp/(19*19)

## [1] 5
```

Moreover the digits sum is not only multiple of 19 but is multiple of 19x19, which is 19x19x5=1805. Basically, the digit sum of all the numbers in the following table is multiple of 19, not only once but twice. In order to simplify the coding pattern, I formulate it below as follows:

DS([HM] [HM]…[HM])

Here, DS refers to digit sum operation that is applied to all the numbers in the brackets. *H* represents the number of *Ha* letters and *M* represents the number of *Mim* letters in a chapter. Each squared bracket represents the number of one chapter and they are concatenated to the adjacent numbers in the squared brackets. Although order is not important for an overall digit sum operation, they are in the natural order per the universal rule: "Natural numbers concatenated in the natural order". Here, the most left number is for chapter 1 of Quran and the right most number is for the last chapter, chapter 114. The following is the proof of this code. Here are all the counts of Ha and Mim letters in Quran considering the 6236 numbered verses:

```
x<-data.table(x)
x <- cbind(c(1:114),x)
colnames(x) <- c("chapter", "Ha", "Mim")
datatable(x,
          caption = 'Table of the counts of Ha-Mim at each chapter of
6236 numbered verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel') ),
          rownames= FALSE)
```

5.8.4.2 Fact: Digit sum concatenations of chapter level numbers

We have observed in Code 5.8.1 that the total number of Ha-Mim letters of the full text of Quran is multiple of 19. Moreover, we observed in Code 5.8.4.1 that the digit sum of all the numbers that make the total of the previous code is also multiple of 19. In this code, we will observe that the digit sum concatenation of the same components of the chapter level numbers that makes up the total sum is also multiple of 19. Basically we count the number of each Ha and Mim letters in each chapter of the 114 chapters considering again the text type with 6236 numbered verses. We then concatenate the digit sum of these numbers among chapters in the natural order. The resulting 205 digits length number is multiple of 19. In order to simplify the coding pattern, I formulate it below as follows:

[DS(HM)][DS(HM)]...[DS(HM)]

Here, DS refers to digit sum operation that is applied to the numbers in the brackets. *H* represents the number of *Ha* letters and *M* represents the number of *Mim* letters in a chapter. Each squared bracket represents the resulting digit sum number of one chapter and they are concatenated to the adjacent numbers in the squared brackets in the natural order. It is in the natural order per the universal rule: "Natural numbers concatenated in the natural order". Here, the most left number is for chapter 1 of Quran and the right most number is for the last chapter, chapter 114. The following is the proof of this code:

```
x<-hrfMatn[,i1]
tmp<-c()
for(i in 1:nrow(x)) tmp <- c(tmp, paste0(x[i,], collapse = "") )
head(tmp)

## [1] "515"     "3282192" "1711246" "1961303" "1711039" "1601058"

tmp <- sapply(tmp, digitsum)
head(tmp)

##     515 3282192 1711246 1961303 1711039 1601058
##      11      27      22      23      22      21

tmp <- paste0(tmp, collapse = '')
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("The length of the big number is ", nchar(tmp) )

## The length of the big number is  205
```

Here is the 205 digits length big number:

“11272223222120213129382220121736251926283119212317272524131511132526121621152525222412172813128815172017121418172718716915161819161319181715129914141015121712151720111012121810734641116414864911810194106 73”

5.8.4.3 Fact: Concatenations of chapter level numbers

We have observed in Code 5.8.1, Code 5.8.4.1 and Code 5.8.4.2 that the total, digit sum and concatenation of digit sums of the numbers of Ha-Mim letters of the full text of Quran in each chapter is multiple of 19 considering 6236 numbered verses. In this code, we will witness that the concatenation of the number of Ha-Mim letters in each chapter is also multiple of 19 in the full text of Quran considering all the 6348 verses. This is the result of the universal rule of this book, where I test all the codes of this book, both, in all the 6348 verses text type and also in only 6236 numbered verses text type.

Basically we count the number of each Ha and Mim letters in each chapter of the 114 chapters considering the text type with all the 6348 verses. We then concatenate these numbers among chapters in the natural order. The resulting 490 digits length number is multiple of 19. In order to simplify the coding pattern, I formulate it below as follows:

[HM][HM)]...[HM]

Here, *H* represents the number of *Ha* letters and *M* represents the number of *Mim* letters in a chapter. Each squared bracket represents the number of one chapter and they are concatenated to the adjacent numbers in the squared brackets. It is in the natural order per the universal rule: “Natural numbers concatenated in the natural order”. Here, the most left number is for chapter 1 of Quran and the right most number is for the last chapter, chapter 114. The following is the proof of this code:

```
x<-HrfMatun[,i1]
tmp<-c()
for(i in 1:nrow(x)) tmp <- c(tmp, paste0(x[i,], collapse = "") )
head(tmp)

## [1] "515"     "3302195" "1731249" "1981306" "1731042" "1621061"

tmp <- paste0(tmp, collapse = '')
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("The length of the big number is ", nchar(tmp) )
```

```
## The length of the big number is  490
```

Here is the 490 digits length big number:

“5153302195173124919813061731042162106116611645445813896410065488702103491442603530644257916889044410749365290773797740059424633868548346246614845439973460523444531732173131586842138290432534231258319542096338164380482765330044324161503120036225252263320522135281181914719150181122311115112431782921831172251512214315781274866189325791887171122112322921210158018747551274743147757714551451746103053086610301141322915629935113051951641336614216412732414712319416455184123103123321254510474826”

Here are all the counts of Ha and Mim letters in Quran considering all the 6348 verses:

```
x<-data.table(x)
x <- cbind(c(1:114),x)
colnames(x) <- c("chapter", "Ha", "Mim")
datatable(x,
          caption = 'Table of the counts of Ha-Mim at each chapter of
6348 verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel')),
          rownames= FALSE)
```

5.8.4.4 Fact: Digit sum of verse level numbers

We observed in Fact 5.8.4.1 that the digit sum the the chapter level numbers of Ha and Mim letters is multiple of 19 in the text type with 6236 numbered verses. In this code, we will see that the exact same coding pattern also exist with verse level numbers of Ha and Mim letters too in the text type with all the 6348 verses. Basically we count the number of each Ha and Mim letters in each verse of all the 6348 verses and when we calculate the digit sum of these numbers, the result is 25954, which is also multiple of 19. The digit length of Ha and Mim count numbers makes 13249 digits length number when concatenated.
In the below code, we will verify that this code is multiple of 19.

```
x<-hrfMat6348[,i1] #verse level Ha-Mim numbers assigned to x
tmp <- digitsum(x)
cat("The digit sum of the counts of Ha-Mim
    letters in all the 6348 verses is ", tmp)
```

```
## The digit sum of the counts of Ha-Mim
##     letters in all the 6348 verses is  25954

tmp %% 19 # it is multiple of 19

## [1] 0

tmp/19

## [1] 1366
```

Basically, the digit sum of all the numbers in the following table is multiple of 19. In order to simplify the coding pattern, I formulate it below as follows:

DS([HM][HM)]...[HM])

Here, DS refers to digit sum operation that is applied to all the numbers in the brackets. *H* represents the number of *Ha* letters and *M* represents the number of *Mim* letters in a verse Each squared bracket represents the resulting number of each verse and they are concatenated to the adjacent numbers in the squared brackets. Although order is not important for an overall digit sum operation, they are in the natural order per the universal rule: "Natural numbers concatenated in the natural order". Here, the most left number is for verse 1 of Quran and the right most number is for the last verse, verse 6348 or in a formal notation chapter 114 verse 6.

Here are all the counts of Ha and Mim letters in Quran considering the 6348 verses:

```
x<-data.table(x)
x <- cbind(unQuran$chapter,unQuran$verse,x)
colnames(x) <- c("chapter","verse", "Ha", "Mim")
datatable(x,
          caption = 'Table of the counts of Ha-Mim
          at each verse of all the 6348 verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel')),
          rownames= FALSE)
```

Let's also see the length of this big number as follows:

```
x<-hrfMat6348[,i1] #verse level Ha-Mim numbers assigned to x
tmp <- paste0(x[,1],x[,2])
tmp <- paste0(tmp, collapse = '')
cat("The length of this big number is", nchar(tmp))
```

```
## The length of this big number is 13249
```

Here is the 13249 digits length big number if the code (Note that the digit sum of it is multiple of 19 but not itself.):

“2312220200020423010105051406070804072303010170514180428010050100811213212052907370825017031518141811040723020300040504210130604021151506012350618216210071705041503010233061321611238040601107222321001022512110041110711507017050651005030105011532050311006080741107052519012051203083118140503070901306182915030649071531401022261150709112312012181404374151140102120502162707220502334123702111141504080531001303102154101235072707015016023221925124131112311329323621223092313110142013030416070726418212091751523012310417662111417130359815652161133211751631119110939140229031101721611502303191212308317071931431921127110140110103711517250907011381731622280618040563101418110411230111120301231151203060412054817011214181714151907060103511107210351014031708460247031304031111111305121152903370303112052612051419230205142121704050224042101301412012111190811802033130416040222051102525041502180307050715314180508141304013043904160416311012212390606030901117020616130012052218170302143112317061807170532030207323211230192919133110809060311308070150522390426170606240311011511233041802380110559020114040704216000615111122328172111308315081703054192292312262517372716043553062493317040119020609073103838060509140213418020211611205040205020429081527291811003260717310010030325021309081208010122121614050111312155216072912011943507115113240121201191782909110231113191101515172141808030202011051436061738141127635121100301020606090305212319040206031806150001122701408190511311062606017550723030004012951526112051911023411514536418823433070715210112205161100908217213061130414090302142902141123212181412013071424063245928410280112742521135010282921205130803070706162521305118071112706111311181119061304020806071102724213516325180714611110224510291205112514241501342131405063142418040717212011141603231508060614120130403140211103080214021128061517050317030305221337112317070503210070402050537140100428031614212053120205250539116343416051812022515212251136040512060614231100925352102081513031152831802136231515117131302001802131501209091914042100602040611503110190728260306214021120306190418212010311210173111821121751151415291218616270628130311109091618140307162301130603040203250505080603010204011112150111401414141205113240725142831003291111411307260723312480128141926372815181111234470118040316190405040313212130141611315113021513342605060205116053707360513021503251604130507070407032401010014051111200414231212001002010906010718050703192607060406110180503110181100425121411016115331416251122431811014221360939012040317291813060100601 0

3160404092413130315170418084101502020806011100304010405042101302102314
0804171514342208160111602011329112022703030208360408050606040326071100
5260603130601521309091312150111613040419060206161411017231217141110102
2062511216120011719041411121441121021007040504010111091411218010290618
0111021221204142124715490211151111135122904360716130706030102415250436
0509171915081419113241527030801118119217212180611715050606012073711081
7070503181306463100601511014240929262162409130101836360715112462817161
7193902316141100701107061829112311270103122703120329370509011051606161
8160619612214313043211311202152142313055815040618010011060403170605020
5060504230714111824290401412011314060417100711608040100824431611162623
0110802131829032602031101702131228160205081408130414194323240219021806
2112101412131407081514316070201003032405130301111001004010120524052613
0101429141521306432514116160702010250203051518120411215180404282304140
6330026031305040715013915051120516152102131305180103904020406031301402
0602040205060110706070812110111312191505010523010133130131000222403121
1111016010408050411024231405040305011329061302243701315221132602043404
0314170304460225061135010307020015153827292921303160214040212080723044
1415001813211534040513002503120107001203383718130405050514171625231301
0041414160427020621512361503111313212170113161805063303042428212040151
5142718031313350904231404201706214041511901311104170610040618130111112
5360412051314010307110041603151100623031416060100808121204031112230103
0504040103142001030201132301120303040426310723140415110301021502010102
0304030203040401020406110102030203111303030302020302102613011000020104
1213020202110721021222033501032801030002020301020222102312151203044225
1303070407043603030222030212161503191100801203241407010152918151603011
5011503150513060605110208050407121318140917010151607142406010191110604
2919140807113114020305030404021824060141708051649020203072416040311222
0503160508061539330318261503212616370515132336022301030729251503002504
1116141319051401052736141101161401151025231304120139060202115612132701
0220081412180315241606150313060901251616111290803100113021203150310160
2042611120402120104230408011170406151404050222010511012316231226010008
1314012314012525040711201211221917113120000102292615210243926042302042
4100323113304103722250839080708060207250918064425022102160501120121110
2031102111302150514314020200370426011611011303053002220602021202331703
1310254823001100030401150302013421110115042312020414120331002614040300
1401151314031606161101030411130411031414020212010200013150214120402060
5120234141314021414210110112040102020203230313110102111213120324032823
0001010311160111110302011201010203020110001301001001110001000001100000
0102222419000000000003051103010101070205001223230215032615042401004412
1111413151512220602072514030104214170303182103011202032403031414140216

0000011413162417132304020300110206010715120103080534161114031423131815
0412061404050205130501240401141310031202110132303090616031412040214020
2140314171816151426020403030400041204030303030101020404040312020101201
5162213063625161315231802241404002122140315123312150103131416031101132
6030512342302270401135210104120314030324050105114190214144612260313013
0328360316111080928110318071303150405030503152221005181627021314040112
1514272606031605090707110406132202312020201120802041201010202270304020
3040108111501020012816030103061120408013313011224030417030204030205151
4252315010403020401120813030302060523180203011704230311110203110400030
0041012180202020222021022160214042203010201242605020204141223222301112
3518221702010223113080217161605132623313361607250616271817218210519082
1211032645211260311100015040815121728020929118131442229246312151901023
0105160201130513011201040311040318270707022606230524030100020311211302
0416110103001201160401022414010001440204020432162703011402020303240336
1303040412130523010102042702040411030100000104010103010117020205120203
0502010101002215111115031121040522021002011120103131101011102030002140
1220104010411020201020100030302000101120231000201010202011103020101020
1020302120304111212020004000104110301140126130104110102020004000202000
4030003030012051102120200040200011100021013030404110511020202000402070
3030301000205041111010200040202020113030303040411011102010004010402120
2110002030403020103030300140311110002020102010302182301020306031305241
2052404141316051329460311240508040102040225021413010411006040601002050
4391424051104050705011204050205131112405370904070111021402010104040113
1311050905162604040524160517061523010114260417251302150126242411112041
4181604021100427134602080706180212051716181103041615050619082100401002
0416160714111181715390414050504261404220807150416483401224150626011605
1302122301120424030326192309042101717110605060201130814151151321270602
0414160402051301004217041503132638160513041606051219010227011505032922
0404271713230101031612011411001601020405032412412235051805081808021401
8081304241100404260423092151403071523281925043412050908060805050110230
1112203141504142101004260314113130823130110415170416133814071214192519
2301021809081211051502061715082507060417070301003050401006121403231314
0011321511511202181602040804020519064103513181111404050632131315140413
2160122131620270110181501010402313423312256210113040318140802010301000
2000304011726192336190615042307020121214291701006060203170419014240604
3322020204081506052302113120516160521006062904111213020403172325310060
2222315273217117470120101201012100201101800120501190604042301023211506
1120306014271112209072300110202110413140606153713041703020807040401130
1030204082213061324020517050313122404032317060100224010316330511030313
0405020302030702060204210804030214140415120404021123000000110401120311

0106000000110300021201021313030204010303051001030202011102040103030101
0300010101010202030211001312130103020111000415140202010201011202010012
1103010201020003010101010202001103110100111218020111011100021103212502
0502020301021104020110021201000111030201000214000211131312010101011302
0303010013000302131101020212061021000101010203012101002221001102122300
0015141005030413061412221023110111111212241018113405160102004011021221
0001121101011611110103021212010112020102120127160203031114030102051202
1103010503020101020302032008060111231211182315116011192634020302010816
0113131611016211061412030117030606021415040531106131511003041415112140
8050905250517120222010715000301230128071304313032624672311020102482261
0281506122406011517142802120120402112702160120111517030101120411040313
2803031503120214110404130601003105031601030202101923060181301021113040
3360312111042401082914052311230203152702150302023703082734160112180501
2170611302021214152612273213040612241110225050907151161703210020724152
3110022043714242813150904212015117361216013501111035350215012407060712
1001151713080223051404080110801338050445290423110101121402030404040404
1601020426131518060307070404000224220241326011312141106050503130115031
4061203150304030602060502030403140316020313031214040203030503220515111
2131305150302132311010212031405130103010203040103040202020203021202030
1010502030304001301090414040423010201121114010304000211011402020223111
2030426210106040904140704151501304051251114062814110060614270825150111
7131223111218012091224171809042814126924151708211160206181721614051718
0804141301023024111531112020403140604280405123190304010190414050107060
4141418161503040717130122321080019180101201110701408031518111462713010
1102010103243941110322230416161224161111458260164907112010070100423010
4011415050201240011230021022303022301011201010301010303050111130203180
2072311052322121523001100030100110201000201020201150211240101031413040
1010402120303120304040102110412042304051402020203041502040201060113032
3000101020111000204000201020112050216031311415010501010312030204180211
0402050802070303131413040343122301130120010100010021020200010101020101
0101010110300070415120825114000001140100010001011011000200000000021501
0101010001111002002301120304120204021301140221010200020024020002011101
0203151100330201220302021200020002051302030213002303000101032311010001
1201020102010220010103010201110101030112010101010301010104011201010101
0105010312010301000101010201020103010101200102010201010102011001120103
0111010223000000000001012525000101010101020202000213100202020223011102
0200030100000011010123141301021103000006030302130102110312240502121212
0222021600011412120303010102021202111112020103211313031311101223231301
0170301090111521312113111113091111415273130705251317172142904231401319
1121416021312141631017081110404163833100061723244180302050701007413151

1005052110704030503310423183523123051931911261611001282901014162324030
2120921307031105081623492325110250241207060100812042303050531106071406
0727022325092407071305032111106030237052723122357012334110441105220203
4101623352714151519052150639082623012415111403010603122103020204061702
1515030704110204021715172302030201000204010011040301010002250003111113
0103100122131102000101030413020218030301042403070333051104022310111201
0211160202021401102101021503041100000003041200020000120102121302000201
0103010200020224010410101223000002140101000300240510000300000101000102
0103141201040312080204031202020205040314130303231503000801020602030103
0502010202020301011402010106110108231311110000031313050412000516120302
1202110223031303110424230201010000011001020304110202030002030132323010
1000000010000020011030002020000000001010101100000020010001170100101000
0401110002020303010110020313011400000102230302120002020001030200020300
0110010001100001000100000100000200000200011004010111231303020002000214
0503031203010201010115031403101401111214011315230100000001000102010000
0101030201020202050102010201110302020001010102010102030102010203110204
0201021123010102010202000102000101000310000201110002011000120011001001
0210000001111626130523000020000201000100110100110111010000000000011001
0001030110100300040102120210120401010201031323000101000200010200000001
1202000101010101020103010101100000100004000301100402110100012301010000
2010000100100111001201000010010103130101020001040223010010000302000100
1101020111010203040423010002020203000202020103000214130200020201010002
1303030113030101121300012301100101102103200102000001100001010100030100
0202152301020110000104160219240000000101100100130121230102011102020100
0102010000010100032311000001100003000001000012110110001012231001011101
0302020000010001010201000100100202010001122300000000110102020100000001
0105020212012200010311111002010000230110010020012101000011020003020215
1213022311010000021101011101010001050023000001010210000210000200000100
0000011300002310000201000200000201122311000000010100002300000111011501
2223010101020400000000000000100020100000000230002011412231512010415041 3
1523000001111003030323101111000100001002110323000102020103000301021123
0112010202110103230000222302021111130100020323110201130223001100062300
0112010201022300100023000102020202231000212300030022122310010211230002
0101212300010001 0001”

5.8.4.5 Fact: Concatenation of sums with verse level indexes

So far, all the codes we observed are without any chapter or verse index information. In the following codes, which are only facts, I will also include chapter index for chapter level numbers and also chapter and verse indexes for the verse level numbers of Ha and Mim letters and follow the same coding rule that we used before. Basically, these are the facts

out of all the possible meaningful coding patterns with those numbers along with the global rules of the book. Since the codes must be meaningful, for example, I will not make any sum operation between a concatenated number and a normal number. On the other hand, as usual, since they are not based on systematic rule based system, I designated them as facts only but not as evidences.

In the following code, basically, we concatenate the chapter and verse indexes and also the sum of Ha and Mim letters. We use the 6236 numbered verses and the resulting 30676 digits length big number is multiple of 19. In order to simplify the coding pattern, I formulate it below as follows:

[cv[H+M]][cv[H+M]]....[cv[H+M]]

Here, *H* represents the number of *Ha* letters and *M* represents the number of *Mim* letters in a verse. The letters c and v here represents the chapter and verse indexes, respectively. Each of the outer squared brackets represents the representation number of one verse and they are concatenated with the number in next outer squared brackets. Order of the numbers is by the global rule, which is the natural order. Here, the most left number is for verse 1 of Quran and the right most number is for the last verse, verse 6236 or in a formal notation chapter 114 verse 6. Each of the '+' is to get the sum of Ha and Mim letters in a verse.

In the below code, we will verify that this code is multiple of 19.

```
#verse level Ha-Mim sums assigned to x
x<- hrfMat6236[,i1]
#Get the verse level sum of Ha-Mim together
sx <- apply(x, 1, sum)
#concatenate them with indexes
tmp <- paste0(nQuran$chapter, nQuran$verse, sx)
head(tmp)

## [1] "115" "123" "134" "142" "150" "162"

tmp <- paste0(tmp, collapse = '')
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("The length of this big number is", nchar(tmp))

## The length of this big number is 30676
```

Here are all the counts of Ha and Mim letters in Quran considering the 6236 numbered verses, which we used in the current code:

```
x<-data.table(x)
x <- cbind(nQuran$chapter,nQuran$verse,x)
colnames(x) <- c("chapter","verse", "Ha", "Mim")
datatable(x,
          caption = 'Table of the counts of Ha-Mim
          at each verse of the 6236 numbered verses',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel')),
          rownames= FALSE)
```

Here is the 30676 digits length big number of the code:

“115123134142150162174211221235245255266277288294210721152123213102148
215521652179218421910220102215222102238224222515226142275228112297230 1
023182327233172343235623692375238923922404241724252432244324502464247 5
248424912250425162524253225416255625662571225882596260926118262122637 2
648265526642676268326912702271627262734274182751327611277427862791128 0
728142825283122841028527286328711288428912290729116292729317294529562 9
615297529832991210052101112102372103521043210511210662107821087210915 2
110721115211272113102114122115521163211732118821194212092121521225212 3
321247212592126132127621289212911213062131321326213313213472135621361 7
213710213842139821401621417214292143132144152145122146921475214842149 1
021501921511521521253221543215552156221577215892159721604216152162221
636216416216510216622167122168521696217042171821725217313217413217532 1
761217717217814217932180821817218292183721841521851621862218725218810 2
189721903219117219222193321941421955219641219792198142199522009220152 2
024220311220452205222064220732208422097221072211722128221322221414221 5
922168221720221852219122220132221212222212222313222452225822264222732 2
814222923223011223118223214223324223482235212236142237102238222399224 0
122241522422224311224432245222461722471822481622492322503225110225232 2
532422548225520225672257102258172259222260132261922621122635226411226 5
102266102267162268822697227092271722721122731122748227519227642277102 2
786227992280422815228237228314228492285112286153113223333433513653716 3
833933106311431233135314123158316131733185319932083215322632310324732 5
632610327832812329733012331833213335334333583368337103382339113403341 4
342434333441234512346434753483349163501135133521035333543355133565357 8
358335953605361103625363236453655366143678368436953702371637243731237 4

4375143763377123781237910380838119382238333841638543867387438823894390
5391113927393739443956396239793983399731005310173102631031731049310553
1068310753108431094311013311143112123113431147311543116731171431181231
1914312012312163122631233312493125113126831272312863129731304313103132
3313353134431359313683137331382313953140143141531428314363144931457314
6831475314853149331502315173152263153133154323155103156113157103158431
5914316083161931626316333164143165831667316715316853169431701231714317
2831738317463175631766317733178113179163180133181631824318393184231851
1318611318753188143189231901319153192431937319443195183196031976319863
1991232003411042843134444584618478488493410541123412314135414341584167
4178418104199420742144228423354243042542426842744281429104302431643294
3374341343511436114376438543994405441244244432244424452446174471344854
4944502451545224534454114558456645794581145994601146134628463746484651
3466104673468346974702471447294738474347584761477124781447974805481548
2148314484348564867487748874891149021491204923949374941649514496649712
4983499141001041018410237410394104114105541062410744108104109114110641
1164112841131641149411584116341172411824119114120541215412294123641248
4125114126541271341281341298413034131114132341331413424135641366413794
1383413954140144141224142441432414464145341469414764148641490415014151
3415294153144154841551041565415714415824159641608416164162174163104164
7416554166341670416844169141701141712041728417313417454175104176115115
5219534154225531563757758759651035111151222513215141151595168517195181
5519652014521452255239524352525265527115282529553025315532145339534553
5353613537753855396540654127542145431054414545105461154795482954913550
8551105521055311554145555556455785583559756075616562756375641556555661
9567756812569957065711257214573957425751057665774578457925808581658275
8311584958565863587858875892859095917592559317594115952659615597115983
5995510025101751025510365104651051351062551071751085510965110175111651
1295113451147511585116145117115118551197512036166286366466556621674684
6936105611261212613361486152616561726182619106206621662286235624362586
2636273628562946304631106322633563486357636563736381263976404641264256
4356441064556461064746481064936507651565214653565415655265656577658565
9126601766176627663766456659666366726687669667014671767226739674467556
7636776678667956805681116829683768486853686268786886689469036911669210
6932169421695969656976698669918610046101461022610306104961052610646107
6610812610996110961111061125611346114126115661162611746118661191661203
6121116122106123761241061258612636127661281661292613013613136132661331
0613446135961361461371061381461391261408614114614296143136144196145166
1461961476614811614936150961512261529615366154106155461563615712615896
1599616076161961625616336164761657711724736743754762773787795710571187

1267133714171527164717117181371967201172157221472357245725372657271472
8672977307731573210733137343735117362737157381473977408741774257431574
4127451746107475748107498750107511075267539754127553756775711758175997
6047613762776310764476557664767376847691477047711477277731477467751477
6277767784779778087815782678327845785177865787107887789979057914792279
3679437957796779747984799571007710177102471037710437105671061710717108
0710957110571112711227113271144711557116571173711837119071201712127122
1712397124671251712677127971285712977130371311071328713377134671354713
6671371171389713957140371411171429714311714447145771463714757148117149
7715016715167152571537715477155137156671572171581171595716023716197162
9716312716412716547166371678716811716997170471716717210717367174171753
7176771774717847179971806718147182471833718467185871864718797188871891
4719067191271922719387194671951171961719737198471991720047201572024720
3127204472052720618158288348488568658778848988107811118127813281418154
8161181713818281998203821382228238824982548268827582868296830483138328
8337834118355836883768383839484068411584215843984498454846384768481184
9785048514852485310854685528566857785858592860178615862386388645865128
6610867486868697870138717872218731874887510914925931294169515961297129
8799491059114912109131291499155916139179918109191192069219922192311924
1492514926492759281492911930693113932293329346935129361493717938119394
9409941794279434944794569463947109486949695079514952995359549955895610
9576958895959601096114962696369649965396689671196899692097019971149729
9736974189756976597769786979129807981109822983898489857986598739889989
4990699110992139936994159951199659976998999911910089101189102691039910
4491051091069910799108991097911069111139112109113109114891157911689117
1091181291192912019912159122119123791241191257912669127991281191292101
2102910310104151059106310731083109111010101011510129101311101451015710
1661017710189101971020610211010221810231610241610254102651027141028131
0292103061031161032510334103451035131036610374103861039910401010411110
4261043410443104581046610475104821049510506105151052410535105471055510
5621057910586105911106041061141062310631106441065510666106741068810691
1070710711710728107341074101075810766107771078710792108071081810825108
3111084810852108641087910881110893109081091210923109311109481095210964
1097310981010997101002101015101028101035101048101054101064101075101081
0101097111611221131011421159116611713118121195111031111411125111371114
8111561116511171911187111921120101121311223112361124511254112631127111
1281111291011304113110113231133511346113551136811374113810113951140111
1415114261143151144611457114671147511481711497115071151211521011537115
4211553115651157611589115931160411611311626116391164411654116610116751
1684116951170611716117201173811743117541176511774117871179611801118112

1182611835118413118551186711876118812118915119041191511929119310119412
1195411962119741198611993111004111011411102211103611104211105411106211
1075111086111091111110711111611112711113811114311115211116111111741111
8311119101112061112151112211112351211122112361244125112613127012841296
1210312113121221213212141121571216112174121881219512204122111122261223
5122451225512264122731228512291123041231111232612334123421235612361012
3713123861239412401412418124221243412447124541246312475124881249312504
1251101252212537125461255212568125711258312597126021261012626126361264
1112659126611126711126815126931270712712127251273412742127531276812777
1278512794128018128161282012839128441285312866128771288412895129041291
0129271293312943129511296712970129831299312100111210110121029121034121
0441210551210651210751210851210981211071211171314132101334134513551367
1374138913921310613111713123131391314613153131612131716131814131981320
1132141322713239132451325613266132731328413296133010133114133241333151
3346133551336913379133831339413404134181342913434141514241432144814561
4616147414861492014101314111214124141381414614151141641417614189141941
4201142112142226142391424414253142651427414285142911430314317143211143
3414347143531436614371114386143951440314415144271443614441014458144681
4473144831449414503145121452315111523153515441554156115731585159215101
1511315122151311514415155151611517315183151931520415214152281523415247
1525515265152741528615292153031531115322153361534215351153611537215383
1539415403154121542315434154441545115462154741548615492155011551215523
1553215543155521556415573155831559315602156121562315632156411565815664
1567115681156901570215711157241573315744157521576215772157821579715803
1581215823158341584315858158611587315881015891159031591015922159321594
3159511596215972159841599116131626163316431654166616771684169316107161
1416127161341614916153161631617216184161931620216213162271623616243162
5101626111627816281216293163061631516327163310163461635111636916376163
8716393164011641616421164361644316456164651647416486164961650516512165
2216538165451655416567165731658416599166051661916628166310166461665716
6671667516686166961670101671101672121673616744167511167610167751678816
7971680141681151682216833168451685316864168741688216899169061691616921
4169381694816955169671697131698216992161003161017161026161037161044161
0531610613161074161085161093161107161115161128161136161146161151216116
6161173161189161198161206161213161223161238161247161251016126516127616
1284171917221735174117531767177111787179617103171101712717134171421715
7171651717417181017195172051721117225172391724917255172621727117287172
9517301173161732117337173451735417364173731738117391217406174121742217
4321744111745317464174791748117492175021751817525175331754917553175661
7576175871759617606176131762417636176491765117667176771768717691217701

1177181772317731177411775417762177731778317796178031781117827178321784
4178581786217873178841789217903179111792417935179441795817961179718179
8417996171006171015171024171035171042171054171061171075171082171091171
1051711171813182818311840185818641875188118951810518111181271813718144
1815718161318171218181318192118208182114182221182301824118252182611182
7818286182912183061831121832818334183451835218364183761838118393184051
8412184261843418441184510184641847718488184912185081851718528185361854
2185571856718579185891859618608186171862218633186421865718665186711868
3186911870318712187221873318742187521876218774187821879618805188151882
1718832188421885018861018874188881889118907189121892118934189431895518
9631897218984189961810021810121810231810321810461810581810631810741810
8118109718110121910192219301943195419611976198319921910119117191231913
2191411915619164191751918319192192041921519223192331924419250192681927
5192841929319300193151932119336193441935519363193771938619397194021941
1194231943419442194541946419472194831949519505195121952219533195411955
2195601957119581819592196051961319624196321964619655196631967219687196
9519704197151972219735197451975121976219771197831979419801198121982219
8321984319855198631987419882198911990219912199231993419943199531996619
9731998102010202120312043205220672071208220922010320112201212013320141
2015120162201732018220191202012021020224202312024020251202612027220280
2029120300203102032120331203402035020361203722038420396204010204102042
0204302044020450204632047520482204932050120511205212053720542205552056
0205732058520595206022061620623206382064620654206662067120680206982070
3207112207252073420746207562076320774207862079220807208172082520833208
4120854208616208782088320893209092091320923209312094320952209632097620
9832099320100520101520102520103220104720105020106020107120108520109420
1107201116201128201134201145201154201162201173201180201192201202201216
2012212012372012462012532012612012732012882012952013072013172013222013
3520134320135521142129213621442153216621752184219521102211152112421135
2114121156211642117121185211942120121213212232123221241121254212652127
3212892129621307213132132521333213442135221365213722138221395214032141
5214282143921447214562146521478214822149421503215132152421530215442155
3215642157321583215932160321611216212163221644216542166421673216832169
2217012171121722217362174721754217642177621789217972180721814218262183
5218492185221866218752188421890219032191421925219332194621953219662197
3219862199121100321101421102521103721104321105221106121107421108821109
3211105211113211127221222292234224122536226322712284229322103221152212
3221332214622155221612217522181522191022202222152222522231022243222582
2263222742228132229322301022319223232233722341222358223692237102238222
3932240922417224242243322446224542246522473224852249322506225142252122

2535225492255722569225722258422595226042261122623226362264522659226682
2676226832269722705227192272722737227422275422766227742278222313232223
3223412353236823722384239323101231112312223132231492315323164231722318
3231942320123218232222323623241023252232612327102328723293233012331323
3262333132334423358233612337623384233912340323416234232343423448234532
3462234742348323492235052351623525235372354523556235612357423583235922
3604236112362323638236442365323663236722368623695237052371923722237332
3741237582376423775237832379223802238122382323832238442385023863238702
3884238912390323919239222393223942239522396423972239812399423100723101
2231025231034231044231053231061231072231081231096231108231115231122231
1322311442311552311632311752311842411242132438244924542468247224812492
2410524111424128241322414824157241672417524184241982420524211624229242
3724247242572426624277242892429924308243120243212243324243482435142436
2243732438824399244013244182442324431224440244515244642447824486244932
4508245110245222453924541124551924564245752458262459112460624613724621
7246310246410251125252537254225512564257525842591251032511125124251332
5142251542516325179251892519725207252122522825236252452525525266252732
5281252902530225313253222533325344253522536425377253822539125403254102
5423254312544725454254612547225486254952550125510255212553825542255542
5562255742558525597256092561325621256352564225652256632567325686256932
5709257142572325734257442575325764257775261126212632264426592662267426 8
4269226103261112612026130261412615426161261712618326191262012621826222
2623226245262532626226273262852629226301263112632126330263442635626362
2637226386263932640226413264242643526444264522646126472264812649132650
1265132652426532265412655126562265722658326590266022661526621266342664
1266542666126674266822669226702267112672226731267402675326763267722678
0267912680126813268222683426840268522686126871268822689226901269122692
3269322694126951269622697126982269932610022610132610232610342610422610
5326106326107226108026109426110026111126112426113226114326115126116526
1171261188261194261201261214261222261231261242261252261260261274261280
2612922613022613102613242613332613402613532613632613702613832613952614
0226141226142326143226144026145426146226147026148126149226150026151226
1521261534261543261554261564261572261585261592261602261612261622261630
2616442616522616672616732616832616932617012617102617222617352617442617
5226176226177126178226179026180426181226182226183226184126185426186326
1873261883261894261904261912261921261932261942261951261960261974261981
2619942620022620132620222620322620402620522620632620742620832620922621
0126211326212326213326214026215526216326217226218226219026220226221226
2221262232262241262253262262262279271127222733274627532764277527862793
2710527116271242713527144271572716527174271811271910272032721227226272

3527248272542726127272272842729227307273122732527334273412735427361127
3762738427396274010274122742527434274412274552746627475274822749427505
2751727525275312754327554275652757227585275942760122761627625276310276
4927654276672767127682276922770527712277212773127744277542776127774277
8427792278052781927825278372784827854278642787527886278972790527918279
2627936281128212835284828542868287728842892281062811128128281362814628
1512281632817428185281992820728214282222823112824428259282642827102828
2282982830728316283292833228343283552836828377283892839228403284142842
7284362844528456284610284782848122849428501028512285242853728547285572
8565285712285892859828606286112286242863528645286552866428678286852869
4287042871828727287362874428757287612287772878122879628806288162882828
8312884728855288642887228883291129232934294629532963297829810299529109
2911429121229138291482915229166291752918629192292012921429228292352924
6292516292642927329289292962930229314293252933729344293522936529374293
8102939429401929414294262943329444294582946112947729485294942950429517
2952629535295432955102956129572295892959129606296152962329631129644296
5429664296792968829694301130213033047305330613075308113091630101301 12
3012430135301433015630163301753018430198302053021930225302383024930258
3026230275302818302983030430314303263033113034430354303683037430385303
9930401730415304233043730446304553046103047103048730494305073051330525
3053930548305563056830575305853059130601311131223134314331553166317431
8531933110103111431128311333114531151431164311783118531194312011312143
1226312383124431257312643127113128531297313033131531321031337313410321
1322232393249325832633272328532963210232116321283213632148321573216732
1763218432198322073221332221032233322453225432261032276322833229532303
3314332533303341433517336163371333823399331073311233124331383314433152
3316533171033186331914332083321433229332312332453325433265332763328533
2943330433316333253333433344333518333612333715333873339233409334113342
1334393344633451334613347433482334916335027335115335273353273354133554
3356433573335893359533608336123362133633336413365033662336703368333694
3370133718337283373103419342103436344634543465347734823491234103341153
4121134138341410341563416634172341833419834204342110342214342363424634
2543426634274342823429234304343183432634336343453435534362343714343833
4395344073441734425344312344463445634461134474344823449334504345123452
4345333454835173521335363542355435653576358935953510835111835121135131
2351410351533516135171351812351923520135211352293523035243352553526135
2710352863529435304353153532103533353534335356353663537133538335396354 0
1435419354212354343544935457361036223623364236523664367436853696361063
6116361210361343614436158361633617236188361973620436214362213623436241
3625336262362743628836294363043631636324363363634236355363683637536383

3639436403364163642436433364453645836466364710364823649636501365133652
7365363654536552365633657336584365943660536612366233663236643366573666
2366763668236694367033671836724367333674236755367653677436786367933680
4368143682236832371037203730374237543761377337833792371013711637120371
3037140371523716337170371823719337201372123722437234372433725237264372
7137283372933730537311373213733333734237352373613737237382373943740137 4
1337423374313744137453374603747137481374913750137512375223753337542375
5237560375743758337594376013761337622376313764237650376643767637685376
9237702377113772237731377413775337762377713778037793378023781337821378
3237841378523786037873378813789137901379113792237932379403795237963379
7237981379903710023710133710293710323710413710523710613710723710803710
9237110237111337112337113737114237115537116237117237118337119137120237
1212371224371232371241371251371262371273371281371290371301371312371323
3713323713413713503713623713753713803713923714023714143714243714333714
4137145137146137147137148437149237150337151337152137153037154437155037
1563371572371584371592371601371612371622371633371646371651371663371670
3716813716913717013717123717233717313717433717513717603717743717833717
9037180237181237182338103820383638453851386538733884389438106381153812
3381343814138155381623817138182381923820338213382263823138249382523826
7382753828738291383023831038324383323834238353383633837038381383933840
2384113842138437384423845238461384733848238493385033851138521385333854
2385513856238573385813859938607386123862338633386423865538663386713868
2386953870338712387223873338741387553876338772387813879138802388133882
2388333884238858388663887138882391339223939394539563961739711398103998
3910739112391233913239141391583916739171391843919439207392111392273923
1339246392553926339273392813929839303393163932639332393453935639364393
7539381439396394043941639421139433394443945539466394713394853949839505
3951939525395373954539558395633957239584395913960739616396203963339641
3965539661396710396873969439704397116397233973839746397513401240224031
4042405124064407164081040964010640113401264013640141401564016840175401
8104019240203402112402244023240242402594026240277402812402911403064031
8403234033104034134035440362403744038340394404010404134042340436404434
0453404624047540482404944050440514405264053140540405544056540573405874
0591406034061240622406314064104065540666406718406844069140702407124072
4407344074340759407634077340781240794408064081140828408311408454085541
1241254132414341564169417241864193411024111241121041133411484115941167
4117741181411934120941215412212412384124641251441262412724128341295413
0641318413234133941345413544136441376413834139641401241412414274143541
4494145741466414717414884149341501241512415274153641546421242204234424
4425104265427642810429442106421194212442131442141542151842169421734218

7421914220842211142221142238422484225242266422714228642297423064231742
3234233142341423564236842374423884239242405424154242542434424484245114
2468424713424811424954250442519425211425344312432143314343435543624373
4384439443104431144312443137431414315243164431784318443196432094321643
2234323743247432544326443270432824329643304433124332174333843341433544
3363433754338243396434054341543423434344344414345643463434754348643493 4
3503435164352343534435434355643562435764358543592436034361443623436354
3643436574366243673436844369343703437154372443732437434375343765437734
3784437954380643812438234383443844438554386643873438824389444124421443
2444344534465447544844491441034411144122441334414444151441634417444182
4419244202442124422344232442434442524426344271442814429544302443134432 3
4433444340443544436144379443844439544404444144442544431444424445144463
4447244485444914450344514445204453244542445514456544572445824459245124
5234533454445584563457145864594451094511445125451374514445156451664517
1345184451954520345211645225452364524104525545261145276452864529545309
4531845327453364534114535845364453734612462346394641246594663467646884
6994610946114461210461354614346151546166461764618846198462013462174622
2462364624946258462618462754628546298463094631846324463354634446351047
1247215473647414475347624774478347954710647114471210471344714547152447
1610471734718447191047201047214472254723547241472574726647274472854729
5473094731747326473334734447357473684737447381248134828483048410485948
6104873488148924810748111448128481334814648159481612481710481894819448
2010482124822248231482410482527482612482715482814829254914492749374943
4956496749712498549913491084911164912134913749141349151049167491710491
8450115024503150455056506550725081509650100501125012550130501435015250
1655017350182501955020150211502235023150241502535026150271502835029350
3055031150322503345034250353503695037250387503955040250415504255043450
4435045651105122513051435151516051725182519151100511125112151132511425
1151511665117251182511965120151211512235123551244512545126151271512845
1292513035131351323513335134351354513645137151382513925140451413514245
1435514445145551465514725148251492515035151451526515325154451552515615
1576515815159451603521052215231524252515262527052825294521005211252121
5213252141521535216552172521875219352204522115522265223152245522515226
1522735228352293523025231452329523325234252354523625237552388523925240
7524135242352434524455245452464524735248752493531153245331534253515361
5370538153905310353112531225313053141531515316153172531815319153201532
1153221532311532435325053267532745328653293533085331753321553330533405
3351533655337153380533915340053411534215343153442534505346253470534805
3490535005351253526535315354153551535615357053581535925360153612536205
4115423543354445453546254745482549454101541155412254133541415415254160

5417254180541965420254210542225423154242542515426254273542865429254300
5431654322543315434454353543625437254383543905440254410544225443554444
5445254463544725448454490545055451354520545315454154553551255215530554
1555355615572558155925510155112551225513155141551535516155172551815519
2552015521155223552315524355251552615527155281552935530155311553215533
4553415535355361553715538155391554015541555421554335544355451554635547
1554805549155501555115552255531555425555155563555715558155591556025561
1556225563155642556515566155671556825569155701557115572355731557435575
1557625577155782561056205630564056505661567156875697561005611156121561
3156141561515616256172561825619056202562145622156232562425625256262562
7556281562925630256312563205633356341563505636056370563825639156401564
1556425564345644156452564625647356480564905650656513565235653256544565
5156562565725658356593566065661556622566335664356653566625667456682566
9756700567115672556733567435675356763567715678156792568025681356822568
3256842568535686256871568835689356904569145692356934569425695156963571
5572457315741757535761577957811579657101557113571214571312571414571595
7161257175571865719957201657217572255723757244572585726857271657281157
2945815582135831058413585558675872158815589558107581113581285813858141
2581545816458177581811581965820158210582223591659222593359425955596759
7105987599175910659111159125591355914135915759164591735918559193592045
9214592255923959248601246025603106042260526068607760811609126010376011
1060125601376116612361326143615961615617761836192611056111861127611356
1141362176221162376242625166267627662810629862103621146313632563356341
4635663676375638663976310963112641764296436644764576464647564836491364
1026411664123641326414106415564169641756418365112652126536654156554656
1565756584659265103651114651276618662966356646665666610667566817669666
1012661186612867116726673667426755676367716786679367103671136712367132
6714267154671666717867182671966720667213672276723467242672526726467272
6728867296673086812682368326841685068626874688168906810268114681236813
1681416815068162681776818068193682026821268224682316824368251682616827
4682846829268302683106832168331683436835468364683726838268399684036841
3684216843468446684536846768473684866849568502685146852269116922693369
4169526962697769826992691026911569121691316914369151691626917669183691
9469202692106922069230692436925469263692706928269290693006931369321693
3269343693546936269370693826939169401694136942169432694406945269462694
7669481694946950169511695237010702070327045705170617070708370907010670
1157012170130701437015070160701717018170190702017021270221702337024570
2537026170274702837029370308703127032470333703437035270362703727038570
3947040370415704247043370443711671237130714871517162717671827193711017
1113711257113271141711527116271172711837119171201712157122271231712417

1256712627127171288721472227232724072507263727472847295721047211372120
7213572147721537216372172721837219272202722127222572233722447225372262
7227472286731273217331734073507361737173817392731037311473122731327314
2731537316073172731837319173202674117421743074407450746174707480749274
1007411274123741307414274152741607417074180741907420174211742217423174
2417425074260742727428074291743007431187432174330743417435174360743747
4381743927440074412744227443374443744517446174471744827449374504745117
4525745307454074551745627513752275337540755275627570758175937510275110
7512275133751407515175161751717518075191752017521075221752307524175250
7526075271752807529075302753107532075332753407535175361753747538175391
7540276147623763276407652766076727685769576103761137612376133761417615
2761617617176181761967620376215762237623176245762517626276273762857629
1763047631677117720773077407751776077717782779177100771107712177131771
4377152771617717277182771927720577211772227723177242772517726277273772
8277292773007731177321773317734277351773617737277383773917740277411774
2277433774427745277464774727748177492775027811782178327841785278627870
7881789278100781117812178130781437815178160781727818178192782007821278
2217823178240782537826078272782807829178301783127832178330783407835178
3627837778388783947840579107920793279407952796179707981799079102791117
9120791327914179152791617917079180791907920079210792217923179241792507
9261792737928179291793017931379320793347934179352793637937279381793937
9404794117942179432794417945379464801080218031804080528060807180828090
8010080110801218013380142801508016180171801818019180201802128022180233
8024180251802618027180280802908030180310803248033080343803518036180374
8038280392804018041080421811181218130814081528161817081818190811018111
1811228113081143811518116081170811818119181201812138122481231812418125
2812608127181284812928211822082318240825382628270828182908210282111821
2282131821428215182162821738218482194831183208332834283528363837083828
3928310283111831238313083142831558316483172831808319283202832118322183
2308324283254832638327383281832948330383311833218333383344833508336184
1184218431844184518463847384828491841028411084120841318414184150841618
4171841818419084203842118422084232842428425685118522853185418550856185
7485878592851010851168512085130851408515185161851718518185190852048521
1852238611862286318642865286628671868086918610286111861208613086141861
5186160861738712872087308741875187608773878087908710187110871208713387
1428715187161871708718187193881188218831884288518863887288828890881008
8111881208813188141881528816188170881818819088201882128822288231882408
8251882638910892089308940895289618972898289918910089110891208913189141
8915589162891728918389191892048921089221892338924289252892618927289281
8929089300901190219031904090529061907390819090901009011290122901309014

3901529016290176901839019490202911291219130914091529162917191819192911
0191111911209113191145911509210922092319241925292619270928292919210092
1129212092130921419215092160921709218192194922009221093119320933293419
3509362937093809392931019311394129420943094409451946194709480951095209
5319542955195669571958496119621963196429654966096709680969096100961109
6121961309614296151961609617096180961909710972297319745975398169823983
1984498569864987498869910992099319942995199639973998310011100221003210
0401005110060100701008110092100102100113101101012110132101421015110163
1017010183101911011021011112102111022310231102421025210262102711028310 3
1010320103341041210422104321044210454104611047010482104931051210522105
3110544105521061010622106301064610710107211073310741107521076110772108
1010821108301091010921109321094210952109621101111020110331111011123111
3011144111531121111221112321124211310113221133111341113531141011421114
30114411145011461”

5.8.4.6 Digit sum of the concatenation of sums with verse level indexes

In Code 5.8.4.5, we observed that the concatenation of the chapter and verse indexes and also the sum of Ha and Mim letters considering the 6236 numbered verses is multiple of 19. In the code of this section, we will see that the digit sum of the exact same coding pattern is also multiple of 19, considering the text type with all the 6348 verses. In this code, the big number that comes from the concatenation is 31020 and the digit sum of it is 118940 that is multiple of 19. In this code, basically, we concatenate the chapter and verse indexes and also the sum of Ha and Mim letters and calculate the digit sum of this big number considering all the 6348 verses In order to simplify the coding pattern, I formulate it below as follows:

DS([cv[H+M]][cv[H+M]]....[cv[H+M]])

Here, *H* represents the number of *Ha* letters and *M* represents the number of *Mim* letters in a verse. The letters c and v here represents the chapter and verse indexes, respectively. Here, DS refers to digit sum operation that is applied to all the numbers in the bracket. Each of the outer squared brackets represents the representation number of one verse and they are concatenated with the number in next outer squared brackets. Order of numbers is by the global rule, which is the natural order. Here, the most left number is for verse 1 of Quran and the right most number is for the last verse, verse 6348 or in a formal notation chapter 114 verse 6. Each of the ‘+’ is to get the sum of Ha and Mim letters in a verse.

In the below code, we will verify that this code is multiple of 19.

```
#verse level Ha-Mim sums assigned to x
x<- hrfMat6348[,i1]
```

```r
#Get the verse level sum of Ha-Mim together
sx <- apply(x, 1, sum)
#concatenate them with indexes
tmp <- paste0(unQuran$chapter, unQuran$verse, sx)
head(tmp)

## [1] "115" "123" "134" "142" "150" "162"

tmp <- paste0(tmp, collapse = '')
digitsum(tmp) %% 19

## [1] 0

cat("The length of this big number is", nchar(tmp))

## The length of this big number is 31132

cat("The digit sum of this big number is", digitsum(tmp))

## The digit sum of this big number is 118940
```

Here is the 31132 digits length big number of the code:

"1151231341421501621742052112212352452552662772882942107211521232131021
4821552165217921842191022010221522210223822422251522614227522811229723
0102318232723317234323562369237523892392240424172425243224432450246424
7524842491225042516252425322541625562566257122588259626092611826212263
7264826552664267626832691270227162726273427418275132761127742786279112
8072814282528312284102852728632871128842891229072911629272931729452956
2961529752983299121005210111210237210352104321051121066210782108721091
5211072111521127211310211412211552116321173211882119421209212152122521
2332124721259212613212762128921291121306213132132621331321347213562136
1721371021384213982140162141721429214313214415214512214692147521484214
9102150192151152152121532215432155521562215772158921597216042161521622
2163621641621651021662216712216852169621704217182172521731321741321753
2176121771721781421793218082181721829218372184152185162186221872521881
0218972190321911721922219332194142195521964121979219814219952200922015
2202422031122045220522206422073220842209722107221172212822132222141422
1592216822172022185221912222013222121222212222313222452225822264222732
2281422292322301122311822321422332422348223521223614223710223822239922
4012224152242222431122443224522246172247182248162249232250322511022522
3225324225482255202256722571022581722592222601322619226211226352264112
2651022661022671622688226972270922717227211227311227482275192276422771

022786227992280422815228237228314228492285112286153053113223333433513653716383393310631143123313531412315831613173318531993208321532263231032473256326103278328123297330123318332133353343335833683371033823391134033414342434333441234512346434753483349163501135133521035333543355133565357835833595360536110362536323645365536614367836843695370237163724373123744375143763377123781237910380838119382238333841638543867387438823894390539111392739373944395639623979398339973100531017310263103173104931055310683107531084310943110133111431121231134311473115431167311714311812311914312012312163122631233312493125113126831272312863129731304313103132331335313443135931368313733138231395314014314153142831436314493145731468314753148531493315023151731522631531331543231551031561131571031584315914316083161931626316333164143165831667316715316853169431701231714317283173831746317563176631773317811317916318013318163182431839318423185113186113187531881431892319013191531924319373194431951831960319763198631991232003405411042843134444584618478488493410541123412314135414341584167417841810419942074214422842335424304254242684274428142910430243164329433743413435114361143764385439944054412442444322444244524461744713448544944502451545224534454114558456645794581145994601146134628463746484651346610467346834697470247144729473847434758476147712478144797480548154821483144843485648674877488748911490214912049239493749416495144966497124983499141001041018410237410394104114105541062410744108104109114110641116411284113164114941158411634117241182411911412054121541229412364124841251141265412713412813412984130341311141323413314134241356413664137941383413954140144141224142441432414464145341469414764148641490415014151341529415314415484155104156541571441582415964160841616416217416310416474165541663416704168441691417011417120417284173134174541751041761150551155219534154225531563757758759651035111151222513215141151595168517195181551965201452145225523952435252526552711528252955302531553214533953455353536135377538553965406541275421454310544145451054611547954829549135508551105521055311554145555556455785583559756075616562756375641556555661956775681256995706571125721457395742575105766577457845792580858165827583115849585658635878588758928590959175925593175941159526596155971159835995510025101751025510365104651051351062551071751085510965110175111651129511345114751158511614511711511855119751203605616628636646655662167468469361056112612126133614861526165617261826191062066216622862356243625862636273628562946304631106322633563486357636563736381263976404641264256435644106455646106474648106493650765156521465356541565526565657765856591266017661766276637664565659666366726687669667014671767226739674467556763677667866795680568111682968376848685368626878688668946903691166921069321694216959696569766986699186100461014610226103061041

961052610646107661081261099611096111106112561134611412611566116261174 6
118661191661203612111612210612376124106125861263612766128166129261301 3
613136132661331061344613596136146137106138146139126140861411461429614 3
136144196145166146196147661481161493615096151226152961536615410615546 1
563615712615896159961607616196162561633616476165770571172473674375476 2
773787795710571187126713371417152716471711718137196720117215722147235 7
245725372657271472867297730773157321073313734373511736273715738147397 7
408741774257431574412745174610747574810749875010751107526753975412755 3
756775711758175997604761376277631076447655766476737684769147704771147 7
277731477467751477627776778477977808781578267832784578517786578710788 7
789979057914792279367943795779677974798479957100771017710247103771043 7
105671061710717108071095711057111271122711327114471155711657117371183 7
119071201712127122171239712467125171267712797128571297713037131107132 8
713377134671354713667137117138971395714037141117142971431171444714577 1
463714757148117149771501671516715257153771547715513715667157217158117 1
595716023716197162971631271641271654716637167871681171699717047171671 7
210717367174171753717677177471784717997180671814718247183371846718587 1
864718797188871891471906719127192271938719467195117196171973719847199 1
720047201572024720312720447205272061805815828834848856865877884898810 7
811118127813281418154816118171381828199820382138222823882498254826882 7
582868296830483138328833783411835583688376838383948406841158421584398 4
498454846384768481184978504851485248531085468552856685778585859286017 8
615862386388645865128661086748686869787013871787221873187488751091492 5
931294169515961297129879949105911491210913129149915591613917991810919 1
192069219922192311924149251492649275928149291193069311393229332934693 5
129361493717938119394940994179427943494479456946394710948694969507951 4
952995359549955895610957695889595960109611496269636964996539668967119 6
899692097019971149729973697418975697659776978697912980798110982298389 8
489857986598739889989499069911099213993699415995119965997699899991191 0
089101189102691039910449105109106991079910899109791106911113911210911 3
109114891157911689117109118129119292120199121591221191237912411912579 12
669127991281191292100510121029103101041510591063107310831091110101010 1
151012910131110145101571016610177101891019710206102110102218102316102 4
161025410265102714102813102921030610311610325103341034510351310366103 7
410386103991040101041111042610434104431045810466104751048210495105061 0
515105241053510547105551056210579105861059111060410611410623106311064 4
106551066610674106881069110707107117107281073410741010758107661077710 7
871079210807108181082510831110848108521086410879108811108931090810912 1
092310931110948109521096410973109810109971010021010151010281010351010 4
810105410106410107510108101010971105111611221131011421159116611713118 1

2119511103111141112511137111481115611165111719111871119211201011213112
2311236112451125411263112711112811112910113041131101132311335113461135
5113681137411381011395114011114151142611431511446114571146711475114817
1149711507115121152101153711542115531156511576115891159311604116113116
2611639116441165411661011675116841169511706117161172011738117431175411
7651177411787117961180111811211826118351184131185511867118761188121189
1511904119151192911931011941211954119621197411986119931110041110114111
0221110361110421110541110621110751110861110911111107111116111127111138
1111431111521111611111174111183111191011120611121511122111123512051211
1221123612441251126131270128412961210312113121221213212141121571216112
1741218812195122041221111222612235122451225512264122731228512291123041
2311112326123341234212356123610123713123861239412401412418124221243412
4471245412463124751248812493125041251101252212537125461255212568125711
2583125971260212610126261263612641112659126611126711126815126931270712
7121272512734127421275312768127771278512794128018128161282012839128441
2853128661287712884128951290412910129271293312943129511296712970129831
2993121001112101101210291210341210441210551210651210751210851210981211
0712111713051314132101334134513551367137413891392131061311171312313139
1314613153131612131716131814131981320113214132271323913245132561326613
2731328413296133010133114133241333151334613355133691337913383133941340
4134181342913434140514151424143214481456146161474148614920141013141112
1412414138141461415114164141761418914194142011421121422261423914244142
5314265142741428514291143031431714321114334143471435314366143711143861
4395144031441514427144361444101445814468144731448314494145031451214523
1505151115231535154415541561157315851592151011511315122151311514415155
1516115173151831519315204152141522815234152471525515265152741528615292
1530315311153221533615342153511536115372153831539415403154121542315434
1544415451154621547415486154921550115512155231553215543155521556415573
1558315593156021561215623156321564115658156641567115681156901570215711
1572415733157441575215762157721578215797158031581215823158341584315858
1586115873158810158911590315910159221593215943159511596215972159841599
1160516131626163316431654166616771684169316107161141612716134161491615
3161631617216184161931620216213162271623616243162510162611162781628121
6293163061631516327163310163461635111636916376163871639316401164161642
1164361644316456164651647416486164961650516512165221653816545165541656
7165731658416599166051661916628166310166461665716667166751668616696167
0101671101672121673616744167511167610167751678816797168014168115168221
6833168451685316864168741688216899169061691616921416938169481695516967
1697131698216992161003161017161026161037161044161053161061316107416108
5161093161107161115161128161136161146161151216116616117316118916119816

1206161213161223161238161247161251016126516127616128417051719172217351
7411753176717711178717961710317110171271713417142171571716517174171810
1719517205172111722517239172491725517262172711728717295173011731617321
1733717345173541736417373173811739121740617412174221743217441117453174
6417479174811749217502175181752517533175491755317566175761758717596176
0617613176241763617649176511766717677176871769121770111771817723177311
7741177541776217773177831779617803178111782717832178441785817862178731
7884178921790317911179241793517944179581796117971817984179961710061710
1517102417103517104217105417106117107517108217109117110517111718051813
1828183118401858186418751881189518105181111812718137181441815718161318
1712181813181921182081821141822211823018241182521826111827818286182912
1830618311218328183341834518352183641837618381183931840518412184261843
4184411845101846418477184881849121850818517185281853618542185571856718
5791858918596186081861718622186331864218657186651867118683186911870318
7121872218733187421875218762187741878218796188051881518821718832188421
8850188610188741888818891189071891218921189341894318955189631897218984
1899618100218101218102318103218104618105818106318107418108118109718110
1219051910192219301943195419611976198319921910119117191231913219141191
5619164191751918319192192041921519223192331924419250192681927519284192
9319300193151932119336193441935519363193771938619397194021941119423194
3419442194541946419472194831949519505195121952219533195411955219560195
7119581819592196051961319624196321964619655196631967219687196951970419
7151972219735197451975121976219771197831979419801198121982219832198431
9855198631987419882198911990219912199231993419943199531996619973199810
2005201020212031204320522067207120822092201032011220121201332014120151
2016220173201822019120201202102022420231202402025120261202722028020291
2030020310203212033120340203502036120372203842039620401020410204202043
0204402045020463204752048220493205012051120521205372054220555205602057
3205852059520602206162062320638206462065420666206712068020698207032071
1220725207342074620756207632077420786207922080720817208252083320841208
5420861620878208832089320909209132092320931209432095220963209762098320
9932010052010152010252010322010472010502010602010712010852010942011072
0111620112820113420114520115420116220117320118020119220120220121620122
1201237201246201253201261201273201288201295201307201317201322201335201
3432013552105211421292136214421532166217521842195211022111521124211352
1141211562116421171211852119421201212132122321232212411212542126521273
2128921296213072131321325213332134421352213652137221382213952140321415
2142821439214472145621465214782148221494215032151321524215302154421553
2156421573215832159321603216112162121632216442165421664216732168321692
2170121711217222173621747217542176421776217892179721807218142182621835

2184921852218662187521884218902190321914219252193321946219532196621973
2198621991211003211014211025211037211043211052211061211074211088211093
2111052111132111272205221222292234224122536226322712284229322103221152
2123221332214622155221612217522181522191022202222152222522231022243222
5822263222742228132229322301022319223232233722341222358223692237102238
2223932240922417224242243322446224542246522473224852249322506225142252
1222535225492255722569225722258422595226042261122623226362264522659226
6822676226832269722705227192272722737227422275422766227742278222305231
3232223322341235323682372238423932310123111231222313223149231532316423
1722318323194232012321823222232362324102325223261232710232872329323301
2331323326233313233442335823361233762338423391234032341623423234342344
8234532346223474234832349223505235162352523537235452355623561235742358
3235922360423611236232363823644236532366323672236862369523705237192372
2237332374123758237642377523783237922380223812238232383223844238502386
3238702388423891239032391923922239322394223952239642397223981239942310
0723101223102523103423104423105323106123107223108123109623110823111523
1122231132231144231155231163231175231184240524112421324382449245424682
4722481249224105241114241282413224148241572416724175241842419824205242
1162422924237242472425724266242772428924299243082431202432122433242434
8243514243622437324388243992440132441824423244312244402445152446424478
2448624493245082451102452224539245411245519245642457524582624591124606
2461372462172463102464102505251125252537254225512564257525842591251032
5111251242513325142251542516325179251892519725207252122522825236252452
5255252662527325281252902530225313253222533325344253522536425377253822
5391254032541025423254312544725454254612547225486254952550125510255212
5538255422555425562255742558525597256092561325621256352564225652256632
5673256862569325709257142572325734257442575325764257752605261126212632
2644265926622674268426922610326111261202613026141261542616126171261832
6191262012621826222262322624526253262622627326285262922630126311263212
6330263442635626362263722638626393264022641326424264352644426452264612
6472264812649132650126513265242653226541265512656226572265832659026602
2661526621266342664126654266612667426682266922670226711267222673126740
2675326763267722678026791268012681326822268342684026852268612687126882
2689226901269122692326932269412695126962269712698226993261002261013261
0232610342610422610532610632610722610802610942611002611112611242611322
6114326115126116526117126118826119426120126121426122226123126124226125
2261260261274261280261292261302261310261324261333261340261353261363261
3702613832613952614022614122614232614322614402614542614622614702614812
6149226150026151226152126153426154326155426156426157226158526159226160
2261612261622261630261644261652261667261673261683261693261701261710261

722261735261744261752261762261771261782261790261804261812261822261832261841261854261863261873261883261894261904261912261921261932261942261951261960261974261981261994262002262013262022262032262040262052262063262074262083262092262101262113262123262133262140262155262163262172262182262190262202262212262221262232262241262253262262262279270527112722733274627532764277527862793271052711627124271352714427157271652717427181127191027203272122722627235272482725427261272722728427292273072731227325273342734127354273611273762738427396274010274122742527434274412274552746627475274822749427505275172752527531275432755427565275722758527594276012276162762527631027649276542766727671276822769227705277122772127731277442775427761277742778427792278052781927825278372784827854278642787528786278972790527918279262793628052811282128352848285428682877288428922810628111281282813628146281512281632817428185281992820728214282222823112824428259282642827102828228298283072831628329283322834328355283682837728389283922840328414284272843628445284562846102847828481228494285012851228524285372854728557285652857122858928598286062861122862428635286452865528664286782868528694287042871828727287362874428757287612287772878122879628806288162882828831288472885528864288722888329052911292329342946295329632978298102995291092911429121229138291482915229166291752918629192292012921429228292352924629251629264292732928929296293022931429325293372934429352293652937429381029394294019294142942629433294442945829461129477294852949429504295172952629535295432955102956129572295892959129606296152962329631129644296542966429679296882969430053011302130333047305330613075308113091630101301123012430135301433015630163301753018430198302053021930225302383024930258302623027530281830298303043031430326303311303443035430368303743038530399304017304153042330437304463045530461030471030487304943050730513305253053930548305563056830575305853059130601310531113122313431433155316631743185319331101031114311283113331145311514311643117831185311943120113121431226312383124431257312643127113128531297313033131531321031337313410320532113222323932493258326332723285329632102321163212832136321483215732167321763218432198322073221332221032233322453225432261032276322833229532303330533143325333033414335173361633713338233993310733112331243313833144331523316533171033186331914332083214332293323123324533254332653327633285332943330433316333253333433344333518333612333715333873339233409334113342133439334463345133461334743348233491633502733511533527335327335413355433564335733358933595336083361233621336333364133650336623367033683336943370133718333728337310340534193421034363446345434653477348234912341033411534121134138341410341563416634172341833419834204342110342214342363424634254342663427434282342923430434318343263433634345343553436234371434383343953440734417344425

3443123444634456344611344743448234493345043451234524345333454835053517
3521335363542355435653576358935953510835111835121135131235141035153351
6135171351812351923520135211352293523035243352553526135271035286352943
5304353153532103533535343353563536635371335383353963540143541935421235
4343544935457360536103622363236423652366436743685369636106361163612103
6134361443615836163361723618836197362043621436221362343624136253362623
6274362883629436304363163632436336363423635536368363753638336394364033
6416364243643336445364583646636471036482364963650136513365273653636545
3655236563365733658436594366053661236623366323664336657366623667636682
3669436703367183672436733367423675536765367743678636793368043681436822
3683237053710372037303742375437613773378337923710137116371203713037140
3715237163371703718237193372013721237224372343724337252372643727137283
3729337305373113732137333373423735237361373723738237394374013741337423
3743137441374533746037471374813749137501375123752237533375423755237560
3757437583375943760137613376223763137642376503766437676376853769237702
3771137722377313774137753377623777137780377933780237813378213783237841
3785237860378733788137891379013791137922379323794037952379633797237981
3799037100237101337102937103237104137105237106137107237108037109237110
2371113371123371137371142371155371162371172371183371191371202371212371
2243712323712413712513712623712733712813712903713013713123713233713323
7134137135037136237137537138037139237140237141437142437143337144137145
1371461371471371484371492371503371513371521371530371544371550371563371
5723715843715923716013716123716223716333716463716513716633716703716813
7169137170137171237172337173137174337175137176037177437178337179037180
2371812371823380538103820383638453851386538733884389438106381153812338
1343814138155381623817138182381923820338213382263823138249382523826738
2753828738291383023831038324383323834238353383633837038381383933840238
4113842138437384423845238461384733848238493385033851138521385333854238
5513856238573385813859938607386123862338633386423865538663386713868238
6953870338712387223873338741387553876338772387813879138802388133882238
8333884238858388663887138882390539133922393939453956396173971139810399
8391073911239123391323914139158391673917139184391943920739211139227392
3133924639255392633927339281392983930339316393263933239345393563936439
3753938143939639404394163942113943339444394553946639471339485394983950
5395193952539537395453955839563395723958439591396073961639620396333964
1396553966139671039687396943970439711639723397383974639751340054012402
2403140424051240644071640810409640106401134012640136401414015640168401
7540181040192402034021124022440232402424025940262402774028124029114030
6403184032340331040341340354403624037440383403944040104041340423404364
0443404534046240475404824049440504405144052640531405404055440565405734

0587405914060340612406224063140641040655406664067184068440691407024071
2407244073440743407594076340773407812407944080640811408284083114084540
8554105411241254132414341564169417241864193411024111241121041133411484
1159411674117741181411934120941215412212412384124641251441262412724128
3412954130641318413234133941345413544136441376413834139641401241412414
2741435414494145741466414717414884149341501241512415274153641546420542
1242204234424442510426542764281042944210642119421244213144214154215184
2169421734218742191422084221114222114223842248422524226642271422864229
7423064231742323423314234142356423684237442388423924240542415424254243
4424484245114246842471342481142495425044251942521142534430543124321433
1434343554362437343844394431044311443124431374314143152431644317843184
4319643209432164322343237432474325443264432704328243296433044331243321
7433384334143354433634337543382433964340543415434234343443441434564346
3434754348643493435034351643523435344354343556435624357643585435924360
3436144362343635436434365743662436734368443693437034371543724437324374
3437534376543773437844379543806438124382343834438444385543866438734388
2438944405441244214432444344534465447544844491441034411144122441334414
4441514416344174441824419244202442124422344232442434425244263442714428
1442954430244313443234433444340443544436144379443844439544404444144442
5444314444244451444634447244485444914450344514445204453244542445514456
5445724458244592450545124523453345444558456345714586459445109451144512
5451374514445156451664517134518445195452034521164522545236452410452554
5261145276452864529545309453184532745336453411453584536445373460546124
6234639464124659466346764688469946109461144612104613546143461515461664
6176461884619846201346217462224623646249462584626184627546285462984630
9463184632446335463444463510470547124721547364741447534762477447834795 4
7106471144712104713447145471524471610471734718447191047201047214472254
7235472414725747266472744728547295473094731747326473334734447357473684
7374473812480548134828483048410485948610487348814892481074811144812848
1334814648159481612481710481894819448201048212482224823148241048252748
2612482715482814829254905491449274937494349564967497124985499134910849
1116491213491374914134915104916749171049184500550115024503150455056506
5507250815096501005011250125501305014350152501655017350182501955020150
2115022350231502415025350261502715028350293503055031150322503345034250
3535036950372503875039550402504155042550434504435045651055110512251305
1435151516051725182519151100511125112151132511425115151166511725118251
1965120151211512235123551244512545126151271512845129251303513135132351
3335134351354513645137151382513925140451413514245143551444514555146551
4725148251492515035151451526515325154451552515615157651581515945160352
0552105221523152425251526252705282529452100521125212152132521415215352

1655217252187521935220452211552226522315224552251522615227352283522935
2302523145232952332523425235452362523755238852392524075241352423524345
2445524545246452473524875249353055311532453315342535153615370538153905
3103531125312253130531415315153161531725318153191532015321153221532311
5324353250532675327453286532935330853317533215533305334053351533655337
1533805339153400534115342153431534425345053462534705348053490535005351
2535265353153541535515356153570535815359253601536125362054055411542354
3354445453546254745482549454101541155412254133541415415254160541725418
0541965420254210542225423154242542515426254273542865429254300543165432
2543315434454353543625437254383543905440254410544225443554444544525446
3544725448454490545055451354520545315454154553550555125521553055415553
5561557255815592551015511255122551315514155153551615517255181551925520
1552115522355231552435525155261552715528155293553015531155321553345534
1553535536155371553815539155401554155542155433554435545155463554715548
0554915550155511555225553155542555515556355571555815559155602556115562
2556315564255651556615567155682556915570155711557235573155743557515576
2557715578256055610562056305640565056615671568756975610056111561215613
1561415615156162561725618256190562025621456221562325624256252562625627
5562815629256302563125632056333563415635056360563705638256391564015641
5564255643456441564525646256473564805649056506565135652356532565445655
1565625657256583565935660656615566225663356643566535666256674566825669
7567005671156725567335674356753567635677156781567925680256813568225683
2568425685356862568715688356893569045691456923569345694256951569635705
5715572457315741757535761577957811579657101557113571214571312571414571
5957161257175571865719957201657217572255723757244572585726857271657281
1572945805581558213583105841358555867587215881558955810758111358128581
3858141258154581645817758181158196582015821058222359055916592225933594
2595559675971059875991759106591111591255913559141359157591645917359185
5919359204592145922559239592486005601246025603106042260526068607760811
6091260103760111060125601376105611661236132614361596161561776183619261
1056111861127611356114136205621762211623762426251662676276628106298621
0362114630563136325633563414635663676375638663976310963112640564176429
6436644764576464647564836491364102641166412364132641410641556416964175
6418365056511265212653665415655465615657565846592651036511146512766056
6186629663566466656666106675668176696661012661186612867056711672667366
7426755676367716786679367103671136712367132671426715467166671786718267
1966720667213672276723467242672526726467272672886729667308680568126823
6832684168506862687468816890681026811468123681316814168150681626817768
1806819368202682126822468231682436825168261682746828468292683026831068
3216833168343683546836468372683826839968403684136842168434684466845368

4676847368486684956850268514685226905691169226933694169526962697769826
9926910269115691216913169143691516916269176691836919469202692106922069
2306924369254692636927069282692906930069313693216933269343693546936269
3706938269391694016941369421694326944069452694626947669481694946950169
5116952370057010702070327045705170617070708370907010670115701217013070
1437015070160701717018170190702017021270221702337024570253702617027470
2837029370308703127032470333703437035270362703727038570394704037041570
4247043370443710571167123713071487151716271767182719371101711137112571
1327114171152711627117271183711917120171215712227123171241712567126271
2717128872057214722272327240725072637274728472957210472113721207213572
1477215372163721727218372192722027221272225722337224472253722627227472
2867305731273217331734073507361737173817392731037311473122731327314273
1537316073172731837319173202674057411742174307440745074617470748074927
4100741127412374130741427415274160741707418074190742017421174221742317
4241742507426074272742807429174300743118743217433074341743517436074374
7438174392744007441274422744337444374451744617447174482744937450474511
7452574530745407455174562750575137522753375407552756275707581759375102
7511075122751337514075151751617517175180751917520175210752217523075241
7525075260752717528075290753027531075320753327534075351753617537475381
7539175402760576147623763276407652766076727685769576103761137612376133
7614176152761617617176181761967620376215762237623176245762517626276273
7628576291763047631677057711772077307740775177607771778277917710077110
7712177131771437715277161771727718277192772057721177222772317724277251
7726277273772827729277300773117732177331773427735177361773727738377391
7740277411774227743377442774527746477472774817749277502780578117821783
2784178527862787078817892781007811178121781307814378151781607817278181
7819278200782127822178231782407825378260782727828078291783017831278321
7833078340783517836278377783887839478405790579107920793279407952796179
7079817990791027911179120791327914179152791617917079180791907920079210
7922179231792417925079261792737928179291793017931379320793347934179352
7936379372793817939379404794117942179432794417945379464800580108021803
1804080528060807180828090801008011080121801338014280150801618017180181
8019180201802128022180233802418025180261802718028080290803018031080324
8033080343803518036180374803828039280401804108042181058111812181308140
8152816181708181819081101811118112281130811438115181160811708118181191
8120181213812248123181241812528126081271812848129282058211822082318240
8253826282708281829082102821118212282131821428215182162821738218482194
8305831183208332834283528363837083828392831028311183123831308314283155
8316483172831808319283202832118322183230832428325483263832738328183294
8330383311833218333383344833508336184058411842184318441845184638473848

2849184102841108412084131841418415084161841718418184190842038421184220
8423284242842568505851185228531854185508561857485878592851010851168512
0851308514085151851618517185181851908520485211852238605861186228631864
2865286628671868086918610286111861208613086141861518616086173870587128
7208730874187518760877387808790871018711087120871338714287151871618717
0871818719388058811882188318842885188638872888288908810088111881208813
1881418815288161881708818188190882018821288222882318824088251882638905
8910892089308940895289618972898289918910089110891208913189141891558916
2891728918389191892048921089221892338924289252892618927289281892908930
0900590119021903190409052906190739081909090100901129012290130901439015
2901629017690183901949020291059112912191309140915291629171918191929110
1911119112091131911459115092059210922092319241925292619270928292919210
0921129212092130921419215092160921709218192194922009221093059311932093
3293419350936293709380939293101931139405941294209430944094519461947094
8095059510952095319542955195669571958496059611962196319642965496609670
9680969096100961109612196130961429615196160961709618096190970597109722
9731974597539805981698239831984498569864987498869905991099209931994299
5199639973998310005100111002210032100401005110060100701008110092100102
1001131010510110101211013210142101511016310170101831019110110210111210
2051021110223102311024210252102621027110283103051031010320103341040510
4121042210432104421045410461104701048210493105051051210522105311054410
5521060510610106221063010646107051071010721107331074110752107611077210
8051081010821108301090510910109211093210942109521096211005110111102011
0331110511110111231113011144111531120511211112211123211242113051131011
3221133111341113531140511410114211143011441114501146 1”

As two further facts, if we had used general verse indexes, from 1 to 6348, instead of the normal indexes like chapter and special verse indexes, then the same exact coding pattern of this section results 31404 digit length big number whose digit sum is 125248 that is multiple of 19 too. Namely, whether we use the normal chapter and special verse indexes together or the general verse indexes alone, in both cases, the same coding pattern yield a number which is multiple of 19. However, since I do not use the general verse indexes in the coding of Ha-Mim, following the rules, I do not count it as another code of evidences. Since this is additional to the normal coding pattern, it is interesting and I inform this further fact here. There is one more **further fact** on this coding pattern with the general verse index. The exact same coding pattern with the general verse index also exist if we look at only those 7 special chapters, which results 2103 digits length number, 8265, that is also multiple of 19. Chapters 40 to 46 are special for Ha-Mim letters as Ha-Mim letters appears as independent verses in them, which had led as to look at it over the full text of Quran as the sum of them in those 7 chapters is multiple of 19.

5.8.4.7 Concatenation of sums with verse level indexes

In Code 5.8.4.5, we observed that the concatenation of the chapter and verse indexes and also the sum of Ha and Mim letters considering the 6236 numbered verses is multiple of 19.

In this code, we observe that, not only concatenating the chapter and verse indexes and also the sum of Ha and Mim letters, but also sum of the chapter and verse indexes and also the sum of Ha and Mim letters is also multiple of 19. We use all the 6348 verses and the resulting 14970 digits length big number is multiple of 19. In order to simplify the coding pattern, I formulate it below as follows:

[c+v+H+M]][c+v+H+M]]....[c+v+H+M]

Here, *H* represents the number of *Ha* letters and *M* represents the number of *Mim* letters in a verse. The letters c and v here represents the chapter and verse indexes, respectively. Each of the outer squared brackets represents the representation number of one verse and they are concatenated with the number in next outer squared brackets. Order of numbers is by the global rule, which is the natural order. Here, the most left number is for verse 1 of Quran and the right most number is for the last verse, verse 6348 or in a formal notation chapter 114 verse 6. Each of the '+' is to get the sum of Ha and Mim letters and also the chapter and verse indexes in a verse.

In the below code, we will verify that this code is multipl of 19.

```
#verse level Ha-Mim sums assigned to x
x<- hrfMat6348[,i1]
#Get the verse level sum of Ha-Mim together
sx <- apply(x, 1, sum)
#concatenate them with indexes
tmp <- unQuran$chapter + unQuran$verse + sx
head(tmp)

## [1] 7 6 8 7 6 9

tmp <- paste0(tmp, collapse = '')
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("The length of this big number is", nchar(tmp))

## The length of this big number is 14970
```

As a further fact, the same exact coding pattern also exist if we look at only those 7 chapters, which results 907 digits length number that is also multiple of 19. Chapters 40 to 46 are special for Ha-Mim letters as Ha-Mim letters appears as independent verses in them, which had led as to look at it over the full text of Quran as the sum of them in those 7 chapters is multiple of 19.

Here is the 14970 digits length big number of the code of the current chapter:

“76876912745101112141618151918172524222328243132283433284242344138424141523943474449434650494749475254546356595857726364716867718176727472727573727479807994908983869289878997961149110094103991091011121011031131041031021071141411101091181141171171261191181211251281221211221281251311281291281331361411351391421381361401481431431551491441491581501531581611591571541541611711681551571591621601661691681661681661711821771701811751771761811791881891801791961941841901901931922012031902142001981952101961982102022392082142062112082082162112092122122142182192202222372302262262392252332352442362382312352322322442542432512482592442582522492422502542482462562492492652672662742552632572792642772652692772832752722752702772772782852782782812802852862842962822892862902862883212992952983038579109142614151918182129262023263131293136343439384339454236414046475043534648494959605355546864576559607164686467687470687273837875777580798881928292939291103878910392969493969810510210310110410110910410910811111112311611311711511511612611812712012412212613413313613513013112913613913713213713913713413814114114714714314314715714915315215615515515515611811691891681701701651761711731711691811761761851761761851781831841831841851831921981961901891951891992001952051941941991992032012161992062072142069151420121728192016193847222127272932323129346258713835334336414544515051474752494750695051676457575660586169676670737275687474768280747580767985858187819396908990871019195979899104115115135104114113106113105104114113143116119114112115122124120121124133127127123123124134129130135133136140135144145141137146139138140145146150145148158167150149154152159157158153155158165171166169165175164169172171183177175174173171176174185195184190183189191102126493141481920201827393930292941383039303237323236433539374151474443544948505173615863606261826763666769736565706671727274758475907985838188918781908786893929499989694100100122104103102115110126116113106109107113112114115123131361291181201321221261221261281351331281311281113161516163317181821193022282327252635323336343339353639394047404448484746565250495354605662576458636272647563677069778374757675807575818190848088848685899090919897969894941011009999113108120121110107109110123110111110109119113116119126124125127123123132127124127130141129138138136140139135139150137149

1401441491441501561531581571541611571621691671711591651581651791671651
7016516517517317417317617317217717817913161416151722212226252322242735
3832383343353635384841434443495344534559595355555465635363596564676865
6973657075667571717680757777777990819286948796859089939593959296109981
0410210510210210110610410911010810911111411511311711411811411511512112
2120121122125127128127128126128130130139137133140143140143140148147147
1471461491551541511501591581611551591561591661631731641641671681751691
8517617119017717818218317617618218618518118418918618218519018818919519
3192193193197200197203203210203200201208207213204207209207211213213222
2152142141314181520191922202525302723232735382836313232394137424042434
2424848534852514951546465606157576167646263647168657072716985747379778
5847982849186101829093141624292927282422242431343229383537393539324347
4839415149455343444956596358525857585660605866636466647067727275727573
7984777882778387869898949088101909092931009610093100101101100991061021
0511011410811811511011211611911712811712111712412412512612512513313113
2131131133136139130148135142139144141141145148140151321232924192021303
0263134293232343736364150495039415151414657474749585251545860625857576
3626260646666666871706876748074857574788082818680879890879493929495919
7999710410297100106109102108103105114112107110110118116112116120118122
1191201221281261618152417252331312524262831333232473632413536404040404
9505045524649515155525955625759696163646376676864737167697274787375857
9837980878383858788839288909292969692104999910810110410411111510510711
2114117110109112115113115126115120117120119123125131128128130132128128
1381321321401371371341391714152120183119242725262627273429333836364440
4041424242454246545049485358625655666156596361616468646673667272697670
7378747380818786899095848985898988909696959511099941041001001041061041
0610610311110810910811510911311412312312311912012212312412512912913018
1825202223262430242941283533314146454034384245424445434548535849615353
5859545657626460192020192625362528433737303534303437413735476246424245
4547444752575155525662585857606363686768646567676769201720232324222528
2626292929333532353637394045424645464649464847495451515254565858586062
6361636669666668707072727575767777788080808885838484878791919392939495
1019898100102102108102105113105108106109110112111113114117115212024222
3252830282833313533393435353838384045454351535156485252555956626159615
8576359656367676770717169707775757976788481868689868889889091969710095
9410210298102102110112100102105104106107106114112113122117118116119126
1161171191241241261241241351271291281331321361351361431381361431431421
4014114714715114714914822272125222530353232302836343339383845414239444
9504745455251485450575656575756686360616272656773666869767473807579808
2828381838690839091929898969291929695979810210099106102105110105107109

1081101091131151151201141321191221231231231251231261241291271271321352
3222822223128302732333037383640474749584653614143455553525954615855575
5586157606361666563736872747976767877748081848583868628484908986898891
9192949495969998103103104117103104103114109114081151111111511511811
7117120123120121123123128131127129127134140242023222628263230303037343
4344039414040434544454744535151514955525857595863636561616466656869687
0737472737574767577958084838584898988889493939593979810697971001021001
0210310410610910811010910911111211411611611712111912725212324272733283
0313333333635363840404041414644444647494850505153545455575962657061626
3646569727072717273807680768083848287859190899288889793103979710010199
1011041011071081071061051091221151111121191141151141171171191231211221
2512612712513112512612813313313713714013713913913814013814114214714315
0150148147150156154157158154158157160262632302929333333353337373936424
1394444424546465650525158565855585759586260616564677173727272767174747
5777479798181828384838486899091919292929395100102100101104108107108106
1091091141081131131131101141161181171211191231211251211241261281311281
2812813213713313613514027253329276331303434353837384242394455514448495
5495551536354626257626865676962647170686872717372757478778680858487818
4868684879191969695939897102101102981011041031222827272828313732353534
3537384641434244464452475257505060585554576169616660666563667068707571
7174747478808083828480848484878588949191929297979810397999810610310510
4104105106108108111108112110115113116123117118119120123122122126130126
1301301311311301321321381411391371381411431421451452926393537333833333
5394944394646474646514961555455565658616262756881667362647072777369796
8847479787682857886899884861089490122103979830273235313135373735383741
4141444451525152485554545557555454575959616362656965656866706976747274
7979767678868184838688919489889391929495999710410010010210310310510731
2829313440343738373938383941454344474647555051555454565957575859596467
6465706868707274747373757588778082818182848587858892899391959397969798
9810010010010410510510410610711011011311011311311411611711711912112112
1122124124126128128130131133132134135135134139136138142141143142147144
1521491471511501501521531521571541571581571621621601641651631671701681
6917117117017517417317517717617917918318318518618518918718818919018919
4193199196197198197197200204204203204204206205210209210211211215215216
2172192202192192212222222222272252292282302302312302332352372372372372
4024124224024624524524624524824924925125125425426232293133373537394139
4244434545494848565650505555595654565958646064646266747069727770747483
7779797780828584818486888690909994941001009610095979810210010010110510
6104108109108112117114117119116117119121123122126125126333031364037424
2403944404847485547495156553526256625865586565656963656872727569717 37

7777779848388818881848889908997959594101949697989810310110110210710710
7106110116112118113114115118112119118118117119343134363937384447434844
5350514651515350505459575970595966646164666967667070777288747775778286
8382828387878786948688968995959410397989910510510235323336413837424955
4143464847514952525755605761636358627667646568746869747173788776758080
8086878583878487929291949293909136333538384143424443514651475060515654
5462565962596361696467646773717537343644454541414547444952515454555554
5959566458616168656366653838403651555553435150464954515054605766615864
6862626466666667707070718681857874827576858379808483981109992113889293
9310097101969699989810110010410610411211311639444643444345484455475057
5558555653556158657063646366656465687372737374728575788182818984859185
8486888790909640435044414446485249536458605953525365565657665862656272
6968697177737276778576808985898288874137404142434647495152535853545955
5562626061596361646467726970737275727680787779798382828589889386918790
9595959395969899101991011011031081041091061091091151121121121161171171
2011812012112012142383940434644474848485449505154565457595860636464646
7656869726970737374747677807881828182858385868788909193939493989810098
1011011011031021071101101081091091111111121151151151151191191211201221
2212412312712612712812913113213113413613613613613913411481421421441 4
6145148149151152157153157155156158157159160163162162163165167166166168
1701721721721721751791751781791821831831821831841851891881901911901901
9519219619619919819820020120320720320620420620720821021221121421321321
8218216219220222433940474744494850515454535553585656585961626662716571
7073687069747374767775778080808188848585888890919091949494969897106105
1011031041041081071061081121111111121141131181171171171181201221221241
2413113012612844434351485062575756565254545462625761626671687569696869
6876727677747880798191848386928587899199929694999699981029898101991061
0610110510410910611611411211312611412011912745434444465750635855565458
5955616462686163736665667468748080767975838779788181839084858987888892
9093949598949499101100105100103103104104114110112125112110112113116117
1171241191201301231261221301341291304644484648525650555353546357636564
6560637067757271806970727577807683808081848286938490899493931059793103
9410010010147454449505753556055586258697175676267627074757374697470767
8788077767783868388838788898994989610210196961021059948464647505351535
5565758596358606368656872706873747273707378777692847882828583888889889
0889492959795961009810010010410110610610410610810811110115111113115 11
5116119119118120121124123125127129126128130131133135133133136494747495
1525556565457565860626063656465666769697171737273787678798178838190868
8888991889090939397949799969910010010510310410550485051535854535958646
0626563666775676968827274797582787979848484849088858551495158626055596

2646561686463766869727379747075797990787983858582848491525064566555555
8586163626964668673676976777274757279797880818685858385899188975352585
1626264585759657368646872767575717871727282100869077102545458595660626
8627167767469767472767155525654596161595965606367636767717070747172757
4757877788182858284878688958995949296979797101565255545857576061616164
6466676773707176727376797980787983828485868788909189919295959799991011
0210010110210410610910610910810811411011411457535556585860596265626565
6767707371777476888076817879828384848793878891909498939996979910110110
2102107104585559575959606062626666676668697072727374757687807886848785
9191100868789949191939395969799981011001011021031061111071081091101101
1211411411611559565960626262656467657068706971707372797675787880808284
8885849188889292929395939695981021021011031031061031091081061081091126
0585858606362646466666869697073727474767677807982818283848786878892909
3929394959610198101102101104103103105106107109109111111114113114115117
1171191191211211221231251251261271301291321311331331356157585960616364
7172666869707172747576757881798182838488858788898892919192939696971021
0310310110310410610410511211011111114112114115117118122122120122123124
1241271261321261281331321331341351341351371381401401411421441441441471
4815015115115315215215562636361786564737672827183828581857981859385845
8785909110096906364737175687186817275827879847778828783797910364668365
6569727674857581767786817979828183848691916585677386677474798110781778
0666866666875827572727680807988677075726883757580797577686770718174767
5777982766972757375767476758676817979888489868570787974847486777776789
0847175777476778278918188858672697576737776758179808182828386899287929
3919694939497961031021057371737373737679777780838382838386928690909194
9295949599100991009910110210510710810710811611111211111511811612111812
2122120123122747173757476778379808185828386858792909291909192969898969
9989910310210410610810710610910911011311211411311611712211812212012112
4757172757976777781798686838387858688898991939396999897101101102108103
1061061071071081091131131131161161161177678767483777984818382858886868
8899092919297959596102999910777777677767781838486868684909390919193939
4959998100100100103106787676777778808182848688878889918992949311979767
7777879818182858487898790919091929395969798999910010310210410412310710
7109110110115113115114117118120121120121122124126128126131127128130132
8079798179828382848787868991899192939395969698981001001011031031041071
0610711010911111211611411511781818181808382858990899091929193939495101
9910210110010510210410610910611011382797980818383858787878890919494949
6979810299101101103103105107107108107109110111113113114116118117119119
1211231231241271261261281298380818383858685878988909191959494979799981
0110110210210610410710610810911111111111211411612212412112384808184838

6868688889191919494969696979899100102103104104106109108109110113111116
1141161181181181211231211221241241271298581838484878688908990919396969
5979899100101103103106105106107108108109111111116113117116117121120121
1211211238683848485888888909092939594989797981001011021051071051061081
0710911311287848486869090899191949496969898100102104105888585888990929
0939495959896991031031021011041051051061061091121121131121161161151161
1912111812089868788899093949494969596989999101102103103107106106109110
1159087898990909296100961051029798991011021031041041091071109188909092
9394949496989898991011021021069290899092939397959698989910310310310410
4106109939091929494979798979810010010210310510510510710710911111211211
2114117949091929396969899999991001011031041091071081101091131101121151 1
5116116118118118119959293949497971009999100103104103107107108113111113
1129694949495989999100102102103103105110106979394969799999910210210210
5104105107107108109111115112113989595989898101100101104104107999796979
8100101101102100969799101101107103107101989910010210510210310410510610
7109109112112112113114115102981011011061051031051031021061091081091121
0410010110310510510810911010510210410510410610610710911111211410610210
4106107107110108112111113114107104107106108109110110113108104105110109
1071081091101131111111141161101081091091131121111071101091161121081101
1311211411411611310911111114110112114115116117115112112116116112116116
4119119117114115117118118114117117118121119115117117119119121”

5.9 All the Disjointed letters sum

As mentioned before, in Quran, there are *Disjointed letters* or also know as *mysterious letters* or, as in Arabic, *Huroof-al-Muqattaat*. They are considered mysterious by most as their meaning are not fully agreed upon among scholars. As an information coding expert, it is plausible to me that they might also be the additional information to design a 19 based code in the full text of Quran. They might also have real meanings but this does not prevent them to have such an additional function as well.

In this chapter, I will present a coding, which shows that the total number of all the 14 *disjointed letters* is multiple of 19. Below, I present all the letters characters exist in the Quran text I used, which was explained in detail in Chapter 8.1. Then, I show the set of 14 *disjointed letters* I used to calculate the sum of them. And then, I will show that the sum of the total number of the 14 *disjointed letters* is multiple of 19 in the full text of Quran in 6236 numbered verses. Furthermore, when we look at all the 6348 verses, I will also show that the digit sum of those numbers is also multiple of 19 in the full text of Quran considering all the 6348 verses.

```r
#All the letters characters exist in the text of Quran I used
names(LettersEachun)

##  [1] ""ر" "ذ" "د" "خ" "ح" "ج" "ث" "ت" "ة" "ب" "ا" "ئ" "إ" "ؤ" "أ" "آ" "ء
"س" "ز"
"و" "ه" "ن" "م" "ل" "ك" "ق" "ف" "غ" "ع" "ظ" "ط" "ض" "ص" "ش" [20] ##
ي" "ى""

#The set of 14 *disjointed letters* I used
hurufs <- c(
  ","ا
,"ل"
,"م"
,"ص"
,"ر"
,"ك"
,"ط"
,"ه"
,"س"
,"ي"
,"ح"
,"ق"
,"ن"
ع"  "
)
#Let's print them:
hurufs

##  [1] "ع" "ن" "ق" "ح" "ي" "س" "ه" "ط" "ك" "ر" "ص" "م" "ل" "ا"

#Get the indexes of of the disjoint letters
i1 <- match(hurufs, names(lettersEachn))
i1 #7 30 31 21 17 29 23 33 19 36 13 28 32 25

##  [1]  7 30 31 21 17 29 23 33 19 36 13 28 32 25

HurufsCleanSum6236 <- lettersEachn[i1]
names(HurufsCleanSum6236) #See the names

##  [1] "ع" "ن" "ق" "ح" "ي" "س" "ه" "ط" "ك" "ر" "ص" "م" "ل" "ا"
```

```r
HurufsCleanSum6348 <- LettersEachun[i1]

#the sum of the total number of the 14 *disjointed letters* in 6236
verses
tmp <-  sum(HurufsCleanSum6236)
#The sum of the 14 *disjointed letters*:
tmp

## [1] 225397

#225397   (225397/19 = 11863  digitsum(11863)=19)
#Mod 19 test of the sum:
tmp %% 19

## [1] 0

#Also, the digit sum of the quotient, 11863, is also exactly 19.
tmp /19

## [1] 11863

#The digit sum of the sum of those numbers in 6348 verses
tmp <-  sum(HurufsCleanSum6348)
tmp

## [1] 227413

digitsum(tmp)

## [1] 19
```

We observed 2 codes.

Code 1: In the 6236 numbered verses, the total number of the 14 *disjointed letters* is **225397** and it is multiple of 19. As an additional fact, after dividing 19, the digit sum of the quotient, 11863, is also exactly 19.

Code 2: In all the 6348 verses, the total number of the 14 *disjointed letters* is **227413** and the digit sum of it is exactly 19.

Considering all the 14 *disjointed letters*, the most rational way to test their relation to 19 is to look at the most simple code, which is the sum of them. Therefore, I consider that the total number of the 14 *disjointed letters* being 225397 and it is multiple of 19 as evidence. Although this code is very sensitive to the text I used, observing such a code looks quite meaningful. Observing the other code about the digit sum is being equal to 19 also support

the conclusion about the main code as evidence. I will count this observation as 1 success in 2 trials and add to the global counters.

```
global_tested_nums <- global_tested_nums + 2
global_success_nums <- global_success_nums + 1
```

5.9.1 Discussion and future works on other 'Disjointed Letters'

In Chapter 5.8, I presented come codes around Ha-Mim and Ayn-Sin-Gaf letters, which are about only the 5 of the '*Disjointed Letters*' or also know as *mysterious letters* or, as in Arabic, *Huroof-al-Muqattaat*. More details about them can be seen in https://en.wikipedia.org/wiki/Muqatta%CA%BFat. However, there are 14 Disjointed letters out of 28 Arabic letters and we observed 19 based codings on 5 of them. I wanted test others as well but there are some uncertainties on the other letters. Some of the key letters like Alif and Ya might have different writings or usages. Also, there are various versions of Arabic letters and the total number of letter forms in the text of Quran I used is 36. Here are all the letter forms in the text of Quran I used:

ء, آ, أ, ؤ, إ, ئ, ا, ب, ة, ت, ث, ج, ح, خ, د, ذ, ر, ز, س, ش, ص, ض, ط, ظ, ع, غ, ف, ق, ك, ل, م, ن, ه, و, ى, ي

The reason I was able to work on Ha-Mim letters (م, ح) and also the and Ayn-Sin-Gaf letters is because they do not have other letter forms nor alternative usages in the text and also they have clear 19 based coding in their special 7 chapters, which led me to look at the full text of Quran too. However, for other letters, there are some unknowns for me and I am not able to analyze them as clearly as the Ha-Mim and Ayn-Sin-Gaf letters and thus I stopped my research at this stage until I may clarify my knowledge about the other letters too. Since I do not know Arabic, I tried to get help from other people with Arabic expertise about those letters but I could not get a help on that. I may have to look at them in the future if I can clarify all my questions about those letters.

On the other hand, here is my hypothesis about them that interested people can test themselves if they are sure about all the Arabic letters in regard to '*Disjointed Letters*'.

Hypothesis: For the '*Disjointed Letters*' combinations, the ones that appears as a single verse in some chapters, if they have clear 19 based codings in their special chapters, like sum of them are multiple of 19, then they might also have clear 19 based codings in the full text of Quran too. Statistically significant portion of the *disjointed letters* or their special combinations as they appear in the beginning of the chapters as independent verse might follow this hypothesis.

5.10 Overall probability of all the evidences so far

Below I will calculate the probability of all the evidences so far in this book using the global counters I have been counting.

```
tmp <-binom.test(global_success_nums,
                 global_tested_nums, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", global_success_nums,
            "success out of", global_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 42 success out of 89 (with p=1/19) is:
7.47e-30"
```

Again, If some cautious people think that we should have used more tests, although we tried **all** of them regarding the rules, I will not even look at the possible further successes in that case and keep the success number same but double the number of trials and see what would then be the overall probability so far. This should calm down those skeptical people.

```
tmp <-binom.test(global_success_nums,
                 global_tested_nums*2,
                 p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
cat(paste("The probability of all the ", global_success_nums,
          "success out of all the", global_tested_nums*2,
          " tests (with p=1/19) is:", tmp))

## The probability of all the  42 success out of all the 178  tests
(with p=1/19) is: 1.85e-16
```

If still not convinced, for extremely cautious people, let's also increase the trials by 4 fold and keep the successes the same!

```
tmp <-binom.test(global_success_nums,
                 global_tested_nums*4,
                 p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
cat(paste("The probability of all the ", global_success_nums,
```

```
          "success out of all the", global_tested_nums*4,
          " tests (with p=1/19) is:", tmp))

## The probability of all the  42 success out of all the 356  tests
(with p=1/19) is: 1.15e-06
```

6 Other Evidences and Facts

In the previous two main chapters, I presented the key coding pattern based evidences and universal evidences. The other evidences and facts will be presented in this chapter. Most of this chapter presents codes as facts.

Regarding the codes presented in this chapter as **facts**, you can skip them if you like as they are not counted within the rule based 19 System presented in this book. I considered some of the codes just as *facts* and not as evidences and thus, they are not within the presented 19 System of this book but stands as additional information, which might be potentially useful in the future. You might skip the chapters with the codes as facts if you like. In this Chapter I will present some codes as **facts** that I did not consider them as evidences but designated as *facts* as I use general rules and would also like to see strong patterns to assign any coding as an evidence. However, sometimes I might be missing some other codings and these kind of facts help to discover them later and they might potentially be considered as evidences in the future. Also, sometimes some people might want to see if there is a specific relation if there is a coding in certain aspects. In such cases, some of these facts might be their answers. Also, some people might find them in the future and consider them as evidence by mistake. So, this chapter challenges them to find also meaningful rules of such codes so that they might be considered as evidences. Therefore I present some of those codes as facts here as a separate section.

There is also another potential role of such codes. As I mentioned before, the author of the fake 19 system claim, Rashad Khalifa, who manipulated the text to match the text to his made up claim and his small amount of followers today and in the future potential similar other manipulators might come up codes with similar numbers over their manipulated text. In such case, these coding facts will be available as facts that tell them that there are already interesting codes with similar text numbers in the original full text of Quran.

In the main chapters of this book, Chapter 4 and Chapter 5, I presented codes, **all** of which strongly suggest a 19 based design within the **full text** of Quran. All of those codes were bound by the general rules and also the special rules described of Chapter 4 for that chapter. As mentioned before, those codes mostly do not contain letter information and applicable to most of the common Hafs manuscripts (mushaf) texts of Quran. Because, some of the letters of some of the words might have been written differently even among

Hafs manuscripts during the course of the history. These slight differences does not change the meaning of the word but just might cause writing the words with slightly different letters. The situation is similar to the British and American English words of *colour* and *color*, respectively. Therefore, most of the codes up until now in this book, deliberately do not include letter information but mostly word information along with chapter and verse information. This assures that the codes are valid for most of the Hafs manuscripts commonly used today.

However, I also discovered appealing and, in my opinion, interesting codes that include the letter information too, which I will present in this chapter.

In this chapter, I will present codes as facts, including letters based codes that are again mainly bound by the universal rules described in Chapter 3.2.1. For each sub-chapter of this chapter, I might describe the special rules of each coding patterns, which are additional to the universal rules. Because the codes of this chapter might have their own additional special rules. The common trait of all the special codes I present in this chapter is that, all should answer meaningful questions with meaningful multiple related codings that might be part of the system although I do not include them in the presented system yet. I will also validate and provide reproducible tests for a few of the known important 19 based codes on Quran text.

For most of the codings of this chapter, in order to complete this book in a shorter time, I could not spend much time to research on the potential rules based on the codings I observed. Therefore, I classified many very interesting coding patterns as **facts** but not as codes of the 19 system. However, in the future, researchers might spend more time on them and discover meaningful rules of the codings patterns along with their related codes as a system. Therefore they are currently presented in this book as a supportive facts to the presented system.

Finally, for the reference, to the best of my knowledge, all the codes and facts presented in the Chapter 6 and its sub-chapters are first time presented to the literature in this book, and they have been hypothesized, tested and discovered by myself. If I later realize that any of them were published in any publication earlier than 2019, the first publication date of this book, then, in such a case, I surely add a citation and update the online version of this book.

6.1 Miracle of Iron as evidence

Iron, one of the most plentiful metals found on Earth, is an essential building block for life, which is required for all living things to sustain life. The number of protons in nucleus of iron is 26, which makes its atomic number 26 and thus this is a unique and universal number for iron element.

Iron is one of the names of the 114 chapters of Quran. The name of the chapter 57 is *Al-Hadid*, namely, *The Iron*. The word, *Al-Hadid*, is used in the verse with index 25 of the chapter 57. Considering the unnumbered (unindexed) Basmala verse that exists in the beginning of the chapter 57, the verse with the word, *Al-Hadid*, is the **26th** verse in chapter 57. There are already a few known miraculous evidences exist in this verse that stand so strong like an iron!

> (Quran, 57:25) Indeed, We sent Our messengers with clear proofs, and with them We sent down the Scripture and the balance ⌜of justice⌝ so that people may administer justice. And We sent down **iron** with its great might, benefits for humanity, and means for Allah to prove who ⌜is willing to⌝ stand up for Him and His messengers without seeing Him. Surely Allah is All-Powerful, Almighty.

In the following subchapters of this chapter, I will first present widely known miraculous evidences about iron in Quran. I will then present, *the new mathematical miraculous codes of iron in Quran as evidences, which I discovered on December 1, 2023 and will present for the first time in (the upgraded version of) this book to the literature*. The following subchapters presents my new discoveries about the iron in Quran: Evidence 6.1.2, Evidence 6.1.3, Evidence 6.1.4 and Fact 6.1.8.

6.1.1 Known evidences of Iron in Quran

Known evidence 1 of iron in Quran: The Abjad (geometrical) value of the Arabic word (حديد) *Hadid* (Iron) is exactly 26, which is also the atomic number of iron! Pause a moment and contemplate how likely such undeniable truths might exist in a book claimed to be from the creator of both facts.

Below is the calculation of the Abjad value of the word 'Hadid' (Iron):

```
suppressWarnings(require(gmp))
tmp <- unlist(str_split("حديد",""))
cat("Each of the letters in the word 'Hadid' (iron): ",
    tmp)

## Each of the letters in the word 'Hadid' (iron):  ح د ي د

tmp <- AbjadSeqofaWord("حديد",abjadL, abjadN2)
cat("Each of the Abjad numbers of each letter in the word
'Hadid' (iron): ",
    tmp)

## Each of the Abjad numbers of each letter in the word
'Hadid' (iron):  8 4 10 4
```

```
tmp <- AbjadSeqofaWordSumValue("حديد")
cat("The Abjad number of the word 'Hadid' (Iron) is ", tmp)

## The Abjad number of the word 'Hadid' (Iron) is  26
```

Known evidence 2 of iron in Quran: The atomic number is used to uniquely identify ordinary chemical elements. The atomic number of iron is 26. This is a universal fact and known by science literature only since the 19th century. The word *The Iron* to be at the 26th verse, including the unnumbered Basmala verse at the beginning, stands as the first miraculous and universal evidence for the claim that the author of Quran and the creator of this universe are the same. At the time of Quran's revelation by around 632, no one knew the atomic number. After around 1300 years, scientists found this universal fact.

The above two universal evidences stand as iron level strong miraculous evidences that should be sufficient to prove that Quran is from the Creator of everything, God. These miraculous evidences should convince the people with knowledge but without prejudices and arrogance against Quran.

Moreover, the chapter index of this verse also stands as further supporting fact between the unique relation of the iron and Quran. *The Abjad number of the word "The Iron" (Al-Hadid) is 57. As mentioned before, the name of chapter 57 is also The Iron*.

Below is the calculation of the Abjad value of the word 'Al-Hadid' (The Iron):

```
tmp <- AbjadSeqofaWord("الحديد",abjadL, abjadN2)
cat("Each of the Abjad numbers of each letter in the word
'Hadid' (iron): ",
    tmp)

## Each of the Abjad numbers of each letter in the word
'Hadid' (iron):  1 30 8 4 10 4

tmp <- AbjadSeqofaWordSumValue("الحديد")
cat("The Abjad number of the word 'Al-Hadid' (The-Iron) is ", tmp)

## The Abjad number of the word 'Al-Hadid' (The-Iron) is  57
```

Known evidence 3 of iron in Quran: The chapter, The Iron, is the 57th chapter of Quran and it is in the middle or the center chapter considering all the 114 chapters of Quran. It is also a new scientific knowledge of 20th century that the inner core of the planet earth is a hot, **dense ball of (mostly) iron**. More details can be read about it from this article: education.nationalgeographic.org/resource/core. So, the the facts that the middle of earth and Quran having "The Iron" is no coincidence but another miraculous truth for the ones who have no prejudice and arrogance against Quran.

Natural iron is a mixture of four stable isotopes. Another additional fact is that, the number 57 is also the number of one of the 4 four stable isotopes of iron, which is *iron-57*.

Known evidence 4 of iron in Quran: This might be a bit controversial as the science might not have fully established about how exactly the iron on earth existed. In the verse, 57:25, there is this statement: "… And We **sent down iron** with its great might, benefits for humanity …". At the time of the revelation of Quran, humanity had no knowledge that iron had already existed naturally on earth or came down by meteorites. Although, there are various theories exist currently, one information is commonly accepted as a scientific fact, which is such that some of the iron on earth was definitely came down by meteorites. Since the verse does not say "we sent down all the iron", I think, even the current limited scientific information verifies the statement of the verse. Since there was no such information that at least some iron came down to the earth by meteorites, the statement of Quran about the iron stands as another miraculous fact for the people of knowledge who have no prejudice and arrogance against Quran.

6.1.2 Entire Iron verse & atomic number of Iron: First new evidences of Iron

I have discovered additional evidences about "iron" and Quran on the date Dec 1, 2023. I have not seen them anywhere before. If I see a publication that already have them, I certainly update my book to cite them. However, to the best of my knowledge, they are all discovered by myself and first time presented to the literature in this book.

I will present each in a separate subchapter. The first new evidence is the following:

The verse of Iron, in its entirety, has further relation with the atomic number of iron, 26. Namely, when we concatenate, in the natural order, the chapter index (57), the verse index (25), the number of words in the verse (28) and the number of letters in the verse (138), we get the following big number and it is multiple of 26, which is the atomic number of iron. Here are the calculations:

> Concatenate: 57 25 28 138
>
> The coded number of the iron verse: 572528138
>
> It is multiple of 26 as follows: 572528138 / 26 = 22020313

This *suggests* that the Creator of the universe, who also created the iron is also the author of Quran, shows us these undeniable miraculous facts so that we, the people of knowledge, can contemplate and understand that the Quran is the message from God.

> Quran, 41:53 We will show them Our signs in the universe and within themselves until it becomes clear to them that this ⌜Quran⌝ is the truth. Is it not enough that your Lord is a Witness over all things?

A further interesting *fact* from this evidence is the following. The digit sum of the quotient, 22020313, is 13. This number is interesting because the word “the-iron” (Al-Hadid) is the 13th word in the iron verse, 57:25. This might or might not be a coincidence but it looked to me interesting and just shared as a fact but not as an evidence. I leave this fact for further discussion to the people to consider it as an evidence or not.

Here is the proof from Quran text:

```
x<- unQuran
tmpl <- str_split(x$text," ")
i<- 5155 # General verse index in 6348 for verse 57:25, the hadid
verse.
tmpi<- unlist(tmpl[i])
print("Each of the words in the verse of (The-Iron), 57:25: ")

## [1] "Each of the words in the verse of (The-Iron), 57:25: "

print(tmpi)

##  [1] "لقد"  "أرسلنا"  "رسلنا"  "بالبينات"  "وأنزلنا"  "معهم"
"الكتاب"  "والميزان"  "ليقوم"  "الناس"  "بالقسط"  "وأنزلنا"  [7] ##
"الحديد"  "فيه"  "بأس"  "شديد"  "ومنافع"  "للناس"  [13] ##
"وليعلم"  "الله"  "من"  "ينصره"  "ورسله"  "بالغيب"  [19] ##
"إن"  "الله"  "قوي"  "عزيز"  [25] ##"

print("The number of letters in each word in the (The-Iron) verse: ")

## [1] "The number of letters in each word in the (The-Iron) verse: "

print(nchar(tmpi))

##  [1] 3 6 5 8 7 4 6 8 5 5 6 7 6 3 3 4 6 5 6 4 2 5 5 6 2 4 3 4

print("The number of letters in the verse 57:25: ")

## [1] "The number of letters in the verse 57:25: "

print(sum(nchar(tmpi)))

## [1] 138
```

6.1.2.1 Entire Iron verse & atomic number of Iron: The number of characters per word

I also found a related code that is related to the previous evidence 6.1.2. In that code, if we keep the chapter 57 and verse 25 indexes but remove the number of words and letters and

then place the number of characters per word, then the resulting code is also multiple of 26 as below:

See Chapter 6.1.2 to see the number of characters for each of the 28 words.

The number of characters for each of the 28 words as concatenated:

365874685567633465642556243 4

We then concatenate the chapter 57 and verse 25 indexes with this big number and got the code as below:

5725365874685567633465642556243 4

This code number is also multiple of 26. Since this code is strongly related to the Evidence 6.1.2, I presented it as the subchapter of it to consider them together. Here is the test that show mod 26 of this big number is 0 and thus it is multiple of 26.

```
tmp <- "5725365874685567633465642556243 4"
as.bigz(tmp) %% 26

## Big Integer ('bigz') :
## [1] 0
```

6.1.3 Iron verse until the word Iron & atomic number of Iron: Second new evidences of Iron

There is more interesting evidence if we look at the text numbers until the word *iron* in the iron verse, 57:25. The word, "Al-Hadid" (The-Iron) is the 13th word in this verse and up until the word *The-Iron*, inclusive, there are 76 letters. When we concatenate these natural numbers in the natural order as we did in the above evidence, Evidence 6.1.2, we witness further interesting evidence as the resulting number is also multiple of the atomic number of iron, 26. Here are the calculations:

Concatenate: 57 25 13 76

The coded number of the iron verse: 57251376

It is multiple of 26 as follows: 57251376 / 26 = 2201976

This further *suggests* that the Creator of the universe, who also created the iron is also the author of Quran, shows us these undeniable miraculous facts so that we, the people of knowledge, can contemplate and understand that the Quran is the message from God.

There is further tiny interesting fact in the numbers of this evidence. The sum of those 4 numbers is also multiple of 19 as 57+25+13+76 = 171, where 171/19 = 9. By the way, the number of letters until the word, the-iron is 76 and 76/19= 4. This fact seemed to me a bit

interesting because there are 4 isotopes iron made of. The letters are also components words are made of. The matching of the 4 regarding components of iron and the word iron seemed to be worth mentioning here and again I leave it for further discussion to the people.

Below are the R codes that shows each word and their word index and letters so that readers can verify the above mentioned numbers.

```
x<- unQuran
tmpl <- str_split(x$text," ")
i<- 5155 # General verse index in 6348 for verse 57:25, the hadid
verse.
tmpi<- unlist(tmpl[i])
print("until the 13th word (The-Iron), each of the words in the verse
of , 57:25: ")

## [1] "until the 13th word (The-Iron), each of the words in the verse
of , 57:25: "

print(tmpi[1:13])

##  [1] ""معهم"  "وأنزلنا" "بالبينات"     "رسلنا"    "أرسلنا"       "لقد
"وأنزلنا"    "بالقسط"     "الناس"     "ليقوم" "والميزان"    "الكتاب" [7]  ##
الحديد" [13] ##"

print("until the 13th word (The-Iron), the number of letters in each
word in the verse: ")

## [1] "until the 13th word (The-Iron), the number of letters in each
word in the verse: "

print(nchar(tmpi[1:13]))

##  [1] 3 6 5 8 7 4 6 8 5 5 6 7 6

print(paste("The 13th word, (The-Iron): ", tmpi[13]) )

## [1] "The 13th word, (The-Iron):  الحديد"

print("The number of letters until the 13th word, including, (The-
Iron): ")

## [1] "The number of letters until the 13th word, including, (The-
Iron): "
```

```
print(sum(nchar(tmpi[1:13])))

## [1] 76
```

6.1.4 Great Evidence of Iron and Quran

In Evidence 6.1.3, we had used the number of letters until the word Iron in the verse. In this evidence, I will remove the total number of letters, 76, and replace it by placing the corresponding Abjad numbers of each of the 76 Arabic letters. We will witness that, this meaningful coding test have a 131 digits length very long number, which is not only multiple of 26 (the atomic number of iron) but also it is multiple of 26x26x26 (17576). To help you imagine how great is this code number, let me provide you the the probability of any random number being multiple of 26x26x26, which is 1/17576. Also, note that the digit sum of 17576 is also exactly 26. Below are the details of this evidence.

The coding pattern of this evidence is just like of the Evidence 6.1.3 but we replace the number of letters with the Abjad numbers of each letter until up to the word iron as follows:

> Concatenate: 57 25 13 and [Abjad numbers of each of the 76 Arabic letters.]

The resulting 131 digits length coding number, which is multiple of 26x26x26 (17576) is this:

> **572513**30100412006030501200603050121302105014006150730501407054
> 013020400126130401071503010100640130501602130100609615073050113
> 084104

This further *suggests* that the Creator of the universe, who also created the iron is also the author of Quran, shows us these undeniable miraculous facts so that we, the people of knowledge, can contemplate and understand that the Quran is the message from God.

Below are the proof to get the above number and multiplicity test:

```
x<- unQuran
tmpl <- str_split(x$text," ")
i<- 5155 # General verse index in 6348 for verse 57:25, the hadid
verse.
tmpi <- unlist(tmpl[i])
print("Each word until and including 13th word,Al-Hadid: ")

## [1] "Each word until and including 13th word,Al-Hadid: "

print(tmpi[1:13])
```

```
##  [1] ""معهم"  "وأنزلنا" "بالبينات"     "رسلنا"    "أرسلنا"        "لقد
"وأنزلنا"    "بالقسط"     "الناس"     "ليقوم" "والميزان"    "الكتاب" [7]  ##
الحديد" [13] ##"
```

```
tmp <- AbjadSeqofwordsperVerse(tmpi[1:13], rev_ = F)

print("Abjad sequence values of the Iron verse till Iron word: ")
```

```
## [1] "Abjad sequence values of the Iron verse till Iron word: "
```

```
print(tmp)
```

```
##  [1] "301004"        "12006030501"   "2006030501"
"2130210501400"
##  [5] "6150730501"    "4070540"       "1302040012"    "613040107150"
##  [9] "3010100640"    "13050160"      "2130100609"    "6150730501"
## [13] "13084104"
```

```
tmp <- paste0(tmp, collapse = "")
print("Single big number of Abjad sequence values of the Iron verse
till Iron word: ")
```

```
## [1] "Single big number of Abjad sequence values of the Iron verse
till Iron word: "
```

```
print(tmp)
```

```
## [1]
"301004120060305012006030501213021050140061507305014070540130204001261
304010715030101006401305016021301006096150730501130841 04"
```

```
# Concatenate 572513 and replace the Abjad numbers of 76 letters with
Abjads:
tmp <- paste0(572513,tmp)
print("Including indedexes, single big number of Abjad sequence values
of the Iron verse till Iron word: ")
```

```
## [1] "Including indedexes, single big number of Abjad sequence
values of the Iron verse till Iron word: "
```

```
print(tmp)
```

```
## [1]
"572513301004120060305012006030501213021050140061507305014070540130204
001261304010715030101006401305016021301006096150730501130841 04"
```

```
tmp131 <- tmp
# Test the 131 digits length number for mod 26 and see if 0.
as.bigz(tmp) %% 26

## Big Integer ('bigz') :
## [1] 0

# Test the 131 digits length number for mod 26x26x26 (17576) and see
if 0.
as.bigz(tmp) %% 17576

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the big coding number: ")

## [1] "The number of digits of the big coding number: "

print(nchar(tmp))

## [1] 131
```

The 131 digits length coding number, including indexes:

"57251330100412006030501200603050121302105014006150730501407054013020400126130401071503010100640130501602130100609615073050113084104"

You might use this big number calculator to test it yourself: goodcalculators.com/big-number-calculator/

There are also some further interesting facts with the quotients of this big number.

When we divide the 131 digits length big coding number with 26, it results 130 digits length quotient number and the digit sum of it is 588. By the way, 130 is also 26x5. Then, when we divide the 131 digits length big coding number with 26x26x26 (17576), it results 127 digits length quotient number and the digit sum of it is also 588. When I run a simulation to measure the probability of them to be equal randomly, I measure the probability as around %0.8, which is statistically sufficient small probability to consider them potentially not random.

6.1.4.1 From the first verse till the iron word, based on the Great Evidence

In Evidence 6.1.4, we had witnessed the Great Evidence of iron in Quran. This code further supports its coding pattern suggest that the same codingg pattern also exist from the first verse of Quran untill the Iron word in the Iron verse. Since the Great Evidence code of

Evidence 6.1.4 has an extremely strong coding, I hypothesized that it might be left as a *key coding pattern* and, if so, we should also see the same coding pattern from the beginning of Quran from the first verse till the iron word in the Iron verse. I tested this hypothesis and witnessed that it is also multiple of 26 considering the text type of 6348 verses of Quran. Namely, when we apply the same key coding pattern to each verse and concatenate them until the iron verse, the resulting big coding number is also multiple of 26. This means, the *key coding pattern* of the Great Evidence (Evidence 6.1.4) does not only exist from the first word of the Iron verse till the iron word but it also exist from the first word of Quran in the first verse till the iron word in the iron verse. Below is the reproducible R code to verify and witness this supporting evidence code.

```
x<- unQuran
ii <- which(x$chapter== 57 & x$verse==25)
RmHamza=T
j <- which(x$verse==0)
y <- x
tmpl <- str_split(x$text," ")

tmp <- c()
for(i in 1:length(tmpl)){
  tmpi <- unlist(tmpl[i])
  tmp <- c(tmp, paste0(AbjadSeqofwordsperVerse(tmpi,
                rev_=F, rmHamza_ = RmHamza,
                abjadL_=abjadL, abjadN_=abjadN2),
                       collapse = "" ))
}


tmp1 <- paste0(y$chapter,y$verse,y$vwords, tmp)
if(length(j) >0) tmp1[j] <- paste0(y$chapter[j],y$vwords[j], tmp[j])


tmp <- tmp1[1:(ii-1)] # until iron verse
tmp <- paste0(tmp, collapse = "")
print("Testing the mod 26 for the big coding number until iron
verse:")

## [1] "Testing the mod 26 for the big coding number until iron
verse:"

as.bigz(tmp) %% 26
```

```
## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the big coding number: ")

## [1] "The number of digits of the big coding number: "

print(nchar(tmp))

## [1] 546360

# mathematical property but test to double check.
tmp <- c(tmp1[1:(ii-1)],tmp131) # until iron word
tmp <- paste0(tmp, collapse = "")
print("Testing the mod 26 for the big coding number until iron word:")

## [1] "Testing the mod 26 for the big coding number until iron word:"

as.bigz(tmp) %% 26

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of this big coding number: ")

## [1] "The number of digits of this big coding number: "

print(nchar(tmp))

## [1] 546491
```

This code is based on the Great Evidence code presented in Evidence 6.1.4. The Great Evidence showed that the letters with Abjad numbers and the chapter and verse indexes and the number of words till the iron word was coded as multiple of 26. Even more it was multiple of 26x26x26, which is 17576. The probability of observing the Great Evidence is 1/(26x26x26), which is 1/17576. Since it was an extraordinary evidence, I hypothesized that it might be left as clue and if we look at from the beginning of Quran till the iron word. It turned out to be true as we witnessed above. Assuming we could also try the same coding in the numbered verses text type, we can roughly estimate the probability of observing this evidence as 2/(26x26x26x26) = 4.3e-06, which is 1 in 228488 trials.

The “546491” digits length coding number, including indexes:

“114260401303051302008405013020081040124130840430305200213070130401050
132130200840501302008104014340130201064013041050154110120507024611012 0

5060400701050163154501130902001913040604001001040179902001913070010501
5070404007030105401000102001304010008006270301054063011308001301050242
6040130305130200840501302008104021113040227700302013020400123012001028
0105541030304040010010502381307001050106405065021301000102610100104065
0130903015640401200710050154010508010065024126130700105010640506502401
1507301301020640115073040501002302062130160020055401061005065025816301
0207030105410405020025406163010205401304080308650261115013070010502080
2006160617030105401150700200400540140304040050700200540301106405065027
1260040040130305703010100306254067030106040705406703010129012005401000
3001656305407070012709001040281164050130501604050101006301405012130305
6213010640130160020064015402406405010502910106001470650130305613070010
5014050616401106004706501301150806054064011030070200650210128010100306
2540402008008071454013030540200800163054070700121301040240120150611020
7002650211116170011001030305403014008060461801013012008001001306115040
1508504090308650212713011505405401304080604650630205030110300702006502
1319617001100103030540140506120401140501305016010013061150640502040114
0501306080511301150540540130608051630205030110703040650214166170013010
0611307001050140506110013061140501617001600306113010300101910505401001
3061150140702040150401508504060400571065021571303051060400571025406104
0454080109100010150540107040565021611163010201307001050130040020061130
8003013052130541080401200284004003120040054064012015061405400410502171
7405003054020405003013070010160400610045012001803040118001400401863057
0052130305250620054064002002054080109003040140030110290200650218690402
2040704010805403011020037065021919162090102405013060401801059003040140
0620070462200100103703065019012705408010170015054040501309061701008700
2001304064006130305408109213020180200105022025102014130220010010600980
1290120054020304011800130540403006180105617001190030407030105401001406
1630630011303053070052260407054061290120054015013030570301020303001010
0410200221121011105113050160170246120022040130700106003010020406130700
1050405010023020403070302040400400100650222231307001037030302040130120
0800802001300161306040125016150730405013060401401801600200325405013050
0402001400200710013020408030140037030613030515041416150400404007030406
5022320615020504004080102001024040150730501703010702450180140061260620
0540504050030561470613005412040405046501303051502050400409014100105022
4138015030404008070306163050400807030618014001006113050120013040010610
0645113050160613083120051704400303020180200105022534623002001307001050
1405061670403061130901308140015030540350140040032001040504008400511301
5051200203040120071006140505140505004020052007100110013061570011307001
0200710050140501002306140061254040030012516305408010511761340952005654
0801051600130465022639150130305301106040081010150108002002405003014012

706800580401806100518014011307001050140506180107030406501505130810040 5
020025406140113070010502080200618010100630650401700112001413030525700 1
405003011080030252050010200161054102520500102001640110800302513011308 0
160100105022720130700105010501008006507054130305405027044010500110056 1
010097065040114020013030525150106903061080604650801013012008001630102 0
540130600160200650228132010804002080200650213030562050400401406140018 0
181012040500401040104002040500401081010204050040130105400200370650229 1
956130700106003010030204040180101301200800340107015004016040061013010 1
306040180606155060270604016140065622030300107030104023028617001001302 0
022030304030110205150103170308010130120080060030108051001306114003703 0
801051405010806048010516106080201304401650850506028284042065010046030 2
010013015010170304040130140070304065023115670304014401301604012030515 0
040702008005407030101304030110205801001301502106501021604015630115020 5
040040901410010502321210013061602815020301703040305011301401703040400 5
011502015040013070301040130820104023323100130101144015021054021604011 0
540803040115021540216040110540100130130401100303020401501017030401000 1
021306040161400613012008006170304040140024650640120504004040020400406 5
023413617001003050130304030110205160346130144080603461130112301060121 0
616040020220062015040501302018020010502351961003050110114401602050150 4
006763201303505620301405051200100041810500300104004016301400100200215 7
005130300320058040020650140501309001304010502361980173054011303001091 5
070505180160020035401404012015018010561003050115296127080020403027080 0
704663020408010130120080040604001002006404001701301081050237118040030 1
001014404050200252030401400804001270301051505561304006121302008104023 8
171003050115296140505134010701801401101400105020404050105410804050400 2
705411080301600680703010540630154010875065023910613070010502080200616 2
070026121101400501163010201908121305012005408010516001304650240141012 5
010160200110103017002020061507040400101304001015070404007030102040616 8
061270541016802705420406110110801200526502411861405061240115073040040 9
041001304014070204063014002065061163020180200256301400300400200612110 1
400105004050110030103016110110801400100650242863014003026061130810021 3
021930640020400406113081006150400404007030406502437611001040611309030 1
561400611307201561200207061407013020012070105024410140014020065013050 1
602130220064005060650150806020406150400404004003065013020400121803014 0
070100306502458616040070105061213090220061309030156150513020210200513 0
170301013060013007010502468130700105010900506501505404030110062002540 6
150540130105200137065024712101250101602001101030170020200615070404001 0
130400101507040400703010204061501080800304002040703010130701304010502 4
819614001006110640130140037105080607050508060300101016301101002304050 5
130080170563011066007004050517043063015401050902006502491861700503105 0

1204040501308020070650106064065020406061307070012107002865012501204061
0604008106505060120406801070030204023014050200220407090010402501061700
8020010050122040130282008015031050120406110002001005011308020070650615
0400404005090020065025112617006170450140660101200270105030103055004014
0060070040040130703304050270456150400409001304065025285004070806501705
0204040502704700302030703020404003002020065025376170014001050140660101
3020400126130802001001503070302040400540046502542761700100130406601030
1006405101100640150204090030404004015080602040214006001700204013070330
8040062611301021200102040801100400306115080602040700302040600102003020
4070504212001020408040012703010204015055613040061213020081040255156170
0100304004010140660103050506405030208400105020010130305352005801600700
4002040130901701005615040040400509002006502567500402705005012040405027
0440640020403070302040400300202006502571869003030501703010204013010004
0140615073050170301020401304050613060306102030614050910214004012007100
5012040640190030406501630205020150611508060540109003040650258206170010
0305011460030615700513010020010580203061405051810500300104004020010004
1614600306113021260341610063061895501000802003020406009110120406605071
0413040860501050259188024301307001050900304061100630110001020013070010
1001030305408015073050170301013070010509003040612003714050130604012401
2015061108060100650260286170016040060100104066010301006405801003050118
0020022709012013083200801508032004004050515005040017030020057010501100
4703040203015016040300200254020306161300200261405020071001303056301400
7050061801013012008004080604105026160617001003040040101406601030505090
2200703010970140618480147030501200220106002003305014040140050240013012
0080040502100305161005001105168064051670460516290305110013014006040024
3065013070010561450102130700105660010200152961409020018015030204040160
1304004068002002400703010540130700305613040602050562161210008002405013
0305700302021505402015061102080200650211014001303056101004003065013050
2101050210001020013081007003020240170906162015061107040046502622415013
0700105014050616130700105051461613050901200106130901210105040501405021
3030561301064013016002006704030901308180305401320054070504200254063016
0068070301054063015401087506502631561700160070050140105001100204062008
0705018061002040130962006007006140114001050120402100656170020200614018
0105307030204040040010065026413500404006301040040405027047003020803063
0180800301303057030102040620084040053020504004040501306001602001050265
1263010047030404004013070010501704004614050204080101306024008010030501
3054020650611002004560016010105026698037030501515020130130401210501041
0516401600308051640670900530304040010010502672061700100130406601030100
6405150130305101402002040150400700286121002005100130611400400600700501
5761100130170670021303051501206504050130315301050268231001306114703050

1200220102105030501401510100130150510100630150512100200530180120080063
0122020070615021050700302080180703061401400640200650269181001306114703
0501200220102105030501401306505110013015051010063015051210020059080200
1801100703065051400602001305019002001050270171001306114703050120022010
2105030501401510150130210020040030012570301050161501150300113030530405
4004650271241001301505101006301505121002005301700306304005001020013012
0080063014006010010130820050040603040530130010580105110013061130150310
4002130810080700286516401201461108070306502721061700100400304004050806
0180141200140040801051613030540600200340120504004040020400406502731180
1003050118002002652270800512070030201081010130305130406400106102001020
4011014005307030204040070100306502743750040100604001003062204040502704
7003020805102013083120051613004100606561504050130831200530401104008032
0040505130150512006150405051304011030010010080106002003405051304016150
4050513040110529405060030010513030564011303052100018030704014007040306
5027519180400940706501501064050613020406100420150802001010040505401060
4070650203014013030550040108200806505405027044017010030656540107030406
5027623617001301006113070010501405061100130611405016170016003012708005
4013010270800100130611400845006505402401804008130305703010204030108136
2040257050420022040180301400701003065027791630110703040650150130305107
0304040110602006506401107030506502781164050540140106503011070304065013
0204001213011401501061505401301109005065027924806103030307001050102040
0265013020400122110410540500401010063065057001405070504130305301030040
0200612550040501100301030180610303054040401204002400110410540661030305
4040401102060265028023610013061305040040605011305012001301110140140704
6451003014006007004004070504130305705418030501060030801303057054514040
0100630650703010130305401301400703040650281132301040502060260101056181
9400256009101040058016301020190812130501200540801051600130465028210613
0700105014050616704030611309013081400163010201908121303505540801051600
1304650283296170016007005014010500110025010160200110103030140070246501
3011303056213061304105018601501670010130100200210613010400140106130406
0120105061006306130305016086050161100104061130903015614006113072015500
4040063010400401301100301030140502040615040040407020080065028415617001
6007005014010500110020403014006080206504401204063014006002003650150806
0204040504101200204050040110020020040040615040040400300546502854950040
1504004056301400100400306501508060204064006002003650802001010014050204
0405041012005404009001520065070301054021301500406130704615061501014006
2040160120010400801465406564082004070301020401600200135401804006405065
0227080013020400126400208020065022708008040137140501080703070030204050
2040130160071080101308101513045010161064013010010140510200465013010130
0413070700126401130305210001803070401400704030650286131630102013070010

5013004002006113081015130450101213016002005803011060080807050540130707
0012630154010509020065028728630100414001050140660101302040012610080105
0140502704521302006030614001050170106010125040200104013021050140061104
5015220068130100460180203040131204020060630240130140056101508060204016
0400202200400408080200101001207002400406802001010014001004003065028810
6100130611003062501100030802303070505401303052208020054080100301030140
1106405065028926630401315402040012405070504130305409041003040140705406
2015061405010023010604008040086507030101307001050208020061803040131540
4017020080612080200612580307050513030570301013020180200105029027210604
0113004002006125150806054015010208020061240115073013030521000101150105
0730130305405080800305703010405010300140507021458021612100080027030101
0008002630302018020010507070012405105029130617001100103030540140506124
0115073013030510013061506405024011507307030105016102080200650240162001
5656130810040904100130401407054010030803040400100400306501502101130305
4050100230150205040040406405010502921163010043120404066010213021050140
0500401400600700400401307033040502704561504004090013040650293276170016
0070050140105001100204062008070501806100204013096200600700614011400105
0120402100656160407061100130616040705016709010501613002002618010100306
2540130703302208020054010030210604011014020020402511040150204015020504
0040406405010502941710030150201504003020401304120013016002005705041303
0560013090540504650130501608040040506113040640015020504004090141001050
2959630501040040506512412401100440400110410540613030570301040213090013
0401050296256304003450540182009013050160703010810156405013070010501300
2002061106418454030610704020013080605056401562407878540501307070012150
1070402006130305290102002401107040306502971810030405020150704613032200
1030801505507305703010100302202170050130305409041001304012105010410565
4106230020010303040640501050298124050201507046130305640301102040056200
6030563220010306401020130801501303057046303020180200105029910630100415
0730501130102011014002105014006401102080200251130113080160100650210010
1620304017015461705415027005802001010040505402301205002005403011064050
6502101226304013154020060630405070504130305409041003040140705405027008
0200101004050130700105016400611302040012204001213030562001900562005402
0150540301107030406502102746140027061401400400306130300101910507030104
0302060301040150640120802006030104015063020501303001019105020802006110
7030406501305016013060820064011507307030101304030201050221230512006400
6401200640064011070304015040501848400101010063011504015085080400505803
0140020802008010400703040650405054014011080200100650252105013040200676
3564015402800120010502540501841301217005013030561040070304065040110800
2005406301105080705406301004703040613040501300400200154013058010130160
0200540506003011006302106040130020061251508060540306201506110703040650

2103126306150540140506161400100613040500625405070504130305600102003062
0150611070304065021041310111051130700105014050613014001006306120017050
1610063061150900200501616040706163030201802001050707001213010402105254
0110641307001050208020061405015301302040012630113040300200201050150105
0730703010204040506001020040502002204061303051060040090220084040054050
1030016130305700613080800301307090010402106194015050606004050110516505
0605150140026001020040505116405003051130404007030401501303057030102030
3001010041020021071713040400703040150130305305403020130604016140061301
2008006401302040405046501303054050630106301509010200210818140400200104
6501504006013061200606302040204016010304066010405010023064050104002430
1302080200213011040150801004800306061130602103021093364205001020040501
5301302040012306102004650204040502704110401502040208012001860414050705
0415080605404050270440140021050305401308100801708061619080861840010101
4001013030521402005150130305703010203030010100410200211017611001040611
3090301561400611307201564014001004406130150806020404050600102004003465
7050413030515013030524014007040306502901020021111861001306130501046003
0130350513014050201505641165090120010400302014015010540100305140061220
0515020401502050400409014100105021121723010405016030406355303056564086
0508030513200570504200256301600680703010540630154010875065021133161001
3040013010564301060400130509012001070301030010610013040013050901200103
0106040013010564703010300106540104003065013020400122070030201001301307
0010503011070304065040500301006305408013030510820402105054010640130100
1014058010401201506180105106004003080650211430640501900304040405040507
0406013413030515010700202008010511604056607010801060020012511630102040
1201503054015010460030651130160011080105030540801013045010160071063054
0801013016002005707001270900104021151263030513040300200100613040100020
0280110504014006306180500406351303051501303056160707030104021161461001
3061140060070013030563041602815052303054018010130604016140061301200800
2030305100150400650211711241070130604016140061301200800617001100800101
4020018015040110100630305205080102065021182461001301307001050301107030
4065030630110203040501130305164001400105011105207003020100130130700105
0405010023054040500301006305404003001254001003062540100421050113011014
0030100640106100506502119101501120060305012021308100230010200165070010
2001630140060130705019081213038104021203163050400200800107050201301056
4630113050901200108400104004002704030400540100301505410130305561305410
6301050140027040015615402704130700103120405013070304040130204050130305
4050630106301509010200212115130700105014001050154013020400121040030650
5810040030164005163010201064050650256405010208020025801630102054013060
0160200650212212101250101602001101030170020200615070404001013040010150
7040400703010204061501080800304002040703010130701304010502123186140010

0611064013014003710508060705050806030010101630110100230405051704306301
4005080705130080170563015401050902006502124196170012400301012200151040
2002522030401400801400405501001301501031703020303050160140140110013064
0507002001040010100130301105013070541013090013040105021252261700370305
0113021040040500125303050160614050161400600700614050401001401220015104
0409030106705450113010122001510406160401701030150952001210400103030911
0801050613070120801050613020020701306036421263061700100130122001510402
0021370305700123041140501612007100153054050130500402001400405014050405
0540213030561301064013016002001001306405020802008014040070510030103015
0040180092005130107070012130501200621060130409010200212714617001020080
7012200151040130100617044050130210400616040170103020025014001002304050
1150201504001306040107013070301040212817200250161370305014060304010503
0206405070020010400501140540603040530206120050140501602050164002703010
5011502015040013040061213020081040212916200250161270500801054020060630
1405054010400306703010540110140020610703040540130204001261308204056107
2010540150201504001307071071308201040213018640501020010002705040305122
0015104013014050608055080605630100419098010501580101304501016150580101
3016002005304050130901308105021319170010013030520025160304010013016030
4040030200213070130401050213217669010251122001510402501056107010062101
2501015013030519098010302040130410508030140040640050130161504004040603
0406502133271402050400403005411700880020010701006213040640017001001303
0250105401400702465040502704101001306150702413052061305121102012200151
0406160401701030616081100130516184165085030540603040650213415400302014
0510046003040030514012060240063020404012060240040630140060130650704012
0150611070403065021351561001306120650615641165090120010400540046110030
2304030512200151040850108016401201504050130403002002010502136311006306
1140501213030564011507301301050164011507301301012200151040616040170103
0616081100610701006261301602196401164001040660106701060106401164001013
0502106504050200254030150802001002105018440505406508503054060304065021
3719801501405061240500304011405040040258010041540046161504006306180150
4015408010300100110080601020801020540130305656130604010701307030104021
3810902100051303056405018605040501303059021000565085030570124650213914
1003014008136505018010130305656200250162002204063050117040130501630204
0170401302040650850305406003090650214030140400100630650150122001510406
1604017010306160811006107010062613016021920150615641165090120010100301
1504004017030401401303056405019003040404050204004030051457050454050130
3056401130305210001803070401400704030650214115400302014051004600304003
0514012060240063020404012060240040630140060130650704012015061107040306
5021422160101006301306080514050130501604016301540705010023040054013040
0102015061703010511003030305130403002001006130401000200210541040501030

0113010902001940604001001040214345620700302037030501204014056609130400
2065061300541703010130501606102065013020060630703010204030051041640137
0305011301002305130400102050400703010511301305070304040501040027013020
0606304040501050100302703010701002105615020150400302021020051301703010
1307001050541013030564012015013030530108001070110401502040150130305213
0501603020068020081040214434100450200104001003026352080101306040180305
0630105020100230540020080015180630635203009200130406034130820014068105
0040120504004080630616365204030092005615013070010501640061130204001230
1070304065015051308100405020025406401130305210001803070401107040306502
1453263010501400104001307001050164006113020400122203011054014002706110
0230400206401150400240012701002304005406401270800540240012701002305270
8006301050140027040015615404050270440131204050130703040150201700130405
0130900130401050214614130700105014001050154013020400121070200806505204
0110702008065012501540615080200101001405054030102040040650130810065401
0703040650214771308100405020022080301400206505040501304040400200105021
4819630203063555640630105180160400210061130600102001400110504014002065
0611014002204013030534010701150130305703010203030010100410200214917640
5081050060020034008063063520300920013040603413082001406150530308100405
0200220640113030521000180307040140070403065021503164050810500600200340
0806306352030092001304060341308200140681050040120504004080630616365204
0300920053010301102065030305016070301020408351301130700105090030406140
5054080301400600300654061600300650106301400405070404001070301020406307
0302040400540046502151172040112006030501801020402006063014050204010400
3067030102040110140050161072010204061070304020401302040012613082040561
0703040204040130404002065061400703040650215268017002020065010170020200
2040613002020061301063014002080200650215311101110511307001050140506116
0400701050612130902200613090301515013030540701309012200105021541363014
0010063061304050101004003080106021030130305140614002301810163020503014
0030070200650215512630502306502040230010405013060068061303670650100904
0501301406130613015080606130500402001400623002001309012200105021561013
0700105017001190124005404090102510013061150130305615011301052001370650
2157916301020703010540903061400405020025406200840561630102054013040540
0465021582415013090801613040200654050300701102001303058040508313021040
0161704004020080301350187030105150109680254016405040096706001020018015
0130305300120200703010402159201501307001050102040040650401150730501405
0130210501400613054104050270440121050153030501608010130204001216301020
1030705054013030561030705054013030170506502160111301130700105040012616
1903086162105061801630102014006270301054061501130400612130200810402161
1315013070010502080200616401400616540208012001630102070301054030705051
3030561304030110205613050160134070105021629600130410508010513011060080

807050540130707001263015401050900200650216396130520401305618430113051 3
015613020084050130200810402164431508010600301001306040161400613012008 0
061600400301801303010306130505120061308030201304001040032001080101302 8
200240110508070130501606401150730130305405013060401405040180181012513 0
120080027044064005162500801051405020304125640090200108013020010186130 6
081213040606002002105013060401613012008003011014003010064010701003065 0
216531640501305016040501040060070040504650130305150414110826505402082 1
303056130700105014050611300482130305630610200101307001050900304061170 0
102006501307070012150130100653030534010701615013030530041041307070012 2
166121700400220011307001050140027061405013070010501400270616200161130 7
070012640010097040025401301602122167236100130130700105014002706130615 0
305012020058050400220014050540204014002200614050120700302010200105401 3
030517040130540860200140070301054064015402600120031050405013050120021 6
817101110511305016020306140401801013012008008301301910216301400400270 6
160096140013030010915015053020407046402105021691115040110140200204021 3
060661308083001615040010063061703010130305401301400703040650217022617 0
011001030305401400270614011507301303051001306123050400270401130801050 1
703010512150116306201501216540301107010030650300101016301105400465021 7
118640500301307001050208020061204050030130700101050701002401301106040 7
013014701650419040220407040108054030110701003065021721510111051130700 1
050140506120306140509102140040120071005012040613002020061303051502050 4
004011015400702465021732515040182004070301020401304010400561304406308 4
013060050710200640115302530100010200130305804050180092001000102002110 0
063017014803011500407030105150130305100080620020081040217429150130700 1
050102040040650401150730130305405013020400126103004002006502550040501 1
003010301163010204011012030650801029650540130113050120063011020304054 0
130305106401301001014056301107201054063054070700121301040217511163010 2
013070010501300400200611308003013052130541061307070012213040100080200 5
804011902200540703010130501200217614700302021501303055073013020400122 1
308100615013070010501600400308061801013020400123080103001001100270104 2
177513010601302200150400630616365204010023013040300200100613040100020 0
263020501302200405014050213030561301064013016002006130403011020561302 0
400126130502101050614001013040130703010825700610130100200210613010400 1
401061304060120105061250130602103061306011030105068010130200100126110 0
140130903015614001013072015613040680650270545401700170154616130901220 0
105080101302160161308002001681050130216016301020130700105090410061616 3
010205401304040010065021783810111051130700105014050612040027030102040 1
301009019080101301004003010130820021308200613070242130702461301505001 0
213015050010804050708010305405016001053001080140021702130407020068061 4
113010521860150700302040060080108040502002204062008405804050170400410 2

7047003020803057070012130104021799630204080101301009019081015101163010
1301302123070302040400400100650218016204002703010204017001880020018420
4013040640015040020020600102001130690105303061304105061301100200210502
1304070200680810017030101304040010010502181138040502430527044016040705
8015040115004057030101307001050102430650515013030560401070703010402182
1680405060018040504069035080116150040180190308210505408030115004070301
0515013030510008062002008104021831510111051130700105014050612040027030
1020401309010140204012040027030101307001050405010023020403070302040400
4001006502184321101401407046414008040502015040502040402001080011670301
0608020080704540501101401600200670301013070010501091010065058041059701
4040602010508040504009670600102001805660010200305615040090640616001020
0302040150205040040400703040650218544300520020040800150130700101507308
0105130100200150541030305016062105014004050130541061308020010015080405
0300544050204013030052008030109040564050201504020010800116703010608020
0807045405011014016002001020010413030522040130106020063011020010422040
1307060200630400204030611307045630400202200611303057030104015412040630
7030204040030020200650218617617001601302070214107050108015010100200102
1310247065130417017001470150803010604003102613010630106405061210307030
5401020030046502187651830302040301030513090101401302008050013010506011
0204055030216030204061504004030216030550703040130305150204020504004040
0600400150650150806020408040012703010204067080170502040801301502130020
0655061240010006140120400213030530204062030616130020026184001010400210
5030204013060010913012108004050130600109130160644050130803200500401400
4061130901014013010130301030630140021300200655061504004070120806508010
1304060134400302084641303058030140010020026512070030201021050130305110
1400530305016030703054010400100650218817630140012030611406130204021050
2040213021930640043061251130101308201403040012030618020010100140501406
1301305016021301500406150400404007030406502189271060130650207050130153
0510030510406110010400303050160613083630106013022002150400140061130210
6400405090056200516302050130220040501400100106140061130210640040501261
2516140010061130305307030204040080308650219013610014003061801060210301
3030513070010501010014003065020406301400704004611501303053011082130407
0400410502191256110040030654081050050010080400406540616002003654040508
1050016002003620406130804005051300440501301004003063014001001400306540
7050413040603413082001408400101010014003062040801058015010014003062040
8011004003065402070030203711302018020010502192680150150400561801501303
0510008062002008104021931561001400306540840010301400206508040050561020
6501304105030305801501504005618030170461501301703010130900130401050219
4221303005200130820014021303005200130820014061308200401400100901908040
5017040041070301020408017040046170301052405003040117040041070301020406

1400100611303056170304061150130305407013040400100105021951461508010061
8010602103013030563014003010061211041020401301013040053020561860506115
0130305108213040860501050219673614004061130836130704020053030580150189
0200400408040116040010602004050130541063014008301006120066020408400101
0230100013054104083058040502015040502040402001080011625170010405020016
0580804105405090101401690410051650602080170011405040040804050400404007
0213070402005130101308380401160400106020040501305410804050304010348090
1014050030150051101408010130836602705170012003704004040030207030020052
0140305700302030405030401020501530581800200101304060341308200140614001
0061130305617030406115013030530041041307010012219730130831300520040703
0640140080405080200800801055013083803012008050063018060610063013413080
1013083640140080703061405060010200107030405130305640076461801506001020
0130714130400100610614001006501011630101301302122198263010607030102040
3501815040024001000618080030140502002204080170011808004004040507020080
1400801700202006113030570504130403007020013082001406170020200652040154
1204061502050400404050100230530405013080013010502199125004018010800614
0508105001801800130501606160400100080200611303051501303051000806200200
8104022002480170011008001040040405016020204080170020200611303052070020
2002040121204016130047002020018040501305016040501010063020025011400501
8010130450101640130580101301600200540506003011002201146405054040501010
0630200250114005018010130450101860505680101301600200586050561005017070
0121305012002202816301020305405090102404012060261613030560200107013086
0122203256170020200611303058010110140407046414008040504007033080101064
0105080301150040703010564050400160020080301150040703010530405014001001
0614001006113030561703040611502040130105400830020065022041764050130501
6040501070322010063058010130810151304501016103005413030570301040180101
0030256561304130600901402205146170014006301060701080101301200800301080
6048010516105302013082005006130506030613030530110821308060142206126170
0110010303051400100130305160070040051307075213015004080860253550406302
1060130405142207116405013050160405010300200105080605124001000140200800
1400130305613030520068021307021422081610111051130700105014050611460030
6180101306030402018056301400400270616009614001303001091501505302040704
6402105022091280150730304004040502704401314002040130210501400801703040
6115013030570710782010402210175301050900200650130115010140010540130305
8010900303040501301000401406130403011020561008001013014020061301013030
5400200370130140620022112060302501016020011010302040140010501540405011
0521050564050102430507040513030540502704401314005801501303053004104130
7010012221220710503030700105020802006113081015130450101610606002006504
0501307001050140506161307001050140010061806100540106401301001014056130
3051020071004050103001210001020086012221349201501305016014056184580270

5001303051305021010504023002001050640507002001050615073040705401302040
0122130810030108204021050130501608010401160040030806180105640116004003
0808010513011307001050164006540502704401314005401302105014002100010121
0505408054101303051307001050140506130401160040030806180105405013081002
1700505613030510541040501030011301090200194060400100104022143014086024
0040150400460030611303505630401101400204040500301307001050600306140501
0023020404060400540130216016130800200167307306184001010100630130200606
3061307001050140506140705404001050902001303051301150509020013030510020
0102221522106013065020401700110508010065010030401150801004004040506001
0200803030613041050613011002002105061301040014010613040601201050612501
3060210306401400807030614050600102008015013030525703010402216252040027
0301020401301004001306562020053020406706010150400202005613001010165660
0102003020406706010150400826130010101656300200302040613030510703040615
0400403014007030406502217571060130650207050130300520013082001401004001
3080105100301004001308010520210200690470506021030130305620802002561304
0603413082001406160020013153054050512022007050413030561308040050512022
0040501301004003063011071306501010014003065020408400101020046204070504
1050204015016040091706164050102004004440502040705041050580104040065620
1802008016301020829400170401305408010130450101613016002005616301020190
8121305012005408010516001304650221816150130700105014050616130700105051
3200616315461801060210301303051630102010200365020084040013030561303051
0008062002008104022192610601306502070501306004020061304010602001003080
1054011500402021020064050180703030501606150040540112022004050508070540
1610601306502040170011050801006501003013070806207003020102105013030530
2040130110140030703020404004008020200650222026801013045010161301600200
5610601306502070501301040014010100301903018305406001020061504006001309
6540801600615020406130305107030401304080604405013040903086306300113030
5301705040020401501303057071078201040222139630140050208611304030020020
1400840010106405063014054064050560010200405040300200205630617032400204
0630140050208611304030020020105084001010640506163070244064050600102004
0504030020020630617032204016301020104706501301013050120061303051047061
3010130350561304010008020052170050561021050110140053030501603070305401
0400700202006502222276106013065020705013040810800100305617001080170400
7306113050601801013040810800630140010020026550840010109520050801700140
0952005080140065504050810500140200204013030515013030510821304006121050
6108213040400952001050222316506016204082005003020408014006182005002040
1501030010400406100440613015080602040614001006113030561703040611502040
4030110065623002001304064050105022241463014003703061130305702008005301
1040150204015040022006164004001006164009030861210501305016061303056040
1070703010402225143011061600700204013030521303010006801011040150204063

020501061600700204024012060240010030622040613030510008062008301040222 6
133030700105010630650405050601105404002002901200270513005200801508016 1
801501303051000806200200810402227761507074061130930110080150130305604 0
107070301040222840613040930100140010400200290502150806055050030150051 0
020066301108303055015010204004050401600301001303058010120081405501502 0
501064050213030561301064013016002006270630400550181002200455080107003 0
201501200146119030181630550405003013070010703010550213040702006806303 0
200313070301055042003561303057071078201040222946130930110040200400150 8
014060120240702006801640060200108218601506301108303020401504001600700 6
140401140010400406550300101011301150106001801130110100104018464130305 8
015060080400401301101001040184641303058030135018703010540180104011804 0
044002540030208464130305803014007040046516405010400704846413030580163 0
102054013090013040650223030801509301005180301400830305405027048400104 0
050208763110001020058015093010051803013501870301054011501040020013701 1
509005011501010010401846413030564003020846413030510210505130100640107 0
304065022314561700193010040040130506018023010005013305508014060206550 2
407020068016602008655024070200680630140040602065508002001200130400704 0
046164050108070307003020801004900304050806056301400400600700611101400 1
303055761617002020061507040400130305703010204064011507307030102040405 0
130204001261308204051070900204025614001006113030561703040611501303052 2
030300107030104022323361700193010040040130506018023010005013305508030 1
400708003065501501050208501761355017001400200180061210505402130407020 0
680700302010670900254050201504050204010640502130305613010640130160020 0
700302040172010302040619520061303051070304061504004030140070304065022 3
364613061304140010200800705016301455086301050201403010503040501200141 5
010400401302008001705670301013040630643052007100550620606400550213040 7
020068030140020308050806013016607051301400800120061304526304516301406 3
064305263045670301013061200500405003070030208015012001418090130170504 0
020018004050540164003001620080301350187030105401615012004400401504006 0
400200800706116301420408030135018703010204017001603040400404011400104 0
040213040702006806140010061130305617030406115013030524014007040306502 9
010200223425613070010501040068065040502040610700200650176131104002002 9
050215080605501200270513005200670300200180170012301000501330550803013 5
018703010204080104018070305080101508060550213040702006806130305240140 0
704030650600210200223547630135018703010204080104017020080040040254050 6
009251305060116120505040040801015080602040703040130305150204060400700 2
020065055063020503014006170465506020011301150400100630611006301407020 0
680163014007074061701004513050201884001010230100013020400121330561703 0
406115013030510703040401801015080602040801870020065617030406115013030 5
100080620083010402236253013501870301020401509301004004013050601401304 0

4004060655016400802008006130550802001080056404007065507030101304066070
1004200567030101304010040020010042005404001701213040702006808100170301
0130408605010502237356150930100400406550405010023015040040606550610048
0200800400403055080200108005805090804018020080040040130115010708065016
1070806130700102104570100451305020186150400708061110020023030400100610
6301400506061130808003021050204015013030524014007040306502901020022388
8180900617030101309030614006130903015130660910610064061303051001504001
0502239158015060080400408020031301162002021501801700114050400408017002
0200611303052040170304020404013040400206506140070304065022402761307001
0501040068065040502040610700200650176131690105301761354040400170113010
1308630100010200160020013801506002003508030135018703010204080104018070
3050801015080605504050407020068061303057071078201040224166303040930100
1400404001702130407020068081001703010130404001001050224272070030201021
0501303053020401101400530703020404007010030650224328130404002001301013
0700105060020036140504101200540654013068087002001304064008010013030540
1303054064006150040181015401501303053070068080030703010130501606302050
1205002001305016030110300202006502244961001400306180106021030130305617
0304061150130305604010707030104022451640507001130700101010020080013030
5100200800186050180108001708053051800701801205001020056130305101002800
6102609613010540020037065022465413040400200130101304030140502501016020
0110103040502704406601017001001306130502103054012705003050140302015010
0140030801060210301303051001305307060104004015020400270301020401301004
0013013014001001400306110013061640130501130150100140030801060210301303
0561004160020035014050410120050161250110501803040120400270301054013010
0400130400630611301100301030140505406130305703010402130900130401050224
7436100130305405021054015013030510042705003020409130640040302011001306
1150101020650305130403020703010501650850181002130403020405056304010640
0607054050130401301001301501303051909801570301020406714526095801013070
3040613036040613030510640010403020540501030016130305616070703010402248
3061001303054050210540150110540302051501014001020401304001264008010560
2010505405020022040621001054040140020020130406601061305120065040084030
5130403011020515080107003020301105302040150205040040406405010502249608
0304018090309130640021303506410013015013030540240030102040250520080405
0300200240505803010604050106405030401097040580150540501013014050110004
0020080100020080521045803002002614050513011003010301405054080304013167
5566130700105014050614070510013061301911005305011301064023130640063506
4510013013070010501090050650150540403011006130305204040508010510030103
0510003024008010520500102005217005013030561303054070130901220010502250
1563040122007613031306400635064510013061200250118020010007030105019022
0016500240011004140501615090200501703010130100640130201802001050225127

8057406540217005013030561004003041664313064006140015130305130403020613
0820405670304054040110300163063014807013030513050160270800540227080030
8060440013012008006302050130305700680800307030101307013040105022529400
3020110140013030550400306517030102021308100615020304050130402006030105
0225352400302013020060308080030501270800540703010270800405054040502030
4013030562008070270800540420031400614001050170106010125040200104013021
0501400611045015220068130100460630630011303054011100400400301307001050
4050270454040502704401314005401302105014006302050160040030806180405054
0405014050640505404050208020063063001130305401110040040030616302050130
3051080703040110200104225422101110511307001050140506115080100614040120
0710050120404050100230150101400101064030121070801056301600305630130080
1705613020180200650540130900130406502255501303053011305130156130810130
1001064030140016007005605056301506403054018010130604016140064018010130
1200800405070011307001010300807070504513012170050510703040401210501104
1054064016003080540630110810965023001040507030405130124013001660702020
0601051306040161400613012008006301101064588090054016561307030101307090
0104022562430112020015801013041050100440021050130200300440501301000108
0405010208020021309110006400610640502130305801004160400406020213070200
6513065001001030115080901403051613030560401070703010402257241303056301
0130700105014050611060020035404050130900304014001301013050620061307001
0502080200611630101654013091100064001060020036505404050130506200130101
3090030401400163010201908121305012005408010516001304650225843130404002
0013010130700108131220015104080102002515014001513030513040302017001001
3012200151040200210130700101081010610401040010013015011810106140104001
0013012200151040801501303051014001021303004060405013040300200100801400
2514050130401000200280254001307001020802006130305301105410130100640130
9001304010502259671620130700104020070301010020010565106001610570301070
2006300511001301501010810105700513030527044064005180140140051303054011
0570140500402705005100130204030250040010013030250040010640116270800106
4010013023030250040040110570140801509002001301097014020630020012203040
1040060505615090020013010840120020630503703020110530305016061509002001
3010130709001402010805050300751500405020606513084018030401400210503051
0013017030401501303057030102030300101004102002260396170010013012200151
0402002120050102010804008101013040640010100130163040400640501001302301
0630205030109401050100302101001308060070012002705405013091020080902005
5013010205004013703070301020303230405055037150040147055010140010502060
7010161703040150130305707107820104022612440500301307001050105080100650
1406130540801060210301303052040500308251502400400602706050123080102030
6050230540110582561303051080017080304050103001613030561607070301040226
2241307001050105080100650140613054080106021030130305500403011040027065

0401150801006140501630117001030540132005407050420025406301600680703010
5406301540108750650226311100630407020068064010008020056001020040509041
0051040027051170010613030510005010830104022643910111051130700105014050
6130140029306190410014002040213040506130170010201307001010508010040130
5200101130501606301106405021303056130106401301600200804050030520405003
0908061507030105400200128019012561230804002002059030413011010042006507
0301030010404012060261613030530110541013010064013020180200105022652764
0500301307001050105080100650140613054012400100014020080014001303056400
5002104001405015080605402040500303505220026519012516123080140040012030
5180070801050801503040109025161230809306130305240140070403065029010200
2266351106418420401504002065030535054050506001030617050124003200104050
4008400511301505120030580105140502030130500402001400619012513020220063
0570020010580070801801901251170901200801055012008018400200100400207003
0201021050130305302040130110140030703020404004008020200650226730101110
5113070010501405061150801006140509102140040120602400406404011600200350
1302040405013012008006301400104040611306002105004050540050801006506306
0400402160070010513011504001000408006180105617030406115013030510005010
8401042268131303001091501070420401308010020061014020020402130808300161
3030510704204040100080200540505680800301613030561607070301040226916106
4001013082040540501030016405010640013082040580100416400106001020012050
0102001640110700202001301163061301302122270156401150801004004040505080
1005165070020040040405050700200801501303051070304056401303090013040105
0405015090120022712015040024611309041001400805070401510615040060080651
6400640065113080100200180566001020030204061020802007050204040506010101
4002040613030524014007040306506002102002272283010607030102054154063020
5013030510541040501030016401400508010061405060010200803015080602040640
1400508010065013011240010001635130305640140050801006140506001020010680
1301020406150400403014009003040650227330303080100200113070010501890200
6180106021030130305301106040091070650800200218010130120080010860254013
0315301100050101405013040070808040070200805402601040154030110601306501
3050160130818016401400508010061405060010200801501303052570301040227417
1307001050105080100650140613054021303010306130505120060200167030150105
8030540132005407050420025406301600680703010540630154010875065022754513
0700105010120306501302002130110100640650130120401101006401307001010400
6002951303001091504050130406070030202150540100130611504011302107040500
3013020021618301303051302107068200401302002180405031540670900540502002
5801504005108030540160308061402005130101303056405070148016301020190812
1305012005408010516001304650227611104081001303051302002161020021013090
4100140061303053011082203020801200150010402277191501307001050140506167
0403061130901308140061100140611309030156140061130720153054013200540705

0420025406301600680703010540630154010875065022781410111051130700105014
0506114001006113030567002006140121001040501302002115020504004040640501
0502279178015030404008070306180170050612820024050130305620060630561504
0024004080302040200660140613020403014009003040650630140090030406502280
1461502015070067060200580509002005130104010602005615040090410061600102
0030204015020504004040070304065022811561400100611064014002003706508010
5130101303055004040068010203050806040120602400654030110900304065022821
2910111051130700105014050611700140041105040040241050130101330406040108
0120400265630102040022105020402014002213070430630110122014002150102040
0220401703040513030580301020400263010403030130700107030105130810063010
4001001303052002563011026006040505300101018015020150130700107030105130
8100608010511680070108011630110604009107015010403056803010403030630105
2130704306160400300546130051041050405020031302040801503040102065012003
3010508020033061402001400150404050400200800650405013030054115040080030
1841540180400700202001841540113016002001063011012130300541170014014706
1630140060140611504002040026590100010200116202102001130101330570030204
0110060970504130305611006403030300514561450101301400200400126113011504
0020650400312005818002005400410200650512105020408030106070301020403501
8130140020400265161300546117001400211070400406301108001200201400263013
0051046150400807030618015058060610022040614001006113030561070304020401
3030561303052203030010703010402283326150205040040703010608020063040400
3461201400218020051504010026800580150140502708002040270800180301064130
7001016400405014015040056301040010013030520025630140020400406113030051
4564050102040040518015051500401003025613030524014007040306507030104022
8428303054018010130604016140064018010130120080061504002461401801015080
6020401640060080651081602204025130305801010008020030405010300161070700
2405010300161303057030102030300101004102002285271405013020060630240115
0730130105405020025613040640506502030140502130305640301102040056204002
5620060305301508020010021050184405020060305610013061604070501619705011
0008020015020200250161301020130409010200228649301102030801303055080601
1301660705130514012060240067030105140112040060240020025013014006160070
0501150506010501161600915012002501630140084030703010501190200120401840
3040057030101307001050405010023050120025016301400840305014013019110053
0501256170807050161100080200305016120084050115040040630150180150902005
0170301013010064013020180200105034260401303051302008405013020081040311
1304032713030530113051301561308101301001064033115073070301020130204001
2213081004090410013040121050104105615073013040062001561301503103034184
0501002305410303050160615073013080200100150150130700105020802006121101
4001303053054070700123004104613030570710770061504001001403511150130305
3011060080107030105300108010130120080063018010130604013613561307001010

9062002040801013012008140201080103001301130513015613070710713082010403
7465613070010150730703010201302040012405051101400408204014005501401302
0400126160020040400300125140080140113070010508010100306254071010008010
4002706504014003001254050512400100011308040050561240010001400161030564
0110703040400161030513011303056130200160600650801013070304010100630650
1405012520304050705042002501640110700202001301163061301302123815200250
1301400710001003062501270417005410400501652305014050304502020084051502
0150400130651239132002501150203140701305016030106403012001028010515013
0305301106003080130401070143101615013070010502080200613050400100050107
0505401406130540630116301454040501303053001010161630102054061006413050
1200311142041213080200706506130700105040501002305402070026121101400501
8016007005401303052700506254061303053004104130701001231291003030307001
0502080200616040010003026506400830020065013010355040621060130405143132
9100420150302040110580108010400105013040010040018010540010014003080106
0210301303056160020010201802005102006505404050030105402001101307010506
1303051061042509020054050103001150801070030203070220053016301013012901
2003142471050303050160821303005614004050130506016130250105061301005019
1020013040100509200540501307005261308080056130600103013040606405613015
0701406130820050070030204040017013081015130450101613030570504586050130
4012315241003016502102040260010200405070030204030307001050140010061705
0420025403501400400320010405040084005113015051200600130410508010516176
1340952005620080061504050130305613030529010200213070214316111307001050
1010063065020025011505011405018011000802003050170050625016100501707001
2130501200317613090122001050613090141001050613010015040010506130405080
1001050613040604001000802001050213016081200318183005413030515053011305
1301566130403011020561630613070304010011040121301006093011305130156130
7071071308201040319261501304105070504130305130160301406401160040030801
3070010501640061130204001213014050270440131540130703040210001012105054
0640501020802002110140013030580150130305602001070130860123202680150813
6208010030160304040063510303056405014002705061003030307001050164006113
0204001261301401010501160304040040801501603040618010041540046161504006
3061801504017030102013023011000613030529010200213070214321181501307001
0501020802006502110140013030561010040030650130502101050210001020081006
1010040030650130700105010140200650213010060940501305016080230020054027
0700121301040322111630102013070010508294001704013054080101304501016130
1600200564013054040505019020010503232013040400200130101307001050164006
1509010214050130204001210470650130102040012130305301082040210505405004
0104006301080200101004050540654040702008006503241570030202150540100130
6130504004060501130501200130111014014070464140061000200540801041050540
4012015061108040020065032515802010801700134070501540301064030120010280

1056680104002030508060401206024006540301109003040650326251003013030540
4013020130403020400640010130403020405040030016400507701304030204040504
0030016400707405040030016400700304050400300121042013060010200150207030
1020303001010041020032721400630313030103080101305051200640063031305051
2008010130301030640060020031308104050130401040064006002003130401040040
5013081064002007100405040030012100010200860123282730110400600700130406
4050650130201802001050163010140504650130406405010506405010807030700302
0803010604050130305801030010130115040040010061405054040010015610870020
0204013030550806056130101303051304090102003292210030150400600806140180
1090462002040164002465107030405130305610703040401801013060401614006401
8010130120080061303057030102030300101004102003302610640400342030508060
4017040304004050600102004088002001640170403040040506064006430615021050
5162105051404127010416108700200204013030550806056130305200680213070214
3311410030150205040040400826501303058014002706501010822204013030561010
0080200302040700506220406130305100080620020081040332111003019107061130
3056130200606308015040063061801501303053011082130201802001050333111501
3030519098010144065068161301220015104061307040200150703010130701304010
5033477002001052708005140502708006130305604010707030104033518170010013
0400140200140070402001502002150105070020040030204018010295010408200200
1804001002304050101502015040013060401070130703010403362480304016800704
0051100130400200215010680070400511505001061303051703040240168007040063
0106013070020200201301505001061501060401040051402001040615010170107005
1220670020010400514050130300109150130200310403373580400100230512002512
1002630860506150240051502140018605016208030517202001012030401460030703
0105172020010113040820012634705045120071001100130101402001040150103020
5700110013040056405070504130305150130305102007100405010300121000102008
6012338155501302047017202001012002510013020025230104050304502070020010
5910251502060401070130470133920805014400513040301102056561001104010903
0108010130408200121501303051023002002021081010409041001220304054050130
3056601041689062001650210140501309013081050340171001302002150101020650
3010100030140610042301000501013020220061402001400107011002001001302070
0302013030510807030401103001341201001302002137030301011051001301104002
0130140020304013050160500301500511014013012004071617002020020022020500
1020016602821307030010613012201200342136170010013040013040301102051014
0200104015013030519098012069520020619098012070301050601130701304010503
4381014020010401100504001030200220616034106120020701040701302001207010
5034420700302040501502113010001025068105130102064012050400304105401700
1030100650110030140540110540102080304020010406401205040030410540170010
6004009040650345211700100130400130403011020510140200104015013030510230
0200202203040540505160405130406010870106010125040200104063105180101304

5010161301600200564050130401002002105034676102030401305016080101304054
6205301640501309013081050347231001304002002150101020650301063046304010
4060605010230020010013020700302013030510600301004011030011700110080010
1402001801504011010063030520508010206503485610703040513020400126130820
4056130400620015613015031030349456200606301130102501016020011010301501
0100431040020402110540502002204015010160030100302040405013091050205101
0513091020080150806008010580102065091020012170050130305612200101301204
0561301220090618101013040640010217005013030561502102040240140012030650
6401400460020065080102106400204015080107003020301105302040150205040040
4064050105035019640904100130401210501041040501304006200156301830302040
2708001307001082004070301020406310400204021105405020022040801400100611
3030561910706503518150130305200210620022040801702465570019020019406040
0100104035220803040118607010601040505401302080200100130405015090120010
1301013030510013013086120010650508501509012001303051405012130305613005
4215014060304065035392002501140501240115073040061400270501130200606308
0120400250140701303001541050354664020200616402020013030561303056001020
0130401202001050355311700100130130305101701060101501040400680102062001
8070201301064095200204050130700105020802006163170301307001050140027062
0806100130700105020802006113010106401301001014055004013010402003702040
8018204021050204080104012050400408010540060040030806503561380140113070
0105020802006180170700254070700121300410418010130450101613016002005640
1305404050501902001050357116140113070010501405061670403061130901308140
0801068010540136200540613030530110821309001304010503587700302050400306
5703010204050130110140061307002020013082010403591515040500307010601070
5041303052040500301440600301005405040020012500401001303052050801020650
3607130810040502002208030140020504050130404040020010503612580405081320
8010540502704401312040501307030408010030400701306150470125015016125012
0406506015016506012040615080605016150806020405004050240053080503703030
7050400130305703010130201700210503621515057001305613010090901308100640
1405013051301130305615013030530561307071071308201040363680150400630618
0150130305703010402130408060410503643210030101153013020400124007013061
1301020304056061210505016210502040130150702413011303056301503002002025
3001010163011040060070027080050127080011200212140504650130305801504006
3061801006306113005461215014060304065036516101153013020400123040400813
6508010122001510406401150730400130400620015613015031030130140502704518
0301400701003065036620511504004056301813340040801040130204025703040803
0404008136508010401301060302040257030406130305107030406150400403014007
0304065036714401201501220015104010564101630150902001501016302050201508
5010801406030401640120150405013040300200201050368131501630101305016021
2200151040303070010501400270656570011305021061307001050140506161303056

3010130406405010503691364400911080540501530130204001230610800306502040
6401108003065013011508060540640110300702006503709101153013020400123040
4002080200650211014001303056150400404003005465037111101153013020400123
0404003026065013081002130219306400204004065013081006150400404007030406
5037217610013040091108054050153013020400121405061213070010150730703010
1307001050140506163513050512006120802006116002005307030540102003706503
7332630140064050611301304050400270410502040100301501305410541013030515
0106400101844050030401164001040040161081362040705042002204010030150130
8080030210413030510640010540501030016130305616070703010403748106004009
0220084040054050103001613030570061308080030130709001040375366405015301
3020400124050150400140505210050912001064513010206405054040501504001405
0524105012003011064513010201301401440400703010510011040170030202150540
1001306130106070301050180101301401010506021030610100630650703010130305
1302070026540107030406503769230104050168010270545614001001080150130305
1082130404001001050377271501307001050103004002006502705413030561104015
0540500405011003010301163010203016003011003054080101301600200563011020
3040540130305630110509002001301054010640130100101405630110720105406305
4070700121301040378296150405054030802001010011030665013060504005402130
2040012304008602654050130204001264015640501302040012610100630650564050
7050413030564015640507050413030561010063065070301013030513020700265401
0703040650379284012015030230020015010640010513030513020400126130820406
1305026550040101006303030501602065061702141301040504650130305630205020
6506120021501010502401205040040400703040650130204001262401205040040400
4200606503801363011014020020401504004006007006113040301102056130502101
0501200212111014020020402130208020027041700150400404060304065038133617
0016007001303054010500110013050210105030401140010400204040502040012682
0405500403120402006063040904100304014070204030400640505025630400509020
0505100130111002002004004061600700400407030107003020401902001010013061
1100200200501100130801300546161501407020404050130300154105038278040504
0063010270470030208016301020540130801601006503831418010001020041050130
3051021000650630516030404050801013060401614006130120080096701620200516
1301051020037065038429100301405012130305640115073070301050164011507307
0301012200151040616040170103061608110061070100626130160219640116400104
0660106701060106130502106504050200254030150802001002105018440505406508
5030540603040650385136405010240010001000102001301603014041050180305010
1002304050565680101301600200540501306001602001050386182010801054101303
0510064012080200612704110401505406300546115013020060630810063154013021
0501400613030530110541013010064013090013040105038791630102037165401507
0301054030705051303056130403011020561305016013407010503889600130410508
0105130110600808070505401307070012630154010509002006503891113011307001

0504001261405027047003020619030861801501303051000806200200810403901415
0130700105020802006127041104015054050040174146120802001305040010023040
0624005406163010205401308001306503912415013070010502080200616401400616
5402080120080305010100230405018454040301301200800700521630618040041025
1630102030540707001213010406401305404050501902001050392153050400501306
1130220084001040050801006140401400826506401400508010061405030010801501
3030525703010403932420301309701402015083013025010160200110103013014018
2004016020011010307030105080605405010023015040050730130400620015100308
0140061213040062001580140030651150205040040901410010503941180405018040
0200107030101303051302070024050270470030208016301020540130900130406503
9511100309041001303058014002706140305122001510408501080164012015040501
3040300200201050396101501630210400680070303050160303070010222054021200
2016541030307013040105039725801051101400210501400401001401220015104064
0504600305201501405016303057030101305016083130210400405016040091701301
0560210301640502080200801501303051000501070501307013040105039813100301
0115301302040012304040020802006502110140013030561303053005104703010401
4007040306503992010030101153013020400123040400904650705060210301303054
0501405040021000650517063161504004030054164011303052100018030704014007
0403065031001510111051130700105014050611504009107061802001010014050130
7001050164006113020400121020046204027041104015020402018020010503101176
2010804002080200650615040040400400301070301020401101400130305680102040
2006063056405010704009040213030580100454101301090200194060400100104031
0213101110511307001050140506114001006113030581004001001400563014004064
0050130161504004040603040650310334617040090406128230130305340107016301
4008020010061617002020061507040400130305703010204017002050400401704180
1308021050100306220408019028400402507040400516006150162050400407030103
0080188020054050130501200801501007002040405051207003020102105013030530
2040110140053070302040400540046503104146304002050405020401405104706501
3010130600102006101402006502130407020068061050565070501304050202006163
0102054013040803086503105146301400206506120130700105040080200100616160
0400308061405027044013154013021050140061630102030540707001270900104031
0617106404002108006365640060646365801401130700105016064400636554012080
2004004027041104015020408070061006113070700122401205040040400208020065
0310710614011307001050121080040063655408080102008405130305540801051600
1304650310811400302011014001303055040030651703010202130810064011303051
0200104900304013030701304010503109116303054018010130604016140064018010
1301200800613010130305400200370130140620031102320504004060010200140516
0020034003030501604001402006502130407020068064005056507050130405020200
6400640506502130305630614050153013020400123020150600102001305404050540
1304064050650612050020054013080160100650311111305010800200620401301170

0106150101001400306204010630620401301421200500403011050902006503112358
0020024007030105401307003051105040150010080611301282304050130305682304
0501305016062161210008002405013030568002002400703010540130406020505700
3020215054020150611020802006502110140013030561010040030650130150210121
0001020081007003020240170906162015061107040046503113143010606160614050
1530130204001214051001104051040030650110140013030515011303010306540106
0346503114151064050650213030561301064013016002006101402006502130407020
0680610505650705013040502020061060120070650801013060010200140061630102
0405013090130810503115964011080703061405060010200803050102080200656130
3057030104021304040010010503116181501307001050208020061305040010005010
7050540140613054063011630145404050130305300101016163010201908121305012
0054080105160013046503117234050030401105080100650801057005130810151304
5010120405003020010880105190200190124008200500100640900304061150806054
0801530204005640190030405401303056302050150806054010900304065031183110
1110511307001050140506130140040060070061291505405046502040301101306502
0406002130164614017050400401004244001302100080014050180615540640140060
0801090462005401202200100421050130204013011014001502050400404007010030
6503119285115040040163014008265054063011082650204064006405065021302040
0122030561700130100620401001306114050161700160030617080061703010204013
0150140304050130100010900100304064006121000109002040150130305703010402
7001400130904620031202115040040606020408605054006065406150400902204060
1010510802008612516150400902200616400400100613011080020020402010454030
0101011501303052401107040306504081093121116170010004640040501530204002
6101304064050105040100170430301004001306130305604010707030104031221217
0054040091108040015040502040150400803003016130305630105401670301013030
5803010400620301304064050650312310630100450902002040130305224200615040
0401700305801400100611303053070302040400300202006503124131700400100630
3030406405010501305010208010204015010404204020022040250030150051301804
0501304030110205405073010503125152301015040090220061640040010061610140
0620404050806200540570011040442040200220402600406051301804050130403011
0205406064010503126176401370305130305130123002001030204063040094010501
0030622040256401130509020013014050705041303051307071071308201040312793
0101009709200801405013070010502080200611610202400540801050100302616001
1021050312812301060302040501301402003001016104006270301054016107070025
4080150540900130406503129166303054018010130604016140064018010130120080
0101000802003040501030016107070024050103001613030510008062002008104031
3013101110511307001050140506130140012030611302002118007018014080017080
5614001006113030530703020404008030865031315614001006113050120013040010
1704400303020180200105031325619107061130305613020060630307030204040020
0840650313311660120070611301040100080200540502002204063505702008005113

0604016140061301200800170440030304040010010503134131307001050105080100
6508010130602001613080020016130201900401050130100010900613070180105070
5013050160613030510821304086050105031352361307001050170018070306180183
0051690030406115080605407002020061130305801604001000802006130700506254
0640501010008020013070050621301130305630401090200617030104018070306165
4010703040650313615163010203716540401000802005405020025406350140040032
0010405040084005113015051200600130410508010516507040132001307014030105
0313713100460030400405010023020406050508060102006180101301200800801509
0020061201080201507011002513040207002105031386570012101503030501606541
0640670900530304040010010503139963014005506163014008750616150400401301
7030650150205040040406405010503140241501040606020401002008801004406013
0100640100200840500305640030201301101405041630512105013050160630107030
4013030513070010501405061610400600700405020403005416130305301108213090
0130401050314166301040890130305130700105014050616104081001302018020010
5031421314086024004015040046003061130350563040110703040130305130700105
0315461405020406107030401309012200105031431263010042050400404004050650
1304064004050100230150400301006580100420011040040656150400404005090020
0650314427640140840413012006063010046003040040501002305130200603018015
0401400161004003015010030240040703010170100122040640501050100302703010
7010021058030501080020013030530010101660103710130305130300120200105031
4524640120150305080601504004064001301217005013030520400121406330164050
1020045006121304501015064005405051640501020045006121301600200550640054
0505166050371013030012020010503146216201105040505021010014003040705200
2106502050010200804016550613040119012540801060210301303056401800708061
6401160400201506161303051082130901220010503147196401201501006305401301
1501001306120025011100080200305017005062501616020018050180101402005016
5002400110041405016150902005017030101301006401302018020010503148108014
0015401303055006121304501016860505006121301600200561303051082130408605
0105031491310111051130700105014050611504009107061130700105020802006110
2004620407030101701001220408040050100302616001602001050315062301303054
0630120406566001020013050190200105031511960503010010801010030621307001
0502080200611302007022401130020020612130305401304010507302560309150164
0161540130501200621060405006101309001304010503152406301004904100204013
0305670451700400860650540217005058400101700180300304004064005017704004
0801013014020067090104004040502704401120012040401400826504050204040501
0200104130450101640502040405010200104130160020055004090200802040705054
0301024003010204063010047080170502040613030570068080030703010130406405
0105031532517004009070465063014003066507030101846130200606301047062040
8010160020012040801500122040100040121000403020103014008750617030104018
0140020406301401190122040613030560021020024014007040306503154755004015

0730703010204040502704130100040140505507016011010003001091108054050204
0691108051004154040054015080605401090050650213030510001020013081009005
0130315301051010063065053030501405013014020040503001010030150130140200
2030530305106008065080101508060540401301102465030201010063065030620150
3050140501301402003001040110040030501515501100303062050400408010210640
0204030220071307001050204002703010540130100400301301040800137054063010
2400301013030540180109046200204063010408904018010100306220406130305703
0104027001400130904620031552115013070010504006306140502040106401304001
0010130340701501504011604007305401303001091502270800401206026163010047
0801130305705054015013030510008062008301040315637101110511307001050140
5061301400206506120130700105020802006161001306130160061505401700180020
0261801013012008001620150611000710306201506170504501401401400616401100
4003061301037030130305700302086020058010100306254061303051081010610401
0400613030524014007040306502901020031571463010501004003040040801060210
3013030516404004030401000802005405013030562008405600102004040110340706
5031587630105040400401610040030400403013010130305400830020065031593080
2401200840540501303053050400305406306205040080900110003010900130100302
3015080800614050863020801708070505406160400100080200305406300162005408
0101301402008017001707404008040062030703010130305150130305108213040400
6203010503160181501050902002040130305803011000130230204061501060070030
2040804050700113070010105090200204040502704567030101303058030104006203
0130406405065031612164012015030502101501010003064050101000303010140024
0110003010640130100101405500404006801020305080604012060240065403011090
0304065031621318040501400270200800615013030520405021260600940501303056
4016153550406210601304090102003163854042003140070504130305613030529010
2002401107040306503164253010044050130305703010130406405010501700270500
8010540200606301405015080605401040030670301054011014005610720105406107
0304054013020400126130820405615020150614050100230308010800301304021050
3165201630401190124002040409010251004190240040405003010511003040040150
1057001100305640507050415080602040150130305703010203030010100410200316
6964011901220401064013040010010130340701508021700501303056301070304013
0406405010503167336301070304013070010505018010061610010303054040070130
6110014003061801060210301303051614807061100130613065070304010040013013
0140027050120405403030208020010640107001100200240505403030110401501010
0630650218061554040130106080101003062540613030517030402401102040040650
3168161307001050100130613016006150540610070461306191706501401100400306
1100308014200617050150806020401304064001502050400409014100105031691363
0140086025013070010501004003061801060210301303051406140012301810170504
2002540102007100650317019802008105024011400154013030540508080030561060
4002300200650213070010503040103081006125404050600308054013016006807030

105406301540108750650317111106040023002006502507040540501303056808003061501303053011080010701320013040640501050317215130700105016040031261303056130200606304050270440119012540130100200830307001050186050614050540614001006113200709001040317317130700105010013030540130501601501305016010043407061302040801600300654080714540110401501610013061860250113030565070401306201030317415801501003026125070405405013030568080030304010406060540606614002706120080061501303056130305700680800307090010403175111504017003020401303001091501060068016301015803014006001806540660018065015020504004040640501050317622630110875020130700105010601200706508010130208020015054030501080020061130305300101011020010413030513011037030305408900180101301600200563054070700127090010403177121501307001050130040020061130208020021301104015030501080020061130305300101016305407070012130104031781763011086025013070010502080200611504015040301030540600102003015080605401504015040301030540301074146115004016305407070012405105031793640120150130305301070020013040640501050703010401150400407030105840010104010713060021050040501309102640120150130305301093070204070301013010001026302050130305103400210405020060305405010300180140506121303056200603056150400640506164004001006180302040132007090010403180306301108602501307001050102600306502401140015401303054050808003055660010200130540230563002003054060109610065040126003061251064013010010140563030540102001501306040161400613012008006130305240140070403065060021020031812230100460407013030510063013070010501001306115013030580100102006508501100050101605020400240110013061610040030540130150210121000102008100650100630700610061707001213082001010031829700302024011004404001104102040615013030530106029003014030307021043183281307001050100130611501303057054130105011301506405030200606308400101014001050121002002150400120305130501200100301004312040200603040501002301021302105014006213070010100304004080304010040030400406540150205040040901410010503184128015020700262080100420700220060304050100230203161213021050140061307220061302040012130405010200318523203050806070011010051304064006150401400680650136200204010640130100101405804050787870501305012006146003013035058010048017640113081015130450101130140400170130100020062003186243040023065080101406130204061508060204063040060407050405013070010501640061130204001240501002302040640501307001050130020020611700102050010200161504009022006164004001006180150700302040507074013014062003187216170016007001303054010500110013070010501640061130204001230400210505053030501606301400204004065058050270065620019005620054061300400200612550040501100301030180210604011030040020065031882030140086025013070010501080200865024011400616108265015010840461240130401080703061803014008602505402408017540501307070012630540707001213010403189963030540302013060401614006130120080061303057030102030300101

0041020031901115080106003010013060401614006130120080061600400301801303
0103061305051200301101400301630101301302123191211307001050107002020065
0130305100101401610070641670301035062540610400802020065080106003010013
0604016140061301200800200250140160030100400570012193016028150208010050
1707001213050120031921120025011502040504004600301305012008010041600710
4005640130309001304010504050150901200319320200250115050160407050140501
4101105014103030110401501501405061220022040801405012002501801100080200
3050170050625016208020070501601010140050164006805014070130122001200319
4142002501614005014016704400501703010200603020630140060075011064013010
0101405150203014006003080130401070143195438016040031230540200254015010
3011800107070403070140304050204040507002020016150500102708002040405027
0800801307001050513200616160020036140504101200540616700618010602103010
6100140030616100400306130120802005070505406010101400540630146003050540
3501400400320010405040084005113015051200500612140507050413030561303057
0504586050130500612319673011010002005020400100302130700105020802006180
1013023014319774040017010030103050040401615403550406210601304051431982
1302050130700105014001006120025403054035014004003200104050400840051130
1505120060013041050801051507301405070504130305640170504130305600102003
0301220012003199306150405015301302040012304050106405021303056401150730
1301020406401150730130105406001300701050303053011030040020065021101400
1303055004050110030103011630102030540132005407050420025401501303056020
0107013086012320011101110511307001050140506119022006169012200616200129
6161400100611303053070302040400803086504426040130305130200840501302008
1040412910111051130501601400100612002204013070010600301002040405050806
0618456600301004050517635162500405054012003130120500102001650601614001
0061130305130700104006013065025613012008140150130305201507030102040200
1001021421661400611301040014010140613054063014004002430611306002105002
1309102630140012030611406130540130101406130204015052015086212021020014
3286150600804004013014001006096180101301040014010801502086140191230204
0405013050601405005010650030150062002170801506008040040130140070430618
0618451640140302040011040150204070030201450101301400706306144146140061
1305060190410014005505083058015092503020407050300104050550806018020306
5550101014020010101451663014006400611306080511406130204013040010370301
3030530204010010140161200710065408010516120606540610063061305401006301
4070200680146376124003061130104001401084001017001230100061130502018801
5015060400404050540200300418014807061130105401406130540630140012030651
1602001801624120011501020220061640502015010005010180301060400708080640
5020150801001020018030101203021304070200680801700148070400401301054014
0613054080130054617030105406208010213030586010214719303020031305090102
4040140020020130613041506130110020026506303050601509010240401400200201

3061304150613011002002650404011003040505162050020050901021408020068001
4813617001880020013010060405163061301002002106130104001401061304060120
1050801200710065404050561006306130540100630140702006801491563010600300
1307001050306400200206140506003080540700200105800701801600180617030105
4080301040010061130305630101006306110063016041041410131501307001050101
2030650140613013010400140109003040115040110120306508010296505405012001
6601090306506070102001411711069010204013030580101630142040303070020200
4050030890013015050010105080150205050601806100150050400105080305505003
0500140140020020615020150400618458030511305090806301261053020306184405
0540113060460404014002002015020150305630480150304010205030563046620050
0512615803014051305003050080150201503051600658030140513060460405027046
9010510690102511641050121620406125016204030140042006501105401100200230
2040508070180200108005405013030515013030520150703010401820104014128863
0204050908040140020020176132040150304010205030550630480150201503055063
0480302040130200270404014002002050405027046901051069010502511641050630
5501302002704040140020020400401503040102050302040630480150201503020406
3048030550130500405040401400200204004040502704690105400690650251164105
0615020150200330106200500203013051614020015630516001616004008030203061
8440505401130604608015020150611205002004050700302080540300200201801013
0500305004050270469010510690102511641050100010200408001200690105405013
0305613030570301040830104041318400302084641303056405010970130305620060
6305104600305350140040032001040504008400511301505120060013041050801051
6700302013080671307090010404141364050107090130305620060630561040070484
6451046003055012001600130418010516305707001240510504152261303014001010
1400105013080183005405050601102040801604003005461703010550120027054050
2040801503005461801406020655080101302106400840010104006801550130406400
1610370301303053055060210301416146130307001501014001015051405020408017
0065401801504001216190308180170200800617050540115013030520150400612120
0810401417201504011304006257030101303053030700105010704030650130606235
1305500401040062650405010020010280163010201040062130305703010540620150
1303057030104018201040141824630106040013040062530307001050107040306501
3060101014008400101700188002001845401304064001001301501040024001301506
3011307001050104064006506540208012001630102017040045013054070700121130
1040141935101110511307001050140506130110830302040150400200500611305060
1202005163014007080030655030400700526122708004011400104004065501301150
1014001050280183005402105056701300200655021304070200680801502020054004
0655080706010150400202005613001010161037030130305801056001020012050010
2001420176150120044004016040024130763402015076361400104004018415501005
0912001803014001600700614050530010101140016007006505254001501615004014
0210501421116201080400160070065056100418080010270800204013010270800616

0070050405020404010500110011000301090014221763014005020861401502081216
2040405013050601130140110046030801505201508018300564010040016601602103
0142354820040400703010204014051400204062501400204061600614002040670401
4002040660013014002040625014001301600625014001301600400614051400204013
0301400101200800705020406160061400204040501302008001705614051400506011
0204062002110220401303014001080108362002040405050601102040130301400104
6003040040255080150304040020650614600304004025508030135018703010204068
3011030125011020401307001050405019030122040615040034070612105013016004
0010501301401100460308015013030520150100080620012008104014244261304089
0501400405013050601130140140302040011040150204020400121303057030102040
6183030204040162001700302040150400240010006121406130204040890501050100
0102004060180810508040116040040400704004025405055080140065501362005508
0200108005630135018703010204080104014002001800104004025405027041308020
0108005150130305201507030104018201040142558640503040106040097040502040
9630115010502081304089050140013040640501400804050401403020400110401502
0404050804001014002040130406405014006130305170304021104015020402708002
0404050270800801502086550217005015305506140065501362005502130407020068
0408905014001000102004060180814006301404006007001400160041508017001189
0508015014001050280183005807030105505090804017030101304089050140040501
3070700127003020304050600300101307050400405020406150400902200616001020
0302040613030510008062002008104042614102001041303053010210503020406105
4102040605050130700105040501002302040610400627030102040613030570301040
8201040427136130305102001041501040062703010204061020010413070010501040
0270650130300561400150400401030614010301709001040142881020010413030515
0106008080705020406600301001301506015080070108014292410111051130700105
0140506130140012030611406130204021050204021302193013011504002065040031
2005705040020018004050204063014001004003061150806020401501303052015022
0402008104014301364050108070307003020704615016900304018060680509030105
5012001620150700302070301013030510601020014311215040034005026120211020
0401400505650705055020802007050204060101014002040650460030204040460030
1202001040143227630140040040506140180800301303052527080020407030102708
0030302003130509010240401120400602616303050601509010240401120400602506
1601306113030540508080030515013030520150220303001070301040143319630203
0370305014061301040401400200201306130415061301100200265061307001050701
0044001104015020408014006540509010254015013030520150703010203030010300
5104143440130200313010061406507030101305060124018080030130305270800540
7030102708006240115080100614050140613054080130901308140010015040014008
1809001400303010001022401880900130305613030140010400600180650503006755
0807090065506153200655080101304080013706180020026550801501970502040803
0140021000617030105506021030115013030520150703010120210200143522615060

0804004030010011002105054018012705006182040140501530568204014050153051
1501020010411903018110680100130305210505401150130305201507030104016002
1020014363261702461130305630140030020020612530010101621306130410501860
1501627001013010020021061301040014010613040601201050613031200700101301
0020021061303120013035026130901822130350261250130602103064014030204001
1040150204015013030530110824050201504060040013018060062001437151307001
0501026003065061014020065013050160213026003061020400406504011400154013
0305405080800305617040045013030201802001050707001214051050143818613070
0105010508010065014061305402001011305016063011064050650213030563012130
1064013016002006405010205013030010915030510020010501806011002001050143
9156401700170301054030614050612130305613010640130160020061508010061404
0120071005401303056201501303052540703010401440151501303053011090030404
0500100130700200561504002086050510800170805161064004050304505132001709
0010401441128020108017001310501405020301405230051046310501220703010563
0130051041442141064010700106413070010502080200616709061130200606303064
0060610254013012008006301102040040650130305841050014434910111051130700
1050140506130140010020026113090301561504004060201200108400104007030406
1401400100630650630135021130170122001060210308400104001000400603061615
0205040040402008001016703010608020016311844050204040501301000110916301
4060400401305060180304040034614018040010404061907010419102180140608612
6365204061104102040150130305201507080611000806200144414130404002001301
0130700105016400615090102140501302040012103004002006501308003013056102
0010465015040080030611306021030445961303051703040217041102040620801021
3030563010162080102130305509010200144638405013070010505146110820080650
1302030407050406180070561010063065060407050167090105016160407010001020
0406040706200170501301012130605040054069705018010130410506306150540100
1306160407050161970501616040706150900200501302015060010200130540611006
4063020503070505401303052208020054080301106405065013011003010301447291
0111051130700105016400611302040012140506124015073050140904100130401407
0204040501002301505094060636518050200451703010142120051165030705054020
4013070501190812130602400620150140200130305408070630144820150130305301
1010008020015010300200202561010008020040146507003020304050103001640501
0300200202130305801004180400200101500401709001040144914130404002001301
0130700105010720650150806054023013030510720104050103001630110900304065
0804001030145010150900200201080108040020065070301013030513020700262080
1025150040140210501451201304040020013010130700105016400615090102140501
3020400121064050650213032400613091100064006101006306503030700105020802
0061563011541040501307001050140506160210301452111630102013070010503070
5054013030564050103070501303058030504003430550901020014531014030540509
0102405013040302080170013011064006501305016050100102001454181401086046

5013050160703010401140015401303054050808003058010041400105011301220015
1040130204001261308204056140010501540403020170900104014551180405054040
5014050256405054040509047050562080102355040607010200145620150130700105
0208020061211014005016068050903010540501200120304015080034003306454024
3050154033064110001020051301070061006113070700121501303052015070710718
2010401457206130700105014050616704030611309013081400605046003054035014
0040032001040504008400511301505120060013041050801051124130540801051176
1340952005650460030540900301900301030145825150130305101402002040150400
6461130140150140013010153051617001820404004021050130501601504008204061
2130704301501303055070401107090020402515013030520150604010701290102001
4592910111051130700105014050611910706113030561910706113020060630616301
0130140200405020408015040050177040040801030010802004651301013030561302
0060630150205040040400640506502130305613010640130160020070030206001020
0618605040016103014603013040400200130101307001050107704065015054014050
6124011507301301020640115073040501002302010200104650150104008120406113
0101309110006400610041402006115010208020061256102001041303001091501501
0800305408003013012701041461156170011001030305404007013061130104011507
3013030561301013020060630200110400130405018010010501090465070502090464
1462168020108017001190124005404090102524011004404001104105405004031620
1083080650213030515012004501130118601501640068010100146316163010201307
0010501070304013030540180101003062540801702008007050540670900540610030
3054080101508060540100630123010100014642364011200603050140502006063013
0130109170217005013030563061505401700900304061150806054031620801604001
0008020061130305616040010008020030540130200606303063461130305400612120
0810401465198030162002203011064050650840010108204062080104013003200210
5054050040301103461801015080605408200314040110080010400610603040614006
0301040146627630615012040025017030105401501100400306115080602040161600
2003614050410120020404018070306513011003010304050540630615054080703061
4011067090065025302015060010200130540613004400500210400146766170013014
0010501540405030450113200170900104014683630541050154090200191406040010
0104014691864050109701303056130200606308016301020407013070010501507040
1303057030105404050130502101050613090410100105061303005416130901308105
0686050163010202008010100147077003020130808003040501303056208010213030
5703010401471111011105113070010501405061600700618700200204080150802006
1500214001615080200613401070147217615040502040304050301029105080150190
1240020404090102510013010041507040130305703010170030401205040705403005
1041473196301050190122040808003040501303053010100630502015030404002050
2105020406210505406451013010400501020504004070540801806780671709001040
1474218030101001400308010602103013030513070010501030020065013081015130
4501012130160020056405010100140030801060210301303058010100400301610100

0302806068050640010513200170900104014753164013020403014001001400306508
0106021030130305613040604008007080105040501302003130613050601613063041
5013070010501010063065020025011600200350140505700513010020010513090013
0401530516137030305014050304502063010161370303050140503045020509010200
1476201307001050140506110100140030650801060210301303056130700105020802
0061101001400306508010602103013091100064008010014003061163010113030010
9150150201041303001091502015080070108014774813040400200130101307001050
1001030305402080611104102040611001040611309030156140061130720158030401
2040027030105401301004001301700180200101004050540106003006501305016020
6003001051303051613004600300105610013061200250130402040024007030105011
3010040013030630116002004005011301013301002001021003040400170130450101
1003010306130160020056001020030405014001001063014009003040650804001030
1478361105040140020650611042002020401304064006306205040040801022006340
3001045615040090254086050510100630615700540507050413030561504009025406
0101051010063061570054050705042010030203040507050413030580401305630113
0100640301102014650108010056508410500147918401190122040508605058040501
3030564011901220405060101058040505080602061200603050120303050160200606
3016208010213030530051041480124050109701302006063080100419170130305640
5040063010804011200603050120703010540880109001481246101006306509170580
1700122007614050705042021040091108054050540100010200130700104001006306
1303051020400240110210400650801702008007050540640062030703010130305620
8010213030562010301482131803011040042200650130100200150630620150405070
5041000102001303053063461801051600400301801205001020014833061700131540
1402004050130140501613060068017001706125630620046513010130200606306130
1016301013014020040505403070304051307001050106040050296505405054063063
0180800301303057030102040620084040053014002704004013030010915013011003
0103014842280100140030801060210301303053014002030801301508060206820080
0130406405010507060101303051501020802160130700105020802006161303051300
4216016130044005020103014852240501030080703008017058605051020503055090
1024050516405010300807030080170560101051020503052080304050516201501303
0570301020303001040100104001486156170018101040040240081058081061218605
0405051162004651150130305201507030102030300108601021487171303053011305
1301563010340705020401301010640130100101405301200102801056405019041004
0501303058410500148822804013020408010130405018010010508010400105061303
0512002060540240120602611400200104650150400546140501800301303056405010
8003030130305803050400343056021030148928646130640020802006502040120802
0061804002065065060618030140040060070061405054016301018400101051320061
8010602103013030580150400630618060070065406110040030654081050063440040
6540630140040060070061405054063010163015090102001490361301130700105010
9030650130101006402105020406210505404010500110016316204089020040090462

0054015010100140030620401610100140030611006405406306300113030530603095
4070301020408030100140030620408015017040073062040803040101001400306204
0613010061130102040130603040804013703013030530204070301054060210301491
3260400346501600200105010200104650150101405062040610140506110064054020
3040120046113010130804005051200206061801051801503040107040073062040610
3010061130102040130603040610208061110410540806007006540611004003065408
1050050010080400406540616301020403703050130204070301054060309150140210
5014926064012015030406405015010100400304064050113016009164050100400304
0640501600918040082001020020010025406405056410540603040513010153051301
1501090410061801502015040501006407046302040656406405080400820010200200
1002540640505615020150405010064021050204062105054040105001100804105406
0304051301015305640082001020020010025406405058040503040103480901014030
0520010504040040012701050400625405013030562015013030570301040182010401
4931664050101004003040640501404007040418037165355040600130418010516100
0800213030570301056307050561704305707001217090010401494401011105113070
0105014050611700180020024004080106021030130305804002105061630140010063
0613040501301001013010204013060301403060400406405014002400100065070200
8001308101513045010180705041303054010001504020500102005207003020205040
0404050100230804050130305703010204080400210506115013030520150240140070
4030650600210200149533301106040061013010017046504050130406405010501000
1020016301013080020020061304031546508010602103013030521406130540615080
6054080800301303051304031541050214061305406150806054070301013010017041
0504200356203016704130305130860501068080030130305130403154105070301013
0100170410501320017090010401496842003140040505640100080200562008405620
1501303051000806200120081040149727150130700105040068015401304030110205
9001304010150806054010013061801040205040040100130612050140604008007080
1050801013012008001001306113040400205012008001303056160705804005132006
1801051801630102040161540355040660140040901020014981213011304060400800
7080105040501302003130613050601613063041503011060400910706508103056301
1054004650602103014991080163010207060101303051501070806705054062015013
0305708061100080620014100316405010513200801060210301303051034801013012
0080040200110004012050010200166070564050106002003405021040054051320011
3010130305620060630550040104200205130406400801004610070132005703010130
3056201501303051000806200120081040141012361700180020024004080101301200
8008030106070301020403501815040010090200614050130903015150600804004015
0108040050204013070010502080200611501302018020010502015061302040704614
0210501410262617001205040080105408011004040030540130903015803040010040
9110805405054040702063010160070061160308400540801700160346180301020650
6140506200110204063040014009110805160020010304010903061803010903061407
0206301016007006187002005406160308400540641307001050208020061306400100

0803065070501603084002040614040070400204080104010306507030102040401030
5618456301350187030102040150201502204017001040504092001620504004040200
8001015040080070611603084002040660070061870020020401501303051704303020
1802001050707001214051050141032080170011008001040040130903015801700202
0061130305100101401610070641670301035062204080170011940150504004080110
0104061130903015150130903015201504007030101304064050105020400121406100
6400141042263014005506180101240010001130100640150400206506140013040650
8015054010130406502040140013040650640020036504050130305401301102003650
6201501303057030104018201040141051515011507305011301020130204001221308
1003040082040210501305016024011200120130305630140020503030600110501050
6009010401410676160400100080200130305150130305201501000806200120081040
1410714630140031430705013070010501060040015065015080605401501303053011
0824050201506006150115001040141082110604006008065040501305016063011060
4006008065040501303056564070540170010210400650401301102008001040501301
0063062015013030524011070403065040810914109195115040040563013143040040
7050540801013081015130450101804050103143013030570505401064013010010140
5140405010206507030105406201030141101364050107040306061161090030405080
6055004010604001000802001303051034130305100080620012008104014111116405
0102060215004018015040110206025703010508060562015013030570301040182010
4014112146405010206026009101051615004015004010200402522001010180100418
4004030254001501615004014021050141133363063018080030130305703010206200
8404005305404009110805405054015010800306206401108003065013011508060540
6401108002006502040503001061507301303057030102013020400126130820405670
3040204013040400205040070304062015080800301303057030102070900104014114
2630160010200801020500102004050503615401301405014020029041005164070200
6801619030182105013050160640501080703070030201240010001402008001400130
3058060680506400105132001709001040141152064050103001100100130200606304
0502704401400210503051305410610400270100010200602103013040640501050506
3054014006301065090305355040660140040901020014116201501303053011010008
0200150103002002025610100080200401465070030203040501030016405010300200
2021303058010048003080030130127010414117111501047065040504650513011501
5001615010470650130130010915014020010414118830705051303056100130301400
6007005040507021420509010214080200680014119216301800305054063014050105
0540630140200505408030102400205017001501301507014063014020050540803010
1000102005060030100130305640501040060070013030010915063010140504650130
3058010046006020060060200150140210501412071070454061040501054064011070
4540130300109150130110002006200141217163010204016154035504063011034650
7050514081090141222161307001050140506167040306113090130814006050460030
5403501400400320010405040084005113015051200600130410508010511241670413
0305810016405019041004050130305100103014123203010602140150102040630114

0150101530130204001240501070403060611037256301103430540504650130305630
1016301509010200141241664050107040304050130901308140040507002020016150
5001065640640508016301020104600306501303505630110900304065050100102001
4125176405018605041050140405016030406355303056564086050614002704030512
2001510408501080161400600700130305122001510406003010301412612630305401
8010130604016140064018010130120080062015013030522030300104081091412740
6106040080400650208010130506011003013030510804001020408010550640110400
3010703010204080101302040012801010400140101305060113030140010301400640
0650550401204002305506400200100026501504005020865506130406040080070801
0504050130630415061504001006406130301040014010213010060964014008070306
1405060010200801501303052015025703010401412829615014020015600180400405
0270305150300671161702001800180301350187030105401150109030812105054019
0308161309030860010200618800200400130150806013030086150400860506164004
0010061801501303052015024014007040306506002102001412922630504006040091
0706115040070430612105013050601630682009040040803014004010306120301304
0103080400700200651201304070301005615040090308616400400100618015013030
5201501000806200120081040141301161501040080200100110100050130305203014
0506070400562015013030561607018201040141313263030540180101306040161400
6401801013012008006301004690105011307001050164006113020400124050100230
2040611012040150140010061130305615040020802006180150303054018010130604
0161400640180101301200800620150130305100050101840104141321063030540180
1013060401614006401801013012008006208010213030562010301413312150103001
1070052204011051130501606101400216002001050620150130305703010700302010
0410200141341440502015010200104500612130450101807050413030550061213045
0101613016002005620150130305604010701290102001413538101110511307001050
1405061206506110061401050213010060930054130305630670301015080602040161
3061304105061301100200210501501020501000501011680100102001801303051630
1025401803014004002706113056101504007043061615040030661164007020080061
8015013030520150240140070403065060021020014136291011105113070010501405
0611405061213030562006063056130204001213070010507307030102006063056130
2040012130700101507304050100230640501020802002130305640301102040056204
0025620060305613010640130160020080100480030800301301270104141372015013
0700105014050615004020802006150040140506150040208020061500401741461208
0200130401020501303053010100080200305406301301054105406021030141386230
0200130405018010010502150305407070012113010401413914130700105010400600
7006501302018020010501630101405046501304064050105011024001000650705045
4013070758015013070753030534010701414033610045073070301020408010130204
0012150170016040704004011014001303051020802002516106040057125180301400
1007046140705408400101060068006180108410500100010200515020401700140500
3054015013030531407013040501801001050613020180200105080103550403401070

1414136130700105010400200290650220408015020150302040804008405013030510
0130611304050205040702040615020150303020180200105050901021001306113040
5060400867007030102040650405070204040501304064050105080130305108204021
0502040106401301001014056305010370301303053030201802001050703010130406
4050105060210301414219150130405018010010501060014706501303056566001470
5406170011001406113010130903015100140612060130101020016501305016063011
0700202006501303051301100301030141431640700270021050210507003020301130
1056301630113010563016405010800303013030580305040034305602103014144181
0111051130700105014050613014004006007006113020180200105016301014050465
0130406405010501400200104650150400370306130305703010204060309150140210
5014145111501304050180100105080101304200201301608030405013050120063050
4003430540509010200141461813011307001050400126161903086161704009040612
1303056160030906141050540303058016301020407013040640501050660680106400
1303051304064050105013200170900104014147114011080703013030527070012204
0150300202004004061405040040620150130305300120200170301040141481430110
8213030513035200213060640501301006301301405090030406201501303056040107
0170301040141491415040024616001020011640060080651640070806170506068015
0130305201507080611004102001415022150130700105010208020065021303056200
6030561020010465015010802001006121050130305620060305610100630650506405
0227080065020802002270800610200104650150104006007006121050700302060210
3014151816301020540130201802006508100161704004501303020180200105070700
1214051050141521761307001050140506121303056200603056304010802001006121
0501844050540163010206068010640010540136200540620150130305100080620012
0081040141533710601302015301302040012150400507307030105402040012140501
3060401801004601306140660101202200405070030208010013061120050113030535
2005801600700400540130901701005290030405405004014006007006113070330405
0270440131400540130210501400807080650170507003020614001050140660106030
9150140210501415419620080705018061005401309620024010500110054061003050
1305401460030611302126034161003050130540301400704618010130602400616007
0050140505404010500110011000301090014155228024015010080054040105001100
5406208020054021101400130305610040030540130150210121000102008100610063
0540100306250110003080230927013030570301051220802005408030110640506501
3011003010301415666220802005406100630540703010402001040254001501709001
0401415734610063054015011004003050113040601087010601012504020010402006
0630130305640110040030656401903026563020503002530540615013070010501600
4003080618010530801030020405054013054025405070304013011400217013090050
6401100400306510100105014158823020080705130305130105620150130305707107
1820104014159146150405015301302040012130130106405050251002304064005610
6401301001014051020650703010540300510414160148029003040405013070010505
1461820040501703010540910214001830400305406290454070506021030130305205

0010200141611461600700540130200216100450561705056120305401406130130501
6021302193061704004501303020180200105040505407070012113010401416226302
0501302001606006508010130703040405054061304064050650106405065024011507
3013010206401150730405010023020613040100104010501309030156130406400650
1307201561304064050650213030561301064013016002001630102060506400105401
3200170900104014163251501168105011301020204011681050113010506861305021
0105040502704561681050113010122001510406160401701030616081100610701006
2613016021967010601061106261065060651200650660301040150614001050141664
7262001416414620060301100410090905015407030102040501002306200603013040
5010090905407030102062030401303054066010400203010401416515200603014023
0020010506405070020010503010301102065030305016070301013030583527041302
0060306201501303057071071820104014166133020501303051030054240115073013
0102015073052703040561304030110205103005465062080102130305300510414167
1115013070010502080200616904617050602103013030510048003061800301301270
1041416812150130700105020802006169003040613040102050130305301010008020
0305406301301054105409200101001416911130192001010035504060013041050801
0511241620150700302070301013030510601020014170241011105113050160100431
2040130200606302130810040502002204080140506160010200130204061504002080
2006180150303054018010130604016140061301200800620150130305703010401820
1040141715410115301302040012301400100030618010410502040630140010063061
7030101303051301130810015040113040601087010601012504020010402006063013
0305620304040051301001511301040200104062006840505801405061213030562006
0305630140010063061500301500515040056160010200130204015040113030513056
1846028150515010206503056304305401801013060401614006401801013012008006
2080102130305620103014172183050106040050208013040601081501020650702413
0305630113040301102051304010020026506405010604005020807050702144005610
6040020220080601083002005401301053401070141732680140113070010501405061
6704030611309013081400801068010540136200540610710454040508080030561401
1307001050160400502080616160400202200618010707002540707001211301040163
0110346503054040504650130305630101630150901020014174121011105113050160
1004312040220051504050200220406150730501130102040506200140210501417515
8014011307001050140506121303056170400904061258060104600305408010200840
5405056808003061054105401301059020019140604001001040141765010604008040
0650201003013030510804001020408010130203013051501402006530203010603056
3046305160040080305150908040140020020656102005005115030401020503051630
4801502015040011500504001050803054011305003050015040401400200206150201
5061160065200313016506018030307002020040500308900130150500101050102105
0130305302040150400800306161303052203030010703010405426040130305130200
8405013020081040512410111051130700105014050611680612130701006418304003
0204025104051301507014013014011040030107030102040100010200408301013090

1046150400408200401501303051082040401102001045253101110511307001050140
5061301400830613007011020013030563011303005200130820014063011305410630
1130100301104630114010501302104001308200140102400100065080800301405020
0254062008006150161700183030400408019091461630110320040502040300501501
0064015090462040705013040603413082001401504007040046164007016506170301
0130220061304001006106301400701650617030101301500406130704615061400100
6113030515013030530041041307010012536182004040070301020401304010400561
3044063084013060050710200640115303010001020013030525613040506005010056
1304061006700561304040020041056130509108564011203013060270130140170020
1040040640170028703010130509026150400604001006040612130173014070030204
0806010013010640101060130700105020802006140504105020408030140060030065
4061600300650130106401204030400302040410502040614004040400703010204050
7040400106200800104003020401301603014041050180405018009200801040600409
0510001020040400315080301500408015013030510008062002008104054311060130
6502040170011830305401003018303020401309102140064017030404004040501303
6120084020302105040070304065055040401703040204013030580203061404011406
0205070301020406170020200611604013030570301056140010061130305150130305
6020010701308601255431301064018303020401309102140069701401307001050164
0061130204001283030204069701402040830305406130408905014004050130406405
0140061304089050140040501307001050164006113020400124050100230204017001
1400104004065501362005504089050105010001020040601808105063014040060070
0101600415064050102080200213011040150801004829704030565680101301600200
5405013060016020010505662101110511307001050140506117001100404004013010
1309030158011000603061636520406110410204013010130402001801006140608612
2006602040612003302040130101302070210506150205040040350218019520061615
0205040040402008001016703010608020016311844050204040501301000110916301
4060400401305060180304040034614018040010404061907010419102180140608612
6365204061104102040405054011020010413030530103703070301020404050820036
3020501020010430109520020406301040040507040400570301020403070302040400
3002020065057196170020200615070405130305703010204064010500110051307001
0615001002040251700100304004060407050161970501614001006113030515013030
5703010402700140013090462005827101110511307001050140506120650611006140
1050303053005412130100609630110320040502040300501501006407030101301400
7043061170430615611002002303040010061061400100611303051501303056002102
0024014007040306505910670413030513070010501405061670403061130901308140
0305404010008020056132007090010405107613070010502080200616207002612110
1400501163010201908121303810405112410111051130700105014050611700202006
1507040400130305703010204017005401006401501026096113010204011041054080
2080110410540705020406140010061130305670301013030580301040062030130406
4050650512456301004160070013030540105001100250101602001101030627050050

1405054015005010703002005010010216100130130305150104070204030105011004
0400401309030156140010400401307201561405040040220060301067072004004065
4061100200800400401303051002008001860501301208020050705020406010101400
2040630146003050204035014004003200104050400840051130150512008040502080
2002704700302040502040801004800306061130602103051332802401501008005404
0105001100540307050154063703050110030625401001601051082008065013020304
0705040618007056506061890014040170020200612563014007130400930707030106
0011050540505401301100301030140505408017080705054061908081501303051082
1304086050105051425640501307001050100130611501509012001016007005014010
5001100540805060618900140401700202006125801100020010501210505401307041
6561302100080011301010640130100101405660680105021054013030524012015061
1090507065051524101153013020400121004312040200606305011021050302040205
0010200140401205040040400600806504050130204001261070806705020500102001
0043120404050130305506200620400124021050516181054102513030540501400270
2008006150560230130603014061060020035404050130900304014001301013050620
0217005056105410540130109020019406040010010405174230100420802001307001
0501001306115013030556130406010812504020010401003080405010403020405013
0305300101011501200141501053020130406010812504020010406140564050801013
0120080034010701630305403020130604016140061301200800640121050540110600
3010040110300161303057030102030300101004102005183061001304001301056461
3050901200105085012501130305618216510030803040107070022040270050622040
2301504004023002004040506003010010100080200304050103001610707002405010
3001630305403020130604016140061301200800640121050540161301051304090102
0051929101153013020400121004312040200606305011021050302040703010804002
0054050130200603015040010063061401315014050230010200630150700102008010
0431204023001020065070010200613030570301020303001010041020052023617001
0013040660103010064051011006401700202006150704051303057030102040170037
0308010204015021016370302040403062016140012040401304010640018414050130
7013040105052115101100640146003061130120080013040100460513040010204002
1303053020406301400200400461703010142120020408040050100302616001602001
0505221810013061101406601015080105110064013212001050615013050504600305
1840010106002003614050518015010600200361405051801501416003065052321100
1302003301504050130700105010600180650150704013030570301054011460030617
0301054013021280170014600304004065801502040100013026506703010130305804
0062030611502050400404064050105052417100130611014066010150130505046003
0511241401414061801051801700521504006200220801001400301150151550110017
0465052513100130200215010301140302013015080601061600108018020010021050
5016210501301006401308016010010505261410013080150514082004057030105401
2002701050605051040010565080101301200800803014001607030101301006401308
0160100105052724614003070301054050211250101440213081001700100200211002

0021501804001002304050184540163040104001002304050130160020010013030110
0400305020100130150401104001002301303054050130404001001050528163010502
6094001301010420304001004003050104011501221609104101301020301100400302
0150101600180130305200213070130401050529131501012001041504002621500401
0615004020804002065040501908121305012006700302037113090013040105053098
0967040030550806051004003016001058010040030580190284050130600160200105
0531268027050013030510002001211028500801013012008003010200105201080106
1200106065160010510013010161030400117037400150120650405003057001130100
0200128016120010606516001080190284050130501440105053240405013307003020
2040025017030102501016020011010301505405010040030508060121000102005080
6016806014801013012008008020150401100400301305016034010701640501810151
8020150401181011305016034010701630100431400540200603050121302105014005
0040150205001020014050540270470030208010130120080030406020080650533341
5040137113070010501081200265013030562006063056106070650801013012008008
0601411501010040030611610903026116400100970110410540612003305404050600
3018016105080614050130120080070030203054060071080101304501016305408010
1301600200570700127090010405341313011307001050400126140501002301504001
0042006170301054080170304061150130305100080620020081040535141011105113
0700105014050611400100611303056124001000611301051306601030563154618010
6021030530703020404008030865053624150130700105020802006130615030540401
8010130120080034010701640500305407053010804004612540507070012106401301
0010140540140010023040505406305407070012130104053712102001046501501060
0200361405013050120064015402600120031050405051630540707001240100104053
8136130601200100613060120010058011009706111041054013712401206021502013
0140501303056130305707107820104053914804050400124050270490030405619030
8801501303051040062703010515013030510008062002008104054019130404007030
4015013030530540302013060401614006130120080010707002405010300161010008
0200304050103001613030570301020303001010041020054168101110511302006063
0301108750201307001050106012007065080101302080200405013070010501001306
1140501218061554063040400640501003062540640501307001050514616040170650
3030207002604017065030100640160020010503040101400620108200806501302030
4040502704406180070510100630650150164001040040570018060070065615030404
0064006580187002006164050102004130305804005040058030504004030203054050
1303053001010116301020130700105030401020041303051501095200100306254030
5408010130450101600710630540801013016002005707001270900104054226604017
0650303020700212013065030306084008015031620801820402105054016170200800
7050540615040070200800705054080305010800200620300101016150820404008018
2040210505402130100609150130305108213040100609105054315620108010820406
5020670504540130400620015801051820401303055004010400630650405027047003
0206401163010202130406405010505444115011507305011304006200158010515410

6506200108204025113050210650130700105016030406130307001050514616130200
2150106506130182120024011604008809006140502040012130305620150617030105
3005418030140060030061130501606160030065063014003004002006121101400105
0040501100301030164050304010820402401150730130305801630102054013020180
2006505453162040025017030105408010511501305080602130508060613070105021
3070105061301508021301508061301700502130170050613060502130605061303200
6810090190804050400904100258056208012005305640503040108204024011507301
3030580163010205401309001304065054626610080105017030101500120054027010
6010125040200104040904100130401210501041054050130400620015614001050151
3015031030801055410650620064090410013040121050104105405013040062001565
4106406709005303040400100105054716630108204015301301503103024011507301
3030580105640503040108204024011507301303058016301020540130801601006505
4851615073050113010201302040012213081004090410013040121050104105405013
0204001264051040501703010580182040210505402401150730130305630140040027
0156154070401312040501308100302030370305014050204030020070564050513163
0630011303053037030204014056184563020503010230620408010401140012040801
6040021006113060010200140013010130305402003702040340107018010502102040
2401205040040801054006004003080650549336150182040210505402401150730130
3056301400400270156154061870020054015010804005062070502708004011507301
3030513010208015040063061801703040150401102001041303051501090102540227
0800700506254061502050010200140501305016030801601006505501018082040130
3153010510210006506405018605040501303058204013010064010610050650551231
0111051130700105014050613014004006007006113010564613050901200101630101
2708005401630101270800640501040063054040502040801505405054015013030530
1105410130100640130900130401050552288040020010130700105080101003062540
4020080010601200706508010540101006306505060030010150400901025014110200
5807060101303051501014001021308040081614020040507050458010902861703010
4011602006180101508060540501440105055315610100630130700105014050611563
0113070010501100604061213030535411040150540150540304070204082940017040
1305408019028616001602001050554381011105113070010501405061405010200400
4405020407050410505806068010140010130305210064010825406108265051700305
7030101304064050105017075703010130201802001050103154650801060210301303
0563011060018065030640530110407003020808003013030510640010540501030016
1303056160707030104055513150401630102040130305620060630561307001050140
5061130700105010100104065013090301561064006501307201565402001207065055
6116405010400630130305620060630561307001050140506180150872130305540130
1000130265055724101110511307001050140506130140040060070061130700105014
0060070061410502040576163070214050130700105016400611302040012405010023
0204061302080120016301016140010061130305150205040040406405010505581261
7001501410400401301013090301514006007006515761630702170030202150540100

6403011070100306505592110030101153013020400125304005010040650405011301
1501405012130305640115073013010501640115073040501002306150120500200204
0801601006505602710030530150210204023002004050700302040500625705041303
0540503070505130305610008002703010563703040505401301002004561306005017
1020067024130911000640016301020300200402015016180030705060611306021030
5611661700131620401001306114050161004460030612130208020065401004600200
3612561303051703040240120150611020400406505621364002001020500102001405
0540106012007065080101301500406130704615061203054013060840030210604012
0150611070403065056313306301105051540130200215010650613018212007050100
6305401301500406120305401306084003021060401201506110905070650564476100
1304001301056410413030540100030630510003040011041054063070506124011001
3061230104154026069400150105080100201080103001630107104502050010200140
5054040115073013010204050200220910001015016208020016130100105012105054
0130704165613021000800113010106401301001014052030401161004615012001303
0820021980151130305610607065080101301200800806014161303053011082130408
0604105056512630615015301302040012140506161400100613020802005017050540
6010101400540630146003050154035014001305070104056624630615054011001406
1130400620015613015031030640115073013010540405020025403012030614050806
1005406405040084001200330540405054014054010040090456205001020040505406
0140110704030650567251011105113020060630230100040115073013010204050200
2206150304040080703080401230100040020060130400561303051070904020405013
0501601501303053011054101301006401302018020010505683110030101153013020
4001230604004070301030010840010400100104061130400620015613015031030640
1150730130102040405020022040630107104502050010200140505404011507301301
0204050200220910001015016208020018030140016070301013010064013020180200
1050569201501307001050140506161307001050514616130901210650613050901200
1040501405021303056130106401301600200670403090130818030160068070301054
0630154010875065057019301004160070050140105001100250101602001101030612
0060305011301054020060301203040131540200606302401301400561015080605408
0200101001207002616802001010011010040030650571196860261130140020650804
0050580704061690406150040400121303057030105405004070406169040612050010
2004050540613030529010200240110704030650572343010042080200130700105010
0130611501303055613040601081250402001040610013013040601081012501016020
0110103017024611303052002106200220401505405010300200202130305801004820
0401303057030105130350564016151305012006401303090013040105040501509012
0057325301004208020013070010501001306115013030550013050050030150056401
4050130513011305618461503040105040056170401101006306503010406050130700
1050208020061405054070700121301040574818030110400626501301013030561060
4001000802006505613030510008062002008104057525401130406010812504020010
4013012006063010046003040040501002305130200603061405904101005201501101

2030150130970140150900200201080502105030540130110140050040150900200150
1010680206505761610030140070246504050465013030540130110403020302040800
2001630150807016130305561306040107013070301040577241003010115301302040
0123014001000306180104105020401000102001308100630140040027061156110064
0100480030614050100230618003061205001020016800306170506061130602103057
8173070501307001050208020061405025010160200110103070301030601504166467
0106010125040200104070030202401709061620150611070400465057910201506130
1104005015650705040502020080703065302106040120150611080703065058019400
2001020500102001405054010400630650130700105020802006130210604011004404
0030540150806054015060600913030570301054068010130707001254060013046505
8115630620150611064050650213030561305021064011507301301054011400600700
6540163010163020502050010200140505408016010065058226304003450130041305
0160704165303070010501405061130105646130700105013002002061630400345011
0020025404064530307001050140506113070010501001306115015090120010700302
0215040505401006010601050620052150161505403011060400202200650583216170
0160407061401150730130101302006063040020010170105054040080108004050130
4407040401702008061405013081001010063065020025011405018012040025014070
1303001541050584166401305013015064050213030564013150140501308100650940
7015010460030501200250140701301006401309013081050585148015001254013030
5240110013061350140040032001040504008400511301505120060013041050801051
6700302037113040860501050586761307001050208020061620700261211014005011
6301020190812130381040587181011105113070010501405061301400820040619102
1400401183013030530204063014007040046115013030530110821304070400410505
8812620306140401200710020401303058301301910216140010061130305130700101
5040040254064050650589453011061600700204013030521303010006801011040150
2040630205010616007002040240170100440040130110401508020801200400519701
4070300200540601201050405016609401400970406501530102040162060640054016
4008200102002001002580405030401034809010140500301500511014070030202080
1200511040150204017001830804004061880900611104015020402070030201021050
1303053020401101400530703020404003002020065059016101110511307001050140
5061150401130600402006130401060200613015090126130173014020036040507040
3013030010915080134005026530703020404008030865059120150401102001041303
0010915015010610070210502040130704165613021000800180101306004020061304
0106020061090420407050700202001303056705013090301580530150400404050400
5650592136191070611303056191070611302006063061870020061801504006301040
0408017030406115040170301020060630501130230110001304021050593243010607
0301013070010501405061670403061130901308140035018801040197040611700140
1140010061614050616704030611309013081400500401400100616140506150040140
0100616186050616130305108213040860501050594241011105113070010501405061
3010230650204013030523001040501309010440050130511041020406200401820403

0107030401303054050106001805213010001028040501704004102704700302080305
7070012130104059551101110511307001050140506130140010040030611309010461
5040040820040640501004003054050204040400704041803714050030401100400304
0501305070401082040257006170430405020405410121301000130207025162080120
0597014040601201050167043070030209010140130107006100621301402005708011
3030570401603080640507014801050400100401303054050561303057071077006150
4001001405962018303020409010413028200697014054040017013020406303060101
2005682004070301020409010413022004014404004082004016140010061130305130
7001013010540083002006505972737030130305130207025130210400130820014010
0101401303050160613030052001308200140613054106130100301104700302030400
7030406115013030510703040401801013060401614006401801013012008006150130
3052203030010703010405989170304061150130305300410413070100126150130305
1000806200200810405991140170301013020060630130113023011000613030510703
0404014002465064014002040040650510016100303011060400610130600210500613
0910263061703220205002005130600210500801400100611303051011630101301302
1230703020404008030865051012610111051130700105014050613014006013061705
0130010115040024302040400606204061504006013061705051810501050730130100
2001504002430204070801130305705051613030510008062008301040510291004601
3051100640405010023020405004019028612512018020010505103214013703013030
5405028102005630160110256301690103056301814063020501307001050208020061
1080400200650703010130305130207002612050020054030110701003065051042461
7001100103030540400701306113010401150730130305613010130200606301001306
1860250140163450170301051215011630620150121654030110703040650300101016
3011054004650510520101110511307001050140506170301020401508060204030110
8002002040405080030170011540041040040130101303054020037020403401070180
1050210204024012050400404007040306505106521011105113070010501405061300
5145210502040170018800200184204013040640081050130690105150050150700617
0430405020401616002001504050100010200204015015040040800200240040801013
0120080080190124002040409010251304064004008260650540140502704130903015
8010100604015021303051501200400240040301503004002001025500405016306201
5070011002002106301502040040300514513030515011700130405013015004010505
1072680150705002007030101505401160400810011500401801600200150101006401
5040100140540140501307001050160400810070301054013016301015080101006040
1502130305303005144005011810040503005144005401640117040041050115011700
1304050130900130401050510822700302014501015010140061213030051457030106
3551161060018061150400200411040150270411040150540614001006113030561604
0706161303053011054101301006401308016010010505109151064010340701303051
3020060308010100630401700113240040100130613017030403050115020150400703
0140130100010625110641700100130130305101701060101250402001040170020200
5070404001070301020670301061304400201700110440020220068130100460400203

0401305016080101304054620530161700703040400201302040012613082040561304
0062001561301503103061700400600301004050130910502051010513091020021700
5010804005080600801051804002065091020012170050106400220010130120405613
0122009021700501061700400600200313040640010217005010617002080804002501
0160200110103070502017003104005402130210501400801001301307001050208020
0614050540150570011301608200402105051111361700168104001301013086120010
1050150140506121062200606301010013061140501613005421505014060304065051
1222170010013013086120010650101701060101250402001040530106040091070200
2201501050730703010501401104540501306040110013014001006113030515020504
0040406405010505113151001306150200104150501203040505164009401050100306
2501650703040150100490410040050165020650703010514050130300154105051142
2100130701060101250402001040130305402002501150730703010501401104540501
3060401400206503050170104130163050161600200501611054050206120071005016
1504006001020013020017100105051151710013013030515010405073051703010204
0804050102080200270440502040801501017070025707001213011707002518414050
1307013040105051164561700100130130305101701060101250402001040115040010
0304003030501601400600700650106140101305105040504650130305100130602815
0204011020650301015011006304013010603010281001502050400100304005801004
7030404005400703040401801050806010630117030404018010508060201502015040
0703014013010001062511729401100304003054013014011402004005010251501702
4611303052002106200220406205040070301054030051041401440400801054080304
0140068010400501020504001504001302001001027030105406150400703010203030
0103005104511811150400707002540801505407021420615040010008020030540801
5020150400130707107130820104051192410013013030557001106401050807013090
1410010509041005403054035014004003200104050400840051130150512006001304
1050801051124120080010130305705054062008006170505700302013080671307090
0104051201130305403020130604016140061301200800640180105506567030102030
3001010041020064260401303051302008405013020081040611413084043030513070
0106003010013060401614006130120080063703013090030401400613050620050040
1307001050208020061220025401070430650621456130700106003010020404050910
5050040100800101330161330406040107050455004015040040400404002006506312
6561303058010130604016140068010130120080010703040602002040635200204061
0703040401400206026506411640140014001054040501105405011014002002540130
1201506170505140702008001050651280100420700261213081003040131540806068
0101400105401502140120150612510604005710650663113040102006120401530205
0140501002305404050100200504020501540801013012008004013040504020503020
4061200603050113060401703010540404200120016370305011301505120040032001
0405040084005408015302050154027005062540615030015014050270454010020050
1160020010506716630650730501703010202040012180101002009160803040606521
1041054030100130130700105020802006115057001130160820040210506813610013

0613063011507307030105403020630615073050140302013010080010130140200500
4030110509002006506996306370305015403020130370305015200330163030260501
7030105404011030260650610136301004160400571022006030405010023020808110
0213070010506060020061405054040120150612510604005710650611101003060102
0061801013012008005004015090020061201080201507011002513040207002105061
2251003030405040180101306040161400613012008001003030305204002703010508
0605130200840530103407050204013010106401301001014053012001028010513070
0105060060200611508060540805403011064050650613963054016020508010130301
0306130505120065613060401070130703010406142410030110001020013030514006
0070063010180192001306040161400613012008006561097040630110970401003015
0101402004001501206501630405016030406301400206505040501304030020020105
0615910030150101600180150709010400200210707001210640709001040616940501
0902008070505106401070080100420084056700302013080671304021050617176150
1040606020130305280020080301201300803051301566150104060602026001020080
5670301020303001010041020061876561301001520080610070214565613082010401
3060021020061937100301103001012022003005145100301303053005104210501062
1050204061681013010570011301002001503015070020020402564050230100011050
2040304003005465015040701303051305516002001010030301130054100301504015
6130561846150501022001040401400300200206506201313070010501400105015401
3020400121070200806505204011070200806501250154013070010506006020061150
8060540805403011064050650621146405019003040404050180400200107030101303
0520700211620700221101400515053011080308130900130406506221261064050830
0200540340107015004050100630303070010501300200206111050300200201620401
3070010502050400404007704065062312500403040400205080400504005401301150
1001306161303052002501401205014030020020105062410150900200201080207002
6170301015080605406800307050540401201506110804002006506253264050540405
0106040040701301020637030501703010100306254012050515010801005656801017
0015054061002001615010200612030110530110640506125184001017001316201031
4306502010100630130700105020802006115057001130116019102001301630105062
6116540105056507050561050165070505615010530206501301150806054064011030
0702006506271763064002001017006100806170301013050120080100130611013010
4005015020046301502070022110140020025016502065040501304064050105062816
2302413054040120150611060080650405010023063062004613070146130401505617
0505615054030201700265062996100130611505101301810140050113045010164015
0850240270650010506301963064002001017006100806170301020025401001301301
0605700121308100100130612301062002501100130807006100611307070012240120
5040040400208020065063127100460060200130700105020700261230100113030584
0010170013140054013060170521000400510013061101860200400501703010401802
0095018010516540108403065016712005407030109005620054013016014011072006
5063213640113081015130450101130130702630566303041200130160020056001020

0303070010501040010065018030140070100306506331410045070304015053010875
0201307001010100630650801505403011020700265020630205013090013040105021
1014001303051038465063422630100420700240020060304050100230208090220061
7030104012070026161670061840010140015405090200501630140243030203040140
0130305630100431204050502113040200603010506352861502015020220070301020
1702001800540801501604009704001504002400100010508010018010130120080016
6030401801013060401804001400105402110563063001130305303407054070301013
0541080301400206505040501303153010506361015040110604003102130700105010
6040706506130406400101027050054013030550040130105102003706506371961001
3061306301507307030105110540502002510030150130305100142007030101501050
7301105630205012050020054030110703040650638226401405041258010130120080
0630191102001091020023501810513011404014050013020404018020095018010130
2040012405030010500401301020025401083002006506391761307001050207002612
1101400501904062204080101309003040140040501030011303051080030305640501
0300110370305703010902001940604001001040640151003012001104002040150140
0120407070012130305161400400204013060170511000102001303054004706501502
0504004090141001050641122301101540047065080102030080401400470650130105
1503001640050606504014003002002065064211630100412006030501130101404040
5010023020801600700501540213021601613080020013070305401040080020070650
6431480306301170031540216050140080020070616302050100604001003062540671
0503054013030010915040120150611070403065064420803040150606140170020200
6125804008501703010540126122030300108400101700180200861240116400611600
7005015402100040058017001540402306065064598010097041220013010064013070
0105090030406161308404303052002130701304010506462310030120011040040150
1600700130305604070204061290120020406600400407030101003062204040501305
1000102001303051014001020402515090020020108050902008013011014005004054
0109048065064714100301200110400204015014001204070700121303052100040051
6352005530105302013011301006401309001304065064815640150200603013040200
6030105013014023002001050640507002001050804050140506190308803016006807
0301054063015401087506506498613070010502070026121101400501104060540130
7070012240120150611080601006506502810030301110063030204070504106007110
5013030563011703040130100010263011100630302040150104030201501400270130
1401106810130101003053010604006101301704010613029010200180301400400802
0200650651176150700200251307001050106001806501501083002006113010200254
0301060305404050465056301063013008010703070305401040010065065225630140
0920041307001050104706502002540213010004156130703001010200104650635540
1703010204050860125404050300106401405086012207030105404050300108040092
0045408040020650405013090013040105065315620700302080400501270800540227
0800301010063061156301405013030570301054040502105050113010601303052170
3040213030012020010506542761700131201307001050106405065021101400501801

0030603014070301020402040022002204070301050806051302008405150540507040
3040502040606123513055004040012405027045619030880150510008062002008104
0655662070030205080903013011014006304006040021050602103013040320040105
0656211003015010505104001501702413070010504004706504050465013030510030
3011400270156120401004800303040017001640115014050130405400410506572210
0301501070301021050540502002106207002400402540170504104014006040070330
6502515013082040130130305101009013081006566001020013080190301050658141
0030306150705041040140060400703306502530100800101301402002105010621050
2040613030517030402130900130401050659316705045408014008130100010230110
7030405113015661070304040180101302200613028200640140060100940506200100
5130110703040516301825801090030401400130120080063012009263011012601301
8010204001240210506602265613070010104006801204021303010306107030404013
2008400402130505120050040102705002040801053010100800101330406040105004
0130105402003702040500401050210204024012050400404007040306506611765613
0100152008061007021456102006030703010204088090058400101700131184204013
0406400400680400520060305016540301108020096506621250040200461130101303
0540630154013081001301305130820406561602007013081602105066317100304050
1050310204040509003040140013022006130282004004706505400800200701660080
1053010501503150140505700530502065050405013030012020010506641010030130
3051050310204040505164050203020200250040150400404003002002065066527100
3056130100142007030101501027050070301020407070012140508061002040164050
4008400120033020401610302602040300107016107001010027080020402160270800
1509002002010805090200801301101400307030540108010056506669620700225100
6402065613081001003030604007030102040262010306675302030502140604001002
0066068040070304065066823617001200110400130700105010600680065080101101
4005018017020080070505408400101060068006180108410500100010200561401105
0601050201303001091508030140010070427041307002020010407013010064013090
0130401050669126401703010130700105010400100650405086012540405030010630
2050700202001030703054010400100650670456700200130700105014006007006141
0505403070216305616100020040054013081015130450101670020200251504002603
0508060240120602400301060305140504650130305630106301300801070615040070
4302030704303011066007004050511630102013070010501260306124012060261305
4030020012405084010406707001213010402401201506110208020065067139100301
5047064050465013030540130110508070501630110800200501650200470301017010
0125012704170054150113030520130700101604005640051303001019105080101301
2008008102001503051908121047065051301013054101104005011003015054101303
0556130541061402005013050603040302002130701304010506728615011001040611
3090301561400100656561307001013010540083002006506732465613070010600301
0013060401614006130120080021308100610640101006302050801020650100630513
0810063051304030201064010508060080101309062007013040130100010261303005

1456561308201040130600210200674146170010013012200151040301210517200140
0400600700190501401130551501012001206100640208010800301304021050675962
0700302050200101220015104040302064001306040161400613012008006301020650
4050130406100501050676158030401350703010513030103020011020620211001305
7001200210803040118030100130301182130180301050677188030401200110130100
4020021710001100130570012002108030401180301001303010503040105450102002
1030120650504050130100640130800130105067818803040120011013030040602171
0005100130570012002105700112022008030401180304001001301011006401501022
0010404014003002002065067912150106354006351030307001080920013060401614
0061301200800850108016401150140501304030020020105068025681351006405100
1301400813650108010130305610045415063011600180401400300200206502513011
5010300120021030010101660702002102030300107030401180301400400700202006
5068122620108016001804011300200204004063014006001806501502040130020020
4004021303054013040105073025703010204060309150180110130802001010010501
8100213014050150205040040400703040650682111307001050140506163040103026
0611104015054029003040163010203054013014050654040540046506831464003020
8340050114001050151122001510407030101006405502008070420031400405050300
1150200220820104070301040684216652501305160811006107010062203015410501
6506815410501405010023064050700200104005416646603010401506110626106608
0640660106512006506207003020503710130408605010506857672020010161081010
6701060106130101602030405013090130810506868616040170103061301060706106
5060630691620301808003050170301013070130401050687964050121105406700200
1014005406160061505406134002105015406541050154013010902001940604001001
0406881670030205410130305105410254050103001405070214563061300200206130
8297050540401201506110704030650689171630102013070010501400105015401302
0400126130820406130502658015010208020025156301801004620305012511006401
3010606125122018020010506901616301020130700105054101303058025415401100
4004510030301160130204070301051320011505613017002020010303070130401050
6914464011004200611303058100100420051700100130614011507301303057030102
3002004050300101003040501507301302040012130700103125406601050620016541
0303050160400370306505100200191060400246505164006008065020500102001670
3040400404013040400703040611504004063011216204010030130305500407002005
4080106006800540103070265069222657001204001215073050154021200204090410
0130700102105010410563040050700200140130100200106405086305161307001050
1064050650213016002005106405065025654070301090301400540108180900650693
4964050190030404040501804002001070301013030520700211610013016810130106
3040106813010530010640501001306015073040500304011507301303056306400200
1017001309001304065080101000402001400130406400613040301102052160961104
1054016002003611508060204013010640400376507070012130565024012050400404
0010063065070301013030510001020013081006205040040705011014005400604002

022006506942963010043104004065018020014102040160030100501204016304020056400200204004040160063050120406200190056200204064015020010407020403008070120401307001050770404004015054080102040300200201301004400100970210502040680030705020404012050400404007704065069517150130305801301001308261305061010600200313081040501304010400640600200313040104004050130810701030204013030580150104006802065069612801301001301902186370301303010306020501613030040606130100402008602150170030204001004102001307071071307030104069716656130700103703030204013050364030400540046125180109003040140013022006130282001004809030501130110140030100640107030406506981365613070010150300120404050508060618458040604001002006406040064701004809030501130110140030100640108010056506994465613070010150730405013060401401801600200350125502140020303001080160020035014050560080020015060020034050582140400200120216405013050600304050930705110050615041501056350140040501705012613071040065061302004015040300400251610001020040400300125150900200611301050040200517001150040200610507051508010700302040301101400301006401080100565069944656130700101507304050130604014018016002003501255021400203030010801600200350140505600800200150600200340505821404002001202164050130506003040509307051100506150415010563501400405017050126130710400650613020040150403004002516100010200404003001251509002006113010500402005170011500402006105070515080107003020403011014003010064010640506506100156370306130305300200201130350660030100540660020010061305250105062501400210001020070304060281505640070130107040110908065061014182410701306040161400613012008001501010206503056304630404002050305901825660030100203030010656220303001070301040610216700302040130305200220403011305130156600130100203030010801702465656703010203030010620103061039301400420020513012901200656104200201301290120065613030910801306002102006104151004312040290110200405020022040804050129020080305080605640507040108070301051640115017030102040288010900610586207003020509020080130110140063010100630614200604006305021050530100640107030406506106131400270401168101301020405020022030113051301566170200800705013040300200201050610713630630011303054011300200206164013703050120703010540880109001640115040070301054026201030610825630140060261130700105010470650405046501303058010602611303057046121000102007030402070030207105013020301405704030540500401301020025404020037054080105021054024012015061107040306506109216110060406121303053541104015054030105031400540110530106405050251100301504011301101400705041303056401103007020020401505117001314003011064050650611013650100302180104400540612901200540204013040106405061251630402005650700200540801091000101505401070405650611122630615050150730501130105401304030110205620304054013040640010683002005017030105402030300101002301401201506130106405061130115010300113030563020501205002005401035306506112236207003020370305013020305021070461300101910501301506061303501068102708005401301027080076002008013010063010002006200163063001200220401807030658070020054064011080400200650611312630400901000101301051801045130700105030110640506502130160020056301020080065630101004002008061401540401004002008065061142318010001020013030512400100010820401656130700 10

1507301301020401302040012408090301613070010501400105015401302040012107
0304065015054050730405020022021308100803014002065050405013040404002001
0506115116400404002030404002002209041001670430130140243030203040140056
5613060401070130703010406116186150400970120500200405080101301200800108
0030620705060210301303051501040027065013011309005061505401301106002009
0650611711150200220561703040405010800307050602103056561703040213040540
0410506118108020306140401700202001604013030570301051502050400402110140
0540640501050611930640130204013014001203061404017002020016040130305703
0105610048090303020404018200407030102040130140118009200200400401301056
1502050010200130108003065021561105402100010200703040150200220561703040
2130407040041050612012670020061900152001301500406219505150130700105010
2060265013015004060103765024012015061101004002008065061212063014001203
0614040130401070020200160401303057030105615053080601006150130300101910
5030106865013010163010110540301031430620406150197040040654015020403040
3002002065061222416405020150401040018018101050156370305013055062001104
0300102580101305016020405040500305801013090030401400301060260012003405
0512070030207105030302018020010504012015061107040306506123156207003020
3703050180102030100200105120122004032004010513010402020061801051640110
4020200650130121508060540640110300702006506124296170013140054011051001
3061305050640508400105064001040500304011640010200603013030513030517030
4081050010370302006013040056010901021307001050132004061901000120070504
1303056707001230041042401201506110402020065061252880405010200413030515
0105410510300200890420053030160301406405010200415010800305103703090420
0580010100182003120150401109070480101306040120700302010370301303051302
0036070301013070010503011064050650612696570019020019200220406040010010
4011004809030501130110140030100640107002020065061271030540412001306030
1407050420025406566301054024012015061107040306506128366106401083002005
4034010701101407030020013035010041604002050020040040405013015060610013
0163010165404050130150602002501160400404007027080050122708006230100050
1133050113070010133040030501100130130501200405006120406001304105080105
1130140130011303051502002208201040703010406129862070030205063010270800
1309001304010502708001240120150611020602650613028101407030020013035061
3015060130401014002040200603040502040101009065070301020401101400106105
0700200650204030100110640204057001100130613005450170301015080605016100
0200400540130810151304501016300546170301015080605401505402015061201802
0010506131107003020150304010205020022040530201301002001029003040615305
1100018030650613296302030420031400404017040306164012002202100018030704
0110704030650613318620022013010005010700613020084051501030011070052204
0610604006003080405027042040401103001204011503001204040507002001051006
4016002001050613471504014006704650301400640115040040240703710506135191

0030101100640170403061703010402015040020401501070140308060680400703040
6504050400206503057011002513041200150530110803081309001304065061363163
7030613030540401700200140501308200500613015070140509010218010013061570
0130305277040540657001303002002011050180401201503030020020110540803011
0903013010130305640120150303058056109030130103002002011054060140110820
4065061372062070030207105030205001020040501304030020020105010040030163
0145403002002016540301020046540630103026061703010540410505406306300113
0305401807030658070020054064011080400200650613826610013061570051507014
0682005008320030110970405113014050503001277040540615070140820040400900
5620051615070140301107002020065016040130305703010511804002001703010560
1037105402401201506110804002006506139226100130614018010296505700513015
0701406001309053070020620050164082004070301017613501615010205040104005
8054080105300200201601037105406908054015058201040703010406140201004600
6020013070010501004003061163014540608051210001020070304068200406140120
0710054013030518040020017030101303051004800306164012015061405400410506
1413165613070010150300135014004070200630014006100010200407020063001400
6130506003061307200704060040030801120305613071040065061302004015040400
3001251610001020040400300125203061405050040200517001150040200614006181
0051064089014563014006020080611505301108213040602008010506142166405013
0150701408406305680200300120306140401200710020401303056301400400270616
0096140013030010915015053020407046402105061432350040150105176134050130
8001501500501050640501304070715005010501003013070020200105082004014013
0150500101050140113004004030400703010512008140130150500101050502106501
0270304015020504004090141001050614440640501301230150050105064050130210
0200150050105010030130700202001050820040140130150500101050140113004004
0304007030105120081401301505001010501402050400403005411700690120401303
0525700180405019003040404050180400200107030101303052070021301080030130
5016021000102007030401501303053011054101301006401309001304010506145391
0030301134801040116810130104082004017030109170401097040513011501020650
4010400516440140608068116308406005071020080150520036016806010011530301
0001020013030525804050180092001000102002110006301701480150200220100080
6200200810406146286703010130700105051461820040501203070010900802006405
0130210020061301000504082004050170301054030086405401130140184030400900
5620054011613086110116401160040030927090040700302037105015402210001054
0615013090141006506147138015020700262080100302002204070062008405616070
5630110200421605705013010064013040320040105061483760101006301307001050
1300200206130630011303054011300200205016301121650163018200405014050300
1020700302020700213070010504050100230540840010700110061216050110030530
7050420404050703040804006002003653050115040040027065013011309005061501
5040040130140060020090650614981003080303051308351302130100058030630013

0541204013407010506150271003053040300541204013070010501030054650150130
3058200405700180150300546180301400300544070540630140040027015611307001
0502070026121101400501613070010503011064050650213016002005654022002540
1070430650615142100304007013061140030401820040200220407030102040130140
0300200206125300101016213061304105018601501630140010040030611630142040
4050140301100508505020071002040611015406301400100200261130806183004019
0052004050516401295063014001004003061130508060130400108200401303051301
2130810070030204069012040253070302040400701003065061523563014001002002
6140130130104001040130121304001051018605084001010230100013004561680611
3020103061304010715021301006093015020308050806011301660705161700110030
4004080170430616306201507001100200210627054130305168061700302040690120
4025307030204040070020200650615317615057001902001910406040010010401801
4002706563014004002706113060230804008020010022040705060210305700302040
6901204025307030204040040010065061541750040140010501406601013020400124
0040140170301013070010186050640080901030130203030010654106200840530703
0540230100120025401064050650615586570012040012150730501540212002080140
0270656140010061307030204040020084065061561415040010063061150401150730
1302040012703010911080400105040501002305016150205017050420016040054030
1000180301050615735164001006306130615011507307030105011302040012302050
1154104050540801004312040210505405020022040654106200840580405019003040
4040502070022110140013030569048070505160503710130700105010904806507050
1101400501606130707001224012015061109048065061583753010509002006501301
1504001400105401304030110205161014001020022016101400102708001101400200
2201064010140010270800110140020022030110508070508060111040150513040400
2050140504004050100230162060240080101104015051600102001100301504009002
0061150140504009002006506159191501307001050802001006141050540620150613
0010701306040040505408010300101504011402005401301013030550040105021054
0240120150611080703065061601640503121308605058030570300200140500130516
4050312130601010580301103710130140500305165403011090030406506161161003
0150501054150102002101301090200194060400100104041050110010401403051220
0151040850108016401201504050130403002002010506162910030150903014001065
0602010640810110640401400103030520021307013040105061638301300200102030
5627003020140200400615011630130406030401050616429100301100010200130305
1210001020021656200220303001063014002060220305080601301703010516301400
7200617200567200160020010500401301020022040402003702040801050210204024
0120504004080105400600400308065061652165613070010370302040600301108013
0120080062008070270800204080610027080042003140030102306204080104011400
1204015020022060200107013070100126150530100080620020081040742604013030
5130200840501302008104071113040907213204001215073013010208030110205080
1090420020820034050530400507002002567002020010303040640501050731414002

706140115073013010204040502002204063014004002706140504650516301011003 0
103014014007002020065074106204040501002001051530205015180315121605012 1
014001165401001103065075128040120150470615401700315402160501130115010 0
130611501205019001304010507668030506013050130700105012006030130105406 3
050601305013040200603010507768030501009050703010540270304064012050110 0
011021050789613067501064010700130810080405050010030400406171050580163 0
102054013040803086507911640506008040040617105058016301020130700105060 0
602006115080605402401201506121101400501109003040650710116301004402050 1
204080101301200800637030501302040801051407011030010030103014014003002 0
200650711166301004600301005012040500409062005012040500401003050130304 0
301102051603461301440806034611301123010603040102050405013060134105071 2
171001304014050702013014006034170014020040020100130150160010200405056 0
030100400501040505012006600301004005405091050713131001308015294050518 0
401102065030201504004002022008010518016002003150204050130901100020010 5
071451001301509002005010130101064010270500650715410013015020405013040 5
090020010507167100130802401110006104005010301100704503054090200192013 0
406040010010407171550040301400105054040502105011041054064050600308054 0
670501104015054067050300401103054063014003412050020054030012020010507 1
812100130160020034050514070064014048620013040504002702040505403014030 1
503550404050204013407010507191761011440160205015040067632013035058020 3
014050810500300104004016301400100200215700513030032005804002065014050 1
309001304010507202580660660305401130300109150301024103054014016620010 7
050540140506061400540161001304015051204012002204017050570051303003200 5
130115040020650140302010501640020650140501306001304105072156100160405 4
011501030204013040501305019081050722288043015401210002006200803040170 0
110011303003200524400305401606140054016980100110600908015070301054014 0
506200100130350565014154012002540113040150520401705040030204011303003 2
005611003030204011501303001091503020401704640210507231210013012002501 9
003040501150806050161503040400100080200305016400200840501305020650504 0
501306001602001050724121001301529612708002040302708007046630204080101 3
012008004060400100200640400170130108105072571001308010514008106506801 0
514004064006506405051400600200365072620101250101440100415073050170301 0
204030216011061200106061400204062001030016302160130400100610700302060 0
102007003020405011014001303053070305401070020200650727311012501014403 0
110804005050204013030010915020401160020031261020404050130350510507707 0
505401302160540130102001054016061400540115051020012040566100210305405 0
810500301400200650540150137030501130300101910501630101303070010503011 0
640506507282261700180703061801830051001306163450170301051121501613030 5
140200501251100301501303053011014020021308083001140010063065070301013 0
305401301400703040650729161003014020020021021301006096110010406163652 0

4070504203040603461470654060030901050305130410502040124120404007064650
7301680200101001541068020010100181007030105401308003013051505401400600
7006113030010191050163010140504650130305610860265015054040540046507311
6101250101440600700617105040020407050420304060346203061613002002616301
4006020080611505301108213040602008010507322610030405082004071050513030
5130400101600200330702145613091021400405013020071001003051030307001050
1405061801013081015130450101600130905106401301001014052070030205080903
0130110140030100640107030406507332910030150401820040200210130806183004
0190052004050516401295061301500406130210001021000102001308100615040030
0200206121303054013040105073025603091501615040010063061703010130305401
3014007030406507341163020301405133080170013113305403011060400160020065
0601705630110604001004406507351910125010144014011014001050204020060304
0502040101009065070301020401101400108040501400100106190308803016006807
0301054063015401087506507361161307001050207002612110140050161604002022
0061705051163010201908121305012005408010516001304650737378040501900304
0404050180400200107030101303052070021162070022110140051630102010501305
4050901025404050130204001284001017001314005402006030501104006806505401
0013061110504012050400404004706504050465013030510013061800306170501630
0546170301015080605401505402015061201802001050738401001301460030618010
1404010046003040040501002302040405013035061301506080101305012002030401
4600304001405307050400160040051840010170011412002061801051340107011001
3040016002001540301630154020025015630118003065018014005407070012180070
8014050130501200100130302030800708063020503014007030406507391461001304
0016301540301600200154080401201503020407030105014050808003080700610061
1307070012240120504004040020602650740231501307001050207002612110140050
1616040020220061705051301400804008305401261213060401630110460030650130
3505840010103031303403080106040130600101962070030205037101304032004010
5074110305404050355040405146405080610054010006130062070030205037101309
0013040105074215613070010501405061670403061130901308140030150203080508
0601130166070511630102019081213035055408010516001304650743366507705014
0180109046200540405010003040032001040504008400540130150512006100130611
3084043030513070010541501305700164012050130505400410306301150541501130
3053010043140020060302002501213081006506461150400302040130350516200500
4004065124012050400404007040306507442865014101908121303505190812130501
2001501004634501401670450120025018100180530634400404016704200220408100
1100130615070408017005040670050210505401503070505130305703010130900130
4010507451013070010501090465070506021030130305610210006505170631654021
3016002005201802006507461862105054018312670301013017020018020031301070
2008065020301260104015406501461190812130350515060301407030102040304010
4600306516540109407065074713617001902008040012901200540400301001190812

1305012001001306120025013014003703050140701301006401309001304010507481
4650141019081213017020018020031301107020080650540260104015401001306140
1110005010705020403407020406401205040040400604002022006507491515630113
0700105011006040400403011050130540130305220084051460030611303505301600
6807030102040630115040040400875065075020650141019081213050120019081213
0350515018010800617030105014050130401164040120071002040130305100130611
5013030582004054017030101302018020010507511919307001050140060070061410 5
0540305616307021610002004005401308101513045010180130106405050601540204
0150606130100110640540570016401201506121101400501103846507521063010043
1050154022040012809030501570301070304054106200840530100640106405065075
3385301050900200650130140016103051064010140010400161030510100630130700
1050506065405010023010043140020060302002501213081008053030501405030080
7018010300807061305011650200480507040301000102001307001020501507040301
0046006020061150806054068003070505404012015061108040020065075432150200
2204013030513070010600301001306040161400613012008008010604005110140500
4016040061070301013070200300101000300101303010301305051200109302585001
0500161303004060613010040200613050364040606002001400214020051301305130
6003010061301402004002120020130305200213070130401050755814706120022040
4008002007016600801051505301108213040704004105075615630140080604618010
1301200800270419030185161470656006801694070115020084040013030510020010
2405013040860501050757296561307001010200603013020010182300200121050104
1020084040058400101700111003040060812150010013016010050153023044010400
8015073050125130401801600200350125405020301305004020014002070030205060
0200313040640010307030204040070020200650758176130230413091021060020035
0214005217005020025613070010600250030110600200313015020412070030205090
2008013011014003010064010300202006507592130100412006030501506811301010
0640580100130101100640170246113030540130204040501305100010200515010160
0180703010204070700121064070900104076091001301304030140501006405150130
5020012080108003013040210507611110013010110064030106021080030130563020
5010200606304050200213070130401050762111230100020402006013014002002106
1509083020406170304040501303054013014007030406507631316703240040150312
0407002020040502002204070301020033040502040301050700200204063040040010
0616307030204040020084065076414802070026580150310501561307001050407058
0101308030206110002001005011307001050207002612110140050115054020150611
0064017040105076516613010701416001540564110013010110064017024611303054
0130204040501305100010200518030140040010065076614100130130403011307001
0502080200614050100640515013050200120801060801556150130509005020405013
0201700210507671110013010110064030106021060801556302050102006063040502
0021307013040105076871230100020402006013014002002106150130204050190814
0105076927167032400401503120407002020040502002204070301020033040502040

3010507002002040617002020061170037030204060030801405027041006405068671
4204080101306003010026095801700202006113011303053070302040400803086507
7017100130611310400501305070241303056845650700200401201501070241216501
8014005012401400704501150205040040501309014100105077125100130100461007
0703010204040502002204020036061000800214003143065050108010160401604010
4004065115040040612162040401507301303052514050603091508015040090020061
1501040702040405013040504009002001050772138015031050156130700105040705
2200840540501610097050141220013070010502070026121101400501640120150614
0640501050773356130105004064160015409013081100130101100640170246113030
5401302040405013051000102005100431400204021050540502002204057005501100
5130305302040110580700200651400120308010120080013030563014004060651260
6801016007002040707001213010407742561700202006117003703020406003080140
5027047014626120408010130120080040040060070065040506056305110090620016
4005084006501303213021064001801700202006113011303056301400705006180101
3012008004080604105077523100130130403011307001050160400202200614050100
6405303070010501604008007080613040501405040505401400703040650150901308
1402006030405020025100130611501240112006030254064050650776810013013070
0105016040020220061150121307001014050400402520180200650777168070100200
6113050110056704006170501402002002540610013061101901308110400501240140
0704501150205040040501304020060301050778680160070040054013020038058019
0286180104120054031500401050779158040063010705054061001301011006403010
0412301000400204020060130520021065090840030204063020503014008265013050
1908105078013630691170010013030100640514001400650130801830054016021002
0402514050184405013070130401050781111502040304001400650130200313030056
5405046501305060123015040040100640406020080650782136401201503612100640
5130115010013061160020036540405010020010400204015054015016010400952006
5078378015031050156153051301140200140052015040040501301000122001050784
8614092005017030105404092001801509002002010802015070110025130403200401
0507853861301040410501600154030070102110013010110064017024611303054013
0204040501305100010200510043140020402105054050200220408016806113020103
0613040107150630140026006061130501601300101540630140080604618010130120
0800270419030185170030204060010200302040150205040040406405010507862463
0140010070461220309020019400670465064009046507050602103013030540501405
0256400210006505170631617002020061170020504004010030103018020500200204
0615090020061201080201507011002513040806041050787196150201509110805405
0204014050612130700101200603040025691108053040106405061801902200618400
1010820401303052105050165660010200130812040105078822100130130403011307
0010501604002022006140501006405305060020035020101300701026130700105014
0506140702040501002001040050116304007064508010403040050110013016306205
0120120051050789421004180400200105017030101303052070021150704501801040

3040020402704170050315011303054050516401102065030501150507064801051130
1150103001130305200250166070200250120303001070304017030101303054006203
0501200250118040082105050162105010064050121308100615040060010200130801
4008105079012610013013040301130700105020802006140501006405301050140027
0400403007010211502040170013060016020065079168016007004005401302003805
8019028618010412005403150040105079213130700105020700261300701021201503
0401010005061801051130700105020700261300701021201506154013060016020010
5079316804006301070505406100130101100640301004123010004002040200601301
4002002106509084003020408020108016010703010100640201802001050794136401
1200603050180101002001054050502101301160070050115305121302160161308002
0013070305401080020070650795185004024305014020150130601010513086050584
0010708061610013061100440601215011308002001613060200180160070050154021
0004005654030110300702006507961863061501530130100200101405061614001006
1308040085017030105402200201400405013060401613012008006302050207002618
0160070050154024012015061102060265079791801405015301301002001015010140
0105402160501210140016540501104065079891614050153013010020010150101400
1054021605018008106540103070265079910180140506140202001303058030110140
5040202001303051301130100640130600160200650710019163040105430307001050
1020050065013012008004050270415305115030650300119025015402700506254065
0927070301010030625408054030110604070650710123400302013010020010501009
0703010204050150211051630100431400540200603054021302105014008040120150
6130106405061240120700261405010023020700302010927013030570301010030621
3020180200105071029640163450130120500200540405070546150634501120500200
5403080160100105071031650040270500501405027045404066010211014005011301
0802007065064030105809003040612518015090020020108020150701100251304080
6041050710496100130406601010180200706501501020060630405020021307013040
1050710518810010100703010150301110063070301013030513011308100100431040
0204022105054050200220408012006030407010250101602001101030710611100130
1502050400310400211058014002511502050400405013090141001050710768013010
0107090158017001510500702150402105071086650770104580170015102108001303
0501900200105071099100130130403014050100640802007065015057001306018200
7030104071107102001041501060020032040405012008002040804017001400140200
6507111710013061120035616001561200603080101304041105081300200105071124
1014006202203060182007030104071131163113060820058020070650100130611503
0501301320011502050150850130100013021050711451001305070406150204030405
0130401002002105071151110013061101406601014011504003010010614011505020
6505085013040301001050711611100130130100618030401130100616082006117010
5013050160616040020052654063161260820070900104071171161681050113010406
6010150130100709012080170015104003010080401101802065071186806100701308
1006293040120150611070403065071194801000302615501302061501003026190110

0020010507120361301001013060820056013410507121410013061140501220021307
0130401050712232002406601065120065071231910013080200706501405040040251
0023015017005030204015057001304020200402020040040658010130404105053040
0600200361405051153051806068040070304065071248301100970501104102040612
0033020404050600301805004030190302502040134070105071255100130611501130
1020025014050100302650712616640140050100404050113011501405012110140020
0250130401314005012002501180200100070301050190220016400680501406030401
0507127216100130130403014050100640802007065014007002004066010610064053
0108060461801013012008006107002002061305400201001306050100400301250154
0650604008101050601540615018061005401001520065071281610013040660103010
0640516040070105061213030561902200611501301200800303051062005005140501
0300140507021456130701100253030404001001050712922100130611670010501405
0100230150400140010501640502704401310400501100130706010200220401501053
0207046204061060400600308020408010130120080080105090020020108040070403
0650713010630100416007005011308020070650213060501050650100904050130500
4020014003070305401070020200650713122801700131400540130860505100130613
0501570056150400902540601010510910200612406601064050407051301150401911
0200540705041303056302050120500200540301107030406507132126100130614054
0140014005012540501105304006082005012518040150850302024064050105071331
3801200603050170301054013096801506130320014613010040306130800801470613
0440110140040809030140080160400202200616201506110064014032004010507134
2363040161007070301054013020037100130611014066010147030501200220240170
5470504203010502030080400705011302003730506405050302063050200603050407
0202501016020011010307135118030401203008050170505401302003713010133054
0213010006517001540105020500650713611801504001004050140505408011000200
1005015408010130104021505402070026121101400501620150617050511000180301
0507137296162005005011301006401307001050201506110604008007080650403001
2001001301200800640100012002511304001021200205018010516400404002030404
0020022013086050107030102501016020011010302401902200616440200501401201
5010905070802007065061006405640120150611070200300650713824631675012250
1016020011010301302820080140061703010100640107020806507030101905014030
5401001306110140660101370303050113051204013054013055100130150204010064
0400353065071391015056301404002200401540801056219304012015061107040306
5071409100130110001020013030512100010204013051656808003020407030101307
0130401050714118617001503105012040405013080200706501060640650204060613
0707001210100400306501250120406106040081065050601204068010700302040230
1405020022040709001040714223661704501406601050030150010503010305614004
0405015127030020080400404010100140020025120027010503010305610013040660
1030160010551200650160030805010801010064010619030863014004002706021030
1304080604105071434163040131406601030401010014005016203040520025100130

2002120050101509002001301020100130305040020015010630205015090020013010
1303230801501604001002004020150580606804002001501080304014003301020025
3030323037030542016600200406601090701001803040118011001001306028150204
0024001301020615011630130406405010507144151001301014066010150101909801
0400207030101305016022006013014001062203014010806007004011400104002062
0504050130300120200105071452062040025013058010130130618405020303001040
6709005640080901030130203030010806007005121006561402001006402010160070
0612186050516012001020404120013080160100105071463660190200807050110140
0101307001050104002022006508010130120080021000102001308100615010200612
0301105301106405061251615010200616021030130200300430110400600700656021
0301615010200616021030130100010104006007006560210301700302021505402070
0261211014005016201506170505110001803010507147136130700105020700261211
0140050163010011301600200582940017040130540530103765013014012015061107
0403065071482261400600700100640406601040502704540508301054070330136041
3056006120013040102006115053011020304054063011054105406021030114006007
0065620150619001304010507149186304016010098010110410540620016115054010
0480030611001306130105030401020084050120025016101000802003050130502065
0504050130600160200105071503963040120037040660101301010064051000800215
0160801100130210604016003080400406501040502704101703304004014020020022
0406130100101301306186160070022001601600105103200513010510013012501401
5013010064016040080070806501062014611010040030650501080301400300404002
1013017041630140037030501040701301006401309001304010507151111001302002
1100080200301063016001061460030501801020084040020615040012008401302001
8401050715215150130700105014006007006113070330601050130540100080024050
2002540670030580101308101513045010162070030205037101304080400200105071
5314613070010507040306113060101014005004040012614050270451614050611502
0022040502704513010008062002008104071541563040160204007050406601013010
0080021600700130130618680105060600400515410620084053030700105054030200
2540102005265071554161600400120040660101006405602701050200330130401010
0140050180304011600700400540130200380510013020023063001040015302040054
0405010023061101101400530205012401807030130608051405011505101301804005
0400204008003025140504003001640054104050400300115040063010501801100080
2003050161200840501615040060010200130100018020010507156306120400230501
8010570051304501018605056801013016002005150154501130102010013070700121
0190102254050130016200840400106607040020303001080601204002513030700105
0104001006506106400650130720156130700105054021101400501106405065071574
3130700105010400270650130200606301305021013014010130700101034650540204
0062170504540801013040062001561301503103010140200540213040702006806105
0515407050130405020200610830305401309102140061082004070301054013060021
1050061080070705054019020054061301100030130130400102015040070301054080

1307001050140506125670720065650902006561400270611305062001307001015073
0407051630102054013040803086507158321003010111051130501601501020060630
1303051301020403401070113070010305403020130604016140061301200800301130
5130156108101061040104008014050612130305620060630513050210130140101307
0010106405021303056203040140056140027065307030204040054004650715986405
0100640406601014051054650213081006251070430650716043610097050154015005
0400107030020051602191140401616810501130104066010170016040060100151006
4051501800200227090120130832008015023604004050515005040017030020057010
5011004703040203015016040300200254069003030501703010540130100040140615
0730501703010540130405061306030610203061405091021400401200710050120406
4019003040650163020502015061150806054010900304065071612061700100103030
5401602050615700513010020010562030614050518105003001040040610063061895
6146003061130212603415010008020030204060091010140020406050710413040860
5010507162178024301307001050900304061405054010063011000102001307001010
0103030540801200603050170301054020037140501306040124012015061109003040
6507163276160130540705013010020010513040010201504008180020051302820017
0010704650801013060240017004001400105408104001505401064060240054030020
0701610640301106024006503014001400105402070030205023065402401201506110
8060100650716419617001001304001405405054030404007090065010064011303054
0530205401640707002540707001213004104110013061407070020051301020022040
6307030540104001006507165188030401506061401700202006125150310501130700
1050105056507050130606616007005011307001050900304061270700122101060240
1201506110806010065071661180304017040061705040150561705051003050130540
2065061100200456001601010507167196170040017005020022030102705005070301
0540130101064013010010140540501060640540606130707001215020022030602001
0701307010012615053010008062002008104071681461009705015408010130120080
0140401405054013090130865064050540465070030206230650154021308605014006
1306010101400307030540102003706507169408060030804050270454060030806200
5006113020400121016007006507020080057001130145010610100630650601010008
0200305016150101400540702008004050030510160070065130401066007007030105
4040105001100130204001215030110100630617030101303051301130810064200606
1401801056130412001301600200560010200303070010501040010065018030140070
1003065071701061307001050104060206502130204001261100140611309030151501
3015080010701320013040903081050717119617005040010050113032308061005402
0150590030569005061150561100702540600700614011400105012040210065617002
0200614018010530703020404004001006507172266170016007002002204050250101
4404050900562005407002001040054061300545407030101508060540130604002200
2204010013061230103005450115040010063061106401301001014051501205017050
5700110001803010507173151640010063061150401130020020121650140501002306
2050170020010540502704540180400530205012401807030130402930650717456207

0030205080903013011014006307030540102003706507175136140030703010540502
1130700101400105015110140050180150603060040505180140027051303001091508
0201504050130100016105071763063063001050130200807050152516302050516003
0413010130120080061400270561580405003052040500301302030215040084030703
0105103055001640040020020510305500700302040500301301006401307001050207
0026121101400501801100909013010090903070305401040080202006507177960140
5003011301006401307001050207002612110140050161508060540201506110900304
0650717810405010541303058056130405400410640501080030308016301020540130
6001602006507179306301004700200150130355040205001020014050130350613015
0603054010030623011080100565025163054017010503011029020065025163054017
0015030110604070650251163010202013015070140230540180030163010205401301
0001803065071801463030513016040113086050108014706525167002006113070010
5010308465080101604011056010376504012015061107040306507181764040506003
0100501140510546502130810062510704306507182861307001050207002612110140
0501605060400420035404050810500301107030406507183561403010305401502010
4104040010507184111630401040080202006140129018254040503505150561301507
0010200402105071852216304010509002006180104030206400130604016140061301
2008006401600301001303054050300106150706010150102065010041100400200213
3054080211084105002704510640506507186104050108003030130305803015141030
5610700200540801091000101505401070405650718737106013065020705013060170
5110150402006015110030150401703040517050420021030110330105130610040051
1301565001003040080101306040161400613012008003014001400102040130121000
4005106013065020201502088010705051100301504017030405170504130305630205
0120500200130501603011070304065071882810030301140302030508060105080701
6301800200113014013001130305630620504001703040130100010230160400205002
0040040501306001020064014060501013060615015011301507001020062300102003
0100640106405065071892956130700106003010020404050508060618456370304050
5176351301060205013010518030401400100030015184030400840301600801080180
4020040025803040115001003040047061130305200254013010501400104005019013
0813050206505040501303001202001050719012803040114001540190130813703013
0530020020180104011400154018040070130101303057040110300200206507191711
0300200206504013011060030100300101016540106003010065071927630110604009
1070650305405090200163011508060540105090200650719312615040047065401301
0130541030110400270620406061703010204014706400406540140150400409014040
0650719414150130700105040047065040504650130305702141405001302040801470
6540803010604003102613020401502050400409014100105071952613054012003301
0403006502511403054011041029300650251140305401701050102902006502511403
0540170015010604070650251100301470613002002012040500402010465080301400
5090020065071969150630101013030513070010507301302040012656104006301013
0901308105071971061307001050400470650405046505301106040091070650509020

020406301150806054010509020065071981261504004706540130101305410301106040706164002001540105090020065013010206540301102902006507199760070013070806614020021307020080617020080070501303153010507200106140110507100050204050130300109150507100080160400707002130305150560401070703010407201121501307001050140010061170014060540911080405013030010915040070020200618017001540402902006507202761600615054010404650540801013010001050040301101009020065072032361700130404001400540211051001306130630113400210400511003015040114002704011068101301040502002105700129011020040502002204065410620084053010064010640506507204861700110020010130100200150801604004070613056150904006130703020404002008406507205166170020200200220801050806020400800200701660010805646501303520040501301006302130100046613019013063014002050405013010001803010507206111501307001050705042002203011060400202200650705070214400561060286505630510603465084260401303051302008405013020081040811810601306502070501301508013010030130150801303030561302006063080140010061130305619030861700140021050204061910706113030562006063051502050400404064050105082171504011304064050650130700105017001700202001303056330400100306254061700140030104007030105401101400571440054011040150167030102002540104006203065083613070010501010010406501309030156404012007100501540105080100650841116301020540130406405065081001305404200314007050420025406401000802005620071002020010408511204011600200320200220405021040020213081006150802001010014050130406405010503020120056508611103143065020801013081002704401400210502015040110601100650130101304064005

0306540630205013030510040030540640120040104001700200401040063020501303
0520040106301023010130406405010504050523018605011501303056040107070301
0408186700302040615013030540655020104130201802001050819241504006040080
4008618010043120401308040086150400504005618056600102003020406150400706
4615070463050400100050107050204080104002040300101016306205002004006150
1303054070130406405010508201210111051130700105014050611910706113030562
0060630563014006306170505615040040400604070650821863014002065061201307
0010501001306160407050165403011060407065082210150300200130461270504130
3051309040130220401307001050301107010030650823116306703040130305801054
0600102001301604070540630616040705403040063061654040702008006508242110
1110511307001050140506116040031026130305630302006063017001470120403040
1108101020406170304061150130305108630210501304020061003025615051301054
0083002006508251361400100618040050530140090102501307001050900304061405
0204060019056170304061150130305300410413070100128261961700202006117001
5040040100301030406040080070806508010130120080040060018065015010400600
9802040130501608016120406110420402509020056200710020404050130910214003
0703020404003002020065082712101110511307001050140506130140060065061130
3056130200606306400600650611401501400204061504004040070304065082810617
0304061150401140613020406163014204080400505615013030570504513200709001
0408291910111051130700105014050611504004001006113030510370303020408020
0100150161020802007050204060101014002040610100080200302040613030570061
3080800301307090010408301661700104020200220130700105020802006130105002
4006201610100400306201610600200362061040202006506104020200130305613030
5600102001304012020010508311761700140040030107030105401101400501100130
6110046040705013065030013010030501405003057001150570011301160191020013
0163010508321961700100130611303054015020150570015613081004050705042080
1409200703010501831200540501306040116110400501270700121301040833126401
2015013030530107070025406150400801054064012015013030540707002540654010
6040010008020065083421640130540130110707002540130305654010904650705013
0406034130820014064012015061163010151501630101651301130404001006506302
0501205002005403011070304065083513640120150903014005407050413021040013
0140201640090410580700610061130707001224012050400404002080200650836211
5013070010502080200611050801006501406130540301090461705060210301303058
0601050801006505150040400206507030105408602005500401010003026506130700
1050208020061130103550401083002006508371830104010713030513060021050040
5013091026103703013060021050027080057030102708008010200204053401070180
1037030580103550401630102054013060016020065083816100303030700105020802
0061150105040056110100080200305404011004603080615010706461801004408004
0060504001301630105083916610014003065408400103014002065080400505610206
5013041050203053030580150150400561801501303052401107040306502901020084

0106150400630618017030406115013030540630120405070401304063010650704013
0509010200841336170304061150401100050404004040503001080150303056004060
5630302006063063070010130100200210613010400140106130406012010506125013
0602103015020504004014050400402130305640115073050170301070245011064013
0802001001501064013040010010130340701506130305703010203030010100410200
8423517001504004021307046513045010165402130704651301009061061302002021
6080304050204063064006170440040301600400308040040801013040107014630205
0301010080010130305140200120150408070630130105302040505302070502105056
1081010405081070502105056150130305306040107070301040843201700102001020
5401303058010405014020100301030163061200120540205001020013080300304004
0630400501770400408010130140200630205013030560304015057030104027001400
1309046200844196170010200102040654017001304001001040040801017010502040
1003010301610100303020408010170105054030101008001013030514020012015040
8070630161301013030540020037013014062008451310111051130700105014050611
7001301001040040801058015002400616170020200611303052050010200130703020
4040080308650846136191070611303056200606305630140050177061804008030030
6164007005220010820406190220061150130305407013090122001050847176301400
2065061201307001050600200361405041012005402920016200101130501606109046
5070506021030130305613030524011070403065040810984836617007105030540130
3001091501704013054061001303011000130230204013010640405013050160615010
3120030204080304014002001400130801040015050209070301070100210561001301
5010220010405020401501012001040130140020065015010160018013030561303053
0041041307010012849181700101006301304050180100650613070010508010100306
2540402008001000200563014105054064050104006203070301013030580150130305
7071078201040850136306400200101700104006801013070010502080200611304030
1102051080020026506365540614212005406700610061707001213082001010085197
0030202401100440400110410204061501303053010602900301403030702104852172
0412130802007065061307001050405010023054020802006121101400130305801600
7005401303052700506254015013030510061030041041307010012853187003020215
0130305304010204010001020015070405150704051703010100640840010101000102
0061401215080605406150130305604010707030104085417204121308020070650613
0700105040501002305402070026121101400200254080153020501540270050625406
1100020010050113080200706506203020150619001304010508551015030020013046
1270504130305130700105020802006180540301106405065085612130700105070154
4004050540500401050100800650705454080102030402005654030110400100650857
1080140140050010080505408010130820028030020042540405060030805403070305
4010700202006508581461401400600180504050100640600101505801502700130105
4070301060611501303053011082130600110501050859863011086025013070010502
0802006160210061150540301107037650860336170461305404011604009704004040
5010065640502002191306001030400200526502570461303056704620406160020010

5040504650540301400703040650540130305107030405406401400508010061405030
0108010602103013030510680130102040615040040301400900304065086112615035
0861303060304080135083051640062030703010130305150556130604010701307030
1040862126150102001046115010600470620801508602201303055613070010110420
2509020056213040640501050863206130802105010030625403061508010040040180
1013012008003401070140113080400210501003062540630205013030513080210505
4015057071078201040864910111051130502108602201303056405014002702040501
3040640501050865271011105113050210820080013040640501050703010130100400
1301501020504050204070300200650901220065010100030261401104001050615010
2050405020404011051010003026113080140501307001050208020061215054010064
0301108010056508662613015060080801303057050204067030401508010204080070
8018015010205040502040401105901220051010003026140110400105061501020504
0502040130801010003026113080105021700501303056130305407013090122001050
8672040120150305021015010206503051602001084001010500600508010130120080
0400200104650702008001304501016130305102001041301600200561303057071078
2010408681030630120400124050130305602100304060204080104011600700400407
0700127090010408691180203061404011000504040040830130191021614001006113
0305150130305100080620020081040870251011105113050210100303040508010110
4102040405013016020010150107030401303058010100306220406001020011064002
0406001020014040116007004050204061010008020030204061303051000806200200
8104087113615010200104616001015040020801004600150611303054050100230801
4020504050540613030570301040820104087245150130700105014050616513200616
3154612140613054061508060540801060210301303056130700105016616509020061
1630102027080054016301012708006130700105014050616304010513200614013020
4040506301104005404050300108400101051320061615016040050902006204080101
3041050807030102040130509020013017030101006402105020406210505404010500
1100613030524014007040306502901020087313613070010502080200612708005401
6301012708001301400807030654002050804005058010130120080068060142021020
0874186130700105014050616513200616315461801060210301303056130700105016
6165090200611630102054013040640506508100130540401000802005620071002020
0104087522613070010501405061405027046513200616315461407020408016301020
4050204061630613012008140270800540163010227080080102040012130305150130
3052203030010703010409192200154050130305620060630513010130700105070154
4004040501304030020020105092148060108618010130120080012002705130052006
1703040611502040100010200407037101303056150130305406007101302018020010
5093326170015040501303056200606305130101305016010640130831301202200150
1303052200104050130403002002010506200606305801504002400408056600102003
0204061504006301040040801703040611502040100010200407037101303056230020
0130700105020802006127070012130104094221301130700105070154400404050130
4030020020105050040304010501009062040300101016304010900152006170301020

4018418014004061130105407054540130104044005401501303051082130404001001
0509526801700115060306001301300520013082004080110040030611304030020020
1050810500634400406540660070065406189020065406110070461305402030402009
0480150400126161100140611309030156140061130720158060030616021030540150
1303051000806200200810409618615018440501304030020020105016040031200208
0132005840010106040702030140130305500401230100054014050570030202150540
1006403011070304065097232010801020650303040300200201050705470504130305
6705042006063051301130700105070154400407050413040603413082001408040116
0400100140613020408016040010010406130540150130305108213040400100105098
1620108061501090052006170301020403011020010026180102040130163017004051
0200800650204021806155406400121010030625406120500200540801601006509913
1300400200612110140013030550040501100301030180904617050602103051505406
0140120150611070403065091010301102001002650801040640501301630170040561
6301020540130407040046509111380150400126161100140611309030156140061130
7201580160061502040801013041050650809030130110140030100640107030406509
1218615050205006111040150540405027047054540697050618010410502040801001
4003061110405130208020015054030111040150305403070305401050400565091320
1301400100140030650100640150205006111040150540654061216002001313020060
6306540246204016304020051400600300650540801303051810015040060030065150
2050400404064050105091411100140030654010707002540130305211041020406106
0075406105090200204070301054061030080904620010064040640501050915116107
0052100010900100306254061040062130305703010405010300161303057030104082
0104091624140860240040150400400200206163040110703040130305130700105031
5461405020406304010400600700614050465013030563012006063056301130406405
0105063010356130305600210200240140070403065091718401201503030403002002
0105015010704020061406013413030530015410507030101508060540213020802001
6301020829400170401305406801013050120054060013046509182315040110704020
0406013413030540501405021303056130106401301600200611001401309030156140
0101307201563040106003001301130305807060101630102015010206506140501304
0540041050919241370304004060100110513081367040120051304060341308200140
2040501405021303056130106401301600200631548010602103013030530110604006
6507050413030561303053011054101301006401309001304010509201613070010501
4050616513200616315461801060210301303052140613054061508060540170900404
2003570504130305616301020540130801107650921101023002005402002540220084
0540505620080061506350140030540801051507010404010010409228600130410508
0105112411501303057050451320070900104092320101110511307001050140506130
1400400600700611212040616006150204016301011501604008261130208020070301
0130110401506405010400630540405020408016301020540130900130406509243310
0301502015012162040612501620406160061502040617613204067030010200400204
0614061301100400200804004065164003120054006003006502060145164060120504

0020080065051182130102040405013030562006063056351480106021030580400200
2906184001010140010130305214020056130305301105410130100640130801601001
0509252330100450902002040130305801040619502050010200561064085010501700
1703240020402050020040020408030404001000507050204030010101680011004007
0301020401301200800240120082400500406301040040404220010509261850040150
7301303056020105040057030102006063056703010130406405010506150730350641
3040400200651670700213070010502080200616700302037113020180200105092712
5004010400621303054050270470030207030104050103001613030510008062002008
1040928281011105113070010501405061150401130403002002065050360803011010
0200261130406034130820014027047014054057001615060080400407010305806068
0101000501020401303054050808003051503001150130305703010408201040929291
0014003061130700105030110640506502130305630121301064013016002006301108
2004065040182004013030562006063056301104105065041050130810040501307001
0501640061130204001284001010709611303710570501046540901100020065093023
6100130400130105647071020012501303056100130400130509012001013040601081
2501303057003020100630540218061554010800151065010063013070010502080200
6140501002301001400305401303051501010680206509312314006007006118212005
4062005215054012002121405046501303056130406010812504020010406401140200
6113013010702461130516184130113051301566028150570401103002002065093215
1020010465015010980106150620013030521806155406101210130305130115010400
4050620056306202005130201802006509331456130700101200603020060630521305
4106410501308100301090052005703010130410502030563062020051304030020020
6509342910111051130700105014050611502050010200140501301821200613020052
1503010120306501406130130501602130219306109046507050602103013030561307
0010501020507650130700526130808005630110508010065051801060210301303058
0230020054027070012130104093519106401084010703010518010501200355040804
0020610251321554063506254069005620054057001401205074004030150806020408
0700610061401205040040400205076509363615070451303005620070504130305150
0501703002003005200180102040012130305106406003010013060401614006130120
0800405051120027058200407003020130410501301001040803014009003040618010
5501508060204061001400306113040300200201050201805204011010014003065020
4020180561703040611501303054070130404001001050937311504011305060107101
4580101302080200108003025130700105020802006110830650570140161082004065
0570140130106191061704540182004013030580108306140182004013030571050305
4060617040130540613030530110541013010064013020180200105093829101110511
3070010501405061401302040170011001030302040150802006180106021030130305
1500110030400401301013012008001200800104004021308101513045010140501301
6002005804014040017013081015130450101801013016002005130110030103093916
1301400508020061107070022040707001211301040161060400243010064011000102
0020406301400800200653001010161303057030102030300101004102009404313014

0050902006580100450902005130305170016002003513070010502080200615001501
0150050105017005401801013010001200170010100630309018253014008750150130
3054070501801507301303056020105040057030105611045235064304040020065163
7030203040513070010502080200611306080301062030405130305510130703010161
3030570710782010409411515080200616008018016500100130163154612140613020
4061508060204080106021030130305700302040600102003020401502050400404007
0304065094223306201507020080011002001021660802001100190413014002706206
3020502704400703010540130300100566010830806502130305306160400970501306
0020035014070204010530206501508060540613030510703040150540302017002650
9431370801130305705020304017005040030540840010104002105030201307001050
9041006164007030401302017002105094414301106040017005020130700105010640
5065021303056130106401301600200150103154612140613054061508060540613030
5703010402130404001001050945141504011060400170050201307001050301106405
0650213030561301064013016002006120040012400100306254080540801020010254
0104002004465094615630612001461130600200633017046130570456302050202005
1303051502701500540805002954061001030110070461407013010017041050947173
0660020036180102040401714620401301600213016301680070616003013020401021
0006502040130804005056801020406040170650305406130305703010402130900130
4010509481630100412400100061130804005054050100230610030261302013014062
0084001031130810069005200140200130305654020120056509491564050540405010
1006301107005030106301400804005010130180101308040050560100961615035504
0304081095213020180200105095016150400902208605054006065406150400902204
0901025101006306110041600700501140200501405010023061040063061654080200
8650951141003030501090102501130140120400213030530501564063015016703010
1303058030104006203013040640506509522210030530400200290650250113011841
0130860501010506508505040020029022040150109010220401303052707001240507
0504516211041050180400200290611501407020404040020029065095312100301508
0100619670116202005130501040010023040502040150204020504004010064018016
0100105095422640140507054015040010023040505405080100140054013011505402
0802006121303056220060630563011014006501309030151301654020601301063011
0508010065013016540201200565095517803014007032201406130540630116301454
0150401102001041303053010707002540251801013081015130450101640075100150
8060540654020180200650956106108308065021303051505403040502040640154040
5020406302050540100640108020010065095711306103465040303116401000120014
0016404600301306306113010565401034086509581664050540405010304072080101
3090410014008015017096140505120080061615030401070961405051170015401060
6009650959196306150540200800614011400154013030562006063056100130618602
5011303056010640010501130305405080800305620060630515011301013030520011
0002650960221504011309041001400303080100200161304060120105061307014030
1050703010516130406308051003062540680101302001001261301000120040105068

0106021030130305612501306021030802001080054050130305613030570301040820
1040961266405054013070010501067006501305021061010063065056170050100301
7005060010200302040106405021303056106405030304064050105062008405303070
0105014050614050204061307001050106700650200606301303053054070700121301
0409621210830806502130305302040301020080062040613030562006063051810015
0102008006515020150614064050105096316130401070304061150540501081441303
0562006063058015030550120035504060013041801051700302013060071013070900
1040964171087002001304050180100650150400507307030105406062005400502105
4024018010100306254010030160400571061150130305406002003401400870020065
0965136301050601304005403010100630501504012050150600680065030702100301
2130305611014005620060630520504004040060400571065096616301400704007002
0061100420802004004027041104015020401505070807050911080540502040507070
0291108052150540201506140320040105096719130405018010065061304050180100
1400270800540405027080010140200650213040502020061050565070501304070200
6806101002800650110410540506061130305805060105401501304050180100105054
0130801601006509681667041303051304050180100105061304050180100140061302
0801200501200355040600130410508010515108602540630705054013030563054070
7001240100104096932201307001050405010023020402015061130044050204010065
6120500200140613016163014180160400404007061260030110054080160400404007
0400402600301100204020401160400404007013070010504050100230204026003011
0054066008004004020130700106001800611630102082940017040130540801013045
0101613016002005616301020540130600160200650970261304010140054050211307
0010504050100230540100640506867014650040646100640122001510406190812404
1050613040640080201400140040054020060305402130210501400804012015013030
5301090030405406302050201506115080605401090030406509712461304064050650
6130406405014002708005401630101270800101402006502130407020068061050565
0705013040502020061010010406501309030156106400650130720156109107065013
0305620060630516301020601020084054013030515013030570710782010409722467
0413030513040640501050613040640501400350140040032001040504008400511301
5051200600130410508010516406012050910258010350140070450620080061504050
1303051202200700302056130806713070900104097312101110511305021031541302
0801200613040501801001050611000309007030105406401615403550406210601304
0901020097446108308065021303054011001306163010041001306120304051302080
2006208020061270416030140540654061240130401050130616401501004061130115
0110005015401303056200606305405080800305801501040062611020600102001305
4061501040063061107070025401303057070012113010401801013045010161301600
2005640130540801013012008004050630106301509010200975126405054040507015
4130305301050140015014050808003053050904100506305020650504050130901308
1050976980304011400154040508080030526003061256400630616540407020080065
0977158017010025405080110018010100306254013010106401030100650524011600

3080611303054016704656240120150611020700265097811130401070304061150130
3051070304060200540650361540615013030570301401301000106297920130700105
0103040765013040967010504050130406405010508010130904100140061307001050
3011034650130135454080106060020065040505406060020013030540505406305407
0700121301040980251604001000802003054016301400604001000802003054015040
0604001000802003054060270105040200580305010100080200130305305407003020
2150540208020061213030562006063056130305301105410130100640130801601001
0509812780200813040600308065024010070454060030180200606301303056202005
6115010315461214061305406150806054080106021030130305610013061301400508
0200618010130820010030501200355040130048200130620150611080100565098288
0301080082061100301030163010220612050010200137124012015061102060265098
3258015020037020130305130109110805405054080160400170050620303060020063
8010030305040060020036140701012416305040010014003061407010704611502040
2008001040040213010070641630402005801100704614070130600130801050984186
3014009030703010184405054040140012416301400100407030101002200515054020
8020061213030562006063056401400616540801601006509851663014007032201406
1305406163014540150401102001041303051501070700254025180101304501016400
7510015080605406540201802006509861861700115073040060620051501405061213
0305631546140702006063051604001700502016306130963040505406100130617002
0050150205040701301001704105098711200800612150102065061407013060061308
0692707030101003062540805403011080100565098814302050130200606306130700
1050140506140705315461214061305406150806054061630102030540130600102001
4006163010205401304080308650989131704130305305403501400400320010405040
0840051130150512006001304105080105170030201308067130709001040990176311
3040707002006504050130170200123010670050305406100704130700105020700261
1303056200606305601090102130700105020802006140505407070012130104099126
3010607030101308007080163017030101304020080010630170301013070010503011
0346504011050801006508200317001509086130305620060630540170301013040860
5010504050602103061303051000806200200810409922363017030101307001050170
0140114006203040084030540100304003011344011840302040703010540063061617
0105054040080108004050130440708750113011034614011050801006509931915040
1130602103070301013070010501060400170050650206540110005010120080061215
0102065061407013060061308069270130305703010100306254080540301107030406
5099430107040070020065013010204017001200370400401301054010030301400704
0070020061305050640503020401004502150113030540501600212002040660102001
0130305704030204062006063055004040020046501301070130401301000102613030
0514580105021020402401205040040400704030650995186010830806502130305302
0401700115010030240040130105403040070200800617050540801702008006170505
4015054020036064016154035504037124012015061102060265099614108308065030
2040304002008006170505408015040020080061705054080150130305301102008001

0705013010064013080160100105099716130170200121300420802001650801100161
3420013011070304061846440115073013030570301020060630561303057030104082
0104099816640501301702001240501040060070040110508010040100020040161040
0200290220401304611020070301054041102005130606613030560401070703010409
9927640501301702001240501064050213030561301064013016002006104006007004
0110508010010020021400705041303056903061400130200606301301150511002002
5305406010460030540130305801020084040051501303051000806200200810409100
2561306012100650130163065040501304051320010506130150901200613070010501
4002706540218601502008001013030570505406200800617050561704305403501400
4003200104008400511301505120060013041050801051124170030201308067130709
0010409101226404050863020404050130170200124050180100650640501530130404
1050540200461703010130508011003014007030405405085050703040540605070700
2540402004001050500401020046501301070700127090010409102176160020065017
0400200806127005062540600309617040301901308161600200601010170601013030
5150104006270301054015013030510008062002008104091031660070040501406130
5409041005400952005406400720105402516903070301054015090301400206020503
0540613030560401070703010409104161304010703040611501303055610100230130
4006257050702145610160070013090410014006150130305561304006121302008104
0910516610030170403061806010200101303057040302040620060630561304064050
6506604002004650130107013040130100010261303005145801050210204024012050
4004040070403065091061261600200650402003650301402001303051401107070025
4061401104006270301054061303057030104082010409107246130700105014006007
0061406034180020012001620802001640080200101001210501304064050105061200
9014130405081200213030562006063054050100230630108308050150120045011301
1308605010613030510300541505403020170026509108233014001004080105124130
4060341606070301013040010061040501630106401810015040010064080105801052
0031301082650150104009520061613030510821304095200105091092718040501606
0250101505703010400100610405013030562008006150600102001404050160602501
0150570301030080132008051200801505120025801050120035504061303053011054
1013010064013090013040105091101530110713025010150540130700102506120010
2580101003062540130115040010097010030625406130305703010408201040911137
1501303051300400200104050130406405010501508060540614061305402150305401
3035051010014003065080106021030130305801010040030650610100400306506704
1703010581001801013040062001561301503103061301002001506405016801027054
5405013030580160400230020061221070204013070010211070400402567003020561
3080671307090010409112161304001102650130701246501308140465013060110865
0130200120706501306013465013014020065021304070200680613050156507050130
4050202006130818090065030846413030562300200130406405010509113204012015
0303050210613070010501405061150106040010008020061303040300200201050630
6201506116301010020021040502704401400210503054015054019081213038104091

1422640120150160400100080120012200151040301210513017050406704567045111
0158030401400210503051505704630305400220014050515012200151040301615830
1040911518640120150130305301080030100640127041700541540840010102105030
5404011040010065015013030522030300107030104091161715013030530540302013
0604016140061301200800108101061040104006401302040405046501303054050630
1063015090102009117273010044001213030570301013050210613040513200105061
3015090120013070010501400270658010601705130706020054050270440120141071
0100010030628020010100405054050040400127030105401505254020068020081040
9118316703010130500301500513070010506003080618400101700180011004007030
1054013012008002401200824006800110040070301054015080605406900506115030
1403031405013030513011301055004040012703010540301040062611501303055613
0400612130200810409119910111051130700105014050611400100611303056206506
1407013090141001050912052401201503015301304041050564050863054040501301
7020012150104006003080617050200606301303056301102001000261215080605407
0505080605700302021505403011090102540900401630150902630140600409058010
6021030130305630110910650406910110100010900130208012006301105013065040
5070465010301130120400230540257040309013081501303053011080010701320013
0408605010509121186301105080100650508010059010001020056301202102005630
1101009706506141011301204002305403010371054013030518605040120150611070
4030650912222640120150130406405065030105080200612018058030630150802004
0502030802001005405054091108053010400801005618010130410506301050700200
6110064054017001200370611301054030703054010870020065091231710111051130
7001050140506110014003061130700105010306502040405013020801200630103461
8010204010003090056170304061150130305407013040400100105091241861700140
1150730400606200580405054040501010063011020407144005570051104015018014
0113070010501405061807144005401104015016540106040023002006509125126140
1130700105080101003062540402008008071440054020036011301020036054064014
0061654020180200650912616163011020065015054010804005065080102030701404
0200516402004001050500403011040062650630154010700202006509127216170014
0115073040060620055090020027080054013010270800530102001204040501845004
0150902008061902008013030510030625402150540100640301108010056509128143
0100431204020060630405015080602040707107703010540170504004082001090703
0102040213040640501050200680200810409129158015040063061801003086021013
0305301130513015670301054006203040065620021307020030013070900104010426
0401303051302008405013020081040101513020040030201101400130204001213082
0104010226120150303050160703211501681050113010200330405054015015070020
0130501606230020013070010501405061150305401004409041007050420025401001
3013020180200650150570013060182004021050103291502002204013030513070010
6003010013060401614006130120080080106040051101405004016040061070301013
0702003001042200130140200401405030080107013014050270417005057003020401

3030520022040801702465180301400700202006501042813010540200370204034010
7016704130305810011505102411306003010050040107010453010371013070010501
4050616704030611309013081400213010060961307001050208020061305403002001
2405084010406707001213010402401201506110208020065010523561307001037030
1303004060800101613010040200506200161004200540501730304007030406170441
3060501050613086012401600301001303057003020130121308100108090301301101
4003010064010703040650106141508010160040030180130301030613050512006401
6003010013030580101306040161400613012008003011014003010064010400100650
1071515013070010503011020036503010015016200800612130810151304501016194
0150612516130700105054070501101400501100018030650108616301020401615401
3050120024012015061102060265010915150130700105014050616704030611309013
0814001054105402002540211040150540400320010405040084005401301505120080
1035014001305070104010101447061540801051602815020130305406400810400540
8010516030140616002004706154015013084043030520021307013040105010111863
0610703301303053030501601303002001604007031305402130600102003010080010
1301054013305408050700200130700105030110200365030100150180109100010150
5401070405650101227617001406013015060150130800200470150130350251610017
0411610011040180304012030080501705058002005402002015030401047050113010
8002004060520700302071050303040602008010504012015061107040306501013176
3010041530205011301002006504050100230204030401900304061631400540200603
0540213021050140064012015061301064050612070030205037101301006401304032
0040105010141050040370305012040600301108080101301200800405027045403050
5090020020108040070403065010153961700140040030107030105401101400501210
5014001001301307001050301102003650301001501110400210020015010001020057
0011624305100304011020650301015012430540504003010015080601015014002701
3014011068101301015010160018015070901040020021070700121064070900104010
1618100303063001130305401400306400570301020406301142001204025801004302
5004008010204070402001405010023051803014007010030650101714804050190030
4040405018040020010703010130305207002116207002211014005150530110803081
3040320040650101829610702465040504650130305401301108002005406301105080
7054061010063065056301300807016501705041303051003014005021065013030524
0130110703040801013060401614006301801013012008006028150564007013010704
0110300200206501019176401201501305016013011405618458016004003080616306
3012030405602100400405020022030100800102105054080104018010510600400308
0650102016610100630650306301150730703010511054050200258010030150401130
1000102303058015040090020061150104070204040501304050400900200105010212
2617001170010050113050160200840540502704800200140604005401700130540402
0200801011014005011003013030516020070402020011502006030501102040026504
0140040202006501022415613070010106010200204080101302200613028200840010
1700120504004080101308030206320010502540220010891025680200861251314005

1200108701908063154013040634050203040201506900506115054018109254047061
1303054060030901050305130410503010501503104005014050570053050206505040
5013030012020010501023268030401150315401700154010210006508010130120080
0210001020013081001011105113050160150401210001020407030101508060204040
4001701308101513045010150040130105014020037020408050502102040240120504
0040400704030650102443150401405003013081015130450101204011507305015405
0130604018016004003092550214001301200800404011012030130501606130150701
4084001017001160070040013012008007600200805161710504006900501530511505
4010014200650703010511400151140200501301030116505120018037030501518901
0412015030404001000502130140602070030205080903013011014003010064010400
8020200650102511613030510470613010412001306030140610541040501030011301
0902001940604001001040102616303070010501860506113086050106710145630110
2005100636554010040020063017003051630102019081213035055408010516001304
6501027276130700105020602611306010101400371601010524050030516400200510
0540700305401305404050130305405070190402015040111000300104006365540100
9701405013030103040900304011630102019081213050120054080105160013046501
0281861064050830020054034010701500405010063030307001050130020020614020
1502040150400406300200201620408071030501210505406100130300200201654040
1205040040110150140070246501029108020801021303053005104121050501621050
2040150205017050702144002040301000180301050103016550130204002306203050
8060401160308040062004611301013030540630154013081006800307050540401201
5061108040020065010312710030405010200710020404050130604016130120080014
0501040302013060407061301290120064050106002003130810405013040104006106
0020031304010400405013081064050104220013014020080601010063065013030580
1003018030140040010065010321180700302040130305200220401308100804017001
2704130810013011308003013080150104009020080650103310207003020810040020
3040400200220703010130700105080601006115054030110640506501034171003053
0405030020020110204040501024113060030100500401070104510030130305102411
3060030100500401070104580150104006802065010352910030530405030020020110
2040405010541013010130810010030130305105410303081001804050105410130101
3081001810015010400270140503011054101301150105410804013020402010804008
2040650103617640110400270120500200540130190050115013090050301101000501
0405013081003001010115013030570301040240110807030650103722640120150570
0113010020015015010804002001040504650130305630205040090410100130700102
1050104105640080901030130204001230120010280105405020021307013040105010
3816140101006306501804002001510030801400612606200540500305614706140501
6040097040040405046501303051502050400409014100105010391923020700261240
1304010810961270304056304011014005404001610305207003020207002130700105
0405010023054080150900200201080201507011002513090013040105010401264050
5404050106405025640505404050301106405025620022017030402130408060410501

041156150207002620801003030107040301063020407040302040150400402200101 0
650404011704030615012200104040140070403065010421164050540405010604004 0
706501301020180150400400604070130904063062015061301107010030650104311 6
405054040501050900200130102018015040040054101307040106306201506130110 2
902006501044101501303053011090030401305016030010101630205013050160150 8
060540109003040650104520610640108300200540201503040103025006113016017 0
540501305051200104007012008065021050540100460060200130700105020700261 2
301001130305640120150614054004105010461561401502001050202708001307001 0
507045401650400680105020801301050140200370540500401303053005104703010 4
011080703065010471263020301405200606308017001312006063054010080010210 5
054021301006096540301109003040650104876101006306504040010570011306704 1
502050400409014100105010492210030301140302030508060108002001630150807 0
113014013001130305302030140513301700131133054080301106040016002006506 0
170563011060400100440650105012100301200110400401501400120407070012521 0
140011650512001401700110604007033040505130403200406501051111500401700 1
401610070140504004025130150610042050400402540060400703306501052135004 0
100103030307001050900304061700610061707001213060030453040037650130124 0
120504004040020602650105311610604005021065020181005610030110620021015 0
530810064011504004024070371050105421630615030203050806090030404004018 0
101301200800301804004400256160200611305041405304012001611307070012610 0
800102105054021301006096540301109003040650105516130115030305401801013 0
604016140061301200800130115067041303058100630205012050020054030110703 0
406501056556108101061040104006130105400200370650105715101110511305016 0
100431400204040670900540502002204063008013040180101309046200654106200 8
405303040640501050105810100302808003013030562200840400580270030208030 1
080200861566001020040401103407065010592010030120011040040401150730130 3
053020404050200710080370304004040505820014016830130110030130305170050 3
020401407030101303054008040020065010601964019005013070010501080400200 6
507030101303051302070021064013010010140515013030530700680800307030101 3
050160630205012050020054030110300202006501061426401400206508010300150 6
401400400306405054050100200150630140070403065040507040301301205017030 1
020403005641170040080108006508010564011070727050200220405040500100130 7
002005801013012008006301801013060401630119010002004050700302063011202 2
001301801020400124021050106210130115016301011303053016006807030105406 3
015401087506501063413070010501405061620150611040010065010641530540130 2
300200108010130810151304501016801013016002005301400241030302030401400 1
303057003020561308067130709001040106510630110875020100630540150130707 5
303053401070156130604010701307030104010662513011503030540508010130604 0
161400640508010130120080064011040027013070010501047065040504650130305 3
002002011501040027065013011309005061505401301106002009065010671556130 7

0010370303020401303010303040060205061801056130505120040290200115080107
0030203011014003010064010604070650106825100130611400600700130305630416
0281505561301000501030540180101306040161400640180101301200800150705042
0404050603091502570011400100630650703010130305401301400703040650106991
0030150130700105010804002006507030101303051302070023011080308650107013
4040017080101304501015004013010501402003705405004050700101005401307070
0121303004104240120150611020802006501071346140030703010540502150681700
1001303010064051011006401502015020220070301020404010014010640070020102
0010211014001303058070301013030540062030400801340706114020020406300200
2012040500403011020501402002040703010204010004055004011008006113010630
1400509002006501072168015040063010400408040160130400204040501320015013
2001013017030101303056140200400150120650405013040603040105010731780207
0026580503105015640504070580101308030206370305015406003011080611000200
1005011307001050207002612110140050180150900200201080201507011002513040
5070020010501074225004027050050140502704520060301130101006405408031654
0213021050140080401201506130106405061240120700261254050100230207003020
5092707030101003062130407040041050107514500402705005014050270454040660
1065120065013010802007065064030105211014005018016040020220061620150611
0064014032004010501076108030401315401308100405070504501100130611505700
1306082004021050107711100130406601014001006306503030810030401312040160
8200570016301108030813060182006501078161001306113104005013040030804005
0170401634501703010512150164002065030204011302022001018010130120080064
0150850302040124064050105010796610013080200706501104006501022030601820
0703010401080108030401311306082005100130305404066010130100614011504004
0403010065010811780304011301006110013040660104013104004025130608200150
1303056010293051501303053011090308704030130408060410501082761081001303
0513081002203040140056306202005130403200406501083228040114050304066010
1301700200105405010064057030106006804050802007065064030105401501080400
5054061508020070650307013080101301200800615053040501304060200801050108
4136100130406601010110064015020504004014050400402130305807030105400620
3061150205040040406030401050108510801001306170301013030540062030501200
2501301400370305018040050530301006401309001304010501086565035012200840
4002040501301006401302018020010501087166168105011301040660106160010515
0400261301006402040124090200210640016137030612106400204010023056110010
4061130903015623002001304064050105010882961001304066010200250115020140
0104008020070650640301571050561406130180101308101513045010120025013010
8003061705060210302020025011940607030101406130540613004470301010030625
4080301106405061840010102006113070700121301301040108911100130100413102
4004706400204018016040010010401630140040027015060210301307001050301107
0304065010902763167501225010160200110103013028200801400270540802007065

0635064521000101670461840010170011420020513010002001001001301405040015
0530113051301130700101405040025250616020011010306150140501304060304010
5010917130150610047090104001002306205040040501304080604105010921480130
1064050503102022450203040020650304050600308020110561502050010200140501
3050160705011014005013010001803065010932463010042615012501016020011010
3040261904100620071005015404050130910214008040116004003080618400103154
0130703040150200220101008001021050540106401301001014058010401201506180
1051060040030806501094228015020504008010300204040115073050113010208016
0130130700105010100200650130204001240501002302030100431201308100405020
0220803014002065050405013040404002001050109510630140020650504050130700
1050207002612110140013030580400206504050130600160200105010968150130700
1050810040070301054020304040020022030110640506501097863063140054020301
1058400101020061130707001213013010401098218030630120150400100200105140
5040080508070511104015051130110064010650603040114050612030080501705054
0707001213060071080101308101513045010164040070501540130108105010991563
0630012002203014050405080101301200800203054034010701180150400400202005
1305016084001010206506140640501050101001464012015030508060150400640501
3012170050130305610370301302003607030101307001050301107010030650101011
4100301509002006140170018010130604016140061301200800640140010005010130
1101400613050700200705010064030110640506501010215805301050400900200650
1301405003011014013070010506003061405010023054010030801504009002006115
0104070204040501304050400900200105010103105004050503102006030501613070
0105014050612070030208100170301050150503130406405010501010427100301011
1051130501601502050400408010300204050410501080301170241307001050400702
4650405046501303056302050170241303051307001010400680120406140200400150
1206504050130406405010501010596150110040635203030410508501080163014002
0650504050130403002002010501010616630140047040504650130305401301105080
7020630110800200208015080703040080150201700140501309001304010501010724
6150104060602013030528002008030120130080305130156615010200420260010200
8030120014308080030510901022540501030014050702145656130100080620013020
0810401010823100301011105113050160100431204013081004050200220408040501
5400410801504011054004103050806056405080030801504011080030703010516401
1501703010204026201030101091161400270401106810130102061902200840010108
2040130305656600102001308120401050114260401303051302008405013020081040
1111013020020400121820404001101400550040809030400405030450820104060021
0200112913014007024611301130305150501030204040505507001020062300102001
1325615016040010008020061200220405004040062611301051040400702040404001
7018605011301013304060401061064002030700108080030808003056150400630618
0150101600180703010204070700121064020210200114813010130305402003702040
6567030102030300101004102001151913011505401050050650904620054030106040

0600806140505130181050106040010003006505001012540107030404011060200650
6401107030506501505703010402700140013090462001161664014050412580101301
2008001301703010130305200710051610703040406040010020051640604006470512
0308010204001240210501173165613070010600301001306040161400613012008008
0106040051101406201507020030057030101304013010230620401102040186050704
0301630105010030400150204040270650065040502704130406400301010063050130
7001050208020061150570011301608200402105011822630105016002005017050540
1307070012130101405407046453010100630504011082605130110640101400105403
0106040902006801705054068110025404012015061251060400571065011911630105
0170010050113015060150405012008405500405077050151405051505301010660208
0620011101363010501700100501550704012704800200140604005301010063050700
5213060101014007050101505308020088060062001111101301130700105090220061
6704030611309013081400163010203054040100080200561320020210200111227803
0703020400120020270800401106810130102068001101002590420020150101006306
1306301150730703010520507163140705403020150401150400507001020061303057
0301020303001062010301113181401010063065018040020015100308014006127030
0200606200405003054080400200101400614706140501604009704004040504650130
3051502050400409014100105011141680130401060400310261302040801703040611
5040115073027030401303056150301130513015680530150400404060304065011151
4405020150102001041308101513045010167105040051506801301054017040130540
8010516540801051301102600606501116161630102013070010503010603054080101
3016002005130113050120068294019050706180105162193040120150611070403065
0111739180405020150703010210505405020025610400306530015440505640501002
3052040012406601014014016200840516301020106405065025640501020802002540
5013018712801305012004067045803014002080104020010540505150513081004050
2002206302050120500200130501603011064050650111823640501900304040405018
0400200107030101303052070021163010201070200800650703010200254061010063
0130130051456301130700105020700261703010200254013013070505130305703010
1309001304010501119111307001050109046507050602103013030561021000650517
0631654021301600200554020180200650112024163010203040102065061407037105
0801013012008006401201503054040504650130305405016301011080017080305401
3070700124012015061106040091070650130604070640120150611029020065011219
1630102013070010506006020061150806054068003070505404012015061108040020
0650112273013200401505408010130160020055401301600602006501123141501307
0010501405061670403061130901308140061600240061130102002540163010201908
1213035055408010516001304650112411405003013080200101001050201301704010
6130190406130290102006130604010705301060400610150405003011803014007002
0200650112596301004120060305015068113010100640515010302040507001020040
2105011261115030140070246113011303051501016001807030102040707001210640
1301040112729801001301304030113070010502080200614050100640540150200120

1301230020014050030501640150200120140027020130113070010505401200170030
5012141013020011064015020010302040703010501405080800302305090050204020
1700210501128201001301011006401200110400401502050400703010210505405020
0210614001501020084054050705045807040104007030102040150307402040651615
0400403051201200565011292361011006403011601302040703010540130115013200
1013017030101303056401150129120041307001050140506115054040301100620025
4063020501012001204010064014003530650113010610110064040501050902005010
4050130305150920044005401803014007002020065011313163011100630302040705
0410600711050130305630117030401301000102630111006301501040302063011100
6303030700105040074200101701050204030501064001054013030560010200113030
5170304024018010150806054015010170013040501309001304010501132141001306
1101506810043143040050180120500200400341305018014005012401400704501150
2050400405013090141001050113310100130150401101400102040251303051503001
6401150400402407037105011341863011050807020405090810150120044001501509
0830204015020150130305102001041501010006102040562002204061301054002003
7065011351214010100630650180400200151003015018040020010400580703010132
0014010615012200104040140032004065011361761681013010506815053050106405
0405010064020130140501004140508030140024001060240120150611080703065011
3711619050701308030202170105050166810501630140060019250108010130700105
0900304061150540401000200100650113819610905070130803020620304014020070
3010540301405010064056060020061405051001301504006060020061405018015015
0606002004050204020401400606002006501139108060680400703040650405010140
0105707001210600710561083070301057070012401001040114026840010170013114
0200501680120013040050620010030501184030801051405020307631050150050105
0615302013014050602100703010513010063064050140506401140504070513011003
0103011411161001301200202618010512604013030540320015164020060151150200
2103010008062002008104011422065104003200102540801040632013032130650141
0506812505620150801040707301012501012002024070501630140020504070130201
8020010501143231001306016101301032301070904050104050130401100130301701
9040130106404050140200130305130140502008406813021050540113040638020150
4050130401000200100105011441961001030101120080012307010401206101604011
1003070106100010800130401610080010130140200616040064007030101303641061
0010302704130301006401309001304010501145156501410506820025801001302002
1501250104050153010615067042013081006150400182040130812040105011462410
0130101506815053010604050153020150570403010001020090130880301400601305
0401301060302025703040150101709002015040020650405013031530105011471910
0130200215010170670022015016013020401301060301025703040613014001000802
0030106400200840501012050405013060016020010501148191001030101506815292
6030140405016220020140070301020670301014040404050407020614040605040400
7054050040104060540405017070012130104011491940030204050150211301000102

5068105113010204012050400400703040511504006301100640204050100230570018
0190220015013070110025303040400100105011501861301070141600154056411001
3010110064017024611303054013020404050130510001020051501504004013014080
4002006501151141011006403011601302040703010513200115013200101301703010
1307001080920050101803014007010030650115218610110064016040010008020061
2002204050040400626113010510200603013060401703010204040420012001610742
0401006513010100640020406301400400630614032004010501153161001306110156
4401310400501221050564015085024001200201013054005017050100630206401508
5030202406405010501154161505010063013011704002001202708001305400501260
6100130150101300541303056130054611501022001040401400300200206501155740
5046505802010465010340107015004030140050900200650115618150104006203040
0703010130305200210620022040401405041251301561600700250190104005115020
0210703010902001940604001001040115721801504006306180100412301000400204
0401120060304002513010204061060400600308020021010064011000102002040630
1400800200650530010101150200210703010203030010880109001158146304013114
0200501503105015641613070010501405061407052200840540501650310501540405
0707001210003010900115912640030207014384612110140020025406709061200603
0561400270611402002030321200705010411601761400270618010570051304501013
0705056106401301001014051301150701412080200612002540130127041307014100
6405641161286130105004064160015409013081100130101100640170246113030540
1302040405013051000102005561503001204040501301200800616040070402002040
8010518016040010008020065500404006261130105150200210100200102403102116
2221001306110190130810042050400801050140200361100230570011400505150115
0507024401107024121650161505013080103002040401400470650113010540200102
1163231001301011006401200110400401502050400703010210505405020021061400
1501040505200840580405010509020050104050130305150709010400580401400710
4650501010001020040060060102001164186101100640570055011005130305302040
1105807002006514001203080101200800130305630140040606512606801016007002
0407070012100200102116511807010020065180100130400404007061801041200204
0500301500511014070030206704100010200402070062116618803040131140200501
5031050190130816130700105014050614070522008405405016405060071010640107
0015020022056130100610130707107116786160070013070010509003040611309010
8580190286180104101200540315004010501168122015030401010005061801051130
1150500406420802006120025401301270413050040641169156301004314002006030
5011220015104021302300200101001306160301401100130603014080401302500150
3127033085010700117018803040120011011041054030140090301301055020200540
6163604050540600108051001306130140060080150112006030501130101006403069
1171961402001400510011040580800820400802300200501512160811006405062001
1608110010701006211721310013040010161030400101130461501703676570012703
0103001060011505700130300107031021173141001306114007032105040501402001

3030520084040013030562200201400570301020401530130210400150584010440310
4117411803040170052705012200151040130200670631400513023002001010314305
0180101006403069117551501220015104030830104016154050102117615101122001
5104017020080070505700115051004311402002002206150540140010540707001210
0010200402004641177136304013140020060305013069160102540680011002540700
2007016100130570011064070901021178276315100640510520070650130105640501
0023020150611070403065013060101014001001301011006405630125014001055019
5200302040801400100611303056301400600765080108001080101301060405020402
0033020030010411791310013061301004703040400401305018010250140020405081
0061502030400703040401502001041180111001303061503010220401006516161013
0102002050300410411813010013061101306915012006030200220305010903061130
1020801602002153020210097040501303010306301103040080400405020401841301
1402001400201505409010251401190125401504067045401309028130106013090282
1002001021182128030401311402005013703050170130105160180305161409200501
7030105183120054050603103040508006411838406064057050420022064015104050
1309001304010502270104118427613010404105016001540300701021100130101100
6401702461130305401302040405013051000102005630140050100906113040201013
0613040107150150101200120402600102006150101600180703010204070700121064
0408109118515610110064016806113040201013061304010715021301006096301400
2600606113050160130010154063014007050061801013012008004080604105011861
1210010400130305600102003020401502050400404064050105064011501703010204
0288010900118721100130611013007010219030140020400140200201505040020020
4011070241216501161505080703080101406130501401503001150203015040013083
0104013020030010411883610013010110064012001104004015020504007030102105
0540502002106200710050104050520071001860501640112001041501600130802040
1301040115051204070505150120010413011301903018401160400970400640140068
0101001013012130305703010540062030400613010515010211892361011006403011
0320040502040300100110010150109010220404050030401190121006405068161006
4056416100640901308640110064030694050204022701041190961604001000802006
1200220405004040062611301051502002102008104064641191191001306110130070
1024015080100520500102001404014001006306150130502001208010501800701080
1630630120059203020034050120640115040070301050127071071192161001301011
0064012005910170770301020404050130305614006007004004065620012040900520
0101150200210240140070403065040810911932061011006401704030617030104020
1504002040150107014030606804007030406504050101400105707001210600710564
0505620170026120040010026115010407020402001001021194186304013114020050
1503105013007010216130700105014050614070522008405405016160070040013070
0105090030406113090108580190286180104101200540315004010501195102015030
4010100050618010511301270413040410502040127044005004064119666301004120
0603050140660102110140050166030915040210501197101301080200706506403010

5801400270611402008020070650640114020080200706502200300104119891010044
0100640510640130100101405801620045401305012006210601306200413040620064
1199961400270618010570053070505610640130100101405210601302008041304020
0806411100970030204050150211301002001050100905703010204050511001104068
9010411101246401900304050154063020509003040611508060540804011100050400
7050540130540054013040010104706504050465013030540503001030401311402002
0022064017146540100010200400400210211102126207003020160070020022017001
1600700130100200106510900130405150160070051301040300410411103161508010
7003020301105304050600180707001213016002005700302010640403406703051305
0160670030201064040300564111045640150660020051301301330407046411105101
0640101400301400203040508060130121700505804050540300100106607010411106
9801401130700105030010061808010130501200305408010517801020063005101001
1107156001304105080105140141404001306040161400613012008001301401300120
0220150200220807013030401102001041110818614011307001050607046180801013
0350560013041050801051401414040013060401614006130120080013014013001200
2207091100010200403700670011109208030140020801040200105404011070245630
1401107024650130120401107024121654040501002306150130406806540509010254
0100010200405010069011110186301004140010501406601013020400128016004003
0808010563063012030405602100400405020022030100800102105054061505403080
1030020405054020010211111106150203013040130106801050540200220170401305
4015052401107040306506002102001111212801604001004020401140200400640504
0012407020630140091000611505240140070403065029010200111131763014002002
0506113010130700105090030406180400406020401305012006401302040405046501
3030540501630101500403014005090200650111141461100401309030159200801013
0505120067308014050130301030150130860501400107005250130601010140070030
2070020200103030700120200105011115761902200801501303053011080010701320
0130408605010501111626803063012015040501301002006504050100230204016306
2100105105056507050130806014801013012008001301100301030140405015031050
1405054061400270130700105090030406140114002008061801056201506140320040
1050111178640120150200220301053020130100200102900304061530514090308650
1111810630630012002203037030130501601405618456301107130650406004003080
1050111191513014050200840200220630700302060030100540640040400203040520
0220301403015035504040501303505613050160134070105011120176203015010090
7030102040501502113020060304015050024002580614206312080105700513081006
4067090056700202001030304064050105011121961003030307001050301106405065
0170403061703010402015040020401501701403065011122361504009002006115014
0504009002006501112316630305100010213060401614006130120080061301051020
0370130140200203058017024564006203070301056401200220210001803070401400
7040306501242604013030513020084050130200810401215130200400302011014001
3020400121304021050122615011507305015100200150170200210130703020404007

0100306501231650850501009070301020186050130100909024011681050113010205
7001130100200150615020504004050100230530405013010001803010501241617001
0013010660803012105101124001501020011040018470300200206202161303004060
6130100402002001104005403010601341050125161001301012501030140010090902
0061012070301016006400208010201046130202010411501303001091503030150601
5070464021050126256207003020103400210202002206107030402040504001610301
3018141050061040040507040400570301020670301013010701006220401140040517
0301012610204050100230122001510406160811001502002207030104082010401277
3010042015080101066080616006400511014003030601103010501281517001001306
1301066080616006518213010121050140501650850709025150121501308010800301
3040210501291411004003061106608016192008651200800110600303020406351210
2040640020650614050270451006401901308105012101610013010011030405054030
1400100400306110660806130100658010100010124001303210304001009527080013
0601012005150205040040801703010501211121001306110112150140130203014001
4050170301010660806150130530501908650121281200603054070501100041102004
0070610307026150130530818090065012131310013015010301087505010150400700
5261256160018015010120305130700102615040040705051000180306501214910013
0613010501203051307001026508507090251501170013060016020065012151780304
0170052612561340706115010370306580101000101240013032616810501130105304
0050210505402140200540570016540301103007020065012164631611215407030011
0220650121719100130611011215011501700525015060400210064002002050110660
8070504404001705018012030513070010264011504002406405030501630620501901
4100105012181863161703010100401090524402070021001302306063040030204015
0806020401402001809022003401030613030513040604007015070301040140090806
5012191763140060101200580120060306161200454080143010430651001301012300
2001057001100030140616020065280017056130305703010402401107040306501220
9630020065250040502600604200154040704645620150618010540501307154105012
2132610013013070010130040020015405040902003014020014005120200401040500
6157060101501050807050116504006007005630416207003020402050130106608080
1013012008006305070304054050400161030130181410500613030510001302703010
1402005630205012050020013050160301107030406501222963040123010001300451
4001050158204016703040162070030205037101304086050105012232362001644005
1304001056801021040051705050806056100030100400130126126100130400510400
3020100130407017001303051505200210186050405006110150530110803081309001
3040650122419630100454040025654025130630115020011022005150200252070030
2030509020080705051306066130808300115054050702145011304060030901050122
5236160400210011302126100440010040109054050422006130801016010451304101
3021210013040040137140501200142153020606113011501060350167070012130104
0122619100130510200164400501070505080601063005430015440501530511502015
0100401090510044050100230809041004006564050130201700210501227106150201

5010040109051004405042200802070024006564050130901410010501228138030401
2001101004010905100440504220010013015054050201042050150201042050709001
0401229101066080170200800705057001616040010008020010307005022015020205
0400405013060019101050123018610013050606580101304041050514020014001307
0710740020016480400151705050806051004300100080518211501305020015180108
0030130402105012313280304016040704002402020055012006030400130105506170
4004400305504040020161400400203061845405055060201050161001304001600200
3703010550803040120011050512022005056100970501104105506100305081300303
0540157001230020011505700113014030202020010401232191001304008070030205
0130700103040400505010801056301004200164400570505080605801604007090406
3010503040108070304011402005301060350506301020650140501309011000200105
0123317100130200213060350182130104040110470650501013010561301400902008
0705010201045501902130105506120504050130315301050123410801604003123052
0025809020080705052010455015055613060401070130703010401235115004024130
5404050270440120016113011014003010603505058400108105012362764600304070
5130603508040010150100130184540115010120015010170902006004020016100130
1301600200150101200150101840308061002001601060027140012030130910200405
0550210501240016103051501502001204050130408605010501237261001303011014
0010204019701404002007100150513015021400204012400161030510023015010140
0102040170030204014040170304050102002101501040020020400403051006403011
0640506502130305654021301600200554020180200650123826614002704004030512
1101012200151040616081100610701006240120150305011505030020020213030540
5030010700302040508080030130305703010501670301013050160630205012050020
0130501603011030020200650123910101901821013060350112002124040080200100
6506001020014013030513061841301005120012403240140070246504050465051301
1604016040104004065115040040612162040401150730130305251405060309150150
1308204013013030514020013014007024611301110157003020130410501301001040
6302050120500200130501603011070304065012412010190182101306035014011842
0401801060100102002560040200161401130160020080109030280400120301309102
0040502001605100800101301402001307001080105400604008040010150124218610
0130303070010900501505501340505401170020200501070504200220801506015130
3001091507002020020025803025008010130603502800706050105012432561001301
3040302015010120010602702100200140060401501012030550602707031806602706
0502301400600800200616002001012601400101110511304030118040065010801020
0610110150205040040303020061014007022006501244810013061180010001500183
0140640150850240016103013018301402701304010501245116100130130700105031
4050540161420200270414051501150210204024001610305801200603065012462210
6608011051130904101001804005018010602702100200140060401501012030550602
7070318066027060502301400600800200616002001012601400307030101200370130
1013050160307030540107030406501247141001304007200706506027060501050412

1804018904400408070020065801060502305130110030103014040140012030650124
8155004010140010405027047003020602703004141012030504011004404004030550
1301100301030140401400890506501249115004010140010405027047003020701408
0105101000150013050160680105107090200650125022610013013040302011040065
0102580304013151302006063010013012003701301020022080160130540121301305
0606513030140010100970501104105501502002102201045507030104012512910013
0401600922050170020016440050106608070505080605100305081300303054017030
4050170301054050606100130400140200140013070710713015089089013081001501
2001644005705050806056150530405013090141001050125212700302030107030401
5010304016005052130100010261501303053011054102010413060011050105012531
5640112200105080601015013050806030140120052130606130140120084020021015
0200210100080620020081040125414610013013040302011040065010251604006003
0905305080601080304012030405100130150201301064030410501402010501401050
1255810013013703050107030106007110501301200800150108801090070301040125
6176207003020402050130106608080101301200800104002614050518105001030015
0901022200840400501405050300163015080010701320013040860501050125776301
3200130160020056001020030307001050140506162015061104001006501258963116
0065106608080460030617030105807020080540654030540502020065012591763040
1357540235175401001301104006501021600302040405012102040130140020065015
0101680101302010306150160010200130405073010501260108015030404001400650
1025803012010303020407050410630140010020026501261610013061605020016470
5051215615013080170306501262146100130308040010150513703061280017040054
0801020081305403070305401070200806505117001150100302611301015305403070
3054010200370650126317803040120037061130101210540100130611011215014050
7040501130201030801200603040705011600150150204003061501305308180900650
1264171001305301405020407030105130120401140504002040703010160010540501
0023080130305600102008180900165612008401302001840105012652663040180400
8614040017054063461280017040054020044001301054010013061101121501401502
1000105700528001704005012004400130105016504010200153050165088090016001
5016507414201030270102007003020201030106010200126624100130305012006030
5407020408400104006400650406500100140501303053040014005050102513011501
0819220408030401140065406500100540100130130305703010401501006306201030
1267286100130101250103014004600306140502126184614600306140501261240400
8020010056401110005010705020404050130305405030010150130820401301303057
0301054006203040067030105803010400620301304040062030650126830630401460
0306140508105001402005401265404012015010100050107050540405013030540503
0010130181358010508060107010062100800151615053070067030403040170304050
1563020501205002001305016030110703040650126916630401460030617030101066
0801610130105160015100130150101501160062080301400240010602401201506110
7040306501270158030401357540235175403703013060100110580102008301600105

5004017005040670050110400511307010200150204030601200100650127151001306
1611002306170301054040170014008010046501272121001306150801004906170130
4030206304050312584030270102006150125770104012731210013061400130305301
0047030404004040131050130508060480101301200800640120501601200100105012
7461001306180401371651502050400402017002105012751110013061371654050634
8010200830580563716520700302050371013090013040105012763380241216701040
0540100230670116001055004016040060020035140506701160010520700302020450
1301066080401201503010160070016001580104105013040302013011501030011303
0550200807042003140040505030016806100203070010703040703010401277241001
3061150106020010080100460200100160030540501002308016020051106608080105
0806056304010245130540100130150400403002004020150161303051703040240140
0908065012781610013061101110511307071071503051213001060012021020018060
0700184501402015051501502001204050130408605010501279131001304070170013
0305150501600700130140506345014040017050170504515011700130900130406501
2803780304011604001016061405056003090615031011001302021020054013040400
7030406115012120401004160070070301020404065001001405013030564050100230
4018020094004080101066080803050122008130120080084001010170050301012101
6108204013030530106566001020013081204010501281181200370611301012102040
8010063061101121501150125020602001006401300545011301240170304050164012
0501303010001028180900105012821161601301301002001051304001020501801051
6130701020013040010110023050180105161501309014100650128318100130230606
3040030204015080602040140200180902200340103070601013030515010140010501
0254034010701150556130703010401308201040128413640063010705054061001301
0116080107030101066080612108004007010501540501308750805620900104012851
2100130614001303054008040014007002020010660808400104002065082008001164
0020650405013051302010501286131001301504011300206250010687501013010130
3056170304040501303054013014007030406501287211012501017005261804008606
0614050106608061600105630140010160614050200681303051505301101016040502
0068130305130113010064013020180200650128822803040146003061703010510013
0611011105113070710740605016153050113080020063105012280017054073158016
8030501130201030640090410070301050115013030510371013040400904100105012
8910100130530703040400404018070304004021066080616001051700150400403153
0650129023100130611150203015040010660801001301501106608065700116001010
0440501303057030105011505405010400100610902200801501303053011080010701
3200130408605010501291910013061400130305301004150020020130305703010501
6150205013060019101050129211100130301400500200102703010204013010640101
0008020013030530204065612008401302001840105012931217005261210040109010
5700180130100657030106351210101400290102001614006501021530204013407010
5012941263040180903040013070102001001301265401501030134200108106608030
6301150400805046501295610013061400130305150203080108003013020130100410

4012962080304011503113023001020013010015703010635580120040042901020011
0013013040110030302040150101703040405013030540130140070304065012979100
1306110112150116040010008020030501700506250115012050160019101050129891
0013060680160400100080200302040200210150556130100080620013020081040129
9148030401460030617030101066080161013010512610561001301460030614090200
1503001130305140501050121004762008070126105703010130702003006600200613
0560341610013010112400570014001610302006101104050100230100437030512002
1081001610041860502101700160020035010405013060350631220404050130246405
0270415050710001303001091502105010621050160064001015020021030910803040
1103001150556130703010401308201040121012120021004140010400501040501304
0302067030404005010405040016103013018141050080192001306040161400613012
0080015040063010108010130450101613016002005400680501040603040161308100
5010213090130810501210214700302040501502113010001025068105130102064012
0504003041054017001340706114020054065401040202006501210366401120500200
1305016063068200904002406405010501210410640140060130540703010540501320
0150561301700202003030701304010501210511620110504050110580101306040161
4006130120080010402006507030105165407050514070200800650121067640110640
5012050020054021303051301654040300200206501210714180140506115040014001
0540100013001054050707001213030516400140010540130601705210004005654030
1103007020065012108171003057005602103010147061301013030570301029010200
5150164050140027050106602815013030564011501405013040300200201050121092
9640112006030501405010023020130120031301506810130105404050153013010020
0101803040106010200618010130120080080105090020061201080201507011002513
0700105040501002305406304120013016002005600102003030700105014001006118
0301400701003065012110198400101700116040010160130200603069005061150540
1004207002613154050902005018050310405050300163011020042160501705013010
0640130403200401050121112330100420150801010090905407022005301630101301
3021240120150841050011080400200106302050400904101001307001021050104105
6400809010302030300106541062008405301006401064050650134260401303051302
0084050130200810401311513040200400302011014001302040012613070010150730
1301020405020022013081006302050120500200130501603011064050650132261303
0513070010200807013060401614002100010200704044002006505150040160400610
7030101307020030066060020013030040606130100402002030103200103013304060
4010104220013014020010809030130110140030703020402301001200220404006100
5065013324656130700104041301200800637030801051200616010615051200164050
2030130500402001400370308010517631050150050105010100030010130301030130
5051200150801070030203011014003010064010400802020065013427680101301200
8001009704040031620014006350140040501705012672007065060010309050615061
0001020090506150106010010240161846508080030270800517030102708008010130
1203015080107003020301101400301006401070100306501352561504007032807032

1006305401170012050140020012111501308010600301003410416301020130700105
0208020061220025406163010201301100030130801017050110054061630102019081
2130501200540801051600130465013620610604007033065020213060101051002301
3086050561004600304004050100230540130405003014006150200220307006401000
8020053030501607030109003040540615020022030300410413070100121371561010
0630130700105020802006130630115073070301051105405020025150401150400405
0700200630203010064051413815130305107030404014008403020301505001064014
0010001080013012008140640140074146203030010705045240100412001395701304
0130100010261303005145130202102001304040070130131014606140502040405016
0200130100630640503520025640505640604006008021303010306601200221305051
2001311353054070100214004050210501041056405060030805108809006505405014
0200130305150130305301101000102004012100640840010101000102006140121508
0605406170011200141303052100640606180301402004305640130540405046505405
0613013129561307001010200102040130220010060068016940701610503001013060
8121305001001301313196106028130200704284045613040301102054050600108040
0561020060301309061701008010901022514050103001654010314306508010130305
6563004104130408130131427305470651308100613070010501047065040504650530
1106040031026503054023001013012021609208010513010130401301023010008015
6401562213010005640147011302018020010501301801080030130131511630305106
0344050801013060401614006130120080096701620200516900301305402130100046
6130190130131645100304050200213060401614006130120080010030130305100301
8014006007004004040504650516301013011040302065030150806054050807016301
8002001100305301060400610130170401061302901020014053040060400610130900
3040140061305062001403703061303053002002016003010061206003010058040030
0125130600301007030105401003013030560013010020303001065613061841301005
1200131742150730405013060401401806013040016410521004200518018400403013
0601030724120012101640401106100465070301058010130501200124001000183010
5164040017072440500305207003020108002002130305130810061302193080140113
0724801070052380161401401105080701305016080104020500801013012008002070
0302010800200213030513014050013013182730307001050160400312613020025401
3086050106130700105030401060400310261305306150305404018010130120080034
0107016405003054070530180400461251630102030540606130860126401615403550
4062106013040514131915180405010703040150401150730130102040502002201308
1002040505617040101504011040070020200163061301302121320713070010501068
0650270541303056301105010080065013040105001100132113613070010501090306
5040114020013030525150106903061060030065020025406106001806506061308601
2132219613070010509022006112400100016352002540611001406113090301561508
0100614040120071005015406020016703015010561042006502130860505130601010
5163010203054070100210130412001323153501400704501046003065051640509030
8405012110540617613540670020010140054061304030110205104600306507030105

4040502030212132476030140703010204024019022004004080507040701002101304
1200132523613070010501050100800650705413030540502704401050011005610100
9706504011402001303052515010690306108060465080101301200800163010203054
0130307050563054060613041200132616130305102609130200710030405010300161
0100420068020086121308101513045010164011308101513045010180101301600200
5130140400170132719610100630130700105020802006130630115073070301051105
4050200251003015013030510800304050103001610541013010540501501213281113
0700105014050616400940105010030625402700202001303051301270020200130305
4009401050130100306213298130700105014050616704030611309013081400962103
0540686050401213302820700302012006030501208010140510046003040040501002
3051140403040040030670301054013070010168105011301020654010208020065021
3020084050100305620021030113051301567030105400620304006130105404001213
3151630615010020015016010200400251303213016100970400251301200800162030
4025130406400102303030513014020034010701180304010101601307001050140506
1150306103001130305305410130501603401070163011071301307001050208020061
4009010254024019050706110012007051640083010020010214050412005408400101
0140010670413030515013030530110600308013040107014133213630100416040057
1022006030405010023020801403010400303070010502080200615004016007004005
4080201080201507010012133339180405056100110407030102030508060240120602
4006370306130305300200201100306040654014040050210650524013011070304080
1013012008001402900152004050130100630230710503030700105020802006140202
0054069046170501306021030640501080030301303058040130540505141334143054
0707001280101308101513045010163070700121301600200513001006401305404050
1303054050611001335194050030130350513040010670413040400100650400320010
4050400840051130150512001203051411040690030514003020701002101307001050
1400100616701002101302018020010501305012001336256130700105014001050154
0130204001210802008650240115073013010206405013018712405010502020027080
0510030150401140200400150170241303056301130020020251301051470661301054
0121337196207003020150730501582040170200210163010501400270400156154027
0440131204050130703040401302040501303054050630106301611001338216301004
1200603050120060301405010023020637030501305401761316700200105640120150
3020060630150101400102110513012170050130305302030133020400121339810408
6130305401103001610500240067050451401302040012134013615040150200105020
2708001307001050704540165040068010502080150401703010201302301100067030
1050113086012134116163040102006115015014001013012008005050100905140501
9200180516130305108204030140701002308204056566020010701308601213421861
0044020200130700105040501002305408030305130402020034010701107030404014
0020602203050806066010703040130208012003040507010021013041200134315610
1006301307001050208020061306040040200603011003020801021303053005104121
0501062105020406405070504570304013020400121442604013030513020084050130

2008104014116130200204001215073050151301020304006002003130501604050130
9003040140013010130506200217005020025401301090200191307071071308401041
4214130305130700103054018010130604016140064018010130120080066103030302
0180200105040507070012300410414316130700105010604008265013081015130450
1017030101301600200561090465070506021030130305610210006505170631163010
2080108003013027010414419640112006030501405020060630130123060150100640
5301021050305408010800301303054050103001610541040501030016561307071071
3082010401452163010041200603050140660102110140050115016002003100640204
0501309003040140013010130506200670020200540211014013030515080107003020
3011014003020309021200300206200146266170010013040660103010064051700202
0061507040513030570301020401700150312040405013080200706501060640650204
0606130707001261070028650125012040610604008106505060120406801070030204
0230140502002204070900104014711617004001700502002204030105030020200400
4030171045020406301050208020040040150707001210303004104148136100130406
6010150400208020061150400406405080101301200800340107018015013030530100
0501084010414937130401014002040502113070010504050100230204010064050686
7014650040646130700105040502704540301107030405401301130305314005402006
0305402130210501400802004611104105408010180615540610013061150120802005
0124011200603040040256150130801030020404014004706505011301054020010214
1033100130400200603054018010130305300208019200130604016140061301200800
1047062040301010008020030204040507005062204061066002002040130101330406
0401010013061150150400401301230020040500305014002001046501504009046501
7040120150107024121650180140065012603091504021050141129100130400305402
0060305401505085013012300200405003020406302050130305104050703010405010
3001405070214564012015030501150501400102040260309150130121700501303056
7030101303058030104006203013040640506501412176401305011301504006203070
3010130305610045415016023050163050902200507030104011700104004065016703
0101303058030104006203013040400620306501413166100130130700105020802006
1302006030540305060020035020404050120080050116304007064508010403040050
1801681013010540200254030505302050130900130401050141410630506020505020
4013012008004050270454070030203040506001804010014010660018067010414155
6160400804008616600122030321200705010414167405062001105355040610601001
0405040190410414171610400320070563011020141060101000561014001051304064
0040502030402015064015624010400640506200110570700121000301090014182240
5003013070010502080200612200254017040130540202004014130040044002513020
0108801010640701908030110100420065040401206026170301030010700302056130
8003013013027010414191413040400200150130305600301001306040161400613012
0080021308100150103001107005220406101400260030100341041420564017003020
7030101303052707107142134622007613030534010701801001301308007080130307
0010501604002022006115012050130204040027018053015040040401000506507050

1405070700121303054050300101001306130654150113030530541050120406061703
0105011377050114090220050140130501405040810901422446100130130300109150
3040110080010130140200150130305670420406704130810066704400204080160030
8040020406401201503010703010204040506030915013011504706400204080160400
3240040301080301400306406501063064061150806020404011501240902006002040
6401150400402409020060010150102080200400240113002002040040650405010023
0150130900130401050305407070012130104014231761460030130700105014050616
7040306113090130814003501400400320010405040084005113015051200600130410
5080105121700502002540400810400540801051603014014241513040400200201080
8002002130305405003012030405910252030032005910251903051500124006802007
0518010130604011425124006400101203051203081050217005020025161080020021
3030513014050013030305016030703054010400700202006501426136405003020304
0560021050052030032005600210500513400500400405080610013012008004013051
4050100200120014271810500240013030513070010501405061213010063013050012
4008010130810151304501016801013016002005610800301303051309001304010506
1080703013030540110300114281213040400200130101307001050243061507040400
1303052080200161830611006405404120013026120014294355040109030650516210
6013010020012001430126370306130305150414130108003061705060210305100304
0040400706180150409010200204013010130501200143121100303070214101307001
0501405061101001040611309030156105080100614040120071005015406020016703
0150105405010023015010140010106403012107080105630160030130143225130305
1307001060030100130604016140061301200800615073040501306040140180160020
0325405013050040200140020071001302040660600200302040130803020304003200
1080101302820021402005660600200302040130150512001433966060020030204013
0300406061301004020041102105066060020030204013030103061305051200143415
6140012040405020304016013040040656150400704615070404001303053014008906
5115013015060150309003064020801200143513617001001301220015104020021370
3057001130230414050161350250106250101505070241301905014014361520021505
5018003030502050010200140501305016080405040027050108015054050106405070
9015010801502010008062002008104014372620025011501016020504004050700200
1040010261410001020070010720070705042104002013040820040200250130101001
0406113090301580137030180104540501305016040056101301054061200710054040
5013050040200140030703054010300202006501438182002501150204007030404015
0600801064015070305064011060080107030101303054050300108010130120080063
0180101306040114391313084043030513070010652301070301013020220016040170
1030616081100150200210306040107013047011440920021370305010401001040130
9030156405070020010400102002501640010023047011441820025011100080200301
0630613041063030406405010501064010100640130860121442136301400860250130
3051000180301704011070403013090013040650150401106600200540301064040030
0600908010513012901200144394059701050401005070102006605403011020040041

3010540920080540618010440054056114442661507002001305016010640101400105
4013070700128010100630130700105090030406120025011600200501130101330100
2001025032470640020650400270130200603016304040020650611100604040040405
0100230401302040405076130144514660205040040801040601205013070010509003
0406115080605406400210503020402010808070305012540680020025013020401301
4050013014461261004402020061402020054067050413030540202005406150201504
0202005403040076304050513032130144711803014008602501303054060030806704
5200603051501303057071077006150400100140144810106404002430130120080010
0010200130120080061306040161400622007613030513061841301005120014496640
0200101304032004010501064010700401002005010508010130190801414506602001
2103054040501009200150640010003001063655401305012001451103010371013030
5203050806040120602400150130305602001070130860121452135700123011000303
0501606301050700200612563010703040611504015613056184630107002020016306
1301302121542604013030513020084050130200810401516130200400302011014001
3020400126100200150402105015272002401106413070010502080200613062015061
4060304010501537700200540101203061610400404007061610305540130140308060
6801070304065015486401153020501405010020010513016305120400124070306401
5574014006021004050140513305164011060400160020065015696100130611011105
1130700105073070301051307002020015020304035065015783064014001400105012
1304030110205150205040040501309014100105015894015050730130403011020513
0121308100640120150611700140509002001050159715015085050730501130700202
0061501305308180900650151076301004120060305014050100230208010300107013
0163010501511864011014001054040502006063013012015061251060400571065015
1252070030205060302058010100306213040320040105015137301106405065025610
0460030400605051301630105015149630680400850170301054021214050130604018
0900306180105107020036501515830100130611504016020200400129012005012305
0850100640406086200650151676301004370305018010130604012200631671050151
3030501900200105015175688090050151405020303001091502003104015187130140
5016040020010013060407080140027053005124021050151911613012008004044501
5161301001050180105120061601061502400501801051405020303001040676501520
8637030501302040801051407011030064050306040040305220017100105015211161
5040503001013017050450160071105056401505073051301210042004070306401522
1261200603050113020010183061100880150730501405013060401401801601001050
1204065640115040040305260017501050152366150130508505081010650401040065
0850130612005006501524763010047030405011304060400100440105040502040630
1004703040501130406040016002001050152576150200220561083002005401505820
1040703010401526863010046003010050113015060150405090309013040508401406
0506501527761303150600301005015405010023040505012001306040640152812617
0010013020022030304030110205150106001301002300200140509030901304050840
1406050650152998017001606104005650806004008010540502006810801007061305

601341050153048060341304030110205203054013407065015317130112301060121 0
150102065040701306013410501532910013010112301060401302013014002065040 7
013060134105015331110013030401205030160343023002006003010040054050903 0
901304050840140605065015345100130801600200340505180150202003104015356 6
150703010201303070505130101064013041050153661001302002801509002005010 1
301010640102705006501537410013080150204050130405090020010501538413010 1
064013061004001304070306401539101001302002240111000610400501030171050 5
030540801013012008006301100061050540134070105015404130170214204050540 1
304060030901050154151001305700190200197030104060400100104015421115070 2
141030106030207030105406030915013014050140027020405013010001610501543 4
615035504030406704540134070105015448305160270512612302030212405054037 4
010060640154551501304040010010508010350140067010650154631460030651260 3
014014050105015471065077050140180109046200540405010003016006150170301 0
602002004040010012301050154883011040605408010515090264015404050512406 0
020031050154965021070214101501015011301000806200130200810401550561507 0
700121056130707001213013010401551465021054070508001080122001510401552 9
170046003061703010580100130616030140110013015014050204063306501553710 0
130613014006330150150230020020210003014070301040155481001301230020040 0
406501070301015040605010130202200802404002300200650155571001306123002 0
050120213081008030140020504050130100150910501556810013064050101005094 0
502008405200251301130800130650155751001308040160092204011051130402006 0
306501558610013061150112006030501130101006404032004010501559613011303 0
691501304050365401340701050156061301140200140051004200501150513040501 3
010001220010501561580304013113030691304020060306501562410013015020401 0
064040502020065015637100130612303105012024012015061801051040400200650 1
564461400105012021308100615013090141006501565148016020021530202100970 4
050130301030614002701421200540630110304008040040502040184614080061810 5
004006402006501566961008001050113010570030201301402001504122005630140 1
009670409028105015674631153013040410505106040023002006501568610013015 0
563018001080108030140080800865015694614001006113030563014006007650157 0
510013061163040505052070501307013040105015716100130563012501400101502 0
504004080170301050157253070402002015054030801060202004005401070405650 1
573380160070040054013090108540300200100105015748803703050170130105160 1
803051614092005017030105408312005405060310301575515080107003020301101 4
003030404006604010501576361505130260210304010010401577515080107003020 3
011053030406405010501578561502015019081213011020530900130401050157958 0
150400100405014050540615054013021401404021050158056301004207002190812 1
308320013040200603010501581561400105015401101400501802015061705051407 0
200800105015826620150611050840065040501303213021064001140501050158338 0
160070040054013090108540902810501584680401110005010705054040120150611 0

2060265015851464016003010050113060401614006130120080064012105054011301
2130810061501306017053014001058019080813090808130340103015865150200220
5613060030110013070301040158776301004140010501206027014050130405001501
0613010020015013070900104015881530140040450701050102013010401404007050
1251761314050540630140087507030105406160080800350182030304064050105015
8956100301501015011305070010200130402105015904204011507305017030101304
0100400604010501591413070010503703061130100200150708001050159238062002
2030506013050540134070105015933704012015061107040306501594680190470240
1400640200617020080070501304030020020105015953150120801050120130406040
0571010501596813070010501037030650407013030513051160020080606801070304
0650159776301004507030401502010800101009042002024011010063065015986806
0282840420022062050405013060134105015995617024200220840010101400102013
0101001050164260401303051302008405013020081040161914001014020013030580
3014006040070330656028150564007013010704011030020020650162181050730130
4030110205213020068405014020057030104050103001405070214515015070020061
1505301130513011501801400100650163760030100130604016140061301200800213
0810040070130107040110300200206501648600301001301506015040505098058017
0015660090104040210501658613015070140600301005130204080105148064050180
7064050514001203065016676302040801051340130810504002001086506810504006
0200865016714640084030150010013020401301023043040400206506121301000105
1301230010013015080601502002204030200680200810401689613060010306130210
0013061308401020030400200202651671050561060030100401301400703040650169
1067030101303051009041306021030640505131102006306300130541204013407010
5016101356130700101507304050130604014013020404050530020012640505300320
0801054006010406501611161050240030204025130720070613071040065061305060
0103061301705012640502030130500402001400150801070030203011053010064010
4008020200650161215660600200302040130301030613050512006130300406061301
0040200613050364040606002001400214020051508010700302030110140030100640
1070100306501613136401700200130204080101301200800406004003080113061505
1508010700302030110530100640107002020065016142165613070010606002001302
8200304001203061405053084019200101640060400600200361405058301054003026
0650516400200101308030204061600200801056304002400100061405080800305630
7030204040030020200650161511613010010801013012008002006160101504004010
4220406150512001660230130703020404005400465016164670301401400621305034
0540105400465016177180405010600301002040503011060030100180301400700202
0065016181061504007046150704051303053014008906511501303053010008062002
0081040161966130305107030404014006020065064014007030506501620106130700
1050104706504050465013030530110600301006503001010165401060030100650162
1714061400100010200181016401103007020065011015010270500650162211130520
4013056184801307001050301106405065021301600200510030625404050202005654

0406040020220065016231330132004015013030510703040401106020065064011070
3050650150530110821304060400202200105016249617001100103030540401700115
0730200220401001306116019102001301630105016251530108403061167120054020
1403051064013010010140564050167120013070010501080030650540210001020070
3040130160140110720065016262110044020200130700105040501002305408014001
0130305250101505404050130100617048060020070301054013060100804050806100
5406140015401307070012405081050030110300702006501627215004010640130100
1014051060071054061010063011050300200201101013070010502050400404003001
1006508010540100130130700105016400611307030401501306007101301064061306
0670301013020180200105016281913070010504004006801540130403011020590013
0401015080605408013010061130603040401205015070403040506062301015013030
5703010402401205040040400704030650162988014600306112612355040600130410
5080105180302106040500610130404002022001050163020610010303030700105014
0010061401700115073020022040100130616001020013030700105018605061801057
0051304501018605056304120013016002005600102006305070404120013040400100
1050163115350140070450104600306505140032001040504008400511301505120030
5408010514011030016502070030201037101303051304040010010501632121307001
0504004006801540130403011020591021050101006306506030140703010204014600
3061130350524012050400404007040306501633225301050900200650130115040014
0010540130403011020516101400101402002002202070030208070301307001050405
0100230540640190030405401303056302050201506115080605401090030406501634
1080190125406010101400401704030616811002540401201506125106040057106501
6353261001301307001050130020020613063001130305401702450140504650540503
0010508506301121650163018200405014050465054050300102070030208070301307
0010504050100230540805307030101302006030130113023011000130402105016362
8630100427050050180102030140520060630115017024611303056134005026113091
1000640080405054040505410130305640505404050810040070301051308003013058
0601020061801013012008008015090020061201080201507011002513040207002105
0163714150400820090703010541540801501303053011054104050108003064013054
0405050190200105016381861100604061213030535411040150540301102705001303
0540501040640023010670417030105810016302050120500200130501603011070304
0650163911301021050305401307001010600400308065080105630107030401307001
0502080200611505402015061201700210501640101504011006305013030010170011
2004501515050100630305205080102065016411861307001050513200618010130305
4050270440190030406130502610505408010130450101860505630132001301600200
5120220030620150611070304065016425130700105090220061670301020025401040
0620306501643156401120060305014050100230201301200313015068101301054080
1601306115301307002020015020504004030140070304065016441221302105014006
1307220061507305011301020130700202003040021050303050160401507301301054
0630703054010400802020065016451618014050130700105040202006113060101014

0015010600608013030525401301200800161014001054013070700124050810500301
1030070200650164671610160070054080104001003025408040154024070371050164
7816101600700540703010400600680801502002204030200680200810401648171630
4010200611301040160030100130305405030010104008010190030130570501301040
1050613030040110306034130305654041600200650164914630305106034401801013
0604016140064018010130120080040504125613040301102056540301106040020220
0650165071060018065020025404050806100540610807030650401106402006501651
1261001301303053014004006007006113051050150050105015040156130561848011
0110801200526501652116305401801013060401614006130120080063051304105061
9021180100010200130305400400100650165312640122040405050704058040501303
0550040170014060204013080020080130105400312006501654105004017001203008
0130800200705020401700180200101004050204022002540103002002065016556301
0208020061240114001050154080400404007061806068040070304065016561261037
0306503040130110703040650509010214040120071005015404001303053040060130
5070401205040040400804002006501657761037030650303051302501400602815056
3054040110300400565016589617001230020018454021301505001090030635540606
4165620900104016591910400612001040501301006404050606401230020025110406
0205703010565014010460580101304002001213016014011082040650166012303070
0105030110640506502130160020054050030130606630305130405003013017030106
5613070710713082010401661236306106160070013030513050160290030405404014
0020020703010514050412563020501066002005401301013304060401080170013113
3054030110604001600200650601705630110604001004406501662176103703065030
3054011020200565064009080130605040054013020700215030540130860501030132
0040150305401305012006150540408020096501663174001303053010041200603050
1130101404040501002302080710503054013030010915017040130540805663010540
1301064063054070700121301040166414640115073050170301020130204001213013
0400210503054013070010160040030806180105654106200840530100640106405065
0166516613030515073040501306040140180181012513012008002704406400511508
0107003020301105301006401060407065016661761503020408010130150701403070
2200550601001020404040180102965054050210508020050064403025016001309016
0110100013030300120021050166715640505004020014001305060010306130170501
2400400600700650405056020200162007100186050115080107003020301105301006
4010701003065016681361681020022013010130508301501400600700104050130321
3021064001640501303003200640401107020030065016692450040203010405020301
3050040200140080160302010602302002207003030110600200340502965051300200
1240600400308013061505801053008013030501601508010700302030110530100640
1040080202006501670206130305600301002040500401040068012040640502040405
0102004130101200700301307040200302010301107030402704703040300101011501
3030570301040100410200167122613030580800302708002040703010270800801013
0200710080401130700105080800306122001410200710054070301040140302040011

0401505408054080105606118025070405130305103846501672216130305370303020
4040501508060204017613163703030204040501761320402501050688045620071002
0404050130910214001802130219301064050650625070404001303055401020802006
5016731561070246504050465013030540130110403020305402007100140501306040
1614006130120080030010101630110604009107065016741080301400800200261303
0513014050013015013030510703040615040040301400703040650167527800200213
0305405003017024140403062013011010042007030103001064050200710050154050
1200710018605018056105080100405056020016352001530106040066501308404303
0523012050020054030110703040650167629680020021303054050030120033010501
8454011220403011010042007030103001065620307030104063015110504011063553
0110140026001020053010604006105664050101402002130704306567030109020019
4060400100104016771963030510001021306040161400613012008006401140200130
6017051301203040813029020016561100200215013030570301020303001010041020
0167815613030516002003204040502965014051400204030140070304065030010101
6370303020401306040706130129012006130180104530703020404003002020065016
7918130401020061130101309102004060600200140080103613060401401104060205
5013011303051508010700302030110140030100640106405065016802561303053703
0302040405021064002040602050163703030204040503306413015070140210640014
0060400600806505110640900705020406106401100140400204064050190618051616
2120051613007012005115001500164040017011301081050168125613030537030302
0404040160030100900301301637030302040405013032130120501501637030302040
6020012103040010010204013082006602001210304001001020402160204020700302
0104004050704040057030102040307030204040060304065016826801504006306180
1504017030102013023011000130402105016837107020080650507040400130305500
4010502020065051612050020054013020180200650168414610640502705004050203
0140530051041500403011067005030307001050208020061630154010604007040026
5016851161700120011013070010509003040611307070012803011060080807050540
6301540105090020065016861961700120011013070010501300200206130020020154
0100130612002501563013002002016501130700105020501504706405046502080130
1006113010540130100630150204030201700265016871061301006113010130305106
4010700130603040680030705054040120150611080400200650168813130700105020
8020061690461705060210301303057450154070700121806100130707001224012015
0611080604650168924610640502705008010203014053005104170301054040501508
0605406310501220300510417030105630165073050170301020130204001240021015
0130203030010654106200840562300200103030406030401050169016150130305101
4020021307043061301860150611040017001013010020021061050510705013080830
0161304050202006130210001010709002040307030204040070020200650169120616
8061270541303051700170154400406301400501008006113011040150270440062010
4516100437030400401303057030102040208010301150130305107030404014008070
3065016923263014002065061201304001050100800400100073051405027041006515

0201500140040060070065011040150204046003012105020401504002065014055101
2002104050140515040110230620401303052563010210505030204010640130100101
4054012050400408010540060040030806501693176306300113030530370302040140
5618456302050108003040501030016105410405010300163040060130507040120504
0040400704030650169419630140040060070061110401502040460030121050204080
4007301004402704500264005164007006100611306062401904440040705060210301
3030563020407070012709001040169515630140030040020061270541303055004050
1100301030115040170504130305566001020030204015020504004040070304065016
9615401705042040105080464017050413030521100630503710501307001050902200
6113200540218605040120150611070403065016971840507040309013081405070020
2001615050010656406405080305081010505810159102563050371050540132005402
1860504012015061107040306501698880170011002001400130100200150801604007
0700213030540501303001091501302003104016991015053010603056030915070301
0130700105014050616703010200254010400620306501610091504016030915057030
1013070010501040063065056130700105054025403002002065016101176170012430
5011105402015011056130305170304024011050730100130611504011504004080400
2002301205002005403011070304065016102131003050730520068130100460405020
0220213081003010500240013070010501405061654106230020010303040603040105
0161031663010045070304015054010100630650150401107030405230020030601501
3070010103084650130105170340106570013060150702002104021050161041215013
0700105030110640506502110140013030530110541054013030563054070700121301
0401610511150401108040020010130207002130700105030110640506502110140013
0305616301020540130201700265016106244050208020021303054050270411040150
5130140501202005610030254094010502130110401506302050405030020082130208
0200904200180703010540100080024050130305630540707001270900104016107137
0030202150540160400826113081015130450101703010130160020056150130305301
1054101301006401302018020010501610811163010201307001050927013030570301
0100306254066040705406129012005406163010205401301000180306501610973013
2004015054080101301600200554013060016020065016110185004015020022030307
0010505132006140502704401804005061500403154616902200611502002204050270
4513010008062002008104016111151064040014001020305080604003143070505080
6051640068010203050806040170403040065403011090030406501611224680020021
3030540500301100200105201504001405054094010505101400105120071005120010
0041405020304020150802080200400215070401303058017001100511303053021601
3036706130600680240120150611090507065016113963010043154020060630405054
0802070026580160070054013070700126540900130406501611413802030614040120
0710020401303058301301910216130020200615070404001303051502050400401101
5400702465016115221504018200407030102040130401040056130440630840130600
5071020064011530301000102001303052580405018009200100010200211000630170
1480150130305100080620020081040161162263014001006306130401400908013060

5040020401302070025700183013065700182001403040080400200617030101303051
3020700215013070010501080400200650703010130305130207002301108030865016
1175404001701003010306305407070012130104016118156703010130700105051461
8200405014011009090501703010204050100230640190030405015406302050201506
1150806054010900304065016119195004015020022030307001050704030611306062
3513055004040012614050270470030206190308611502002204050270451301000806
2002008104016120111501220015104020150140510015040013030585010801630401
0204050130403002002010501612173001202001301507040513400215654151301090
2001940604001001040161229614001050158010130450101860505615058010130160
0200530405013090130810501612312500401681050113010201501400270403051220
0151040850108016401201504050130403002002010501612417150401370301306024
0070301013070010501600400308061801056150200220301082040210505401064013
0100101405801040120150618010510600400308065016125221470130106021030200
2202130820405613040670900513086050563143054021304001051018605015020022
0561703040240508003070506021030565617030402130405400410501612612615070
1100240040807011002612405003040170610024004025630105090220040040305660
0102003030901220010501612714619022006401902200201301213030563014008750
7030105406301400208010800101004040110402020065016128815013030540701307
0010501400100616130700105054040860506501742604013030513020084050130200
8104017121602815013070010160200102702453010301405013040603413082001401
3010130406034130110090101307001021200205018630530502001054050110140050
1150556130604010701302901020017212614001050140660101302040012637030501
5541030250101602001101030130140040060070061405046501062010301173970020
0105405084030501407050681505201507024130020620011741361008001050113010
2501016020011010308010130204001230400806045080101301200800402004001050
6304007030507030612021020011751780170013167041630154012705005017030102
0407021413050116301021603004104803160616003013013041012006201506704140
8070630117611500402004450130204013020200570301054061404450120402140613
0625010506370305012040120500200508010200117723150186050400401860504004
0301508060204061501601400408030518017001316704130160020053010606616365
2040630104600306113040603420401460030651630402005630104002200614017030
6140040021020011781170601020022040150102008402040615070440040704501637
0305013550403030201802001050890102001179161505700113010020015010541030
3040010510110064061023002001304064050105013070010501070403065013090130
8140015030540132001202102001171096150130700105030110640506502130160020
0517040045013054070700121130104011711861047013015060150213030020047015
2130600102006201501301506015070363011712236370305011303010306130505120
0110400105080408650111051303010306370305011105130505120040290200530400
2400100061808003014050200220406304007030406170441306050105061308601262
0303001080903050154008090103011713136203015060150130740501591102005801

0705010056506002003305106401301001014052040012110301001540503006200117
1471100200120400122020801025080602013010640703010208601021171521405015
4004108015040110540041030508060564050800308015040110800307030105163014
0072006172005672001600200106401205014070700210508400105027050020060630
1171614617001120045011505053020100200105140200501404002008010518080601
0061801051808100703010511301006308044020050151400440102001171713620401
5302050140501301002006504050270450686208010220022027005062702145600210
2001290102001171818405020150102001041307013305703305013058010514015030
0130405050200104500403703050130535504010903015140700406401404862001171
9126405012001413016002005660701030516070105165640640508016301020201506
0701054040300206200117201220301504045630165630140507091200220640120150
7091200220408900620011721111509002002010808080030501270800540703010270
8006303016002005120220042003140061202200400808001030117229301400370304
0701303051305116002008040010070440700406401406007006301172325610080010
2002201301400702461130111015621306130410501860150114011023010005070504
2013020220018454011620301540180301400100303054011806301400505200540161
0030305401100630120200104011724126160080800305401350181307003040501302
0084056100302002120084054012040120021015010901000102001172512200220401
7030402401801050806602040150400206506190130810508015052015030301612105
0100080620011726106140070011301002002108100561304060201050612501306021
0306301400270020040027001020011727915013040270020010502015061160061501
3030010191050620150130300109150302002520806200117281261401400702008005
0705054012400100012008405405020022040020036518010030305401006301401060
6200117291363014003703010420401000306305130107050100206301400260951203
0130260980400100704403064014086062001173012150200220102609130200710030
4050103001610100420015052015027021456002102001290102001173113630140010
0400306116301420406003001051403011005085050200710054061101204015010040
0305402015060091012021020011732863014001002002611307501150520150801830
0566016021030117332263014001004003061130508060130400108200401303051301
2130810064050100400304090030640180100437030501306301056030915018030110
6020080801013010040030150520150405090620011734176301400100200261401301
3010400104013012130400105101860508400101023010001300456168061213070541
5013070542015040601063011735116168061130201030170012030400406750612130
1006091601304060400100104070030206001020061860504001610301173616630140
0100804013010603020257030401501306040706130290200613080614203016301020
2015070505406010630117371363014004030080101301200800402008115020305040
0600200100130120080063050400230100013032130963011738720307003020201506
0101057050420022040202006511739187003020404011681013010202002204050130
8204056301400370304070130305130511600200804003010010801035504040306401
4048620011740111801908012040200220402130250105061400600700405013040301

1020515015001150204030400100630650100630170900104011741106301004902008
0501801057001130100200150301070020200616401107104540130150806200117421
3100303062015040705130552040110100630650170013012400100061130107001013
0702003006021030117436602815056400701301070401101006306507030612021020
0117442140060283051306040161400130602706130120080064050801055061504050
3001013011060282840456302050301400801005650400602108540150520150830104
0110008062001174512617001100200140013010020015037030501210502062105013
0700105030110640506502130160020058312140604006200117461963703050170301
0100306254012050515010801005656801017001505406100200161700170020200400
2002208010130100200150684563061703010142120054050806200117471950850170
3040240110604004070650251700106040040706501301020617005405036101700101
0063013090013040650150400400270650130120033014060862001174891509002002
0108080020026130201301405001308080030618030110604009107065060210301174
9961001306111700120501709001401620080140011150130402706500650600301001
3410411750510030206506183120051684104117512516600301001404011020220080
1090462002040806010100630650405010701045011003013070010809200204016304
0200580601050100080065013010202006605406101006306504040010561003070601
0150102065010020010211752910640104706204080400604003102650284045640090
0506501503025004004013011003010301175316610030307021410101006306113040
0105101860501501303001091501050710002105054015013030010915020150303015
0601507046140210501175414200220401703040220401501030011020084020401615
0103001107070022040640112006030501207030105406201030117551562002201703
0402405080101306040161400613012008006301004808003050127080013050210105
0703010270800614001050141664726200117561310030147061130700105077040400
4040504650580301104030206502030080130800200705020406301400861030117571
8163010201307001050104706501024001000650130102002540130660103051105401
1002002610200365020084040056106001806507070012515070700122002202015040
8700620011758186150405010020010513015085040530206511002301064013010010
1405164070700265170700121300410412015070030208010130204001240609620011
7592164014050705011505020060302130110140013011502070022511301630650614
0010501500406413050110054029020058090030406125164015020060302130110140
0130140060061080117602561700100305013020150200220181921305016064013703
0501130200610113040010120010501201301804005053030501606130300320051304
0307065058010130100200150650600680540804011071045401301910001015012021
0200117611361700100305013030403011020516034613014408060346113011230106
0100130116034304050600301004009105011762151001301200110400205700113070
0102020040400703010301050160020040050130101064013010010140530184005020
5070020010400513011003010301176310100130170052804050400270204050540801
5035504037162040371406806200117641961604008077405016040097040040505402
9064002061330270301054026001030206200330206300120020540801013014061306

1301630146704540640110704540130300109150130110002006200117659150702141
0301060302070301054060309150620801022002206201030117661420022040130700
1010731030204013080302080101302820030400240010006140508080030515052015
0220402008104011767186170014060204013080020080101302820080030405040047
0650130111015803040150312040130101302200170200800400406201501301506015
0208062001176815180140504004015010600608022040315021302200161020060307
0301020408190215004030140034613020406201030117692214014050400401501070
1042040801054001200516002001080102006030703010204010019080140501302001
0880101000200100204024012080200400405004030140034613020407030105012540
0210701177017630100420200405012501014406840305015408010130220061302820
0620071005015404050130910214006808003050154070301020500102004040506003
0100501400808001030117711510640504706203015016021401405408040501640010
2040012521040105058016301020101002006502040012540630110900304065080400
1030117721164050201508010570051704010805680101301600200517040106180030
6021030117731361502014613010804005065020705013070010168105011301020304
0080400200107030105011000102005617001301400600700620600301030117749630
6301150500240050120301004204400400200205013010540300101011003010301177
5121700130170010050120800708013081015680070801304040140050040301400343
0207030105015090102001177613615020146130106040080765020405013012008003
0106002003620405051617001301103025006506003018020130110030103011777116
0505405010041200603050110023020405020060305016301400343060504005014008
6103011778141100401309030153043062013030040601301010006010013030103061
0020015013080320015010020015013080320020150403005641177912640501303010
3080400534255018030530207060101501027050020200220401001401408406411780
1461003020021460030501040460030904100616002003501040600200390410061370
3030104050304502060309150150901020011781961003031130810067510013021930
1501302193020150756100117821365050730405013010020015040156300801620084
0530304064050105063011071041309001304010501301600601200117831261700115
0704050170301013015060150170200800650110231502561700140605130300200201
5010106601178411100302030107040307030103001203040058020022040170304024
0505615410602103011785146106013065020705013020068100301302006840501402
0020021064011640010400404050130703040130110030103011786136301050300105
0130507005250213070010168105011301020500403014003430202570301050162010
3011787913012008405405020022015080800305201507030102020210200117881910
0303010501340040704001301506061303507030101501014006124050030570011301
0020015030110140065024050030563062015027080054030270800900510200117891
4630100490200805013030501608010570011301002001504050203040500308012101
2050020013050160130120806200117901061001306130505064050302084001040080
3200305014050130120080010502670117911116400206503020350540505060010306
7050280400803200130150512006003013051400803102001179212164006010091306

0401204017704040070301050120608011640014001021303056130403011020510021
0301179326161020650302021040040507600200801640020010010801013060401630
5050640503020010010208400104005073070301050120400121501002006510030602
8150200210530205040013012300200120060630117941564014050701305016015010
6405061170031540130541013011501001306112705001303052300200120060630117
9514100303062015080101301200800403011020510403006504094010501050305073
0501703010540405013060401403020120060630117961110030208010213030530051
0412105010621050204015052015027021456002102001290102001179727640501054
1303058056130405400464050108003030803050400343054016301014050465056508
3002005401064013010010140570301063655407040101622040169040140161540355
0402030401600240074501540607010200117981470030203716540215054020802006
1211014005016100130611170012050170900140162008014001115013040270650065
0600301001341041179923163040102006115013030513070010600301001306040161
4006130120080010014200703010150106003010040500305406370303054013301301
2001028010580121013090013040650130120806200117100141003030615040040400
4030206506007110502008405200210170013014060204004060030010513015080110
0620150130150601501004006200117101196301004140010501406601040060701101
4002105014008016013025010160200110103017003154080100130305802007065015
0103019005020101406601040608620011710216100130301004703040400401150730
5630113012002130604016140061301200800290110200615010301900502010180200
7065040500262001171039801200141501060400807540405013012008008011000200
1005015640504070534010701171041461003050140502704530250101602001101030
1602050611301200800801700131670413016002005310501220403080108011710596
2130810015073050156213081005073064011200603050120130140230020016507001
0200117106961002001501802001005015304001002001570301013050160703010402
0500650730501540050710301171071810030140506125163014006405061150130700
1050164006113070304040501002305170011040030107030105401060020065030301
7001001506034117108861010063065060281502002501150201506704200250130408
0706301171095610600200650303017001001501022065061071045406003006701171
1022100301470611303051614706113020084050110140140047061803051301604011
3086050106301400352002903014002063014006001804002516124001000210507003
0206021030117111216100301308404303051307001030401040060070063041630401
0205030530020010208010130403020630401020503056301040501307003062022005
4002021020011842604013030513020084050130200810401811113084043030513070
0101507307030107024513020400126304010370303057063118215100104013010507
0020021601300410414050304505610230020013040640501050130700105010704030
6501309013081400150305401320018605011833401205001050801051241184661050
7002001307001050100130611400600700130305630411851640130540254050703040
6301301211054020220040020304054006002003405018061554015010100630650130
1207002118611803070302021600705080602070301015001200540150304010640506

1257001130841050016080118711150137030501401703010130120080071050530513
0502306540110540186050704030118866150130317030650401703010519070104132
0071189101408602400150190812130205806130200100104020150614050110140050
1703211810161700161013080400105130101302058080100130612002501140050140
5030450202008405651010305014050140200501200300411811780800200250170301
0170015054080101302058060501050704411812950040270500501540305070304011
0130872105018901030401302500611404118131150850501009070301020502154021
3081001505408040010514050612200254067450154054101814196200295017030101
0030625401700100140618010013061200250120021306040161400613012008003050
5047064050465051305130100410030501170013009911815185630110064050114006
0070061405046505130553063011014006507030105402603091502105080405019003
0404040501804002001070301013030520700211816196170017040073040040654064
0110702465013011303058016611301013020580105030020030204020022040405020
0840400561051010302040405014020020404020080100118173464002001013030040
6017001930704004007162007050205805407001400130104010506170011000200240
0400100200800540700140013030040130654080108036540505700302040501101400
1303054050105413030580561304054004640501080030308030504003430563010140
2003004118182264008602540110100190016540200100646501003025407001400130
1040105067001400130300401306203025402160970020017010521306901043061930
7040070301054030630104004050540802001200163040301040040505402007021181
9386207003020270500501540301040060130612105054010013010011030405054020
4030250040040100130613025005011064011627080010640100130612002204017030
4024013025004004080127050061184204026200100204057005130101304041050580
3010509002001105117201097014018030101400204022007100405056301040030980
6301103007020050220401841182013150540150109005200617030102040102003406
2040161070104620408010403040054063050400803086117001124118213262070030
2017050020050170301054030107030406115067041303058100615013060170530120
0102801051170010400501770650210505401402005408010013061125061703010540
2501015012002540170304025401001301307001050100030261703010140200540305
0400600700507030105404060341182233601010063065050030150052001270540203
0254061010063065060040605601460540203025402003401213010001026101006306
5060270565001405054020302540100302002101703040270440054040110703040540
1301100301030803014004012008010540130140200190015200163014006040080400
8010540405054018411823763014001006305030300101501080170307003020100041
1824171301150103001130305617002020020022017001506010400610030706010150
1054105020021030110020024050570012003004118258630250061801020580540500
3015004011056050105061741461400607011826231003013030517030402401302500
6130510001021306040161400613012008001290200256160407040130540405046505
4050630106301103002002080108204051841182715614003040116810130102040502
0400122002203014024303020304014005630504003440504650540304008411828306

190220050806020407013070010501047065020025402130100041561307030010102 0
010465063556301400704701050120705054040020010471050513081015130450101 6
301400970405011000803050110030257050700202005016140027056156201501402 0
058020091182928610030130810040502002204080405030018030106405064050300 1
803010208020015011704004501303090013040105050120011819254060200141005 1
615010604001000105006110100015006124012013040530103006101306365210601 3
030020012660140040200400801001183012150130700105014050616704030611309 0
130814001501301508001070132004050186050704030118312816301020305403501 4
007045040032001040504008400540130150512001083065080105140501601620040 5
070052610302606505001012160080020014050605046061604002200100404002010 1
050801051703010130120011020507040130500612686050400402004008010011832 1
461800200230540405003012003301050370305013018454013504001050405017050 1
268808050154012506003063703050121050540172007011833112030400113035040 0
105014004001203051630404009003040405053001010168032005016003013054015 0
520011834136201503055004020080100130309018256561081620051501120500200 4
050204013016170750802001183512646003035040056569001304030508060510013 0
401190050150400210457005124118361264011900501306017051001104056301050 2
004440013010200210301345060010200140505140501003021183716100130305901 8
256561081620051208020040021307001060030100204050400200125004040505098 0
550040606120200330118388302050156130305200210630113002002022002101841 1
839196306301170046003040035040020100304004013001130305301100651301213 0
305150400200501501110030405020401301663041184015807060102002101501064 0
010506001020014050350400206102006030703010518602150140501306040180400 9
028907010417301001184181610902840165110006200180305040060400910703059 3
021184220618109250040200580190281010030220801057030104011508010080105 1
651060016105703010702006300516101006301013010400501030401300200202200 2
101841184311630404002050305801051050902006505405046501303056401201504 0
504009020011844955013020130630110530305130810056600102005006121660010 2
007010021184523618002002305404050030130810151304501012040115073050154 0
501306040180160040030925502140013012008008019028530010401400700200651 3
020010186201501303057030102030300104010040042001184613130401306130250 6
507105051308101513045010161302110010140013090130814006001020070504200 2
205006121660010200140301184711610640506010200130321306400200101301200 8
002120075683002005015408030405010001420040505401841184816670200800617 0
301020022090801301004310400406501204016003010050120401630402005230770 4
040040130505037030302040406704118492866800701302040012804002001013040 3
200401050403008010010504040180105610100630650101610304005014013057001 1
302040012301101000142009010001020056301202102005130118901516634614017 0
403061818002001630110900304020022018411850266170010030501303040301102 0
516034613014408060346113011230106020150405013035080806010070501402002 0

0251804004006007006505670020010400516301014050465010654030204070462106
0303090013040105024301185113401130054400540600301001306040161400613012
0080063016003010015080605406401205040040400600700130408003010507080041
1852136106401010063050146130020020110101307001050770404004080470654080
3040106040031026130540637030501210505404062100118531062001101304032004
0650130501200809005061150540406110070651630401034617050514090200801185
4146301004902008050180105700113010020015030305016040502030405003062015
0130150601501205002003001034301185519640140507013050160150106405061170
0315401305410610604001000802006120025401301150400140010540605051301630
1050161014001054013070700121002301185618640150200603013040200603010501
3014023002001050640507002001050610314301307001050208020061213021930301
0488006125130810061400600700611101400106401150700200615761185730640501
9003040404050700202002110140020025801702008007050516506010401100440400
1041515013703050170301010030625401205051501080100565680101700150540610
0200161504004705401301013054108030501054004611700112411858196200220130
1000806200700613020084053061061600700540240120602613070330305401307070
0122303054040670430501034614050465054061030118598640030201301002001015
3020501540304019003040616370305013040530205404067041186013617001001304
0660103080400153011220088400101230100040340701302820010501614080010810
0211861118030401230100014034070210505401506010186400540180140060070060
2103058010130282006020021186212803040131671100130308040015140050110004
1501301004301001050140506080200501570015090211863201001301200110400170
0161050113010130906002005801501050601040013086400640115060150105130113
0300109150150170020200561400600700602103058010130282007032118649100130
7003020401205015021000801200400417030101500120054011009090118651280634
1702414050702145011400105015200840540507050450167030405015405030450170
3040118661110013030540660105301400270207030101504007030405040401703040
4002003004118676100130150203050400604009107040701090220011868862010804
0090220070301040130404008925600220011869101001306040034501015030011303
0590122001630117090103020140200118701210013080150140027040050108030140
0601305010705030010840010184500302040505700202001187115801509301001840
0101700120020218010130608010505600200100511001301600200100400513040010
0020010015305130100431040030010101140200118728100130130401100301502030
5040060400910704070109022001187310100130301400616007005010240150601040
0630140020051005010405014020010706020011874168015093010018400101700130
1001011000301401801004003051001301100400304005080601720105210001020050
8060301004310400300101015020200118759100130130401100303020150203050400
6040091070407010902200118761310013015060130400207050300102704518030140
0901825010100423010004004050304501070700200118772480150930100184001017
0011400101153010020010516040097040115305180126115010800108065401806341

8010513412001102001041501050100800801100140510013030630010400301400600
7004007030105132001187812100130570018020011002105010621050206015021020
2400161030401304040060400970703010590220011879171401130608010505802015
0400304060120105010704030650801013028200801200440015017010251620150620
0154040302010160070020306080105051000902118801061401130100030140802015
0126154064050105080600300105011501020051005401910001015016208020011881
9801200450115010243054012002540160010200140505720156110020022008401188
2356140113034120080201503010003014010501040010401050801013040410505620
1504008400520507305401620150126540190130818012001420022015010230100011
3004540161060400600200312050754012008405405020022064018070304005705014
0200107003020400161030401304040060970703010590220011883961060130650207
0507001013010020050105010030601400306703010204040505700202001188410150
1402050130580101301200800614001050154050203030010602211885280140027060
2211886258400101700123010004010002002130300406063451400100020028010701
0508401056634705045110064011003050110170011301002005010501401150400707
0026140115040040060070080105408605011887131001301401405090030408060680
5070700255004010200413010200258010707002570700121502020011888136140140
5014050670403090130818030537113086050106605010063030540501402005011060
2001188935004014002706022118901584001017001230100040930701303004060634
5140093070703010100640304050370303054040504650516040020011891620700302
0610041895012401304105600220011892350040140027060221189313840010170012
3010002105013060410506344050465054011006401301102014650108010056501006
3011894201001306110170011301002005010501501013636401363408060465080101
3012008008053050370303020600200317030101504003703021050501621050540604
1189512100130401402050108010520021060010200801701050650102100651370302
1050204062105054020044011896191400650107220013084104840010170016016102
1050130904801050100130150806006184001017001370305501200110013014006501
0180200100070301051009200118978804011609170611501090052006564011604009
1706130550100211898151001305700120084054050200210801700131670420021037
0305420162015067042002108100118991164002002050127080054010640107001040
6380102708006508060080101309062008034070501540340701181005670200800501
3550401064010700303020180200105070200800118101111307001050201504001701
0505408010100091705070020200106201506130110604009107065060407011810214
1808602130700105020802006115010400600700617021410405046501016301011501
1704004501355040303020180200105050730118103510030530505021020402130160
0602001050170401301181041113070010508003060701054080101308101513045010
1654010860265015054010860506509050701181051416301020130700105020802006
1211014002002540630100110580829400170401305408030150100104030540106401
3010010140567501181069700302037165403550402401208020061614006007006111
0140010620060301057611810710150130700105014050616704030611309013081400

2015040030540350140013080200466050730118108660013041050801051301102100
0650705051863011810918100303062015013028200404141302030401400200210305
0804130282001002301504005080420304014002002106306310501240500305404411
8110241003015040115012300200405003020401068101301015040113052040130561
8480405020150102003630100120025803010704030704030190130816301103002002
0270214520025184119426040130305130200840501302008104019112051070901925
7002020020084040020022070245720200101193517005014102002550416008010119
4141001302002150106550130709004040501061300400703013020016030010216304
0120502470110202002300100101195136150106008040013040613010405062001101
0620150400140200140010701100200180523010405030450206301011968102005005
0106102005004050130107010062613703052002200800101197131017202001011501
5023002002021000301401604051081010304050370303054050100230604010119814
1001302002150101020650301010003014062015040014020014001070110020016100
4230100040040501302022007040010119914100130207003020100130200220567030
1051050610046003010040020405010023063040400203001010119101310013020021
3703030101105100130110400201301400203040130501605003015003010130606101
1911118060020037030101006405405013040820012801681013010540150602861220
2005670300101191281011081010600700130204001221006561400105015130820409
0210119136685015014050304501672015620150400100101191466220012613041056
3040102050321200170901011915966030140703010510640630461064010406400610
6401027050081011916106170020200801013020400124020010401700150400270040
0405015305140201501300200100101191711801400600700400405046505408312180
1200603050113010512006850180400405003030512300200160610119188100130400
1501017067002130200840504050201502050400400100101191991001301504011501
2006063020022030152302010003014017201011920111001304001501010206503010
1000301406304010406060501023002006304012021000101192115100130207003020
1001302002205670301051050630503703051105303050160620084054050162015014
0200140100800101192258084030400580150400270040025402015011009010119231
4801315113040600180013010370070130506003051001304001013010400501040400
1002305700162050400506010140506010119241080501415140504008400511301400
8750101004370302002204008400206020010119258657101301020237007013050600
3054006011009703010202009213501011926188020301061300200210610020010701
0501801401400200105040501302300200184180100630101501050700200400303020
0840509064018030501203040130106401506010119271180140040025100640514008
4030510013061101402001040301004310400300101018020010119281210116004005
1200650401201501262014020016066401201504001402021000101192910801300120
0400130105100130612010805020304040502015080101304054902101193081001301
5010702413030514001501013020400126370305010502101193111637030501040212
0020111050401205040061690150102130903015613072015401440400810119326622
0012613044001063040103703050103212001300100101193396130603014070301010

6406304400610640140640061064012705008101193497003020701060101250402001
0401006301308100130700108010510404002006501935164012015030305150104006
0070040506304602815051700110080010140200180150401101006303052050801020
6501936861501303052002106200220408017024655700190200194060400100104019
3711801600400308013018712405021050540806103030307001050208020061405040
3005410640709001040193811160407025406129020010640101400650501302050130
9001304065013010640801080030130402105019391261507002005401064013086020
0517001008001013014020065408010100080305654030110640506501940815015085
0502005001301200800640507030105161301050110200370650194186170020200801
0130204001212200151040150520150904101001502101194216170010013030121051
0112400304040070244013011060407063011029020063011010005010705020300101
0119431410112400150101004315010405013070304040130401014002080140027050
1015420902001916061011944101011240030140070241303001091501501303001091
5020150303020084050709010119451210112400150101600180150104060207070012
4050130200840508040020650303030010915063010119461310013012001100021504
0070501305400101011220015104030105030404005040053012003405020615320050
1040301011947101001306030140703010206016040010008020030202002101505201
5021088010119481461704007302040640140047065040504650130305614706200210
7060101301120650247012002103001001011949148030401170400730540640110702
4650405046501303056525013051608110061070100626203013703050150210119509
6652501305404050200840400501637030501305403060150904100703010119511061
7002020080101302040012406601015052015040600309016201502006063015021011
9527650141050154050315021309620013011040506100200250155031011953766525
0130540502008404005011600155120065050210119541161700202008010130204001
2160401701030150520150901410013067046201502006063015021011955962015010
1402001530521309030156130720156201507050420025402008001011956861700202
0080101302040012142001060150520150904101001502101195736200807050154020
1501703010119582916301020130700105015070401303057030105404050130502101
0504050700200105144064040508403050140705068640507002001051220015104061
6020011010306404050541050161340021050117001400400301070301054011014001
3020084050600200616034162201011959118060030804050270454060030801800170
6113090301561400270611303005614008060680103010065010001011960121301405
0400126140506704030901308180163010201046003065013035056301109003040650
3001010119611135014007045013040010670413020084050702145213010001021505
2015067045401400101196211301106040706508010513010006113016030140163054
0200710054080105122020056703001011963940030201303505130400105062005004
0507021450140502015040010010119641864015040050730130121402002002203054
0121050110410501640160030805016401210507003020640120150200220506010119
6512200213060401614006130120080064012105054018017024561909220030702144
0055304007030403056040101196686101006301301506015011700140140400306068

0160020038101196710163011070020200130150601501501600301005015405010023
0630401020300101011968880620022030508300200505406130300101910505004030
5088002005054086303550403500101196910500403050507705040502030300107051
1054013004703010130200840507040010119708500403050850170304021307001050
5401630102519030101197196150405020401301612004512015070301020022084004
0140100800101197285004050503101307001050140010061650700200130900130401
0508010513500101197316617001400400301070301054011014005012105014001001
3013070010502080200613030700105014050611101308020010100105060010200401
0014016186050504101197496204015302050110023054040501002005054018605015
0015001620010101197525100304050201508010130800301305803010404430513020
0840504041840010170012001614011067046501401130707001261401130601705806
0107030406504050563002004020150161800708035041197613610710413030513070
0105015400461541061302110010140013090130814006001020070504200220500612
1660010200402004119778180200110400130700102080200211014005016100130301
6400105040130166304119787193070130100010214014006007007050413020084050
7054119799203016050204002401101006306504043054050130707001240411980565
0200500540110100630610140010501802004119818614006007006140504650130305
1305530102065061305407071198262030160102080200650270214400540610206506
5070301054080041198391304040020015011200603050113030010191050703010130
2018020010504006754017119847803014007033070301054015040150704305407041
1985610640508300200130404001001050130101302008405068041198656506061001
3040320040105013010355040620041198793011040302065013030080170513014050
1400600700705041302008405070541198846100130611400600700130200840506304
1198943010043104004030010101141199094002014130604016140010400809200504
0505640050300100130120080064006002001303213054119914150470613030200840
5063041199266401105021000103030200840501501040060070063041199310150203
0405080101306040161400613012008001301140010130200840507024119944301004
1890154067045407041199556203054014001051064013010010140580200411996915
0130700105014050616704030611309013081400601037030305401302008405064119
9710801504011060200501523060150203040023002002513040400100105064005070
0200251006401304119981462040153020501100230540405010020050530400860405
0540405018416400604070305402002071204260401303051302008405013020081040
2011952025401150730501703010201301002001503040030010010203413014007002
0200530405010600300102046400507103014040506003010013012008006130604016
1400130703010205413020084050703010130702003001604006102061230540180101
3060401614006401801013012008006401210505401640140084001305002001020776
1504003520021301006308015051070304013060200616008010208813030530113051
3015630513016040113086050102094653014001208410500406601020101817002001
1050120018010013030153051402050061150101506040050120013070301014001020
4040505121002601613470301013050120054102011580304011400151506410101406

6010201291501015012002208016003070507030102015020213061413040100460961
0201356150116004002004002080160400407030401106810201411150501015011303
0530113051301150180170245010611004013090301530700202001020151015013060
1705140010512014160080105130400371020305080602401400607010201610803011
0904502070505140503011064050251614002705615804002004102017564014003020
2104010502010140660102018131001305107090110140062017030105161530025170
3010100050401063010801051401200216002001020194100130130100511014066010
2020580130100151801700151081054006070102021710013060070051630140060080
6050701045160102004005113016301020221161800404010420130103501820400600
2003210800140501000102006061105160020010202343050200102040501101400501
1302022001020245170052130108020070650150591000102025510013020021300200
8301090420010202636106020030101402001020274618303070100454050306015010
2028210801005611006301020295613703030106710200140501530102030251200650
1600102031313004425172001020323613002002058010140200102033320105060282
0205001020012034265070020200202050010200120354150202050400250129010200
1203661001301004164001040060630201014066010203756301004405050170301020
4020051600200102038617001681050113010140204011068102039221501100700801
0580101304001264008011007008010580101301040803010301005130104021306018
3010160070057046301067046305613010010400703010204082540501063040090507
0703010701050102040351700400403001016004002080400100630530143020407030
1040501020803058020037050120130101402020104001002007010505163014008750
6100400304005080601805031050120405013010004068040050120804006501803025
0040060501050801015304041050500403104007030101004200101406601020412619
0950704002030508060102042817005215040061600620211014001063014005010180
1070020200102043517005211301080200706501505910001020448801006301305100
6301301050130703051040070020200161060030010204510100130120025011505015
0600180150108020097030105011615010910001020467100130301400600180115050
1040702040116040706120010204721801400101580100630115012006063012002208
0120060304070501250101602001101030630140070700254010043105012021105405
0200220613060301407030104050140027013054102048101501100416810130105011
5013070700127030104050207002640063010204951001308040502002204011014066
0102050910013020025011307001017091020303001060030100550040541020515100
1308040121301301002006501301630102052111001307030405170504200210801020
4001230110800302002106301105060102053191307001037030302040130120080040
5416603020302040801051602301615073040501306040140180160020035012517613
1405050214003004001020549203061612007061150701402040150801070030203011
0140030163010130505102055840505160030100501204068010515070104204064050
5150600200320404001200516002001020566630100412001050151101400501203051
8020700261210205781001301310400501304006002003501405012008005012608200
2010140660102058148030501400105020260820040500305801370302105050162105

020406704130150600308055085063011504004020150160610205981001304067042 0
401064013071050561501083002001305016080081020606804006301080200706508 0
340702010455004014001020611510013030540406601061030204030140080400200 6
170301013030520700218010608400204027070012610046001240501804002001020 6
258040050177061140200540210505406160200611305036102063131001306115057 0
015030601820015010200104150150106002003120404050120080020402608200540 1
610700521292001010040020401304050030102064108013407061201042040500401 1
040061908016100418030813010640405016040070301020651210013061101406601 0
140115040030100106140115050206501630405013010010206612100130230130100 6
180170018213054067090105401060010301301054050608200540150514006070102 0
675801636080105080605600108054066010206861003050130140060080150201504 0
013017030102069166130100401801010401050204003010080401905070611504019 0
507061201046018200630110803081306018200810500140010207088013010010130 6
082005603411001306114050122002512006506406601020712610013014050400403 0
510023015017005030204015053020210200204013070010703040204013060820080 3
011009705011041020406120033020404050600301806301903025020408010370067 0
130506003063040070304050110501130047070012161210010207219100130613050 5
065002002070301040131501405013021050140061307001080920050180110080040 1
150400100180015040140010080010570051308101513045010120731415011405012 2
002501301010008020030501600911015016401120200540050170301054050130608 2
006130305600102006121001020741315054050101400200254032004018015030535 5
040301104064008010516301108101020751064050101400540640501100470403013 0
901308140080163010203054013042003140013070301020761235014007045040032 0
010405040084005113015051200600130410508010516700302037140504007201020 7
718630100416810501130104066010150160200270214108018002002305409200101 0
018010130282001026013014006001804200201630140060030010207888014002705 4
080200706502350645801000300105404050130104040110003001054020795618003 0
802007065010064056401541020801510125010160200110103010041503105012040 4
050704620406617045012040315021309620013011040506507305017030102040130 4
050613060306102081172030614050910214004012007100501204063014009100061 8
010580108307030102040100080021064050108303070301051000800210801004561 0
208296150103010008012003040504001261405067040309013081500401540041020 8
366401170330207050100640201014066010208491001305401630170301015002001 0
670330400130102020023040020080010208591001308015011004804005011006402 0
405027042061800305401306014020010208627802003704066010130101006405100 0
800215016080110013010110064013040107042040200220406704186050118091307 0
301020401307054140120044004015010830703010204010008002405020022040801 6
003080400404067041020871510013061401160030805014067042024030205016302 0
501840305011671200140507105051301006408010070080501518020700302013010 0
101306014020010208812801600200330540703301360413056006120080100130615 7

0011305204061305406601080506010208912180301102006501301102003701301054
0100630163011040302030540800200163015080701209017630100410013030540512
0065040501002301011006401504018040050400402561502002204013020084050801
4002706501061910706114020010209191001306130505022008703010570120801050
8400101020037013010501406601020928100130101512006504014050702017002001
1040054080030612093413014004002705018070901040014020010209420100130101
1250140301400160070023081040010630122001601015010600300104001504001006
3080200100400210502501016020011010306304040020010021006301020955100130
8040160092201016014020010209616100130290200400240130401029020061258010
0280040010028005405015002001302006063080502700400516207003020606304003
0105080601020972810013080170052801503020801013081015150400100630301406
0160615030204067041305040060030805615090020013010130520130700109003040
0703010570120801305082001005055004030505060805058010130104050608012098
1215040113052040130305130700103011305130156660702030300107030401209913
2070030205010090703010204050150214011004602100610041400105012040503045
0170020200120100840501702008007050580150510840301064013010010140567200
1201017600130410508010566013054010640130100101405840301201028106401050
8060080101309062006508300200130403200401050106401070072001001201036104
0060018040065021050540150302500400401301703002001201041250850170304024
0110100630650170010100630140500305409200101005150302500400401301106401
2010576106013065020705013032130801003010506080512002105060801201063801
0700200511001701908090801201076301400200108010517063163011404001201081
3106401070010400270650130417010301706330566003007040013019061400303020
0840508030140060407013015406012010912106401070030140050807013030080170
5130140501700503051302008405062008001030510063012011010107030404012105
0110410540640160030805406301108109650257030401201119670504001306365303
0810130100106406100460012405084030900304012011211640501070403040501309
0130814006564064050803011060018090030401630158004012011314620700302015
0730501510020015017020021016902008050180105405013067010430703054010400
1006501610845003054070020200120114178040070130101303051304030201308100
6301400703302130100200150405010023015010100800101301020681056100302002
7450107030401201151163010047054501130101440405010023080506010630405034
3057074012011696170010030501303040301102051603461301440806034611301123
0106012102011713801003050110114401505700170463020630763208030110600200
3502040140501303505804003001001020118715030201301400367080105163014007
0200102011966150203014009004018010516301400800810201201480660660130105
1303001091501001301011440530143020703010300320051306003046403020301102
3010201211580120301405051802440030540160614005401698010011060090801507
0301054014050620010013035056709010144020025801000610201226500401340021
5200258040012703010565410201231810013015291405051340107012708002040302

7080070468014011014001050204040501054108040501400270541108030110800306
3011030010010201241264050170200800705070020200108015030540701030058005
0201650830020051064013010010140517040102012581001302002304083002004005
0101704010610042050400290102001201268100130207003020140040020110140050
1805060104005162070030201301064040050601020127126207003020503710405016
0200806304010640502110140020025630707001213016002005130046121001020128
1718030401054305402040153020501100230540405013010020065010403006508010
4060120505401508010700302030110140030163010130505102012996306301203040
5602100400405020022030201503071401613304060401020130208019022007030104
0110100630650660282840420022010023093067013030040606100230100020062516
4050150113030103080602861920018013050512003070302040020080010201311863
0140040450701050102013010401404007050125176131405054075200513081015130
4501013050804005054080105620071002002206001020061210010201321261402001
5302021309030156190922007030105130150601302020071001508505020071002061
3070110025303040010061020133136100130613063011014001050121105405020025
1630404001400540210505401801013090880130163010201341963061501153020501
5402707001240501002305301001306120025013063011200603040013010501200606
3018050400270110140020405010023015050700306506007102013511100302030404
0020029080400200290618060400703040650405019081213090200191306061064050
1540041021426040130305130200840501302008104021171100400200230305016086
0125406540801010008030540702008006502121140110140010540405070020200405
0200254040845001301160400407065654010307026502131530151051003062540616
0200611305036101307001050900304061530570011301230020040500302040180400
1400650130608200615040040400290200650214101001302002101070304013010063
0801013060401613012008006561306040107013070301040215142301001306118001
0001500183014023018040020015230563001702008030101400501211052040112006
0301301630650216840114050400100230540405010020010515302050151180540106
4050650217146401120060305011002302013012003130150681013010540801601306
1153013070020200150205040040301400703040650218964013703050154036041301
1012030650130970140640120150616001304105021985004090410050154013067048
0150310501540640505030016153020501130406020080105021108301004150730501
1301020402040012180105700202002040180301400701003065021111062040100904
0501405010020010520150400900130405615030015012704511006401160020010502
1127803040118606121605011700154040505110200208006502113103014002002080
0616120037061130104011400200804004080105640601205020403070302040400601
3065021146100130611016103050115012050190013040105021158804017130400400
3020470615408400103703050154089010416001404105021167640160030100501130
6040161301200800640121050540130170210502117113061200450115050400600700
3056130140060070050154050304501150205018017030105021181323050100700802
1308100703010130219308010440100058017001567151006302040130610304040140

0908065021191363054050801013060401614006130120080064050705045301106040
0202200650705070214400563011060400860200650212051060286501303010306130
5051200301108040020065021217140140060070061130554050130120080054010503
0020065021221330620150801054011305513011303053080604400180602815013030
5200213070200300704011090806502123630110601307040110807030654010601306
5021242214014006007006140504650513055100305140061220051502040570017002
0200405040701067002020040501002301023012050020054030110703040650130810
0805404070200800650212515640112006030501405010023020405020060630130150
6810130105150530113051301150180170246502126861001306114006007001302008
4050630416028150523070214402020040650212763011060210065052130100630654
0214020051070403065021281510703040401210501104105406401600308054063011
0300807065013013040501200400800106540405060030010400540300801006502129
1364050101003040505401501013054050465058070030205037105355040207003020
5037101309001304010502130181630401020013070010502080200611501306040161
4006130120080020150400120040010018080400100501540163703050140501304012
0303001081018030110640506502131136370305018010130120080020061601015040
0401042540637030501801051803131602301307030540105400465021328637030501
1306040160100801408806900165407050110140051407020080065021331165613070
0106003010013030103061305051200613030040606130100402002030801080302010
6028650213410640137030501302300200405010023020130600304180150404008054
0130600130465021351020305080607001101005130406400650230620402130300200
6130600102008040050561301050140020037065021361761700120012013070010502
0802006115010400600700650201301576115700113070010107002020013054002040
6540270020200130200840505402018020065021378600301001301506015040507033
0601200102040110140010803014006040070330650213876101006306504040010570
0113067041502050400409014100105021391630610703040130700105020802006181
0503011020806507050636554013050120063017050900562005406301540105090200
6502140102304001400105402100040058040025400540803011060400910706502004
5163015401050900200650214113630100416040057102200603040501002302080811
0021307001050606002006140505404012015061251060400571065021421310030405
0102030620402130301030613050512004050130200840502305407050700202002002
5404070200800650214314140305401305540040507054040504650501301106040091
0706505090200150806054063015404050110908265021441823040400705015630161
2154084001091307030105401307040200180301102006501501501400101301200800
5050100905140501920018051180540130100013026502145111003015040115070020
0204021306810630110604070130904013047011700140110507002006502146126301
0504060400540508085405070700122002203010100630501016103050115012050190
0130401050214720650800701304061710501301006093010640130100101405803014
0090030405080603001010161502015040500100130825405060020043014001050125
1620801025018160210502148863010041400105014066010651200650130802001001

5068001016700202001303040400100105021498130700105010600300650200254021
3010001026540405013060170540300801006502150765700170020200402120020150
7305015180150400403054050202006502151963010041400105011220015104020030
0454050100230620501257013040105021521117001001303012105610064054015700
5130400401500103013040010150400403051701208065021535100130616345011215
0130517012410502154810013030100420504004015040040612162040801080030130
4021050215571001306113104005012130810014015040040501303017021050215613
1001302302002204020021306040161400613012008001307001080920055061501703
0107003020404050130300154105021577640013030530120104501905014020402704
1504006306140422001050215888037030540370017001130120210200130540307030
5401301051020037065021598100130614050807030570012130540050115053040501
3090013040105021607100130616040705018040010107002020054010100130305122
0015104021618100130618014006125703010170105013050160307030540103005465
0216271001306111504008070304005700121305400501101122001510402163910013
0230807030520210200540570018016013065401502015061105091006502164780200
3706113010150806054080100130611502040150400401309001304065021659500405
0206061703010200660540301004703040400401563011050910065021661110013018
0400702465040504650130305401301105080702040300101016301108002002040216
7918030204063040140070246504050465013030518030140070100306502168710013
0618200100656150902006113054002040150205040040801703010502169810030501
1015012002065010220041660301401703010122001510402170561200146125201041
8037030501540130160060200105021718650310501563069113010130120080013040
0102120020501801051303070130401050217286652501305160811006107010062501
8030562030137030501901308105021731563703050154011040510546502140200501
6168105011301054080703013060010200140061100140130903015611040011307201
5620150613050170124105021741663069114001050158204016703040165031050154
0501301002001051304001020150400400704030130600211050015054020150611006
4060680160100105021756614600305015801020084040050115054050130901308105
0217612650681170050141040501002308016040032501305805031050156153054050
1302020021307090010402177126509020050154050130100640130700105020700261
2110140050115054020150611006406068011000200100501540134070105021781464
1664660301040150170010820401508010130820050017005080300400801051000504
0130100640620501308204054030015410502179148080540501516030104015062030
1140010501820401670304016606002005014070416641303213010602850613091020
0620501801703010502180106703040501590507053026603020403040089050204040
5021602040805301504004030012020065021811463060301040150130200108701908
0540032001021402005130101301200800130400102120020501801051620501220303
0010701304010502182126405013030010191050405010100069065030561070403065
0704030146507003020620501305408180900105021831061106217005014102002515
0104060501013080020061504001200840130200184010502184168016040032501305

8020300805014012540508002006140010501515305640500305404070540200840540
5070504501670020200103030701241050218576160401701030614200106067001130
2080302030405013090122001050218666146003050154080102008404005011505404
0501309013081050218723670011305065017007005240100018002180900501503050
5010042007030105805014108010130900304014001503011305130115040060281502
0150102050400405013090013040105021888801604003250130565031050154050130
1000406207003020505031013040640501050218911672020010117005014102002520
0230140070020050108020041615040060010200130612005001050219019801604003
2501305665250130510810106190308501305763515054020150611060120070650801
0130600102001400610470650501200100021620052162015061305016001300701050
2191116130400101890504008020035180508060050180105140502006850163703050
1516125051110530307013040105021928150570051404002040140561845615012002
2040801702465021936640010097061140200540210505402030130105012001370650
2194128040501070403040501309013081400656406405080301208020015030607010
5615013052014002650219576820014070301010020010515302050151150540301102
0037065021961084001017001804008400101363640136365404050203084210506030
6502197206110040020021306704130810080170015103001600905129012001307001
0502080200611016103050110042050180101000803054050570012302050190013040
1050219811150204064014007024650405046501303058902355040150400403051612
0046502199930620150563011305540162004651620308010516001304650211007305
4080105178010200654080105130110604070650211019150130700105060210040030
5404050113086050101630102070505140270465021102930110604070650860106051
6540801040113004005400150806054060013046502110311301108750540130807701
3012022006400400301001540130403011020557001106402040130700102050400404
0067046502110416106405096101306040120910130603303030204002204012415011
6306003010050701045670417030105011501205018017030105021105126301004204
0025018010130726200405027041307002020015013012008001020050051702141013
0901308650211066150801057001302301100013010064070124105021107564011200
6030501201301200840530307013040105021108111003015040110681013010150401
1305204013056184805301504004040603040650211091380150400630618010030170
0504002040703010606161501420010110020010214027010440140067046502111081
5051070304013035200405013010063061070304040140020400406502111186150142
0010307030580400505302040640400170130108105021112101001302002182040213
0810062002501130200840501304060400701507030104014009080650224260401303
0513020084050130200810402211010111051130501601400100612002204015073073
0513060170530010709001040222221064040020065051400700530203040200800705
7040112008007040064008007020307001400840308403051640020010130501606020
1200106401540260201200106302050707001213030530041042231264050130501604
0501031430801013030521000102007030406104002702030300109150402001042241
1204002703010515054050400630158015051080030561054105130107070012130607

0102002257010111051130501601502050400408010200102405013027050080150160
0301005012040405040020012500404050509805500404050703010055004040504080
0100054060030100561000102004060030100530502105030204065010020080101301
2008140401503001130101330406040105004050600200320409803015004030400230
1000611300420406405020404050104006801064050204040501020041301012007003
0130704020030201030110703040405027047030403001010164002001013012008005
1404580170011507305017030105113040115400740062002400615024004004050203
0763251032261370030202150130305561308100615051081010130406400106150570
3010203030010100410200227126150130601705140010530120010280105161501303
0510270500405080101301002620022813640501305016040501031430801013030521
0001020070304063015410630120400124050102002291550015010709805301080030
7050602103013030530580101304501016007106507001010051064013010010140570
7001213082001010022109700302024011004404001041206150130305301060290030
1403030702104221125640501305016040501070241303057030108200808015019012
5600102001940150256150190124005804005051501003027030106355600602001304
5010161301600200570030205613060060200150130402105022121410470640504650
1303054013011080020056401301105080705700302056130800301301302701042213
1010470630405080020051100200240505080705302106013040630106302106013070
3001020022141715013030510460030130700105014050616704030611309013081400
3501400400320010405040084005113015051200150130305108070304011020010422
1522405020150109005015030501050902005130305801013045010161301600200580
3010404426022130101306040150040301010097080301050900200530107005250201
0454011010001090022169620700302015073050151101400210501400615013030510
5410405010200104221722150130700105014050616130700105051461613090121010
5061305090120010613040366061307001050130020020611501303051080903021050
5401064013010010140515013030570301020303001030051042218371304040020015
0130305106034305405080101306040161400640508010130120080061303004060613
0100402006130503640613032130613030032006130461262050010200405013050160
6205001020081007030105130707001264050105501303058040130540504020200401
5013030510807030401103001221917570015060090401501600400904061801020025
4080130700105020802006110097040030540500101240505012001090240508061002
0066054013084010402220610905200254018010296505406130330642221463054040
1001407040508410422221220304011200146115010600200361405051405010004017
0104618010516700610061707001213082001010022232215013030510460030130700
1050140506167040306113090130814003501400400320010405040084005113015051
2001083065080105140501601620040507005263063061630216054080105182001020
0222496546113010130910240501301006306546113010902001913084010422252515
0130700105020802006161090465070506021030130305613040603413082001401307
0010370305015303050160606113070120808010561302146405010200480105213081
4290030405070010054050707001213010402226166170026150130122001510404020

1501302104001503014003002002021030010101695200210400103030911080105061
3010011040105061302002070130603642227146170050801013050160213083101400
6202003130167030102030800140200101400105040502030803704010100222820301
0300546140501807030540610700202006116040130305801011014040703064014007
0301040120071005404050251040513015070140802030614050516197040611302110
6013080100102002229850040301010080061400805005406301068061507006200540
6301096806121302104001307040010100223024700302064050107090040820040140
0130305805660010200305705042002561830400302040130150701401301401104003
0107030102040801340050261130200360405013016500150613400502611006301307
6200223121850801303051000102004030020020105025640501030020020213030580
2015040160020040501306040180400600980513091020016400561025130200108801
0402015060810100223297003020640501070900403007011020013030580150514050
4001006101301003062223311302040801051405018070130101330406040105004040
8305113010130210400130704001010022342063020301405370305014050602013010
7002020061160401303057030104012007100540405025104051301507014080130520
4013056184803051603040616230020013040600240010502235151307001050170017
0020200130305633040010030625406130901220010507030104011901254061304010
0104010130903015640401200710050154010508010065022362761302450370305015
1302040405030070110200130305302040801051600102008017002020061160401303
0570301051906180801700163240035062518020306140505161970406113010015070
6130407040020020700302060600200501513020403070302040400300202006502237
2030501050130130305308640516301440165163020501050130513040010061040502
0402070030206060020051302040304002022006113030570301040154120406230020
0130408605010502238131501303051041807070501307001050140506115013030530
1108220306006150208062002239101700503030700105010100140030650215054090
0304061615013030570301050902005403010041020022403513070010501600200361
4050410120054021000102008100130115010100630612002501130305630630148070
1303051305016027080054022708003054404009061407062107069030614006406013
4107002020080105116040130305205001020016301050902005013030540501050902
0051501303053010061070710722411713070010501504020501540801013012008001
1001406113090301561400611307201561402006121304070200680650561705013040
5020200630305701100251301406200224296150102070026208010042070024001002
3054010064050686701465004064224346100640122001510406100640306922441161
9081240410506207002406601080140301040030302018020010505004016007004005
4080201080201505020102002245148020110504050100200105153020501516510900
1304058051060016105703010702006300516210200407093056100902004030010422
4623180304010601020061801013012008008040020650305401003062107010030650
2511617001501060407065025180150513014007040101301290120063020504007040
1013010030621304001080101309046200224714610604007033065020213070700126
3050106003080130305670456150106401705042002202013080605054040140070465

0224811620110504050100200105140301040030516510900130405500401600700400
5161301013040901020022499100301011105113050160150401150130204050700102
0040210502250880130700105014050616704030611309013081400305404010008020
0562007100202001040225186130700105060706180101101400501407013710501630
1020190812130381040225227640112006030501405010023020405020060630630150
2101301170014004050101301001013030010915080101405010400580105060600130
3054011030100101303001091505004010820401303051101400561303057030104082
0104022531630103703040110301001013030010915080400505303070010508010100
3062540402008006130100160105100306254061501309001304010503080103001001
1002701042254216301070304013070010501640061130703040150513081004050200
2208010640506125804006002400305100306254061501303053051413070010501405
0611301090200194060400100104022551663011071301307001050208020061801040
2001054050584001040014001054013060170521000400516101400105407070012106
4070100104022561213040302010640107003030510820402105054080130700105014
0506167040306113090130814008010350140013050701040225786130700105020802
0061620700261211014005018016301020305407070012405105022581861307001050
5132006180106021030130305500401004003061164014006130102007100505401303
0520071001860501615013030530566001020013020017100105022597301046003050
5404046003011020080065056150130305307030104083010402260167003020640507
0110022405003040170610022550040210001070301053010509020050513030515013
0305307080610008062002261157003020215013030510630313030103080101305051
2006106303130505120080101303010306150130305604010702901020022621770030
2021501303055613081006150401104706504050465055613021930615013030556130
7030101302021020022631513040400200150130305150730405013060401401804009
0281301200800406008002005150130305309108060021020022641230540180101306
0401614006401801013012008006150130305305613010005010130840104226527130
4040020015013030560600200302040401801013012008006130803020400320010801
0130282002140200561040602013060401150400100707030101301200800130121700
5051501303052130501603020068020081040226610656130700101810120405004010
4010400204050040108101020401501301506015030208062002267173020301405370
3050140506020154050160206580301105017705020801013014020061470130102002
2015020307030105410406040010010402268761503143062080100301303051703040
2401400704030650226991303051082040210502040106401301001014058010401205
0400408010540060040030806502270181304040070304015013030510703040401801
0130604016130120080015070030208010204001215070030207030101303051060102
0022711861070246504050465013030540130401050730256030915016401301060305
4025703040640130309001304010504050509010200227229617001400400301070301
0540110140050121050140040070200808010636513070010502080200611304050202
0010201465010609650213070010501040030650703010540110140050110030180150
2102040230020040507003020401305012006704511303051307001050208020061621

0601304090102002273291011105113050160800200240500308016040040706130515
0130700105040047065040504650130305305010600301006170021216306134004070
6130561501060302540130700212300101013011060400501007006540505800708013
0913026130409306222749401100420061130305810010042005150130305301006107
0710722751113030510909801040501304030110205200603016405013050160150130
3056040107029010200227610107030404012105011041054064016003080540613010
1303054002003701301406200227712101110511307001050140506112002070616160
3461617024612002204061807030611306001020030703020404008030865022784463
1546180101303058100351455613400212040640137030703010204080101304105040
5082003403051210204012200151040566040120401304060304010504050100230680
1057001301020650130200606303005104170301020406400206506130054170301013
0501608011001040611309030156140061130720156170400904061213030556406301
2040805070401304063010650704013050901020023426040130305130200840501302
0081040231310041803081304064050650232513070010505408010903014005406001
3007065023356130700105054070501303010006407020080065023446130700105054
0303072015801703065023546130700105054030802006354081809006502361013017
0301017613540164014030204001104015054080150540100010200403064010502377
8040501240010001062001700302080163010205401307014650238561307001050540
3014015014005406705454020017065023956130700105054070301090306140054010
8180900650231031630102054013061200500650231161307001050102005006501308
0200466054080105160013046502312763010046003010050113015060150405060301
3054050910502313650040370305015509805801010020012004020105023142150040
6003010050113050980570301005806003010050113070301005408001000580600301
0050113040800100057090014018020606501130709001403084015004015030015015
6003010011600200804002120020130305186050130600130100105023155500401502
0402704700302030401040065023165500401502040106401301001014054002705006
5023171063010046003010050180610020406027092001101006401205017050130600
3010010001803010502318136150730501405013060401401210042008016020501580
1013012008006150170301070051225301001420065023191380150300150130204025
3501400405050600103061705012302040801051806120520500102005640505140012
0306502320963003200540060020034050962006010501400502400213045506902100
0303012030105023211561503020408010130150701403070220055060100102040404
0180102965051630204080105140501807020500102005640505140012030650232246
7030105167030101308030204008403065023231763010041200603050150681130101
0064058010013010110064017024611303054013020404050130510001020051803014
0040010065023242680100130130403011307001050208020061405010064054015700
1130123002004050030204010200104150104008080030703010204063063001130305
3015073040301102054016040705012570018010121105011301630105023251015056
1301200330253505804002002906125840010810502326510013020021509020050102
4012070026502327328016810501130105150190507013080302021701050501668105

0180170013114020050168012001304005062008016030208010514050203076310501
5005010506153020130140506021007030105130100630405054063014006001925010
8010130700105090030406115054040100020010065023281580170011604006104001
5040064050407020703010130803020801003013084043030513070010503150140501
3010064013090013040105023298610030200215073050104050730140212002016150
4006001020013040507301050233071508010700302030110140061502050130402400
3010502331650040150300150140502704540100200501160020010502332148012006
0305018010540200606301405054015017024611303054013020404050130510001020
0518030140040010065023332561001301304030140501006405130700105020802006
1620700261230100113016002005614002008050154080101308101513045010140157
0011301230020040500302040101203040401400120306504050561030020024040140
0300200265023347630105019704004023002001405003020401502040170013060016
0200650233591107042040150204017001404004062050400404002001216709001401
1502040406002003650233645105140051051400304014006704650233710150510130
1810140050113045010150406400650810164015085024027065001050233812150561
3012003301804002001070301013030520700216401508503052406405010502339510
0130200215090200501024012070026502340510013070401100301030301090285050
1440105023418801600700400540130901085213081008037030501540100050018027
0413030100640130900130401050234265004015030015014050270454010020065011
6002001050234374014006021004050140513305164011060400160020065023441950
0401200603050120060305014004002001020304013114052006063051207002658014
0027050127080054027080016370305015401814105008027041301006403011064050
6502345850040120060305014066010616001551200650211014005016603091504021
0502346713010802007065064030105801604002022006162015061100640170130105
0234778010013061150640503023002001050405003050161006405401305017012465
0234848020700265401802015061405013040530201050234966301004140010501406
6010130204001230703054010540046502350116370305011250402001040614051105
6161050154011301020026570014001002001200640701050235112101110511302006
0302030614050130910214006170403061901308115010240140070403065070301040
2352861505700514040020401405618456150120022040801400100650235398040010
0970611402005402105054072200120308722401304105408020086502354580700200
5408010100040200400540840010810502355711086026501504015040454025405040
1306250105023567506012007030540801013060010200140023030110300702006502
3577150130700105054040506003001052002540403008010065023585613070010505
4021101400200254010640506502359561307001050540220025403011030020020650
2360106130700105010640065040114006161003062540633051505401301020025402
0013706502361716301020106012007065080101306001020014006540305160121006
5023621263015020308050806011301660705163041050120400121050910021308100
6540301109003040650236314230100306254080101000402005405057001630540170
4013040504650700302054030517014030650236488400101700116007005014040020

0801054021307070012170015401031200650236573014003120061130106401502040
4050130140050902006502366910042015040011014001040040030107030102040802
0504004070301017010012204040050209065023674406040020220010502560140200
1400532006502368101803040104220061130100630140315404013040101400121540
1301630105023697140304010702008061200606305408054030540502020065023701
0140101006306502535052303154021308100612050020054030308100201200565023
7116630614002701308100156154030806044001306040161400613012008006405080
1055023014001050154027002020054080540705070020200540407020080065023729
1404006013054060020031806002001320022060010200656600102001302001710010
5023735615020304004706540130109020019406040010010402374861501307001050
3011064050650213016002005705013090200193050120265023751163062008405015
4062030080501401254040508002003030361801091000101505401070405650237686
3010041600700501540213070700128040116040020150613020025406401104008002
0070650237712840010170018040085017030105402121700170700123004104170015
4080105402306065023781065613070010150300130204013060407061301290120061
3018010451003010301401400300202006502379765613070010700200120408010130
1200800613010540083002006502380106561307001010810106104010400630516004
0030180130301030613050512001803014007010030650238162301001306140500304
0110013013016306502382810013061117001404005016205014002001216709001401
1150130402706500650238312301004670450150850612165015700140501002301505
7001130116019102001301630105023848100303040501301200800640508010511502
0504004040070304065023855601010063065030305100301803014007002020065023
8681003040502002130604016140013060270620021307020030013070900104023875
6010100630650303051003018030140040010065023881410030405021045403020640
0203030010656103102006301103120070301051502050400404007030406502389560
1010063065030305100308015010400608200650239052301400105015402130810061
5054030201700265023912440114006007001303054050630464012015040705405013
0517001307005220301305240160030100630703012708005407030102708006028150
1303057040110908065023926701304013010001026130300514580400701301070401
1030020020650239361003020021401400200105010401106704650239462002803014
0037030501080101301006401309001304010502395761501703010150502001020401
5070454030100142006502396914807021304001051018605013060101055085017030
4024011090806502397761003020021706700220405054071400130300101910502398
5617067002202002150108800200650239988400101700131184540130406400100130
2002120037065023100163070301017040309013081801040140020020400203011505
1203040556100110305164050620011054022007600130101064010270500650231011
0801700150806008010130906200803011506012210505401064010700630110400601
3065023102680405050010030400406171050580163010205401304080308650231031
0640506008040040617105058016301020130700105060060200611508060540801035
5040600130465023104640030808636554013050120065408010512013086502310581

3040400205011014001040040030107030102040802050400402514002070026502310
6810013061200250110003024007030105013001006400501620501100640180013010
5023107720025011600200350140505180150704501801501900130406502310851001
3016006010618010516301400203040650231091415052015080200101004050702141
0101006306502002501140501801100080200305016120084050161504006001020013
0200184010502311088014006007004004065406060020010184001015060620407002
0200106205040040405054040080082065023111815010371040054013010640240190
2200611505405401308011076502311271001302040302500400408010130120080070
4460501050231138100130613025005011064011627080010640801601301307014105
0231149100130150302500400401301100301030130615020402050400404007030406
5023115818086024004015040160030100501204070250016150204013010501301400
2003706502311611804007013010130305130403020130810030113051301562002130
7020030013020200104023117186405010470407013030513051160020030122005150
3052580150401860125705042002515053011080308130201802006502311876100302
0021100080200612008406150400600102001302001840105024426040130305130200
8405013020081040241960620051507305015168020080050151615073050180105111
0140021050140030703020404007002020065024226130715010561307150108013304
6120306184405054014011053304563014001600700204025401200180580104105013
0305150205040040400640506502130305613010640130160020063010300547070012
5401911080540501304064050105024318130715010301105020813017150105164030
0200205613071501053011050208511301715016403002002068200407003020703010
1304064050105024419613070010501020040650130408905014005004030401014006
1212002705300541801330465405004015010503304563014001002306130540300514
5124161630102054013080160100650245111301130700105040012614050270470030
2061903086180150130305100080620020081040246176130700105010200406501761
3540630401020503054030054113011508060540803005145184540120027030051414
0021303051505304050130901410010502479613060014060515030705040013030570
3010515020150405013020170021050248116104200170505113070700121504003005
4120027030051414002130305150530405013020170021050249961306001406051501
0008002130305703010511502015040501309014100105024109630630180800301303
0570301020406200840400561501303054006128201040241128150130700105031612
1301802070902540502040301400860265300200130204023056600102003020403020
3014020010405054040112040060240501301500406130700104006301020220054050
5403057070012709001040241212306301170060407040040659005013040640506506
1304064050140021508060540600102001610013061570011802040210502413143063
0131617030105212002705300541801700304010140061213030054180163010207050
4130305540130201700265024141563063018080030130305703010204062008404005
8010130450101613016002005304060204080104011808004004080105707001270900
1040241516170040030100650521306050400204064001006306502180615204040130
1060302040257030406400860265055105016567050413030570900104024161463063

0117006040704004065100304004040110206503050115050400203040257001602815
0205700125400150709001040241791070900204013030515040070646130405003051
2411502050400404064050105024187610210501303053020401301101400613030570
3010408201040241920150130700105010826501504003001070130801830058010130
7001050140506130540707001213010408010130450101613016002005613030510703
0406150400403014007030406502420963063018080030130305703010204062008404
0056150130305200680200810402421351011105113070010501405061301400400270
6160096140013030010915064050104002706009614001303001091508015051014020
0213080830016130405020200630630180800301303057030102040620084040054017
2010405020404050184124163020501303051072010405010300161303056040107070
3010402422266301101400301630613080800304050204061306070515010640061163
0101301002002106130406012010506130405132001050801060210301303056301070
8061630109080861130140082650150101000802001303053020406130305100080620
0200810402423131501307001050102004065013040890501400130100018030140013
0406405014003070506180101304501016130160020056305407070012709001040242
4910640400300547030105401306050400540611041054061200330540240120150611
0704030650242511106401070010680105401303054105054013081006107030406501
5013030556130810013040210502426161306002105001400303060021050010506130
6002105006503030600210500140061309102140030309102105061309102650303091
0214001630102040220065040401101006306503054040100080200562007100202001
0402427191011105113070010501405061301400460030612106400110001020021064
0020408400104006040015060616400603040617030101530517003020406001020030
2040307030204040070020200650242822801503040400346180105118418030140046
0030651840010106700503020406150100103030204012003706180120037061561720
1030204061303052401400704030650703010402429173010607030102040350181504
0046003061210640011000102004060206505801051404001703020406130305107030
4040140024650640140020400406502430151003030304064050105010100080061405
0129012005406108809006180200635407003020172010305401501303056002102002
4011090507065024317861003030304064050140010100080080050405012901200550
6108809005080200635506301102410507105040055013014019005200405051630108
0020025026004020055070301031062550630110241050710504005501301302706304
0055016121105501612127063040055016125011055016125012706304005501616006
1505501625010160061505501625010160061400550165060110550164014030204001
1040150550161304001270105010001020016301013012002540501302003130161309
8030130700105030401090052006170301070620014001305060163011080020025021
2003305503010703040401106008010504050710504005506400626113010130305340
1070111051304064050650307030204040080308650243217615020861130110140104
0502040613090130810504050702142040614011020401501020650618010020011010
0050540130305405080800305613030561607070301040243348630106040070808013
0700105030110346505020181840010101000501054013030540508080030561307001

0501024001000650130204001240401403020400110401502040802014002654015070
3040400408010540600102001614006540405040130130305130700101400120406301
4002020056180400101400204070301013021000115012004504008905013040024001
0006170200800130810151304501016405010202005550801501303054050270412020
0155501000806200200810402434136301004150730501130102040110140040210501
4006405003014050130700105060030614050100230204064067090053030404001001
0502435481303055062001306040161400613012008004050030506200520403002015
8010514090218130409021880107313513073135201505120620242001010610044050
3003200540212002057104006505301300200100105630110002002105102014710400
5110800106306304040040606055012005062007030105062001054101303053050620
0540501030016108002002130305130140500130303050160613030522030300107030
1040243614801021064001700501303051504002008070610700202008010511604051
0602830580105121301000466130190130243719200313030140030510540400312005
6301210707050700202001303056110014013090301561104001130720151060018065
0106401400400100302801051301003062613012901200243814301037105401303051
8605040170403061610710454040508080030561303051020071004050103001210001
0200860122439226130700105020802006117040130540206020012210010705108602
5130900401504018400101700131530401034530010101663413030570504580680158
6012561303056020010701308601224403316209003040140080102820030310101000
3001540634050806100540634050806100560812900304014002708005180610027080
0170011600200310453040102041020015164050304010370301303053055062001804
0130540505062002441211304040020015013030510602830540508010130604016140
0613012008006130910200901801400203010047030409030140056400602108561303
0570301040240110807030650244276303054030201306040161400613012008006130
1013030513040901020024433813040400200150130305107310608121500401063080
2105055004010370305200201401804002001013064100106002003405060030130561
0507304050130604014050321308010514050220048010901022540501030016109020
0805705040501030011020146050122001005107005221301290120024441010100302
1303051303010306130505120015080107003020307022005301630101301290120024
4531613030560030100203041254050401804050540405010403001070301029505640
5054040501040300107030102003301050640505404050104030010703010120027010
6003010013030540110300115013030570301020303001010041020024461130100415
0730501110140040210501400613030510541040501030011301090200194060400100
1040244715610100630650140501213030562130200606306197050150040104006301
0802001010040505404050270470030206401163010202130406405010502448116170
0147061130101303056200606305301082040210505401700180200101004050540407
0200800650244976150102050305401308100101400611301054070070501050245016
1801010030625404020080014012004001261140106001806501501081080130305703
0105406200606305230163010205401309001304065024511815040120150100630130
4064050105017001470611301013030562006063053010820402105054015010100630

6160407050161970501616301020540130408030865024521064050109701303056200
6063056106003001303056104001005801630102054013080110765024531761100604
0612130305354110401505403010501402004005403010600200350100303014001006
0406191705407020068051501303056002102002401400704030650245423100301910
7061130305619107061130200606308015040063061801504017030105401840306703
0102040401840304004061504009107065400540046164017030101302006063013011
3023011000130402105024553867041303051307001050140506140502040670403061
1309013081400301060400600308050540801013012008002040116040060030801307
0010504050100230540630104020505030540410505401307001012004008001030540
6301024305054040502704600680540140501107024650501030110300200206502103
0010101640502080200270470030208016301020540130801601006502456861100104
0611309030156140061130720156191070611302006063030703020404002008406502
4571130140086025013070010502080200614070371050801013012008006401615401
3050120063021060130409010200245850101110511307001050140506130106040017
0050204013070010504030204001104015020406130700105030401023010006113083
0404050204050030150040200140040501002309030151308032006810504008007065
0500101220404050130900510200564050270490301513070300150030150070620014
0030204030106070301020406301703010540350182704550961806507030102040270
8002040703010270800207003020102105013030530204013011014006130305703010
4082010402459196170012301000130198013040502040130830408030106040017005
0612040116040017005013070010504050100230540207003020102105013030530204
0110140056130305703010408201040246023613010061704405013050601130301400
1030110200365050201818030106070301055035018150108007050500101255010001
0200404002200314002710505615010604007080805060010200305506130305604010
7070301040246176301060703010130170401082003630170301013017020038200363
0170301013040200108008200363017030101508060204015040012030614050210640
0204016210640012110204016210640014051400204016210640016006150204016210
6400160061400204016210640017040140204016210640070401400204016210640016
0061302040162106400600130140020401640140302040040408014008516904101002
0403010607030102040350181504001203061340107011613004001400180170014600
3040040210640018060304061703010150806020404008105405070504130305402120
0205910252070030201021050130305302040130110140030703020404007010030650
2462391504011304064050650130700105014050612130305620060630561700120150
6140705703010140200314070304010700526184001010604001700506515013070010
5010604001700506502016301020130700105010640506502130305620060630580170
0116040017005062030270800300150540801700503040503001040040505406160400
1000802003054013030515013030510008062002008104024632730140037030614701
1302006063021050204020470127080020402708001100410703040130305130700105
0104006030306504050204030617001803010870020013070010501060013080650705
0140200515040090102540804005051610901025407070012130104024642213011503

0305401801013060401614006130120080010041070304040115040040703010561064
0102003706501301058010502105402401704030616130305220303001070301040254
2604013030513020084050130200810402519400212002013070010507301308020010
0150703010702453010206503030701304010505070010200125219130700103054030
2013060401614006130120080063040104006007006304163040102050305300200102
0801013040302066003010020303001080100420054001004102001253226140060070
0614050465051305530110600301006503001010165401060030100650630110403020
6503015080605408002001630150807016301104030206504064001630181015630150
3006200125416610013013070010502080200611505700113011802018040020015617
0150570301051006401600200650801004316190030401676200125596100130611601
9102001301630105012040040025180510400403010703010522020056190103012561
2100301507305130700101070304013060200801013060401614006130120080015052
0150100080620012008104012571661001306140130570011302006063010120301309
7014061040300108010130160611003063011507301301054030208010206504070550
7001020012581716103010010130105205071640020650305350510120304050516100
1301309001304065015040040027065013012003301406086200125991509002002010
8080020026130201301405001308080030618030110604009107065060210301251017
4002120020130700101503001370303020600102001405070030203501400400320010
4050400840051130150512006103703030201009062001251182302070026121306017
0561704004501304050207002213060170560701020012512917001200140054040504
0201502701046040706130514001000109001678010200125139617001130100614050
5140201501800101001401002005010504706155013020500262001251483014004706
1130106405002620016184161470615002620012050010200125151310030170030206
0010200140350513060030413040010670413040400100650201504003054037164090
1020012516103054080105140110300165060013041050201507030102002206704140
6010630125171661064010830020054064011070246504050465013030580101006301
1504004018003030400407021410563011405408003061130602103025182110013061
6028150204012015010502100010305011505040060070040504650204050163010163
0205040400704005406121540840010506061130700202006201506110064012620012
5191580100420700262040240140010063065080401400604009107065090200801630
1509020016405010900304040502040507001005707001212021020012520206401120
0603050110023020405013040200603010501301150540301012030650130970140610
4030065080101301606110063703050127080020403027080080400505140090220065
0620150200220290102001252119610013013070010503011020036503010015013063
0115073070301050113040301102051650200102002501301004160400202200618010
1508060540670400617040061202102001252210106401020065013040301102053012
3002001010640107003030403200401050610100630650832001408362001252396100
4405011301040170403061405070403080370305015521405050062001252471908121
3035051064010700600102004060400100200161860504010010301252576106404003
0010010013060401213010004014065073013040301102054005071030125269130403

0201064010700130810030302008405062015010640170301013020180200105070601
0200125271261064010708001309001304070301010410510100630101301040050101
4006007004004070130200606306021030125287101610304001030104005010304014
0060070080301501600301030125291130100418003050107050130700202002704170
0315010620150130300109150303015060150600700630125301061001301302006063
0101200215010064010140060070061570011301002001504053620012531116207003
0203703050130203050210704614050130403200401050620801022002205141016509
0102001253215610013013070010502080200613063015073070301051301002001503
4030561845207003020305050024002580614206200400305015400200400103012533
8630110140065020240500301301310501202130810061860504008060102001253411
1307001050108300200650703010636554013010355040163010203002004020150161
8003060210301253596301004140010501406601013020400126370305014070516001
5512006506710200125369801003050117005211301013010064013070010502070026
1211014005018044020050154040044010200125371361006405068304012070026113
0200603011000200100501540637030501540303050160110561704004501303090013
0401050707001211301040125388670141650040646190812130200606100200650121
0507003020205001020012539762030180020025013051301405001306203014002200
5014004002102001254016630100414006170301013010020010513040010140920040
0409200130606180304010206506110200650512302015061301102003650503006200
1254111617001200162015010400600700650201301576115700113070010270500130
3052006063012542171502014301080030501705013054005013063011509022005017
0301051660680107030406508105010200650130707001240501800306021030125439
1200110400405014006007001305556151801504004002065070301056201030125441
5140400860215012050020054010604070650161070100306501505401301201301507
0140230540180030602103012545161304040020013010200220201080404130900306
3063001303703056012050150040370305011303004060703010543010301254655004
0100280050151301050110028001106010200125471165613070010370303020401303
0103030216016130506406021400163703013050512005030062001254813656130700
1012006030130200101823002001210501041020084040056150730501405013060401
4019562001254910305081010252304540104001650601001054040160030100501150
7014016150160102050010200125509630100490200805015210505403010700202006
1801210120500200130501601301208062001255176306300105013027050050180102
0301002001055070010200125527803014009701302018020010506315454025351412
0210200125531565613070010402003130282001050570017070028020014006570014
0308131363703021050540122007600168320014083620012554126561307001060030
1004050130401230020018037030550602169052001620150200220100410200125551
4610702465040504650130305401301105080705406301108002005406201501302018
0200703010200259005102001255656401120060305012013014023002001650700102
0012557141003040116013020407030105405013200130140503001150104006007001
3010200256021030125581364006203070301013081013070010301104064006602828

4045620801025270050627021456002102001255917130700106003010013060401614
0061301200800640121050540180106040051101405004016040061070301013070200
3001302008405080160130256002102001256013617001100103030540160346130302
0084050100130616401130200840501506034304014001402005016714540508062001
2561114002120020130700103703080101306040122006316370308010516020013161
0040200140501020012562136561307001037030130301030613050512006003080530
4050120014150107002020016120014300206200125631267021413020084050130700
1050104030065070301013012008005650161700160019254013031530650100130616
0301401256456130700105010210400650302002540603416100101401256511613070
0105010100630650200250119020080705017070012355040150707001251201501000
2001401256641505160140040604001002001640100140125671161307001050170011
5080100613040106020080616304010100400200616201502105070030201006140125
6822613070010503011047065040701303051305116002006301101004003065013050
8060130400108200401303051301213081006301107506506405010807030700302010
3010015001401256981080017080305130707001210640130100101405610600304801
0540515012570161301405040012614050670403070403019013081801630102010243
0130305601010140054086050140062015013030510008062001200810401257196405
0400126704030901308180150510400621301013030540400121257296130700105030
1103005465013076200617001402006121303010006402006120200140125731061307
0010501700170020200612110140020025403040106002006170301051904016704010
1501257413613070010501010063065020025015230501405017613501670020010140
0501100200517010506137030501303040400100105014014012575916301020103765
0130100020080524019022006161030100650801051400810566030140125765600130
4105080105186050400406040010020016401001401257712100304011070212204020
0210306301470162040801004207002400408060680102065030714012642604013030
5130200840501302008104026119604026244003020110140013020400121304021050
2636307030202160070508060201301102065061406405010502641115050300150507
3070301054040501306040111058090030400170501100540305160018007010502651
1640110140010540405070020200405013020084050408450013012015061705054070
2008001050266880100420700261806010140010540150214012015061251060400571
0650267111630401020061130101301200800204015024005018010514050203076320
2001040268815080107003020301105640120150120500200540406405010502695615
0200220305613070710713020081040261086170050141020022040660101501104001
3010064013090013040105026114100640802007065013011040010065026126100130
2002150101600180150102070026502613861080010100904200106301105093010030
6015010801200603013010512006502614663054070301070050280160018015010100
4003065026157100130203018017005212110140050115014070204040604004070650
2616780140010180200706508010063011501200606302002130701304010502617515
0120060304070501250101602001101030261810100130130405020022080105016301
0416302500400801050140507040200206050105026197680703040080703040020130

4001080703040061504004050130201802001050262061001308070304005117001615
0140501308001301050262111808020020040040502040304016008040020408065230
1020021082040163703050104050130402006030105026228640030205070405400405
0517030101507024400250101602001101030262351001308020070650640120021307
0130401050262491001302002130604016140061301200800640121050540115020504
0040406100501050262551001303040508630513014006040040706502626510013020
0220406200212110204013016301050262771001301502006063020401307001012006
0301301020403040350650262891001302002130403002001006130401000200264012
1050540115020504004040070100306502629810013030105014006007004001305110
0010200103013703050204050130406036501050263051001301630631040020230010
4021050263171001308014002515020504004050130901410010502632680130100107
0901580170015105007021504021050263366507701045801700151021080013030501
9002001050263471001303030403018630515057001306018200703010402635810200
1041501060020032040405012008002040260820058040170014001402006502636710
0130611200356160015612705008010130404110508130020010502637410140062022
0306081200703010402638580340701306082005304010100140010640407030640263
9561001030303050160530150400404034004070650264073070305015040027013060
8200515020150615401301000130210502641128030401311306082005100130613080
2007065011050305013013200115020501508501301000130210502642610013050704
0615020401700130405013040100200210502643710013030540406601013010061401
1504004040301006502644980130100618213054067090105406100130612707580200
7065015013050850130100013026502645880130100104066010709015801700151040
0301008040110180206502646380130100101306082005601341050264741001306114
0501220021307013040105026483200240660106512006502649211001301405040040
3051002301501700503020401505302021020020401307001070304020401306082008
0306068040070304065030110097050110410204061200330204040506003018063019
0302502040134070105026507100130613018001020015011301020025014050100302
6502651111501509407015010100080200305012002501600911015011502050116301
3040640501050265286168105011301040660101501602002702141015020404040027
0650265358012006030802007065080101304041105081300200105026544150563013
0300200700405100301030650265536150540305013010001109006502656361501303
4010708170020065026574801600200350154040503501400670106502658362050676
4010014020200104026594207003020616200500501512501016020011010302660280
1400270654040300200100105026618803040140020011013034070150100130190812
4066010150130404200206502662610013020301150407010200210601054105026631
3801681050113010406601015018002002270901201302820080150803010080201502
0308020010020130964130709001040266436173080501500401301600200105026655
6150310501406601064050407051340701050266635004011000200100501130160020
0105026678150801070030203011056401201501205002005404064050105026685615
0200220305613070710713020081040266946140030703010540502112200151040267

0617001001303012105610064054014007024650267161001306150702419050140180
5090030305170120801050267251001305301060407065020401700400470650267341
6105080706502040161080020065026746100130612306345011215012070030201080
7030650267551001301802001104004040120504004040070246502676315040040612
1620401301100440650267768015054070463010130120021307013040105026784130
7001060030100501080561054105026794613070010561097040501061060100105026
8046170014020080040080561030080105026814613070010104010400501050040108
1010502682861307001019407015010100080200301060091010400101064013041050
2683620025230108204016130810050102130901308105026846613703030103060150
9041008010130160020010502685561370305010405062005005350513050701040268
6661100080200301210150520150405013080013010502687463014006007501010640
1027050065026886106403011050807040130630125065026896130140501400101303
0521003026030104026903617308040013035053030404001001050269136220074001
3038104030301000161050269266100103030540110504012050400404007024650269
3740504650130305530105090200650204016105040090200650269448020220261801
0515406130100016650269536350641230106013407065026964100130616540801051
1060040090406502697640013030515020501308010800301304021050269841700506
0610204022002130701304010502699464011800305011301130403200406502610048
0401305014050300180701050261013630190410100840104026102780306150305012
0200580502065040501304064050105026103815080107003020301105640120150120
5002005404064050105026104561502002203056130707107130200810402610542070
0240010064050681304020060301050261067170010013030540160065405068130140
0400100650261074150103020402006063014010502610838014001006113030561910
7065026109116401160130204070301054050132001501320010130170301020021307
0130401050261103801400100611303056191070650261115100130611506405030206
1400270201301200700306502611261001306401703040102401201506110704030650
2611371508601254013017030102002103064003007020065026114464011501291200
4130406405010502611551501501130150700102004021050261169100130613010503
0404005040051015068304002065050405013040200364010502611751001302002150
1006401020700265026118980180400821050106210505408040081650350106405040
7010405013040640501050261196801503105015640504070580101308030201304030
0865026120450040110002001005012704130211001050261218150801070030203011
0564012015012050020054040640501050261225615020022030561307071071302008
1040261233207002400701413040200603010502612471700100130305401600654056
4130140040010065026125415010302040200606301401050261263801400100611303
0561910706502612711640116013020407030105405013200150132001013017030102
0021307013040105026128514002506502203020010701105400702500650261294640
0400600700650409015070307030204040060030465026130461700129300400402930
0400403212001050261313801400100611303056191070650261325614001006113070
0101404204024014007030406502613331404204021507014062501050261342635014

0067010650261356150101600180703010204070700121064070900104026136910013
0616061703010501167090040014030404002050405013061709001050261375150570
0113016003010013016301050261383640150850240707002105026139108020700265
8015302050154015080107003020301105640120150120500200540406405010502614
0561502002203056130707107130200810402614132070024005004064130402006030
1050261427170010013030540160065409013081301400400100650261434150103020
4020060630140105026144380140010061130305619107065026145116401160130204
0703010540501320015013200101301703010200213070130401050261465140040020
0206508010401515501140501050261473801035014006701065026148467200670650
6003093070515800104026149564005084006504050130321302106400180120051050
2615038014001006113030561910706502615146301400910706114020013040602008
0105026152613070010501080604650801013012008006301109030865026153510013
0611504011504004050130406082001050261541140115040013012300200405003050
1801400211051502050400405013090141001050261559100130570055011005305130
0200263020403002002106404070306402615676301400406065126068010160070020
4070700121064070900104026157380701002006518019028615014401050261581080
1600700540130707001215080107003020301105640120150120500200540406405010
5026159561502002203056130707107130200810402616042070024001006403069130
4020060301050261617170010013030540160065403069130140040010065026162415
0103020402006063014010502616338014001006113030561910706502616411640116
0130204070301054050132001501320010130170301020021307013040105026165414
0014006501307002020015040501307013040105026166116400700200650401600301
0030204020022040405017613204023015040040100640701465026167910013061301
0503040400504005101306930400206505040501304060020031050261685100130150
1030704030204040501301001301050261695200250350106153010404011070403065
0261703805031050156153051340701050261714130170367180101301000122001050
2617235004044020050113016002001050261736614092005017030105404092001806
0140920013040507002001050261748150801070030203011056401201501205002005
4040640501050261755615020022030561307071071302008104026176420700219081
2130110205130402006030105026177617001001303054030070102130140040010065
0261784150103020402006063014010502617938014001006113030561910706502618
0116401160130204070301054050132001501320010130170301020021307013040105
0261816168061130201030630140020650614050130406006020010502618236750612
1301006091601304060400100104026183963014002600606113050160130010154063
0140070500618010130120080040806041050261845614001006113070010600301002
0406130323051301630105026185510013061150401150400405013040608200105026
1869640115040013012300200405003050161505090050203040501302017002105026
1879801601009703010501206080140501306040115020504004050130901410010502
6188510013020021017030402401400704030650261891080207002658016007005407
0700121064013090030515052015070700121064070900104026190815080107003020

3011056401201501205002005404064050105026191561502002203056130707107130
2008104026192461505304005071030200213070130401050261934507302513020068
1301401050261945703010100302203040020650405013040507002001050261953230
6015070200210402105026196461505308010722001301630105026197916304010205
0305401105150107030405703040125010160200110103026198563065073050157030
1027080013017034010502619968010020015703010540401201506125406405010502
6200520700302060302050158010100306213040320040105026201730110640506502
5840010102006113070700121301301040262025801014001054021000400565403011
0300702006502620348010100630615305085040509002006502620421802707001250
1106040070330650262054180200110400150404007050154060501050262065500403
1540401201506110670465026207640111000501070505404012015061104040070650
2620876401153020501405010020010513013051405070020065026209470020200106
4012050190013040105026210464014005073040025130300101910502621156401105
0210001030540640110604009107065026212415054070501306040703040707630650
2621398030140047040701303051305116002008040020650405013040707002105026
2143615070020070300102004002013011002002105026215661600808003501820304
0501400270204050130406405010502621678015070906208010030150102200104040
1400704030650262174640062030703010130707107130200810402621841307001010
2001208105040010064026219364001003022080101306013410502622041505561306
0401070130703010402622165301502102040703010405040050730130300101910502
6222540050730703010203018012015001040262234103010065013060407061205002
0054020170026502622436130300702001104002705401301000166502622571304040
0200150540801020306141051040650262265615054010100630650401301108070306
5026227191301130700105014050616704030611309013081400670020200611303052
0500102001615040090200614050270440190030406166010703040130700105090030
4061110405010030210501003026502742604013030513020084050130200810402716
9604003020110140013010020015062040012402105027235410623002001030304064
0501050273913070010501010010406501309030156106400650130720156540213016
0020055401061005065027410150130700105030110640506502130160020057105013
0540170401305408054010704056502751016301020130700105030540606130707001
2654080101301600200554013016006020065027676150203040030100101301002001
5040503045082010407030104027716170010013040660103015305150101506040050
1200160140010204040505126002200161400102040230051210026030703020404009
0930650278148030401315150641015026200204050801013050120064050863051660
2815013030520021307013040105027971014066010150515011303051307071071308
2010402710206130100709012080304012001514005400720150513150630104042200
1630401070100210140660103014006008015010301106001803041013040200603065
0271111130140509003040500402430860501270460680150101000806200200810402
7121961460030104208010310220400600200321080014050100010200606801040060
7011014001301080200706506100640515054020150611006401801601001050271388

0304013140054011014005014029020051001306157001608200402105027141163846
1251616040010100504005115080605409003040167030618015090020020108020150
7011002513040806041050271515630100414001050141664660301040150703040161
0013011308404303051307001080800305017030102050010200405070214513040640
5010502716196620050060301040150416646100130101110511305016070304050140
5091001309102006164001050140502030300101505700130561308080030130402105
0271796830020030603010401503506454050130350613015060613091020080540106
7706502718208400101700114006170301061413050403010013040050403051011105
1130504030146003061406012050204030110894050204060301040150635064565403
0110300702006502719248040026040800182014050100630516100130200216770501
0150130020200507040400201304001015070404007030106703010613041061501704
0309013081400200800156146003050102200840400208010702142013090130810502
7201264008010041309102008010013040130103011200101305454140201504050130
1000110210502721930170700250570700121300410411630170028505163010140010
5010260309150402105027221480402050010001020027010480100130189400240130
4040089256310400204050602125021101001050272311150106344001402001540040
3020540616400104004050203030010630517020030070900104027241763440051610
0640511060346503030300406040504650130305671050305401303001091501704013
0540809045407050130602103080540301105400465027251413011060346130305130
7001010600200313060028010130604016140061301200800610703040401400600806
5064014007030506502726813030530113051301562002130702003001307090010402
7277100130605050900200190410040014020504004050130201700210502728111700
5222040012105700180130100513010540500404006307050540801509002004017001
1020037065027299100130400101110511304030115010130100101301020400122020
0104027308150540506030104015061505260401303051302008405013020081040273
1513014007030617030106140065010406030401050273213100130400101110511304
0301180400650108010140200104012050400100197051402001840010400300546502
7331210013061508501630610065616306216030041046130140200130102080150900
2001040170014001402001050273413100130400150130403062017001460030611002
0010518060465163703061170751530511700305620700302010807030650273586150
1040200603051301054025410580501900200524010200370130402006030650273616
8030401316030104015010013014004046505024013080401140015010130305600102
0040401140012040230150400402541040020404008020086502737131200370130105
4080305014001050540235064301100230305402516305060020035054040505117003
0565409011000200650273811100130101110511304030111020401014001050102702
0030051100230150101400650104060304010502739161001307080200104004050130
3501501140010202510023015040010064040504010014020615010703010530100610
1401050274038100130130700107050457030404050130204001215011400102025100
2301501020040041301020920080208030401200154060400100200170504510013057
0014050808003020021030102306501011300202001401208020064050300202008015

0401103002020030508060564050208020080150200210100050102020010402741121
0013050202006130517020030051505090020014005400410140400206504050130700
1050301105400465027421480304013140010010301520700170200300201001304002
0150556616400105011307030404050100230516205014060304010502743126904514
0120150400400702440504650130305150512015040040501006402018020010502744
2810010303051146003010130902008803040120014005860240053035620300804007
0506011001051100130150590200840402004405010061200102001001304002002150
1090030404005080601061603040400407060301040150303052002130701304010502
7451363010041200603050113010500406416001540901308115017024611303058017
0015408020010100150106004009040650274613100130101100640304040060400703
3065021306010105100230130860505306301400604001000802006501303053070302
0404002008406502747131001306119102005012206240504070201001309110200204
0705041303052301504004010064040080400506502748106201508010130404105054
0060705200591080604650801013012008006301109030865027491410013061400100
1604061213030530502104005056153055004030501006305030630105401300545014
0530201530561501309014100650275076402020061402020016402020050140202001
6540301103007020065027519801509002002010802015070110025402020054015014
4020050154061006405401340701050275211804003020210640054060016105240190
0304061150801070030203011053010064010703040650275356150310501130700105
0140506162015061104001006502754863069117001001303010064051400140065013
0801830056150400404002902006502755111105020403040014006501302003130300
5654050465013050601230150400401006404003530650275615804012015036121006
4051301150100130611600200361130306940501002001040020401505401501601040
0952006502757780150310501561530513011402001400510042005015140501301000
1220010502758661409200501703010540409200180601409200130405070020010502
7591210030130840430305660301407030107021451307001050190980101303056001
0200140110300200206502760271405060030100130604016140061301200800615073
0302040405013060401401801502400501258411010070014002535401201503020401
5040050240061300320051113054070130305230540100640107043065027612114050
3703013012008001002001200163703060030130511505120016370303051200616010
6370302105013028200105081371113054070130305230120500200540301107030406
5027621614050103102130408009200170014701561020300801306066103703020406
0030801130120080011305407013030510030103014014007002020065027632014050
1054102040801090030401400130220061302820064050102006030130200101823002
0012105010410200840400511305407013030540070130101303057040110300200206
5027641914050102411306003010050040107010456405010200710020404050130604
0161301200800113054070130305100305140061220051502040150205040040901410
0105027651410030301107030404050801013060401614006130120080013010001021
3011303056401103007020065011015010270500650276614230141200207030405408
0101301600200523054080103002040505123054040505170406502767961001301307

0010502080200611170012050140020012161216501110501304060020036502768123
0100467045015700150850612165014050100230150570011301160191020013016301
0502769910030601020061801013012008008015090020061201080201507011002513
0403200401050277096301400875070301054063014002050801080010100404011040
2020065027717610100630650404001057001130670415020504004090141001050277
2910030706010150102065020048030204027080013070010400604007033065027731
0615020022030700680800307030101305016063020501205002005403011030020200
6502774861502002203010703040401400205090462005406401107030506502775106
4014050100011025801013060401613012008001301801020400124021050277612150
5700113010020015010100907030102501016020011010301205002001307001054080
1051060040030806502777461505305410620084053030406405010502778815020022
0101008001021050540282040565613070710713070301040277978040062030703010
1303051502070301013081001304021050278011150203014006040701304064001063
0140060407013090401304701170016306140422001050278114640115040025141013
0704010705080030130400540150400604070130140501064050211014005018054040
6030406502782166170016100701301006307030105401600200350130540412540501
3012008004002030405401501305016020150612110140050130110610050650278311
6106405083002004050203014058063140405010207002211014005018054010677065
0278413840010170013161100130120700240040211014001063040400810961251703
0401140170012050400404007040306502785866100701301006307030105402401900
3040618054030110509100650278615130401020061150137030501130301030301060
2050618010561305051200402902001150801070030203011014003010064010640506
5027871861064010508060080101309062008080770405080101306040161400640508
0101301200800130140503001130305620301400654160020010502788186400200101
3032130400860251314045651040040200402001306081290507013030513070010140
0100502030300101505600210200240140080703065027891140503121308605058030
5600102004050516540405080770106401070014050650279013640503121306010105
8020240063655408010130501200530400376501301401205040040400704030650279
1171504011402004001501702420025700513023045130700108200405163052030300
1061402004001501206504050130406030401050279215615014003061301002001508
0405015400410801504011054004103050806056405080030801003015040115014050
1304050700200105027931161003013084043030560102001020401101400580400702
0080650516401200220210001803070401400704030650284260401303051302008405
0130200810402811960402824400302011014001302040012130402105028395040030
6703010204050502140660106802007065021308100301006401064050650284191508
0200706507030180101301200800637030153051300107011060400800708091108054
0505401070028125015406106040081010506015401505201504050130408060410502
8512650200104150504050703010130700105016040080070806180101301200800650
3703054011040565037030540130612005001050286126504020503054080101301200
8006502001080200706506514015063506454014050540401201506110870020065028

7226168105011301014040660101501200800701058017001600804007030105801301
0010580101301040630140060018010630140087501015012001465130102063170306
5405013040200603010502881380130400100951308020070650301020650305407046
1687501150802007065065140150635064540120150616001910105028918610013040
0140200140080200706501002004007010503010630203014001004003065706010150
1050807050116504006007005630416540301103007020065028101761902880614140
4066010801200100011502014400304002410253063011502002950170301010030251
3040020650405013040640501050281110610013040030160040051009010580290200
4002570503502654030110300702006502812166820040501703010513040200180070
4050100230801001304005301430204070301015302104001020803065053020406540
3055019086502813178020044501513010140520104001002007010505163014008750
6304007030401506704130305810063020501205002005403011070304065028141063
0401230100013004561604006101400105015820401670304016207003020503710130
4086050105028153864600301304041050570301081050100080305405015305180634
8010512003301050101004004003015057001405030010704005657001405070465801
6040010001500513070010405030010704005703010130700104050704658062075406
6010801008001070301051001305700140507040301303001091501505704640800304
0210502816131001302002150109003040400508060108011000802003010801000802
0030515055613010008062001302008104028179100130200224011507040400703010
8030501206509005102001303040320040105028181680190288010130404105056001
1080110400200100280170011307001016040050902005213014060106040090200600
5100130305406601015020301000610402105028193380304011501200141501029300
2130700105670463054011001301014066010140020010415040010040030501020401
1004003040050806012130140601504002001041301150400206503212001801013012
0080064014002001041504002065040501304090308105028201963120033040501100
9010130404105051060701010013010140660101501304030110140040200650220301
0100400306208016002003150103020405013050190810502821108060020034050516
0011080110400200100210013020025035010405013010064013090013040105028221
1630401400635400301001404105010013070601020021015010541050106061130602
1030282327630401620044014041050634703010514054050130501601060100650663
4405046505401402001400105040070064150100130401600922040110013040013015
0601001084001010904200130200701612650130010600202102002824158060100103
0540150040400630101301013090030801001302002150103040115073040013010405
0600102008010010200282526803140051841540140040300107030101604008101100
1304001501210104706203010371020132004016010010400305018030401315610090
7030105130100909010013030140060080503640040501301006401309001304010502
8261110013040018415401101124001604001320051506001020040501604001320040
0130100610130140105028272910013015010120010415015020820184101250400105
1400105070301015040013200501050040150108338015014004040400703002001804
0507050420640112001041501300100703010206040034501015030011303054050130

9013081050282815100130700302021050106210502011040113013301050100800104
0080301704615070301061303057030104015010063062010302829278030401100800
1040660101301330660120021530515060405031502130962005012001100130301530
5140205006115010150604005012001307030101400102040405051260022001637006
5405013050120030703020404009093065028302080304011400151506410405030019
1013061413011040508010130210070513040212002054050130300320051501014066
0101501015011303052002130701304010502831206150130100709012080304012001
5140054007201505131506301040422001630401070100210140660101100230630140
0600801502040501301405010502832251603020104208010310220400600200321080
0140501000102006066180040401301020350182040501302005280700150202200515
0150405020022013010802007065064030105150540201506110064018016010010502
8339100130200215010100400304004050540508060180160018015010100400306502
8341461600105120065056180908405010306015018012006030540701020041109041
0050101501016001801501020700265028351510013060503004708004202160010206
5037030302040160309150180301109030650130102040121101400501150400401640
5014002702040113010001302650283617803040131540406601021101400501210501
4001001306140157001130160820040804002001064016040705012570018010121105
0113016301050283718610013040660102002101703040240503121305410405070504
5640504002065030570110025130412001505301108030813090013040650283829610
0130802007065010111051130403014017030404003020404050130510001020010801
6100430101015140150703010130910508013703030109020081307030101930701301
0130540660106150103019005054050130201700210502839126160400202200566350
6458010130120080021000102001308100690050611505401301050130110200370650
2840108016007005015635064580502700501540801013010408015090020020108020
1507011002513090013040105028419637030501540110405104706501301013050120
0610640130100101405301105090200650284210614002705015408010570051304501
0130705056106401301001014055404050130401002681050284316630100414001050
1406601013020400124050270440115302050113010020065013016301029011020030
3050160654106200840530703054010400700202006502844136401205040023150213
0100020021017001008001050113010406601013014020064012050400405013030015
4105028451863020501150300150110020065018040091630703010540130704020064
0120504005001610180101530404105040040030670301054011014005016302050120
5014020060301050284620640120504002315021309620017005014105016302050200
8405405020022030400507002001006401401140015404050507001020040501002302
0307030540104007002020065028471863063011504009010254040901025240110044
0400110410540801010063061200250130630112006030400130105012006063018050
4002701101400206502065040501304064050105028482680304013154013081004050
7050450110013061306301164001040500304011640010406601016304010208020061
2401164001040660104050100230100130616082001504009001520016100130611501
2203020180200650284913100308014006122040012405070504130305561541040505

401140027051502050400409014100105028502380150304010604003102613020801 7
030401504011040027065015615406405018003040405014002705615210001020054 1
040501303051501303053011054101301006401309001304010502851663010046903 0
501305401301006303070305401040070020200650285281307001050140010501540 1
302040012405010023055402510640506502853156170011040030107030105401001 3
061140501251505130810040502002501150120501405010023054060304010502854 1
216301020106400650132005404020040010502401902200616104200650213086050 5
130601010564040120071005015401050801006502855156170016040706113030100 0
617020080061705056100130613050117040130501630204017040130204060301407 0
301020403015024001000101303153010502856131502030140054104050182240063 0
205013030510541040501030016561703040213040540041050285725610013061150 5
040027013054104070205040060098040501200800501163040504020503054082004 0
114050110321013010550040200140020303001020071001405030450163020501205 0
020054030110703040650285817620401530205014050100200105292004004070103 0
040051804003020406012050540304040060205040502704540130110030103016205 0
150850130612005001050285920640120150200220405302013010020010840010102 7
050080101405120060630110400306703010540110140050164012050140530201013 0
100200101301615305190013040650286015640116400104004040503001080404001 7
013081015130450101671050400516401705041303056001020061210010180301400 7
010030650286117180405067045015670418605018056301100105204050404007050 1
540400170130810151304501015004056106401301001014054050130408800200105 0
286286106401050141054080101006301105030020020110101307001050205040040 4
007704065028631810013013070010508100703010540130100630200250156301130 7
001050110006105011100061050154020401100061050140022001501130102040120 1
506111015011070246502864136100103014706130020020120408047065408030401 0
604003102613054062001611307070012306150540201506110540046502865661064 0
105014105408010100630401700113240040130402006030105028667807040104007 0
301054013015021106401070080540301104006013065028671180140140504001261 4
050670403090130818070601015010206504050130408030810502868146200220106 0
030100401103001610600400120040120150305401306001020056028150130305640 0
701301070401103002002065028697620022010703040401400205090462005406401 1
070305065028701565613030530113051301563051308404801013016301061301600 2
005630513082040613010540020037065028711910030120011040040150370301303 0
570301020401303010306020040411301010640130100101405405013051000102001 3
030510140010204028001011803014006040706502872211003012001104004015037 0
301303057030102040130505120060200404113010106401301001014054050130510 0
010200130305101400102040230103040060205065080105180301400290200650287 3
136405020084040053703030204013030103061305051200304006020506180105630 4
002400100061405080800305630703020404003002020065028748610640105014105 4
080101006301105030020020110101307001050205040040400770406502875176507 7

0501405020301405300510418010030501514006122005150204080703040611501308
1003030568003070505404012015061108040020065028762915010012006502015040
5010064040660108021000107030105406140010501540501302050674011504080140
0853040050621307090251630101301006517001001303051006405301400802008150
1303053011082130802008105028772661240010008010401140012013030513041200
1301600200563014005060509010220405013045010161860502040118605013030513
0102063014002100013080601480101301200800150130305301108213040806041050
2878281001301504011640010400570301070304070504101630401070304015013030
5100415302040501002305405013010020065040505613004405051006561205002003
4070163011060130705070050625401304032004065028792180600200370301010064
0580107105040051001301307001050102001046501308101513045010110130104003
0501405003040116400101001200650150530700689007090010402880166100130130
7001050164006113070304061030204050061213030560010200304050140506704030
9013081630110301001511301130901220065028811780600608050125624120051301
2008008040120150305405080105105090200650540504650130305640120150405013
0405040090200105028822661902813070010504004050614020150521301406010100
6306506102015013030510260913020071003040501030014050702145610100420030
6301150405013030570301050130600608025016102015053011080308130201802006
5028831440030201304120013016002005503703051303070010503011020010465070
3061801013012008006301806014161307011002530304040010010502884184050312
1308605058030560010200405051640503121306010105803011037101307001050704
0306113060101014001301401201506110704030650288519150130700108020080070
3010201301002001503020014201301040701410030200210170304040503121305410
6405056801080030130402105028861564012050400400200361501030100101301020
1302040012130120084054050200220803014002065050900510200130302018020010
5028871663011090450207050110140013030527041700150730400130102061470130
1020022063014002065050405013040300200201050288819630140047040701303051
3051160020030113051301562030300105130201301635530513082040613010540020
0370650294260401303051302008405013020081040291113040292101860213050160
1501040020020611501010063061140501654030110804005065029311630100480400
5011307001050405010023054080301070304050130305130700105090410061630107
0304050130201700210502941014086021307001050107040306501306010101400150
1060210065016014011082040650295124050201501020036301001130305801501330
1303053014006561306040107013070301040296106405031548015040110315430508
0605150130305301000501070501307013040105029712613070010501405061670403
0611309013081400305020802005070505406010101400540630503710505401860501
3070010201506110704030650298216690105011301506015026130410586050161503
1541203040030020020210401301060302025703040803014009705401130104020037
0204080150210204024012050400404007040306502997613070010501405061670403
0611309013081400305046003050540801013090130810502910316405013050160405

0101006301405012130305801700116700108010130305370308040050513050160207
0700121303056301050315090200405020022030101006305015012050140702040163
0106013030521703040240180109046200130701304010502911663010703040501303
0513070010501405061630107030405013040501801001050291218610013013070010
5020802006130307001050140506114002706160210305016305084030600911012040
6401540281403010504050600911015404050300101505403020170026502913116301
0840305015001001305406150010013014070150010013054063010601305010640130
1001014057040120150611080400200650291416630100412006030501506811301010
0640580302500801054013080605051301600406010507014018016007005401309680
1506540900130406502915680150310501561908121306080105056370305015111053
0307013040105029161361220015104017001001303010064051702461130305614001
0065700302040600102003020401502050400404007030406502917271504014007024
6504050465013030516500150164006003010065018020115013070010504007024650
4050465013030530110403020650302040200710018012400100061705041303051302
0071006170246561300202006130513010540020037065029181361504002070026180
1004207002140404050100230204064017030101302006063013011302301100013040
2105029191316304010200612010801024101303051306003010050040107010451507
0030207030101303051060102002920191003060102006180101301200800801509002
0061201080241130600301005004013030510503001013050300151301600200515013
0305703010203030010100410200292181070700240501030016102008404050103001
6130105400100302650292217640115040040240703710508010130120080063018010
1306040164013020404050465013030540506301063015090102002923136130700105
0208020061211014001303056301001105163010201010606140502008404001061630
1020305407070012130104029242080401201503612100640513011501001306111004
0030651682001006580150315130305405013050120015080107003020301101400301
0064010640506502925276100130150401140060070040040405046501303051650015
0140645210502040801013081015130450101500401064013010010140510208020027
0800204022708006103070502708002040270800164016120401305012006401302040
4050501902001050292612801405030530696100130150104051320013010200210150
5561307071071308201040292718665250130516081100610701006263703050180107
0020010400513050265613020400126140010501513200580101304501016150580101
3016002005304050130901308105029281463069117001001303010064051502040304
0014006501308018300540160210020402514050184405013070130401050292923110
5020403040014006501302003130640010097065013060210306400140065080105014
1020401304050202008040120150361210064051301150100130611104005012707001
2130305150205040040501309014100105029306100130200215090200501070301013
0100640130408060410502931156304013140020060305011220015104021302300200
1010013061150140530206153057005130100200105150153051201506190013040105
0293216100130150801051306911001306150850170304024050801051305050310505
6153051301140200140052015040040501301000122001050293323630401150314002

0060305013069160102540680011002540700200701610013061301400600806301400
8750150140503620615302013011402001400202015040040501301000122001050293
4121501405073065070301015305700513010020010520037140501306040124012015
0611080601006502935763010044002002050140505111052105053010064010701003
0650293617613010404105016001540300701021801001301011006401702461130305
6120036113010640130160020063014007050061801013012008004080604105029377
8020700265801600700400540130200380580190286180104120054031500401050293
8166701416500406461004400210503020404050406012050540671050305401303001
0915017040130540809045407050130602103062015061406040029020010502939136
1001200650680200706506514015063010043154040660102130210501400801604002
0220061801013012008006401201506160121001050294028802030116007005012700
5025804050540405012006030501703010581902164050540405016007004005130901
0856405054040506006080501251301200800640505404050110002001005016401201
5013030530109003040540630205020150611508060540109003040650294119405003
0130700105014006007006140504650130305163010120405003013070502026400140
0600700400210400161501655013021064003021040013070502026400306201506110
7030406502942121501303051070304040110470650405046505405030010656130707
1071308201040294386400302013014050013050800200251303050160640110701003
0511301130701304065029441060030100130305130604016140061301200800213081
0015080107003020301105303040640501050294521140030401168101301020405013
0204001261100401309030151501309030154005051070501308083001613040502020
0630700202001303051202200613030510703040401400905070650294625630140031
4306115301302040012130121304001051018605013011307001050900304061405054
0610063061140501213070010150730130105016150730130102040613055016130520
4061846508503054060304065029471962070030201507305011301020130204001280
1307001050140010501540130204001210640506502564050563014050106405025640
1103842110140050113011302018020065029481364012050400400400306405010023
0540502040012630140060095210401050201700130120040012130402930650294914
2305611014002105014008010904620013070010501640061130703040640110384211
0140050113011309001304065029501661001306130630115073070301051101400405
0200251003015040113011014007050413030561504011501507001020040210502951
1516304010208054015011507305017030102013020400121040030107030105401508
0107003020302008405670020200103010064010640506502952191003020801021303
0521050106210502040300510411070304040180101306040161400613012008006130
7001050140506121302193062080200612130305163010205401306001602006502953
1261060400703306502021307070012630630113304060401030315401307070012630
1014001050540210004005654030110300702006502954610604007033065020213070
7001261503550403040810952130201802001050295513106401010003001540130707
0012405080610054064050400840012003305406101006307006100614012050400404
0070403065029569101702141013070010501405061150120080010616070580110110

8017024650295772030508060700110100513040640050040130105014002003706502
9581761307001050140506167040306113090130814003050261050540405013035051
0002008014003200104050400840051130150512006001304105080105150704013200
1307014030105029595130700105090220061670301020025401040062030650296012
6201105040504125301400840302007100511303051020071005161101204065613060
4010701307030104029611363010506013040054040506003010013060401614006130
1200800660600200130300406061301004020030101006305013030580150101068020
6502962141303051026091302007100304050103001405070214561010042003051501
3030522030300107030104029632263010506013040054040505073040501306040140
1801810125130120080040502704406400513010100630501303051003013084043030
5230120500200540301107010030650296415640157005130810151304501011301305
6630702615013041200130160020053051013081061503062015061107030406502965
1680170012002026180101308030204706113030540600309010503051304105080304
0150315401301013022001700154010300200206502966630102080200612401140010
5015406301040040400706180606801070304065029671516304010200611501370305
0182004011405016104006009801305016040508630540180213021930106405065062
5070405130305102080200650296817640501900304040405018040020010703010130
3052070021162070022130810030401315130106080103550404050061030302018020
0105029699613070010503154618010501305054105054060230501615013030530407
0130408605010503042604013030513020084050130200810403011130403022100030
2400130200640303880101450101301200800654040502704100030254060101000302
6503041280102800706050105030305130140200405010023064050270461064010700
1080200813040640506503058250902001303051050902004050103001656130707107
1302008104030611670413030530110600308013030567045630205012050020013050
1603011070304065030710107030406509001520014050130810151304501016540705
0130160020055401000180306503082216304010400802020061801015080605404016
0030100130305130604016140061301200800640121050540113012130810061330406
0401061502050010200140501305016023010012002540302018020065030932163040
1060102006180101301200800801050900200612010802015070110025130700105040
5010023054020150611300440505401006561500120061130120080067040200651120
5002004040170402006516314005402006030540213021050140080401201501303053
0109003040540630205020150611508060540109003040650301013500402015070110
0251307001050160161130606110150207002612110140013030562015061251106040
0571065030118130305102411306003010050040107010455004013010540020037065
0301256106404001006401306017051023060130403200406503013963040102050305
4040503002002011054030080701620150612300200201105402018020010503014561
0640400100640130601705106401070010400802001006503015980140113070010501
4050616704030611309013081400805408010200680051082200650301611614011307
0010502080200616207002612110140050163010011301600200580163010208010130
7070012408800200650301768060281501303058105040040606506810504009028650

3018863051308404801013060401614006130120080067030010168105040090052006
5030191410600200313081040501304010400610600200313040104004050130810610
8101013012008002704406400516207003020400600200365030201164050110140051
5060030100204040504002001250040170011504004023002004005040030020065030
2120640501101400515060030100302040405015080602040176131304006020506113
0105163703021050204040645620084051508010700302030110140030100640104008
0202006503022136405011014005600301001306040161400613012008006160040030
1801306050400204061306150204015080107003020301101400303070130401050302
3146405011014005405014020402130301030613050512006124001000162040405080
8003051508010700302030110140030100640106040706503024216405011014005102
0010204013022001006006801694070161050730405013060401401801081010251301
2008002704406400511508010700302030110140030100640107010030650302516640
5011014005150400100640130604016130120080021402005500401700147012040470
6540501301200800170011504004040060020036503026863054050801013060401614
0061301200800203030510015040065030271865613070010102411306003010050040
1070104565615650703010563051304050030130170301080101306040161400613012
0080065613070710713082010403028278002002302040405003014050150806020405
3030204040504014030204001104015020404050300200201801040120071005012040
8015040040801056061400600180650540206001080400204015080602040207003020
5080903013011014003010064010701003065030291623014002701307001050900304
0611561540210001020070304080405010541040501800301303056401305404050501
9020010503030228011004063520303041050850108018092004001303051304001080
9200130501607030105130140024103030600301001303057003020130410501301001
0406302050120500200130501603011070304065030319405010210501301056140010
0656110010406113090301563014002065061405013040300200201050303211405013
0700105080200100614105054062015061300107012030872240130410540802008650
3033186170014060130501608002004706120025404050102105013010550040170011
7001100540405052008405170018020010100405054022002540103002002065030346
3010208020061240114001050154080400404007061806068040070304065030351014
0150730501703010540603091501805610400203040240120150612510300200206503
0361561700117001005011305016020084058020086125161504009025406010105240
1100440400110410540170015401010050965030371516304010200611501303051026
0913020071003040501030016101004200150801070030203011014003010064010640
5065030381680140070011301002002108100561304060201050612501306021030700
3020600102003030700105010200104650635130305616301020540130408030865030
3922640114001040040405020021301020026801014061301305016080301102002670
5041303056401140010400404050720154002001046506351303058016301020540130
4080070806503040221303051307001060030100204050040200710020405004010401
0400204050040108101020405304050300200201102040405010807030405070030204
0405030010602815056400701301070401103002002065030411590052001308060148

0101302200613028200240120602400110410130501603010700101005402708001307
0010704030613070305401020037065030421410030601020061801013012008008015
0900200612010802015070110025130700105040501002302015012050020054040300
2002010503043168011004063520303041050130100104040501002301501014001010
6403014020043054050130305106401070010904706503044940502080200807030105
2080200564050704030901308180301508060540104054650304511301037101307001
0501405061670403061130901308140040508080030515053011082130201802001050
3046176405011014005150102006030130200101840230020014006301070010100204
0405020084040056304003200101308030202140200563040024001000614050808003
0563070302040400300202006503047186301004120060305014050100230202006030
1130101006405408031654021302105014008015040010040501405013070010501320
0406162015081001703010501509020013040640501050304828130305130700101020
0603013020010188040050010200608121801026095801013060401201080103001610
3703052060801804002001013064100106002003405060030130580170011901225405
0103001405070214517001540106040023002006503049106150201506140501002301
5010507307030105404050100230530402306010503050198015090020013010150012
0020084040013030520108010810101301200800270440640051150700302030408101
0130406400106567030102030300101004102003051963010501200603050120010818
0200165409080200130900306140502704510208020065030521180150203014006040
7013040640010630140060407013090401304701170016306140422001050305314640
1150400251413070401070508003013040054015040060407013014050106405021101
4005018054040603040650305424130305130700106003010020404050800708050040
3703040502704800708010065500403703040502704100658007080163001025106003
0100401103001656130703010401301004102003055126106404001006401306017051
0100604013040320040650401302500611000102006017052070030202015061106802
0650305620610013013070010501640061130703040613011040150301004302500400
4080102040012130305130101064013027050080570011064013027050063020502040
2050400403014007030406503057980106401070030110508070130700105090030406
1407070020040054063015401060400704002650305819630100480020025013030501
6080105700113010020015040502030405003063010503104005402110530101006305
0130700105020802006115015040040130140293065030598207003020109270130305
7030101003062130700105030110703040650306010801902200150670413030581006
3011060400600805020130700105030110610050650314260401303051302008405013
0200810403111130403124400302011014001302040012130820104031335410620084
0530304086050105031491307001050101001040650130903015610640065013072015
6540213016002005540106100506503158163010207030105410405020025406163010
2054013040803086503161864050130501604050103004002001030561308410500301
0800307050602103013030521000102007030406104006007005157611630102030540
7070012405105031716617001400400301070301051101400501630104060400202200
1201503040106040705120150801017005010561002001802300200527070012130104

0318815013070010501405061670403061130901308140030540350140013050701040
3198600130410508010516704130305810016561307071071308201040311027600301
0013060401614002100010200704044002006505161301001080101301200800200616
0101504004010422040625008010514050203041256150730501405013060401401801
5024005018010514050203076320200104031111457001600301001303058012006501
0401700160030100130700105040504650523013090013040650801080030130402105
0311218630100414001050130100401501308204051501300202003030564050103002
0200801504011030020200305080605640502080200801501303051000501084010431
1315617001001303010040150301250565610709005101250103014003002002021303
0515013030020020309003040709001040311417669010501130150601502613041058
4030400514056550170301065506809013058010701401050150130020200301063061
3041020130101304090102003115296150315412070301015040030020020210401301
0603020257030408030140097054016901825401801013045010140702006801614002
7060210304050150121301050040130104020037020408015021020402401205040040
4007040306503116251012501015051150400204050010013082540506002004308040
0205080109060020051680101306040161400168010130120080010140025113030515
0130305309108060021020031171810125010110040130903015614020021304070200
6806150570501304050202006190220070301040119012201507003020405070740130
1406200311816630140090702006004203030501606301400403008010130120080040
2008115013030530110822030406004001308060062003119116110090480104030010
2061100080080040509064002015015020200130190614003090640013084010200312
0301304040020061150130305606002003020404018010130604016140064018010130
1200800616021000703010204050704059001520056219505640501305016040501031
4308010130305210001020070304063015410630120400124050102003121216170011
0010303054014002706140115073013030510013061230504002704016345017030105
1215011630620150130300109150104706540130107070012130607010200312215640
5010603040635513010130305656408605080100416040040602021307020065130650
0100106130101303057011002513014062003123156405020802008030110875020208
0200513010501402003705408050502105402401704030611501303057030104027001
4001309046200312475040400705401003010301500405080092005401301070700121
0003010900312515630105060130400540405060030100130604016140061301200800
3010100630501303051003013084043030523012050020054030110703040650312610
3030540180101306040161400613012008001501303055613010005010130840104312
7216306150401801013012008004050300320051100301406130282001040454050270
4560270512820040150804400203040140013030515013030570710782010403128114
0160030100204063012705002040130120508060618451501303056040107029010200
3129251304040020015013030510630313030103080101305051200610630313050512
0080101303010306606002001303004060613010040200203010320010130101330406
0401061501303052401400704030650600210200313016700302021501303055613081
0061504011047065040504650513021930615013030556130703010130202102003131

1913040400200150130803020400320010801013028200250704040013030530102001
0204040501101400515080107003020301101400302030902120030020620031322261
7001100030010540406320130900303047061130305406003090105030513041050803
0401503154013010130220080405054040100400904640110384211014005011301203
0600400120020806200313331101110511305016014001006120022040616003006110
6401301103710613047050630456301406306456317705061304530010101150670413
0305810080301400100020050204013081015130450101630110100020050204021303
0513010002006200313427150130305705045703040130601705610507301301000105
0061070304040180101301200814064014004200105080604017001400206021000416
4014004200105080602110120080040040640015013030570301040600210200324260
4013030513020084050130200810403211130403228400507103013020400123012001
0280105405020021307013040105032318140101006306501804002001523056130810
0405020022030400507002001006401401140015404050507001020040501002302030
7030540105400465032424130305130700106003010013060401614006130120080064
0121050540180106040051101405004016040061070301013070200300401302040405
0465054050630106301300801070180301400400700202006503251710422001301402
0040501306040113010130120080050040107020031301058010106402015040100412
0051308060505404014007046503266700302070130401301000102613030051451307
0710713020081040327101307001018605020303001060030100562416003010013015
0601504050910503288500403703050603054050603013054050401405105032914500
4060615650806008010540502006856370303020401306040706130129012006130180
1045100301030140140030020200650321014610013061117001800303050180101301
2008001150130801060030100341042305402301001200254020180200650321111100
3010400680120404030201304064001307001062030220405004013010200220404002
0037065032121663064002001017001304032004065050120606200660540705042002
5402002501129020050166040705018012003705015070403090130811501406100506
5032131663063001050130140010501203050806054151630205081001301006304050
1030140301503550404050130350561305016013407010503214148070061006124015
0601040040301001106402040570011501506010501204067006100617070012130600
3042401205040040400704030650321515150401106405021101400501130700105017
0017002020061251600200616034166028612840420025406540301106040020220065
0321611400400318010350625407050130408001370104706502002540600680169407
0164040120071005015401050801006503217138030140070304050806040116008010
3054040501002005170105037124012015061107040306503218818040502015040640
5012040502015080160100130110604006650321912140113070010501405061670403
0611309013081400803054035014001304016105073012401201506110704030650322
0216140113070010508060100618040161540130501200203040112001461150106002
0036140505117010461801051610010303054070061006170700121305012001307001
0205040040254002070026503221963050700101005054040501307070012130145010
4650130707001213012022003070305401020037065032221364050190030404040507

0020200211014002002550040170200800705051150140501304032004010504050400
1004065032231463010041400105014066010130204001280301400205080104020010
5405030100110563703050155410302501016020011010303224106370305014050540
1104051054650214020050130401902200616201506121101400501106100506503225
1115020022056108090302105054010640130100101405801040120150618010510600
4003080650322618163040105430540204015302050140501002305404050130100200
6501040300650801040601205054015080107003020301101400180301106040706503
2271716304010200611501506061001304011301013012008001303200780506002003
2572007014001203040505150701405406150806054018030110290200650322876101
0063065040400105700113080400815020504004090141001050322911100301064013
0804008301105080701307001050208020061110401505406301540105090020065032
3058017020080070505406150400900200150540405040090020065033426040130305
1302008405013020081040331141011105113050210140010013030563014009701302
0180200105061304050180100105015013030520150703010401820104013321261400
2704011068101301020405020022015013030520150240140070403065060021020013
3366400620307030101303056208010213030562010301334284013703013030530200
3304050100302105080103680564013703017613204013030110104009001520065040
5055014051400204064013703014701012040125012040700302040100630204021806
1520406130305101006301308100656105410130602103033528147065403012110540
5611006097050413030580150304040070304061121540801600615020408010130410
5064061301020406301060703010204035018801040116009140040256302050401400
7040440010030622040620150130305100080620012008104013362913050210163010
2130406405010504050150806054061761351405140054061630613012008140270800
5401630102270800801020400121303054050130406405010506130405132001050130
1150400807030611301016301011020404070200680120150700302080101302040012
4060962001337176170016007005014050130502101050401050011005406405020640
5050686122001510406406601067010601012504020010406160070050140505404010
5001100110003010900133883010601301309014100105070509041005406170430302
0180200105070700121130104013392210111051130700105014050611700202006150
7040513030570301020401700314002040350648012006030501703010540200108163
5064130404002006516201501303052401400704030650290102001331016170031620
4040508061002040640501608030405020406170071100040013012901200623010004
0013010030621308501320064009005065021303051309005065013311655013020124
0030101304064050650673073061730713013004104133121361700101006301304050
1801006506130700105080101003062540402008004016704501130305620060630513
0110002006200133132661700100130400911080540505401011530105002002301401
0014030204080120037061610604001700508020010100405054013050210101006306
5015021064005017062005640151027062005150102001046501301802001200133141
4630646003040070301054040501100912005150040601030611308040050530140065
1640140030250061251130110601020013315136301004201506170154611303054050

1002303011063065013014212006201507054130305406010630133161510030305010
5080702040130802001200150802002004004045013040640016130100400306170 01
3014004040070650130110030103013317241003040507001130700101070904020404
0501303051501200142204060611612001422040200840563011034650305404050465
0130305630101630150901020013318141004107030401303051304070610010504050
2040613010011030105030160061505405304013010501630110140065013021601301
1003010301331935130085703010204080170013113060068020011040054010509002
0065013010204004620017010505402013070010101000300107030105405013040640
0801700170052130600680603010062040213060505841413008570301013060010200
1630102030401064050618018291303051704013054062015070030207030101303051
0601020013320231086026501301871230401070052616150101400130187121064613
0615054021465080101301702001210601306507050150211020406306201506180102
0404011001400306113011003010301332117301004201503020408010200606301303
0516065860505304050201501020036130305613010640130160020067002020013030
5205001020013322186304012001101304064050650130187121001306157001401670
4501130305620060630569041001303056200606305640171454013011104015016400
6030104013323184050130406405010502003130904100614017015461130305703010
5804050540405010080010508256405054040501050400900200640124306140024103
0133241630103710130305130901410010502904100540610707002130405018010010
5015030011610400627030105401501303052015010008062001200810401332516620
0413030513070010502080200612100010900540304010501306160010200162080101
3030513040640501050130100400130620150130305100610170710713326166150730
1307001050900152006540405015301302040012405090101901054061007008080101
0030625401302007028020010100140010040030650640016020065080200101001332
7136162005002040120080054064101200540614061305406120080013040400910651
6201501303057030102030300101004102001332816101110511305021010030301761
3201502050400504002004501308101513045010167105040051804007013010501404
0070205061602008205060200181340103013329146150205040050400200450130305
6200606305613041200130160020058015013030517043030408605014004050205013
2001709001040133301710150601130502104050101400405020502801830054021050
5108001708030511307070012800708010506201507003020703010130305106010200
1333114640501010050400405020503030562006063056400704030901308150640051
1320051402004001050617040045013051200710012020010401333220101506011305
0210306040050201844050130506011501400100104005080301400600800705021301
0063080109407013070010801010030254020080061003050100630140702006801333
3256100200508010210640020506301400220035040022003130315301051301630106
1100405013090301561400105013072015619705013030562006063051504011020010
4130305301070052705020401302003601530130210400610952002040400951020013
3341461700202005040110400301080102106400205040501101400130305613082040
5150130305201503091080160021020013335301501304060304010506130406030401

4006130406405010506130406405014006130100150400105061301001504001400613
0901410010506130901410014006130901220010506130901220014006130600130070
1050613060013007014006130404009041001050613040400904100140061309011040
1050613090110401400613081809001050802006354061308180900140061307001202
0010501303052050010200161307001202001400170413030530540401000802005613
2001709001040133362464012015030406405063014064050517001100800101303056
2006063051402001150102065030540130600102005405014020054064050107090130
3056200606305801004800308003013014021050133374861700400100630303070010
1507040130305703010561507040400703010514060207030102076320614001001303
0564006008010801050806020401130305402410564006003001013050160613030518
1001504006003001580304011008001071044050516920017635012051302010301102
0650703010130406405010508200380101761314701011054017001100800614050550
6920016201501402001303054080706301333822401201507030101305021040508200
3801040180200800130305305605051303058010130700105060030614050100230620
1501402001303051004200140100462001333913130700105010230100065020060130
1400130305610600300650563011060030065018411301130305620801021303058601
0213340174012015040840412118440502003130204063020502006063013030566001
4004013050210105062015013030522030300107030104013341810111051130700105
0140506117002020061130305700202001205001020013342366028652202005619010
3013343135613070010109030107030102040640301102040053010600200320404050
1309003040140013010130506200620150213040640501050200810401334484008104
0054010640103010065056030140617043054013200120200104013345810111051130
5021015011200603050120300154164023002001650700102001334666417010113010
1303052170050566020013140501020013347862300200130406405010502150305404
0501303058080030120210200133481263014009701302018020010506130405018010
0105064701700154064006203070301013030562080102130305620103013349231011
1051130700105014050611700150208400401304064050140050040930100400406550
4050100230150400406065508040130204070301055040507045400704004650518040
4007065506602008655060200181340103013350621011105113050210150118303050
1302017613201303014001014001040013620055064014030204001040105020404011
8011303057030102062501400704020625014007040140020625014006001302062501
4006001301400201303014001051320050407020614020015406405051506524005080
6051303050210150120014130502101501060400502085160013090530204050465013
0406405010501004703040501401802008005017030105408010176135406401403020
4001104015054030201030110206507030102082003620150130305100080620012008
1040133513540020031040504003001405055064006610130102040504003001640501
2400100010400404050707304008030135018703010207003020145010150400100200
1701050550630110875061020080010502401140010400550203055061303051070304
0401801010030622040620150130305703010401830104013352253011083030201305
0601405027046301150400243025504050176136306170322086050550130140140302

0400104010502062015013030570301020303001020010010213353701011105113070
0105014050613014004600306121064001305021013011501067005030204013010970
1401000102005019002001050150156302050170014701040040801460030618017001
9704040040801504003002006163014060400150601050308410500150700302040201
5010670010130502108010604008101040502040613030530110604008101040501308
1006170016013040040655040400170180160130655040506200183127003020401952
0030100306220406100306255064012015030204015040067006120060630130305630
1150400502086117613540502704512411507003020402015070504130305709001040
1335411150400246130010101164006008065801501303052015022030300107030104
0133553030135018703010550801012110550630112501105506301160061505506301
1250116006150550630112501160061400550630150601105506301401403020400110
4015055061400100105013030515013030520150703010203030010300510413356141
5013030564030110204005109030650703010130502101011105113070010501405061
9030617030105660304061400603010401335714150130700105010670065013030562
0060630530705054013030580101304501016130160020056170430540707001214051
0501335812613070010501067006501304064050105061304064050140021000102004
0112040060261801004184004030612540015016150040140210501335922101110511
3050210100303017613206250140020650601130406405010501045010507030105504
0503301210255070030201450101501070200805080301106700105062015013030510
0080620012008104013360193010503040105040051304050180100650613070010508
0101003062540402008006130402003806508010130404105053050100020010502025
4050040301103162006502080105113011003010301336164030706501050110504015
0010080611600700616100400306140010040010301336212605051303058010130700
1050600306140501002306305040034306050513030540024103013363151060130201
3050160705013060170510030150401703040517050413030564011042001020307030
1306017054002065010020010213364715013030530705013020180200105061704305
4060701020013365860013041050801051124130110346506301016301509010200133
6612106404001003026365540801013050120010100630650101301040050119705011
3030561970501130200606301336786100130612002501150119705016014400501620
2200150180180030650113060210301336882002501140054080070801050405013070
7001261307050540307050120210200133691710111051130700105014050613014002
0650612013070010501700614066010802200151303054040110013061620150705041
3030563105133709101110511307001050140506114001006113030561006306110063
0160410413371141090308302040170401302040610100080200302040700506220406
4050109701303056200606305801004801780671709001040133721815017020080050
1130140150570301013060401614006130120080061303213080121050150108403050
5161300801005040505168403051130150601501505201509003064013563013373153
0107070021303051304050180100105061304050180100140061304030020020105061
3040300200201400610400621303057030101304064050105061304064050140062015
0130305100080620012008104013442604013030513020084050130200810403411713

0840430305130700103054018010130604016140064018010130120080063051308404
8010130160020056561308201040130600210200342181070304040110303801013012
0080064011060020034050516401105073040501306040164011070200380105165613
0200810401301000806200343326100130130700105020802006130140014001050113
0601705100302301062002103040014001050204070130401301000102301107072705
0540500100130700200580101306040161400630180101301200800630119010002004
0507003020630112022001301801020400124021050344103010371013070010501405
0616704030611309013081400163010203054040100080200562007100202001040345
1161307001050607061801011014005014070137105016301020305407070012405020
0371301040346166102001013070010501640061130703040130700101507301301020
4050200220561308100610541013010902001913070710713084010434716610013013
0700105020802006153050430204070301020033010502102040170014071004004020
3040407100150204030801060030100341043481618040020010703010130305207002
1140253505230130700105030110640506502130160020058010130707001261308003
0130130270104349291803040102006113010401210501104105406401600308054040
5013060401613012008001505030015060060802540130120080016506010097030105
4020608014050130604011508010700302030110530203070244050102341013630100
4140010501416644050180800301101321301621040705613091020061305013051308
4104341112150170403060121000140061004200801013060200461704030619013081
1501024014007040306502901020034122763060301040150130200108100046513005
2006200618513005200616030501305701050130100920064050130350405010704030
2105010410521700502002564050107100040505407050140200501507001005405070
7001213060701020034131910704030650305401103001405040812001026400401500
1030638015020130361261004620020016010140017040306113041664300202001610
0301030405070214101303002062003414278030401100800105017030105130406400
4014305407030104064005130141251301200800400120304050601400580304016002
0040021050400130350150306201506110703040650130100010240130250061801013
0707001213040510503415203010042015030602180104060205054011053504001507
0501040105063004013020306140502007100200220406130020200613052304591025
6200210008062003416168017020080061801200603050170301054060103013070200
4062430501540235040010540350400105070061400101203060040961500306300104
0506042001003010303417870030203710501540240120802006165305031710130113
0208062003418176370305012105054062105013010020010130400102120020501801
0511002001090015200561004200501801051130601020060102006180105130101301
0611014011405010503419198010013061200250121704210501608012005016900304
0611508060540803703050154018141050064071005015402030404071001508010700
3020301101400302030902120030020620034201063010049041007030105401230106
0900505801400270651301802001010014050130406405010503421216401201503057
0301054040506030915013013050703040405010640502130160020054040505640505
1801030020620022070301020303001088010900342226100301470611307001050770

4040040405046501303053011040302065040500100130700200580101306040161400
6301801013012008006401305408010540140503002002064013054050540405090051
0200342322630140050807013030080170570504513013040501700503058400101700
1807707050100306254010013061401700110013020022040100130611308100656130
7030101302021020034241710030405010200710020404050130604016140061301200
8001003013030561501161101204030703010541016801080030130402105034259100
3030140060130650704011320040501630150601307040140070403065034261110030
1034070210505012002501500401080400821050501213081006561308040018130703
0104034271210030120065010130700105013081004004025300200201203012305613
0305130707107130820104034281264011200603050120130120180530305016023001
0200165070010200163020501205002001305016030110703040650342976101006306
5040400105700113067041502050400409014100105034301010030302040401070141
0640301400604001600200650705056017056301400604001004406503431326100130
1307001050208020061305050640502570011301002001506301213070010210501041
0563064002001017001309001304065040610068065070504200254010200370270800
5401301027080013010063010100630130700105016040080070806130307001050160
4002022006130630115040040302050140640501050343215100130130700105016040
0202200613030700105016040080070806115085090445012040705013054102704170
0312040230205040040403200401050343334610013013070010501604008007080613
0307001050160400202200612304020200130301030613050512001700400140200650
5011505020802002130305650370303051504141616020061130504140530401200161
1307070012637030501130110003013080101705011001307001050208020061530103
7650130140120150611070403065034341464011200603050180101002001054050507
0010200130110013040400200806511501240112006030400402520180200650343586
1001306150850120500200140613016163014164015085024070700210503436131003
0150200210102609130200710030405010300161010042006302050120500200130501
6030110703040650343723640114061302040630116301420402130400104001002002
2040705045017308010130140501405067040309013081801630102030540371130800
7080240170403061654080101301000200801400140506503438961307001050106070
6508010110140050140701371050163010208010130707001240880020065034392010
0301502002101026091302007100304050103001610100420063020501205002001305 01
6030110703040650343723640114061302040630116301420402130400104001002002
2040705045017308010130140501405067040309013081801630102030540371130800
7080240170403061654080101301000200801400140506503438961307001050106070
6508010110140050140701371050163010208010130707001240880020065034392010
0301502002101026091302007100304050103001405070214561010042003056401150
8010040040405030010805610600308056566001020013020017100105034401061064
0108300200540340107015004010100630303040301102051563011101204020150611
0702465034411310013061602815020150400630105014050465054023020150611070
2465013035012050020054025404064050650344218801301064030110403020270800
2040302708005080701630180020016501006303030700105090030406170061006170
7001213050120013040010205040040251400207002650344334617001400400301070
3010540110140050121050140010013061401570011301200330102001041501090420
4070401201501070241216204061001306140157001130118020408040020010610013
0130700105020802006130308100304013154015057001130160820040210503444116

4011400105015404050204002104200606505164011200603050113010540100230204
0505070010200344514620700213070010504050100230540640123010006140703001
2004011400105015408020700261200603010802010802015050201020034462410030
1504011709002040261845150400100640613030540500501068020014105004040040
0802020061401290182204040503505150561301507001020030204021050104107070
0123004104344717100304016013040020404050132008056302040150132001013017
0301013030565670301020303001030051043448710030150200210101007008021308
1007030140130100010623449810030311308100640110241013021930640110701043
4501610030150800303040080150401180030703010508060106150154004104008024
0110681013010200210150560401070100200102345110630640020010170080770618
0301806400616007006140504020150100200102345296100130611405012561501030
5401304005016300405040201502701043453106100420802006125405010023061010
0700806502130100010240504020150270104345415681030210505406210504011030
0400565020401807030213001017054040501002301505402015061801030020402001
0235426040130305130200840501302008104035124130840430305801920013060401
6140061301200800317030130403011020520060301163010135085405005010650030
1500620021701071048010130600301004011030011501303057030102030300101004
1020035219401108040081303053030501604050200840580301404060203051640110
4060208030140200603030540502704565613070710713082010403532210111051130
5016017002020061507040400130305703010204053040506001301001000102001303
0510200710020404050130604016130120080030113051301568015010400680206503
5411615010207002620801004207002400200603040501002302061301013030540020
0370130140620035515101110511305016015067041303058100803014001000200502
0401308101513045010163011010002005020402130305130100020062003561315013
0300109150302040704680140060070065704611504011047068725301020650614050
1908121306070102003571313070010502080200613054070700123004104613070010
5014050616704030611309013081400305404010008020056132002021020035825180
4050710503056067040305802001586050180150130305108003040501030016105410
4050103001803014007005250806020703010540860200140015013030570301040240
1109050706503591761303051307001012006030130200101880400500102006081218
0601005015130102304401040080181010501251301200800270440640051207003020
1305030062003510244050201501020010413070758030305130707534010701130105
1090704130203040130910261307040301309013081020080705613070010501040202
0065013060101014003054070700123004104640202001630102056102620035113461
3030560030100204040504002001250040405050980550040370302040176131640140
0840304050150500106301400800701301270304056401107040200405040704020063
0110501009040507040200513018010204001215070030207030101303051060102003
5122864011060400610130282001505700170700280200140060110100030020012565
7001403081313640502030400120306503084019200101640060400600200365083010
5400302606505164002001013080302080105406160020030400240010006140508080

0305630703020404003002020065035132810630313030103080101305051200610630
3130505120080101303010306606002001303004060613010040200203010320010301
3304060401070030204013030520022040305130403020613070010504004706504050
4650540110403020650405010094010200351418150400470654030110604070614701
2040630660407061401160400312613020406106401301001014051020802006502300
2002020406301105021020405003060021020035151110111051130501601504004013
0801002001130101303056130305561301000501013084010435166150103001107005
2204061014002600301003410435175640170030207030101303052707107351834630
1400720061720056720016002001061504004704050010030513010840305130110840
3040505300106306201507001100200210150401400507002001307001050106003006
5020025402130100010261100140611309030156405040072010801504011040072010
3050806056130101303051304090102003519464011060400610130170401061302901
0200352046301130900304014006301130506200352146301130900306301130820062
0035221664011060400610130181016301130140614001501303051060407040501030
0164011504002406040704050801013010026200352341501504001301507001020035
2412150112006030501202130810023001020016507001020016150405014051301600
3018010515070010200352513615010207002620801004207002130700105040501002
3054031400540200603054021302105014006213072200621302040012130405010200
3526750040160070040013070010502080200618020108020150502010200352722130
4040020015013030515073040501306040140180160020035012550040200140040600
4003080113061505164050130321303442108006840200406004003080130615051610
0020012102606435281764050130501606130461261301507014040600400308013061
5052070030201504011060030010130305405070214513070304011501303057071071
0008062003529161501307001050104003065020400121303056110014061130903015
6150801006140401200710050154060200167030150105102003650400312005305040
0262003530830106801054013620054061071045404050808003051505100080620030
0206200353116613070010168105011301020405013020400125613081004090410013
0401210501041051501303052702145306002102002901020035322150040162005005
0113020400121307001050190980105014050702145018040505409001304030508060
5640505404010040090464050540601210021306001020014002170050130305700302
0561308080030130202102003533133501400704501046003065051108306508010514
0501601620040507005263063061630216054080105182001020035341161001306113
0840430305130700101700527050113087501502002501301000806200300206200353
5141307001018305014120013040100140540508080030530110406050180105150902
6301104060501801051301000623536186130700105020802006130540501200355040
3011010080010703010540801040640061630110600808070505404050707001251207
0030205037102030208062003537256540109092006006508010512002501160020035
0150704030901308110001020013070010205015070403016304050704020020404011
0400700202008010540504007002020063120401305070010200807006100618040130
3090013040105040505090102003538101501303057013040100010213060401614006

1301200800150570301040270014001309046200353924561307001037030204060030
1108080101301200800804050208020080703010520802005630110710413020180200
1050208020054070504200254013014010040016301107104130201802001050208020
0540130160060120013540331003012001104004030020020120401307001050400470
6504050465013030512006501040170016003010061405013012008001403054030020
0208010130604016140014014001050154020400121805407030102105040040505230
1501070413090013040650270800540270800113011000200620013541191501303051
0406020130604016140061301200800150400763016301050713040011501406020540
1405018440502704515052015083010401100080620013542196110060406121303053
5411040150540301050315405070010200301020650501541040501841013014040803
0401315405070010200401714540130150806200135432616040020212001801013012
0080064020200130601010630110810100130402020013060101013012153058053010
5090020065013016050400130163010508030504003430605040013030540024103016
3050400343060504001303054008610301354430163040106010200618010130120080
0801050900200612010802015070110025130700105040501002305406201506113004
4050540100656401201501303053010703754050300108010130604016140063018010
1301200800150520150703010401100410200135452563061061600700130305130501
6024012060261401400200207030109005200514050412563020501066002005401301
0133040604010801700131133054080150130305201502702145290102001364260401
3030513020084050130200810403611106036226130100200150130820104036331502
0304050130402006030105036437030109020019406040010010403653400507103013
0707107130200810403667304005070020010064014011507002001216540805401000
1803065036783010048100130100630703010120500200540805403011064050650368
1015013703050180101705011005401100030130180510130101301700100150805404
0100408650369126370305014050210501104105406041640506003080540604180110
0030010501540805403011029020065036108660617030105401150700200400540140
3040400507002005403011064050650361112150401400507002004050140027013070
0202006600300101302008405021301000102802300200524010008020056132002020
0104036121415015085050810101304064001065020400240110044061615001200540
6203030010189010501580101401404021050361386180020023054040500301190812
1301002001051700315113040200603065036141117001200603050113010540150050
1050802070026540180707750125001305008010013061150113010204040200603065
0361515100130614011504004013012300200405003050164011507301302008405040
5030010150150400401301400207002650361661001306120025011070304015011301
0204030402006030650361756401703010501130113023011000130402105036181210
0130611501400910200501220403010503040400504005613050200340502040630104
0605020404050170700121301040361991001306191102002040407020401105070020
2004004023015040040100640406020080650362011631405011009010130404105052
0033010607010100130101100640140027061130402006030105036217140027061405
0301106013020401320016540405400465036228640130103011702413070010809200

5010613010540020037065036231511400600700405046505130551501020045013020
0840502800200301400100050705010300801704005403001010163011050100700650
3624515010170013080108003013040210503625415010140504002200220408016040
7065036268100103014600301303505100130101301040010064010107030406503627
7240110008020030102002106370305010405013040202004010503628136401150730
5017030101006405405027045405035044050130604016401205014050730105036298
1502015040013019010856184580170015406001404650363012101860200570301013
0702144011014001054040502006063013012015061251060400571065036311113040
1020061204015302050110023054040501301002006501505401301054030110200370
6503632661502030304013401070304105014088002006503633106110530540130120
0800130401040051810105015161600200350140505182180405051012030650363410
6370305018010513501400405050600103061705012680320050180105140501307010
6503635830101203061405050040200564017040304005110410540180301103002020
0650363613602815013070010600301001301761320305140401400502400130120080
0640501508060540640401301107030406503637961105305401303010305060306004
0505130505120080170015404090030406503638861303004060400320010304060400
1002003051700302040010041020013070710713070301040363976130100402001004
2005015405017308400107014201307020036501301004104036401530113030040601
0502100010305115040042002013010040200630113030103060121001305051200620
3080108030201060286503641861105305401501840305017002001040054080101308
0302013040300865036426660030100501305404050405003054011020020265036439
6150503001501000200100540803019020010600305406301540105010070065036446
1301200840540501640400170113010810503645116170011001030305401400100614
0121050110410204064016003080204030703020404002008406503646116401400140
0105404050110540501101400200254013012015061705051407020080010503647246
1700110010303054015080100614040120071002040130305100130130700105020802
0061303070010501405061150970404050306103001130305197040515015040040130
1801080030130402105036487610100630650404001057001130670415020504004090
1410010503649840110509002006501301901085618454001600700540654010600904
0650365078030110604009107065040069010563011301015305401020037065036511
0650806008010130906200801700154040501301341500130102002540105060306503
6521310013061101610305014050270500501405040200100450157001401670413020
0840506904100130402006030650365310150201504001301901085618458017001540
3401070304105014088002006503654118013010640301400900304050806030010101
6301400376501301401205040040400704030650365571501908121303505130106408
0103001000308012056503656754061761354080109003013070301013012001102040
4002010650365763054080105180120556305404011047065036585603014010063014
0502002200810403659461404001761130106401105113040320040650366014130401
7054130102040101250101440150301400702461130300109150150530204070464021
0503661561501702465010570019020019406040010010403662863010041800304050

2040323012050010200118030404002065061400701003065036635570053550401304
0010205040040400670465036645190306511301064024012050400404002080200650
3665111301064050600400407030101806155406400203040501110410540640030054
1200330540240120150611020602650366696306503001309406050170301017010505
4080160400210061130902001980150101029020065036671063065030013040606005
0154070301040201504005408040116040091706140800101630110200370650366876
4050507040200550502060580101306003010018030110701003065036691264017030
4050151303007020064011050210001030515056130170020200610020015040210503
6708301050700200405020150810161081001301006307030101302018020010503671
1216304010200611501600301005013054040401704030400110410501150701401805
4030514013020650367266700303050151305408040505120020625406405051101203
0650367366305408010514050180706403001200218030110300202006503674761400
6007006140504650130305130553070305401050902006503675730110604009107065
0509020054065403054035044088002006503676980301108750201006305401501507
0304040110602006506401107030506503677111630401020013015060150150160030
1005015405050980580170015660090104040210503678116800200230501405003016
5060106003010051001304050108101013070900140651020040104036791010030108
1010511307001015030015116304020056562203060030100703010403680111307001
0370303020404050130300320013016008002005012001801700115040040405054006
1004650368114163010601307001060030100130604016140061301200800210014200
7030101501060030100405003054023010656130600301100130703010403682101504
0114020051700112001430010101150101006303052050801020650368388060281501
3070010210454030206400203030010613010540020037065037426040130305130200
8405013020081040371261309018014009080137228013071320014007320013732801
3040013010140070020200137431501305204030618437572002130604016140061301
2008006401210505401620021304030012001003766150171050113060401130450101
2710505130206120237756880900140502030300109150401200437893011060407065
0130101304030113017030106101007008065040502030315023794486200163054070
7001261902371071301405060098013060098058014002705300512500110023711128
0160400804005401540130046003010011404050600301005011501600301005015404
0509105030172371232307032400610606002006503713461700170020200613011070
0202006503714461700120016111051060400606002006503715661001306115057001
1301608200402105037167117001404005016205014002001216709001401115013040
2706500650371721612165011301630650371841003050704061504004041600200650
3719780150401510732005618458017001540105090020065037206610013061101610
3050157001106401304105037217570011064013080903013070010205040040254002
0700265037227183002006113070010509003040616176135406401201506110702465
0372374050465013030580154654013010902001913038104037243610080654015054
0406010630650372544013020403014005019020065037264230540130106404060400
6030406503727561100230270800540703010270800104006013065037286100130611

5020402050400404001400650501705013010401050372951001306123030404002065
0614064050105037301064012015030501703010204040506030915023020504004010
0640191100010503731680810070301050110063020025011501307001101006503732
4801100061050120401501205011000161050373358015054010640107008010130707
0012403004002002065037344150120700302050807030213040320040105037351015
0540201506117001100103030540301130513011303051060400202200650373666101
0063065011050130400120020613054005013030017020040350650373752303121308
1006904100130402006030105037384150204030700110100613070700121301301040
3739664014003765013014012050400404007040306503740413017021413030513040
6003090105037414163010203054020071004070306403742380612056540402020040
6503743380103501400130507010403744370301060200200404001001230105037455
1091807030105402201604050407010503746321080013070053030300120021050374
7730180105110006306301540705051105078065037484670504540100190200140013
0920080701050374932015055021080040205065037505801100230270800540703010
2708001040060130650375171001301001103040505401501020150301010020010503
7524101006301150203040501304090410010503753711700140400501620501400200
1216709001401115013040410506503754410013053015040040409307065037555801
9307080200158010606113038104037565100130400130305150204400304002004105
0375766306301507040520021030205040040501304088002001050375831804015085
0240104001050375961301406400400501130163010640150850240707002105037605
1505700130561308067130709001040376143040500305700180301070403013070140
3065037626170030206001020050730114030032005130710064037634150137030501
5180400505303090013040105037646150513003200540060020038010190301303810
4037654930705120150520066013030010191050376668015054030120306504050518
0401301065040505113029650376775004015030540703010513030062140508401040
3768550040150402003705403013010130381040376941505401308061121540800130
1050377048054070301015001200540105200706503771563010048003010023054012
0500200130163010503772463010041200603050180105404050700200105037735801
5090020020108020150701100251304050700200105037744130170214130305130406
0030901050377556301004501415015068803050704013040310265037765650310501
5615305405013020200213070900104037774637030501700200104005540130211001
0503778464002002050170301058010130160020010503779560301407030105068801
0130701304010503780415012070030205037101304086050105037814150540507021
4501130406405010503782350040110002001005011301600200105037834615040503
0010704005301220015104037845170031200252100302603010403785617001001303
0121056100640540170014007024650378651108020113055465013030540020010465
0378748040190050204022002130701304010503788480509002005090020058010130
5036403789380100130150106010010403790380400630617050540422001050379168
0200110001301013054005408010013013014001203065037924401302040301400509
1006503793480200110007030105408002002121301040105037943801100230611301

0510780650379541001301400702465040140050840065037964613030560030100204
0640140070403065037977100130611250613052501015018013010065801013038104
0379858012001461252010418037030501540130160803010503799661001301501070
0152130102002106010541050371005200252301040501309013081050371013802300
2005015210003014083010403710228803040123010004070513060701010013010125
0101501012001080101304050140150101700282080150900200401700140020010100
1301011240018070304014006402006040034501015030011303054050130901220010
5037103480304011603040164003053030321050371044650141050151501011220015
1040371057100490410040013020061011501207003020503710130408605010503710
6515057001305613023011304021050371073680410501527002870900104037108464
0020020501703010580101301600200105037109360301407030101220015104037110
3207003020503710130408605010503711141505405070214501130406405010503711
2562300200501521608110050210140501309013081050371131062120020501703010
5670301016081100640507002001040054014086050690013040305080605402105037
1145630100440505017030104066010651200650371155650310501540161006405401
4050130202002130709001040371164650902005015408020150615401301000130210
5037117361400105015401130204001213040604002105037118365410501540113090
2001913040604001001040371194640020020501703010540180101301600200105037
1204603014070301040660106512006503712141501207003020503710130408605010
5037122415054014050702145011304064050105037123461501301016030405013040
2006030105037124517001001303010064051301400400100650371255140047065027
0301640070020065018605013060013010010503712651303052002204062002121102
0401301630105037127380207002658015054030408800200650371284130170214130
3051304060030901050371294640020020501703010580101301600200105037130460
3014070301013010160105037131415012070030205037101304086050105037132415
0540507021450113040640501050371334615030691304050130402006030105037134
4170050310501561530513407010503713541301703671801013010001220010503713
6350040440200501130160020010503713746150204030400402006507030105404090
2810503713836213030103018030140070100306503713946150106506030405013040
2006030105037140517001210013010130803020130403008650371414806015408020
1504050130404880010503714248013040010040513086400656403010403714358030
6301150520150405013040602810503714463030250080102950513010106401027050
0650371454805027005015213070200165660100104037146561502400501703010530
0320054050101009105037147661200603050151301040110513080161071046503714
8480140506180404007050154013010810503714958016040080400540130200220130
2501400630540130250650371506140600301005011304030110205150150016540300
1546503715151301150540405018020540301010063065037152463041303056150540
3020170026503715341909801013025014007030101302501050371544401302040201
0804008204065037155218030140070020200650371564140302040603091504021050
3715758014006122040012204015020504004090141001050371581063703061210505

6210501303505506021630100470304040013035051505403040880020065037159460
2815013030570401109080650371604130170214130305130406003090105037161380
1502040640140070246503716244011504004070301052801400501050371635130140
5056901301303810403716466401405011301305401001404070306403716536150130
5085013090180650371663615013050850130406028650371673615020150613010100
6306503716863061507050450170020200140501301630105037169430205017021413
0305130406003090105037170480208020061258060680107030406503717156301004
6021004002030404005013070214501130402006030105037172315054030540130405
0906200650371734615035045013054013010001302650371744804006307050540840
0108105037175361290200540806068010290200650371762180270700125011060400
7033065037177680170015073026018400540806019021813040507002001050371784
6400630705054084001081050371793612902008060680102902006503718066028150
2002202002130707570401109080650371813660301407030101304020060301050371
8246130840430305200213070130401050384260401303051302008405013020081040
3814906130100200150700101307002020038262301307001050208020061801070756
3001001100383102040153020501405010023054040501002005080501461630140081
0504050190384106703261150315404050700200405054061001301302018020065057
0016018200207001238581370301301305513051618411505700130300107031238612
6150930100130403014050540150140300616190220061703010130540020401505700
1303001010200143871040160407050125700180101304030513016002005150570011
3011600400301100388151150730703010513070020200405021050501230540801030
0204050700202001023030401107006100617070012389714070504540600711050200
8405200220130707107130651238101014030540403020130604016140061301200800
6401210505401803010200400100618010130160212381163504401550130204057640
4050130187123812820700240010023054010064050686701468020070650700613016
4001438137650040646100640306961908121301102051630102013018712381471502
0301301207002130200603080810070100123815106401105090020056301130190108
5618454013051405080611003816861001306120025017033030501100950110023010
6401308601238171119022007030104011010063065061700202007024501416647001
1301104150516123818715016060020050113032130407051060285021307030010613
0130020011003819561309102004083006200520303051612382066300445014030205
6140010501513082040568090301306009123821765301400120502113060090401700
4006062006113040820012382223170046003061703010416648080770405054010013
0613014006008060090401502100010270800501703010270800801820402105050121
3081006301400300996154501130106061130902001938231515057001160010305400
6070640060706505070356301050703561845801001301208030501051670750108010
1306009123824321001303010049003040202606130507034002013010507013561502
0500102001405013060030913010210001027080054070301027080013011307001050
1405061670403061130901308140061003010304015406900504166415040180400501
5801604001000802002002566002002001207016150123825980100080200501305700

3020615030570504501307308010686050401238263110141664150137030501206003
0108058010130120080080182040210501305016021308100630140040027013056108
0108003020705060210301303051501307001050108003065070506021030130305305
4070700123004104240150606110640130860123827166401600301005011306040161
3012008006401210505401219301700302090050130700105020802006180610303030
7001050208020061405013050120038281314050370301307001050140506167040306
1130901308140020130408060410508010130120080014050370301304040010010502
0130803120038299204001215073050151301020402120020301042200611101400563
0104007002020016306130130212383076652501304166460301040150507040130702
4150516123831617007020080070301052130703001013090180501400130310143832
1180100130150101822400821306001020070507002020020021084001040061200400
2130831238336200465170301080980100406081213060610061301705011003834963
0100480400501603010401506130100105017030102020060105360415004015012383
5151001302002110008020030106523010403020130110502100010301844050270410
1502015040013065123836880606002005013051302001084003200102140200520060
0181050019012383746130300101910502030250161000619038384616002001050401
0020050105080101301908014383975700170916501801405050161406020210001020
0860123840661503057050450130730801068605040123841116170020200702450111
0621700501410200251501040605010130300109150250902670700123842612002080
0220033020570014010004006030212004630020012384310665250130515305640500
3054040705402008405405016700202001030163010130130212384414660070021042
0800100050018018002002256301400850500150163450159012200150704013070241
5051612384586170020200702145011220015104061608110061070100621630101301
1041061301290120038465150116003090501540260013090570020200101304120038
4756150540705045013040501304090980105013016001012003848861700202001604
0170103061301060706700113020803062030405013016001012003849657001700202
0061503030404001001050308605040123850535014007045040804008530540130126
1238517404002010105080105110470650801051280120552050010200563002001238
5246705045401001902001400130920080140020012385355700140140067046503010
6401308601238547150570013020071005014013054050508014385555700161503030
9110001050303002004012385643550401090306505180210601304051438574570018
0301070061006584010406100060110038584616002004050300203051761338591057
0018063401004008404070204030140200821254015054090130613050120038601110
0130612301504004030140200821220401504004010044040040653050180210601301
0020012003861111001306120025014050100440305015700180745707001218007080
1801013050120038621061001306140130501301502001020031301205015070454040
5013013002001200386361400600700501540606002001011407110004007050540130
1290120038646150700302030810040060019040153013050120038651110030150401
1501405070020064014050130513011303051306184130100512003866720021306040
1614006130120080064012105054011307071071301000801200386741003056502170

9001040386831504004070505407020080065038699401201503010405070304021304
0301130170301017001060040090406503870815010681013010130115040115015070
0102004021050387191700100130200220303040301102051501060013010023002001
4050910503872980170016061040056508060040080105405020068108010070613056
0134105038734806034130403011020520305401340706503874613011230106016040
0202200620150405013020180200105038751510013010112301060401405070201504
0060343040160030100400210410160400202200400140205040040501307013010503
8761010013015016001020040505600301004005010405050120066003010040054050
9105038775100130801600200340505180150202003104038786615070301020307050
4001013010106401304105038796100130200280150900200501013010106401027050
0650388041001308015020405013040509002001050388141301010640130610040013
0407030640388241001308027074002030110006105054013407010503883413017021
4204050540130406003090105038844100130801308100613081001100630388573014
0301503550404050206404050400270204050540134070105038861010030401160130
2040703010540501320064011501405013040400203080105038875150561301700202
0030307013040105038884630400703040505021527048105039426040130305130200
8405013020081040391640050710301302040012405013030513070710713082010403
9210150115073050113010201302040012213081008017024130305406003090130513
0410503933313013030513041050130600130906130700105014006007006140504650
5163010140150702454013013010100200265011301013030573080101501303051082
0402105054080104015408010510600400308065015013030530110541040505620170
0220801200394163061200141303051501040060070063041301909801040401106003
0100401103001602815055613030513061841301005120039523600301001306040161
4006130120080021308100102062001303010307030101305051200610206200130505
1200703010130301030660600200130300406061301004020020301032001030133040
6040101301561307071071301000801200396366003010020404050508060618455004
0370304050517635161507303020404050130150701405004015010517613106003010
0204080102965014051400204060030100140502704600301008010900304014005003
0150070030204013030520022040305130403020301130513015680150104009020080
6503973115040020802006180150130305100050107050204063011020080010307021
4513020802006150400300202006110200800530204063014007200617200567200160
0200105004013010200220404020037020408010502102040240120504004040070403
0650150570301040270014001309046200398346170014060130150601508002004701
2002540501021130105500401700160063055070405405055060104012015010470613
0105405010023063703030305150414130108003070506021030510030400404007022
0802002010030103011502040501908121305012003992414050561001504001501130
3010306013416100110401108700200130160020056102003620084052002510030530
1060400610130700105010703040650613070010503011070304065015040110400700
2020016306130130212391022100301017021413070010501405061140010061200220
4030307001050186050618010570051304501018605056120080013030561607051504

0110680101309012200650132005402100010200860123911910030150101402004001
5017024130305406003090130513041050391256140200400301501206501630130406
0304010503913910030150101600180150709010400200210707001210640709001040
3914610030130305170244060030901305410501039151980170246140130010400404
0504650510030150130600160200105013070010506006020061150806054061530105
4010640130100101405130170030205613060060200150130402105039161730540405
0806100540900303040501305012006405040084005409003030700302010600680130
3052570214510170214801400100650391712613070010501340050261130911000640
0150107024651615012611301013030530540130230020010802300200702143918131
3070010501060400407065013010063080104002706501860505163010201307001050
5415401303056163010205401630613013021239191018040508100703010520304051
3070700121801504004005010070040508010130501200392020302050130700105014
0010061200254030540100020080405080610051100020080402501054003200104050
4008400511301505120067041303053011060030801303051304010701439213113040
4002001501303051507304050130604014018060302051050121070801013012008005
0040106002003257200701406004003080113061505500401051038040020015409080
2001500401037030589140115080107003020307002020010301630101301302123922
2018040503002008130305904200530301603014080567030105062004050200258061
0303030100160105100306254040507002020013030516301020801080030130402105
0392334130305507301860501308410500204001214040030012514050015010400100
3007020040505330641307001050106003006502002540500404003010503306454061
0030625401301070020200130305700302054101303051054102540501030016405010
8003030130305804013054050514392413180405010400100102635560613070700121
0640130100101405610010303030900130401050700610061401205040040400206026
5039251020700213070010504050100230540801400154013070700124050810500301
1030070200650392612801700110054013030513060071080101308101513045010163
0707001213016002005120220030620150611070304065039271163010048002002501
3030501608010570011301002001504050203040500303070305401040070020200650
3928710020015017020021011000102007001070633070305401040010065039291980
0200213030540500301200330180105300200201404003001206065062003301603040
1302003305301060400610150405003011308404303052301205002005403011070304
0650393041502040104006150540401040065039317500401502040106401301001014
0570504200220404006004009040650393215804050190030404040502070027030101
3030562070022130904100170031513010608010355040405006103030201802001050
3933861307001031213090410069041002516301020540130404001006503934830540
4011030016507050420025407003020371130408605010503935123010208020013030
5705054016061130700107040306161037105401320054021860501307001020150611
0704030650393615130106013030522018070245610600680650202130700105040504
6505640501080030301303058040130540505143937126405010541303058040130540
5040800301301060130305270710770010150400100140393836630105060130400540

4050600301001306040161400613012008003010100630501303051003018020011040
0404014004706504050465013030515012001450101303052800200530550201300801
4008002005161200145010220084055305504040602014002008404005100308602101
3030570301051040062030130404006203065039391010030101100640170403061703
0104020150400204015010701403080606804007030406503940840501014001057070
0121060071056108307030105707001240100104039411815011507305017030102013
0204001230305016021308100804050154004108030508060564050800308015040110
8003070301051640115040070301054026201030394226130305104006801013015080
6081050406400516130400103040400404008010405014051801040602013040010100
8001070301051130406400610200603013016002001013010133040604010150801070
0302030110140030100640104008020200650394314140140060070061405046501303
0530080701100301630620150613011040302065030010101630110701003065039441
1100303030513030080170534010701305403020130604016140061301200800500401
3010540020037065039451861700170020200130305684513004017400100306213070
0105030110640506502130160020056170017002020013070010504050465051700154
0106040023002006503946171003013030540801920013060401614006130120080070
1304013010001026130300514515040040082040210507021420801040120150618010
5106004003080650394725630615030307001050900304061401801013012008003401
0701640500305407053018040046125405060613070700121064013010010140562413
0540405013030540130401020650611084006026503948116241305406010101400401
2060261681100254040120150612510604005710650394922801700140601301506015
0800200470150150040170016006305015507040540501100130150401164001040057
0301070304023051080400505630205012050020054030110703040650395011100410
0130511307001050405010023054080401110005010705054040120150611020602650
3951158019012540601010140040120602616130700105090030406140505630160109
0102540601010140040120602616401540240703710503952151630401070304061150
1303051026091302007100304050103001610100420015080107003020301101400301
0064010640506503953211003010170214101307001050160200806170301015080605
4030140010050961405020084051303051501303051010008020013070050623401070
1150556130100080620013020081040395413615010261130102002204061603040613
0540501002301501014001020401307070012500403014005090200650395516614002
7061186050401150730130102040405020022040405010023015010140010204013070
7001221000400561504004030140030070200650395615150400100630508060101860
2004001703010401802009400801035021303056150205040030405013060160020010
5039579164001006303061501303055415010302050400405013040400100105039581
2164001006308105040020010130707001230615030102020058012065040501304086
0501050395910230101004314002011014001080207002400251616040020220040062
0504004050130201802001050396014610640130100101405400200101307001050207
0026170301013030563655404060645130106080103550404050061030304040020220
0105039611161050310130305130700105014001006124080174005403011040605401

3060663015401087506503962913030560013010020303001065670301020303001062
0103039631130540100130104130604016140061301200800613070010502080200612
1101400130305163010205401306001602006503964710030180100010200130305400
1402006501017024110511303153065039651463010041681013010206130101307001
0504050100230203010501300200204003010829507040302063040020650504050130
6001602001050396662301303058017024620504050130300120200105039671764011
0042006113030581001004200561301200800340107011002800400510640130100101
4056130604016140040961014002104010505602815056400701301070401103002002
0650396822650806008010130906200809070100405080101306040161400640508010
1301200800130140503001130305500405080600801051600200108017001540100101
4010509002006503969156130020010040013012008002506200200251668007013020
4001263102130502101050613030054161008001021050540213081006540301109003
0406503970966801040020305080604017040304006561703040240110807030650397
1346601010013070010502080200611301035504074020018400101700131651804008
4001261251610013030540600750400511304010140020402006030405020401040030
6507030102040110140020022040610507002006502040301001106402040570011001
3061230106302050810040020304051307070012703010130201802001050397291001
0301460030611261235504060013041050801051802106040500610130404002022001
0503973206601010013070010501400100612002540130101303505740200184001017
0013165168040084001261251610013030540600750400516030140703010204092400
4080146003065160013041050397416610013061130840430305130700109041005016
7045616200500501130120080050400261405013035058105005030018050704013200
1307014030105039751764002001013040301102058180105040508630130702003001
0602865028404200254061008001021050540213081006100103013084043030520021
3070130401050404260401303051302008405013020081040401184040264005071030
1302040012405013030513070710713070301040403141000180200130700502610012
3013040062300410413070100127001013096303011305130156130105130409010200
4041340110314308010110140013030513011307001050208020061803011010002002
0020400100302540801013023014405212070024001002305401006405068613018712
4050270454065404002030140522006063054030101600700656314306121302193030
1048800612513081008016007004005408020108020150701001240610620700302081
0040020304040020022070301013070010502080200611505401908121305012004072
7130700105010840306501307020030064050863051060286502840420025406106405
0650256106040010008020065030307001050140506120025016607040020303001020
0840567030401801100080200303070010504001261614002706160210302061005407
0700121303810404081620025016146003054035014007045013040010670440054064
0509030840501211054061761354067002001014005401502015040013070710713082
0104040912610054013060101014006405040010013060101014001064010700801004
2008404005670030205613080671307090010404010151501307001050208020061105
0146503040100400130305120220040504010040020401508060204017004004706501

3010130110401508040020802006504011131001306120025011404005011500504001
0506181010400501150050400105080170400200805012700506250180530130106002
0063405060210304012157003020402150517001470101303056845208020040040615
0103002002025400640506180130820403030513070301013020210200401314561307
0010102001020401101400561050730302040405013060401200710016401104007002
0200130140501050102401488014706113030540600309010503051304105063062020
0513020180200650401516200801070130420031400700613070200300103010010130
2006840501402005703010405010300140507021453010507002001064013040030110
0401615106405402120076503011060080107030101303054050540300103040501304
0302013010640303051306184130100512004017131301064040037102030508060240
1206024003019003040130106401501303056020010701308601240181561507002005
4010640130178051700130100306230410130850132002019004010504013030900130
4010504050840104063013008010701091704019610703040600110505130170105064
0140060080101309046200402015613030510100800102130810061307001050104706
5040504650530110100800650230010150130305561306040107013029010200402130
1630401060102006180101301200800801050900200612010802015070110025130700
1050201506140501002305402015061540130044050540100656150012001801013012
0080080160070054013030527005062540640120150305404050130305405061100402
2137003020215054020150400400140010540200603054021302105014008020802006
1801600700540130305150510061030041041307010012402366301004120060305014
0660102110140050166030915040210504024713010802007065065140150610012006
5080100130616018200207001240251980304013154021308100405070504501100130
6111004003061125011307001050140506140705616040081061506015406401201041
3020180200105013018010800301304026186100130802007065070020065010110040
0304066010630104702002515010160018015010243041050204016150109005200801
0130120080013080601440271361001304066010150107070040022002106200220404
0502030404002022003011064050210640130860124028396100130200330406405040
5013080200706501020400401104015051400100400306502003301150101006302002
1013030561004312040213021050140040502002204061501020201700218070301052
0700256150102090141001109022040270800130700101070420401501303053011054
1040505640602008020700124029271011006403020401304030201301064090015200
1050801013012008008040501050902005014050216013030515031501100130802007
0650401120010204013014011200106401154102040130160210301302003001440301
1610013013070010140501011006401501016001807030102040405003010640130187
1240311440500304121006405068670146500406461307001050405027045406401130
3051020010490030401303070214403276101100640150101600180703010204010640
1304005014403316106404006306504042200105040130204040501303054050701904
0640501080030301303058040130540505144034306301004312040106608040501002
3021302105014008040173040040801030020404013120402584001017001530201003
0400403050102705001303054050270452006063012070030201080030130305405056

4060200804020040012403523130700105010314306508010110140013030521000102
0060309150140015402022004010040017050413030567050413070010501405061207
0030201092701303057030102030100302404002022003212004036106100130802007
0650101514015012503010902008130703010123010001301602124037231602121306
0401614008019307013010130540660106150103019005052017002162070030207105
0308020070650606704030569047050130602103064012010480200706501301801040
0212403896100130130700101405010110064014002706501542040602103013020030
0144039121011006401504015700513081015130450101404001706150130160020055
1041200130100200120040402340507040306010105803011037101301405003051640
5070403090130814050700202001615050010656406405080163010201046003065013
0350510200710065080105121000102008601240411061011006404013010147062040
1301013050315640047065050101301013050120040421540047065050103012080200
2130305613002002025401301060301025703040615011470620401301013070710713
0100080120040432230132004015040140047065050101301053010603054706580101
3045010163018010130160020056150402004501130101303056150130406020080105
0540190812130501200404412806040070020200650401110063030204061806800140
2001013010130305150130305290102002130702144045108061001513030560101014
0040140202006168110021308020070650606130707001240461313050120010702008
0065070301051100046167030010161064040010064013060170514600306113080200
7065013004130707001240471961700104008136508010130501200801010063013080
0708013030700105016040020220061150120501302040400270180530150400404010
0050650705015090102140501305012004048121001301307001050160400202200611
5012030801051150130305100482040210501307021440491361001301307001050801
0130501200306007505355040147061200220401060080807050110640140501307070
0124050161001306116304040020400140010204020060302040213021050140010013
0612301010013061801470616401470113020180200105013018010800301304051111
5013050509020020060305016130700105014050618010130810151304501016106401
0100640130130051440521010640301105080701309001304010504070700200400540
6305401303070505630540606130412004053863010041400105014066010130541061
6200500501250101602001101030130204001240544541067002020010301630101301
3021240551280190220015067041303058100616040010008020030700502206602828
4042002202130703001061301220120040562315013070010501031430650801011014
0013030521000102006030915014001540150801090462005401301202200401540221
3010001058016040070700213030515055613060401070130290102004057123060030
1001306040161400613012008001202200405060030100130501606302050120500200
1305016030110703040650405813640110604006101301704010613029010200613070
0105014050616704030611309013081400630113040601010030103014014004007002
0200650405911150130601705301400105301200102801051630205012050020013050
1603011064050650406013610013020022040147065010160400323020401501307001
0501060400202200650705070214400106010460030650355040416002001050406120

1303051307001037030302040130301030304006020506180105613050512004029020
0115013030530700680800307030101305016063020501205002001305016030110300
2020065040621270030204013030520022040600130100203030010301130513015680
1501040068020650406372070030201068020130700105020150612110140013030510
3846504064211303051307001037030302040130120080010020012001613060401250
1690620020408018605090620020406200710020404050130910214007003020401303
0520022040804002120020130305200213070130401050406514561308103011305130
1568014706540600309010503051304105013084043030520021307013040105040662
0100301501050510400150170241307001050400470650405046501303053040131501
0130210501400405020021061402004001501603040302002130701304010504067305
6130700106003010020404050400200125004040505098055004040507030100550040
1060020032040980301500403040023010006113004204050040304002065061300106
6001640502040405010400680104050100230630400230100061133014060401063070
3020404007010030650406812561307001010810106104010400801700110080010140
2001801504011010063030520508010206504069101304040020013010130700105010
3143065080101101400130305150101090200806504070913070010502070026121302
0400126240112006030501252006030501806068010703040650407161700130110003
0130801017050110054061306030160301060826504072680101308401040500408010
1305012001060320065040737500401001030305401105040120504004040030020020
6504074174050465013030510013061800306170501230304050205050470640501002
3030010101207003020108003013030513020180200105040751170030204024012050
4004040080200865080101301200800210001020013081006240120504004040040200
8650407681460030611261235504060013041050801051802106040500610130404002
0220010504077148019022001506704130305810080140150200105020270800130700
1050704540165040068010502080130105011020037065040783263010041200603050
1200603014050100230204050540405010090905017030102064050540405030405010
0909070301020640120150302006063015010140010211051301217005013030580170
0131140200130305100800102130810066006020055013020130402930650407991303
0513070010370303020401301507014030400200202614050516405051400120306504
0801263020408010514050180706304002301000617030105181358010904620020406
7030105167030101308030204008403065040816610200102040110140058011011014
0013030540050202006504082251803040106010200618010130120080080105090020
0612010802015070110025130700105040501002305402015061120500200405054061
3004100656150012001801013012008008040111000501070505404012015061102060
2650408315803040131400540200603054021302105014008020086124017050454040
5013070304068110025404012015061251060400571065040841280304012001612160
5011001306114050121303056845620802005012401205012540300200201050408517
8030401020105080705401104015054030401200161216050160504001303051304001
0100460030400801070214566006020055013020130201802006504142604013030513
0200840501302008104041118404124400507103040501302008405013020081040413

7204001280903040011014005100200150170200210130100640107030406504147230
0102001650700102001801702008001205002005408054030110604070650415176100
1306110030625018010120505404014004706501130105680101700150501610020064
0502105050162105020831280170403015050170140306504161610030150401150123
0020040500302040106810130101504011305204013056184801604001001040611301
0561604001000802006566103030304030020020105041781307001050301106400650
1307201565402130160020055402018020065041891501307001050140506167040306
1130901308140030540132001000102004040506504191410030110502040304002080
2006502130700106003010013012008008010106401050640037030650305150414170
0302020021307013040105041101563703080105120061601040508061005162120020
8010516100420080105111006140051801012002705110140606130306011030105041
1116500401604006101301013060401651046001508010013030516303012008001104
0010196701162020051100130400114001050191107010504112198010080015506027
0604016140080101064010506168108010203060401140200516710501130604011304
5010124090121086880900170030204001004102001307071071307030104041139801
5017020080061801003015070020040020409017010054050030901701005701465004
0644114231700314005401302006030405021050110410540640506003080540130140
0702461130113030510013061306300120025013015073040301102058015012401120
0603040040252018020065041152580140170148016040020220061801013012008002
1000102001308100610013061405013004405011006516304010200611501303051307
0010600301005405613004405054010065620150612110140050110384650411619801
2006030501703010540200108190200902001801011014050860140030507001010054
0707001213060071080101308101513045010163070700121301600200516007106540
3011050902006504117146140150040648054105015408016040082611307040107030
1013054108016007004005409017010051307070012130565024012015061102060265
0411856503105011307001050140506162015061104001006504119861064010830020
0170411303051301013050120080540106770650412012840010170014013165130054
7030105406040705406129012005406330645402401201506110704030650412118610
0130613033064540304030054400407030105011001306115091005011303051307001
0150910020303001065660030100204016304020056130105400200370650412220640
1205040040400604004002006501501030054703010204060407020406301129012002
0406301330642040630205090050504004015013030530110703040205001020014040
1400704030650412396700302040900502040130700109005050400402200220401200
4120408019028400404050130600160200105041241180150109022006180130501200
4050061030540615010604007040026180401540405013040704002105041252561001
0800501305401002005018071050613054040121050110410540640160030805406810
0703010540130100630801014040100460030400405010023054040501303506130150
6015054020150616001602001050412611610013013070010502080200613014006040
7061305700113010020015061301000618010530703020404001000302650412710803
0507001010050130700105020802006170700121300410416305037105054016061130

7001020150611070403065041281470030203711704113030513050120030540801051
4120013060030437124012015061211014005011038465041291661001301307001050
2080200612002501120050113030700105018003015014050130350613015060503703
0540140084001100414050130102065014050130160803010504130191501307001050
1001306120025011303055004016040010014061400400507307030105401304030110
2051301400600180616301400875061612300200612130350513040010205040040400
6704650413116508501630101620408010130810151304501016801013016002005630
2040801051401400300400510150806020406302040801051401400470650413245073
0140501000806200200810404133136405018605010063014040504701130101303056
7040309013081610013015050104050130406030401050413417630140060400610130
8605056301130601010514807021304001051018605080170011307001021050206210
5057041652015056301084010404135116401103010015113011307001050902200616
4011030100151130170068900709001040413611614011050710005020405013030010
9150507100080160400707002130305150556130604010701307030104041371964050
1101400513030103061305051200613030040606130100402003014006034613030300
4060630130301004020061603461303051307001060030100550150205040040110154
0070246504138128015016040020220061801307001050705042002201060286503052
1303010306130505120065403011060140650413922640501101400515020400200101
3012008006001300705801700115073050170301051130401154007400620024001501
3070010181015130408101013040640010150570301020303001010041020041402615
0130700105010308465080101101400501301106008065070301050118040501030100
1080101305012006001020014040501014001014050110640130100101405170403061
4013001040040150524014007040306502901020041419150130700105020802006121
3070020200304013154061505302040012707107414213301101400105130219304050
2105010410563014050600308054005071030405082010408401044143174011010013
0302013014011004100103030302006030405010023020150200220307006401000802
0056700670100121301040414430630637030501510020015011703401013010013061
3063018090304001101400511703401067020021010030563030700105014050615410
6300801613070010503011064050650801017001505406100200656703010540704010
1630102010501465040504020150270104414518630100414001050140660101302040
0128016004003080801056306301203040560210040040502002203010080010210505
4061505403080103002040505402001024146114050704030901308180305080605640
5016018070301051640120022029003014030307021044147281301051020047030401
3060170564014006002003405050040200140040501204014051640140084030405015
0500106301400800701301270304056106401050141054011050300200201101010013
0611700501204014050140503005104414812680030705054040120150611047065040
5010023069005061401305404050408109041491130110601401301506015040504701
1306001020061504060513030020080101066010050694150326301050170010050152
0084054050140502704800200140604005301010063050570013010640119005013060
1705100110405630105020037040013010200210150301070504530308605010803050

5021050130700105020802006124017040306163050700101005054040507070012100
0301090041511361700115070405017030101301506015017020080065011023150256
1700140605130300200807006470170200108004152171003012001104004015020150
4050705041303055004020802004004025405018003040405056801030010011002701
0441531960502001054011014005018010130180110068010150806054084001010400
2105030540150513081001630401020802200220150570301020303001030051044154
1213011505408010402001054050301001200254013011505220303001040810942426
0401303051302008405013020081040421184042217060100423102070030201068101
3010206130101307001050405010023020130305130707107130820104042410305401
8010130604016140064018010130120080065613070301013070900104042519400201
4130604016140010400809200504050806100550613040301102051060286502840420
0254061060400100080200650304050801013012008001301150130305561301000806
2001302008104042612613070010501400600700614050465051630101130305880109
0070301054064011504007030105402620103042722620700302016810501130102010
0200150170200210130400507002001401301002001064050863051640050700200106
4013034070301200102801058020010100801013035056802001010080101306070102
0042819630630011303053037030540140561845630205010460030405010300180102
0084040056130900130406504013054040506301063015090102004291614014006007
0061405046505163010180130305561306301065610810101304064001065670301020
3030010100410200421015640116004003080400408010540503001080820405130101
3030570030204013030520021070301054006203040061301051501024211198019200
1306040161400613012008003703030204040501508060204017613164050130150701
4017613110700200620408010530106020405003053001065613060401070130290102
0042121330540100130104130604016140061301200800102609130200710030405010
3001610100420015052203030010703010404213383002007030204040501304105040
1690102550681613070010168105011301020640169010501251220015104064066010
6701060101501100104061130410506301400400802001006180105202200703010130
4030020020105040140047065401301051303051034002101301054050103001610541
0130105405010501024214306401400802001006113014050270440131540130703040
2100010121050540630630120304056021004004050200220130101330406040103010
0800102105054061501307001050162005006113020400124050270454030801030020
4050540200102421534803070030208014706160400100402040114020040063014004
0027015615406100301405040024011507301303054050204001261402004003017043
0210502040130305200250162002204030501170401305016302040170401302040301
8352105050162105020401303051034070210505016130105130409010200421618613
0700105010813650801013030540502704401160400310230583400540418800570504
2002540670301054010008002630540707001230041044217111303051307001015073
0130204001221308100613040107150640110420010203070301306017051002001024
2182210604007033025113070010503011064050650251613070010501405061403008
0100650405051610703040650150511308100130115013070010501040120065080101

3060170530801080030130270104421991303053091080270214510200710040501030
0165613010061013070710742202240502015010200104820050013016002005507430
5801082005005640502015010200104820050013045010150640054050516401305801
0130160020054050509010242212214030540300200201300200706130540405013041
0504013040101700502513030563063012030405130809030301008001021050540615
0130900130401050305407070012130104042222440020010130900130401050403008
0100105040401206026165661100702540613070010501405061670403061130901308
1400801020068001400130350140030540401103001650705042002540700302056130
8080030130202102004223297003020130700101023002001303057021451307001050
1405061670403061130901308140010030301160130204070301051320011301130406
4580101301002002106405010100400200808605055074305801051860501150130305
1000806200300206200422422214010100630650180400200107030101303052070021 8
0150103001130305106004004070301010030220610408130305130219306108100130
8100220304014005150570301040270014001309046200422512656130700101010023
0130400625705070214561070806705013060101014006107030404014008070306504
2261261060400310213070010501405061670403061130901308140061071045404050
8080030561302018020065030540707001230041044227176306260913030513020071
0030702145302100061801013012008006302050105073021004200401103001150527
0214560021020029010200422813656130700101050730130100010500405027044011
0050961610503002002008404005656130630101308401044229166405011014005600
3010013060401614006130120080064012500801054014050412565670301034070540
1700110300110041020042301064011901220404050409010258024012060240011041
0204061070806705020500102004231146401150400402407037105080101301200800
6401302040405046501303054050630106301509010200423266405011014005130361
2008010130282002013017030140423315150103001106020501302001088010900303
0502006120470301090052005150801070030203011014003020309021200300206200
4234716106210055024012060261610708070502050010200423596107030401307001
0501031430650801011014005014013054040504081090423617804011640010400404
0503001080404001701308101513045010164017050413030560010200612100103030
7001050140506167030102002540104006203065042371061307001050103400502650
2021102001301500406130806183006170014011000800261540101000802006504238
1161307001050160400312613020025406110014061130903015614020054030062001
0210505406404012007100501540105080100650423966130700105017001190125401
3021000105401050400902006504240146371601010560101054050030518040507080
1619030880132005703010130305150530110821309001304010504241963040501504
0090200270490030405801630102040170301054040506021030424215150401130602
1030703010130700105010900304065013050160610210006508010130120080021000
1020013081001630102030540707001213010404243863040509022006100080200150
7003020304050707401301406200424420640501080030301303058040130540506301
0405027045640020010130900130401050304012001611307070012101006306505301

3010402004405060210304245276400200154010702008006507030105160013007010
5040501307003010509002006504050920080600801061001301307001050140506115
0130600160200105013070010506006020061150806054061530105401064013010010
1405130115013090013040105080107070012401001040424616640120150305404050
1630101105090200650540405046501303056405010800303013030580401305405060
2103042472116040031026130200220404050100230150101400101064030140200430
5405013030540130204040504030311064010700640130204040505020102004248278
0150170200800618040112006030501207030105408801090011507030102013011302
3011000615011700117001005011301506015040501200840580200825161504009025
4060101052401100440400110410540801501301506015020806200424915303054030
2013060401614006130120080010600301004011030011052304050103001150150016
1052304050103001130700206200425011161076354070020200150161501500161037
0304050103001701001040115057030104010041020042512264012015030230020015
0102030405130305130168101164050620018312161020060302006063018010681021
7005054011030011505703010820104042522762070030201681050113010202006814
0501402005014012050400400420010401130204001263011301104015063020503703
0501550620015054102540505030014050702145016150203040054101301090200194
0604001001040425315902001913030513070010305401801013060401614006401801
0130120080013011301013030540090102001301406200434260401303051302008405
0130200810404311840432261302040012130402105043361501370305015100200150
1702002101307030204040070100306504347615058010140130204001230410501307
0301082010404358180508002002705020401307002020090808115020504004010064
0140602008010504366620401200603050140505021080101301630105043786401101
4001054040505021013012015061251060400571065043878015302050113004405054
0293001640800104050030130163010504391063010506013040054040506003010013
0604016140061301200800301010063050600301005501307071071307030104043101
1130700103703030204013012008004054163703030204080105160230130703020404
0054004650431112613070010507304050130604014012100420080150300200501252
3045401040012070030204006002003650431211613070010600301001301761320305
1637030302040405013080302061301507014040140020020265043132030400604006
6170301090056200550040400700202006150704052002204017001160400610400407
0301056400100630616028150130700106060020030501570016401205013054010020
0501050431446150113010200250130405010030265043159637030613054050702145
3711501301506015030208062004021050431671401400600700404011060030100250
1400619080120402130250105043171261700123002001845402401800200230302008
4050405003019003063554060641656209001040431891640501050300180101308301
0565680101306009014010001020040210504319126370306113040301102051307001
0505407021413020084050150150011300546160030100540604002040023005144005
4061060130650432015610013061306300113020084050401702450154040130540270
0302040507030401505401301106002009065043218140140010501540204001214050

1002305805402540604004060206504322112301001306115016345011215017030101
4056150170301015001200540405400465043232162070030204011200603050140501
0023020801010020010540505070010200130110013040400200806511501634501121
5017030101405615017030101500120054040100400465043241410013016306310400
2040215410404016344004070301051212040100130611501240112006030400402520
1802006504325780150400100405014050540801509002002010802015070110025130
4020700210504326961700100130122001510403012105610064051505010220014040
1400702465043275130113070010809200501080150560105410504328763703051203
0405211001058010701002530703054010200370650432992304040070400563016121
5408400103154013081006200606304021050433096304013154013081001001306157
0016082006150125201802006504331106100130613063015073057001130100200150
7030102003304050130100200104001050709001040433225154010100604065020084
0400200220508501006040501210505404070103004005408010130810151304501016
2008070501270800540806100270800420031400301040060070027080054027080016
0600200101620084040020022060010200404011034070650433317630630115010206
5013050160140561845303703050130405010208020021302008405030210640054060
1008014050808005640701200370301051109005200650433456302106400540126121
6602002001703010511040020106504335126760020080161502030700302030401404
0017013081015130450101613016002005705042002203030404001001050433611640
5010703007050700202001302008405050100108003053001091501805630510020010
5043377615054030109046505407050130602103061086026501505404054004650433
8128400101700131501100130101301040021050106210502027041304030020010010
5080210601301002001050433996305010508070204013010640170090030404004015
0204080101307070012403004002002065043401118015040040060407013090401640
0541013070401064050201508010800301304021050434168014015070052502208015
0140505404050400100406504342716502001050201307001067045015408015017030
1054040100400420065043438801604004060202130700101681013010201502070301
0902001940604001001040434466150530700202003020630100640206606804006013
0650434513616013040501200603050140501002302040502006030501137030501405
0465013020084050130551070246504346126301004120060305014066010211014005
0113010802007065064030105801001301501020060630200213070130401050434778
0304013154021101400501170015404050511080082065043481364015020010540405
0110513015101202200405016004005161600700501540213070700123070305401020
0370650434912610013061101110513060182001470305012002202401705470504201
5050130405400465043507803040120300805017050540130707001217001540105020
5006504351186501410802007065080101006405100130101100640130106030104030
2040902006570051301505120040032001040504008400101803014002902006504352
1114015016001020040505700113070010564051050630110201410210504353118030
6301130100107030105160620054050700521631407051304030110205401004002005
0105043547801604006008010064058019170651505402015061100640180160100105

0435568030401160806501150400100405014050540801100020010050154013407010
5043564803703050154060308016405003013030160020010504357963040180020021
2504020010404050030117001100640204050510904650435814610013061113054005
0160010200140564018002002653020130134301230540100640600904065043591015
0561301702415070405017030105637030501540500301302501016020011010304360
8630650300130370305014050204040301102058010130120080010600308065043611
0615053070304030306017058030140040400200502516140027065057001902001940
6040010010404362763011090450204013030010915015053020407046402105043631
7630401317010601021302105014001001301004310400204021308204056301210503
0204027080013070010400600400308065080105801400100611303056191070650436
4915013030556200210620022040801702465570019020019406040010010404365118
0160040030801301871240502105054080610303030700105090030406140507070012
1064013010404366105301050900200650130113060170515040014001054021000400
5654030110300702006504367713016003011064010700270800540302708007046130
1130404001001050436891017021430160068070301020401301064063011504004040
0875065043695130700105014050612110140050162015061406030401050437051460
0306113035051504004061761320404008220065043711510918070301054029081804
0507005261206126801051401400300400510513015080606400307001301701050615
0400408010516001304650437276400302013035051304001016200500400406512401
2050400404007040306504373630204080105180120552050010200540505140012030
6504374615013040320040105080107070012355040600130465043756301108040020
0705054065408010540230606504376664019003040501540630205020150615401309
0013040105043779650146110140130203010100800703010501200220100130150204
0401205006504378730100431050120402130810063020501205002002040303081002
0120056504379514012200406114020018015014022004065043801114010860265015
0130150604070602005406503615402301062006030501304105401020400265043818
1003015020150303020084050630480150116301307012410504382860281502002130
6040161400613012008002002130702003007040110908065043838807002005401060
0680061610307026184001010301100611064054013070010106704650438411656130
7001080101306040113056801013012008001305656130820104013070301040438513
6400212002013070010305403020130604016140061301200800640121050540167050
4570304013060170561301054002003706504386136301104030201307001050104706
5040504650513030080170513014050300542130810065401070304065043878630105
0601304005404050600301005403010100630501303058015010106802065043888610
0103051012002150563011006403011064050650438968019080870505406100306030
1408060680107030406504442604013030513020084050130200810404411840442261
3020400121304021050443815011507305015801030103054021200205150120501405
0700200105044458010511080200100203014020082010404456140200140507050450
1150120501402006030105044672008405405020022015055613060401070130703010
4044782002130604016140061301200800640121050540115020504004040610050105

0448103011305130156108101061040104002002204062002121102040130163010504
4952305408010300201030702650441068012004001002106404001400101306040124
6001504021050441151010003001013050160570017070012130104044126200250112
0300807050113070700121501406405065044137150103054013070020200106100431
5402006063040210504414650040400630617050561001306140703040403506504415
6150120130080613070700121003010301150204070110465044166106405029300130
2930051302022001015014050400100406504417863010048040050110023054010064
0802007065063154020060630202001040441891501461130107021413030515010302
0402006063014010504419961503014007030617030101303051501014001020402603
0915040210504420661501070700400220021062002204015040020034065044215615
0304040064050613010801704007306504422680470120025150563011006404032004
0650442358016020027021410301030115020404040027065044246614002002013028
2002005611505403504401000200100650442552040400200206140503501400670106
5044263672006706401001402020010404427465070405201506180105180120510504
4284207003020616200500501511006401160020010504429880401220400703010540
1306040161301200800640120150614050900200105044307630100450310501250101
6020011010304050130707001213040510504431740508020070650150520150701301
0140501304060200801050443266301004160040020050154070301070304070301013
0701304010504433761400105015404050130110140040180105230140210504434315
0563013010100630650443581505101301406400400501130163010640150850240503
0020010504436580140061212110501150205040040901410010504437121540600102
0014010064040027061307001050405010023054015302050154015054020150614032
0040105044387640160030100501130604016140061301200800640121050540130170
2105044398401600301005015401130121308100630205012050020054030110703040
6504440515010640130809030401010014005401340701050444110106403011010005
0104063010705040630103001010163015401050902006504442813014050200840130
3051505561307071071302008104044433150300320040013071006404444297014013
0150010404445420130405301010003010801013029650444622010003010130840104
0444756007006580170400306513010606113038104044487500409026180610020016
0540507070012130840104044495700100150201504001307071071302020010404450
6150570014012050400402540040400200650445151501304040010010508010401001
4014010504452380103501400670106504453510302606504050605046061604002200
1004040010012301050445442070030206763501540286200701050445551047065080
1051220308012055140501050445610301107006100650801051130406400130113040
6400513016301066100154070700121303810404457780800301405020022070030205
6130806713070900104044585801504011060200501523060150203070305401040070
0202006504459380120040010021505404020040010026504542604013030513020084
0501302008104045118404526400507103013020400124050130305130707107130820
1040453615080101306040161400613012008003011014003030406405010504549680
1060030100204064011025004050412511014003010064010610050650455206160040

0301801303010306130505120064011507301303054050130604014050200710080181
0125130120080027044064005164009020010801302001018110140030100640107010
0306504561240030201101400130305504003065170301020213081008021108410500
2704130305611014005106405065045746103030203018012015001040458141060407
0110140013030540040030107030105500401090200406040020220012015030401060
4070518023002005270700121301040459116170017030404050110140050130010101
1400600700515761163010203054070700124051050451019405062001105403550406
3011010005010705054040120602613001010163014011400600700614050465013030
5163010163054070700127090010404511115700154106130700105020802006121101
4002002540305407070012405020037130104045121413030513070010606002003020
4013028200304003200101308030208010521402005630400240010006140508080030
5630703020404003002020065045131666060020030204040180101306040161400640
1801013012008003401070140505150801070030203011014003010064010400802020
0650451414100303030700105014050611010008020061303070010503011020036501
1014013030530103710100640124012015061102060265045151140507040309013081
8030508060564050160180703010515004013010200220404002003706504516136301
0041400105012501016020011010301302040012613082040613050265620071005015
4040501309102140068080030501540703010130701304010504517246140010501540
2105014004050130140200804011600400308061130140502704401315401307030402
1000101210505401502002201010080010210505401064013010010140580104012015
0618010510600400308065045181350040370305012070301030020010705405013014
0200801400270516301400400270156113070010503011070304065045191515054030
5010100050617050204050130305300101016150130900130401050270800540163010
1270800613030563010130404001001050452075700129011020030305016065410620
0840530100640106100506504521171408602130700105013400200861130601010140
0150503703054020130700105014050616704030611309013081400606140810154064
0401400540601401108204065045221366003010013030513060401614006130120080
0213081006304003710203050806024012060240065403011090030406504523241802
0011040040501400600700130555615618003051303057030107030406600400407030
1060407056100302563703070301029020051000300165804050105410540502704130
3051803014007002020065045242161001306140151013018101400501130450101504
0640065081016401105302050113011304520064013054027003020405070304015054
0130110900506504525166170014004003010703010540110140050121050140040120
1508340054013011501001306111040061212110501150205040040901410010504526
1810030130305108101020405004010401040020405004010340702040130101064013
0100101405301200102801056302050120500200130501603011070304065045271063
0305403020130604016140061301200800610640400100640130601705106401070010
6006020013040293065045281464002001020301405315001052030140540047010130
1020400125113010640400376504012050400404007040306504529115700120400125
0110509100703010204021308100150120501506040050606004012050400404007040

3065045301380140113070010501405061670403061130901308140080104600305402
0025408010200840400570030205613080671304021050453112614011307001050208
0200611803040400205011014001040040030107030102040801604002022004004062
0504004010064014032004010504532226170011001030150670413030581006130601
7053012001028010511003040040401504200104011306017051505090050130190050
1640150850240604001010050105045331162413054060101014004017040306168110
0254040120150612510604005710650453414610010301301064050506012040204015
0601040040301001106402040570016401612040130501200640130204040505019020
0105045351670030204021502040140060070040040110140013030557616100020040
0204013081015130450101801301064030110600200365040505163015401060400704
0026504536880303051308404200213060401614006200213012008002002130701304
0105045378630513020220010180101306040161400613012008006561307071071308
2010404642604013030513020084050130200810404611840462640050710301302040
0124050130305130707107130820104046315401600301005011306040161400613012
0080064012105054011301213081006133040604010613070010502080200617040115
0700200614070200800650464291003012001104004040140047065040504650130305
1200650104017001600301006140501301200800140305403002002080101306040161
4001104006501022040012405010023057001161500120054050703040150205040040
9014100105046518640501800304040501047064050465013030540503011060400310
2305130101064013010010140565407050470110540100018030650466961700183002
0013050160201506130540170416201506127021440054020180200105046714617001
4004003010703010540110140050121050140010013013070010502080200613030810
0304013154057001608200402105046825140101006306501804002001510030150180
4002001040058030140040302065030104050130305300101015617030402401400801
0800650801052080102530051041210501062105020406561301000806200130200810
4046924100304012050400247014050130200603064011420010401108070302106301
2204015014002701301401106810130106401150113015070010200402105046102410
0301200110400401502015040507050413030562080200400402563005430015440502
5010160200110103070301040500305801405061604002022004004015013030530110
5410130100640130900130401050461119610013013070010502080200613030700105
0140506130620150600102001401602100650113010561700304010540046125806010
1006306505700118020100410404612166405010023052040012406601014014016200
8405657001204001240904100306015017020021013010507002001307001050900304
0616230020010303040860501050461313150130700105010013061200250113030550
0401604001001406180301600680703010540630154010875065046149163010201908
1213035056001304105080105137124012015061107040306504615456690105011301
5060150261304105186015018403040051405202005166800704005202005168403056
8090130550030150065030052001840010170012301000130045623010001200270105
0605051001302002167705010150130020200507040400201304001015070404007030
1067030106130410615017040309013081400200800156190308301080107002001040

0101501040024001301020615010405013040603040105046161816301020130700105
0504001002307050540186050401704030616504003167705060101014005408010190
8121303505670413090410013070010201506110670465046172861307001010013030
6130410518030204011400704150501015016002003610046003040013010020065040
5010023010654011060400100010500150130305610302014050150670413030581008
0101006304015700113011601910200130163010504618171630102013070010508100
7030105401301006308010140401004600304004050100230540405013035061301506
0150540201506160016020010504619963020304200314004040170403061630106801
0540170401305406540301109003040650462027610640107020080013070010502080
2006170301013050120017005240040910214002040801081014002040130450101616
0400404007040040251801301064040037650707001213056502401205040040400604
0020220065080101301200800210001020013081006240120504004040080601006504
6212561700202001600170141700150700200100640521301810018061004600304001
3050700200405021050104105640506003080513014007024611301130305150101600
1807030102040707001210640709001040462212100130611310400501304001802050
1705013054005018014005012401400704501150205040040501309014100105046231
3100130150401130703040705041303056123010002040401120060304002563020501
0120012040100640140035306504624188030401200165701200800140604001002301
6410400540100130615700170120080040409200501230564011604007033040040252
0010880105170700121301040462514400440200203030010214020020025180190286
1301102001013014060120505402070030205037101301006401304032004010504626
3263010044020501540801040115040205012040801056370305013054060407016129
0120016180104580401110005010705054060407054063011290120054063011801044
0054040503001017002015061103846502110140013030568110025404012015061251
0604005710650462710630100415302050140186302040405013010020010690200805
0113011014003070305401020037065046281780306301509020054013070010501400
6007006140504650130305100200215011305523080030617050540670030201802054
0640120150611080400200650462918617009020080501130102050802001405013035
0106040040706501301002001508030401880020065100130611509040061803040110
0800106306113010100640540405070020010504630201001306110110064050115016
0407050120400121150730405027044066010409041001304012105010410510541013
0101308100613010920010100406040010010404631151011006405011310261417010
1303056140506125101000802003020404050700506220406103200204040507070012
1301040463218640503011032417010130305803010602407037801013012008006301
0603054050465051630101163010208010800301304021050463322163040102006115
0130305130700106003010013060401614006130120080063040107010260030100550
2100142007030101501081010130406400102301015057030102030300101004102004
6341861064010702008001307001050208020061703010130501200130106057001213
0810010013061230106200250110013080700610061130707001224012050400404002
0802006504635278019022002040190220016306130707404050130200603063014006

0400703303054020150540106401020065040110670465030401030250061130160170
5405050512002301100080530105302013011301006401308016010065047426040130
3051302008405013020081040471813070010502080200616904617050602103013030
5180030170401305404721861307001050140506167040306113090130814006140506
1240150730703010408404656130810040502002540208020070505406010101400540
6190308213054047318700302021501307001050208020061140027061130219306150
1307001050140506114002706113081004050200254020700302010800200213030530
3050160140500130540474388017001301001040040130700105020802006180800200
2130200100128400101700115006005040040654080300461130650011008014014050
1270461401804184001040080070130820021671200517003020630610300113030530
1504009020040505406302050301023062708002040227080061307001050100400306
1801060210301303058030501080030170401305404753601054105406109030821305
4047646104600305401303505702008051305404771010111051130700105014050611
5040050902006113030510509020020406105002400110041402040478661307001050
2080200618040070601305406180030170401305404798700302021505402020056140
1150730130305801829170401305404710161803040106010200618010130120080080
1050900200612010802015070110025130700105040501002305404402001303057030
1054063030201802001050140500130514711117003020215013030540630101307001
0501405061615013020180200105030140630103054047122215013030510460030130
7001050140506167040306113090130814003501400400320010405040084005113015
0512006130700105020802006110400404007065061012030650204014001203013015
0701406130501200405006103054047131462011050405010020010551013004100654
0501002001040020130400101600200340020153020501540803015019020030540471
4131804050201507030102105054050200252040507105030560670403056140027061
1561540471544405003013035051304001067041304040010065080105115051200405
0401100010200160506150512004050302503040104001000102009704056150512004
0506004020030700530303001200210506150512004050706030409080106305408010
5140502030130500402001400640100080200540502002540204050566001304801013
0501200660100614018401040180100970140701540471624640505404050106040040
7013010208400101700160020036140507050420100130613030700105016400611307
0304040170011001301508011630102013070010509270130305703010100306254061
4002706115615404717661307001050154004617145405410614001540400100615404
7181580530105090020065013011306017051504001400105402100040058010043113
0020019518015010305401700131400540700202001540471914801703040150530113
0513011303056160400100080200307005022063030406405010506130406405014006
1303051070304040400100302204064050061204047202761010063013070010501405
0613063015073040060620058017001150730400606200540820405670020200801051
1301004001302001104001307001050801010030625404020080010509002006501301
0205090020013040100030010703010540501304064008016301030540472112917056
1006304070200680801700170740130140200803069041006113030530201506001020

0130540472210805307060104004015040063010400401504008060461801013012008
0064001009706112008140204047237163010201307001050307050540130305801904
0540617040101290120054047247180301104004220065013010020015014070301010
0306211008013051472516150130700105012004004617030101421200540405027044
0140021050305401305410130300109150606303054061403010305404726157003020
2150540100130613030700105020200561401507301303056050910702040801027080
0130140200613030510703040160200120054047277802010801700140068040054013
0403011020510800200265063655406142120054047281070030202150540140027061
4011606009130305620200561200800615058018291704013054047291114086021307
0010508010100306254040200800150305010600200313030518001000150540473012
6306503001301200105012054080307020080400540260104015406304007020080505
4080103085013010063061303051070304017040130204047318630502306502040840
0105070304013040315410504050204061309012200105065023061600212002040473
2211501307001050208020061690461705060210301303056300110061130200606304
0502704401400210503054013054103050108002006113030530010101660108291704
0130540473311101110511307001050140506119107061130305619107061130200606
3063014002930611704013020404734151501307001050208020061690461705060210
3013030550040401400616540208012008030501010008020013030530540473512803
0140055061640047061130101306030406150400401301703065061303054070204063
0501040020020401704013020404736131504011308101513045010130702630566150
4006405061640040010061106400204013620020406301106013020401406130204047
3761501060130204065180108802040400260030616106002003180010001502040473
8305115040040563014004706503040050801006180106021030130305804050204040
5010260030640501026003080150401102600307050508060561303051301000501061
5040040130801002001615040040063061106040024301006401100010200204050040
3011020650611405001302040484260401303051302008405013020081040481515018
0400850130208040081402105014821530101000802003020130305401400100440405
0700502206401400160020061040040507040400570301020610541020902001914060
4001001040148346105090200201303055090200170710714841956130700101507301
3060201050580101003062130406405010503010741461110401501407011040150540
6303053506413060401614006130120080062015013030570301040182010401485193
0104600301304064050105061304064050140035014004003200104050400840051130
1505120060013041050801051610208020070505406010101400540620150700302070
5041303058067170900104014862161070700213040501801001050613040501801001
4006130403002002010506130403002002014001309001501050213030590050130606
7030105404110200513060661000800213030570301054063070505406170430540355
0406601400409010200148786303053506413060401614006130120080062015013030
5707107182010401488515011200603050120300154164023002001650700102001489
8304006405061213030562006063056400707200656400610020065640060286522020
0561901030148102515013070010501021107065020150401102110706501303051041

3030580610011041054080405050205008015040110502050070301050806056405016
8010240170154703010513030580601064001051320017090010401481137601010063
0302013040600308065040501301702001230010003040050114061305016153065018
0160400100080200305011010063065021306050400540401301060801010030625401
0030804050104030203020404050130305300101011501200142204080020011612001
4220405080701230201501303052401400704030650600210200148122023090050504
0040150305010501003021302006063061304064050650130101530105401241671050
7003020801010030622040690050504004090050130606620504004010064012620014
8139640503040106405021303056200606305801501170400450130302018020010506
0701020014814146303054030201306040161400613012008001010008020030405010
3001610707002405010300162015013030510008062001200810401481531601010063
0130406003080650170011509301004004013010401000150403040016007006517002
0065015040027020401020010465015010243061203014013030510030305040040027
0650120700302040100130130305405010023080601010063065023040086046505012
3020150613011080100565013011003010301481628100303030406003080105040501
3017020012604004706501301010064016301021603004104400100140030650540161
0603040650801504009107061106400204013030513200186050161504004006306120
4014006301040040405010023010707002204070700121130104014817273010607030
1013017040108200363017030101301702003820036301703010130402001080082003
6405010970130305620060630510460030535014004003200104050400840051130150
5120064050104006301070700257070012113010401481819301004200800101303057
0501304064050105017001021107065020400840013030032005807030404018010100
3062540801507301306020105057030105406150012540804008110020010214819764
0100015040205001020051016007006505162015013030570710718201040148201867
0420401303054010001504020500102005400160070065051807033030204057005620
8011041013050160705020406304002065011053030406405010506105410204090200
1914060400100104014821146160020010304040010042006170301051100418191303
0525162015013030570301020303001010041020014822126306100140030204013070
0105020802006130630611301421200500403011034650630101630150901020014823
1260505130305130400101004600304004050100230630504003430605051303054002
4103014824196561307001020801104105407050204061104102040705054022950402
0540502704150190080200204070301054062015013030524014007040306502901020
0148254054013070010502080200616904620407050130406034130820014061305410
4070206801150102301000408305630630120031304064050650650601406405014003
0404007030406540150400910654080400901022040405054040702005210001020070
3040301046003013030580102008404005405010300130640071030613070700250113
0700105020802006140505407070012113010401482628170037030130700105020802
0061801010030625401308401058401051303153010580150730130305602010504005
7030102006063056703010130406405010506130740540203040513040010061062015
0611810025161530516201501303052203030010703010401482728301004904100130

3052006063051302006101213081003040046003050130406034130820014015030011
3030514050105040830100105020066020406401009020010503014006001806508070
3040401304040070304061803703040504650700302080400811002001021482814561
3070010120060302006063052130541064105013081003010900520057030101304105
0203056208010213030530051041482954408404200606301303056130700105040705
1300417030101302080120020084012105054040020015402002070160341102400100
0650808003014050130305620080061501601040154080106365540405015002001306
0364700302040500305408010130400620015640500305408010130150310302072007
0160020033009158017200580160400100030900801604006107030106061005107032
1307200170301010001090025401302080120067041303051307001050140506167040
3061130901308140040505404010008020056132001709001040149426040130305130
2008405013020081040491161011105113070010501405061301400100440612105010
4101303056200606305614001006113030515013030560401070703010404922310111
0511307001050140506130140020080706119061400204080610090640013050210630
1400352006130521301006302035200270800204030270800150400829170401302040
6150400403014003007020065049317150130700105010100080065019061400540705
0420060630130305163010201307001050140400850130305100306254030304001006
1030540401000802005613200709001040494915013070010501050146502040506200
1130832001400120500200540301107010030650495126306150540902200618400104
0060020031301054030201506001020013054061303051000806200200810404961810
1110511307001050140506115031204080160100250218040021050611504009010261
1006401235130580400902861703010401807030400405014401050497286170304061
1508010204020060630130305306109107020408010205001020040501301402003070
5040040630205013030582213010204013011040150671050580101003062204062020
0513010204013020802006130806061006130709010150163010205401302001300465
0498780800301405013030565070405613030570301040820104049930615091108040
0150405013040640501050110040040030618019030861210505401801502100040018
4154017030101301600200108010014003061130400104002100010840010400801013
0101402001303058015080140080190308612105054012130704306110060961150130
3051082130401006091050491010150401130406405065016006580190308612105016
0061020406140010061130305307030204040020084065049114010111051130700105
0140506130110606002001006404050100640706010150102065061600102001405054
0630150601405050601706010150102050600102001405055063014003040761150806
0204063014005012761213013010012210601301604013080606100270413011040150
6405030401040028016301020540130900130406504912321011105113070010501405
0611340050261205001020014050130900501502708001309005015004063014003606
0616301101000400227080020402708001110821842040150101203030840160010540
1040018020200540040656140010061130305150130305400612200810404913211011
1051130501601501600301005012040405070020200615050010637030501204030070
6216100211030304007012008061150120200402040705041303051400100120401501

3030570301040600210200491427100130400130170200121405011003030404006405
0616302050100630611603040501630401104600301301104015080101003062204061
5040091070611303056200606305301103040020404050170401302040300101011501
3030510008062002008104049151815040113040640506501307001050140506121303
0562006063055004030401020040012616315461214061305406150806054080106021
0301303051630102054013090141006504916161003014007030406501303052410502
0406130305107030404018010130604016140064018010130120080061303052203030
0107030104049171910405065070301020150160304061100303014004050617030101
6030140204023013030510405070301020401505412040303011040150150205040040
9014100105049181015013030510703040100010213060401614006130120080061303
0529010200240140070403065050426040130305130200840501302008104050131006
1301002001501304031045021123070326115031540405070020040505408010013013
0201802006505700130010703102503711700140400501620501400200121700302020
0370270104504910047030405014014005010090130120080040505406705045012040
0128801090050592302070026121308100304013154080540801014020040200103506
1218030401050900200611301013060401806100540201080250105015167105015164
0130514050802006350711613012008004044501516130100105018010512006160106
1502400501801051405020307632510350854002902005670020200103020307024405
0102509106507305014050130604014014021200201801502400501253501400682130
8901045010561305060030216010014003051930705080010450118200710013030702
1461810105012523045401040012070030201306002006350127207002400100230540
1006405068619081213020060650040645013467014680200706506160061503069501
4961908121301102056100640400270203020700213020060308081006701045015101
8070101050121306003010013016302305408010302604050600301003410450161463
0100460030100501130150601506507030404014006606602550806056508501100200
2130105405082301306200104501781700104003010010130404003010010150705013
0104010506705013030040130100701045018840110308090040501006301301304105
2001001027040010450199631400602020051304064002130810070030204012050400
4050540081045020665080600801013090620070030201064013067010450216631400
2030508060407051601101006300510450221230100420504008010100080305405057
0018020300805017050201000912080290200201301064084104502366100130100200
1050557001401304107040010450246130100101801035504020302080120070501045
0254405017030306001020040704004402001025026101307001037030407013030513
0511600200801301001015801013070700121303004104502710100130100200105052
0025014011910001040056302050201508010800301302701045028810013030140060
0400904061304106100410044040013010204021306701045029840110243013010063
0304106401150129003014030307021045030910640501006303035504053014040030
1400640010063053040504071045031561730804001303505303040400100105010001
0200270104503265700140140067046503020301612880109005033740506003001013
0200840502130100010263121003024050102503451460030651260301407003020106

4013060030645035630540401103001650801051630410501407104503615620401530
2050110023054040501002005054013004405054029300180501002618010130230145
3040504081090503713150801070030203070020200103040502015030510030216130
1001013060407065630051045038136301004600301005011306040161400613012008
0064012105054018010604005110140640140605014050301000625039128019022007
0301040110100630650660282840420022010023093067013030040606100230130100
0200625040564050130301030806028561421200130603645041761604004070106401
0501413040501440504020150100200102504271064010604070650130901085213081
0070030201064013060020063504361501508505081010650401040061301050113040
9010200504491064040030010010013012008007050540602001701700302083002007
0301050110601020050451350850170304024011010063065064011504007030105402
3212008070020200213010020015040501060018067010451426040130305130200840
5013020081040511261307001200101400700200615122801308140301400610020015
1328013031200101400106020015142801304010060401400140200151531504014006
7046503090141005163615013041050306110070517361306040170014001308220518
4150204030801010063040600400308051941068020705054050180205110210040030
1306002001906505111513070010505408010100040200560156505112410601306501
1015010640130410505113510640540703010130501200108040050650511477006100
6180400504002040570011307001020504004025400604007033065051155150130404
0010010508010350140067010650511691600700105040114001540200254015054020
1506110023070030204086050105051176201506110030103014050130301030401105
3706505118362130160812005401060400100080200650511956801014061305408100
3030601103061304082006405120468010130120080011014003030406100501050512
1468010150806020401803014002902006505122568010130604012007100204064014
0067046505123980620021306040161301200800150530810040500304011502040400
5091006505124653014001208410500800108012200151040130402020040105051259
1700460030617030105801001306160301401100130603014010064040502020065051
2668020011000130101530580312703306040105051275801002002513010540100130
1301400120306505128980163604050540600108051001306130140060080623002006
5210003014070301040512998011002304001402001400580109020058090204006355
1610013040070367701001040513081001306120700302010013020022015055613082
0104013070301040513151001308040160092204011051130402006030650513261001
3061150112006030501130101006404032004010505133530502006030703010540831
2005405091050513444060640570504200220303040602008010505135680160020035
0140502015080105140501304064050105051367804016345018010511000102002104
0040501304060304010505137764002002050180105111053030700105010600180650
1307070012130130104051388680104066010170012006030501513010802007065026
0309150402105051396804006301022002050561001306018200164035065051407801
6007005015635064580502700501540801013010406564030104051417680107014170
0120060305017030105401302001081307010010405142940140070020040503001014

0040070301051301370304005201302004010405143868010500406417001001030305
4040040400706184001081050514488070400617050140200200254080160070040054
0130901701005654010509002006505145780401160400917061405010010140640120
1506140504009020010505146861006405068405010023015054020150611006401801
6010010505147561306040125010501512110461501304066070650514846130120080
0802003005015180507040130401546505149764050203030010600301005017631050
3070302040400700202006505150880802006113010130305150103020404050550700
1020040210505151116301400370306140701303051305116002001501030204040505
5070010200402105051521320700302040114001013070010504050100230540405020
0606301301100130616018200164035065051536140061906125230540100640911000
6505154580400630705054080401150400240306405155567002020080150130700202
0010400508070130406405010505156664016003010040013035061301506013013010
7024650515794011200104405054040502007100640112001041501097040650515871
5013030556130200711007006130100651304040010505159980150303070010509003
0406170050621405003070050621908125408030110604007033065051607806103030
3070010502080200614050106405401307001010670465052426040130305130200840
5013020081040521161309620052226204001240609620052338010200100405030062
0052426130210400130407040620052526130601008013040200806705262613028200
1304060362005274150707001220022030611007052844013054050418070529410640
4004062001306040140620015210364006010200130321306010200152113806103010
6401070030304020700210505212513070010505408010600680010307026505213610
6401047065013010501200355040470152146570051305012001304001020504004025
1400207002650521561806082005700114015040040301400290200650521612190306
5180190220061163014009022006160617030102040150401400376504012050400404
0070403065052175150130404001001050801035014006507010405218880120510502
4011400154020025406610015402002540707001213038104052196203061613002002
6155010101240120504004040070403065052207404002010105070301060200200409
0806805676350154028620070105052211961307001050140506161400270400540700
2001040054021104015013081005012540700200104005406401130400501540405070
4030540405030010203014020010240120602200510505222561404450154028012055
6308404040110300400565052238104005017706508010512016013013010006801051
6301400150010405224761096807030105401000304015030540201505403063064020
5065052255611002302708005407030102708001040060130650522671001306115012
0501100230801015305014030080100105052276804050130305703010501661001501
7070012130604064052289150120501405010023050470651505561302200130200810
4052298807002020080401150400250704040020022022015506301403506505230714
0101006306503001702005040020029025200102130405065052316100304002002906
1801501040702040405013040400200290105052328140400140200540183014054025
7001140540100640911000650523361401010063065040010063052303011064050650
5234680301014006128410500405003051502015061901410010505235814060030100

6140501000102003001014054013060013010065052367140600301006113060401614
0061301200800230301106100506505237714070504540600711050200220140540130
4090109200650523891403054060304010604004070650801058030101400406040040
7054026030915040210505239514030513025014006302040130250650524071404006
0130540132001805404050401000200404050010030650524151407050454013010001
0280540102040026505242714010200104650201041801307001050208020061540130
4020104650524391403054013051000102001303056028150130305704011030020020
6505244961501020061206080140501306040160110091101006306160812402002064
0524578070020054084001010301100611064054013070010801051090701006505246
9106403011010005010705054020104540300101016301540105090200650524710615
0303070010509003040617070012146507003020630205012050020054030110703040
6505248106190220030820402002208015020217010505016602828404200220810504
0010064052495640501303010308060285614212001305036405342604013030513020
0840501302008104053136130503401700156105325401800309018220406401100061
0533464011050910070501305610534515056130168101068105353703040530041041
3010061053637006402005801604006105373656213018010013017030105383500404
5018040043010539580201501001210066010501614501053105801681013010702454
0116810531154012070021308061440120011053124180400401200650570301040110
2001053134630100420015507305160020010531437050460420051304050400510531
5370504513505130401610531651700101000300101306042005401101000300105317
5401711000130290200640191000105318630100420011040501101400200251302022
0010531931802001104004013030140061307071053203640501513050013050051301
6002001053214130204013070020200630513015050010532244003020170011006040
5800107105323251505101301160401604010400406511504004061216204040115073
0130305251405060309150150104002706501301130900506401400561013015080606
3010043154040502002540130541053244140303015060150401400405010532538030
3051301600200561301630105326186204040504030208010130604016140030140010
0050103008017040054030010101130140502704150101700501303053040501030016
1020080010532791501307001050301106405065021301600200530106040650130403
0110205400604010513015050010532816640130540254050703040150104002706501
3011309005061501309005030110100050104050130810030010101532911801702008
0070504050400630107050700202005016304010200413011308101513045010153301
6700302040230100054040501307030401502002205617030402405080030705060210
3056561703040240501540041053311663030540180101306040161400640180101301
2008003010371013070010501601612401704030616103710130700105018605061213
0860501053323113070010501034005026502021102001301500406130806183001301
1303040401502002206160701304010008020055617030402204017001503001204040
5013012008006170015040040135058010296501405140020408030140072061150806
0204056170304024050140010010533331802001104001307001040063010533436170
9101003010301612041053355170504570304013010001028056102001053367140304

0105021240180109088040660105337361220015104013070010680105338513014007
2006172005672001600200105339661503010603030150601501301401607010534046
1506070105606801020010534145004010371513037113016801053424615013010200
2201304050400510534346150556180082061220105344461505561401400618101534
5561505600301001307631050130700202006130150500105346440505098051700140
0405010534746150703010513050300151301600200105348461505561100050106110
0501053494615055620021303007020010535046150515302070141130163010535136
5004064804011210010535296100640506840501002301505402015061540190030406
1910001053532613040640080205156105354380100030015140110003001053554802
1101301200220400400401200105356557001507001020040501305070020013016301
0535721780400130178055358630106030514050465013030520130080553594180405
0570011308410500400703265053603640080082065063014002206505361261504004
0601404650536238016034613030561702461544260401303051302008405013020081
0405414110040020024001306017056150300100130100402005427615010200611105
1070200800616101006306160820040604004020054366207002616140027061156154
0620301402004060400100200544763010043154040501301501214018010540743200 5
4558204052130100058040140010005013050700200546880400630705054010640104
7013041701301030010502020054786003007011290120054010600200365040501301
3415002015054032001440504003002005488405970105013010130417010100630130
2018020065057001106407060200549920700240010023054010064050688020700261
7024501610013061403506506174320054105804701200251501040100030628015040
0902005411580804008501126121306040124014050540200541296803200501130120
0800701065018013040010010130401703010140200100410042005413568403050157
0301070014001306186460200541464003200102170105050137130405020150208020
0541566301004400200205015111058053040504042020054164802010802015070700
1210650700200541776301004106020050113010020015030307002020080530405040
4202005418620700240070148020108020150707001210650700200541991501120060
3050170301054020010819020090200180101064050860406040040200542064005077
0130501602015054017031750600304050100702005421480201080201507070012106
5070020054227630100410602005011301002001503030700202008053040504042020
0542332070024005004064213050700200542410801001306112300200140501618415
0400270515011700130801080030130660702005425911301001013070020200703010
5405021050501230562070012130020054265601070304065010004140501302070012
1301300200542771501402006030613050110058040050530540801200400100254061
9092200542886502105401501304011006040521050540203030020024084008002005
4294805014619018254080400701910807010020054304802010802015070700121065
0700200543181501120060305017030105409010856184580201506120530010401304
0840090020054327630100410602005011301002001503030700202008053040504042
0200543342070024001006403069213050700200543491501120060305017030105408
1902113011303069503105015402608200543575070405405070504501207003020503

7104050300202005436563010041507002005402930040050180400401200612130507
0020054379630100420016465705080010805809406050117010505408070061006170
7001210650700200543856301004902854022020057070012406040010020054393807
0061006170700121065070020054407630100410602005011301002001503030700202
0080530405040420200544156301004311308020070650130507002005442720700261
2110140050120305180160070050154016007007071074010040042005443912080120
0204060010200405016301020401403020402200158010130722005444514010100630
6505085034010704050400902005445460105740130340706106306501304220054466
2301306017054067045406130601705145106140200544751501304032004010508010
8003013066070200544891064010608265080101305012007030106365540700610061
4060601002005449515012030300106003010050152100420054506640114020050113
0161845203040821302902005451663010041530205011300101702040805304050404
2020054525620303001080703065801013072200545346203090100010200620210200
4060400920054545150130404001001050801035014006505200545568010401007049
0410070504403010204010040042005542604013030513020084050130200810405511
1302008405055227030401301002001505532600301001301506015055427030405130
2101505553130300406061301004020028602150556361305034061303003200106034
1505574613060401200807051668007013040107150558413014009100061801013040
1071505596611001040611306750213010060963014006006020061130401071505510
3613012008006800705130301501405511580105180120556130506003070014001301
2040140551246130827006130709080613020010815055134802110130120022040140
0207002150551456003010013015060150405090309013020130806001200551566600
3010013031504050401200340505012005516480211013012002204014002070021505
5174200213040300200100105062002130401000200210505518480211013012002204
0140020700215055193402003130282001050103040010010150552042105054012200
7600301102100010150552148021101301200220401400207002150552241060020034
0505401130306306613040200315055234802110130120022040140020700215055246
6305130361200130405030014008010130282002013017030140552548021101301200
2204014002070021505526420304050703010518015055276610210010635200220700
6130330130613012020014055284802110130120022040140020700215055291010601
3054050801013060401614006130120080020301064056801030015055304802110130
1200220401400207002150553146050802001000302040110513050010030150553248
0211013012002204014002070021505533171014070300200130350613015060150160
4009704004015040050807006140501100912001306040161400613012008008015080
7006130140050807006501301260309150553448021101301200220401400207002150
5535810200603070301020401300619004050501200650816080301400504009020015
0553648021101301200220401400207002150553768017001150300100400130604018
0201504006200452013045150553848021101301200220401400207002150553988010
6401070030110601307050700502515060630131505540480211013012002204014002
0700215055416107020080130403200406502601040154080106600700213050619010

6130110041405542480211013012002204014002070021505543657005355040130400
1010207002251130403200406505544510968065021050516210508401040150554548
0211013012002204014002070021505546563040506001804010014020025350400150
5547480211013012002204014002070021505548270061400118050150554948021101
3012002204014002070021505550380105401701050150400320010150555148021101
3012002204014002070021505552580105401405020308012055763150555348021101
3012002204014002070021505554940400201010507030108020030029110505140501
6040022001006350101303504001050415055554802110130120022040140020700215
0555698010550100190200140013092008030401094050055015060100230540630131
5055574802110130120022040140020700215055583201505501301011006400613040
2003150555948021101301200220401400207002150556055303711301860150130113
0186015055614802110130120022040140020700215055623640504650540135040015
0556348021101301200220401400207002150556414045140400150556548021101301
2002204014002070021505566380105401701050150508001600400150556748021101
3012002204014002070021505568480105401801205565060030620040150556948021
1013012002204014002070021505570380105506001020014008601505571480211013
0120022040140020700215055724862004010090620014008010130600101405573480
2110130120022040140020700215055746304010940500550150601002305406301315
0557548021101301200220401400207002150557664040020101050703010200802008
0600800200670210020010860150557748021101301200220401400207002150557864
0021200201604020022070010130330130613012020014056426040130305130200840
5013020081040561317001610070400130611007055623301060306100704005120170
0255632600180800520018070556441700120034001301200800200315653626040013
0321302601566380201504005214050250015673620504004017613150030150055685
8019081213040104050540119081213040104050556956190812130403001405401190
8121304030014055610261306012100650130601210065056112163010201304010020
0265056123801035014001305070104056133500305405013016301050561436100301
0304050130160020010505615370301060200200406800650556163404002010105070
3010514040010012301050561741096807030105406304150406003046505618521206
1261212001010062016040504070105056195301109047065070505163011050780650
5620368012055404011040060010200650562146308409102004040110300400565056
2226862007010505623320140500130130306306130402050650562443712401201506
1107040306505625630110604070650801051301000616301400150010401562641301
1001030160301401603014015627561908121301040105040119081213010401050562
8380106042004060080064562926930840508006456302690030404046456312640140
6020625632268012055205001020055633430140100967056301404050670556342680
2003004020080670556353150115030015015501503001563628037030501550122012
0015637270200211400200121563823019081213010401050563935003054050130163
0105056403650030540501301600200105056415619081213030040130401190812130
3004013056423801060406406840104056433690030405010840640564443012120046

3012020010405645515054020150611002307003020404002008010505646562015061
1090200650703010130850500130709001040564796201506110100630650110700140
4005016205014002001216709001401115013040270650065056482161216501130163
0650564941003015013016301050613016002001050565053040340670650130104010
1001400106404070306405651550040150204011051130800130650130402070026505
6525301203065040503003200405071006405653380401301065040505113029650565
4480300120026507030105405013084010405655380300120026503002002130510405
6564570015073054010640130410505657450850600301005012040803063014009041
0065056583180200110400404014004050650565951150400404006003010065051405
0850130600130100650566075085010042005012105020401304064006401508502406
0261001050566197030101505024301405001302040650503001020408010401301400
7030406505662663010047030404004013050300151301630108030630140070020200
6505663318020011040040401400820050065056645115040040400720070650514050
8501307120070650566563065030013037030501589140180900304004040080205650
5666215013040100020040650566732305085040820064065056684180200110400401
3040113070010400300200265056697115040040150730400406540501304075014050
8501304050730650567063065030013703050151313180306301400300202006505671
4180200110400401305012001304001040062006505672611504004015030014004030
0320040051140508501304050300106505673550850370305015140070020200564040
0170130304010061050567448060282160402002201307090010405675480301110060
4024061100701305036405676561505301006040306400703040650709001040567731
5053010020015020200104056783801020400124020506505679430110406051301130
4095200650568044005071030405020021307013040105056814180257001130841050
0150400404045506505682464003703065020071002040150204040020700265056834
8030630117001230100040013083010064056843615040040810501070040050900200
6505685765085011002002130105405020406302050301400290200650568658030630
1150205040040100010200404105010505687440020037065051150205040040901410
0105056885801401150201504050130401002002105056894802006862001081506350
4005070104056906614011502015040501908121301040105056915806030140302040
5019081213010401050569266140115020150405013040207002105013080013010505
6933805073040508401040569426400903010538104056955150570013056810013010
1001050569648060282160402002201307090010405742604013030513020084050130
2008104057196028303054018010130604016140061301200800656130707107130820
1040572113054030201306040161400613012008001081010610401040065670301020
3030010100410200573956130163061301600200613090015200613021950656220303
0010703010405743656130700106003010013060401614006130120080080106040051
1014050040160400610703010130702003001070304040110303801013012008006401
1060020034050516401105073040501306040164011070200380105165640702040110
5040120504004061303052401400704030650290102005758305403020130604016140
0613012008006130101303054002003701301406200576121063031303010308010130

5051200610630313050512008010130301030656703010402700140013090462005771
5140506121303056200606305615080100614040137030204040604006003080105080
1058013070010501405061405020406150801006130540132002021020057815640130
2040301400640506502130305613020060630104706204030400640506122002204061
0041600700401050011002040150205040040406405010505791756130700101050730
7030107024511014002105014003010600200320404050130900304014001301013050
6200615013030522040302006802008104057103764013020401301400508010061801
0602103013030563030540102001500130604016140061301200800301106040061040
5020404050150801004050100230130804008610014003016301020170900404200354
0501307001050150801006140502704610014003061620301670413030513086050106
1303052401400704030650600210200571112405070011307001010100200800130305
1002008001860501801080017080530563051320020200104057122210640400200101
3040640501050613040640501400106070105062005402105011041054062110401505
4023002001204013010640350140040032001040504008400511301505120060013041
0508010517003020561308067130709001040571327106401010063013040501801006
5061304050180100140030307001050140506115090020065015010040026040505062
0020401001030120037061620012040801304004060615062001808002002210505402
6062003052122195058010513020084056900152005405010023051307070012571420
1050146505401304050205040702040100130612301063020502040804005040040150
8060204064002002904004061200400240040610002004002040130140150108400103
1140200130305610002002040213030513010002006200571515801301064030110660
0700405020408041056301405013070010502080200614016120401305012005104063
0120406210601304090102005716281304010150303070010501405061150400600300
7010030625403070020200130305640150730405013081006301102065061201307001
0501640061130204001240501002308091307030105401301404801006040010030625
4062050010200405054080160100650571713170304061150130305108101013012008
0027044064005110042105013020401301101400307030204040070100306505718121
5013040904100105061304090410014006110020080061130305100200800186050110
8001708030540630540132002020010405719206130700105014050612130305620060
3051630102054013090410100650613030054170504200254030540132005406506200
5406130700105020802006162070026121101400501163010201908121303810405720
3917030406115040113081015130450101307026305667105056400801600200210502
0406400201500200801013014061306130163014204050030100010500170321302080
1200502140055004010510380400200154090802001500401020650891401680101301
6002005707001230041046401000802005405013030562008006150640113081015130
4501011301404001701301000200620057212560121006113010401000802005405020
0220406350570200800512070200800130604016130120080017044003030700105014
0506121303056200603057003020808003013030510640010540501030016130305700
6130808003013070900104057222140119012405040901025801013012008006301801
0150806020401301801020400124050100230150502200151150700302070301013030

5106010200572315302010301400160617030104018014002040630140080200861240
1140012040613030530110822030406004001308060062005724121307001050102600
3065061014020065013050160213026003064050104006308015013030556130100050
1013084010457251330100412006030501200603050121302105014006150730501407
0540130204001261304010715030101006401305016021301006096150730501130841
04”

You might use this big number calculator to test it yourself: goodcalculators.com/big-number-calculator/

6.1.5 Iron verse centered rewriting each letter in Quran with Abjad numbers

In this evidence we have three independent codes of iron verse and they make together another great evidence as they complement each other. These three codes together suggest that full text of Quran can be rewritten around the Iron verse. Therefore, they suggest that all the letters of Quran is intact.

The common coding pattern of each of the three codes is that they are based on rewriting the Arabic text of the verses of Quran by replacing each of the letters with the Abjad numbers as seen on the text. All the codes have *general verse indexes*, which are from 1 to 6236. This means, this code pattern is literally re-writes the verses of Quran by replacing each of the letters with Abjad numbers as seen on the text. These three codes are all around and including the verse of Iron and exist over the numbered 6236 verses of Quran. The codes are generated in the writing direction of Arabic that is from right to left.

Since the codes are too big, I will first provide the brief descriptions of each of the three code below, then I will provide the R scripts to verify the codes and then provide the big codes together in the end.

Code 1: The first code is that when we rewrite the verse of Iron (al-Hadid) as explained above, the resulting code is multiple of 26. The coding pattern is illustrated below:

Code 1 coding pattern:

> [General verse index of the Iron verse (5100) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text]

Code 2: The second code is that when we rewrite all the verses of Quran from the first verse until the verse of Iron (al-Hadid) as explained above, the resulting big number code is multiple of 26. Because of the mathematical property, from the beginning of Quran till the verse of Iron, including or exclusive of the verse of Iron, the big numbers of both codes are multiple of 26.

Code 2 coding pattern: The Code 2 till the Iron verse but excluding it is illustrated below.

> [General verse index of the Iron verse verse (5100-1) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] … [General verse index of verse 2 | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] [General verse index of verse 1 | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text]

The Code 2 till the Iron verse and including it is illustrated below.

> [General verse index of the Iron verse verse (5100) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] … [General verse index of verse 2 | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] [General verse index of verse 1 | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text]

Code 3: The third code is that when we rewrite all the verses of Quran from the verse of Iron (al-Hadid) till the end of Quran as explained above, the resulting big number code is multiple of 26. Because of the mathematical property, from or after the verse of Iron, including or exclusive of the verse of Iron, till the end of Quran, the big numbers of both codes are multiple of 26. Therefore, in the below coding pattern illustration, I will first provide the main code from the first verse of Quran till the last verse, which cover all the 6236 numbered verses. I will then also provide the shorter code from the Iron verse till the end of Quran and I will provide the big number of the shorter code to save some space in the book. Because, when we concatenate in the order as Code 2, Code 1 and shorter version of Code 3, then one can obtain the bigger code of the Code 3 in case readers would like to use that big number and test it.

Code 3 coding pattern:

I will first provide the coding pattern of the main code of the Code 3 and the the shorter code instead as well.

The coding pattern from first verse till the last verse of the 6236 numbered verses:

> [General verse index of the last verse (6236) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] [General verse index of verse (6235) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] … [General verse index of the second verse (2) | Abjad value of each letter in the verse 2 replaced at the place of the letters on the written text] [General verse index of the first verse (1) | Abjad value of each letter in the verse 1 replaced at the place of the letters on the written text]

The coding pattern of the shorter code, which is from the verse after the Iron verse till the last verse of the 6236 numbered verses:

> [General verse index of the last verse (6236) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] [General verse index of verse 6235 | Abjad value of each letter in the Iron verse replaced at the place of the letters on the written text] … [General verse index of the verse after the Iron verse (5100+1) | Abjad value of each letter in the verse after Iron verse replaced at the place of the letters on the written text]

Considering the three codes described about, because of the mathematical property, it means that from beginning till the end of Quran, if we re-write Quran as described above, the big coding number is also multiple of 26. These codes suggest that there is a strong coding design over the full text of Quran based on the special strong element of universe, Iron, which is the only element given to a chapter name of Quran and also at the center chapter of Quran.

The R codes to reproduce and verify the three codes are presented in order below.

```
x<- nQuran # 6236 numbered verses
ii <- which(x$chapter== 57 & x$verse==25)
print("The Generel Verse Index of the Iron verse in the numbered 6236
verses is: ")

## [1] "The Generel Verse Index of the Iron verse in the numbered 6236
verses is: "

print(ii)

## [1] 5100

#
RmHamza=T # remove Hamza characters as they do not have Abjad numbers.
j <- which(x$verse==0)
y <- x
tmpl <- str_split(x$text," ")

tmp <- c()
for(i in 1:length(tmpl)){
  tmpi <- unlist(tmpl[i])
  tmp <- c(tmp, paste0(rev(AbjadSeqofwordsperVerse(tmpi,
                 rev_=T, rmHamza_ = RmHamza,
                 abjadL_=abjadL, abjadN_=abjadN2)),
```

```
                        collapse = "" ) )
}
# General verse indexes added
tmp2 <- paste0(1:length(tmp), tmp)

# Code 1, Iron verse.
tmp <- tmp2[ii] # iron verse
tmp <- rev(tmp) # reverse order of verses
tmpc1 <- paste0(tmp, collapse = "")
print("Testing if the mod 26 of the Code 1 number of the iron verse is
0:")

## [1] "Testing if the mod 26 of the Code 1 number of the iron verse
is 0:"

as.bigz(tmpc1) %% 26

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the Code 1, the iron verse: ")

## [1] "The number of digits of the Code 1, the iron verse: "

print(nchar(tmpc1))

## [1] 236

###

# Code 2: Until and excluding the Iron verse. (Shorter version)

tmp <- c(tmp2[1:(ii-1)])
tmp <- rev(tmp) # reverse order of verses
tmpc2 <- paste0(tmp, collapse = "")
print("Testing if the mod 26 of the Code 2 number until and excluding
iron verse is 0:")

## [1] "Testing if the mod 26 of the Code 2 number until and excluding
iron verse is 0:"

as.bigz(tmpc2) %% 26
```

```
## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the Code 2, excluding iron verse: ")

## [1] "The number of digits of the Code 2, excluding iron verse: "

print(nchar(tmpc2))

## [1] 535957

# Code 2 (longer version): Until and including the Iron verse (With
Iron verse also works by the mathematical property).
tmp <- c(tmp2[1:(ii)])
tmp <- rev(tmp) # reverse order of verses
tmp <- paste0(tmp, collapse = "")
print("Testing if the mod 26 of the Code 2 number until and including
iron verse is 0:")

## [1] "Testing if the mod 26 of the Code 2 number until and including
iron verse is 0:"

as.bigz(tmp) %% 26

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the Code 2, including iron verse: ")

## [1] "The number of digits of the Code 2, including iron verse: "

print(nchar(tmp))

## [1] 536193

###

# Code 3 (shorter version): Until the end of Quran, from, excluding,
the Iron verse.
tmp <- c(tmp2[(ii+1):length(tmp2)])
tmp <- rev(tmp) # reverse order of verses
tmpc3 <- paste0(tmp, collapse = "")
print("Testing the mod 26 for the code 3 number till the end of Quran,
from, excluding, the Iron verse:")
```

```
## [1] "Testing the mod 26 for the code 3 number till the end of
Quran, from, excluding, the Iron verse:"
```

```r
as.bigz(tmpc3) %% 26
```

```
## Big Integer ('bigz') :
## [1] 0
```

```r
print("The number of digits of the code 3, excluding iron verse: ")
```

```
## [1] "The number of digits of the code 3, excluding iron verse: "
```

```r
print(nchar(tmpc3))
```

```
## [1] 62040
```

```r
# Code 3 (from Iron verse till end): Till the end of Quran, from,
including, the Iron verse (With Iron verse also works by the
mathematical property).
tmp <- c(tmp2[ii:length(tmp2)])
tmp <- rev(tmp) # reverse order of verses
tmp <- paste0(tmp, collapse = "")
print("Testing the mod 26 for the code 3 number till the end of Quran,
from, including, the Iron verse:")
```

```
## [1] "Testing the mod 26 for the code 3 number till the end of
Quran, from, including, the Iron verse:"
```

```r
as.bigz(tmp) %% 26
```

```
## Big Integer ('bigz') :
## [1] 0
```

```r
print("The number of digits of the Code 3 (longer version), including
iron verse: ")
```

```
## [1] "The number of digits of the Code 3 (longer version), including
iron verse: "
```

```r
print(nchar(tmp))
```

```
## [1] 62276
```

```r
# Code 3 (All Quran): Until the end of Quran, from the first verse 1
to last 6236.
# Works by the mathematical property as we take the shorter version
```

```
upon the first two codes.
tmp <- tmp2 # all the Quran with general indexes.
tmp <- rev(tmp) # reverse order of verses
tmp <- paste0(tmp, collapse = "")
print("Testing if the mod 26 for the Code 3 (longer version), from
verse 1 till the end of Quran (6236) is 0:")

## [1] "Testing if the mod 26 for the Code 3 (longer version), from
verse 1 till the end of Quran (6236) is 0:"

as.bigz(tmp) %% 26

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the Code 3 (all Quran): ")

## [1] "The number of digits of the Code 3 (all Quran): "

print(nchar(tmp))

## [1] 598233
```

As we witnessed above, all the three codes are multiple of 26. We also further provided validation for the longer versions of the codes that must also be multiple of 26 by the mathematical property. Since we could also test these 3 codes in the text type of all 6348 verses, the probability of witnessing this evidence with the three codes might be estimated as 2/(26x26x26) = 2/17576, which is 1 in 8788 trials. Below, I will provide the big numbers of each of the code as sub-chapters for easy access to them for testing.

You might use this big number calculator to test it yourself: goodcalculators.com/big-number-calculator/

6.1.5.1 Code 1 big number

The Code 1 number of the iron verse is printed here. The “236” digits length coding number of the Code 1 of the Evidence 6.1.5:

“5100710770106100530301501210100030125306020065200905010504053030140307010306601503030708015040641043006012510804104830115030750169601003012601503014061001030501710403016214002030140570401503075016400150102301215030602001503060200141003 0”

You might use this big number calculator to test it yourself: goodcalculators.com/big-number-calculator/

6.1.5.2 Code 2 big number

The Code 2 number until and excluding iron verse is printed here. The “535957” digits length coding number of the Code 2 of the Evidence 6.1.5:

“5099410408301105010003016553030150180306400105040630600230126015030150620040110650630600210501070030150982006600803014006004030202810130530301640201400114021682008040013064020400180140103070166014001301020305097200106010530301103070203070050115120025050130210050402140020108013014020608050110801306800200130110805210904050402190114050964010900703013080080301670053030161300105040510400610530301308008020307005306020065303012165040150107003030400470180020013016140603018002007020158002007055036402022005040520080100040103011610021605095200620010003017014004013011105043015110830114065016800200653030150405200801000406410430021700705200600130110806140198506201040500120080904051200400803105104050054001250200180203012370150010100030500402041306130163016401301108020050012040064020501022006001804006550107665306270301105043015110830114050116403070150111640307015091506100601804055040200105002064052630100400601008044013014051030703019803021005040214002030116400615010700301200107003040526301007030120165062010130610083015040307501406530301200207003040526301007030060040050116504015010700303050110403015090200109040301601026402013064010520015030140201614016200802050107003015040130651048040205040700600610130406103018050892006200100030153030124020200100065303012004011310400810501401301402040020010006404002400200164040090220040064020608050140400504008040205020306103021630110040207040502050403014055064150105088217007030153021005040520051900654082003015108055091221253020066024055010222008008012006501660404003018040201200616703200130101004020200650504060240010050150620090050116504015010700303040011008015040301650610080150403013061001040610508740109007030176803016520307001510805010430160020015501301154008400504010200340040015034061030140201200300240550140101264051041015010240520065010706010400150406403016501050406403011020040040610508640102002020031530653058070180010801506081800200100530301800200100101070030117005040508520010260050630407040014025303016105060830153030147061302061630400110064702504016100805015010700301504053200440900701201030613040011006840080301302100504010080501504040205040106400601013080020013016400161406030150012001040530306530301301026010801610080 50

4001301402030140650844010820080620030402025303015016200650301103014001
4030900301504040203200600103040015010240011015427010307030750101070030
1655083501050406404040050205014020100150010407006001410064020220021650
4064003040206704103066020030165303012506504064001304020301406508220010
2202003140530161008050164020504016504015010700301805108050108030600400
6040402030703140401610080501653066020065303012165040150812006490301400
1700240103070656301030301108020015503013306106200155030110803010303013
3061050802006401301703200400530301103016800200130164001614060301203040
5305079200109025063040704001402530301640400502014050101402070406561510
8032007010140614060301504030750101406155040320060010140680020013011080
3301014040307010300200703011030701064006014050040110154006010808002001
3016400161406030110030600107003016550784010307010300302026565091230162
0051900301620060013016306130165507720010410010300302010307065640010401
0610108108002001301640016140603012030405305076401020830171077030165680
0200130164001614060301108014053030826050754010900703012022004060128260
8050745010100103011008653017005501507340108351030904006507240104085040
3075080507150103018003015010270020403015040501205011401650705010401030
1218901504020304013060805069501040103012189015040501205011401650684010
7050400503650181020068620080506750102200100403015040501205011401805066
5010100419040400502050115506703200400506550105010440200101000404005020
5011306308050645062009024001305020306402050405103012200100150850650635
0620090050400700105010840400501650624061003083014001000302170011306308
0506150627002040040205014020100720050630703400650605065054404040050150
0104830117005280150595010403017030122005040301075040050585062005940301
1301560401013050575065020402140020108050564010200205012001003055015055
4010900705064030704006304060100305501650544063503017010016402406010011
3080505340109007030120220040601282608050525010610040303017014004065200
2070040015150307035085050515061030050403015085040115400200330040400130
0501404005011505050620064001040030120015030140400101200801504950620020
3004001306308013131515030703130050630504850630750403015085040150740301
5040564040030750140400501150475062200300400107003011403014040010120080
1504650640620084050850302504550640200100040301501504450652080400404003
0900801401985150307033013005063050435067020017301508504015506702007400
4040050115042506500200840014040400101200801504150620020700400130630801
0306130151300503014040040307041003065040506403070400130140108040201030
0505064020301500401304250501103070503950101006260402508501406400640301
4020501021502004100508505038506100301600301508504015506100306004004040
0501150375065040400140404001012008015036506100490400130630804020150100
3060050850503550104301406104053075017005503440105301220030050622001300
8050334010408301504051030705062200130080503250692301155040506103014080

5031406100750402003300504050630201305030506270020403015063018003011510
1402050140500502940630704040610400110010401030150670640340305028501020
0600130165010306130150130100502750630613011506121615026506500670240301
5011140190070612120040015020615040040170010150630610010165012065025401
0900703015005083011030705062009010165012065024501080200400402030700302
1001650120405501502340102002013064200121305022406408105040309006502140
1040864064060108050203014030030121890114030140300301218901650195010200
6001301504053050065018501030613015040530500501750104010301218901305016
1212004001122007050151200120215051503070380501413005015051501300501150
1501357068020040300200806501257065040401306570691004013050115200105002
0552018065010262060401406500946440403090065008468005040830965007468006
0040200460108050065010401030121890114050104010301218901650051401306014
0130601301010013015004140105001400130616100030151080506704060101305003
5063040701016501201402173500250650204030163063030130150040120500150107
0200686500050654003001014040200109408306499950620010600400101404055201
8064998506807501013061550705067049010130499750107040504060120610010200
1216216201249965064306004050143064051030708069104995501030211004004015
1030705010102040040499455068006402002006010307049935010200600130150403
0103010064992501030613015040530500499140107050301400150310804990506220
0100403012010306149895061002160301506100216030164988540130040301218901
1405401300403012189016498755040104030121890114055040104030121890180498
6550013050013167140400502064985150025040125400501208049841602301233014
0060264983132008002001301400320017001498257080120058008016004981527001
2015400701006306010304980570100163014007010061700149794012002013016301
3033011070020220040601202001240049785012700204001402022001301101280497
7501608102001002706200800600802008020010307050101020400404976501270020
4001402022001301101280497550131306405302100605015055004091040304974501
2700204001402022001301101280497340110600301108040012006901004020068497
2501270020400140202200130110128049715016084001200106005051080497050127
0020400140202200130110128049695014020063060050655201801405108049685012
7002040014020220013011012804967501400600180050501501070140510804966501
2700204001402022001301101280496550140040154404964501270020400140202200
1301101280496350140050314055064504064962501270020400140202200130110128
0496150160813011301501608130117330549605012700204001402022001301101280
4959501320040301640061001103015055012049585012700204001402022001301101
2804957501313064053021006050150550040910403080200930140012009011005051
0804956501270020400140202200130110128049555014501040050330110503610020
0240060150401550101923002008010307050101020400404954501270020400140202
2001301101280495350136755201803020504014051080495250127002040014020220
0130110128049515011020034005015010701405108049505012700204001402022001

3011012804949501508011400167004948501270020400140202200130110128049475
0140050352200401100408016005040306494650127002040014020220013011012804
9455014010408501026155010250680691049445064020034030115227002010104003
0140505357005494350127002040014020220013011012804942401410013016109016
5030127006006108040514010602506402003403018020070104941501270020400140
2022001301101280494050131306605015250700507030160101307001040610804939
5012700204001402022001301101280493850154301205420064005012080140603014
0010030050117001804937501270020400140202200130110128049365012009040050
4001308060185062001505040900163001402010307030602001049355012700204001
4020220013011012804934501930602130150670080504001301670080501808002001
3016400161406030120019100150401670080504005014040070940060150160501301
6503301200300704011049335012700204001402022001301101280493250130100500
3015101402030100020080506049315012700204001402022001301101280493050130
0108065406103020800200130164001614060301108050405301601049295012700204
0014020220013011012804928401200201301630130330167002022005361010021064
9275018015103070504030204926501270020400140202200130110128049254013070
1301202008230110804001300504030120016330153064924501270020400140202200
1301101280492350132004030166306303011405504032006001049225012700204001
4020220013011012804921501101000210130600720021405501024920501101004003
0105010200823013200404919501270020400140202200130110128049185010220010
0040301220065010100200300403012200491750127002040014020220013011012804
9162001505040320014050405013301100306006491520016008030120301903090504
0501605013011003060049145012700204001402022001301101280491350181020030
1680907030167002830164912401402013014001700306005030165520180151080491
1401501303015708006800200130164910501710403011620060600400130696010030
1250763011640101001649095017104030110801610009400130149085017104030170
8006615708020014060301649075014360102003300301640350301649065012608220
0401003016604030030149055011023015403070490450160501301100306004903501
2001003014030704902504082003014901200440010040201030404507010049047010
0401080490020055064001503108050101004004030150148992009400604020010220
6200101000903020648982002730110805630708010300302064897200204405040305
8040207011030011502030514100306489620090230128403020548161301150200401
1406489520041002515010030600103003020150148942001006060401610067004055
6361030702001503011080506286010406104893200706063013080010805010402003
4030150148922004016105415701603016405470640570160301302489120024301506
3061067040330140751060489020090400504070104035085050630610010401488920
0273011080512002402030401402010306150402001060040202001802014888200440
0100407107707006001405150700600180153020150400110121627002048872007005
0301506702008030113410030648862002044050403058020020700303050120010030
1150200601041003064885200700506102170070161006700804884200100400604021

7007052002024058290410030648832007005061021700701610067008040550107011
5060409805801080050705646120041003064882200700503012162001404008015040
0300924052007005014100306488120020300504010735020307002015045070504054
0705048802008602405150103509630301130112901840510307015030602001150148
7920070050301296304061004002700204878200204405040305802002070030305012
0010030115020060104100306487720090040084030140103005201650120805481658
1090405103070150306020011501487620070050610217007050120801020804875200
1007080109170400804052819016415080487420080040084022003003020405501025
4060100140301501405102506487320029901640521004002001804053055040080510
0150301630602004015014872200300130121700203015040141000506403070106048
7120030012170020653021505010250405103070200207003011010030114870200706
0630130800108030170011501570240050148161504012003002116301100804869200
7005030124640500400270020486820020440504030580200207003030501200100301
1502006010410030648672007005061021700705012080102080486620070100504030
6005071370140550120601503017075040048652004040060406085040610108012009
0200901810200405103070150306020011501486420070050610217007050120801020
8041704002700204863200204405040305802002070030305012001003011502006010
4100306486220070050610217007050120801020804861200204405040305805101151
5020200400410030648602008020501205040301731505010701210200340048592006
0468163014001700103070515030408648582004100410020040110307014030110100
4003018015061070800200130115020038064857200405504014021406030121621150
8400808048562009040050180263010004010501522001704804855200347165065034
0163011006150427016270020808650406100405302100400270020485420060704061
0170055062008012030130610010701430110301501070954048532003004005040412
0034055012050014313015040506320060010405200190211703006004852200205010
3001030170143017041040610405507030640080485120070050301501000400140805
1000301254020848502003474051080140125013015040405134100306484920010040
0604020040130206405165116702400161627002064848200404006040200860163061
0010616800200701051011620010501648472004010030110030050165701603014002
2004001001484616427016530301643601804845506440160404005016484450620240
0130650620880040064843506237040050010483011700550408014842580300120530
3015064504015306010304841580713014008071484010306130120070050301504020
0107005017005483910200140400400202200130110128048381030010001401513001
0008048371065152080400640301648361010009164030900140516501204055013021
0050408650406100648351010021140804640500648341030613011417020305155016
4833102007030030122006555016483210501001610501000165550164831102006001
3015130050301510307050164830105040400170015809505040482910500501301620
0207003015010367301100306005501648281108164001401655501648271020216208
8001655501648261054005040301202200103015016482510806130117330151731040
5004824102001080660510706050164823107060140130150160501303060103050164

822102006001200765200716200740013014821108061070030140105120021648201 0
606408089010801402125010403040148191020010658021010003014030705450701 4
818104201613010301001097016481710306400107003014001012008014816101004 0
015040240307016540206080501162074001308040204001540150692108055031404 0
050170016800200130150404020130050170014020240307016552008010004030170 6
016202200501404030301130130081680301640500130120010122050625040031050 1
070030148151050608301216506081501070030110731061630407014021616015010 7
003011073103080020013011080140640016140603011080140530306481410440051 5
040240307016565301026050703080050402403070165202200501403070301504040 5
100030240203070048131105043015110830113014200104030615020020700507010 3
064005040507080020070180481211010300100830150401050100010130509003015 0
165090030113015067024001050140307050405240530140648111050050130151040 6
040052010130403015064060103052006001301250650406101305010700301501481 0
108002001061300105040305303015070011050147025040130111010300405400701 8
030010501000400130400161406030110802030405040402064809103061301652006 0
013015303080480810504040014050160501303040148071045301405220050404051 3
410030660805013011065400140650900301130150670240010501501930605040152 5
303013075011404020612164040050115640400104060140601130110550148061071 0
800540601001700120304004805105005013015306200207003014020301480410200 6
001301550030150030151504064803107703016400130301404001012008014802102 0
022030152200400110150401012004100304801101000914062009023011000171404 8
001030010001014052004603011030010001070014799106140301550315450704798 1
054005040301520046045070479710200600153075051200410030647961020010140 1
030705506200140400801479510120014041680301270020140479410861140542701 0
301108618047931050416150106061002110050120804792103044008015044050047 9
110307013011008013012656479010640060180520040670047891061003014104300 5
403070478810861010861301655014787106530150701009501014064786106100014 0
640202819030800140478510651700140350301647844063503012001241658260803 0
103030150406478340610040050108202200440828260615050107012205018020220 0
402083020029016478250640307010130405200500201502030620307005064121700 7
016403090050107003030501647815062009050104051306110103004054102040550 7
010501000101304061047805061007090105108010700301405406101610013010104 0
084052007008047794062020040218601630610010191001601406030150401806020 1
620010501647785062020030010140705303015018260530301200101000530140530 4
014777506410204030140516200802050107003018014102050641020010401477650 6
240020104058021010003014054507040147755063010050040402001000405040405 8
012003140530160400401477450650230140203064001502301530401477350102405 0
193060240570404006040400110308051080506704040060104030604053040147725 0
620091090403014054012022005010176004054507040147715065010061013030280 0
200130164001614060301161003060040147705061003016003014054011030020010 1

0005040161003060040147695010100419016501205015305004050010482164001103
0804768506504061013030253061004005063061001040147675061000194061004054
0117005240540130814052004014004014766501090220040040301504040207040105
0180169022004003010047655065040301210200529022004005020070130050630610
0104014764506503401306505120220220040040705024005011408020020700804763
4010820030120023016555015670450302100504015020150147624064060301217007
0150110066150103070530301504080476150101008030040150305110803021001502
0150116301100476050630160400108007021030704058007023021001647595065020
4063063040550120405305014030100040510307080691064758401050014001306151
0806100030130160120151080506707150400104757506540030010140404083065520
1802405150444016475650105200260201402102004013020103005040405304070504
0405150400301140640540010200700405215010083015014010124054001020070040
5400702400161650401501070030164755501070200682405150367658068090402002
0060103070501010204004047545063040704004040050201402110105051622003001
6163020475340108330121700704052200405110066405220040514001140250105201
8047524010705064001503108050101004004030150147515063040704004040050201
4050673400140501402010307016601620029040013061162002901801563090147505
0620090240013040400501401170052008608014749506270020400152404005020104
0030120015030157005474817044050532001501030150670410406104747506270301
0800660010804055010700301474650102700204030307001040610301068047451200
1060301233012001060400647441200640140603012006404004061047437080145040
5301404742701001630202200217007050147412006360403012008230164740706802
0040301801006030164739200640704030140010230164738200630050401002001080
4737200696040214002064736200693016473550647061010700301405406105040162
0080205010700303030106804734506303704006010130804052189012650700305004
0126507001640309005010700303050180473350104004030156100301670010017200
3016553030150147325064070910501410200114061007200504040550404102001140
4731506427010301301605013016503301400100306001406473050105040640301708
0504001020020700301501802002070064729406304024005011408040550703064008
0472850610001940610040530252169016400147275065034061200816016301100130
1306602005040405302100504050107003011040011402030700204726501024020010
7005055040402030105012006001153015303017040163070340013064725501024020
0107005055040402030105015303011030116200808047245062002070040040203070
3050103671501003060010300302050406472350645140301407050801515030020080
8002001301647225067060640301501641012151501050214060301647215010100601
8014061001650120405501302100504086504061006472050102009040050401650120
1406401101005040167019400601140804719506200900501040565100701903014054
0070060018040522002004015070164007080471850108104008167040040400405303
0101007001464050010806471740104020030120540030703130151030704004001103
0050402007004001404716401010070301810200301405103070150306020017001417

0108064715401030406564010301108040515070025080546503651507006001804714
5065034061200816030110065502020021030640080471350102405019306025067020
0801030151503060200170011060640108064712401030130121700703015068016001
0501070030305101151080150202004006471150104030604030150404001022001010
0015108015043614080471050105040640301504015108050120504015032006001804
7095010802006040303020220045070540660404708501095040520013840510307030
6020050304707501040200340406100103011503060200115011630110047065063060
2004030115101402029600140803011004705401030703014010208301655501202200
3011002030700201630110047044010100707637040030110061553640020908052009
0108054001200401400302100180470340103070401301000256200300268060040013
0163011005801060040550406036180470250630201400130130110040510301522001
0080470150104060303702138053051103011000120080470050620020504040610040
1306030110014013060163011008051030701630600470014699501040200204030140
1051200218010800500104820140013054698506100950400402050114030500401008
3055018002001301614060301220068046975064706400140640201007200140603011
0806469650620090240013080140206080501108064695501050100640303040011018
0020013011080646944062008403016301016030301008405301640110806469350620
0801000400601040520018601301264692506703510140301030301504013010301001
6501204691501050608402030700302100165012040550140522004051400114050107
0060014690506107064001503108050101004004030150146895063037040060400524
0400502010700301170054020400504008016100670046885065040080102001503011
0307040540610468750104301406105011015063016010468650651605200401000108
0405501070030146855069012006003013040010046842080150405507020806104683
8030400600403061001080304020501468220283014001700140603016468170100163
0501043015016468010041903050647064001405014679120040140014060100403018
0467812006010400110200133018046771200100640013040183018046761620070040
0110200170030164675410706801600105040501200100301220020700802001232405
1030704005011406506306100101402403070150850467420010601015010307020030
0820307001701200604055070800200130110010030040040610467320010904030115
0103016400104050610108505085015014672362006003014061020307001008301258
1090301506704060104061046712102001005012040504041504030141501040610704
0400601646704636030120012416582608030103030150406466926200100030130210
0660403003017063093021002022004408282606506306100101401030702002901804
6682610003050401506040140640110154006010801405501021406800200130164001
6140603011501003060041003064667410530065670406030110100301612301005305
0120504030102002070030203070010805014666901084050403054130230110801621
0050801300924055040430014055020010050404053021001502030514020646654107
4015010430615108050613001014040530466446306003014061020307004013060215
6306004146632105040230100213621010003012504082003011030060050404662900
1080821613020305064706400140170054661410702200101000501010040040303055

0330140080307164660410740504030530610040064001304004013054050533030610
0504061046594102703030401309002150114061043030610030130421014046584107
0630124020103014004041004100610430164090400600400130301100465741070230
1308001080501205020306540010100091140150220055010200100301100465641043
0030121700703011080511010030180200600115301530301704030703107003014655
2102004044007040200106003030701504046544105070200180203020405053108011
0100301465341040070104301401700555010200100301100646524104840610301202
0090280201910002050701508030020801700550405308010001080400502041003046
5141053006100101601570406080503020400136465041070630140610203070020069
0301108060080506464941084005504040050201402030700100830124006403015200
2060400136464841040070210100200510430130130610050409008030101404647410
7010030140300301507065010401030150705011010030400403011010030400107001
4646410200630130285040510301220010015085065608050526066064001404030705
0650160501301150100306004100306464541043100306005040602301080405302306
1301100306003012150101070801464441070610088030602003012700203020702400
4061006520101301218901646439630501660016506702008064170646424640500660
2003012189016865040610040530210040027002046413620060030120307002014001
0405430252150101081641270303011007200464041080050703091530400110060123
0600503016463941090830128640015035215040025018012020012401401406030150
4015030750646382105040427030203010200207006520090240046373105236730205
0401510801504002501610601620015108015010100301615150444080020013016463
6362008050401530140615150107615150105028010204051006801406030110301162
0090050104030801463531020040200401108040580405131403010083012162700203
0246349001080821400201504507064055040800200130190100504001401504030704
1004633410702703200203070012120040015020615040040170011463221037010300
1700550620080120301301100804055040200700504040513501162370302463141034
0301501200100301610046305063040704001402200109025303016800200130164001
6140603012101000403070105303015014629501010041904040050205015014010130
3040201455014020103070504010530301302402040130601103070165040400130301
0016403060150120103070506504010462840103070103003020253030168002001301
1080140640016140603011080140403070105303016402050104253030150640307040
0130100462750610041903014052010306153030130102601080405608050164053016
4012164513616214002001040304050053066020065303012165040150107003015065
0406403011405014626401082002006801000530301501110103004020301407015040
4020400301013053066020065303011670109400501640202630100108050140101301
3060041014030615040306011630610050203061650406400403030100150401212007
0130140030110046252001026004010307053030150140201100400153030145070402
0402002015011680200170400303010121006126703004020150307036105005016200
2070050404020150100306001501601503011510111046244010820021640053030150
1530301161004001656404005200208014001040510600140830302011050140204812

810118007024020800702240010001013061660603400130640500150900301800702501509003015040120010500201625040031165040150107003011510111046235064030190030140520103061802400104030504065014010130147021006608030140601301601022110030130121672150400130640206080501167403040013065055040120010600500201050110607016050504016050130640550401200106000501050110607016050504016050130640550401200106006016505620105011060704061005040406100200600601013016504015010700301151011104622506408200400402030703053030116100400164020106600150102168309018056600150650406403011405014621501096010040301281053030150116960100163047030121405501021683090180400180501805303012004011030110804001040081010002400104003011630400110080102006001301103070140514814001000250180140550102168309018016304004001001501050406403015040501400801019501646204010208401030705303016540705065303015040130800804619506430012003014052010306150110907030161006608030162008020301402010301520020640202630100108055010765014010130140201030122853030150203064040050703020040130150402001050020108040207010910630530301306602004020108050116403070164618501040415040400307080140103070168290400805301532140610016210904005011650102400801250210060180402013501165040150107003011510111046174010820020068010005303016405301200106005012030405103013200600400104008162002904055016306461650630100701013040520050020140012003830112006504020506415010501070030150146154010907020031652008010004040530106100400303040526301005303015084004015010701030615303013066020045070405400169015068001000105010700301501461450620070300400130404005016402030140701928400501800702304020800702200532030610030125301620053400130610250301400690100680402040016901167080200400130165040150107003011510111046134010307070104060530301501530301161004001653066020065303011041050102164041004001301650401501070030115101110461040100307070104060530301501530301161004001653066020065303011041050102164041004001301650401501070030115101110461214010900701200316520080100040405504040018301903011630407061650401501070030153030147062001802030140529001010001030701200730123701051006601030701064006018090030100040060180520071805193003200600170200720301035013011080405305004065120064003011080405305004020307004636030120050015040405563610804051401060150168002006530301504013080080506100040021014360170202004051200400405501021408200200180203011030701430015704050107003016530301306602004408404611141053005303012108020653020501043011030705200590010301008301501046104530125306602003060200110700301654610121020010018400802030700506450403070380164030704004030140403070805068016004001305010200901004064020606200501010030840501050401530301130050140120083014360403015030600440030100830121106200301530660200530301100490410030460914010307010300302025303015012061530516152100811650120610610040030154030204054073016501050406403011030706530660200103070540050102060530301307501805103051330151040851040830140526301001080162008020501070030130703700146081401030112170070405504016200802050107003011502700703016301 0

740063013001050405400408200108053030130600410304030702001010002520070 4
040550404020210904008040561094005014056403070400403040015040640160506 5
065040640301320013063065308401000302105011806207040104530164012008301 4
360403015070402064906162008020501070030140546071200109025063040704001 4
025303015012064051030704020200809001501470250405204050922405507040201 0
410164020507040510410180201070030165646061301042400530301550603043400 5
030630210050404003060041001040030153030155060460512001090501306110306 5
064310130405002001241301163063016200802050107003014020304001100630646 0
412001041001030030201030705303015012061525303019181410015103070162004 1
004004030102006001646031401010040060401912009040201045106501050406403 0
305101506204003064020507060150301104101802065700540203030370801550670 0
600140052001050020405011000405303014020470646021401020817107705303015 0
120615506700600110520010500204050110004064601121020010018400804052150 0
164051030705501020603013075018040526301001080140403070805200330030140 0
840020506701012107001501050406403015070530301108002004100304600140103 0
112170070527007010306400105040620015501301154008400504010200340040015 0
353060041053066020065303017091050406320088001020040301103070130632008 3
200701301103070130632008104070130110307060103045991401030112170070402 0
270070103021005040404001030640014020163064004005016150608120031530301 4
020400610167010940050180506403060106140550630400110040041043006012103 0
614061001030150670440060212007013015040501080306004030303010045981301 0
301001301506510080101301650120302150506460840030250630610010608030210 0
504053030130110040203070020150670240040050303010053030140130201630421 0
501506410200104020702400501506200700156700600140030405011000401030140 4
001003095011700150680306004030130610010604597140108200120068010005303 0
150120613001050402700701061300105040302008010001080020013016400161406 0
301203040530306459612001070605010200801203030150440070115018053066020 0
653030125040610403050406459512006214061004040050206660301509004040050 5
090064020263010010802030700501076142140510305110301506504064030163066 0
200301230100501050305014040050509003024594120010260050630407040014025 3
030150120302170805040202412001611200800402024120015011101030053030150 4
040203020304010504080301004052630100108060103014040540050603012506306 1
001015030200801000400601801506305161503016401150400301000300212007013 0
150405068030600403012030306100106045931401090070120031510400610608053 0
301510307045170140210806150406560805010307050020501014050180500205050 4
080405104101100680530301410530301506701012101405012050670101210501070 0
301501459213010901652002025682604006562001006400656200770400653066020 0
653030121650406400304591120010700506120030024061451300201503060200115 0
145901401020817107705303015012068002001301640016140603014650353030645 8
912001090404001606405053405304701640550703064051030705303012800100066 6

0301520010144051030706603015090053030125010501900301400120200300403016
5010202003004030164001100801504030165010100801504030127007010645881401
0900701768053030145070203070050120640540011010604055070200802010615108
0501043016002001550130115400840050401020034004001503400150406403016501
0504064030130600410304587140102081401030705303015012068002001301640016
1406030146503530306405501401017040150140101164147103050105040640301263
0100108055010206030130750110700301654586171077012009050530301202009050
1064585140101004006040191200902010451062010307054004070504040010620060
0140014062025070050404041004001405303012030200801000103045841501024018
4008020301508400801501458340203015004011650620101304050040202001010001
4061003042400601016306400400501612001008030140400501610501000301530301
6560805050703060021014050180306002105040630600210504040205040805303013
0102601080161008050400305067044001306540400501154582402050110008001320
0600106163060024004020808108015640203016010501458140203016401402030160
1013064020200631402040061016100400400616504064005016653062703011050430
1511083011405014580402030140701402020040010503064020704053030165063070
1301404005016403060301103011670440061650540013080457940530530301200801
0001050308020018020405616400140405005303013010260507016490616200802050
1070030150145784020301407011630924001306306602003011670109165303011670
1091165040150107003011510111045774053014070192810606110103005303011620
0800105030104530140530501024001404702504030660200301161001300653030130
1026050701649061620080205010700301501457640202001260016302506501020021
9030164020504050104513403014030705010400840205063025030645754020301407
0140307010530301630610030150830108040550802007040030640514010602405400
8020070308040520150102001301300506306457440550110008001530301320060010
5030501800200404052630100108050107003012608401457340530140701928180550
1680020016520020653030196006011401670240014055012203070045724052001241
6405563650622008001052010130403014054008064001700180102080457140520012
0060140307010530301620040130180070210804020701095060530301307501401652
0020501070030301630110040550122030700457040530103040164053030660501910
3003011045301405305010240014047025040405200124110307016440020015010700
3015014569153018010012630100103070401501200100301506200244001013080145
6840520019021104070164054090180530301405507030501070030120103061456740
2040182001167091004006800200130110801646080400501404001030640050140400
1060703058045664053012001060050120305303011610049063080200401301407701
7001808062007040306100657019456540530103061804006403015040510307010300
1000403012009005020103015062009005010800200404052630100108050107003014
0010120030140010030115108020020700654020840520066040030750117001805200
6604003075013063016504015010700301306100106456440201650040640202301004
0040403070105303016400150406403016501050406403030620250700302008010004

0060165303011301530113055014030701804563405120020700405400131700140530
1050180159120030011341008054001000240510400140050157016030113015062009
0050103058045624051610040040514001610454054171644005150107003016456140
5165116702400164052630100103070530301702950107003012010306118050130110
0170014040307030116400615010700303016301100204507050401632006001700110
4008201030170404006010504040550406456040517040170910080140104081401610
0606200150301108043016006550402040522005040520080100040640012004050030
1302050401510804053061080904030607050402001550165010220013003030570030
2004060050402001550165407092001010004001040305023050402001550165060120
0101000140504020015501151080506100400403014706104003015503301305004045
5940516511670240016530407066053050107504020522005040550102103070501205
0408014558405302009015013080405150203051204003200600110400301204001020
0100504056100430011055102001005040501012064557405301065004020015030164
0170501301302014001402050630201106506704004040010162008020501070030162
0015501301154008400504010200340040015034001830190301163040706165040150
1070030130600410530301501455640530103064013050102008012030150161650401
5010700301103064053030150122030700455515301500401501020080120303064051
0307053030120040440530210050405010700301521001705012080102016200900501
0808002001301108016200106010403080145544053014070192818053030130750114
0165200204055012203070045534053014070130800164053016070400801620080205
0107003016455240204014100140025001064020200905010530301162009050400501
1650401501070030115101110455140530158020070550330140530600410645504053
0128309010640510451060454940530140701308001050308053030130102601080163
0400100501070030168007022402080070263021030502030640550402009040050130
5303011300106306203070015200176122008301708004001040081480140164702150
4014018010015006301164300804056404005060050011700110400821100200301220
0800801620080205010700301404001010030170018045484053015004016015030305
3030122008001020307002040522005040100830116702400116504015010700301501
6309123011670240011620080205010700301501220307004547405301283090164054
0011010604055070200802040522005040100830165644084010307030750140216504
0164001830190301163040706165040150107003016454640530140701308001530301
3010260507016490616200802050107003014545506100601803014061003011301203
0510305801000130220015505040570160130116500230104030506470610140506200
1040610405501204053030370400604001306306020030150404077030163061200290
1402020029018045445062008020400404005020140221700703011610067008030110
0150220061030216301100100830121700560103012001503011030701620080205010
7003018002007010406106454320010410010300302010307055011030210400640301
1010810501103070200411002505100306002107010403068002001301640016140603
0110030600107003015303015011620010403061454250102403013080010802010306
1110306155064504053060103068002001301108073704026010308053030110701423

1013050406454140103012170070504040202003106402026507005040402030200801
0001052165040165303011070141621031150406100110454040101004006040100102
0091030161008301103011045105104105010214030110049040106064047025040307
5011214002015070406015011504061001101630110045395010200700504040540610
0103011630610800100140308016400905011630110056200800814030805012001003
0150670404006010503301504012008050201030115080200907001645385062004008
0101650120140640520801203070064055070163080030255301150122001005303015
0645040167006004001501070030140520090501306308045375067032001040530703
0400110130115080200906102001003015040402030681401502030514100306453650
6107540060105216501201404052100186530301400110125064831016501207001103
0050404054004108011306405200190211306405704060405507010501000114080541
0801612001902161704060405301503070365108040201502040501140108040515020
4041003064535501040200340301406100301107350203070020405502016040130110
2001013016829018015220020040121030030202004044004534401030121700701510
8081020052404003037040060114065302150200940408002001701700516301100405
4001046130210040060401800200170561200140308045335063053400140610040201
2001105020306524003060200114040201000302165303014507040307030114050130
1100453250101004190301504040050205011504704001402150400180150400530150
7015020801400301504001031163011004531401090070406102170070402010307080
1600110501530301130116427040013015803060050406510410501025040200700503
0140030600410068011008130125406100200700501700141701600120020700164530
5061006080400404005020140261008301200101000280020013011080506200220400
6040040400502014025065301217007050673400406103018015240400704004040060
1611050430140204001108108040204001210940400257001200150301103070162008
0205010700301800200701040610645295064030900101304056405301407014051080
6103061630407014040400132004302030645285010200601600165012040550160501
3016503301504040530210050404003060041004040110803061003014051030701008
5010700301201030614527501030613012001091601130117005140306100108010085
3030147065015040120301065303015015001010004006010140561030210050405062
0010030140030600410063200600150110505014704001140203080151043016303011
0010700301645265064706101650120107003011004903014706550330121890110804
0540011010605070761340050616304070140506081405507030210040050501070030
1201030614525501040306040301504010501620103014002400105011040010200700
1080103083090165180020040018301903040701501610430161030706103070400407
0501104003012040040705020020300150110507076122003011005506050107022001
1000302654300110003021700110400812005300506500130500530190806530408615
2002054007080066152002054015400304081501608151043016250160501301150109
0664524506304070101650120140217315108050104301600550330121890120103061
4523506507810405130640510307080660013080164011004006014050053030115022
0016301100501070030150145225010506084030301020030026164030900501070030

1200700501030110220070150160301004904021400201700565408200614014011060
6402140020530210050406452140104100208011700550630610010608052164400510
4030700165103011506100260140120010600501206301650401501070030301620080
2050107003013011006452050104030190030140610030110451013053030150140400
2002204006016504018053050040103070301010120060110502504045130045300652
4040020080206530301450705040501205014040010120013010045195010240200107
0050130115011406103011086101401301702400150140202130610230708010140102
0041140630602003015040170424005020140301004518401082003012006801000301
6564020501026105010214105300521080205108050680010804001402403070165110
1030053030150401030506203040400130805400102004008015013010051200400801
5063061001040145175010240200860170054051314030100830301620080205010700
3013011004001501021504001101405103070103040040017001645165010200801204
0540041270216501206147014053016501206015030120030081700164515506308011
0004051017045070405654011010030140610103015302103400601013050405303015
0645040670410504040308001504064514501010041904040050205014030705040520
0150016117005302100504021400202105064001014001614060301108020200300405
3040180020013015040161003060017001401050620015303015064504050670440014
0404001012001301004513506800200704016200700501140701620080205010700301
6104060403031610083012130114055010214068002001301640016140603011501003
0600140451240102083017107703015303015040214002030130107504004511408451
0401020830171077030165680020013016400161406030110801102002203015306450
9501040301703012200800200130122006400161406030122004408301530308045085
0624007040060104051306155040506320060010130406103018011050430151108301
4020400200100061675530301400110140400700600400140205012402030700450750
1020090150504040203014062001503014020161406170054020406101100304040010
6050140204020160505040610301301010064506506107540060105216501201404052
1001861630407014040011010604053014264505501050100104006040250850140615
0900130150900505015701603011401020045014040400301001510802102001305701
6030161008530301470650130101001700164504501040200340140610040400502064
0400200220400601804020103070103040040010400110150204004030801162008020
5010700301140164503501024030176803016520307005400408200108040522004053
0600410804001830190301163040706165040150107003011401804502506304070400
4040050201406006050400605015020150110083012402010307010095010150214002
0170054501506304070400404005020140506734004061030115214002010301107044
0054013020510500135401302010200400645005063092403012006060010700104061
0570160301406100400406106800200130164001614060301203040530306449950640
3070101306015030120050020150203065108021020013054011010030140610103014
0207040310405004020400104010405004020101081053030130100449850101004190
4040050205011501012121640010116301100501130140540038501201404001501021
5040011014051030701030400400170016449750650900101301405501403070504020

3070024053014062005430113011502030510140611085064006405011050430115040
0110813011051401630110064496506200207004001308015303014702504051045105
0408056130010005200902103070307036523010065704060103070404006006403070
1030705303015308001651655530170060040015040400101200801449550640309001
0130405640026020140260805030201073400306100830128002001301640016140603
0153030110030600644945064020810140160405400140406405110840166040018301
9030116304070616504015010700301204053070350501400110106030116820040031
5010700301260840144935065010061040610030540820061045660150303020010190
2170054492501010040040301103065303016800702110306140580070250104030190
0301501611010300530301504020507016501000105030405501449150640307010130
5010700301165170240040013061570240018020040130150405701020030010307020
1503070340500449050680304006001051080165012014010805401101003014061040
5501021080010010202200501405501021101000240307030140513140470250401301
1680304006001140802004013015040400150102405150104001644895010403017030
1103070405150308008064001210930150404051501007200656250301640208301621
4002030130101012006011050215010400141003064488506703200400402022001030
1405001510307080160150406560805030801830190304070504044875062602010165
0120140214061001073103053030140110150632001013050107003030162008010001
0165040150107003030301004486506200208040010406100304001101302030700108
0501550401701040380020013011080140640016140603011080140402030200600606
4485506200203004004020307030653080080504016100040024003065200401251080
2030803011020034003020082301402030200600601070030153030144844010301732
0050402170070405304052200400110121620080205010700301610451700544834010
9007021700704053061103061530301506450401670060040011401306110103001626
0201404055070105010001013064050534051012006504044825010540217007040530
2010306116751570060040011101030015040011015040403070170016448140103012
1700702520030028015704060104030501201200220400604020090104050051030701
0304004005303014001101704060104480401050012018013020303010644795065040
6105400110165303014702500104810128010083012201030701563040050530301400
1101203040044785063010070104061003040011018110200301801020090400615400
6404702800200130152110818010072005040140603015040530301307501140620015
5030163010303018013040060016447750650100610406100304001101521450405002
1014064020100306001080644765010504064030304001101308002001301640016140
6030110805014475401020830171077030153030150402140020301301075040044744
0844735062100400200404055012100400200180447250620020700400104053070302
0501603025150200601014050180447140109007030176803016520307002022005040
1308008044704010833012170070405110066103061301540064030113014006403011
5108050610067001013044695010504015520180302021510805067041044685010702
0068240515036762030700204467501030211004004010020024006016604506050405
0660230104466506107064001503108044655010401401100401080501010040040301

5014464506200400404005240400502014017005501446340102002030171077030140
0501205011007004462401040830121700705040560120010068016290405004461401
0833011660103015630400701805670060044604010408301103010002044595069230
1108010301000103054030120445840105001301401709445740610073014002003300
5014456401082003017107703016555015303014082005040130144555062009050104
0513061101030010306405070103064010501000101304061044545010704031405400
1100104030908030140610501445350640307010130405200500201502030610083012
1301140515010030600140445250102701301405501021406800200130164001614060
3011501003060014064451501040200340165012040550140515020305140530210050
4050107003016702400406100401200106004051445050101004190404005020501150
1012121640018044495010200300504025085014061030613011504004006401301105
5014448506306100103013065501444750102401302510801404001101301504040515
0104001644465010403017030110307040307010307040515020040060014100306444
5501080200604030150401103017050120550150670200805040444450105403012170
0703015040301010120060110502150103504100306444350102009005040165012014
0680020013016140603014051030704002021408044425010200600114061001515050
0200616203070020444150105201801510801650120540705064440401020020401100
4067062007644395061070640015035040162020040040204438506100200100040450
3405501165200200823012020040016443750670240040402050113010301041270220
0601804436506402003404061001306550152200170480443550630740070180103016
5040640040305016443450640320040050140202200610220024007007010501644335
0102405019306024020104001105015303011030701630704001305016443250104013
0660200402030105015303014127010301164150144314010200203066020040513650
6702008040610040530210015040080410030644305064010040050401501102002203
0153009230130092504061044295064101704020501130103010021700703016803001
2015014428506503404030704016301100655070163064004050044275010240306602
0040513410061020020700301405301050144265065040640150121700703011507080
3002011502200442540103012170070170056015030110300100010442450102405016
0042140603011040014004061021004002001804423506270301020300108040530244
2250103061301402010121220064020220040010401061010810651301530113044215
0105010064040400502050114055010214068002001301640016140603012200442040
1030703017010406030165550120220050405408200441950103060200401502015011
5045070504012004014418401020820040130201002008010151080441750102007005
0401502015015202001240530103010805150307501150144165010240301214002030
1644154084414506403070108066080401306030100640550708809018044135065040
6101304061001306550122001105301010064412506208061010501805303015030610
0103040510030600504040540030160501030644115064030701040561008301245300
5040130157018030030155064504050670410501070030120304010130644105067032
0040051030165701603014030705450706140550102140680020013016400161406030
1203040530107003012020012400644094010307030140102083016565301800200130

1108065301140603011080107003016564408506470610107003014054061016100130
1010400816270301061680066001040520070080440750680901014070300200703012
2008002001301640016140603012200501826044065010421703013061150180430650
4082003030501205013010044055062400201040510430150306020061030240516350
6405200607040605013015015062608104014404506402002401501801200401164020
0214014403506520012010083030402020050020150203061008301240201501034100
3044025065002014040205013011002022001501030708001001030203014011016415
0644015010403019003014051650120502030640515040309001406440050660302405
1080405640550702004008010130439950643016004050532170070108050104020034
0301501439850630201400155040520010500205520180151080402030439750630407
0400404005020140215640400500200611040030155033012030400643965064301600
1510804040050165010701301700304006608050130151054003004001401510806216
2016257005040801890240510307080191043955062002840040203167164040050155
0330116306004143945010403060401650120615040011012165040150107003014393
5065078400404005011306406103014020103070806600130412701104392501010040
0403011301647080070230405800702700104061013060013014391506200703001013
0405654001000240510400140050157016030113015062009005010305439040103014
0610217007050401640309005010700303030106804055010250402178130180304006
0018043894010100400604091200901700556427018040202200610220065530301501
4388506701091653030116100400180510805068030400600400107003018007024020
3050102130654020830124020400103410030110040015010230121060107013140306
4387501024064704020305501501910300301402050490101306438640101004006040
9120090170055067024001615250200400404001308057016030304030703055016438
5506803060010800200130110805201013040402050401503070330130050630643843
0101012006011050230130500405150307036510307015040705014270130165501438
3506409060040610040530213043130120305622008001406540120010600150400530
1116301100643825064901055040204061001700113050040401020040502122008001
4030643815010200600130301305004061803060405150307038043805010704031405
1501002001000180405504015040100400501150680601140308043795010100601801
4061001650120405501567019180540610080600400601804378501050200400100405
2010130403015704013612570050405200660151030701010030113063080437750102
1041201013065010540651070030117005504020010600150140143765062009024001
3080110400840050401020034002001550130157005620090402030401030601030140
6100110301100540610010805067020080104150643755065002050104051700121700
7030140550701508030020140308043745064400540301505012045070457014022022
0015030704120081603015101110163011006437350670320010405307030217007030
1240515070060016154006001504020022011051301510150404051020050140643725
0620880010155040405170011504001101240513140308043715010403017030122003
0660200105013011008051030406506702008010301150400110121060640150306020
0141003064370506427010553015040820030150645040150307031150306020050402

0302100504015030602001504030160164369506301604008066062040610030620302
0020700305501643684010100400604091200901030702050120103011086110700301
2206040400601804367506200440010040405103070150180405150470610700301205
0102005061436650640100400504040550401501802025025700501401804365501024
0301308001080501205040610407030110454006140903017040604004005018014364
5062020040030040217007030110804020501404004030900700140610301402070805
0105030643635010200100301601028050101002003004030147022050102610501024
0010301103011001501317001104008436250644005404055015062608106301026030
1507040550649010304055016436150102001005306580150191030053080010100505
0408200301200207005070300701050406436050101004004030302022004507052006
0013016110504301511083017014004014030203070030205016180200600764359506
1020400101510307012002006061216214054006102306435850620059001015103070
3200170406580080504018010060405400610230504082003012200802010504030150
3070330548165401601503015062010501130630643575067040310140402001060020
2200400408200611020060060180070240580070270060040010304001320048007021
0068040580070215070802006110504301511083011080405400300107040405501021
5040601005085020220040040820050640601001040514356401090070501040010200
1003015040303200103070501200100301170053075013063016301100643555062008
0120521501620086017005163011001008301405131403064354501024030660200610
0830140513104008405121613065400704004030243535067032001040530703052100
7010805101001254030201530703643525010451060550180105020098010700301130
1435150642704001404012002105050154061006510213040105120021301100700164
3505010270020403015210017050120801020200900501804055040150401004005018
0434950620080120524040030602001140215011630110040201215103070404004361
4040104512402040010363061301100434850644001004040520015001103070150165
4011030701501211504361501156802004004030110013012001070050504051020010
0108020302100504015030602001140203070020643475064400540405200150011030
7015016540110307015012115043615011630110030243465062060404006040524058
0530210050401214002040515010400140143455069020060010130140550140307050
4020307002405301404051504270140504082003011300630163011006434450630160
1064054004153002400204006040510030600164530011500150150408200301412704
0550107003015201013040301163070364343501024020010100040190600301108065
6510308301108013005010504061434240109002065614660405536309001305004050
4082003030220080014024054812003002170016434150105023012402018090164001
5021003060010140407006004001401434050102402006802030501605013015011735
4127050405301630703643395062301005040301502200103011501643385010502001
0040530150201406170051503020060060107003015018260163061004006510307040
4001064006011700140202200540705016200207004004050052006590010307016640
0604003043375062202004001404017050130162030803015040402030307036153020
3167130110030600107003016433650632006004002030700201400104054302521502

0030050180200410021401406030150403075010700301643355064400540040203070
3013026015108040203030703614540800200130140203030703107003014334401030
7030171077030150510030600503061001030800200130164001614060301100306005
0404054003016050103064333501030613013050040108004061300924055040430011
5020305180433250610754006010521650120130110250504040510400110140643315
0103061301108010250504015030602001402064330501080200604014061004040050
2050118809020020700301402050702200800508014329401020810307030150104302
1400203014011080550164328506301007040040203070301102200701501200100515
0307031501432750102403012140020301643264084325200640130120010904005303
0110301130180020013011080140640016140603011080140530107003015303019120
0904324401010040060409120090103011045400302050161504127050401300505040
5210455012006505150307035020306501401013011306214002030114010200440040
0502014015020040150401862002010301150108612030700206432340102081030705
5011300101405507001210861080130660200306020010612138120065040611108613
0153030154030201050120030023050120140643222001041004010307055011401010
0701300105040307031061500150161501200207004053671061432120062070030113
0010504030251061500150113001050403025101300101401003060010800200130164
0016140603012030405303043202006802050160501301501804051041014004041001
4025101060405290400501615282008054082001504050160501301150100700117001
1501610001302301130120103070501190010808405103070201503060200114080168
0020070150180431920010205050404020301406700104061013304050404020301405
3030150405304200401304061010400110501302100504040202200301621034006014
3183010260504053014080530301303080010504065303015064504040550620090501
0110306150404053050120140643174010100402170070108050104030190030150113
0154011010030140610405103051640560805011620060600501070030150102006016
0030150116504015010700301301100610806008020095040506200900501030700301
5040501070300160015103070506800200701040512004006431630102605040420040
1030130550630610010217007030116120014030501040301900301102004006547025
0401030650405301408053030130308001050406431520064013014077050403020307
0050120080100062002905040306431440103012170070405302010306110083012001
0100028002001301108050610002106601503015064030900105010700301103070301
0260301140501431330102605040405103070140201030618054030900470220090400
5015040306431250104030190030128101305501530301103070520031808309016180
7050408015305004051010605101060173643115062009040050104051010002301405
2190117001501070030164310506100805010405150100720014040640550102102006
3004052004016513090301164011001640522003016213400601501070030164309506
2008010001040516280010001401700163008168030164050013012001012205062504
0031050107003016430850630206400104052200103070616504015010700303010100
2162001060053030145070140611050430151108301701400408010300504040400104
0061140804307901084050404053014015040011011080506304131050107003014030

7010643062001050020507080701061626020140250510026106143052006203002001
2903020304001101302030700108050152005900103070420162005030309001080810
2003015020601013001050143044013070130120200823011080200163301540011015
0406430320010905013061030650405303015064504040203014068002001301108050
1073704024040050114064302200105002050706807010640201041014002602014028
0521090405040402021901140643012001041001300101700140570403103070656521
4504014051080500214068002001301640016140603011003060054001101504064300
4104083011030630165654004082002003005010616950100140470250405001010003
0130750101070030165642992001090220010260054127025501130010140200410023
0750105020306800200130110801610002305412703010072003015303019602630642
9841043002170070405305062008012030165308008050404054107106400183019030
1163040706165040150107003012103400601064297506307080400140403070106400
1101060301507068070106541270507052640030130210010107003016564296200649
0301400170024010307055015400140302021008301100810630912301530301840106
2023010010307040400600105303011300105018012700205303011030701020040080
1506306100104014295200620300200680100053030150115060815108053047505506
0880200400100105040610220010030110805464030113011200315103070402030160
1130301004001830190301163040706165040150107003015412705303012003002101
0700301203070042942001022030130800803016520307004052200450705061300101
4040530400150330140018006200108040018301903011630407061650401501070030
1640527010016656162602014040501010080300405010403019003011020040042934
0103012170070405305010403019003015016405501021080010030309080301540302
0130630653030152507001104030140501043015040405301670200300120200300405
3040142922109050504052006001301108053014061550405400650110504301500200
8410200105012050406550020081080530475052006001301500200841020010501205
0404291710770301106100301656130010504010072001054127028010930530301429
0410702301308001080305701603011080506200140105010700301501130110083011
5501506403070106155040506100803004016504015010700301615250650406101305
0107003011523037040060104289210200100570160301307030201020041014065017
1040301610083012214002030130750110700301530301428841043002170070405306
2800100040510307064052200450705800814405400385302103400601140470250405
3030110805063181050107003016428720010904030151030161505010270403105303
0140205010261505010253813040203014070140203061503014070115030402022006
1502200530301402050102304701304002004016214002050405303013075011402400
5040130100640516517024004001306400200401140204010040060167041802030700
3080428621020040550402030010803040547025040214002030116500200615010700
3015016405501021080010030104060403031103012022005040400100260540302013
0630640550102110100024030703014051314047025040130116100200804001406428
5210501050405103011045106130010504051030110240031053030151030140567044
0014050102020030040301103070200220510801610020080400400130650104301164

0101001501106010706106064064010512002152150109061406201030115010861107
0030161865052109061405010430150404020307020030042844010307010300302025
5012004100106130010504030100720030196021080020013016400161406030141030
1100405304283200109023017010406030165610300530500402060103051080402062
0070010131671401705013015040613167140206080501504040203030703800200130
1640016140603012009180428221050151030164003020640051030701022005303014
0203070053030110301540208801030050405108040400803040060011406428120010
4100103003020103070656104006403011010810656103063016553030180110306155
0645040167006004001401428020010905013061030650404053014050640301900301
6540040820010801300105040306004105020306548165401405307033053030113006
3064279200107060301108010010200806550330110801001020080510802102001307
0403301406102007005040061530685040610200100301401200700504003011022007
0150120010020103011501086120307002064278301020624051030704005011406405
1030709001080853030111030615506450401670060040015010700301642774010820
0301200680100030165530301501130180020013011080504030506200801000400601
0640522004408250682601052010130403016505100680504050200980400104001614
0603014120400427640109007030110307030165680020013011080140640016140603
0110801405304275401020830171077030153030120302100504050107003011030162
0103011086102030700204274100607042734084272910840103003020255011301405
2200110030504051020040108040550113014271410530010300302010307055012022
0028020104030611008301550140530501024001010400840560805011080610018013
0110801504001101405102005060427041070210011003001080655040403080015040
5240400200802040500530301450705040501205014040010120013010042698001020
0701704670080200300301560401700165250132101506800200701501605013011030
7015040705011700164268900103010002170070504040550100107005030616304070
1402162008020501070030150102505030801050608303054507010305011022001030
1400703200501030654010110057016030150900114061030170055030610010305400
6040120080047025040150405408200515010070015010306426796501006061010802
0030030156040501620010600301170450405016050130140160101304266901084050
4040530140165090063021005040506704101650120140405507030800642654105300
5040150401402015070011630110010101202003005010140510415010406106540307
0213017080040013061050050150403040840014061540140201504040012004050050
4032006004001406570160301403070420010510301426441027030304013090022022
0014061510307080160150406560805030801830190304070504042632102004055040
2030010803040550164055010210800100302022005040400100260540302013063065
1080803040060018021400203011060640150104001410030642624107025012040504
0506415010201030611040704051030706562001006405501700110805065040610130
5010700301618030061045165040150107003030653010010220070610403701154001
1014003090801306301630110030110403701150120010051503070363064261401030
1211007067006520080100040670030202200501203021005040306020030303010100

4100140130120303011001014042604104084010208504030107504005803060050401
3065104105010250403091230151040011013042597107702140020305501640513140
3020020700301216200802050107003015014258200109025063040704001402550140
4001030014016304070154011010030140610150401104001105040401200106002001
5030110801010030105040801150103070506806001013015040011011080506483010
5010700301501425720010410010300302010307055011040064030110108403015110
8110700301501400220064007400511403011510307015030750117001805703001600
8002001301102004002050154001101504064256506401601013040562001550301630
1030301253050682601020220045070501070030180162002204006015018042555064
2704005110140400502050150510030600107003015303016436016200401003030130
6604030030301643604001302004010030166040300301620015503016301030301540
0110150406425440103070301701040603016555015303012700704006018010007505
0191030030150402050100075010140164253401090070900867001301151100301014
0616200290501070030113011511003010140642524010408103065501205614705501
0262050102107003011700180506081105104003012708041510106030113065506083
0110640060400130642515010403060403015040105050130110061830190304070653
0301103011704504040130610050608150406425040108200200680100050401307504
2495067044001401510804020306402060805011054003004001401510804020306520
0600130110806110504301511083011080402061103061508504248506470640040400
5020104003015503301216200300216165078400130616801600400130152010130403
0140510307030750400400164011004006014050053030115022001630110050107003
0150142475010308060130150401506201030150401410014008400140530703506050
1301650330150401501308001501070030301150200115022001620080205010700301
3011006424650648310150400110121650120140217343060030120014151080405302
0015030153030114701173203070042455063040701016501201070030116601405501
0735030614104300121700701620080205010700301501001070050308042445062301
0004004020307030510801610003016501200100301170053016704060400130162008
0205010700301301100642435010200601600165012040550160501301650330150404
0530210050404003060041004040110803061003014051030701008640580306001406
4051041015010214040530165010780150200100405301508001010064242501024007
0403015040405140801624007040060105016405301065004020015030180162002901
0501804241501020060160030150404040082901804020142001402022002404005050
9001070030140205090040203070064240506304070400140401200105002040307010
1305303015014040050509005020306402046303130640202001902113064020704060
4020103070453001050150620040040060400404005020140642395067032004005103
0165200403061402010030600656103003020100950110700301530301150100950116
3011001501030704040045300403040546303301630110064238506304070101650120
1402405463036405200190216405704060405103070453001561314017001104008423
7506707610405802001503011030153030114701200300810406106423650610040010
1650120616504015010700301150103506423550626020101650120140250653012170

070301510070190405400700600180104530110307010407030116284006018040515 0
104580464050014016423450620090501013040561076001520060013012170070306 1
105043015110830110801076003012170070405100107005030400160850401101108 0
120090200901810200405103070150306020018042335064831015040011012165012 0
656100405504043001654051003060010700301530301501162001040306156100150 4
043001504016301100610083012001010002800200130110801620022040060180417 0
140180423250620080120524040030602001140215018052010130403075013015022 0
013006301630110053030113011642704001301405803060050406405104101501025 0
403060200301405400137001423146405006417051007019030500405100701904020 4
002007005013010080168002007015018042304010307030171077030120010410040 0
203070019008086810219040211050430114060301150107615200401140603020108 0
108616501040610108040016140607026050518001008042295010701019150104001 1
400301100152002061170691104001018002001303061530301100805016004105614 0
603011030110640060140500422850103010160303016604011015702200110801540 0
161001151080200410061510802020012615100680504010601620015108030703642 2
750104030170301220020307001414501530506307034006501040610108080020013 0
110030600107003012506200802040030402050101301004226506504040200101000 2
003140530400183019030116304070616504015010700301501422550620080120405 5
200600130124056512073015064006101305010700301422450102020030040303030 1
066562008010004006016510301164010100400601804816530140205301140501103 0
110861040203050040200300215011405013010042235063040170150501304070180 2
138205010261505010250406200100615050170011080651030115067044001404055 0
201108015026301001630110064222506704060101304058040520050020180020070 1
801200107005061200103002422150640307010406100301102200701501200100540 0
110140030908021400204220401082003015040820030150403010750400421940842 1
850620080120301203015052006060065412701080400306004100104003015303014 0
050601506012161200140304055014010140570805010201040308042175010202003 0
040521502014021502008020654865303012150401163011001506012161200140308 0
421650610754006010521650120140405210018640307030150404054507014021682 0
080400150102301240530602004054001314030804215506260201016501201404055 0
701050100011408080020013011080120015001656100430016405504020050020116 5
012040530210050405010700301521001705012080102016200900501080800200130 1
108016200106010403080142145062002050400530301400110110180540011014020 1
020010642135063040840020308030110307061510307064020200649010805318151 0
307016100030240030670801504015108040203064212506302014001550406155040 1
622020040030401705013014020303070310700301530301421150630924030120301 5
052006060061008301210800100530301200401131700180530301507001213015101 2
104001105013066020030501201406201030709090100504030504040550406201030 7
015090901005040405504020302100504013060200150306020014100306421050670 3
200101501030180205010806400506140547050107003018007022050102005014018 0

1008530301470650120029018042095010200220400403011065004060102801510805
0104301600405053216211630600414208506820040400404005020140261008301200
1010002800200130110805068200804004040050201402402030700420750102008012
0301530301308001020307002011010300302100504067045050205040303021507016
3080016301100530301506450404206506202003004004040050201405010140530301
0100405004205506200360102001503011080405004010408301108042045062860103
0601306030164051001507011080301301000130170014203506403070108066080150
3060200521503060200114026214002030121627002050107003014202506802009010
1050153030140011011080506304131050107003011030120040040301420150620108
0502053030610010140501801200401108001001700180400104010610108101070030
1654200506301007040040203070306104060401303116100030240030630210050401
0806400105040402050406160061030016506204003040500402043001161000302400
3040500130809402032006001040500510030705040405005809505040405002120040
0504040201003060010700301654199501040301703012200304030601501400200401
6102200504040015010230110501314030530301506450405067044005010700301427
0150140010550105013010041985010403017030122005303044083015010430153050
1090306004056704180651301530113010830165419750104030170301220053030120
2001240080402022005303014020307004001210930150404020100720064020200690
5060818040202006906150214060301612001200100800200130140203030703107003
0153030141965064831053030140011012165012050107003012080610203070020419
5506208064001050180651301530113010300302010030160040202200530301402030
7004194506200203001013060150301200500201502030660150301103070308008067
0030530301501120090240200155030165108016502060400303010303014020303070
3107003015303014193501020060014405053506306004106010400412705070506200
2204006010501070030150140203023400601105067041402022003011006419250650
4061013060150301200500201502030615108021020013051040013057016030150141
9150620020700400400140130103010010604030113064001830190301163040706165
0401501070030162001090230161040701301106400601014064190506403070101306
0150301200500201502030660150301100306005040200220180020013016400161406
0301100306003041892001090230170104060301655501530301270070400601805101
0003012240514020022013014052006490108050140514001501930602001010002530
3014001101108050630413105010700301501418820012021301610300703012202200
4408282606202507003020080100040060161008530301470650120029018041872123
0130110306130102002070061045418621400203013010101200601105021505002006
1610453011060640150104001410030641852001430166040530655070303014053064
0540020070070405010403019003017080501013040610418441530013014061001040
6106110504301511083011080165040150107003016150306020020090505030150141
8330130800108013015010200801203011704140616704180163011001030216301100
4001501023012402030602004020104001400204004030611630110041822170070301
5040140610150708080600104020220016704140505355076003020015030110805010

7003013011006418141270301501024020841005303015011510803020150116200220
4006015010700301301100418020015030150401210905015070506501000404040050
1305801702400402030150201501162002204006015010700303018070800301306100
1080200150301108050631840010700164179217007030143001506702008030116306
0041570160301406100400406106110300706164100015103070506800200701020015
0301417821700703016605067020080301210018616200204014040011010605303015
1100680417741270301220010902530301501530301103011020040180068016402030
3061001140506200207004006080417620015030121890140550108020060403015016
5303011030115042004050165200600130110801306110504301108056704530601030
5103011050506704400140501402003130417520018010003017107703011030140206
7041150164030705210306010301405220200300165303012200802013010505067044
0041742001503011030110505067044006513503011030140206704110301404061001
1064173216082001010002151080506100720010550330150630600410201030618050
4064065610500501612002070050401830190304070504061530500401301107310130
8051010603040705040417220012001003012001410552006001301501670140040110
5043015110830157005140501406100110417141300200301301026040204515067024
0014061001105040110700301301100641702124001080130150670200804102014063
0102603015070490653040706605067020080305010720307002061270012055090013
0105016106064053011030170309180400161406030121260141692126013011000302
1103070301820090103050215014015110506702008030110064168200123200220400
4023010030201030705303017029102030700201650401501070030145070653030145
0701400100402002204051400150193060200101000253030140011011080506304131
0501070030141672140020040802006040655040530301308001020307002013066020
0547025040530301500702105030404003010020305170011040085240201314040203
0010804040030714080400150102301230210050408060610402013410030641664155
0405301408053030130308001050406409017050405303015040402030140501020024
4050630640040610416541504003014061040201030708016001105014061001106416
4412703030140309004102001053030114064054702504050107003016464050064170
6865040610021430500404163217813014061030500404020103070801600110501406
1001105040110700301301100641624130020030130102601301402010451140610200
1140130140201020011405067020080301100150135015303016012504015020090501
0504080800200130110805010200519004061030120304030140203040610011041612
1700208020060406550401045101305303015014020470101070030180070240202901
0110041902010501652700205103070801270012020105016402022005040400150102
3012402013410065303011022003061001050113032005063040010040015501401014
0400201050670200803015040504064030320030110064160216083014061025040610
1302002204004030205040402022006102200240070070105011060640301100641594
1608030180020013011080200590010501614020501043042105018016001105015220
0704103061060640304001001105062007005067020080301100641583013080010801
3015010200801203014102014064051605016108400601657040165040150107003011

5021163040010011630110015045070504010083012405131403080415721700202008
1601630110080506200110065014015650670200801030141565010240501930606150
4001101210606401503060200141003064155211007030141043001061005501530301
4057006001801620080208040015010230124053060200405104001400400501204055
0122030700415410016504053030150404053050120140640526507002530301405700
6001808002001301108012001500165610040550404300140516501204053021005040
1650120501070030152100170501208010201620090050108080020013011080162001
0601040306141532001090230170104060301655303015011030025068001001013055
0645040506704105010700301610083012108001001053030164152200649030110806
0040014065010701301550101600403070104151701910701080300130640104085040
5010403019003030140501040900120200315083011043026301003017001580713014
0610405200700501641502160830170102006053030150140610301403090013040026
0201402608050302010734004061030141492001510030148163015303040610301203
0403015040301030040550405303011030701080600101305067200124054061041481
0013040030140610200700501030541270504013001050401030705200401504086200
3011010030103002007030167004001320043017010802004147506200801203015200
2063065010430153050109030600405303011670418041462105010504013012002070
0400101406110072001406030150404020303075010654001101402010200101070030
1654145200102203011030703015303040208301801650406400522020030010501640
4002008020548653030110704170015501240203070041443010260504036200600103
0130580150265070021508020040070180501040050500115040010108165010400505
0011504004011502200163011004143506200802040080501401013011030150670440
0700140206080501402040010040504020022015303014001004030506415010162008
0205010700301501414240109007030176803016520307006540040820041008070010
4061040011010603011004005040640011010603014051006414140102083017107703
0140050120501405400110200700640531671640510121504083090504064054004706
1040030150470400150340530600416150220041404010833012170070405100620301
0260167024001616214005010700303020080100018014030706540820010300302040
0706061502200165040150107003030506200801000400601065250650406106405220
0440825068260105306850406300200703015063040810501070030141392001503012
1890140550116200802050107003011030702022004004030204001008203070020641
3821100705012080102080405400700600180100830152168008410303091230121630
4136567006001103040530660200254013020400405640547025040217813016865040
6100405302100400270020413741302301108040523010040020200200100010130801
6200802050107003011301530301400110110803041310140413620010904030151030
1651301530113030693011070021100703014104300264003013021100625070030120
0801100041354010307030171077030153030150402140020301301075040041344084
1335010403017030122005303044083013010100610083012405501021080010064052
2004408250682601030020070301306850405010801852010130403011020040064132
5010304017030120031407050801300505001085503301504016240050800200130115

0500200616547061501004901070030153030440830116301100641315010430160015
6306004180404002940201030704013060154005076004053030110061521621400840
0806156131700110400812004075503301103014052200161004001501070030110010
6064130501020022040040301106500406010280151080501043016004050532162116
3060041301010041295010200801203011030702170070301540302040010085020306
1030216301100170054020406101100304020506200700501064020220040011014020
1030705063040010402050403060200402040011040301154005076004053030110061
5216214008400801561317001104008120040740505310301162008020501070030110
0106064128506307080101402403070165640030407014060805030204001080664127
5064030900101304056100830124055010210800100614530030165010102503012103
6214002030170800661522002006502800200130140010020030016412650620090050
1040110100405170018010200600151080600805040500530301130050401301800200
1301108050406400161406030110805040100709080200690301108060080506412550
6202003001014070103017040065501826055010401024001106940400161406030165
4011010030140610540080021001701040380020013016520041001008530301162004
1001406412450102002013003015040502064270180530301302412350102006016003
0150405050620400306203040705092810304002020030015010302030210050405010
7003011030162010301108614100306412250630513301151014270110506200401400
5303012001010008013010041215062006016003014052010306153030140011012162
0080205010700301680020013016400161406030141030110040530412030102061030
0302010307065610300302010030160053030141195065078104051306660301405604
0101304054007180402161004001501070030153030110350106411850102002204004
0303010650040405053108060103015466040405563653030110307016270020501070
0301102004005401101003014061064117501020080120301504040050206400200220
4006016152400270020801040011012040013410010302411650105060840301504050
6201805200201030501630217007030110200400501083061004006141155010100400
4030150404005020301050145530301501630306100400614114501020060016030150
4030400502050165303012503108040092008014010307014002006081106080503061
0040050141135062007030040013040400501654001000221700703014020104001105
0130210050404020220050404020103013075011405060811670240016411250620090
5040013040500217007030140201040011050130210050405301640306016402022001
0301162105016411140108200301200680100030165550117010403265070030120080
1000105303015015303015408200504016950100400130405608050110307016802006
0150107003011041270110301004110506504061040610030400110130203070010805
0120041001061300105040301007200301960210530301501164030701040306141095
0107370402405140616260201404001101060405210901060130655040164030900501
0700301616260201404001101060405219018041085062602010165012014040550701
0501000114080405302100504050107003011530110041004107506403070101304052
0050020150203065504008010530240307010307054001040061140501301100150405
4070505150306600170014050015017042008005016050130160401700180410650610

754006010521650120140405210018616260201404001101060405301426410550626 0
400810165062010403014053030150404053014265401101003014061021700703016 6
050405216440080130570405305004061701040380020013011080140164030900501 0
700303050163064104506803040060010510801650120140108020412705010240208 4
004005015415300301621010003014030170800200130164001614060301200918040 5
303013010041035062003002400601040517001550645040501070030120020700170 0
165200600130125065040610130501070030126301004007140300154865303012002 0
700170016410250670320040051030140500800200130164001614060301203040530 1
701040357018030030153030301004101506301007010130611010300506203040101 3
016501206306130100170803005303015064504016700600400140141005062002080 4
001040610030400110130203070010805011040604030311030110200600130130602 0
010640064030115103070108001001040030120604010801540150401080400404004 0
301040030161540064050108608050130110806400105303014099301020624051030 7
040050114061510307030800101405018030800504065608050308010440051504080 1
008301260150303021400203012010307015030750115014098401010040217007051 0
307030810651076001021700705104001105040409750640307040080660803040170 1
050140204005012040103070163040701406100110301004096506302064004030130 2
064001051030705303011026083010054004082004001206040405053055408200210 5
041200161520080040018030012050530520080025303011050412001501530301506 4
504050670440014040400101200801301005303015030610010308002001301640016 1
406030110030600504040540030160501030640954011004005011070071077025303 0
160103013080040504053014080530301451050406409441550405301408053030130 3
080010504065506450405010700301220506806600106542708012025303016010301 4
093506304070101650120107003015060812405200314051073106163040701070030 1
166014055070530301200802010304092501050608403011732030700405220045070 5
061300101404053040915061004004030140520103061521004906100490301213107 0
030164090501020080120303010650040405053108060103015137001100490301227 0
020653030110307027002050404040309001504080408950640904006004004020220 0
450705401101003014061040205014050040885064001040405501640010402050140 8
750640307010130405200500201302530304408301130500405011064006010305303 2
003014030601303200650660201300400401202003005108013032001305004053030 1
220080040865061004001040530703036701070020010100011022007015012001004 0
855062002070040010405307030305004030205040501200100301170051080601503 0
301502200800410030640845064030701016501206302002201520060013012170070 3
061105043015110830110801076003015303014051001700180408350620070300101 3
050010850402170070301405140018040530210050405010700301270020408250626 0
204004040050201401610067005010403019003030301010065401101003014061021 7
007030166055362101004001050408014081415504053014080530301303080010504 0
613001050405210451053030110452030700530301200207001030140526301006405 4
630350103040040500405220050630060010501070030146303550402007030010040 0

105015004015213004004012140020500104830150608130750530301408050102403013080010802010306153030120020700504040526301005106011003030301068052200504020065010307065804013060130305200490530301820030050408014079212301301103061301020020700302030700108050114019853070310405001200809040512004008031051040500550163011803040060040170200752320060010405008002001301108070102150105203060801401406030150403075015303015012004004030140784170104030153030180306001013053030147062001550130115400840050401020034005105024080200100015100680504080200100040530405220016100400150107003015020304077200150301108050407001005040040050180121700703015403020510307010085040801407621230130163061405201030616530301405145501070030120103061555060815067024001080306100301506704040060105010700301407541270200300280102003002301405305303011030116215016156427010501400610001930116250400315010700301640745061004001804127011054127052530301806600102030700303090040540084005040620015030150403030900405100680504040530407350102403015012006060030165203070013015401101003014061040510305164056080501162006060050107003015010200601600301501301005506450404040010300140164270180407210501045301903060040427015303013010040714010900704061021700701022004001090705018016001105013010040705010403060403013061506201501304002004016406950104301530190306004053030142701501400200401105013010040682160820010100024052003150620021903011080610140501570601653030180020016550608110504301570051080165060815010700303040202200161004001165040150107003014127011030100406721230130163061200207004001014050150640307010130501070030165064030701050107003011064006010305301005220054082006320010652006001301200700810140101100614316030103030115014005011006550401406620015030121890150402050113010301002020080202704004040030100530102605070308001030141450153030307036302100504051030167041050120140106050550405407050530660017001405005103011210504052200170420080050160501301604017001640652006490301400170024010307055015063040704004040050201402402010250108040207032004040202200103014050010200600120076520071620074001306402030580020010162002030040050162008020301541270301080020010130640205070105010005303015018016200802040050140645068020090400105018065130153011302030403015304020220053030140203070050013050040014030900108010030600470250401100306004020400154015069210804020100306001031671510501405004017050130150404020303075016153671550403070340500548166080505040402010030600406320018010003017107703016513011040604030313010200310302020040100301660403003012006006063010303011030702001550301200620106200155030110307030103030120062010100830128002001301640016140603011003060040622001510030148163015303016555018260130010140100306001014040108099013014306700600400105015303014120016304061200180202700120655040104510130530301501506803040060010510804051401080405501024020810530301501108030753030110301150620

2001001030130140542705014011030615506450401670060040015010700301690301
6003015010430153030130140605010430153019030600405303014270180100830122
1400203012010301150307501150140594010208301710770301530301504021400203
0130107504004058501084702512505040307040030640575010403017030302002070
0130165501405650108030204004030150401501140620031504051030704020301601
1403010040555010704031405504020702400504040620504040505350130401304054
3061001100830161008301803011004053501090306004030140550402041270130140
5250107040314055010610001302040077028030110040514063070403014001006301
4061010301405050102009005040301504020501803011004049506500702104061010
3011050200900501802200301100404850104301406101030110400507030201030705
0164047401032002050180155040320060018030110040465010950405400100306006
2001505040105040010030600550402001060015013011004045501030170301504040
0502040140020022040060110410240010030600140304360400501207050401406010
3021110301100404450102008012030150405012062002204006016010302113014043
5067040314053020520101304030143608040425010431605301670100801086200504
0510804006008050654001066017001804041501095040120030021003016001050152
0101304030302022003011007001404050102402001070050150114050113011030110
8610501403950640904006001070011030701301130403012403070504010305012014
0403850680020070405507040400501403740109007012506530100403620018010003
0171077030114055010214068002001301640016140603012200403520015100301481
6301530301130153015040140620070050401501140501301004034200150301305140
9016004001008302030700501403320019021301405507040010001740111020060060
4051507006004001403220012003001301504040547050150201301320010200501301
5030140163011006403120015030110801807080012170070547801700515030404100
5040150220016301100403020012001003016010280150305640400404100404005014
0202128200401304040050130216301100402920015030163019040550140521282004
0130402070404084001004036801700540283167153020300504020060016402710016
0100064010408561006700103080170054026415403016010280155063090104050534
0252140200300305010100019303050161700540244180505040530140150100720030
1700550140232160830140610305064706400140170054022212004001802009301400
1200901100405450706402121200300652001050020552018021510805067041015108
0501010204004040202162130140530584008040504704001503401921405060830501
0100400403030501620020700170054018200110600130150403020630802030117006
7060103016301070140601200207001640172001106001301504030206308020301170 06
5045070405501640162001430110200207005903016002405150903060011501401520
0190213016104101301103061261007010610018601640105120021150412702002070
0164014216155014270301407050120021905150436150150050840013065222008001
8015001000800204102700600640132123013011030613010200207006150405408200
4057040405305004065305153015025664012212003006420012306040010004017005
2030320028002020014011217007062905025019103003011050604010501522001041

5070012610115042702002070016401021405060861080307301504507053050164009
2160820010100022060401615050401801506197017005400841809013011080501050
2001004050102006001640079016100061502302050109110300301640062190150010
8160020052004012102003400810200301530150200600608040052156301400501205
0110470250404813010100025010130120304010302561030200801000122003011004
0042150140500146035106020020103070150101003016501401030601504008041003
0640031001507013016100660301218604010080980103070156420040022138301240
0200164001040081022002002070050702001060030128400228110501301100804001
4110330140015080190301103007030125103070800200707001400021615501427030
1407050501401030604661430150256639992123013016306120020700400103065400
1101162002410302020012402010301515030750121400203998200138030120501010
0400403013070350401800200130110805010460804030120400183019030116304070
6165040150107003013070350401399720015030150401620080205010700303030106
8016200802050107003015090020307001309121405501021406800200130161406030
1150100306001406399621608301406101660501402410430021700704053053030130
1026050705063080010501070030150153030130102605070203080010801065301702
4004001306100830126015030150102402081808002001301108058010306002015030
7031501466141103995214050608610803073015045070530501620307005301502008
0100080399421501617020120020060065220020080100040060180515040080140501
4661450900640514030103010064001830190301163040706165040150107003011301
8007021030704058007021010002103019306003015040120010500205016531705010
3012040037050301660220403090041003030110039932196003011080105077061510
5030802013011008054816537050103065370505067060400670604005301060011700
5501399291200903011660103011504516993004001306100830121505010240208180
8007021030701508007021010002501409060080600400130163011004055040707808
0466141030701630600470013991212008403011620066040070014090600301125020
1400130563990219600301309080654020830151501040016520304015044300639892
1615303020520063008402001093016398810012003001301610300703012508260105
7040301233011502006006015013987216155014101301170046614150427020020700
1650630610010140103070200290139862160830140610302100150910015030303701
5022001630110063985100168050401530140548165810901301130652009005010140
6398421100701008803060200301270020130130205013983217813012010306152010
1301218901696304061006464050063982414006130167005067020080641706865040
6100405302100400270020398121781301504040675402030150514045033980212601
3011080161004002001030801405501021406800200130164001614060301203040405
3040139792156301710770301202200540820050101760040545070401397821700701
6100670010140303021020020700504020300108040530215050102504020020700301
5103070307501139771001304006001130117005501520060013015304030110801700
5215070406014039764120010103003017005501402040053011030701620029016163
0040150140550401304030110030950163975213701030030170055011481615301553

0130130703139742170020200816017005506200801203013011006405504020070050
4040513501162370639739015040501084001306164150805020010050404053021005
0401502030514020397210011003006577010801620080205010700301302397120020
7003011070050120010030169039705010403017030122005303044083016396950103
0602004030110307040130606396850680901014070577030122002022005018260396
7506200902108066080200902163966501081040084055070306400639655010200700
5040301812901608040540081602307501700180396450630370400601015021700702
8013963506200902108066080405200902163962501081040084055070306400803961
5062301100030140530150450350163960506200690504030140530405501395950103
0602004030115041270301504004030204001002604100306395850640307010806608
0521620080208039575010903060040301530301412701502030395650103061301504
0120020700150450705016303955506306100103016501205016395450682604030150
8503015016395350680190301508503015016395240630704040110040530130115040
1406395140108330130190655040130139505010504001802510307040400501140394
9506427040014064020501803948501090306004030153030141270130139475068090
1014070530301501826039465062008008403040550155033014004030704100306126
0505503301501026550102163070363945501010041904040050205014020214002021
6400180394450102405019306040203040139435062002070040013080139425064020
8400801020402030140394150105023011030704001502301108099013940506270012
0304055016530301430639395063061001030405208015040405501130139385064513
0040561500150152010130403011501003060040139375065023014053064001502301
2022003014054008040060180393650108103014051507040040801650401803935506
4107106180301510140103015150306020016393450109100105040520033005103070
1504002501639334010100606561200703012515070025080393250650070210406101
0301550921080500230303931501082604030150405012055011306308039304010304
0656400683015401004003018039295010800844030150405012080405160803928506
8300403012030803011030110021700139275010306020040301504030605061050163
9265063010070400130801301030301263925501082904040510307050620040400304
0205016392450102006001301150200404405003923501020021100030110801763701
3013922501070403153051651501035070013921501030602004030150403019630501
6392050105040640301150412705040550139195010506084030110735020307002015
0139185010601103011030704013060391750102006001301108051030701502020040
0639165010903060040301530301412701301391550620080084030405501805627002
0803914501030613014020101212200640202200530301391350101003016003015060
8150620070040061307025067044001391250610040040013015406100303011007001
3911501030602004030150403060110301501639105010504064030115041270504014
0550139095010506084030110735020307002015013908506200156106064010307040
1306039075010200600130110801405103070150202004006390640101004006040301
9120090301140515010456390550102400604030121400203011405150104001639045
0102301100030140516501208040515020090506390340109007030122002030150401

4054061006140515010350639025062001561060640103070150504041003063901501
0240560805030403019006506084014054001020070050406100186011030706510307
0150202001263900501083019030150401102501001860125150200300263899501050
4064030115041270504055013898501050608403011073502030700203897401051200
2110307040130603896501020060013011080510307015020200400638954010900708
2700251501048063894501024030113023016530170055013893501050608403011073
5020307002015011106200301400100490410038924010512002111050151501041506
3891501023303053040061403060114030803890501020021903015040530301130050
1105043400602004064001403070801400211103011001020040017001402009005018
0208270011050140150403011080102001105011050211030110010706030157040100
0302140308038894010308401301000251502003002803888501083019030150401030
2522003887501045106010220010301251700105013011006388650103080601301405
1503070380141020521641200180388540108330110805610030180150110502530165
0211630110038845063040704001406402010030600530301638835064008504001405
0642704001301100388250680710510301163021001803881501040103012122008004
0510307010001200803880506100950400130402030140387950630201400130130110
0804054005301103011000120080387850102002440550701630640080387740101006
0105013011008038764063503011080520090050200900508038755010403017030122
0024020509001408038745064102004005303015064553011208010138735064270400
1700140540610065102130301100700138724010306023010025220013700138714010
5120021305400701030050405016387050102006001301150100200100014050038695
0105040640301150412705040550138685010506084030110735020307002015013867
5010403017030110808650103070401306038665010200600130110805103070150202
0040063865501010012301405540010200700150307036386440109007030122002030
1504053051651501035063863506210340301407050308086501501415041003063862
5010903060040301530301412701301386150102007005040301521001705012080102
0200900501803860501020070050404051080150306020014100306385950103061301
2005002014053021003080041003063858506702005104052001500110307040580385
7501030180040512116803014055013856401083301103013040570320040501405003
8554010408504012630030151030704053050140500385450692301155040506103014
0801550405063020130405501803853501091103003016062005501201570309385240
1083301309011080320060040052003300155013851501040301900303055040080151
5030703150138504061007301520033004011307502001060020307001384950630401
7030130407010308017005305004030384840109007030176803016530170055013847
5010270070402508501406103061301150400400640130138465010400104025085014
0801384550102008008403015040400502030102200540705013063063844501042004
0030400420501530301400301100384340108330116601080512008070309180384250
6703094040400501305301100384150650104403015011140190070612120040015020
6150400401700113840501010049040301504030205011306100103839501020010010
3050120105014055040301011003011003838506301604001080070210307040580070

2302100180383750650204080010250550120383650107080200930140012009011004
0545070638355068075010155070405130630610001510801303834501022001300303
0570030180010238335010704050406012024051030708019103832501030211004004
0200200601030703831401070503014001503108038305064020020404056520168038
2940630704010072004053020103061382850109030600403015303014127013013827
5063040704004040050201401301506734001406382640103013012170070301610010
1700304020501382550103060200403011004906100830121330238245065034020070
1300301504005301620200140030150101506306100106382350620022040060105303
0113015301130405303010100170011650120405501382250104020034030123070805
0203070020150138215062020040030040217007030110807001040610405501803820
5010611000150201501402015010610001803819506100101700301501150220030610
0150103070100880381850101000191406100404005020302501930605040402010307
0150305012014063817501050406401650620400403030216301100381650104010301
5070150506400140040400502040205011630110038155063016040010800702103070
4058007023021001638145064030604006040406103014053023813506200901504001
3040203014038125063061060404055014056801006381140108330191200901030140
5645180530301506450403810506427010165012014064053167161640309005010700
3011620030081380950627002040052404005020107003013090803014061017005380
8501043014061017005150301061101630110063807506200900501040517001805481
6520037105140501803806506200600144040050164070503010038055063061301150
6121613804506500670240301501114019007061212004001502061504004017001138
0350102402008601301170055011630110063802506200600604006010510116120017
0016380150620020700101301620020700170016380050620060060106400237030237
9927130501095040405150100306001501150100306005040401110030600430014051
4054008040060180379821001500215300570240018058096003018096005040130137
9729016217007040530612006843796250133020504050680700100106103070130113
0403011030150670406010130379542001405019103003020504019008086379422016
2030155010721105043011406030115010715013793100200130040301220061405501
0214068002001301640016140603012200379248163040205301501379112002070040
0110301400301803790120037400120031730180378918090400180190301637885067
0320040051030161030030204006203040541021070030150182608037875062010805
0205303061001050111010300412001170015200401140501378640103070301100130
6003016561030240530500401003060010501103070200411002800200130164001614
0603011003060010700301601030613785506410064005504040400501170018012001
5020080060013012003300301504040203030703107003013784401030701003060030
2026565200403061151300501107003011510108103010037834010402001056401900
7030110108105040301100510030600106050613050040150302200800637825010240
4010906006517001805809505040515010030600150150160501301200104030613781
5065030701014065062006010140403070501501405306100205078101308037805062
0080084045034053040564052009050506701094006010130377950620090501040530

7030553015303015064504016700600400163778506200203001013080122001300406
7080150401510804053063777506302011015504064052620200155040804053015150
3030700637765062030140153040580140170501150104101400304070140404053015
0100306001501162001040306137755010200801203011030703061003011008106110
8501205040200700501030377450102405012001006200207001301655015301010002
5010140620070300301515040307014063773506301007010130801100306003011080
5602050505200407050504063772506703200101306110800401670194006011408040
5400501204010307040515060060403013005063063771506200902101050180912009
0301161002400601804055010701103070150604093013005063063770506260201016
5012014024053032001453004006405104101150403020400640551680110307040400
6005040610301376950620080204004040050201402406103011563090137685064706
4004040050201040030140505357005376750630100704001650620400403080112001
0500201302340205040308001410030637664010100400604091200901700510506427
0150163765501024064704020305501501910300301164270400130501404110502110
4020103014570140301376450640200340301151014061030116714004016376340108
2002200504013061004013060376250670410140405306552018015108040530376150
6102040040201012001301103070301309001080405316716405376050652018030100
0300108040610301550330121890150137595063040704004040050201401301506734
0013061101030060805040309004001304061030180375850620080084015010430701
0403405170018054816581090130140050120501375750630602004030110049065040
8200301470614017005150410020040504015050070250401503010611016301100375
6506306050104052200103015001431301504040517001802006903011080600805063
7555067032001040530511030113065109064005067010940060101308037545064090
6001040564057006001400548165810901301506200900501014037535010100419040
4005020501470630117005104004050630610010637525010240301308001080130140
4005015015407091530301130010630504040709501165040150107003030162008020
5010700301301100530301402010072001404016100805014053030101001700163751
5010800200704015507016501201301405220040011015040510150404051040014001
4063750506408200400402030703040208030600140640201041015010214016100400
1405303010100170016374950108103011701400406150405408200130137485067001
0050104051306405306001020090130804051002001000501300505016374750622020
0101405305004050404053015010030600637465068300403012030803011080405400
1020070015030408150140530510163745506826010203080108030206200155030110
0216030103030113062004010030120200440050115301010002501060403003011303
7444010410030150632007030120417010400830715040515020041002004010030163
7434010307030171077030120010410040020307001530200100400604030102003400
6040300301637425064030900404051700180200155030155040600306050301030301
4053051016374150640307010130140406405608050150406800200130140025040014
0401530203167130110030600107003015018260374050620020300101308014051041
0154003040701406520040500504016302011030373950610703015040151080150200

3806215070163010600505040400150315108015030703637385063020110550408012
8155040150320060016151501010815400104030180020013014053051016373750620
0800840150104307010403140303020501637365067032001013040510301405501506
2001003015040405302100150203051402016200104030137355061075400601052165
0120130130660200504040510400110140412703011030705200608110373450644016
0040517001805481658109013014005012050137335010307504015020140614060301
5040450350405470250405406100103070150307501140637325010402002040301504
0105030703610220010302008010001402373150640307010104061004001030110301
1005503301306004130101003730506704060180402022002400504011050137295010
2403013080010803017001105013728506700100501013061101030040540070180300
1050705010004001302008002504082003015042001050155301550645040700600400
1137275067032004005103016105020098010700301427011301030140637265064400
5404056120031402030160101305040167024001372550103060200403011670240014
0610011030110010706010303200550104403011090100150401363724506802006040
4061004040050130240400200207005010140207040402020010191630110037234010
3012170070150404020506040103064020504032005030165400504004030501030402
0215020010940015011630110037225010240301100013023011301150103070140637
2150630602004030402010301150140307010150220016301100372050627002040013
0140400501501103005040504082003013075011406150305004020030021301404005
0114016301100371950630602004040201030115011630110080500301500215077708
0140562700208050105050014051030115030602001700137185063060200403011513
7001510200100301218901130500404053022008001637175010240401401108051501
0908110300302064052001500161640410014024002050610400640301101085050850
1501371640102002020031652008010004025200300280210100030125040820030110
3006006200207003017024001504020070050400140501371550650406101304052007
0050400403040140540020070050114051030701660637145062009021013040580405
1501030010001801460405803060050406146040510410150102504015030703637135
0684010040405805011007001301103011058013013010001405100150701108015030
7031501371250650406101304058040520050020110307030610030110084100303711
5063080110004058040561212007005011401406100200700504003037104010820030
1710770301301075040037094010100400604091200901030703708501030602004030
1504030205013707401020830150120010030163706601037051200109025412702501
2053030150180405303113170018010406040303110301405200600610502030652145
0401520059001030702020040014016260201402601503015303017006001610630637
0412001041001401030705012055018002001301108013064001614060301108010300
5040573701030530301501201406561004055040430011650120640530210050405010
7003015210017050120801020162009005010808002001301108016200106010403061
3703130106840053030140050603043400503061301042400530301400506030434005
0308050103061301400506013015062009005010305805305121301101060301200204
0301100108101306101060301200204068002001301108012001220400601370212006

8050130140541714020010700504051314030804040130110481504010451505062010
3020010700504051350103040550140101453530301216406010016370112006801000
1401030850120550154702504048150401405206040150114003017501030613067400
5018002001301640016140603012060401053030150137001200620010001301180070
2405800702506403019003014701050130255040400501021030704058012140020405
1501040014014001614060301108020200300405304018002001301504016100306001
7001401050620015303015064504050670440050107003014020120200300404001012
0013010036991200160600130140520080205010200801203014107101306140010040
1301405220045070405200802050102008012030141071013065200802051030708020
0802050408080020013011080801013060040203070310700301653698200649030140
0170024010307055018002001301640016140603012101000403017053030150136972
0010905050405010403019003030140801610067008020010700503014020136200207
0040050405108020020700400101404020200407050403061304070501502010700301
2001010001830190304070501503200600115022001510805066002009901040563696
2006802030201073502030700201521700705040405507080806001013061640064010
8040510307010800100101304050532001504053016200802050107003016369526100
0301510801506040101306290501510801506040101305308008050405401100403012
0014150308110700301369420062030020068010003015022005015078301150702570
0110700301530304408301163011006369320010200815108040560123061630630625
7005040200616015040151080506308101550630600410504704001503369220010220
3013080080301652030700530301507001240012001060030121002160405504064904
0010040405504065608050304030190040550408015041270504015010809901501070
0301214002030115050020061405003691200109022001026003054127025303015015
1041050102140301100490401008301652140020301504020103011501086110700301
6369020062030020068010005501530800805040405410710640520063140510806103
0368920062400503052001340050632001051050130706120060405150100720014040
1610080501651309030116401100165303012140020506304001050107003015013688
2006801000710770530301501140307030154127050405303011030060010140501203
0700205501630180304006004040170501301621643016601503015040636874660210
2120010006155016301803040060040200408680010244330123301504061550163011
8030400600404001200405005215032006001801401406030150403075015303015012
0040040301368620010205050120801020801620080205010700301400700600140500
3685200105040301214002030126200273012640015010230124053060200405400134
0530210050405010700301270020410080206270020105016368420010700501510801
3060013015401504050161200107005061200103002100830122015030602001150136
8320010700501301400501501368220062100301108050407040604024005011406130
0105040704060105303015014001640130113061108130110640060101406368120062
0083011306309003011306368020065030113064001403090030113063679200109023
0161040701301106400601014063678200109040301530301103016560805030102074
0010140501801020740050406513090301164011001621010003012405220050630060

0105010700301200700504001405011022001001700501206306103005504030408101
3015304081030153010050040704400501610200600120076520071620074001306367
7710770253030110307020307001406367641043100306002400110640202570010130
0105013675410408301105010003016553030165303011030112001008030140400501
6015030115101110367420010260030500402010250101306402020200300250620080
2010540110100301406106402030162134006011401670406063064020170416704060
1013040567044005013673200104091005040506203040101405506450405067044005
0107003016203040301530402022005303014020307001040604030313010200310302
0200401003016604030030120060060630103030110802001550301330610620015503
0110803010303013306103672506200203004004020307030653080080504016100040
0240030200600164051080203080301102004006155066023040051030850632006004
0060400611020091408305063020140030205040631318304017005652120030010001
0160400120080270070170055012008230110640060101406367120010601053030110
3070203070050121400201080130152004070504090100501013062004070405040200
4070101406540307021301708004001306105005015040304084001406131671402030
7034050058095050404050021200400504040201003060053030163670200621065201
0306120020406410430021700704053040011010603015062002040105010700301657
0802001083019030130407030162109301403020301470901051030117010403577030
1530308057703014102001050120504036692006300503012030700201540064047028
0020013015215010108180400104043021030151501006080121860200105004008081
1020030130602001107003015303016366850670509010140240103070530301501400
1200608405103070206080502570040013080130010504010451061300105040308001
0530301501801506085120080530407066053050107504080136672001022020031652
0080100040405304001830190301163040706165040150107003016410430021700704
0530162008020501070030136662001070603012189015040165062010305278670410
1405011647056700600400180647040203050191030030150136652006200100030153
0301240205020010001013061105043015110830140205020010004001308010085303
0147065016015030115101110366420064013017032004005303011030162030210050
4030602004002700204100802062700201050163663506208064001050180651301530
1130800200130161406030150404020100720010530301200101000100301600504030
5402010307053030140040705016200207001601503011510111036624010208301710
7703016565470250405303060200401308020604010140615302060404013080540820
0504060150303053030184008010140366120010410010300302010307053030150113
0010140100306003011080410710701220065001305006105050040585031103061130
6020052010130403013070138002001301640016140603012009180530304408301366
0210200402030010801650120405501302100504040570110300123070801402050654
0030010140501026405501023010863659410702501204050402101000301250680700
1001063021005040521620080204100636584107025012040504030061504003014053
0105016521504011630110063657210200100501204050401670060016400680130801
6707807001102004006306365621020010070104060550110220010301108610140280

4001044005150161060805010307030800114050180400303080050130100365541070
1014063091230110421014061008301133010036542610100030140130701008301280
7001001010220050130100365341053001030030201030706565303011030701301102
0031501402030658020031504040204003016014030100365241043002170070104105
0102402030200107005013016550155035040402028190214016200208040040040500
1041200806105050040530301640610040050154816240209007011405013010036512
0010205050120801020801030602001627002080405150104001140200130070401610
0030214064053021005040501070030127002063650200107005050402030210040510
3011503060200114061550660200410240020504040515010400114063649501024020
0860130117005501405131403010083030162008020501070030130110061020040080
4020801130117005140163011006402061214270105012014070402049010501410200
1030320013011700514016301100400150102150400110140510307010304004001700
1636485062700204001524040050201040030120015030121700701610067001640309
0050107003030306100506120080013061708050800702304020800702203040101304
0610301803647506504064040524052005002015033015064270101650120302405506
4504015010306400501205018260163011003646506427010165012040201101130651
5201013040303030610010405001701040340520030081040610636455010100712003
0120010600656580306001065801030050404040010080501140653020041001065412
7050401300105040301007200301960210102200501301003644506200800840217007
0301108020103061501073170401504001101108050670601050107003016364350650
4014001802001000301108040561630407014028070800301173405302010306180183
0190304070650401504013011080307150450704020220010040010400301240204130
6113064020301640114063642506403070101306015030120050020150203062004100
1061300105040301007200301960210102200501301003641501027007040250850140
6141306161301640120050020150850163011006364050620080120524040030602001
1402150115680200400403011001301200107005050405102001001080150306020011
4063639506304070101650120140130150673103051620080205010700301100150701
1080301301000130115030703621700703011612001403054014503011620060161414
5015303070350653030122008020505011505062004014007001200155030163010303
0120020403021620022040060150107003030168070800400601501070030130110063
6385010402003404040050203024020137001470210453015070402015044905085011
6807080040060150107003030162002204006015010700301301100363750105040640
1502030404005011306301620022040060150107003030168070800400601501070030
1306100103061003018007021030140580070270320010405220045070506806100640
5064030190030170011020040063065104105010210700301213065012001003011700
5250406505030162008020501070030130110063636506404100400604001306570160
5507050620060014006040013040610417010404020303010036355010100419040400
5020501470630117005104004050630610010636345064030701013060150301200500
2015020306120010700506120010300260150303058012013012015030602001140636
3340102083017107703015303016530213020120200300524040010083015010700301

1050620013010036324010307030181400803016561008301215050102840080104050
0150220015050102704031030100363150630407040014070301605013061504020031
1407050630160400130301003630501024030130800108061104510307030402011016
1150165303013010080020013016400161406030150404020100720010504030100362
9200102203011030703016561008301163011004020220030110017001401630110040
5263010050707078017001104008530507001504030130154507057018030030170805
0400130636282001059005040405504053014062020030050401405108040530140680
0200130110801306400161406030110805200700301100500405062030401013053030
1506450404040040707501070030116704130100362790010808103003020103070202
2006203001080155040655040405200600130125040610504040307050301301501930
6050404051030705305012014063626501050406403015040110010200801301567024
0018055090060103021405103070100490410030636252006203002001290302030400
1101302030700108050110074040302040515010074065001041814051503070380405
6080501164030900615020018060150102470121502200163011008036245010504011
4011016103011030151080162001060200106030115108015020041006520051900102
0010015108015020200121040030110200100301501026405501021503070363623200
6802030113011071350305616200802014024051501073203070036223010301002004
6050401030063050016940600302011040016700501040050340510400503240515030
4264020070301301060405103070150306020018016800200701803621200680100022
0065210954302530162002030016402022001007200504016302030140300650104010
5070501400503510140550206040108012603050120410030362050105403012170070
3011080165002301402101000301506403070101650120630501503301400501024002
0060014030805400160504030201400800200130152141301540064010307040530414
0400640301510307015010800100140308036192006203003011041270504030103010
0612002030046614301163040701400110601200200641006216330120501803630105
0014040062102001840504013001014053050630407010361820010706030121700705
0405100700501502004015070405504010007105040652200507001251041050102304
0701050405033015040620091003015010705301503060162005300158162006200530
0156410008102003015014010306030636172001090250630407040014021050118301
9016304070164200603011080200410064001100021603040701501361641048301530
1503016200109301657040102613012311013080080150404661415010400141003063
6152105040427030203051013020307001080501140603015040180602040510307091
0060506180020013014052806060050130050501800200130161406030150404058030
6001406405104101501021401030116200104030801361441070230130130800301621
7007030110805200600130125065040610130501070030130255035240112700205303
0110307010200400801361341043100306001080304020501100740403020404001007
4017001402010250103032001030704020304503051620080205010700301301100636
1241040830171077030191200901030110451061008301652022005040201030130750
1107003014030703011640061501070030110200106361140103017320050402170070
4053020103061501073170401504001101108016706050107003016361040102002010

0720065200801000404053020103061400183019030116304070616504015010700301
1073103036095010240214002010801301200220113062030700504020010009011306
8002001301108013064001614060301108052007003011005004055070277010130210
1000301403017040205010400140030102200610302301005701603011501040014001
3016200802050107003013011006360820068010003014010820030165615108032007
0101406140603015040307501014061550403200600101406800200130110803301014
0403070103607200102600301401020830165652006001301108044083015306800200
1301108014064001614060301108014053010700301530304408301360614010820012
0068010005303015012064001504064030165010504064030110307053030126400106
4001202003004030165010202003004030164001100801504030165010100801504030
1530301270070103036051306531406309005012055015016050130115304086155040
5010080300161550304081050150102180301233016800200130164001614060301103
0705501401301150800200701501360414010900701768071804100805306602006530
3017091050406402026507004020302008010001064020301407014020308309010360
3141046013061001630610065303011610040011650401501070030115101110360215
1036530301450705012061630110014040530301512002801060640167001501070030
1201650620400130165040150107003011510111036011200102201507030405507030
1621700703015040501080708004054001150220036001301026030115063080018015
0120022061504004160150709115011502200163011006359913066020030115070916
5303011507091150400103011050630610010200150301108040556362301004004061
0359812001090501306110306506431013014211510805010430160035971200107060
4053047016501020080120301507030530301501359612102001005062040057016030
1307030201020041014065303014507015403070140501301005701603015070601503
0120301601035951301042400530301550603043400503063021005040163060050107
0030110805303015506035941301040010040016304001006167006001168010050014
0501015010506703040359313010301001301151080205062006131013040500405220
5010200100050305501044030110805068032004030168002004040526301001080501
0700301650610080150403015400501040305010303592140108200120068010005303
0150120650107006101308050802007010501105041203070050521021303504050510
3070501050410501050406403011605062040015026203167130301001025030115101
1103591150102401405001615014005216304040081410080162604002011402001010
0024001504064030165010504064030150670061050107003016359015010540121700
7040530470165200600130161105043011080530301405507030530660200653030150
6700610501070030150135891401030604001640306065103070163090165040150107
0030115101110102503011030705063090105400201013040653030150135881410530
0103003020103070501205303015015303015010100400165055014010140020304014
0130650510160501306505400166001150211306505501660011502113065055016600
1130650510150211306505101211080505103070815031303587140103070103003020
2501205303015018056806004006111010300164240050135861401090070530301450
7050120402030700501142154702504053167116820504005011306530301306602001

670064005014020305012014065052630100640202630100302005914020307002138 1
200650405056301601801701400405056404003016017001610083015040101084006 0
101305303016402050401010840060108010250301107006105012040203070050150 0
104830501060501400604013061620030040050180404004070917001801630600418 0
404001070417001502030651501501020090015020010100040170910301402030507 0
061050113011025030140061021630600440013016504015010700301151011103585 1
210100200103003020103070530301501206205010401040020304014013015055060 8
202370163063167150405052304240050113064702504016050301203030810130358 4
140103081401030705303015012064020263010010801404030701053030165053020 5
054001040011402501080020010650781013065055010701200100400501105041203 0
700201030708150313080400307705040404001010004002150406130040050402010 3
011066400650550401300400504010320040035831401082001200680100053030150 1
206320082010307050620101301020304055014010140020304014064053167110804 0
510307015080020080140150403070410050105040640301506450402030590301600 1
582050400601050110250301412001501102503030156080504002565015504064051 2
004016207040502003151040013030120400130160040015026203016004001502620 4
001407040015026204070400150262010307053030118011404020501040104002030 4
014065052006314001040011040013030120316712030150303081150110250301151 0
111035821301040318120060505682006065056704004080155064400704005470504 0
505103070402030140805056604040050130210050405056404001003094050040015 0
406403014040082050170011650401501070030115101110358113010206530301210 8
020653030110307030206400640517001704650101008015040301650102008012030 1
709400130635801200102201308008053030150404053050125010504064030120030 0
263579120010504013120060655070012530301103011107014635781200107005061 2
003002406145130020150306020011501102503011510111035771401020020120031 4
053047016401306055061003010406104054001084003576140108200501050406403 0
125012062006503011030140014030900301504040203200600103054002010130406 4
020103070103090101070030165357513010901652002025682606357412001050020 1
200207005303011620020700116504015010700301151011103573140103070103003 0
202530301501206501010250301404001600653030130660200502030640203013200 5
040481121440840501201403572121060853030121080206530301130114815063006 0
010130655063006001065303014001301602005061000302105010700301357112006 4
100401200410053030120040150120630210050401630600501070030110805303015 5
060530530301800200801401080320085040102503011030705012014035701306708 0
405303012004015012061200965055040168001001700140510110704131671108032 0
085010504064030110307050620101301020301520150367120096155040410710800 1
001403080513006004005011008153030166015030110300600400651042405303011 4
020608050108010806004006530301100400162036720103070206040151030704004 0
705016510307053030140705011070030303061004007001635691501024013013080 0
308004100805306602006530301907010504064052004015040520010600301405305 0

6201050112004015306602006530301108001001700155040640130650406403050120
1406356814010900701200316520080100040405305303014701400120020170030161
2001050020530301501020020170030164001900801830164053620080501090080183
0164001401019030165010401019030164001100490400403016501010049040040301
6400170300160030165010703001600301640012002190301650102002190301640011
0041903016501010041903016400140050110030165010400501100301640015040640
3016501050406403016400140306040301650104030604030150135671200102600180
1093050120530301501540208301653030140011015040502040061021080103040010
1405020020700163566120010594004020200591064001023013051603200301402050
7025700103053030141020010140501530660200653030150709165120730150104001
6513090301504010016103061301510305133013200240050320024001306502040061
0210805020010063565180620070401306100503010068002004052301001080107003
0170409108030610030125070800600400130805040010100400150116050301504048
1205040060301025030116050110356414010200201100720015301504400701650104
0020040152003115400650183019030407040065306602006530305020504040050100
1050406356312001060105303011030702030700501206501080708002170070301153
0807018001055010240530081802502050404001105040102503011605011035621401
0900701200315020504040015060840303047015303015018052006001301200143016
5306602006530301504200400504005020501635611301040318120060502082006016
5020704004015010301704008015400501076110504301511083015042004005040050
2050120316713030100102503011510111035601200104100103003020103070530301
5012061561094004030180020016405301640164052001104640580020014020500200
6163559110010200805062006014006506304001004001100102008027020030140526
3010010808070010064051090110905040214002030130515040405620051900501070
0301307501635581710770110610053030150120630140010030150105040640301530
3011080206120010600163015010403040590010100021620080205010700301530301
4200635571401082001200680100050120530301501405103070264001061130050150
1010080150403012700701064051004902501010041903015303011073103035561301
0424001630421406200900400501050404055040652850108001005040405504080510
3070530301164517014016100490301320050105040640301504035551401030604006
1501401011301405417140653066020065303011004906530660200653030115047061
4017005163011002178130150650406403011012001403063554120010500205303012
0020700620060013014061030165303016320010501205040305506085660153030130
6602001080402030501204100303553130103010013011630400110014040201080165
0120630640201012501507050630160102120070130110805064124055016301646102
1781301400110501616257001040302178130150626081035521200106010530301103
0702030700501206405301407015303019281801650406104030201030612001060030
1103070583001414855060301240206100306080660030125700170018040064030150
4051030701030010001010700301204055010701200644002010301506200900501040
5400101200806600301131700180402010307058300135511301030100130160123015

0640011013061501030140305405501660013050103010110030164020504050101006
7040301530301403070104100355012001090501306110306530301506450404053050
6431013065408200402024120016116604020241200150153030150404020409070101
0700301170050403010035491301030100130150670400404001301700163040010030
1614006403015040404002002008050120012008030140207080501050303010035481
3061060405303014570501206200124130150630610130302100504053030116451701
6501204100306354712001060101301152165002304001406156400130550400803011
6301060405001520019100150404051030704003060046306354612001200801301506
4102001050152006702105140652006701504006102501506306100101025030140550
4010010200805070014006010616703200180402030401100401302200500103051110
4055040580101940030110070016354512006200100013015306602006530301150470
6140800200404052630100108050107003016506100801504030130610010700163544
1410430013017307163073076506504064030110304002120301505354315065090030
1530301250650900400620031508301263010030140010003026200190213014001000
1770016402050403080601504064020100680504040206137001354212001090250630
4070400140253030150120615620040040301465036181020040510307015030602001
8046503402040013700140201030705303015407050162002070011650401501070030
1151011103541140103011217007050102008012030304701640510049050705010100
4190301301601030354019001030100011001500104040550401507006001640102004
0502110601070610606406401051200216865050406205040640510015001040501010
2503015040150700600170016353912006960402140020301108020307005012018062
0070404020101103061103011630708040050113015010200315403016501050406403
0150405303012140020108080070221030614058007024018200130163061640540015
4015316716405608050150405010504064030121030611025030135381401082001200
6801000530301501206402026301004004407040014050203065240400196001140108
0815034020103070601030640201030164065010430110804020501660018040512116
4030704004030501805303014507096010016540510121304056704135373010260301
1045106561008301306100105303016402051680124020306100402030700402015021
4020110704130703140640204001540150550405062005190040010101303014020316
7130703140658063108050102301005040303200305303013070314035361301020653
0301210802065303011030703020640063535120010260050630407040014025012053
0301501202200504020103011086101407024001635341401020814010307050120530
3015015010100801504030165010200801203017094001306530301100400110250301
1510111035335062009004005040405501200900400501640550708002007018035325
0620090050104051306405501401011620080205010700301708050101308400803014
0610301003531501010041904040050205018400803011700510400405063061001063
5305062009021013080140560805016405401705015504030201400170200752320060
0508072003301800200130110301140301100660501501162001040306135295067040
6010130801400110130203070010805014055020160401080506300401050620010030
1504040530210050401502030514020405304510403061352850680304006001051080

1650120140108054011010030140610405501023090801065202200501352750650100
6101504001101216501206162002901403015020040125064510540101405504015030
7036352630101012006011050230104551503070365101100305040510200401080502
0400130802140020301106064015010400141003063525506401004005040501040200
3403015040150115507080020070140500522004001101220020700504040403090015
0406352450670320010405307030200220130121700703015064105041301217007030
1504040550100107005030635235062700204005240400502010700301200150301217
0070161006700405303010100615108016410701155040163200600105011641200114
0302020015030140516140801610060805010700301140163522506304070101650120
1402130750106140301400150340530804001830190301163040706165040150107003
0114013521506640060101301100601805012050402015040640501205040801352050
6304070101650120140217350107015200100504040530108060011406080504030704
0013080351950610080501040515010072001404061704096180660040522005067041
0703180040301507040526503108013400400351850620022040060101304056405220
0440821682606143601620060015216200207001700150107003011504001101250406
1014050135175063040704004040050201402430600301217007016100670064020150
1060501501170054020406101100304040010605014021610067008035165010704031
6015030165503301504040505350130401301050403061003011008502030615145608
0503020150104001301501030063063515506501006401501183019030407050150703
2001801507040606150200902115022004052200450704056062006602015050640200
3403017001102004006306351450670320040040202200103014050040202302061070
0301400640301203040402018064001030100351350620080120405220011003024053
0241043100306001080301501180020013011080150303080017001116301100635125
0620020300400140130103010054108013016200190213016704060301402030307036
5862005040510806008050651660405003511501054014050405301306050405306050
3070340500351050109504050160501301100306001426510030600103003020506081
1070030135094010820030171077030154153003016210100030140301702030700350
8506470400140405506080301520014100405012040610108051030132007010405008
0020013011030114060301504020040130120024103507506200207004004001308017
0108030013061030650405506450404020301403002007030110307010640060140500
4011015400601080140550102140680020013016400161406030110030600107003015
3030135065064400510405307030203021005040200107005050404051400114014061
0020070050400302022005040100830165302512004008015063061001040135055010
4030170301220050405108021020013021400203013010750400350440301350320010
2600401030705303015014006404008002001101260805010200440014061410002602
0400170014060805010200440014064018200130110801404030701065001010003013
0750106570160301403070545070530301501350220062001000301530301240205020
0100010130611050430151108301402050200100040013080100853030147065011101
0300543016507071365463064013065430650704301610731013014061016300600164
0202200161004001601503011510111035012006802020014006003020130115040011

0124831014064904001004040550408020023011030140513501403080501043015305
0109030600405303011670430309003012036404051030010001700163500200620300
2001290302030400110130203070010805015400110150404020102001030530301400
4070502200823011080102003400203080301501200400403013499200102203011030
7030165530301501630912301550645040506704101405016100830165530301501220
3070034982001026005063040704001402530301501610406040303110301102003103
0202004010030166040300301200600606301030301108020015503013306106200155
0301108030103030133061053030150120040040301349720010902701040605303015
0154816608050201301402050070213064020100306001403496401020871077053030
1501530301400140302040048050140200821570260547025040544010200823016401
3010015200330050408002001301108014050163063495410408301105010003016553
0301501800200130164001614060301108014053030349450640307010130405200500
2013025303044083013010053030150306100103080020013016400161406030110030
6005040405400301605010306349390010301000217007010301405200980050405001
3010301004057040040503492200649030140017002401030705303015011630407014
0240510250508040570320040150103015200802020507810130802008020504063491
2006401301521001705303011030161010050063015620070301220604040060141008
0506084065653030110301553640306010504063490200107060301217007010301405
6704105019103003015012063061150121510307015043614070240050302163011005
3030130750114016702400140530301010017001634892001050402140020130610451
3064030702001010002530301108030413105040601503015040655091265200519005
4070504020103070100026016800200130110801406400161406030110801404020302
0060060530301501162004004030134882001040830140069030400169013012002050
1501204006905040800800100016201030040108049010016348720066008030140060
0403020281013053030150118200408002001301108030040400130660150303020460
0200709040013063486200640130140770504020307005012021901140103070200290
1620020504030150705501680620070403012200401651309030140100110502110348
5200102600801093053030150153030115240011080020013011080614001614060301
1080615200600901080502040080304200600504052830110050040204005011550110
5021103484506304070400404005020140240201025018040207032004010301405001
0301215015040301026070240016180620070401105043011080140528190614057094
0013080403070522030601030140102202003004005011030702014513501634832001
0904030110301201043016306103020020300150150104017010805301908065056103
0701505654015400304085104301625016050130115010906634824010900704030900
3020200300301501530301220200300400130105021105900701065655021305014010
0303011007001634814104081050100053030150180200802050406560805030200203
0010140501802002030010504065303020020300150154020830150140100301501040
0141003063480501024030130800108050640301900301302550645040501070030110
0306001700140105062001805303011003060017005347940102002036730205040151
0801504002501801401406030150401503075016521430205040151080500264020241

0404005011060162008002001301108010100301615506200400440702001010002400
1614060301100306003478401020830171077030165611008530301470615108050104
3016003477401070503014001503405304001830190301163040706165040150107003
0150134764010301217007025200300280120010065105070011080501201570406010
4030501201200220400604010306150400110151030701030400400170016347550105
4021700704053020103061167515700600400106403070200101000253030130102605
0703080010305001048301653010200400300105040601503015040634745068308040
3014052010306164052200504010451030702010306134735065010061040552006001
3012405651207301506400610651309030150640101001050107003013472501050608
4030305408200610453471401020830121400203014001101203040034704030134695
0650100610130501070030120508060040060101306100853030147065012002901803
4685064030701013050107003012630100103070530301702910203070020346750630
9240130140400501501162008020501070030150306100103051012405400103501030
6305004030205040501200100301170051080601503030150220080041003063466506
2400704006010405130640540020070070401640309005010700301708050101307001
0406108034655064030704001304040050204020502030650070230140610170058050
0702301406101030153030121400201080404005002304100305014010130164030703
0116400615010700301301100634645062080610165012020307002057016020010100
0165002301405064020034030140601001057016030140610040040610634632001041
0030140103070301656130010140100306001052103006180708005610047025040307
0340500561008070800470250403070340500807080050404020100306001070030153
0301346250640306040405801504001101250406105040130170406040050140540030
1308005070104070301415240050114063461501020024401630617001170430140903
0170406040013061040064030170406040013020501803460506200802010547025040
1630900301200809040561200801810200150306020015010306345920010410010300
3020103070656104006403011010840302030700501154006404702800200130110108
1080102053030140040820020015001103012009005018034585010603024030530210
0504040510307030750105013021005040165012050163457506200300240060104051
7001541270504013001050405221901170018053013060050403200600101004630110
2004008018060205307031061300108010201406030110805960210801218602001050
0400808110200301306020010107003015303013456501050406403012009050150103
0701100850120616402003150107003015040150401004005018040015010230124056
1380405406100103011306020020302100504015030602001410030634555062002030
0400402030703065308008050401610004002400306520040122030803011020034003
0654004082005040402010010700103064001200300240811020030130602001050154
0011015040634545010200801203012810130550153080080504040018301903011630
4070616504015010700301107310303453506454010405608050130801830190304070
5040652008020510307080200802050403452506704901070010406105303015040530
4200401304061010400110501302100504040101003015010430302053640100180345
1501020200300404052005002015012030210050405010700301521001705012080102

0162009005018080020013011080162001060301003450506703200104053070301630
4070107003018007024051001070010306015030110410140026020140220082301620
0230110804160803012005900344950620200300101407010301704006550182601030
0504040203070050403070801050404020101202003005040305402010108104050040
2040010401040500402010072004050040201003060010700301530301344850680708
0040301405201030618053030153650641020040051207504040400104001140653030
1450706220010130806015030130164011080622001030122005040404001040011406
3447506830804030140520103061653030153650641020010501070030302001060020
3070030102603015021650102060403016510081022001003011700400180344650650
4061040610030400110130203070010805012004100106130010504030100720030196
0210530301501162001040306134455069501001040517001405104101400404100140
2510106040529040050161521682008054082006015030115010070011700163444506
2020030010521650120140240302040010658015019306040510307015030750140134
4350640307040080660801670400404008040515010400114021620080201030344250
6202003001040522002405504010010200801700154082005504040510017001170014
0500510301501021050404052200167042008006015030160401700163441506820080
4051043014022783020170103001650120640550104161002008050107003015040344
0501020200300403015040165062040013065130903011640101001656100400165103
0150102105040343950640307010130601503012005002015020306401010030150104
3012030700530301100306003030104240013015103070601503012009801040030153
0301400200980180105085010430302053640100180343850102009015050404053014
0653030130800150401045105040804030702001010002405165116403090050107003
0170240013023437506301007010406100304001101301309080502030700204020608
0501402040080106002040550680160040016605108040400501804020150100720014
0108012020030050404020501401014002030401405040402030305402060805015040
1305004040203022008003436401020830171077030165680020013016400161406030
1108010307013013050040301530651030705065165654107010405001003060030114
2101070030165634355064005011005303020800200130164001614060301108050405
3063434506320060040040400501170018002001301504056704402017041700140500
5200401280020013016140603014061004005015400110150406343350630100701040
6100304001101302030700108050115400640470280020013015210108108014014060
3015040307501061704096180660010020023014020102001054001101504063432506
7040601040610030400110130203070010805015308008050404020611000400216200
1550301630103030124020401504054001101504063431501040301703030400110130
2030700108050140205016301640204005060301801304006001680020013016400161
4060301100306005400110150406343050620020804001040610030400110130203070
0108050154082006546404020501023070361510301165020604003013167140206080
5015040402030100306005015400110150406342950620030040050400200300240400
5011700140500212004005040402010030600501540011015040634285063200600400
2030700206154006404702800200130110108106108301504040010403013200600106

4001040301504010830132006001034275062005900400501086110300706800200130
1640016140603011080440830153063426506829040050108650660404005010853030
1501826080342550620080084021700703011080201030618052006001301110030615
0400110121627002061620080205010700301140163424506200281058006200108040
5804001830190301163040706165040150107003011401803423506100200804001070
0104061057016030140610040040610634225010200801204051012020030021650120
6170803004051012020030050404053050201040306342150640200340301603021057
0160301406100400406106342050670320040051030140500541070104050010030600
3011421053030134195061075400601015216501206530301400110121627002050110
1660301161601501070030152100170501204050034185064030900104056080501165
0120502030640540309001030530301501201408040015010230124053060200405400
1361562004070140402005002011562004070680020013011620015001656100405504
0430011650120405302100504050107003015210017050120801020162009005010808
0020013011080162001060104030613417506200801203040522001100302601503015
0401200105002050161040604030316100830121301140550102140680020013016400
1614060301530301100306001404056080501108016200208040010403061341650630
8011000405520060013015070405611050430151108301504012005190050640307010
3415506403070101306015030120050020150203065470653030180306001013053030
1470634144010820030171077030165613001050402009050105303012009050234135
0650406403018200801070010406106470250406302100504020040130153030501050
6070800210803412506230100010604052301000470250404056800200130110504110
8034114062003014002301000341040301340950105060840301704030530301501615
0302604055010455030150108016451350107003016340850102008012030301065004
0405053108060103015131403010083012270020611270020530301103070102004008
0150404040309001504063407506200802010530301540705026506504061030912301
2801405306850406015030180960040010615040114020081503070315011620010403
0613406506403070108066080167040040400103064051501040011402162008020103
0340550620200300104051700120023011030140513501403080501043015305010903
0600405303011670420308030110801622020017001803404506403070101650120630
5016108301105305200600130120014301501627030665301301110504301511083015
7005140634035063010070101304052005002013025303044083013010053030150306
1001030154006404702504080020013015211081801401406030150403075050404054
0030160501030634024010307010300302025303015015302004100106541270504013
0010504030100720030196021053030134015062080610105018053030150306100103
0200401003016604030030120060060680020013016400161406030110030600504040
5400301605010306340040103070301701040603016564020110161510072001053030
1151007200304084001305214504050101206339950630206400104052200103070616
2002905010700301339850103040170301200314070501510805010430160020015501
3011540084005040102003400180200100055033015040405501062503040018301903
0116304070616504015010700301633975067032004001501030140500400640301510

0101700608050302033965064270180101101805706016108002001501165040150107
0030110412701103395506304070400404005020140161006700306100106405303200
1400840050406405100680504021700703014051300100010406103394501020080120
3012591084030405053501621700703012205063037040060103393506200703001013
0405654001000240550104001103062170070301405133010406040303113063062170
0703012205063037040060106339250620060160030140520103061530301216200802
0630912301216504015010700301680020013016400161406030110801404030701014
1053004020501026105010253030121080203010033915065040610406100301020020
7006540820030203070010805014051030701030400102140020301201030701503075
0115014058020104030613390501024020010700501501140501653030145070400110
1301140501301005220050404001101510307030750113063016301100633895064030
1900301130115040011012483101406403070301164006150107003012006490108040
0150102400110165302338850630924030121400200130170012050104010259600400
1306214002050405302100504063040040040050201406338750620080120301130115
0400110124831014065250406105040130655040652506504061021400203014051501
0400150107003018021400203012010301150307501203070020633865064030604053
0508506481640205301615053016402010301307501615010301307501107003012150
4011630610064055040164030900501070030113015060811051040030121301214002
0301305116304134001306338550670509040014040307010530301620022015303012
0020700306200205040301613008803015070105504005130903015015130903014010
0162140020301504020103011086114030400133845010504064030305101302030700
1080501100830128002001301640016140603015303011003060033835064030170301
1301153010070101406601503030152200800503015004013012030400633824010208
3017107703016561030050405506450405067041014040307010530301501338150640
3070101650120630400622050703014001023040061023015056150161400102400700
6004001400622050703013050040201103061530301506450401670060040015010700
3013050040338050640309001040560805011650120502030640540309001030530301
5012014061501002001000150404055040680020013015215080606005040405504065
8109030154007006001504040550406129018510307015030602001504040550408052
5070021507006001130208033795010100216016501201406800200130110801620022
0400601804001501023012106064040513410030650140156506702008065062001100
6337850102009024006040165012063010260301507040549080405301407015019103
0030140530501076405502016040504040203050102400410064640500614170633775
0104050013405200141080168290180580320030140540070060018056270020803376
5010460804080020013011080165007040013062006001301406103011632001653030
1164270140610011030110080121070300405160015010440103016337550630100701
0406100305501025101155040150202004004100306337450610060801016501201402
1406030150401732005102001003015700530511030705063075040150133735010200
2110003015040400501202040012004011301203051620635040150150784001306806
0040013016301100617020070040521001800640521060196301503060200400135011

4030633725010200211000301504040050120540012004011301530516550103505030
1510805040240307015085016301100196301510805013011003371501040301900165
0120153051501510200100301570053051620305401501163011001020030023012401
0512002115030602004001314030633705010460804030140610030110307010502009
0501220030110033695010100419030150404005020501530301217007021504001011
6301100501130154061002163501201408020020504030140201041501080506400140
0630102603015067091004006301320030150640014003040205010133685010403017
0301504048150401524020100260140530081803015064001400304020501540610030
3011007001196306336750108301903015040305200600130110805501611050430110
8052003151501040016214002030165625030154001020070010801503070362610070
1061001860153015025663366401020830171077030165550110220010301200315401
0501301100696305305040180336550102009015050404020301406200150301402016
1406180070240208007025070301068007022402080070220080201054011010030140
6104050011050430151108301108040205010254640150150061530301506450404040
0700600400114050130110063364506504061040610030400110130203070010805012
0015030150405303015135018056100200861563040010011630110050113015406100
2163501201408033634010301217007040530201030616104004082005040166010102
0103061510110030653030140011012162008020501070030163362200109050130610
3065040530301506450404020301406140603011080130680020013011080501073704
0240400501140633615062301004005103016130010504040820010613001050402700
7010336020010410010300302010307053030150152006001301513005030110300501
0530301405001003060030114280102016200900501808002001301108016200106030
1003359200106010530301103070203070050154107010405001003060030153030110
4210801020162001040306133585010240301100013023011301306602003011030701
4064020302100504040401270020410080162700204005016335750670320040051030
1530162002030016564270161007200301530301450701610004002180110072004020
3050620304010130530301506450405064270400501070030150112080150610030600
4006150150061530301506450405064270400140501335650640307040040400502050
1402030200106004020307005610040016530301164270154061003030110070014010
5120021633555010403017030305101151503070365501080603012189016515010350
1803354506403019004056501806930140570060018014017050106040600130155060
8030140510805002308054061001030118650150306020014100306335350620040080
1016501201407054011010030140610503016010306405301100500170401301100500
1640530110050015030408103063352506270012030405501103005040405110196005
0405010304018240514064020110196003040850306150301026016702400116504015
0107003030162008020501070030130110063351501010080150403015040307010306
1650401501070030153030150403070103063350501040301703012006490108014024
0307012530301601030614020704015020150150306100103020220050402009050135
0103065303012170070206015030155040080307035303011080107006117001805303
0121504013061001050406015030150406334950108301903011080405503060045030

4001830190301163040706165040150107003016334850630407040040400502014024
0201025018040207032004010301140570940013080403070522030601030140102202
0030040030201451350161506085104301625016050130115010906633475063040701
0165012010700301506081405501073503064054001101060405507050200802050304
0018301903011630407061650401501070030163346501040301703015070105010003
0530301501560805030451310140501804513504063345401030703017010406030165
6400130530301303150180530301110030632001050120504033445064020810140160
1506100260105014001101060301506304070105010700301260840133435010270012
0301504030701030616100490501070030153030150403070103080405302100504050
1070030115040080410030633425065040080101304056150401163061001050116202
0040010501601503012608133414030133405067032004005103016402083015305536
1301203015103003020651301530113020060011530153030170407044001306333950
1020200300403015040505062040013062022001030170416201030140030750170014
7025303014001101507020504901013063338501020080120303012001059005050620
4001308020220050405408200130121400203012010301101003010501632004004005
0201406333750102403013080010806550406104530121350404030701102200301004
1704010301204120030501200100301201030708002008010700301501333650630407
0101650120140130140011010603011630407050107003011073101308051010603012
1350406155040200106005308055060830121350403335501010040040303052100170
3016141608013068002001301108016307050641020010130501070030301530703505
2006001301200143012030400333450620080120301830801013055012010615028060
6003015010307053030150405011306302004100106541270504013001050403010072
0030196021053030150120106506306100106040130125501204016504040050107003
0182901633335010200904005040301504050120140653030150645040550620090501
0510805040530501201408080020013015200142652150806060080333250620021903
0113011511003010130618301903040706504015040302001060053030121650040203
0106403070301164006150107003013011006333140109007090086700305501506200
1100104006114030500401503040010301101105043015110830150641020010501070
0301301100540050107108054061001030703200600803330506402003403014052650
7005070301601013061704032005002016561005504043001655040506200100301504
0530210050402030514100530301501403070104030611045070403070103070540010
4006114050130110033295010460804030128101305303015018002001301108041608
0301100024001306201030153030150608114020506081611050430150402021090506
0504001306520060013012001430153030120140011401080100040021633285010820
0803012810130530301501820080400130540610053030110070015610030110306152
9070301265040030584001804050114076502030150405150104001640510307010100
0280106064040610050405012050620011005013327506200400801016501201404055
0703080065303010083015011640307080402050152002164001515030100801410530
0540130205040150707506332650640707400404005020501070030110101202003005
0101306100108040510415010406106332550620020300400402030703065308008050

4016100040024003065108016502060400302001550301630103030140203030703540
0408200504063324506200902400130801510805065020604003010302402010400110
5303012001010005301504054011010030140610103011440200602001550301402010
3070530301307035014040010120013010033235067040604001308011108002402010
4001105303012001010005301504054011010030140610103011440200603010303014
0201030705303013070350140400101200130100332250670320040051030164020830
1530652006001301610306130110804408301530651301530113053030165633215065
0307010140640520064905020400140403070102022006332050620200300101407010
3017040065303015018260520010600301405305012014020014006001061300101401
0030600102022006331950108308040301504050620105011060708018301903040706
5040162140050401401803318506301604001013040580700104061012501301405103
0704001040708033175010306020040301404002311700140306100108040510415010
4061063316506440051016501204055016302170070301161200640530162103400601
0403080405670480402012020030016704130101006331550642701015011011650120
1402010301150120024001501061000140204051501061000115010610001501070030
1130651502200306100301405103070100850107003013011003314506407074004040
0502050107003011010120200300501013061001080405104150104061063313501020
0800840301504054011010030140610654050011050430151108301701400405150704
0040504020510100130658015060814706515047065040801331250630100704001308
0110100216200106005303014507014061540050107611050430151108301701400408
0103005040404001040061140633115064030190015305161301102001003011020305
4015020140615040011014051030706304001013066020015401108050070210104008
1020010030120305402022005012014063310501050020016301508501502061301030
1001301405470250405020604004030405502016040203040080154003001070404002
0092510200100504015020305140206330950640307010130405200500201502030615
0430504011007200103003020400120040500510301102310150401140200840530502
0405040306115080020015040809600400502070401045301702400505011630110063
3085010440054030124030701656130010504010451053030150203064002281504010
4540013020501330750103051330110100040025013040201030704013060402030140
7014020306150301407011503016301100655070168002007016100030301167040601
7001633065061008050104051501007200140406510106030155060830125062004106
1620029014025010400200404052003150640061020103061330550104030604053021
0050401502015011502200504010083015501521504011630110040510307010304001
0170016330450650406105240553021005040214002030140515010400150107003013
3035062002070040010405307030306100301405301503090641003063302501040301
9003014061003011045101305303015015303015040104520010100025165702400150
4040308001504064051651506702400101405014030701802030162103400601040305
0180330150101004190404005020501570240011405504010451655303014507050402
1400202164001803010033005062008012030202150116301100612005190040050120
0860163011003021005040106064010400611402162008020104030611060640104006

1140305004010400611306301630110015045070504010083014051314030803299501
0504064030150405062050620400110170240050801306602001501030140030602001
1306301502200163061001080405104101400404100140252109040405210904005011
3063063298506200207004001040530703020302100504020010700505040405140011
4014061002007005040030202200504054082005020306150104150700120069301250
1324005020140632975010306020040150201502030615040011014051030706304004
0050104403051108011061500400502014062004070301405103070306194008015062
0010015013005011502030632965010451300301504040050201406200401301106064
0103011501080010070011022001000301250132400502014063295506200207004001
0405307030540820061045660150303020010190210306130150620010030115020305
1140470250402140020301106064015010400141003063294501086210040301504040
5540110100301406106550703011050430157005108040515070240016329350620090
5010130540110100301406106200150301103015067041054010140515030703632925
0104030190030152100170501208010202009005018040103011080405150700250805
4650365150700600180329150670320010130150103014055011650900610083012001
0100028002001301108054650366520022040060163290501027001203015040550900
1301050161060640530110301703091103070301820090103030703180501093011030
7050140151101030410061801020010100053015040402030400403070140130403011
5101110506702008030110063289506403019003018308010130550120014301521001
7053050620400504065450705040104530121350402403070110220010606403011006
3288501030613011501012110801700521507040601406102004008040200860130117
0051401630110040015010215040011012106064040513140308032875062301100030
1140207024001504061404005011504001101214020103015063090101308015019306
0140203030703506201060012204800704300506030110032865062700201050180160
0110501105010049010142001070405306020018015016030105040890801655062001
5106001632855063040010010501801600180160805040550404003040010010501220
0301100328450101006018014061001650120405501510304065067020080103012022
0050405015015200220501700802520030150402081503201030140408001666020010
1000504018001023200600400202103108020410203060132835010504013015040205
0180600400130630210011060640110210070104030612002440103065013155012074
0054001512001403080201907010030150163282501040301703012200530301150110
5011060640110501520033003015040520200124030157010023011080504010130141
6301109130050401046501514001140308032815063099040040203070302001503015
0405670036120026002155040402010400110307030120015040060501105011650020
4015305130301100120015020069301250135040605015305122001606303130110606
4010800100140308032803010206306100501401030705303016103070501647013080
4001080010050103031301140101205010261050102203070030110032795010830190
3015040530301130050110504340060201030701003001501410200114062045070504
0801200300704004040400150180338105014050010502003140050110307050104001
5104005021104812082050150141020011050130110032785010401301106100301400

2003140060150402001060050152003140060140021110140514814003011003277501
0403019003014061003015040400635080600400130301100909010030151030709010
0651314030801503040010100601402003120107310302067041010215014003011001
1084006011030701030040400140514815400138032762001010080200106005040103
0140030750114030105012200301100803090030110301103064004050014053010100
6080327520010220600103001506216170200301200490101040081010060501301400
3011001402029600140301100501467004005010400120040140550645040436650610
0601060150301504054015103070436501044014042006140306327430102603011660
1050104510501102200106070301100501044011003040053640014030632735010403
0190030140610030150401050350220030110021002004001018010160015504032006
0080327250108901503015040203010501320060018020630400100103020250620040
4001101304030150110606401103011001070601055010440301109010015040303200
1363271501083090403015040506204005014102004001406800200130110801200123
5062040050113014102004005016040130121608050400304001001402010503040010
0400501410200400110606401103011001405306470651070030123009210501412001
5011403080327050102401061000302050110606405303011005600200904006010604
0130125200905040060110700301170018021002004001018010160055010440301108
0829018032695010402003403030120010590050620150308010307040040705011402
2200301100326840108200301200680100030165550153020080100080103020080100
0180106080504004030900105012200301100326750102403080040647055015019103
0030130407050401700530110051030701080010080106064057206805647050401070
0301103070540070103005040107003015500110004006018056470504017005654007
0103005040170055013040040010010501030320015108043680153051504053080100
0501081030705501044030130600463266501050608403011073502030700206140307
0614020851501040011064006016543001100030214030632655064030701013040520
0500201502030610085303014706501403070400306507840013061550107020010040
0102054011030151504420080326450689015053040564020305506308020104001023
0511030704020304130540030110080302100504070800120040301510307015040200
8632635062007030010130405625035070524002009028051090100540060013040030
1100632625010504064030150405062040030152301001030701509220050113063052
1042400304004120501110002001801060640401416808290163261506200703001013
0405614306570060040050611507080501050110607056304001004001302030610305
0107040020010050670200804001200401400301100632605010109160016501201405
4650365014015650670200805011507861647040530506201030506702008030159100
4003018032595010306020040301504056307013620103015641200150110507840013
0610801600400130640103011080510100301805103070400806001700180510708002
0015011060640401103011501086163258506200700810165012014040550401405465
0365014015650670200801020050680020013011080405305020405063257501050020
0163014053070350654010140530703506800200130110801680708004006015010700
3011030705040505014102005063256501046080403015040501205501405160501010

840060106405150218270010405504058010198070800400601017010300153051307 0
368002001301108013070506702008050132555065040610406100301008301250670 2
008061060640125050402010307063040050325450102403012140020301400110120 3
040032534060932525063040704001407030801100022022001406155068020070400 8
054001101402010200106053030440830130100632515010200700504030150401501 1
405013010080308005040656080503010440051014050180104400515040805012001 0
030163040015016325050104030604030150405062015014002004016103003020530 6
154020081070030154302301570052200427015014002004011405013249506304070 4
004040050201401301506734003052001503011080405563640022080510106030121 3
504063248506504017001040610707805040405615504020010600530805506083012 1
350403247506307080400140220010260055011030030205010040011070030153030 1
705090218603012004020040400105654401315260840030123301102004006324650 1
020060014564001302065303011300504013018002001301108050406400161406030 1
108050407078080200690301108060080501040610632455065040610406100304001 1
013020307001080501120090240200155030165108016502060103030103030115030 7
031501162001040301324450610095010130405801640309001402405103070306100 3
017010066324350630407040040400502017001401140307015216910840040306104 0
011012404002700201301100161317001104008324250670761040580150400110122 7
002010504040136805401302050402003008504061063241506501006101301504001 1
012165012060150301501405403020400800200130150405214405301503200600140 5
103070306100301701006170016324050640306040405801504001101250406105040 1
301704060400501405400301308005070104070301104152400501140632395010200 2
440163061700117043014090301704060400130610400640301704060400130205013 2
385010240301100830110307020501530301103070302064008032374010307030171 0
770301656540208240550102108001001020220050132365010504064030305408200 6
104530550163235506803040060010510804051070030120050020130101012006011 0
502103070901001050120010030117005501323450102402140020108013018002001 3
016140603011080521011000504014063233506503070101406405200649050204001 4
040307010302022005016323250620020300101304052005002015020306601503011 0
307030800806700302022005016323150630370400604001070030180070240203080 4
200506201050110607030100323050101004190404005020501470630117005104004 0
506306100106322950620020401014040100108001080502040013064051030705078 4
001306322850104020034030152100170501208010201620090050180800200130110 8
016200106030100322750103061301200109160113011700550130210050401506121 6
508501700515047064100303226506320060040301501011506121612120040015020 1
700111620080205010700301301100632255064070155040405302155040203001080 4
053025200600130110804054030702020014130232245065007021050110150620070 3
001014065303011301210100030180020013016400161406030110805040403070101 3
030100322350101004190404005020501402050152002164001530100530301704053 0
118002001301614060301504040201007200105040654107010405001003060030114 2

105040132225062020030010140705303011030170400530301704053011540040820010410501021200300281102003013060200105040620082301620023014001403090010804020104510504013221506200207004001401301030100530301704053011800200130118030600402030703106660301803002010651704170012009800403012103105040132205064030701013040520050020130253030170405301117318501020082301501023070361060162001530307036120015501153013060030703612001200100800200130130703504013219506304701040610040530253030170405301115200330016400250404005014020305012014053524001700100101485215040025018014014060301504040203030750168002001301640016140603011003060050401321850620200300101401200106005303011080990150107003015412701030704013060653030440830130100321750102007005040301200940160801200940405103070150200940163216501020021100030150401515020041005400120040113015305165150103501803215506200593400106015014055014020400102001005040963030116320060011630110050113015406100216350120140803214506305340040610040400501302160503015064504056530030132003015064001400304020501013213506200902400404005016530081803015064001400154061003030110070011963063212506100400101650120616504015010700301150103501632115064030701040610030510130203070010805011640309001402510616004054006102203040080321050107040314054061006405150200404150140520020405210017050120801020200900501803209506200703001013040561200204015020020406120020401620020406320850610041903015016530512030540150453001405103063050306100503040500530516550400102503053030121640601100400163011003207506830901013068002001301108050646080109520057060400550104403011080501206320650650400804004061004040050130253030145070402020010193011002070405040262021502001091163011003205506408200400402030703053030150620080100040060400130630550608301302100510106030125063037040060400403040610011030110032045064090400600105011001020080405170018053030116427015011830190405160014640500103011503060200141003063203501040301703012200530305014010306070404004030601610608050400403090010501220040030110020010200161005040420040408200905501301100151010016050704008030020653305400260854001200140308082009030110306004115303010100320250102008012040610050404005012015501530301506450404270400400501201401549063201501040306040150206153021005040403070301150104006166555012040030110020300200701700205130101004001314030803200506440051013050107003015040506204004011044005400120090050501530020070153016200205030110031994010200201050100010220050180200802050406560805030200203001014050180200203005040620080201401200203001110506302103010220030800805040170053011005450701200100400604051200140308020802009201030144002001050130210052201040011501214002030150404030705450701070030130110031985010401106100305103070105016204011004050404061004005013021005220104001150150330150404001020080703011003197501040306040105064001105013021001530020070210501040011040201011304030 1

151011103011003196506200100019040565307001155040405503200600503061524 0
530302100130465032405501040015030804051030170320013195506820080400402 0
400104524040050130240201400114040200106005303011050140011408030140250 5
064404001301100501401030601314030803194506306020040301703200104025200 9
001508051045240510301530602004010501631935063070801020307002065307001 1
530515770116307036156460801510200100163060041700120630403015014003011 0
031925010200401400170014010200900501802010301200401301641043006012630 6
165610063061508501630110031915064530040010400812004015709110040050201 4
010200401108010506400801130403011510111040030110031905010403060401050 6
400161030701630704001301318940108200301504082003015303014060255016501 4
010306050405501318840102002021400201030110100301105011304030115101110 4
003011003187506703200101700140200900501804055070306400405004051030151 0
030180170051021400202257001318650102700120301504040050204014001004901 2
009005050603011003185401090070301300200703012200651301530113053030131 8
450650307040014065068060040014040307010680020013016400161406030110802 6
003013200600101070030153030164360101301318350644005101304058030102603 0
150704054908040530140701501910300301405305010765303015064504060403003 0
305064360101540610061540043631824010900703002007015306103003020504040 0
104006164052030404005120040140043610501318150101001012502126050402040 0
103652984004030140240098130110080410702200101000500204080318050102405 0
193060210501040011030615508270013061141043001217007055027007013031795 0
102101100030150405012040145453011020011301030140301100802001093014100 8
040063178501083019030120412701080204004082002105030600416518002004001 8
301903040701501610430161030706103070400407050110400301204004070502002 0
300150110507076122003011006153061005040120818004060240080317750620070 3
001013040565465036501401030604020504098101304020502016040163060041304 0
503011510111053040504003011003040503014161030701640011700110400831765 0
670761040580200109301660501301650330150405465035014010306030200300863 1
755010240301308008030165301700550110300302050401501040061620010930110 0
950401504030706015030115101110301100646614501401030605002006631745010 5
040640301541270504020010500201030701503080080107003015303044083011301 1
006140307050140103060646614150104001410030631735010460804030152100170 5
012080102020090050180163070614030900405608050115400501001040060161521 6
483631725010240200860170051630110052009024015040011014054001314030803 1
715010100601801406100165012040550154061006506702008010301400110170604 0
010806602001010005040180010232006004002021031080204103060041631704010 8
200200680100010501806604702150608304240500403090050401301316950630602 0
040301104308016001013010501806004001301060640110210070104030612002440 1
030650131550120740054001512001403080201907010030163168401020830171077 0
301530301150155011060640110316750104030170301220053030150182606153068 5

0406200150301108050402020062501104650151314030803166506309904004020307
0306021002153002402010400161200260021550404020104001601200150400605011
0501530513010606403011007001316540103070401020850430504050120010030110
1003040030205016316450620060600130140552006001301108040562170070301660
4053050107003012010306131635065407010405804053014070140530150107520060
0130125065040610130501070030150131625065010061040552006001301240565120
7301506400610651309030150640101001050107003013161501050406403030102003
0026104531605010240214002065012001003014001101203040060931595062301005
0102301005040101164030900501070030140307010606164030900140470250401620
0904005016120010500205303011620020700640018301903011630407061650401501
0700301130131585063070801013014050630610010405501631575064010510416302
0108040550120040040301315650661100030140570240010120070300301631555062
7001204052005002016704060301506100301031544010500120180130201030703075
0400315350109110300301307504005040103070402010250130531524010307030170
1040603016555013151501043160301108020230100400631504061004005010820120
0101070030131494010820030171077030110307030206400631485063040704001404
0102002105013010080206907050180314750105040640301504020702400150403020
8150380080600163146501022001001301204002001030070200700501631455010270
0704030150405062040080200600115301530301704070440013080314450630677040
3070406030150704055013143506701094006010140640530101000250101406314250
1091103003015240030750400140631415010403019001502014061020020700314050
6200700504015301301510200100504015020305114063139506704004010165012014
0405507010501000114031385064706101650120140405134050031375010506040515
0704004050140010120080131365063037040060101502170070280131355062009005
0405085030516306100108031345062007030010130405654001000240510400110803
1334010301301217007030116200101040085250650406101303132501040200340301
2630100108051502030602030700203131501050406405216501201404051030705120
0100803130501040370130180070210307051503075063063129301010120060110502
1403070540307010501510140530502010403061312850103061301200271080305501
6312750102401022007050160302312650102007005040301504050620400302023010
0103070312550104013018620030152307503124501040301703012200301075040030
5501631234010820030171077030165302022005016312250105040640405200500201
5012014065101302030700108050131214010900704061021700705012055015309003
0140610217007040570060018056270020803120506304070400140240307011022003
0110031195010100419030150404005020501140603015040180602015010307091006
0180311850102700120301504030205090050501615030500402003002130140050114
0631175010200860403015040400501140501163011003116501030613015302330164
0201003060010700301161004001631155010460804080020013011080165007040013
0640511030016015030116606002400130631144010100400604030160196010030121
6507631135010200606004030150401650620400130630102030116806131125010403

017030122001030701301102003150120031504051030704020301601140631115067 0
109165303011610040018031105010401306602004020301050131095061004004001 3
012107030040530301100700131085010306020040301520101301218901270020310 7
401082003017107703016530202200501631065010504064040520050020150120140 6
510130203070010805013105501020070050403012009401608012009404051030701 5
020094016310450102006001301150200404405003103501020021100030110801763 7
013013102501070403153051651501035080310150630407010140401030516105035 0
220031005010301100301504040203040703010501301100309950103200600403015 0
405050620400309630110540050400403050103016301100309850641704061004040 0
501302402031671504040202200402030100306001405062007004006309750104030 1
703015040501200207003015064001400130965010403017030122001030701301102 0
031501200315040510307040203016011406309550670109165303011610040018030 9
450104013066020040203010501309350610040040013019630405660014053030110 0
700130925010306020040301963040610040027002030914010820030171077030165 3
020220050163090501050406404052005002015012014065101302030700108050121 7
007030140570060018030895010404150168290180156200100708030884010900704 0
610217007040207006001108066021566040400130630874063070404061022003004 0
203062200300153051001505700530110030865010100419030150404005020501510 1
240018015030500402003002130140050114030855010200860403015040400501140 5
011630110030845068309010130680020013011080506460801050107003013083501 0
802006040301200401167010940013063082506701091653030116100400180308150 1
052001801400610230123301504050640085040063080401080051570309306005067 0
620076307950610706400150310803078501050401150515140108050620200400400 1
307750104030170301220010307013011020031501200315040510307040203016011 4
063076506701091653030116100400180307550104013066020040203010501307450 6
100400400130183019040566001405303011007001307350103060200403014640500 4
002700203072401082003017107703016530202200501630715010504064040520050 0
201501201406510130203070010805014051502030518056270020803070501027007 0
402508501406306950103061301100306001301170055013068501090070163015040 5
020400403040140090070611501030701660163011003067401090070406102170070 4
020103070801600110501306650610706400150363065501050264017050124020440 1
306450640307040014024020440110700301161004001630635067010916530301161 0
040018030625010200123404003009240400300921700163061506430600400402030 7
030705019040506700600400400630605065002704005101701020030202506502400 1
305950104030170301220010307013011020031501200315040510307040203016011 4
063058506701091653030116100400180305750104013066020040203010501305650 6
100400400130146540566001405303011007001305550103060200403014170400270 0
203054401082003017107703016530202200501630535010504064040520050020150 1
201406510130203070010805013052501010012301470215010020010001405003051 5
068300403012030803011080570405040651501035018030505010504064030150401 0

704050406105035061840080405501026105010284008018030495062700201040610050122003011003048501040632004030150405050620400308650110540050400403050103016301100304750102402001070050130115015013046501050406403014200192150114063045506200703004006301022001030701301405216085013044506304070101650120140210403070140630110030435063070020013012070240016203050406501163011003042506701091653030116100400180304150104030170301220010307013011020031501200315040510307040203016011406304050670109165303011610040018030415010403017030122001030701380303950104013066020040203010501303850610040040013018650405660014053030110070013037501030602004030186504061004002700203036401082003017107703016530202200501630355010504064040520050020150120140651013020307001080501303450105040640301504050620508052002015030501630803033401040810010490130630325010708013005040150301408030315064020034030113011503080011406303050104030170301220024020106605070013029501024030130800108030150205015303014003028506409040060010151080405616301100302750670403160103021465036302650661100030164051510801622022080302550620090400501061402050620090500103055303015064504030245064270400404005020140501014053030101006302350106110003030401083301400720026302250101004004030305503301400803071630214010306023010025303011040015040130130205065021306301407080501013040610301950650070210406101050760040013063018501030180030150405012055011021302008010001630174010705030155035500200650401050307031630165010200600130110801004905016030103030703163015501083019030121050100830161402081030252200301450104301406101040010109600103020080100010501704091107003016301350101081040500105040010401010700301630125010803001065804008002004017001630115010100601061050407091065107003016301050104510658010501003060010700301300950104030170301220013011030647040550180300850640410013014020612164040050130075064270400404005020140404001012008013011003006506307080102030700201501211504363021630110030055062008001061402050670805010613004506704400700140205067040601030530110030035010802017015303090050801401509014270501630110030025064270400140540610065102130301100701300140105120021125040510307030400163000401082003017107703016530202200501629995010504064040520050020150120140651013020307001080501299850102006001301150100200100014050029975010704031570405040610606401501035016299650102006001301405001508030716299540109007030146930120100200803020501208010030805018020082301201907022200800150110606401030115010861802994501045106010220010704050113020301100299350620200440301501106064021890130110050170403301101200400140308029925010100200300404056702400180299130101012006011050215150500200616203070020299040102002040110040676502062989506107064001503504040515032006001802988506200700187010403301501629875069001011000301503040550162986506301030100540700200300301306550129855010200300185010144030110805067020080306020018029845067024004040205011

0412702200601501106064010301150108616298350105040640301306115020501150
1101960015022001503020080100010501704095015012982506230100504015022001
0301150120010800130163011002981501070403140205023090130680130600504040
2030320016402010410150709100130506403070400806603080200860301402040307
0107003014020200102203055014020305070015013021005304040050401301100298
0506200156106064022002979501040301703012200215040116301100297850104316
0520086030110100301802977506208011014080100304001051700180519070106064
0101003018029765062301100030150850301501506702008057702163011006405109
0706405301281610030180297550610030404040050114016100301106064040530301
1002974501022001004030150403017001402050164070503011002973501023011000
3015085015020501120031301503050101506702008030163011005200860301131403
0802972501023011000301405165012050152008603017024005015030703029715067
0404003404040050130560150303030101006297040630704040610400110010403052
0086030170403802969401030702001860302022064001102968501020030018501014
4030110805007021651600165320011630110029675062004014001700140805200860
2402080020015040402032006001050141020010296640103070200816030170055015
3068130403030301100296550102009001503030180010210517001805410707506296
4501024050127050010517001805190701010030180296350101004190301504040050
2050152400180301100296250102401030022040010363061301100296150105063604
0301504020503070313010200101000153014007006004001501030301100296050630
1007040040400502050114055010214062200100040301610020030040301220030110
0295950650340304020103013060200110700301402030660200501301100295850103
0613014020101212200640202200301100295750670404006040013015306850403030
1100295650105010064040400502050114055010214068002001301640016140603012
2003011002955501040301703012200140650670200803011002954301010120060110
5024004270501103070155040400540705020304006295350103060200403015040105
0307036140208102200103025680402040080600140304020504040020020080802952
5010301800301504015016170011540030708030110029515010200801203015040400
5016400307080104003012040030708040030708062950501050602020040705040150
1080400500230614103061501080202200504030130110029493010101200601105021
5070403060200150129485010403017030122003066020015011306100805067020080
1104001802947506704040060404020704015011504001101212570018013020301100
2946506304001001050180160018025070010307040530629455062001510301306020
0180105016030100309501013061020049010010800106294450627002010501801600
1105012200301100294350610040010130150670200804061002942501040301900301
4061003014001015011060640202200104150700162941401082003017107703016530
2022005016294050105040640405200500201501201406510130203070010805012939
4010200203673020504015108015040025014020800200130110301162001040306129
3850610754006010521650120140125014051040011060801627002041008029375010
8002007040550701650120130150048405040820030150402002070050404051040011

0140629365010708001600153040510015070140030900805101140603015040405103
0703075050130050501293550105040640165062010130120608050706001220307030
2934501024030121400203014001101203040029334060929321401730506201080660
8040400270020410080402061704130630102200402021270101403010029311401100
4061200100400604040050608151080501043016002930140130606510840015108050
6100301061620029014025802001000301506731020103061292914014015010100400
4030301503070316501070152001001504001102007006150316715040150302515022
0050630610010501070030162928150110407061409015103070162006001040304052
2004001101216200207001700150107003016292714012002016200406100030301216
2004017001620067301506453001013050107003016292612140040530301103012640
0105501801830190304070621400504062925140108200120068010005303015012064
0015060840540011010605303013042102010306180183019013040703040706504016
2140050401301292415015405108043060010654011010030140610217007030153080
7018001029231401500110030102030700307080105040650650710130610083012130
1530301402008104003016080503015063040010010130620060011530153030170405
0670410130501070030162922140161002030700501025012061620040010010403061
6802006010403016100805011700150107003016292114011004061200100400604040
0160155012920140120010005012015217007050140505321700701507080200901150
2200506306100105010700301629191401101006143604052200305064001021050107
0030162918140130601630110050630513301405291600170016150658002001301103
0705063004010501070030150408200301412706291712006203004120016120020700
1050141200150403058030600200155030163010303013070310700301656291612001
0504012004010061312006015108030703613620021406030110803070310700301202
0012400291512006805040541761502004014001403043605015040820030114061630
1100504082003030164360140530301010017001629141200102600523016018050408
2003013002007030110307010640060140500401101540060108014055010214068002
0013016400161406030110030600107003012913120010260054127026507002521080
2065440828260640064010130107003011083011030703020640062912130102605220
0103017006004001050113005040130120031504051030704020301601140301002911
1200107005061200300240130120150306020011406291012001059005220010307020
0801203015012064052008001013064057080501013014053030150645040506427010
6290912001041002022005012061200590612605053070380120030021403015040100
3060010700301656290812006384012003861600720021405501023070363131830401
7005640012008027007017005501020082301320040107003016562907120010220141
5352405451365010200801203017094001308029061200107005051020010030201080
1505007023015010300630629051200680201301601503012005002011021801620020
7001030405501025150802009041003062904120010500201060150161401705011501
0030600140405101006050614001040543025210108503029031200659140140603015
0401503075016540040820010410501021200300281102003013060200110700301656
2902120063005020015503013070361400126040650301616012303010303014020303

0703107003016562901120010601018002100150103015150800210040500290013010
3045103070604030030115030703405001502016053070330130063063090030144080
1020202200103012004004030128991301026030800140530240170501301201301405
5015063010070106150670406010405200500201501260840040128981301020651030
7050620400400501801516555301700600400150404001012001289713010260308001
5040217007030150620010501085064030701080660615103070150200290501130630
1504005301507015030800103041205012896130660200530301500702107003011700
5116751301205067006004001050120612001700162895120063005050632001013016
5012030215506200101650620104030801660301200940400200940110400301510200
1003011030701640014100306289412001024004001502002400130206301500401301
5301502200800130206289312001050020203070050102150620010066020030121890
1646405006141706289214010301121700705010403019003030150440070165101601
5030304051503070364051501002001000130602003011627002014030865040610062
8911200104044004051502004048015040011012162700205010700301406100301103
0112570011503010080289012001076506200155160015704015030703621400203011
0606401501040014100306288913010260308001615012040200300201030614050531
0301405563610307050620030081050107003012888120010608040050608161008301
2201501031301305004022050640011013062887130104002004005150304002006204
1680524002500503020307002054816530403501200100301510307030750130630162
0080205010700301301100628861200109050611041520220021080206501040200340
3015040164701025030203015030703203070020628851200635405012001003011700
5167006004001104061005012200110306602003013011006288413067006005016050
1303050191030030150120610501370014702200207003015070105030800141003028
8313010306001501308070060040014030105040010301040030106110288213010260
3066020030170404007006004001105040010301103061001051041010307040301900
3018007010406106288112001060705010200801203011030701406105012065040820
0303010083017001040610203040301288013010750400520101304030130750640140
1000301214060301100100300400406106287913010100405060816120010040060402
0010600700104061055033012189012878120065005040125515030703803040705040
1630407014010301150404100628771200638401200385063061001065010402003403
0307001040610102003002130520101304030150620010406102876120010220164007
0164007064056080501108016200220400601410030150220010200506152010130403
0115010307030750113063015011003050632001013050107003013011006287512001
0902202200501206506200290400155040080800702304020800702150307036100166
0130110805063004010640170930150630201103040550113015010306020040301504
0203021001503060200114062874120010220121700705100700504020504040309001
0504061200905013061802009050670109400604001408050630610040014024020627
0020410080287312006214061001650120620020700301166050104008405121640540
0704004050203061103061504020506450407006004005050115030101000250105012
0140205018260163011002872301026030116308004054011306510412704040030308

0014040050113061001080530301506450405064270101406405200300810406106287
1130610604014706202200103070501205010430160050613001014015108040530287
0120010904061734053040050120506100400403014706104003014306003015503401
2001060020307001301002869120010500201200625001670416148161200625004061
0301167044001302868120062500203015051670450105020010040110010800150120
4015504016100301170016286712001080761900101000400153016704060410702501
2040504040540012001700128661200107060570160301227002050403015044007016
5701603012162700203022865120069010020303070310620015501301154008400504
0102003400400150320307005040120010600203030703130050110700301202001240
0286413010260506701094006010130801630800803015004013012030162200800801
0202009005012863120068604013032001301506702400400501506403019003013011
0061550403020110550353050620400617502051030110100301061286212001070050
5704050620108020304051030130750113063010016601301108010300401064017093
0130201103066020030117005301401630110062861140108200120068010005012055
0180020013016400161406030110802006030140307010107003015307501301002860
1301090165200202510307010304040010580152400400201501030613012001091601
1630110062859120067614030900161341008050620060014061005103070550170165
1200400801208011301170055011620080205010700301301100628581200630050130
6511081306140064050620304010130617080501306120080040560805013050620304
0101306506100306001040561101030050610030600101305530155064504016700600
4001628571200104100400520041008010300302010030600620304030110802010200
3005305020104030614306700600400104030680020013016400161406030120304053
0107003012856120010700505010403017030305062010305427010307050110020080
3013075010700301202001240028554010307010300302025303016163040701402405
1025010805103015067032001040610651030704040050114040307010410080020013
0164001614060301108014053030501130128544010301217007040521090106155040
0804052109040050152004015070506803016001050107003012007008103080170016
3040205040506303060400105010700301530301403070104100180070240208007021
7042040205010230660200301170416307034001302853401082002006801000530301
5015303014053020080100040060164055040400103005040305070018040550130080
0702302065070014006011700180530660200653030125065040610501070030120103
0612050650700140060105010700301501565070014006010104008162570010403070
4013200401103070570401650120170016530660200653030121650401501070030150
6504064030114050128525063010070400402030703040011013014020305303015010
2102030700205210952020012405303014507050405108400402060805011030701640
3060801400610240400306004170018014001400300161170104031630201400501815
0340201030706010304020100104906158400180404040020304014061402040013016
0040061026140203016600140061026140204001407040061026140204014070140061
0261402040016600140061026140205016600140061026140204001540140061026140
2010121400610261402040061025040163020140050140206080501103070130632008

8001020040301103070130632008320070130110307013063200810407013011030706
0103028514010307070104060530301650530200106005080807040060105016550107
2400132002400402001010005052110500507080010501815035051030706010308018
1205050632001013010400130301160503015040470161003016285040102084010307
0530301654001101402030530301501021020307002040530210050405010700301507
0014006011402016507001400601030804030830140205040301809130110003021700
1628494010208401030705303016400110130140203053030150102102030700208007
0210307040208007024020103070506801695054702815034051030701306402010307
0601030402030400120067050013050013007030151309047025040652001059003015
0404020211050050670800400501086200380301513090302100504040012004050013
0500402050404030830116100030210403050107003016402050140101400203040501
0700301402050700140060103016504015010700301151011102848200109040301601
0230620015030140516140680020013011080501073704016200802050107003015026
0840013028475064082004004020307030306602003011670109165120730116400165
1309030116401010016284650610060180301405201030618020307004702200802050
4061101030010250620200300101301050506427010150401405806600470250404055
0304210306405301080040020011070030140550104405305050204010306405302100
5040501070030180306004006011402080020013011080405508030600400601030400
1830190301163040706402050401650401501070030153030147062845501024030110
0013023011301306602003011030701406164400540056701094005016404003040814
0402010307063040814051030701405018016306400501803066020030116701091653
0301167010913010028445063040704001402200102600530301501580620070405701
9164060100400130301005032006001030405400200401501030405501401014535303
0121640601001628435067101803014052010306180510040010653030130060010653
0660200653030170910504062842506830804030140520103061615070916150704060
1630610010501405501024020810305306602006530301103011670417001501050406
4030130610050120140501284150640301900301405201030613025306602006405103
0705303018010810501506801600104011621400200140180020040405263010010801
2840501050707004051030116400110100830140530502010501628395068002007040
4055040100102008017001405501024020810305306602006530301103011670417001
6283850105040640301220103061140620307004702504040550401001020080103064
0010405001507091630660200301265303012150401506306100106283740101004006
0409120090103011300105040104510530301640015010240400110115030750141003
0283620010410010300302010307053030150113001014053030110030600107022001
1030701030040105040405504065010303200103070103004010504040550406550921
0307010300401050404055040801405040521430201003060053030162835200190213
0110306130520027030203070010805012001550301630103030153030123010010283
4200190213012257001051002002150604120101300105040507058020090106130010
5040522109010804200250401510803012350401406030150403075010653013060050
4032006001010046301102004008014012020053070310405005501028030610405001

2186010371053030150120040040301283320010904030153030110301680020013016
4001614060301203040530306283250630708010140240103070530301658102604006
5400130904030704100302040018019020010930168002001301640016140603011080
5040530826010530301501200400403012831200650504053014080120065053053030
1307031040305040615120010420104030541032006001170018007021006801580070
2400140309002186051006805040364051006805040364051300100010103302008210
8040014030900206128302160830170102006053030165216085180680545070530301
4366110103005431040305131700110400814050140900301526081057010100221200
6020405301407011620080205010700301628292160820010100021300105040100720
0105303016530800805040405410710616304070140506081530301405107310302828
2001902130162630100301510802301004004001406105068016001051207301140010
1651309030140110016530301200207005070701021306520013400405105304001303
0132002827301901301664100030121510805308260105406011510802002070010670
8020040050153030150700140061021080282640103070103003020253030166015030
3030150040130153030122008001061300105040520065030530301104510200650103
0702006502001505606040400403063061080010154001074120105102200100013065
1010020030013055064001075202001240520033005040410061010200422062015501
2053137301531371080812904030181290401510805120300402052006503050040800
2001301640016140603012006505303012825501010040040303059007064064020302
1005040163060050107003015040130500406400150102404001101402010301150307
5014100306282440108200200680100050551200201470250405303015018050552002
0105040611050430151108301800200701610004002400301509084005042001501110
0023011030704020400110400801652002040013064020140011070030153030130140
5040405640016120010600405108040400403070501405624001208040205014010140
0203040140402140020301506100040021050107003016530800805040530301405105
0100010104008181205050643101305010700301808070400601030628234010307070
6016530301653080080504053030140550100010120010080165062010501402010140
1640204127050405010830190301640205040104011013011682050162822506830804
0040203070305065040640301510117010403530301103011626400650540050107504
0501080600101404030701030505303200125022008001013061605030140012006701
0307016200590010403050107003013080930161301320030150405220013011030612
0010100050107021400301615055014010140020304014061505101605061505400166
0011050261505501660011050261505501660016150540030670215021615051015021
6150540030670212161505101216150540030670230130150540050107501042101306
5052610310307050520040600250220080010306155040200590014013015054005010
7501042101306505362008050900808106505200190215040508008001000104001504
0640303030100628215067050901014022001026005303015014053010207120307004
0536200801690080810640520019021504016800100010501050406403030301002820
5064040020400140650642400140403070105303016402030701400401510805506206
0402001010001400610216306004400501815034020103070601030281940103070506

3040704001402530301640203010207165167032001801670320014020303010100501
6402030507006101040081563060044001308014811510801643400403050180281850
6200207004004020307030402030200106004020307001530511030701640306040061
6605014006040010400840204006102200101000140061021630600440013016504015
0107003011510111028174010200201007200652008010004040530506306100101404
0506200240201030614001210930305062109301650102109303040012109301640015
0010260030305065001026003016501050010260030304001500102600301281650102
4030110083016553030150150640307010610083014055010453030140510806107001
0406102815506304070101650120140240530320016405104101640540050603014051
0307045300400406102814401090070217007040530652006001301611050430110801
6507030400150406403014001308011000301400150908403015064020010501070030
1501281340108200200680100053030164020305303012008010001050150628400130
1168809010306168070103065303013010260108050102003154030165010201604030
1610220010030110306116400610501570603016402050403080080301630613040011
0130628124010307070104060530301613001050401020710530301502030614214815
0404020504010207140540040820064020103070530301308008013063062002050403
0161300880301220040110550180501910300301400169600702400105040650191030
0301400169600167024004001301650401501070030115101110281140108200806200
5303015016540040820064020103070530301308008013063062810506403070400130
4040050164030701053030165200600130161105043011080401030121700704053016
5040150107003011080530081803017010300400501506281050107003015012809401
0208401030705303016400110130140203053030150102106280850105040640404005
0205011421530500403016467040050153030140209007010280740109007050140052
1700520501826017005240302040050501150305062010140404003010056404007040
6070011306306280640109007053030145070656150105550626084006403070524020
3060103014040205168012506306100400640204005060301255061003040070012805
4010900702170070510804040080080114010804020604030520060013016110504301
1080540040820064020103070530301308008013063062804506270012030140553030
1450702010306180145300301216400110403070018014530057022001251030701613
1306302803501024020801170051630110061200106004056080501240015040640301
6506504064030150900564040070406070011306302802401090070217007053040550
4052002201030640010700301640500130150402604002011404055040102004013020
3040203020010600653024020301200300562608400130402050405290702080130121
6135010700301501280140102082164005303015016540040820064020103070530301
3080080130630628005010100419030150405012050115103070530301280010005015
6040160030162799501027001203015040305501530301240014153007022001453004
0050121700703011550701200410627985010270012030150405012050151030705303
0140050703050156040160030162797501010041903015040305501530301240014153
0070220014054815415300804056080501130114530040530502010403064053167150
6402001050107003016279640108200200680100053030150180168309016203070047

0250401621400501070030113012795506100601803014052010306161421541530040
5301630210040013065430350105014050040564303180145300570220012164001104
0304050040015090840301506402001050107003016279450105040640301103070203
0700402008620200300406150171301158205010130510501730165202003004061510
5017130182050101301050173012793501050406403015040580101914052170070453
0010306200600130140610301653030125065040640040400502050153030150104108
0580120014052402070060014001306543035101401405504048163020164303180105
0173016510501730127925062002070040040203070304001501024001101151080150
3075016151508002008061515030750152006602791501040812003012001060040050
1640820016200801000122003010062790506200801203018308010130550152200450
7052160814050180525305015200213020060011530153030170407041050406278940
1020020301300200703012200651301530113010083012030403015303011030170400
8027885067032004001301501030140205016150027040201501003060014050140400
2608801278750640307040040400502040205016301301030100130140400500230501
3011002786501041703013016018040610800702611406101505002301630110027855
0105060447080020013011080404005002304020301100278450671018030140540550
1162002901402406103014054001073105012783506208800400405504040400502061
0200207004020660501104008110200600604056404007006004001802782501040812
0030120010600400501615040820016150302008010001801504011502200506306100
1010412705040100102008050120550127815064030204001306151080161060600130
1100278050640301900150180150470501801550401503200600115022002779501030
1800140610015020615040061003001501030704002301000150220016301100277850
6270020400152404005020804020103070103040040010400110150204004030127775
0683012015108040562001503014055636880304002776506430160040505310804056
0805011620060600501070030120103061805501071640400806005040627755068308
0403014052010306180550107164040030100500504080277450630160400101306700
1040610405501022160501130802006903011080600805017001802773506500702104
0610103016007200240510120065040615301011006554030201550113020400202004
0014010801830190304070110307030277250670320012200301100400640301405481
1317001104008277150620080081050122002027006701627705010911030030140017
4055040202700670122003010062769506809010140240307015085051010603015060
8110510400301270804127685062004110030405470501402010200505011030701501
6276750104030190030140610030110801050307034001308022002766506470610140
1050102004001401220030100276550620200300101407010301704008054153003016
2101000301403017027645068090101407053030150182608007021030704058007021
3070306100306001402530130202570030170015301504057040501201406430650405
3030170060040011402763506270012030405501610083012405150104001302276250
6200860400105018030100530305063061001060276150640307040040400502050151
0307020013101306200103106561030030204006203040541025040301002760506100
4004001308013010053030506306100106027594010900703013002007030122006702

603014001614060301220050403010027585062002070040013080130100530305063 0
610010602757506403070400404005020501151080504068002001301504030300100 27
565010306130120010916011301170055013021005040170051506121650850150470 6
410030275550650067024030150111401900706121200400150206150400401700111 6
301100275450630613013011001403050040163011003022753506301007040013080 1
200155030163010303018013040060015306400104010610108101070030165627525 0
620030084005103016800200130110804020120070010700301656275150620020300 4
001401301030100541080130162001902130167040603014020301300501107003016 5
627505066030240510804051700141043002170070170012124051030701508400801 7
001104008274950670200800400101406405220030165012040060114080217007030 1
240515070060014100306274850654070104055011010009108016330302008005040 4
052140150803002064051504082006306274750622015030912009030150705200600 1
301250650406101305010700301501627464010100400604091200901030140567044 0
030205016274550101007120030120010600656200106002022003120060080132006 0
040530160400401274450680020070404052002070050704058040520020700240515 0
104001302505108050406800200130164001614060301400460803040516511008301 7
024001630627435065200120100830304052005002016100830124051330255035250 6
306100104012742506200205040530405804053066020016802007010403040127415 0
103061301405121400110403014040513401306100301162002410403080127405062 0
035400120040160525010200220400604027395069020504004020211007011030704 0
400502080402010307010304004001040011014005012041002738506200905040013 0
150404020501406103011620013400130273750620013104051700121700703012405 1
080200400401507006001170011040082736506304017015304052030700506450403 0
140701405306170055040520040100010804052630100302273550640309001013040 5
610083012100950102140020150104306157060613011608050803020501306273450 6
100216015304056400120010600301108050670200160102010306127335067031200 4
052200103014055015303640526301006164001140506400610501070030162732506 2
020030010130405220024055010700301627315065040610405220040011012405501 0
700301627305061008030040405220051030060050404055010700301501272950620 0
703001013030240012001060030110804053070200160502728501050263014050405 2
405440501405015062608101272750108104008405400200401000108040520070080 2
726506820080405104301402278302012002740550102405200401167091004008027 2
550610040018040202200150165481654014020400401570055016272440103070506 3
040704001402105011830190163040701640012109301504016302030602003011510 1
110272350107040620012001004001700562200103011405150106165101540164010 2
004050211503070362722506440051040530703021400203011060640150104001410 0
306272150102030540301504016501208014056270020802720506421701503014054 0
610061503050040501020030023050406501163011008027195010301701406100165 0
120616200220400601805103040650670200801030127185010240501930606150400 1
101250620015516001610606401503060200140500271750650406101304061003014 7

0280500104181405150307036180070240580070215070240018056270020153066020
0540113140302010200400400150306020015030602001405002716506200600140060
1014061530315401504010026040014027155010200600115062001004054702504015
0130050140500271450104030190030140610030301470280150010004051503070380
1008301258109030140540070060018027135010404150508290103030103010014070
3011002712506270020140210502009050122003011002711501050406402530508501
4061270020530301103070102004008013032001301655012710501050067024025085
0140611085064006405011050430115040011081301105501270950647064001403040
0151054001510527085063200600404020501140190070612120040040400502064040
0401700140205014020470101270750620060160030170014020501402030500401200
3002404007091501030627065062200300400140402200300106550405063020140014
0403020110402030500402003002130117005140110504301511083011080405150802
0040016520060013011100302162700206162008020501070030154061005040130403
0130110062705506100400400130801520010100053015040402030140530301164270
1501405504013066020040510801503060200180270450102006001150200100405470
2504015013005014050027035010304002403015020501640011013020307001080501
2702501030750403012001060040050161202001240130750401050307501220030100
6270150104030190030140610030150401501350107003015303044083013010080203
0803011030702070405040640050140010640060117001802700506100200100040405
5011640309005010700301108010502916004001306405504030610030151030701002
6050401301203051650105050015010367302050401510802030601802006504003012
0018061502004011317001801501086615050107012203080301705090150151030115
0108618026995062700201402105020090501220030110026985010810400852169022
0040080550352303200130165501269750103061301150101211080170052150704060
1405201013040307501305303011300630640201030703080080400105014102001040
2030500402003002130117005140540610050401620080205010700301130403013011
0080269650610040040013080152001010005301504040203014053030116427014061
0011030110080540610010301186501503060200141003062695506304084002030803
0110307061510307062694506302014001550406520010500207080150401510804020
3061550692108014040402010100605052002703040170501301108040203050162693
5010302013030100029065054301240025040015010602006950403200600400520033
0062692506302014001550406520010500205201680151080402030215070163010600
5050404001503524020301501300501802691506200411003052215700103070150168
0020013011080515020601802004100214014060301504015030750162690501030801
1000100306003015070150201406100101200970260402010068015010030600410030
6268950650070240054011010030140610402050140500268850640010403020307004
7024020501405002687501010030160030150608153030120200124008020060011100
3060051501300501405001408304019007030115066020801401900705100080040301
1501003060080510008004051003070301150100306008051003070580950301150100
3060040500268650102040200120010010805809505150307034050026855010950405

3013060504050160501301150100306004100306268450643016001510804056064200
8030150650020010501070030126835065002001630140520103061268250690080181
0405400163090103070405501070030162681506701200405457064054001501401304
0550107003016268050641703014052010306180203070012006101000400215040802
6795010406304020010100040550180405501401014002030401406140531671103070
1301267850690080184053620080304055010700301626775063070180512073030405
5010700301626765068002007040610003030150704055010700301626755067030016
0040540013090108040550107003012674506504064030183080141002673200109050
3014070506103064030140705080402013064065530301216409040070165120730116
4001651309030116401010018060150301103070145300165062040064020103070141
0530030660200301506201030170051080630210050405010403060403014020140606
5401051200214020102153040320085040501043011080402010307030703140640201
2400316554153100853030110801645136267250683080400402030703020010600301
1630708016402022001642701616436016167020200116504015010700301151011102
6712006401301703200400530301103016405803060014064051041015010214040307
0102670200109027010406053030150160150301504061306020052010130403015040
1080990105303012669710770106100305303015015200410010085303011620041001
4026682630940301623019301807080055040567001005040060101301101030021270
0301405230601050165301670404003163061212700161003060010503053030150645
0405067044005010700301501530167040400601803050040220080060150301151011
1026672001090403016010261620080205010700301530301154706200150301402030
7005040200300240201025018013010015040011014051030705063040010501070030
1250696010506412010200205040301162008020501070030156361080802007040040
0150102150400110140510307010304004001700162666200109050504050104030190
0303014064030705240530601030140615019306052307501040301405303015064504
0506427010626652001060105303011030702030700501214002010802030700501800
2001301614060301108014040307010530301501403070400403012664506803040060
0400510804040050201401080540110100301406104020501024020810530301266350
6304070400140240307015303013010080206304135016266240101004006040104510
3070302050120220010301704162004013011080205070715010130805620601504051
2060504015030703540130203026612006802030501605013015014020101081040500
4020400104010405004020110811070030165626604010820080620030601503012530
3015015507001213018002001301103070701004005011406030120604010652004012
2008230110801020034002030803016800200130110801404020302006006053030150
1200400403012659410408301105010003016530530301501680020013011080140640
0161406030110801405302658200102600801093053030150152008006004080020013
0182904008014014060301504030750153030150120040040301265720010220301103
0703016553030150163091230165550645040506704101405016100830165530301501
2203070026562001090270104060530301501630103030110802001550301330610620
0155030110803010303013306105303015012203070026552006801000680703053030

1501530301550200905010305103070101000240500522100670140305004022100170
5040620307002654401030840103070305303015016550680020010130600440405503
0600410302653501010071200301200106006530530301501615060811007200530301
4055010072001030164001406116304001004050053030130102601080162003155010
7003016265250105402170070405302010306180150400110121627002061620080205
0107003016265140107050301400150310804001830190301163040706165040150107
0030180405501024020810530307001040610203040301265040101007040610217007
0405104001106154001000257016030140510400140010400855040510200401080162
0080205010700301301710130626494010100400604091200901030116504015010700
3014153053030150164052630100530400260040080521650406108020220050401008
3015501403070301164006150107003014030701030626484107021001100300108030
5010403019003015016405263010051060110030168002004040526301001080501070
0303055040080501910300301101003010140307031030264740102084010307053030
1654001101530301402081040500501910300301101003010140530301600605010805
4001050401108050191030030110100301105040400170011301102501306306602005
0402030210050401503060200114062646401083301218901201030615010731704015
0400110110801670605010700301626454010200201007200652008010004040530400
1830190301163040706165040150107003018026445010240200107005040203015011
4050160150301151011103010026432001090403011030161540070060014050054030
1900105615304001030401510200100504050101206264250647040014040550608030
1202022004507014061050165470653030180306001050306217007030122050630370
4006010626412006490301108010400301263010030110407040050203062001902130
1104070400130155018015250670406010501700161152506301007010263010040530
5062040080800200130110801620010601040308012640410300402009010065309704
0200102615300620070103070510616001058054030190010561515020305151020010
0504050101208026392001020505012080102080405400700600140500501020080120
3030400103040180106064027002065010440218901626389630406100640105120021
4061006263746405006417068650406100405302100400270020410080206270020105
0162636200640130152100170530306200205040301507016550680620070403012162
0040165120730116400165130903011640110018002001301108040515020405015010
7003012635710770106100305303015015200905010504053030150200905010306120
0105002053030140601151080200207001043160406400163090670102670401690400
4045308007022405800702601503015303017080413063065303011502200163061001
0501130110082001010002405200110450401632006001501070030126342001041003
0405200905010307053030150161640309004055012506304001100105010700303050
7001263320068020501660030202810130530301501165040150107003015070708014
1053030150126325010506084030120030026402014514010307053030116200220400
3040203015200600602030700204020504010610040030153015010502030615614041
3061540683053030130150105030263150620020300400402030703040203015150200
6006020307002020040070403016705011003011640709161550401630208015265034

0023617001808016901510307053030140601162002070018020010600151080402030
5303012001017030050404020301515030703504230162630506100805010405150100
7200140406513090301104010100403016405219011401030705010200219030164052
6301004003036530301200207001700150107003012629501040026004030120030026
1640306015308048165301402053018040170501301540105250404051007200140103
0705303014060116200207001030120605040150307035401302030626281001040070
3014001023011030115308404050010406040303110301708015040151080402030262
7263010030110610040050401550180530301200101703004090070105040620307002
6261001086050120401080810200301521065400612001093015809600400801406030
1504020060014050120805303012202003001050406525010202003004020010100053
0301805082625200673013061001625040031650150061301504060320030116250400
3180402010307010304001014013014017050130140203040030816522004507053020
0106006580530301400140200840900701050406203070026241001040070301400102
3012168069103064052006700501680610306405500804001680010010304050026232
0010100803016010123011640709161550401630208040170501301540105250404051
0072001401030704001406307040401101108053030140601162002070010640530708
0150401645300103026221001040703803020504050104001102004018003020103070
6130132002064001103830126015030110805070016262146360301702020030165010
4010110030165010801019303010400102200596110103001022020030040013050140
0102301501204040105120021301501627001626204010301217007050405100700504
0309002418301251080420010504064123016510808020170301166060150303051503
0703107003014012008301436040301653030130102605070506490106162008020501
0700301501261941040830191200901030116456306100301504021093011030116456
2618200102008151080405601230616306306257005040200616015040151080506308
1020015501301154008400504010200340040015034001830190301163040706165040
1501070030130600410530301501261710010200830121700701610067006151080164
1070140100050401550401632006001050116412001140302026164104850407040110
0404053062615463033016405506921080140522005901026144010408301405606200
1006805040290102001505040211050040530400709100162008020501070030180405
2200108016409040060015014090600501700526131300101403070801053030150140
2002040504053014080530301505105040621700703015103070100820010500206601
5030150402001050020621643016200330030163012330164063503016200401003016
6040300301680020013011080504064001614060301108050405304360105303015012
0040040301261241053001030030201030705303015015401101003014061040550102
3090801053030150116202003001501070030166063403016102001905030165010102
1903016164155010700301616504015010700301501261141020010504010451053030
1501640015010240011015150307501203070020626109001010001014054102050257
0010305200900501030807091001030405001406030110301226024440103080520060
0130161105043011080530301520090501050305015090010501205040260941020010
1403070801053030150120015501301154008400504010200340040015034001830190

3011630407061650401501070030130600410530301501260820010300703016010230
6103064030160102305708050504022001001520080050403067041026074107023013
0130800301652030700570805010130140652008001013014053030150645040670410
2606501024030150120060600301652030700520060013016110504301200606005536
1030702301005015504008054002190150165250140912001060052190150180802008
1030705303014270105040601503015040626054102703030401309002601030530301
5016201410400404100140220307002604100102008301217007054011010030140610
5100107005061076001105043011080530530301301026050703080010305809701050
1500260320010504021400201306104513064030702001010002530301108030413105
0406015030150406260220062100301108050405007021053030150161510802102001
3051040015701603015016260120010410010300302010307055016104006403011010
8105501610083016553030150122030700260031052367302050404004002501640022
0064007400511403011510307015030750117001805440158002001301102004006110
1030040307047025040403070101301020302004070301307002001103014200105040
4020504061080640010504040205040640204300116100030240030405001308094020
3200600504050010406040303110301130050140401820013011080200100506402030
5010250305100306004020010100065100306004051000800405040405005100307050
4040500580950504040500212004005040402015010030600150180500702301504021
0200108040400502050160150301151011102599200107060301217007010301510451
0653080010550180513064005040550151030702400202598410200405019103003020
7024001064030702001010002530301108030413105040601503015040625974104300
5303012170070502030610200120602405140610200120606015030110200400615304
0830408400170030207080040064007080020011407057080020040302030570040015
5062004004061025964010900701030057016030153073075014020220016100400160
1503011510111025955068090400140103070501704006040301504082003011502200
6100830124020812200301100259450108103017014004064020305504008053070301
0200415016259350640400204001404030701063061003015040200533014030701055
0125925064706400140410702401210200100110200415016166010307040204005070
0130100801630640050180259150640306040404005013058048165301402053011405
0110301108610140501301002590501040301703030540820013012015030602001140
6258950104217040610030110001302301700510805012588506830190301104127015
5002001080020013015012002070030147025040200627301108015024002041003062
5875010307018015020150115010307014706541070501003060030611501421402024
0020303030360301109201406030110695040610258650647064004040050201070030
1402040610170055201013040301405110030400400620022013017078030140550781
0130258550643016004056080501400540030011401080405615601060850670406010
1302584506470240155070201030611050608301150404053040010026050107003015
0125835067040601013015108040562001080715108040530258250643016001510803
0206156420061405530113065501206302581506420016153040400501405053290853
0301506450405064270400140640205012580501040301900150203021700550405308

0100010801502041001503010611016200802050107003012001902159060013001051
7001801008301470630122004001001625795063060501024830205040405636314063
6311040084008017001104008257850670320010130405501151502030515102001001
0307040120086257750624001205301501651070603050120080201308050406406564
0018301903015040304070105040802576506703120015010301302040550102405200
4011670910040062575506427018040202200150165481654014020400401570055012
5745010403017030305101155021615150307036150862005040151080150600805080
1532008040050908110400301625735010703001600150301650120612520061210002
0015050670410640012001060030110805067020016010165012040550153675301508
3090161010810530150256653015023400601802572501050020016301200106004005
0161420080105020070040013022005220010415070011102002076257150105040640
3011035050203070020640100030150405150103506530150234006018025705010403
0190030150404005020105012050182604005011301530113050140014030900301108
0104150805103070200410050503050150900801280011000402570070015065030117
0062569501083019030150404055011504004082001080405150306004162568501020
0219030150403020308020301170066010200416301070140601625675010421703030
1020020700615045070504054082004057040405305004065305151501040016200800
5040521401508030020805301502340060180256650104081200301408200140050162
0080030110506040105015220010415070012610162565501090080184053015020620
3070050641304070506304070106530506906100010504050109110300301504062564
5010403017010300302021502061510801502020012104003018002001301103015200
4012102003400580901708102003015014010306030625635062002013004040050130
5804020601250404020509084003040203060623057050905150403070625625010307
0180150206200109301650826010301233014661470401502006006061403070614020
8150104001130206501401030601515040580802561501045130040540208301502064
0610030140501000510804003008050700150020083011080501402081070015014010
3060646614625605010704031405150100200100018066040610016501204055011504
0011012162700205010700301406100301504051502009050625594010900703012200
2030150405305165150103508053015023400601803021005040104150700118650625
5850108301903015040550115040040820010805150306004162557501010060180660
4061001650120405501500101260030130407040040050120104003015102001003015
0405150103506140307061402085150104001196306255650104217015030165012065
1207301140010165130903014011001640012001060030130708040510301150108616
1502004012506451054010140515030703625555010830190150307031302065308015
0261007010610018601530150256625545010403017030301510801502020012104003
0180020013011030119630651501035062553501020060600130140515030703801410
2052164120016255240105120021103070140130606142002105062020015011015030
1002551501030701804040050205014020400530116200905016561002008163011002
5505063010070400130801530301506450405064270400140306402030801254940202
0080010130611010300402070805010130140530301506450405064270400801301100

2548506100950101306514040040307041003040560620010307016602050405002547
5064030190030140400501402050116301100804056080501103011670320080254650
6100950101650120501405630160180170054052001022053070803023011002545401
0512002111015040053012170054003070804005011163011002544506453001040530
7030601503015010701103070521640018016301100254340105120021530301100104
0520020700101040080150704060163011002542501040301900301504030550115040
0530121700530708050401630110025415067032001051030140530703040530120010
2201301170017003405307038025405010200244016306400501470240204015090150
4102013053030140062539501045130030150404020307001030701501650520098010
7003018002001301640016140603012200402022003023011002538501027013030150
4040050140110083012150400103116301100253750102403013080010804020612164
0400501404005020410030301100253650104217015301501211504361630110025355
0680201701530404005011040030130105001404003015700514054061006510213030
1100700125345010403017052150206302100504054300200401051200211501040014
1003062533506200205040530404005018015150307501202001240200207001700562
5325061008030040570160301504040562101000301240522005063006001050107003
0125315010100400403030120020700611080065011002008030150620015610606401
5010400141003062530501026018150210802061521501040013042006005040528301
1005004050120501611010300608050403090040013080540110100301406103096010
0301501071640301708005062529501040301900150201501150301061105030610010
3020220021700705040588050405400604050103062528506200700501014017001170
4301409030170406010130610863012402020070050114050130100252750623011000
3014058011580120091504015901005050800200130110400150150150620010130801
2004070301405103070301910400840512161306515070400403022526506289010150
4040513064056080501200905050670109400601013015050645040405705040400553
0140530401252550680020070404052200200207005070405302504082003015040200
1550301630103030124020630201050403010025245061075400601052165012014040
5504016200600605010700301210018802030210050403060200210754006014100306
2523506200900501040513061542005067010940060101308040540052400805400100
0240510400140030225225062009050104051306405200659005070130620015030140
5563650705068020101305010816200802050107003014030701063025215010100419
0404005020501470630117005104004050630610010625205063037040060400130801
0400110140201020016030370504050160501301100306002519506200801204055040
8200301200207002405640204005301200207001010700301170051167513012050670
0600400105011620080205010700301201200170016251850670320040015010301655
0400802001060030162003003012402063025064006403015100101700608050302025
1750643016003014058040040501801430600301203021005040200300230150307031
4062516506826010203080108030202004010030166040300301620015503016301030
3011003060010700301656251550680020070401540011015070405619006808401801
0060140603011503070362514506440051040530703013026013138015108015030703

64052410404005011060162008002001301108015030703625135065040610130801108103003020140301504015030703614051501004008080110040020014005012080020013016400161406030150116200802050107003012001040306125125010403019003011073502030700204050535107350203070080550645040530110501405504030100105040625115061008030040540010300600504040561080040020015040301301506708030010130640580306001406405104101501021404030701025105063040701052004012405630610030125506100260101302509506402002040412703025501826014306504082003017006004001163011006250850642701801501130153011305501510301108650130130660200504020302100504015030602001140625075068002007040405801008301506403070101304052005002013021030210050402002070061070405040200207000170054020501520021640015301005530155064504016700600400140125065063016010405630708010140703016010130250550680901014070300200703012200530301501826080140046080305303011301553011405108050120630250450620030050104058002001301504055301167006004001401250350620040080101302001550301630103030150682601025025062006084006010130654004127050705062002204006010130545070504068002001301640016140603011080504053062501506809040014040301063014020306100517651700180510004041080309123011030701008301280700100503022500501030701801502050115043050405150700600400130165307006004005050115042001630249950102701301405501021406800200130161406030115010030600140624985010440160014109084051503070310400840516704203040040030171408024975010403019001502015011503010611016301100249650630160400402030703040205020160406510804040080200400114010301167032001616800202004001302495506800202001015504040517001150601216608114030802494501020060011406100154702150130050165403019004005012051020010050401504090100402062493506301007040013080140202002070051080121400204020103011503075014100302492501080200604030115020305161300505040640515010350180470630140515010049040500249150104301600165012014064017093015063020110130146034051503070314062490506403070400130404005020501200207003013051163016018040510301108650130132001301203021001503060200114062489506504061040580115150203051510200100504040530210040050401140248850630613013060200114020510121504001103080200701300653025120040080130240130815001100080011630110030224874010307030170104060301656800200130161406030110803061003014030701010220030110024865062009024004040050162008603015064001400801402030500402003002130117005305164030900501070030110635030116200601640526301005105130248550627030104056567040400601130150048404052200504020020700504040510400110140248450680020070405308010001080405640521608601503030220040010012483104400515040610660301912009030121890150405064030704006080169022004008090220040040302030100248210760050630700505013021005040204001101702400508013066020015010301400306020011306301502200163011003053021005040217007024051502030511501630624811030613018089030110801405501024054001400403061

5220050405101215010400110130630163011006248010610040030305210017030162
0100720050508501100720020301605013015103070200299016513090301220305120
0401624791010021620010600202200100720065108040550400805030110504301511
0830152005740550401316715215070400401401030120105010705044040013062478
1080020040020307030200155030180120091682608030103030115015040615262001
0003021006604030030170630930210020220044082826065063061001014010307020
0290180247710406040303161401730501203020220050404001002605403020130630
6247610550301103061304001101302030700108050140550201604010805063004010
5062001003015040405302100150203051402040530451040308012475101002164300
1520060013012170070306522004001101250406104030680200601504010735020307
0020624741060504004061030120307002061540010605080150400110120400400120
3070020301100247312001090240050204100610407011050400200300840302200301
1002472104070154011010030140610520030085061205080053001070405305018010
2002070050708002007015040624711010030010130630800101308010145702400150
4080104510504040205010400110140180647080070230402080070217010403155040
1925130110024701045651030702140080522005124003140500246910610008052200
4041109070655033011002006504014051030705018090600101100809614054001660
1405304004280155040130201802468103021013020304064306003015200330010307
0203041305404111030110050191030030151030160660680246710880040013061510
8014090040013020501624661020070400130615108070634001301203050124651010
0300400805503301504014020503200600101308020367306203064701700550140411
1015030100802464102160103021130116436080404130164360152010130403030150
3010070016246314077053043504030610605080302100504040411030115045704100
3062462140307010504722003010065108620103011080010010501302100504050120
0100301230370400130610083012030403015303011030170400802461120020700405
3050048106150610040010405307030410706301504051080150802009061102200701
5012001005150307501203070020624601408005130614030900801600101308050406
4065640018301903015040304070105040624591403090030408504021600410064061
0100301108303056363014005070624581403070525069108101306405803060014064
0510410150102140403070102457130610053010800200650408200301530507001504
0130157018030030170805040013070010406102456160405130170406040013080504
0820030304001690130140070300600653036701301070143015067024001070010406
1024551400401130613670151080102004001302454180908090170110015200700108
0245318060501022001580605010301008030123301507020506301601062452140610
1301404005002305015100102009405305004013061001070015063061001014024030
7015085024511200300701301404005002305014055010250640080160040010245011
0020077001040610501040200340301200300850620069030110806008050104061024
4913040854011010030140610405301606510805010430160024481200765401101003
0140610304081055018055070800200701504024471200207001504305040201501040
0141006100260410014012501504020103070901005020307002024461403070103003

0207060665130153011301070030153030140205301140501244518060504010301108
0550806050503040500550100200850301802017051030704003090010700301205301
1030120090050165803060040050301470640203050166016040130306100400501511
0830110802030501802570018030110024441060805010304003066020307002061540
0700250803066020030120050015040580021004008002100805216200902104030140
2400200902301100244310200401601102029600140803011002442103061002100200
4004030630101012006011050250102400100200803061004005014001030060010501
1060120021306104001083027006001400130401502111030110024411020040140010
9070801507024004001301244016308004054001012007001207050401405062001511
0301100243910606401501030170320010104008501080201705103070820025050301
6301100243810200401167010916105067024001805040820030140202200501652404
0050400801405014061001103021005040506200154053030110041003062437170805
0130612008004053020304010130613061004051030170320010130150620010130801
2436106050801060640530164020530117005163011008020016600530146031303704
0530320060018024351020040160301101003012030700208015150807001008040610
0301550107504012001761150304081502030615020304022047064015080306001140
1630110024341047064040400803060018040202200504028001000402010307030810
5014040042001401457030140201030703019801150608147064020220040204701040
3014061001103011001806015012800100054061001030110606407032008024331020
0401603014053080016204702504020406100150400804100150180301100243210800
2004003022002010301400303706102005001103070130614053011002431106064011
0204061005070203037011406243010440051405001830190304070650401621400504
0302001801000301050162429106541008010280010005103070303081050406102800
1000402010307030810805108016100094001306402015010072001404001210950401
6302024281063060301650403014020103070150307506504010130120069301250134
0201504701664020647050404020150103501410030101012006011050211024271045
1406540610050670200803080016242640510300100014040103015040405103001000
8054650325067020080405702400180242510300600400130612020048016004001301
6021020082301108011001020094053022008001801041270220060150110606401030
1150108614100306242410207400504017320307006151080501043016002001550130
1154008400504010200340050470400150324231030703014001320043014053020103
0618040018301903013040704100150406405400110504062422101081013061510804
0064010130405053530501801402003405220040011050405501242110100216200106
0053030162008603015040510307015040052002011406150110196001503020080100
0103015022002150401150124201105043015110830157005108001004001405018001
1004005011408001001801502009801070030164001501023015040150131401030702
0200500650503016301100241910100216121700704300115010150403070400306306
0050301706700310804020502309013068013060050404020303200164020104101507
0910013080200860301402040307010700301402020010220305501402030507001501
3021005304040050401301100241810606406506200152200215040116301100143605

2008603011010030180241710400150010820081603018308010130620081604102016
7050901405011670509014080100304002050104010108014010030162416103070130
1400501205018060040013015030100241510606405801060056080501080603618024
1410706040015501405200860504051030130106001040510907064053012817001801
6100301302301100241310100301504030615062050501140161010030400501140110
6064011016301100241210307040060150404061030183080141006180901640010140
5004020410201670403180241110305004030140204001001020092125700106140520
0860240208002001504040201320060010501501410200105012008160305017005501
1630110024101063503011620060164055010240520040116707150400802409102004
0080150402160041006217007024020400860108012700205303011030701620040080
4001304020301061060640405303011002408104001405005410207040380506702008
0103064008024071088006015030120030081050165501073014061040204706403011
0024061066015012040400501130650850580306005013014706402050102615050102
3070318053050040200860220501040015030802405106064011020200860215080020
0150401503200600400301504001031301100240410216270020801530201504001101
5150102001410030624031020060015200140040203200600501550406402041070501
5108064020150100306001550402402105503011030613040011013020307001080501
4020401705011670200161630202401104003004001250504013167152150320060018
0140140603015040307501613026015108040203020306061454080020013014020303
0703107003012400106050101306102200308001013021400201080102200450701540
3070301100239910306130150620010030130121408030110023981045405005100306
0010300302010970110700301150220030110023971060640110140202200504080301
1002396103064006270020504010307021700703015011501030110861410015012395
1045301702400150401030704013060301620220050405101220150103410040527007
0400130630101012006011050215070403060200180202200130660200150113061008
0511040018023941020016704060114020704010505011801600400130301100239310
1000910501611501030709200801050180160050150501150220013011002392103006
0010612002070040010530703015010301306100530130610080239110100095501506
7020080103011257001239010200207001080110504001306104001101220660016400
5012570012389106080503020400705099016238810606401102004100103070400103
4050050104403051108050105060400500230801506400802015040080640100030150
4020150103508016080504003040010065078400130615501070200100400102020401
1030120150703200805308020105040103070402030413053061004008020400600110
3004040070012387105010701030707050904003061050405284020103070400101003
0165306470610306470570060011030816030124010301510030103080401030110805
1080700100180400621400301108051080700100150123861086101402040110301150
1086170012385102006001520040201030701505040410030623841060640110203066
0400104006141003011002383120010902150240050202050123821200105002020200
2070050623811200105002020826050102023801020040110805202003001623791020
0715244300123781060015062001523771030515040120010761030307031623761030

6100165100801023751050160305040541007030308162374102004011030200601062
3731020049010308200300122003011002372101000955015067020080103012570012
3711020022030115040011015040201020050302370102006001510166020010100050
4018001023200600400208150310301204104040800162369103061301154002001060
1541070506080600400130615700600301100236810706040051081051700180151100
3018023671060640110151003013011002366102006001220014015108010306104050
1000103070152300516151030701206400110190701053011002365106064011020501
0401022030400140623641042004008051657024001615250406101305040155070205
0490101308023631070604001402608050302010734003015108060014120151040015
7016030150123621020020700305130903014010016105042701801501130153011305
3030115011050501236110861014030704040060180204002004006001150162360106
9604100403014163012205012010307050703060018020220015011050123591060640
1101046501514001140308023581045200150301103070431616021002155040402010
4001103070301200150400605011050116500204015305130301100801200150101200
7001235710606405001048201400130562356105060830114060130153065130153011
3053030123551080600162006030140307010550180306100301220053400501623541
0200500301400840014061405501021406800200130110801406400161406030110801
4053023531064006013002007030110307050408200301235210307030140016140603
0168002001301100306005040401301075040023511030060010504030520020700400
1301235010100300400305012001003012010307015030750114023495923481720200
4053070406040061481504040550406084003055020010050404053021001502030514
0206234714301406100522007005040065010100400403015220030024003020501603
0251502006010140501802346146504082003014053030703106040018301903011630
4070616504015010700301501234514200805401101003014061051040014053020623
4414704054706405190814100302343142705040820030110400113018002001301640
0161406030110805040302050123421430670060040010501504082003030101000250
1014062341143065040820030301670450123401453012330120060040068002001301
1003005040065504050200980400104001614060301412040023391411101030040400
1034100302338143065040820030170060040011630110062337145705040820030145
0707006004001504013015701803003015062030401013023361420064050531030150
1040200340301100660506233514806504082003011030150101004004030120030085
0406102334147040530470501405014051030703037040013080233317140576400501
0200801203011030705010911030030115030602001150120040040301233214800405
1030705065062010640540041270250620080201060130202331177040530165062010
3055301530301506450401670060040016233014200801501040011063061001014055
0020050623291440217007030150405304405063061001014024002050601302023281
4570504082003014507070060040014012101000301703091232714306613014050104
0061303011006150400110122008020107003014001012008012326142004020010600
6121650020220045070200106004001830190301400110100123016104516440051501
0700301530301410710623251450380708001615012040200300655040506403070106

0805701603011401621700703011401506470610140161200170011040081440504082
0030153044401030805301308003011080501205040301002324110102006150015001
5060814055020010050404053021001502030514020623231104505060816140110040
2001060050101001020080301101165040150107003030162008020501070030130110
0400150102150400110140510307010304004001700162322110500315108050104030
1900301200700506161004001501070030110350504050023211108001004014040082
0220010307050120154200161301402050405016232011030901521030614055010700
3012403070150850304050023191104007050408200301103070430014051015701030
0302050405070750503040500231811050034050533068405502008008503040500501
0911030030164055020030085030202200680231711010300201040306302100504051
5010030600150150160501301200207001013061231611083200600180660304004014
0170011501605013013061001062315110406053040307040030554004127030200299
0165427018014055010214068002001301640016140603012200231411060502022005
0120140620307005010214061508030600140615010410150102140530202200200401
2130130750400501406231311010040050120504015041270504050020065010400301
5503301203040023121103007065200202151080405100720040530614013060130116
1000301510805067040601013023111104001405470650120550121010003012541270
5040820030147061040030150470400150323101101030050640309001013065503301
5063060041020103061801830190304070650401621400504013012309110100050610
0301080660804001653003011670240016513090301167018001803060040547025040
8030600802308110202614360162006005040820030140011014051030701030400400
1700115010240031615010455040406301010120060164010512002151020070050406
8650704015030408504040640415102007005040501010250301504040510307053030
1407050150107003012010306123071103070150120405150708020062306110250110
0104905012055016010200412140020301108020020700162305110800200405220045
0705012065120730165130903012530512004011050120623041102501306602005012
0647063011004190501205501301070140601214002030110802002070016230311025
0506200155160011504004082005040530150256623021103505150220010065040101
3012006930125013504051501041506230111025013066020050120619030600405012
0550110606402140020301108020020700162300110307010049050160304053015030
7036150400408200504040530150256622991102501503070313020626100701061001
8601530150256530301506450405064270101406405307400701140308022981101003
0010220017042506201130110607010220067041653030150645040506704400140640
2030740070162297110808102501205501102200203020080100040060160201030704
0130603011002296110304010502003516205040320013054005040040305010304010
5120021110104005301507040050121000120013011002295110306501910300303050
6204008050408200301504021700702060401050180160011050140021110229411090
7050408200303050120501910300301501501910300301427040013040021110229311
0660191200902045110507024001802040011040301404030703015040105013410010
5014002111022921101030020507010501000101306200902101306704060101301404

2704004030400211105102130301100700122911102501100104905012055014010512
0021214002030110802002070016229050670320010150103016151030705040680020
0130150020050508501501228950650406101304056530801000108040562004013011
0800100700152006083014061040520070050162288501024030130800108040610301
5064030190030150203015050640011040610200902164052704060122874010900704
0610453004050401620080205010700303030106804055010250402178130180304006
0018022864010100400604091200901700556427018040202200610220053030150162
2855062010805020530306100101405018012004011080010017001550182604306504
0700600400105015303050120140228450620040040105108010700301100830130610
0401020040502110601070203070022831108500702140610640064014061064004306
4061010307040130603016228211010030012001231050307031040306104004301621
2002622811108400404140512073016513090301210501906164005020140501011202
0012401050307036228011025010503070362140020301105014001530301427010501
3011002279110290454030110805012050404030205080102016301100510301400200
1300180227811010002204014005012014066601200401206215012014050620015400
6001110227711020080110103004001034100304010200401101630110053040840015
4061005240040018022761106050140610301403020150308014069050408200303040
0200700501050110306100801481200300230150405010200400140180150107010200
1006102200300161030208022751105031292002010307091001604005306005030170
7003220103011075622741102006020400840020220030703410010507840013011540
0840050401514150802273110605040110605040050206170053021004004010504001
0301104003011005306005030170700310301800160040301151318022721109010015
0120405240070024005018054003040880227111080010040120040150120615040540
8200660150303051015307035030650105103070652022003011002030700203011002
2701101000220140306200300210506060401040306401301000103050620101050140
0301100226911020714013010002030251302022003066020015011405013011002268
1101004004005020501205040504082003012700670110501400301100226711066012
0030021530305004040080150862001510301150306020018012138405506450404007
0060040018022661101002003001501204015305150404007002400501700140102004
0214002030110802002070016226511085007021040610640064010406106430640610
5103070401306062264110907012001235020104030651043016212002622631101004
0050120651207615043050401501508622621102904020830151501040016561002214
0020301700600101081011022611103007065200202168260501405103011086180212
0084030150405406100103070320060080226011066030110305001305006015030140
3020400130120400101301100510110303070312200301100225911010300204004030
6302100504020400100306004100650105103070652022003011002030700203011002
2581104007020022030150404001000302410061200100170104001200401400501206
4013010001030506201010501220030110022571104060302100504053030703504030
1010810540601401301000220200300250150111020020711022561108002002200530
7031626100701030150405002001061050500200102255110306205043050401030258

0120010017010400120040140050120610101200650401030164030140080600105016
2254110100300220020101704250201403061210300601200301307040030016105040
4090070301505610501220030110022531108060014505220010415070012252110200
2075427020220040040820020020700225190701052022501481522005412702202003
0010130618301901304070304070103080522001100306320010501205040804816530
1402053011405011030110861040203050040200300215011405013010022491444053
0500402150103630610220040014030204805040050130210020082301480503010220
0400140302030141440200823015012063030100224813068155070506100021013015
1080501043016002247130750606420080301400150340530400501204001830190301
1630407061650401501070030150122461675103060200610400110116700600400161
6200802014024050534056173203070022451507654011010030140610405304010100
5013080405301407014009288051011003064052200400110121620080205010700301
2010306122441705090506506081040550150626081040561105043015110830110804
0510706030800501070030122431301407015010200606001301240201025050305301
0022421307505010200801203030405053150440070115011103061105064504010412
7016700600400105011620080205010700301260880122411704060506701094006010
1301650120610200207005070191000108040550107014005012050107003012240180
0200705010200801203030700104061040505315080020070622391704034051507040
3802006903011080600805068007021080364010700104061040580070215020200400
6223811008102200470650120612045307031022004706131700180102200504054082
0017005301100223712100505301670194006011406562005900105011670196011408
0223612009100510307010002008011050640013011001200150530703170011040081
6600805013011005010804903015010210616017001104008410483012002710506400
1223514042004055010264020501023070315610021050650107018020010600102200
5108010502040140301100223414604055010261505010230703400501103070132006
0020303070350305808002001301108050646080403631406363110501501050200100
3011700110163011002233130610050651008010506412010130140610014055064504
0436501046030150102100030217001104008223212260702400140500223112002600
5104301402150981410062030700202230120040060155064504040530307035040304
0610010307070309400154366040300301703094010003021700110400822291226070
2400140500222812006010150200401504053030610050606105060830117353080183
0190304070650401504014016222712002050121700705270070108052200103014200
1040500527007050806608040309005040140130110022261506084051080700600400
4005011401627007040050114015010502001003011700110150301001406100154507
0436651040850107010802200100040015436604030030122001000401000302170011
0400822251226070240018022241226010300302050405150104001680020013011080
5301502040150122231200207005504040201030706304001603010050105020010030
1107005070205063016010622221200290510307070960400403014030106140020307
0010200401507054003070801406202200504054082001405750201320060040060106
1405430011100030210501202200412001801830190140562150120614053075020540

0840050120655010440301108050104010400105010401301000305012080200143301
1401622211408200220010016512075504012001060014052200140530421050115042
0018022201200802061501101000914051005200105011501030060080501050406405
1621501208040130100030114016221912901000550108060302070060011020304040
5120065012061521070150140042001802008230110805063040701050102016040304
0050120805501080603011401221812002905103070709400604004030140301061400
2201025016020501026105010210012008017005301100221712003151030704007006
0040013040010300630301100540110018080010050105014102001012001431510801
4368014056801080010501162180153051140709400601510200100305111040011700
1104008110030950180221612007007010504305040400100030241001050281904001
3080154702103005070204003016050130110022151200290107040701094006040050
3020501203030100140301301100221412002050110103004001034100306080502001
0100025102071608050400304001001301100530400100801401301000110100301700
1104008110030950180221312006070102004015040105010052004001306400106050
1402105070060016400130301100221212002901070407010940060400503020501301
0014030130110022111200401110103004001034100301530511002001000400301540
0100200600130110015100200600550108060301108012202001700110400811003095
0180221012002070055040203050048110400810300507010503016040013080105040
0702400150180301100220912004012030109070113061200219053030113005011050
4340060301100220812002600529840040301401030702002904008010206220712002
9010704070109400604005030205013011002206143002004004030701404050403070
4005011030702070240013051060640530301100220514030701504305040515040307
0615045070504054082005150104001150412705040142701436802204190901001405
2001500110307014400200180100025015020140203070030110022031237020082301
1080530102607006004001652002070015015019103003011301510501605011406400
6830140010605010501805200600903011030115010617001400101200130110022021
2905017005150200806050401501010030410030150141000150400151400803030110
0176131403080220112200602008230110805301026070060040018014054006811060
5014055010270403401100030214030802200121008108004016150102008230170403
4010003021104008820021130514008030106064030110070016219914706404052030
5403015030703616403090014030405150203051102001003012030400621981301064
0550645040164310503047064040530302217007030140530303703016260201402405
7006001610630540820030167002006801000301202200621971421170011644005105
0308010453011030140570440050161200100640550170011080656510080105015502
0140526301001030701503070315015141040040410014010605061550708002007018
0522004001101220020700504040403090015040621961675162007005011406104001
1011670060040016100830152168008410303091230121620080205010700301304131
0650102007005040650102003002401301501030602004030130602005014062195130
2100217007030140510400110615010306130155060405104001400501130140522001
6200801000400601061045301405137001165040610501601503017050401406219413

0431030020050020150160501301501206305004030205040601503030501200100301
1700510801508020090410030621931802009040155070164310403061567010016404
0550116509008020015030150640200340301101200621921100264040550102150307
0364053016210340060104030804056704804040040707501070030110101202003001
6415030610010406106219114800705010308004030170060040040400502014064056
0805011003060013068002001301640016140603011003060040540045300114021901
3042501040301900303060102647040203040561050645040110306154001020070065
5067006004004008015220020040150701006080805033015040501206010302113011
6436080404130164360152010130403030150301007001621891481202200403090010
1306120080018163040701401643661519081130152001022013065200101000902004
1100010130214002030117005301401504003010611050630610010651080140405010
1008030040501040200340301102004008021400203017080066218814706404020303
0703505030140400407073025200403061402015010030600140201506404001034100
3018090202200103070168002007062187148140550402004110005040308040515020
0300865720012800200130110200400630123301200106050406106218613040120010
6006121650020220045070200106004001830190301400110100123016110504301511
0830155010750650230163014030121851200440010040103003020103070530301501
2068110200301562007004001401030058290180800200130140012505293040060018
0140603015040515030750114020110504301511083013050040405302200800162184
1210070200106006121650020010600651008301530305101306301203015052183120
0904005040501201406530301506450405506200905010510805305020400403062182
1481102200220200300140301050400103011030610010615300620070103070510616
0010561510801008050114010307051080202301001082901805200405002910816218
1123095307010940060400503080120061000156140829010612180110030714107090
8290400801406030150401501260815103070306020010620400503504012001060050
1040061050110220010607080217914306613014020504030100115015020040050153
0301213015610013053030113001404003010020400503400306004700113063062178
1481102200220200300113061022005303016515020302177130320020166040500580
9505040405002120040050402010030600107003012400200802015200618106565281
9053030110021761230100504015504012001060050431301022001030140044200501
0306540101100570160301509001140621751421570054102400501509001140301100
5608050304030190065654005033060046217412008050770161301402050402005002
0115015200618106565281903030110080200405005305012062173120055014053013
0600150200380611010300550404030900400403061530201400400150104005033011
4003020217217020071405501021503070363060050214051508080862150701504050
1040050314054813015030703501030320013050040405302200800162171110080400
2004040050608621650030140705020101200130110307015108050101020400401002
0024006016604506050401200800600121105005066023010625700504020061601504
0151080506308102001550130140540084005040102003400504704001503405302010
3061217013040705060815040200317010800501301501400183019030116304070616

5040150107003015012169110080400200404001606212003003016010256363011063
0010305403012014021650011000101650010100040060105016151004120060405291
8112001505010403019003030150440070115012008020103080130050406504061030
8013005040804020220050401008301301006216819200805200401501206516570240
0161502002070050705230100150308010001504070940013061105043015110830155
0107410200400405507020150107047040013065536506410200101030070301651410
0030124052200506704105010700301704020608050200290162167148400304055064
5040434005030654001403020303042401302022002140020504020103011086114030
4001621661481540208108020200300101306103065040550645040405301407040601
6522009021800200130164001614060301210100053016500230140240307015303013
0100216517060400164147165010506051014050013050040580520108016500230621
6414300200170055040220010013010220050104510501106070301006400106050170
0120220020020700165303011300105011301216314100020307003070180105011030
0305030610040013062162148140550404051080400804006040013061200519001200
4013014051080200140400130803010301001301405403070101404054004702403070
1102200301004052302040550401500657026050630610010621010003012140320040
5230204056041605604060050630610010640523020405702120055001305005063061
0010602161143604040510307050700600400503040520040110307016230100050107
0030130110040524030701405220015011050240510307016502116301100804052004
0140550102506707150400107001151080210200130570160301501610085303014706
5011640307010304051030701502005007012030700206216014211700116830804005
0306405400304010804020641070106140206403200104020103070162005900105014
0550121591481402025020070300101306809304001030655040100720024020400110
3080140170910207115101200900501030805501044030110301570054020100200624
0204811650070218040400500230140240307014020220016301100406108007026114
0610150500230163011004040050023040204055040301011003011004055010216301
6040010304051505007022030700206215812702004055040400103040306120012008
0405504040010306304051030704007030916304109063012510701200700960124052
3020630140300301400170065010401030140017004052301005064610020040561900
1100101405260840062157143002004011030653043400503080303080010504064400
5403016580530301451050405303014001101504020307005504056380108040563014
0300301400170040580020010040040022001000170016501040103014001700405805
2050702006174004007030917001604030030110200400621561100802004040202004
0150404020301010510654004082005040402022004020302003005010805203011030
1166180530301130150642701014064056404003074007017001621551270020530301
1030701020040080150404040309001504080501025019306024051030705064001101
3063055301550645040167006004001150406100130652154199300170011503010041
0030153015506450406704505030800200130164001614060301220015022001630110
0801640110070014052630100103070150922006215310454051504764052200216504
0151040080405501100830124051250201030709010050508502152144011650023014

0301090815010278301101403070503040515050070240500215114470501050608052
0301108040550170011030701502200800802150143002001502004015040150301010
5654082002050430504015040011502200163011008080520301103015104008030110
6170012149123701504001101504016501204010100200301680520301218901501400
2608401214817200314107090151030701405063070133015016214713040705060814
0510140563025030153055010780020013011030701401503070315012146180601500
1048301170052165040610403050140520015001103070206080507060012203070308
0214512700201301506306100105014055168015040320060040054030204002002204
0510121301306403070504052405301402144143065303017006004001163011005010
7003012007005010621431421510805010500201402142150608120031405305014001
8301903015063040701050107003015010504064030120030021065504305040141043
0016012200700501030140101002141136705303070310403062140020301542701030
7030750110700301530304408301214012001022040052002206307003015040103065
3050201040306203040301108020102003005305020104030614306700600400104030
1070030153030440830130100621391301026020307005010210004002161524008016
0040013062040013090220053400130610506083011406013015308016704400140110
1504082003011670416153030116704130100213817063006004054107106506202105
0110070013030506200600106213713067080403015022004706501205011502200501
8260506306100106213614360501100700130305062006001040510307010304001017
0015302100504040307030116400615010700301501165040640013061521650401301
0021351301075040051503075065002040103070601503011030705120010040030515
0100200801501200100621341200107005061200300240130120150306020011406307
5010083012651503075011008301262133180108030402021501035200600130147061
3170018080020013011650206013010101200601105023054702504015030100621321
7010403570405040651501002001000180800200130150404057804006010501412001
8021311200625004050670200801102050900130105016200101902800200130164001
6140603012200130113065307501140400403070410030301100213012006860401060
6401102050900130105015067020080530301100804051370013010101200601105023
0160180400150102400110170604001060640150104001410030621291200640010050
1605013015012061001805013015103006004040020604013017001102200540820050
1017600506203040400404005016303010021281200680201301506403019003011021
8051080210200130130314053030703640530500401003060010501103070200411008
0020013016400161406030110030600107003015303015011620010403061212714104
3110030600506500670240301501114001802006140190070150201700111630110061
5040011012162008020405501240561732030700212612001070604051504740026001
4030204050534051614014090614020261104070405563610307054011010030140610
4052003008506550645040110306140530434005030803030800105040644005403016
5805303014510504062125120010902120010260054127025012055014020501026105
0102141053005303012108020301002124130660200120304014060301504040510307
0150307503050105010409405063004010520101304080020013011080501206303010

0212313066020012003002530301500702116301100501130110453014051370011650
4061050160150301705040140621221306602001200300213014005020305102200501
8260301005620010050121400201501030703075040010400820101002003050406505
0306140603011080101002004006180200600750404001022030506201061212113010
2100520101304030165303012104001400611806020150103070400407071402014060
3019100604006121201200103804001530130600200155013012003804008025070630
1060050504055032030506204006121191706250108002001301504015030200380400
1040082030504065050301630110062118120068020130160150301200500201102180
3050040302050405012001003011700510806015030301508020090410030621171200
1059008007023040580070250120630653050040250640011013050120010030117005
3050040216400110501103070503301660501301400704040031501030301002116120
0102202010307050120530800805012022005040540820013012115130102061501030
7052203043400130405002010301150108611070030125025700503015010300501030
6211413010301001301403070301504040400104006114061022002004015040862003
0130100862003015070205063016010621131301026010451655040240307014020220
0805400302013001030703040701030203010021121606101050120200300301560401
7001652501321015068002007015016050130110307015040705011700162111120016
0600130150104030190030141071013065010504064030305408200618030065140501
2001003015040307505062110110065750120309123015013091230110057610083011
3301006210912001090501501930602050430504010303070316100490320060040105
0320060016100490306004401050306004122003010062108146408401401100402022
0020500702105011060702030530801505243540080301030301504062107146530040
5012020038030150120010050120038030150120010063010303011006010001030160
4030030120630430513090301401001210613010684001504005060304340013061503
0602005040203021001503060200141005040550602105130103010013012080130600
5065002301013017001615504020632006001030800200130150402050678040060103
0164120501621041200109050150103070203043400130405004001404030180708006
5110830180708002015010070013017001210313010301001101030040510301502020
0400400420410030201504002500501130630621021301030600206700600400130170
0165200101000150103070102004008040030201030115010861107003015070205065
0400801030164120501621011301026030800161040701520060013011080658010407
0157005108050120504062100130104008050640309001013064052140020506200100
1020103061805501040102521400201040061504080405401401260150130206704504
0610209913010800804001501003060050404020010500201030704051503080080640
0121093015040405150100720062008230162002301108040515030408640411050215
0402002041003062098170102400521501030704020301643400130405004040020080
2014024020100200100010808102003015040180901100402010307030602001080102
0060015200140051080402041070105014040050401401209713010206402030164340
0130405001290184020103070306020010612002301250134020280606001050140400
5040180120961200680205016050130150120640400800200701200230110301402013

5014030805110113015067044005040308002008230110802008003014020604017001
6209514010820040202501205501530800805040161000400240030200823011080203
0803014020301037101070030140202200209413010206202200210802065019306040
5103070203060103010412705012093120062001000130150191030030140547010140
6405470641306130163016401301108040520200130062030320062030106002405103
0702303162040069024055040400709400601504077804006016209212006806401734
0206173405053501804055040207024005040802570013011002091130103010013015
4001020070050205040081305401101003014061010301504002006001501030103070
4004020020107003011700520400101200130110020901501094001003060050403043
6011301100601030211301164360804041301643601520101304030301503010070016
2089120010220150110100091301405410710140804058066005065012001003011080
5506703040301520033003016601503030550400801301201501020011040030111062
0030115030703140660150301291812022005012030150301007001620881801066004
0013014001101301230602005014061521640309008052009024051001503014640500
1501040016506306130115227002050113014001101301230602005050115070504014
0620871200696040214002030110802030700501201410430012170070156270070406
1540110100301406103021001562030540508501301510200100504050162086120067
0084050120202200217007050152170070506801600106540040820050632001062200
1001405101530106063014052200103015061000400210506704105010700301201030
6120851301068400130640205070200800301803002050620304010130805506450404
0400407075010700301167041301002084120062746614150104001680070210307050
1010250301800702150308008041003068002001301640016140603011080504024030
7012022006208313010206405103070201503060200114064020270070101300105016
1402040820010130010501402024030701402022002082150102401647050160501303
0501205019103003015014055010210007501050191030030150150608110510400301
1630610010104127030301006208113010301001301404005002305015065090040065
4408250621034006040080402067041040610208012102001005062010501106070301
0065104004050630610010640560620020103015068001000501060805200403061402
0200980107003013010015041070105040506306100106080402020064901080200220
1014040110030600612079141048615200138165062030100207814104311003060050
6500670240301501114001802006140190070150201700111630110062077130102605
0670109400601013080163080080301500401301203016220080080102020090050120
7612006860401303200130150670240040050150640301900301306100107001106350
4057001620103015067040400601070015250670404006010140240307015085020751
2006805040520012411030701630654865012001003011080202200400200207001700
1612001006405501700110806565100801050155020140526301001030701503070362
0741200640060401213852006001301250650406101305010700301501026205010215
0307035012001003014001200100170016207312006801000140103085012055014058
1026040050651008040013050203065440828260101301103005040501650510805040
6800200130167026030140016140603015308260400207212001022016307050630610

0101407010301704006550182602071130102603002007030110700103011610004002
1301700150630610010140205530157040501206303010020701200680501301405410
7101406162002070010305012001003011700510801508020090410030620691401090
0701306100506306100400304020501150015015201013040301504070060040016501
0502301240202200402018090180120681200684401406304040505310801010030400
8020060011530153030170403070340013065402083015040202200201030110861140
4020307002067156200204020220045070510106050120203070030202066130693012
3301100030240050306800200130110020060040050302050118200408002001301108
0300404001306206513061060405507050120201030613020416803016200902301670
4060301501403070522030601030140801004001306206413010614005060816200106
0020307004010100400604030160196010030121650764040030201700130102030116
8061620631306106040501204570301501457030121680616543001100030210104008
5060811051040030121301401040010301301401622001004001306206212006905040
5012055013040010030110808020060101308015019306051030630150307034100801
4063090040304001005040610083012130153030140200810400301608050301163040
0100400130620611301026016065300818050120550115073011622001004001306206
0120010220110960050120405304001005014020110164051007200505085010013040
1510300600402041306116304001004001306205912001090212001026005412702501
2055012004100106130010504030100720030196021020220050120581200660840140
6304047010040080960230130201596024001306201005070103015306301000402041
0307034001306205712006601040130610040530301008015632004002022005040540
8200110004002140550705080020070400140162056120068020522003050191030030
1501206501091103003015016600116501205010200700240301501205512001070024
0020070024001306301026030150216501020604030165100810220010030117004001
6205412006801000501021613030501205501805010830190165062040050140206068
0501080140240307014020220020531200101000901050110220014020140540820012
2003010065408200301504030700301815031405308008060016205214010200201306
1001405303010061405200550400130680114053030100400130801405130206114054
8120022030120450705010003021014011501608150104301630126511011301164270
4001301202200108001006205113067006004014064070040470100400802006001153
0153030170403070340013020501301080080400200220164001320042002201520060
0130306800702103070405800702150308008080102020090050120491200690084020
2200197050120140620220019705040130656130654405013020204812006203004040
5107060501202010306180504064065615107060153010706065200600130141200150
4062047120068440140640700401513090104050535301503070340500410200505040
3013005014015108053015030370530317030141020010501205040204612001090212
0010260054127026507002202200210802068650470250405062001003015040150203
0514020620451200104044001515020040480306100301151030701008801510801610
0608080151080200400401502004015102001002030550501150420011700162044130
6602005007025010400850102700704015020140610200600120076520071620074001

3061510307030800101405018030800504065608050301044005101405018010440051
5040204312106082010307040610301206080502108020202140020120010012042120
0630050405110030101214002054011010030140610530320060050651005070108052
0010195150407301501605013020620411301090804005150309080103003020621608
3016501050603014470164030704003064020220050401308008016100040024003052
0090240200155030151011503070363010303015101150684080501040010120015503
0163010303011503070362040130637050160501301501206200106003012517042003
0030125016050130170410620391401030112170070405301504400701520060013012
5065040610130501070030150162038120010220120031405305014001830190301506
3040701050107003015010504064030120030021064061001105104003030104510501
2001003011700550120371200109085010200801203030405053150307036150470404
0047050164020408200105014020220010607020361200102400400163070140162002
4001030652004030615630600414020436040301163060041030640205636166601030
5200600130147061317001801530804040016015016402060805013040400506081404
0050608150120351200108050200500201402015030703650105026301640124020150
4440164051030705200203014020301504420040500203413067080401470650120620
0110430130130600166013804104300601210306115030141270402010307015050070
2140513061470613170018020331200102201630705030704003065010400200408002
0013011080504608040030214002030110803010101200601105021030115010800100
6203212006203001427050120550186507040150304085040510200700203113010206
1050645040167006004004001301301010120060110502301045515030703621400203
0110606401501040016203020010902301701040603016555011504001101504051020
0503053068150202001210700301109010013014360403011030140120083014360403
0150401301030542702102006011070030150182602029506506084040550107003016
1610040015010700301704053030150120285062002040101404010010800108020400
1306405103070507840013065303012130120200290140620029016202750102002190
3030200106006530404002002905010306524040021006701403050040216210017080
4040021001705016202650104400540301240307016565301026050703080050402403
0701652022005015060811051040030124053041365506083015900706403016540208
3012202200301026010301704120255068030400600105108016501201401080540110
1003014061040550102402081030202200501651080168030400600150107003011030
7040026030130703140501202450102020030040301504050120140618010508401051
2002153040702400150120103011501086140500202350108301903015040305200600
1301108055016550608110504301108051501040016202240101004006040912009010
3015145651240031540705013012002013002021501020200300403015040201040306
1801050853030140050110054015012040105120021501202040108200200680100030
1547025040202200501168309016203070047025040162140040500530153266030116
3040705010700303020220050140500201950640309001040560805011650120502030
6405150403090014063021005040201030701509090100140150402008164155010700
3011030706201840103012170070405306301030100701400402017506830801013027

0020301530301103070506200400801050107003015012700203015303011030701620
0400804003040120081700563013081700527002030140204005060301809040014030
1630610040013062016401082002006801000530301501804170130610001220010100
0200980015040805253030120010100030305114062001075060030140830640430165
4001040301402010307040200814050120155064270400511014040050205015303014
0040705016200203001612109130130853030140201007200140401630208020145064
0301900405621700703014057006001805627002080405504030660200405134100306
2013506705090101650120140280660030167063301601230530301151001700180530
3014070501240020080208050120403020504014100020015100720015104001105501
0409405504014005012051020010013050040530301220080062012506403090010130
4056400304070140608050302010806400615608050507030413400608050302010400
1400406102011401082002006801000301547025040202200501162002906164513405
0016504008014047025040162003155010700303020220050140500201050620060160
0301405520060013011080405501402003130200950630801100030140520103061640
5200190216405704060640526301001030705303017029501070030120103061200850
1020080120301406100301104510130530301501652006001301103070110504301511
0830116284006014055012203070020074010900702170070405306530301504028001
0004051030708012004902008020301282003005040502030650140101301250104094
0523010065200201504013015501401014702504053030122008020504020065062700
1203014052010306165303014001101250650406101305010700301270020301102004
0080101405012005401030121700704053065303014051045101305303014001101250
6504061013050107003015012004501024010220070501603017005610403701510301
5064830101070030150160302003002540307010140501506306100104055014030705
0410030620035010403060403030102003002610456165040150107003014002500103
0100830122022005040604100301862005307503010020025064030701013040520050
0201302200400804040050114050116301100307501014024030701530301651015012
0405101150304217001620015062020030040524055010700301655063064001050107
0030110307055019306014050120005063020640010405220010307061650401501070
0301103070501930605306010305501199940103200301501910300301504053030127
0070400601805012001003014001200100170018019985063040701016501201405060
8124052003140550107350306521095110855010108503080504064065610500501612
0020700504018301903040705040199750630407010165012014050608124052003116
2002905010700301501073503061001253030145070140648050104020450701401996
5064030704004040050205014020302001060065530301450701405011301030100150
4050053030145702162004003004001306199540109007021700704020306530301301
0260507040400449014026603011610067004006154006250047024041003074008040
2050102130600440205014010116700600400400130619945063040704004040050201
4070503016040030613001050401045106130010504030800105020306548165401402
0307033053030113006306199350680304006004005108040400502014054011010030
1406104020305050102103065253030140206302101405015401504010220011055401

5062040050140205010213060044020501401015067006004004001500120501561004
7025040153071000400800100501040030120165062040013061992506307080400140
4030701053030150113010802040201030705303014040030703410061541020640047
0250140101301168001005040013064040045170170015303014570216806161991506
2002070040040203070304020900701010100023016200205040301613008803015070
1055010610220010030110700140010165016081301630470301220040110530301501
1990501040306040303010200300265408200610456103003020301501102400214002
0301201030701503075061306510307014105300202150103640560805015040405103
0701410530054013020108050070250406106198950646080101650120140221700703
0110068012170070405150475303013010260507016490616200802050107003011988
5062004008010165012014040550703080064030603017001040610530301103011610
0301619875062700120304020501306100301405103011610030180205064504067045
0150205010700301150612020030013065150220016301100405120200300162020030
0150107003011012001700161986506200900501040513064055070808060010130802
1700703011640309005010700301101200170016198550624007040060104051306162
0080205010700303050700610130405001410530054013020504050070250406106198
4506200801203014052005002016155062002050104050053030140040705050680200
7010198350102403011000130230120103070140501801630640050180198250640306
0400402030703040201030705400407050404001020307002040206012402010100400
3010212006062008301402010100400301021200604020303070361501502013012330
1504040203030703613013090010030600140404020303070353030161981501081030
1170140040615001500115200170300161520012616158016901504064020400401100
1406106402050709004061015506806004006040014006102401705013014630350404
0203030703615020604020400610250404020303070353030161980506504061040610
0304001101302030700108050153030113015052060401014014060301631080400120
0600604020010930110301162001040301197950620020300400402030703054108013
0162001902130167040603014020303070361101030050640307040013040204001540
1506925040402032006001530301619782001041001030030201030705303015012200
1001656120090230184030201301570160301200401140680020013016400161406030
1210100053030619774010100400604091200901030706563047030122004011050406
6510640060103052001060024001101305536101405010151306401030703020656103
0010307020041001013040202114054815010303200130500405303012200800619765
0640307010130405200500201302530304408301506640060103051200536120060550
4010080501065801506081100720015040515010072005040610300103070200410010
1301206304040142701305004053030122008001975506403070400130404005016403
0701053030150130150040130153030162200800400130801974506701094006010130
6110103008002001301640016140603015040110072004053020304010130140530301
5064504050642701061973506200802010405530301400407050265065040610309123
0128014001210930150404020100720065480865010502402031671504040203030703
6131671402060805015040402030307035303016197250648310530301540705028011

660510804058040550140101400203040140103070405100720010412002163080080 5
010700301140801007200301108080070210307040208007023080080530301619712 0
010410040103070530301501110103004030704702403070101301020302004070301 3
070020011030142001050404020504064020180640010405004020100306005303016 1
970506200208040010406100305101302030700108050160150303018030051080550 1
630180304006004021200300155069250403200600101303070020220030260102030 6
018040012004050030130205040103020405001969506300200701014040620033003 0
150406140061023012330150401070060040015013085030110301202200108616196 8
506301007010406100305101302030700108050115060811007200612002060550405 0
670060040040021507013016301060050301400120040500504061967501022001300 3
030110001016019030160015023040465002008050102504055069210801404040201 0
100605052002703040170501301108040203050161966506704060104061003051013 0
203070010805011540064047028002001301521108180140140603015040307501530 3
016196550650406104061003054082006104565108016803040060011070030140530 5
010240030130121400203012010307015030750114061964401030121700704053064 0
610301405103066580405301407015019103003014053050107802030210050404040 1
103011503060200141003053030140019635069200804040550162001503014053050 1
402003130105060830140530501270020301405400506030180904006506520020101 4
053030506307031061962506404100400601013065701605062006001400601013040 5
303113170018010406040303110301405200600610502030652145040151030702020 0
400140405403090026015030153030170060016106306196140102083017107703016 5
610307013013050040301530306660301305004052006001301250650406101305010 7
003030196050640208101401601301212004003011080560410401506510307052060 4
010152200300214066050404061003015040102001640010195940109002065614660 4
055363090010500501301240548120030021700161958506540030010140405306550 1
826040015023015303050630703106195750620040080400404005020140705030160 4
003053030140040515010072001404012109050506403070101301403050630703106 1
956506403070400806608016704004040080405150104001140216200802010301955 5
062020030010405220024020504010010200801700140205070200800301803002017 0
014050019545062001340051030180200800301402060401700140500530301504080 5
407050504040202140619535061004004005303012001010008011290165010430153 0
680020013016400161406030110801405306195250625200180101101804816530165 1
405015010505001501053011670060040040013053030130110061951506200406101 4
050630708010640510068050404052200506801600101950506200220400601013040 5
652010130403016521450408002001301108014064001614060301108014043601053 0
306194950620060014405653030143603010140300301650104010301507053013090 0
110804001010300504053030110030600140103011620010403061194840108200806 2
003040202200501808066004001030704057006001106119475010737040240514080 4
052301004001080405700600110611946506200703001013050010850402170070301 4
051040011061800200130140525303018060600105014001101060301162002040501 0

7003015040180119455062002080400104053070306405103013075014060150303050
1024003020020700301201030115030750162002730164001501023012194450640307
0400130404005020501200207003013051163016018040510301108650130132001301
2030210050401503060200114061943506302064001040522001030706162002905010
7003011942506403070101650120630200220152006001301200313065506081105043
0110804055010625030164030900140470250405303011080162003155010700301619
4150620108050205303061005050151504200117001103003015030610014050119405
0102700120165012040550116200802050107003014030701030651080506803040060
0101070030140530501021030193950640307010130601503012005002015020306110
0851030701470610302400640105040530301500702101304055014010145353030121
6406010016193850102009015050404053014063080010504010451013053030150180
4051451030709020084005011937501027002040301521001705012080102016200900
5018080020013011080162001060805301308003015103070400100850404055040653
0301104550404055040804006100019301162504003165303011642701501130660200
5401302010801505007024100306193650102403011000130230113013060200301103
0703058040530210050405010700301307080203070020103005040550645040150402
0081306150612113065085010300504055064504015042701405303011300630162020
0300150107003013011006193550610754006010521650120140405210018616304070
1404001101060405219018019345064030900104056080501165012050203065303014
0540309001406405302100504050107003013070802030700202022002004011040011
0615201013040301405104001400501130150620090050103051933506304070400404
0050201402550330116306004140201030704013060506306100105010210952010130
4030140518064004005010700301193250101004004030153030110731020307002050
6130010140151080405302001550130115400840050401020034001550630600410504
7040015031931501010040040301200144070503062001060052006001301200143065
5060811050430157005108016506081501070030301200106001630110040202200307
5011700140161004001501070030303010100619305010200220400403011065004060
1023080151080501043016004050532162116306004180192950630407040040400502
0140240103070530301501103026605040304070501502014040306030116100301804
0560805011040301900520101304030140518064004005010700301192850102008012
0301103070660301640610301107600301501403070301164006150107003013011004
0510805061001300400404005020501070030110101202003005010130610010640510
7600105401101003014061040500192750620070300101305001085040217007030140
5140016405100680504080100603014051030702006008047016100301504040550110
5025303011040018040530210050405010700301200204041001926506200710140160
1301403070200101000240550630800105010700301200176150406540110100301406
1053040120405200176116304081030192550103061301200109160116301100402022
0030750117001404053030101001700161924501020022040060403012810130550150
6503070101406506200601014040307010530301501402003130192350620022040060
4040565200205040405263010052006001301250650406101305010700301804816530

1402053011922506500702105011015062007030010140611081200101000400164011
9215061003060010405611010300506100306001013053030150645040506704105010
7003016192050650307040014065062006040014040307010530301619194010820020
0680100030530301501156908400130530301540705016470400501619185062002070
0400130801100306001013050402010030600105040801191750644005104054035030
1264001401307061916506440054004020307030130260612001550164020241040400
5011060162008002001301108010100301619155062002030040040203070306530800
8050401610004002400306510802006001640203080301102004006155066023040051
0308550401632006004006040061102009140830550401630201400302008230120060
0601070030165619145062002070010406100305101302030700108050155016301180
3040060040800200130110804020301200700140619135063010070104061003040011
0130203070010805015200401240012006006040406350301620040100301660403003
0162001550301630103030140203020060060619125062002080400104061003051013
0203070010805014001200405003013020504062150701301630106005030165064001
0730167020073015240203040025010191150640106040051080200330055040621200
3005504040203014014060301504030750110700301651910501070403140201453013
0063062001013155040630102603014901005303011030706190950640307040013014
0100306001065501076156220200400302001040830163011000230163010600301619
0840108200806200304020220050160805013011003002130151010003012165062040
0403043021030140203011005001304084006190750682006040050108650681020040
0501083014031510804020306190650630201400155040670801504068041510804020
3015100306004017050130161905501024040109060065170018058095050405016050
1301100306001904506202003001014070103017040010083012800200130164001614
0603011003060019035061004001801501130153011305501162007005015015412705
0401300105040103070520040150408620030125201013040301307501019025062020
0300101407010301704006550182605630370400604001308053030120040110400119
0150101001030120104001101040082022004270161900501043160301504050206202
2004408282608018995063061001014022020049010010800102050140307050410030
6189850640307010806608020060011530153030170405063070310501070030118975
0101075400604030120150108020150118965010202003004030150708002007016200
4064001402704901801895506304070101650120140701894501070403140550301605
0302022006801893501080070501200100301163070350107003011892501040604001
0040301103070150307501140201891501024030120010700503011501105013010061
8905010504064030302081503800806001640510307050784001306405504013167152
1507040040140103012010501070504404001301889401090070301501200100301610
5015004030150401702602015010400141003061888401030703011001306003016520
2200501188730104033018809030188090180510400130570160301501610083012130
1140550102140680020013016400161406030115010030600140618865062602010165
0120140405507010501000114080188550108290405810903014054007006001801884
5010504011400610230123301504050640085010165012061883501080020070401550

7016501208015040011014051501040016188250103060200403012003830121890127
0020410030618815010240401401230140550164055040150401004005018018805010
4030190030520101301218901501205016187950105040640303051013020307001080
5011878401010040301026023015501618775010406064004030304001101302030700
1080501187630103605040520013840510307015020094016153080160151030170150
3070380187550101002003004058109030140540070060018018745065407010405400
2002060108030405501202004070301873501030701804040050205011040015021306
5301100187250104030170301507020550504030611630110018715067600400130653
0301161004001618705068800804001308010801080013065501301100186950620030
0240060105501044030130511361868501082904070691004013065200214501200401
3012030700510301150108001006186750620040640050010816800401648140205040
4008040030101306405200124170240016301030301504070910022030512200601801
8665061004190301501610083012201501040016186550620040040105108016501201
4022015010330216301100186450620020504040610040205013011001863506306020
0403019630301131403080186250102002110003015040301550115020041005400120
0401130118615010704031405635040301501963030113011860501040200340406100
1030115030602001150116301100185950630602004030115101402029600140803011
0018585063018003011301522005408200504095010010504063011001857501095011
0030150405020400130801008301220150200300216301100185650620030024004028
0200220301105060405011030701050640400200300213011001855401030704013010
0022020030025015013036400130163011001854506303640205040150130110014013
0601630110080510307016306004700118534010512002180108005070405102506185
2401030130121700703016510217007050161851401082003012006801000301150110
5011041270102501850501032006004021550404051406290501510804056040101301
8495010302110040040200200601030701501660013010005040405200649010801401
5070750618485010504014013060215630600411847506107064001503108050101004
0040301501184640660100407340550402123020302162157026015301845501070403
1405470640304050535016184450106110003015040207024001504013015019306040
5103070203060103010412705011843401010040060401030709120090170053011001
8425010903060040301405504020412701301184150107040314055010610001306800
2001301108040530505010713010504001061000114022200301100184040630704030
1400100630140610103011839501020090050403015040205018030110018385065007
0210406101030110502009005018022003011001837501043014061010301550703030
1201030705016183640103200205018015504032006001803011001835506506040140
8504030190309050405400100306002003002304360130502014030301100183450104
3160301704050620400130120301406010302111030110018335010431603017040506
2010501102160103021130118325067040314053020520101304030143608018315010
4316053016701008010862005040510804006008050654001066017001801830506506
0401408504030190309050401200300210030160010501520101304030302022003011
0070016182940640603012001505040302100504051501003060050133016182850650

604014085040301903090504050160501301150100306004100306182740103070401020855014052003008106520220050161826501020060014006040301150403070410030618255065002001630150850640020504050104041004006040301150403070410030618255065002001630150850640010405061010850508503015016182450105071600253040400501140656402015010100601801401406030150401503075018081001630811020030115030602001618234063070402004100213015307505014065501017600150450701301103005040501618225010100712002530404006030504063001017040151080402030150307036182150676401030030205040151080150400250161060162001510801501010030161515044408002001301618205010240215300570240018070406030110020040060150401301181940103200501910300302050401515090080861818501020090015030301515010761362002140603011080150307034100306181750620068604040610050850302150200190214002002060140501163011003018165063200701051080163090080140603015040121240510307015084008063061815501030613015506040030600410065250650406101301814501040200340301263010010805203060502030700201813506107540060105216501201301306602005040405104001101406181250103061301701030010802030210050401503060200141003061811506900801830530150162002070030115030750508501501181050102009005040170011650120140610083012130152010130403013075050140180950101004190301504040050205015201013040301215010400140014063018085065034030205012002070030151030703075010700301151011101630110061807506200600140060101406153031540150401002604001401806406307040214002015306130151020010050401502030511406180550640307010806608030401301405530106167040040400106163020110405200700180450104030604016501206301620080205010700301461014022001803501024050120010062140020301400110120304002003011802212301301630612002070010306481653016514050116403070103065216200700501030660150303010001302170051801216083017010200605303015014002602014060805030205303011073103018002001503014055636103001000400650120091005040405301021200601799418090130110805010502001004070010406105010402003403011020040061798200151003014816301530301672002640016140603016800200130120010100080020013013042400406101797401100400501670071077053030150153060200547068030600405303015026084001308017963012330155040306740030405200405012050164052002040530301450706405200204016200204041006179530150040130140203015022008006405215030708080102040203050102400640560805011640309005010700301306100108021700703014051040011040610601503012007005016179316540540041080164058020094051030144002001013040560620010705010040501070954017922001902130151080906003004004061030405200600610140501506403019003013040701014070130801100053030150260840013061791216083014061001040610501050406403030610430163061030200801000115022001790170430210040061502200104001020070050406513090301401500115022001790170430210040061502200104001020070050406513090301401

1010040105030703122001789170430170104060301022005011001860163010701406
0120022030110307010302561070030153030440830117881406030110801306800200
1301108010300504053030110307010806001014065030705014061080600501404030
7040020501150220017875062002030010405307030400120040500301504040510072
0016405103011065400601503015040541080130703180513090301164010100103015
0220040200840301204001024507070200710700200101000416210400102007005040
4005020601105011502200178640108200200680100020501801050190705040610504
0550180105070240050408060150301504012001050020503030800150550122001785
4015090130142705050110502610502503161504014302301170053070312200401051
2002130110070016178420018020406309003050160501301501156908400130530301
4004070501647040050165640400301601403020504040201400161783200155030163
0103030140203020060060650102101420040100301660403003014020302006006061
7822001550130140203020060060652004012200823011080102003400302030803014
0203020060060640203011007200400120040500301504052320060018014014060301
5040307501680020013016400161406030110030600107003015303011781301306001
3065108070102130406101040011050130210050405105013070612006040515010072
0014040161008050106513090301164010100101650401501070030110412703030100
1780200150301103014020200109040501801670400404003010053010260507016308
0010301414501530301630703617792001200100301601026155063090104050531778
2001623012001440540610016308161200802053030140040705016304250107003011
0301200400403011777130010140530301307080106501040301900301530301308001
0652006001301108061105043015110830110804002150030130610030121650401501
0700301530301400250010177620012001005040153014080020013011006805040400
5004003155001026005200330020550010260054030203050040617755062002070040
0104053070306015030303015004013015303012200800106152200507001250108302
0153020110400640017741406030110801570200806400215001530901521095200330
0205210954030201305004053030122008008010202004004030117734013060151080
4054001084004052200507001215108050104301600200155013011540084005040102
0034004001503400183019030116304070616504015010700301306004161772401030
1217007040530501040301900301501302100504050640400202003001140240020080
2010501106002009040240400501140640206002009040215011404020608050116406
3061050640630400130801030404002340060180402040067045011301501930605040
4020103070103050120140640204008030600180402040047066100830147064020470
6530301501200401301108001001403050191030030130110061771901084050401503
0140150200290401150707311501030701660402015010453053030115014563016301
1001030050405303012170070504015070506501000404040050130580170240040203
0150201501162002204006015010700303018070800301301100801701040353030167
2002617707107702530301103070203070014061769410431003060024001106402025
7001013001050110083012800200130164001614060301100306005303015012004004
0301176841070230130130800301652030700103001030701626020140405062004100

1013080901704061010808102003015240044003001414020020405301407014052200
2162008020501070030130500401767900103010002170070510120065040640010402
6514065012040302050404006403015104001106510001060104120101306570200340
0101766410490140504010100601064050535101200650401765410507020012330202
1600616840080400601617644107068016006104011004080160050403020307004054
7025040800200130140205050206050306176350104030190030150203055030405220
0405103011086180150400304010805046704003061150800200150404020503200600
5030405306020030162008020501070030130110061762506302064004030130206400
1030805303011030706150640400107001140103070502002905030615030260150145
4100653030110307030206400501301150301406176150650406403013020640010308
0530301103070653030150700121301501930602402010400150501150305012014065
4127050401300105040103070504010530301502030640203050040200300213015085
0501405306020040530400301100176050102405019306021506400180150612142701
0501201407015064904005015064102004001503050040200300213014040050150116
3011001040604030311030140202006006106402026507005040402030200801000103
0402067041080020013016400161406030120091802030053030110801405306020040
0301100175921020040510301150506704400140402030010803015016524040030602
0011402150200802015011630110064055168011080405104101164200804001501023
0124053060200405400135303011301405403070101304054702504050107003016464
0500641706865040610040203021005040501070030112504020400110403011758410
4081050100030530301501801701040380020013011080504064040050116200802040
0501106064030110061757410430030102170070501404002008020501030640205041
0713040400200203005010304020220050700140070016175640109007040202200504
0130240203070010806402016050506108400601064020150215068270010621700703
0166040205064066010506702008030150404020135017001402010307053030154070
5016200207001540610030106064030110070016175520062030020012903020304001
1013020307001080501530301401101240520020700620065030110301400140309003
0150402040610032006001501150400110121060640150306020014100306175440102
0830171077030165613001050401045106130010504053030130800108040530501021
0305406100501603021301306602005040150306020011406175341070230130800108
0201030611367015506100021065303013010260507050649010652006001301103070
1105043015110830150628400601050107003011752410430021700705040501020080
1203030301066800200130110801406400161406030110801405301070030153030117
5141040830171077030191200901030140522005070012200650301103014001403090
0301504060150301320060040030201030151503075012140020200301175021400203
0140307054507050406402050102610501021410530053030121080203010013060200
4040060301620080205010700301306100106174920014301102100705040302001802
0301403070106066080503020260204001404030701017010403200204030153030804
0530210050405010700301200204041006174821608301701020060656540208302100
7040130402081053030161580120091504015901005050800200130110400150150116

2001040306117472160830115010307061000130230120103070140501802050108064
0050614054705010700301800702205010200501405016174621400203014015450706
4002500106130010140530301684010174521400203031302030530301507001213015
1012104001105013066020030501201406510200700613167140530150307036203021
0050401306020015030602001410030617441001613061030650405303015040203014
0403070301504020131404702405165140070240015010306110220070140208515030
7501203070020617432140510301667041510301522020030011306530301427015014
0020040114050130100580070220020501050402178130150406201030130750114025
0682008010214002030140515010400150107003016174220015030150102008012030
1102100706161004001501070030110210070203040015309006401014153020120015
5013011540084005040102003400506100400403014706104003015503301305004017
4110016504053030150404053014061003001520060013012170070306110504301511
0830110802170070405301740415504053014080530301303080010504063010260301
5070164906405200204016200802050107003030501073023061003015040200519002
4018002001301108040307010130140255061025040040140564060301001202003005
3030163070364002602014026080503020103070401011006550408011739211007050
1208010208040540070060014050016200802050107003030400103040180203021005
0403060200210754006014100306173841701040301803060010130530301501530301
4706104001101040084052001450401210200100308400615702001100167050901402
4052109040016200802050107003013017101306170104036015030110453053030113
0010630501165040150107003016011010403080117010403200401301530303021040
0640301524030206180020013015240070910061301233015240020010601501200100
5016306173721400405103016400302064005103070651301530113010220065301005
0408200301250620080201040562010301150108611070030140510307063040040030
4040115302100504040030600410054011080201503060200120307002017362140506
0864053010269400183019030116304070616504015010700301173526301003015010
4094005303012002070021301530301200207002405263010050104094006165040150
1070030117342150150405103011045106130010504030800105303015013010052200
5040510151030703075011306301620080205010700301306100106173370140040130
1520060013011080110504301511083011406110504301511083012168200806200410
0106130010504030100720030196021053030117322001430166040530655070303014
0530201030618002001301108050646080106309061050152530301200401140506709
1001065100150010404702504053030145705068001005010501070030161731200143
0110210070407050804040020029014024020103070401306017302123020504040510
3070506306004105201013040301640540011020070064053167164051012150408309
0504061550630600410504704001503172920014301102100704053020103061510106
0301550608301250620041065105013070612006040515010072001404016100805016
5130903011640110016405220053611000400211620029050107003016172821608301
6605068016001064052200506300600106309061050152530301200401140506309010
5010700301617271001500104030150680010050101306530301457025068061050107

0030117262123013016306120020700400101405011040701655040201008301202200
5040201030130750114050140307010504080117254154030160102640505340516140
6216083016604053020103061521644008013057040530500406170104038002001301
1080140405305016305301621034006010403050107003016105060830140522003016
2134006015010700303017243015004013015303012200800102030700208002001301
1080500204010806015030170805010140140161803257001080427301140180309123
0161008301530301220080010203070020530500404277014004061510308110004002
1200150301108051030705064100610140406110212001427301060301304040081801
5200410025104614003016080140140603015040307501172320015100301481630165
6103003020100301600530301301004051030701003060030152130040080510030600
2016100306001202003005303016307034012006503016400140309003011064006040
0305401200109023016104070130110640060103053010012008001306170805040560
8050130506203040101301103061550645040404007006004001801301005303013010
0800200130164001614060301220050403010017223019013016641000301240530130
9006152002061706980020013016400161406030110805040436010530306172130130
8001080130150102008012030117041406510003012265140651801000302103014030
1103015108020960122013011030024053050621034006010130550645040506704105
0107003016100830156704530172030184030141043006565303011080506304131040
5613001050401522109010801007016903013060200106540080106005040520101304
0301654408247020030182601061719301100500301218603011030050106170409618
0660010020023014020102001010700301651718301650405506450404053014065304
2004013080166040610025303014120011700164056080501214016200101000101040
0840610021402001010001013053030150153030120040150405506900808105803060
0504065104105010250404001210070405301717200155030122200160630103030128
0600400604065504065220053504063061003012006015040402050401660171630170
4004030120010220301541530030162101000301403017017152001410040254507010
3003020641474001406401820013018001010004001406105005013020304084001404
0307010530301171441540610030203062007005040400501140501522005040510151
0307030750113063016200802050107003013061001061713211007030141043003020
2200501640540309001030706015030305200801000406700302022005016400130500
4030140530210050404003060041006550608301302100510106030122050630370400
6010617125064301600151080405200150301218901201030616405100150701108030
1301000130120103061640522002162008020501070030120103061410431003060010
8030150111212004001502017001140530610023708023704005016171150630100701
0406100304001101302030700108050130201301108080070210307015800702308008
0506481614021010060105016509020010100065016509030106005067020076215070
1504040015036400120061340040709100800200130110806171050620020804001040
6100304001101302030700108050120015503013010303011030010001050105050015
0103671510803070340012004050030130205040612001550161060162001510803070
3680020013014401070030165617095065010064004020220011003024020307030400

1101301309080102004013012002410104060403031301020031030202004010030166
0403003012006006063002007030110307010640060140500155062004004407020010
1000240016140603017080200107003015303011708506504061013060150301200500
2015020306100830120220050402010301307501107003016214002030140011012030
4002004030117075065040610406100305408200610456103003020301090804006510
4105010210700301100104904005020306102004008010150010485012014021230130
1103061305200270405909010010805012041003017065010402003403014061003015
0701506012420010130613005050401035080150200905040513162700204100405501
1650900630602003016011040060117001104008170550630100704001308011610040
0150107003030200106005200600130120014306405302100504050107003015210017
0501208010201620090050108080020013011080162001060104030801102001003013
0515040405103011086501301320013012030210050401503060200114061704501020
2003004030150401501140653030150182606105070240015040615015200109021030
7053030110301670411030102605700530100170350620070300101304056540010002
5701603014051040014006153030121700705040510300110004051040014005011650
4018011702506202003004040561301530301240520050020150406101406170150680
0200704015507040561510307050620040108002001301640016140603011080510150
4050101206170050104030170303020020700130165501200315040510307040530160
4001406169950105040640240090200863066015030120050020114061698506200204
0104056405200401167040317001405104304005020140620103015108650210100030
1125015040203070016975010830190301210501008301614030604010508064005200
6001301611050430110801010306400501800200130164001614060301200918050010
4181301301061400504010504004030706203040301504010504001040014100220016
9640102083014010307030165550113001014030801093010220050110400660015010
2610501025019103003011000750501470250406423015040402021365036030150401
0503200600170011025060814100611008102200153070341003021005040101106200
3010614001700540021110301100614360530162006006300200703011030705106217
0802006169550105040153030113005012009040163060041301100651062151030110
6180606101030701630600414030801694401082003012006801000301655501102200
4020302008010004006018066030110016935010109160015020150115026507001503
0200801000400601150121110163011001692506403070400130140530301504040307
0110501402030301001403013011001200109024400200180553610307051100301200
1030023011350114030801691401041003012030130800108030205015303014001630
1100169050645080400501130630806061081020043130105014056213011002001070
3014003090801403061689501070403140203051210506400161200109024001101021
5361030705610030180170051090104010021625700116885010408120030140820016
5640203053030120080100010406103014020103070210200500400130301100168750
1010916003015020501615010307053030120200500141003053030140016301100168
6501050608403012003170108001013053030150180200290106100400105040550115
0103070530301504041001060011700568060610150130110080606104005013020501

1163011001685506305134040050170015106001680606102404003070801404040040
3070305301100168450101004904004030110731053030150115010307010049040063
0102030115030806180513740570180022150103620080030115030516150604071077
0301151011101630110051030701630600414030801683506200801203014061003011
3015303018620050406011010130550153030186200504016601104001306510600168
0606105040166060840080162570011050211016825064030704001301405303015040
4030701653030110301105078610500262030011405013011001681501020301530150
4050620400611800200850620400104008806061020020700400140080400530301400
1630110016804010900206580507830150405150107040080010216806061010307010
8060111030110064055070103064006167940102083014010307030165550117010403
4052105010400110501530301106070301040320029080120040140206080501402030
4003066030230110016785061004190301501615108015030210011040030120010703
0161510801502010400301510200100301301601616775010900801821010003030150
2014061504030701402130115045300140610020060205021501150121110163061008
0402010211030116703200116765010402018301200106006561030530301402081061
1021103050700110104008800200130182002150308080606101080404009200801403
0210050406530301504011005006404020103070700600141004020121501164030704
0040301405200102203011001103501690306005504016601104006011403080167550
6403019003017001150154507015070140040150436504013017006001505015303017
0017040301100167450105060840301504020120050150155012040150481700600801
2001022016001030012153050171077030115101110163011001673506809040014024
0307015303016150120402003004040050130110040530154210403065608050108080
6061015200601803021005040530600110020060410080100200601050116301100167
2401030704030701070030201006806130050504040013200470802005053030113001
0501130120304030150104108051600170060011030501201408060610301504202030
7002051060011706504015320060040060140500510600117063021004054001070612
1428016715010403019003011073502030700205617365805308200108043650405617
3163011001670501027001204040050205015617314080163011001669501010020016
0150201406800200130110804608050301501031404040040307041003053030140016
3011001668401070752150162001070230408521350403062030403017016904100805
0163011001667506410080400170014040510307016302100161630110016665061002
0016030402050120010703011540010150700640507001405005106001308200108051
0110060301307034057153240575314030801665506304070101650120140260104002
4001308020660011501105013011005160015103011061806061010307016306004140
3061664506403070101306015030120050020150203065150403070140304030706700
3055016151800100261007010608050108053181301103005040530301504040550701
0501000105012014040562140520040150010850401630600414030616635063020640
0403013020640010308051030706400302064005103070530301301402083015011030
0504053030150404020507010501000114065100200804004021621504016306004164
8162125040163060044001301050211030110061662301020630610050140103070530

3013011004051005006405640011403080402029181050113015210505040014003053
0301504011005006405064006400104008402070405306020015030301100166120010
6010301020203070020010702301020414750615016001900808506150305120010405
0615010301400420015040070180025700510100025014015012111016301100405103
0140042004054007018002164364057014004016840080140306166050104081200301
4082001656190080182001060053030180302100504051060011030704020400504011
4020130151030704020504013053011001659506900801830530150163040020501501
6001150704030602001803010203011504070504015012111016301100405102110301
1670320014030801658506703200104053070304053051103011623010050117001155
0680200701040530703040530182001080405400701800216307031550110400803030
1100616575063070180301501651215507046120050601630110016565062200100400
1306104507040203030102013080521050640014004030501801655501030750403012
0010600150163010203011080611050150620040013014020102150404020306001210
5064001013011004057153240575314030616545062002050405304056405802007080
5103070163060048080606105660011361653506100400101650120616504015010700
3030200106005200600130120031306165250105060840301200317010800501306130
0505040150400408200221090501300105001081550401624001080020013011080806
0610301502040203070020616514010307090010808105018002001301501017600103
0701050307031301100165050104015010204015010430406103012050130110054030
2014030801060805030590306004006015210506400101203040301301100616494010
8200200680100010220050110220040820014013016603012520014013060805030150
1106080501020021140616485010501016003014102010451013053030150162101000
3012550600140301050140307010302030700164750101004190301504030550165608
0505070540046120015011008301908908501301710770301400120040140030110066
0504051030701504030701405303030018503010056080505070806061050400461200
7001502029600140301100164640103070505410202102200501505104101507091001
0400130301566050301301214053016018020220010301703200130110030660200301
5131403080521050640010120304030130110061645506200907010510806601503015
0011000105108040170203070047025040104001104050016445065090840014040130
1030100130150530404004041001405030201104143007026020307004702504010400
1104050016435063020140014040130103010013015302506010805620070080404004
9081408012145010506070260506702007400301100164250640307010405307030601
5030110301703200110307030400160211020060016200800600400130250607026068
0137070260505302011050140604001200100270260108015040080110010490301151
0180606101641506306020018053010614002402010250115015401470220020416140
5504013501070030130110061640501040301702401308130130106140025085014064
0130815001100080011630110016395062002704001106200303040400502050110110
6200108010506400801130403011510111040016021102006001620080060040013025
0607026068013707026050530201105014060400120010027026010200110501203040
3013011006163850105060708002503603011080500230805220020020700501910300

3015160501802022004507010502002070011405504031505501509001070030303011
0061637501104008040060400510801070030120040130110800100560120050402001
0930130201400802309010802006001301140161200406005220010100601080140204
8114015036030110281901101636506403070101306015030120050020150203064010
1003015010430120307005110113011642704001301200401530301301402083015015
0193060504015253030130750114040206121640400501156404001040601406011301
5506450405064270400140163520015100301481630153030140120010600506100200
8040040212200115036030110281901101634506200203001013060150301200500201
5020306601503011030706150103070530301308008050402030700103005040530301
2202003005050115030501201402610070106100186016401051200211010121530404
0070240016163350620080120405520060013012405653030125065040610130406100
5304040020200400105011022001050403070140401402030700140201040011050130
2100530106140021402040012501301550110072004004017091402010400110130301
1001632501050608403015040201200501501530106140021501025055040200109301
3020140017260010601200100680304081105012001105012006001301301100612004
0600200907011050120011050114054813011005011040080503603015704030600461
6315010810400855050360103040011013011612001404702504040530142405001630
4010307030170104060301655501505410205507080200908052200530213400601801
6295010305133015040502016505103012901505410201050708020090400130165103
0110505067041014040103012815036030122003011001628501020010001903015040
1506201030650503601030520040114030708010403050103064090704006018056080
5050705400461200410030651080105050400403010700301502030700804003011001
6274010200202030401301170055011200300217005140530303001850301006505104
1015070910065502002201550101200140308050510307032006001400301100615010
2060505504054816302040040016120400405053040044007016505103014003060200
1505200204024007040601403080162650102403013080010801512005030150112815
8010003004100560805050701514008046120040071077030140012004015501044030
1108056605030110061625501010916003015040400502020501202507003010200801
0004006016170055070800200701806061016244010900705020410205015020410205
0405501301100200245040410059010401001012001403080162350101004190301504
0656400270020802002450404100590104010010120014030801623501010041903015 04
5640010049080302100504041005901040100501205011530515040451300453006106
0805050701050400461200105301100162140103012170070615036010501130116602
0305124120015040173140400301100212301104301541060110803016200245040590
1040100400410062123011100240060161620501090306004030115041270504055011
3008803016660301550708020090503020307002052200501520021012005011306301
5240565240040541003061619506403019003018308010130550110165004050608110
2200550153030170017040301100203040010540030110062162130140010030100065
6080505070154001021080651040030154004612006161850105060840301107350203
0700206140307061402085150104001543001100030214030616175064030701013060

1503012005002015020306520040110307023011000530301650010418130130106140
0504054030705030680020013011080806061030150204020307002061430657006004
0050611507080501050110607051650040104020020154001200401302009040504051
2004003001107003013011006161650104517301504051080165012065464704040512
0046060025040500256200300616155063040701014024010307053030165701800256
2006016401301000170051020030021103011005630410304180405420016163060200
1805200110604001361614506809040014010307050170400604030153030163010403
2002908012004014020608050140203040030660302301100270020404259010401001
0307016136161350101004190150206306150305040640240050114062107003015302
0180150701400404507080606101502020040061002400605015025700150115012111
0163011001612506202101300704051211613616115062007030010130405617005405
2004012405501025040030510301150108616233014002110100010805630703105011
6704031652162570014030801610506200601600301700115015290705085062107003
0153020150103016301100160950630801100055070404005016210700301530201105
0180160016521625700400501105050781030105013011001608506900801830530150
1627030106704002001014100015070405306020011607506890150305301501680606
1010307015040140013020301401501211101630110016065010307018040400502050
1520011060301800702591004003010233014002110100010805610030168060610163
0400100400130405504030101100301100160550108301901406100547025040165062
0400640201021536402030306001018002001568200916180606101630400100116045
0102403013080010803015012150152907050850615040150102110301281566001680
6061030163011007001160350103010160303040011015400660016806061010805012
0410030160240102084010307020220050110018601640105120021302100504020106
2110307015404001140202610070103011030706201030705400407050404001065001
0418130130106140050402040307010620220020102400310203070020616015010240
6470501605013030501910300301501141020203016410201080204006600110307020
1106200909010040013010502110301100160050104316010304054001012002004010
0301660403003016122062020030070481400101200105014002111051021308060610
3011007001159950103080110003015040305302100504040050205016501200100301
1700520103011501086114029090100301506081201030709010050508501598506301
0070400402030703011022007015012001005150307501150115975010240301214002
0301400110120304002003011596506304070400140703080110002202200140651030
7030206400654270180530202004013017032001051030168002001301640016140603
0121010005303061595506200900400504015011620090040050161594506304017015
0140204005012040103070163040701506504061013050107003030301006159350105
0406403030102002070065900706406100830157005108020136204168052400250050
1403060200301125015040201030709010050130206159250107040316015030165503
3015040405053501304013020220054030204004040064051003060020307003062022
0040820050401301159150108030400600405063017101306548165401601503013070
3302022001300630615905068309040153051640309002102001003012030510302022

0050120140615895010402003401650120651080168020040011401640309005010700
3017024001640550401501035015040401301030100130180020013011080416080301
5070506550105101002630614020302100504050620010030150405012013063080158
8501050608403012003170108001013053030150180200290161587501020020170030
3010200207002030700400110106030150257001040015060830150130103030150401
8030762001550301108020095130903014010016158650620090504001304050011030
6150405303015064504040203014062001503014020604040080164030900501070030
1103011650202004001306158520010902506304070400140255011610009400130620
7040214005040640020040114020401004006018015842001026005063040701014025
5014053014070120220040550108061030140301302050161583210200405504020300
1080304055016405501021080010030202200504040010026054030201306306510808
0304006001802140020301106064015010400141003061582906100504020010100040
5210905040568064030150163021005040405612142701014020130150642701014013
0654270101404051020040108020400130801581700670034020010100019702022001
3001401301800200130164001614060301400401414015108050104301600550330110
8080164706050107003011401615804102001014030301708020220050120220013001
4013018002001301640016140603014004014140151080501043016001579100105300
6200108071510804053020015030110808016100300501070030114018015784107060
6101003004055040805507001213016080504030204001304001104061015774647040
3031301301520060065014061576465300404061020307006601503015307064034040
6102030700520060013012170070801600504030510130203070010805011575410430
0401030157006001501540301900105610200100301700600117001202200700600120
3070020615742102400400200101000405641714062022002004011314030103005040
5303015064504050670410104003014054005301405507040050100011408040560805
0116403090050203064051504030900140615734109086401011001550402010307059
0100501020010030112501504020307001572468020040301480200301601025401101
0030140610655070305700510801670240016157146200640301420063016010262001
5030140542006180540110100301406105406100404100101570410300200250670200
8020040114065067020080200401167024001805103040650670200801030115695010
2405019306061504001101210606401503060200141003061568464050040047021402
0501044030147021301151080165010001040305012015675010405001340520011041
0801682901805810903011640309005010700301400700600161504054082002570401
6504015010700301612107030015010350150200401131403061566210100200402070
4010501162100400200162700120655040651076001021700705104001105040506403
0704008066030401701050140204005012040103070163040701406100110615659108
4050630407040014021022005011102005900402012006564040070060040016530301
5040402010307077011095200140610011030110015647107702150103070400501140
6201504032003020952001306306180107080015010802012005030150163061004001
4040120010500205100805014021070300110163011001563464640108200102200501
5103011626400405004020220016200801000400601615624107022402050409630406

1001406830190406100614654061006186504061002190114030500404020210901050
1101001100300402050402003101304061001106156121050151030164003020640051
0307053030121301101001080640014064007094006011408130901301130141020015
0155070402015501140103014020803016001501410200114061506081100720055040
1050100720061022005040550102103070400502050140400101200140610011030110
0156041030020030140103083014005013020501130050140150301640110803070805
0501611506121427010140202004005050120200401400204001309012107030011016
3011001559900108082402010307015011406501050406404040050205014020302001
0600530301400101002155850104608040800200130110801650070400130640511030
0160150301166060024001306960100301250171040301630110204030116806140610
0110615579108404061021700704020103070801600110501620010600240201200110
5015017104030163011020403011690100504001306520010100053015040402030140
5303011642701406100110301100121070300405160015010440103016155641070225
0104030190030150401051406202200450705406604015554680050403010360504052
0013815103070150200940161530801601510301701503070315020040113140308015
5421020010028290301601030182903014054706405014052190114015210904055012
0400120040113014814020504040080400301013063010303015040709100220305122
0060180201030116309010503020220030602001501963011016301100155341043005
0202001030110616156100402021030501630301100155241020050140403070400302
0501610085040204001502108015030140400403070410030163011001551410300200
3032004020504060103011080108001080506760040013065303011610040018040203
0200591505104001502130654061001103011004001101060301506304070101650120
3021005040651030150670200510540610051361550210907040610170053011006170
2007004052100180064052106019630150306020040013140306154946420040200101
0002170070405104001405501620220020040113410055011700550708002007014010
5120021110154821050405161401030830401051200215011547963040610010801503
0413101020030023015400136706200301401051200215070257001403080154641034
0410408550140010230130514020103070540012020026530301400408200530301200
4015040501023704001163011001545210370103003017005501160010300103070217
0056763701501643011104003010611040030110015442610070101001860112006504
0610018601215150200300280400208800805401011005400120040161543963040610
0103011503060200115018060040013016301100580106004055040603616405200205
0510301309040013040510410110120014030801542700105083037021350150023014
0804013060301100140130601630110010200300230124010512002115030602004001
3410030615414640500301470213014052200162008020464050050113011510801650
1000104030501201540501040500134052001104108016829018058109030116403090
0501070030170060016153971077030110610030165202200501700104061010760050
4061504054082002570401650401501070030161830190150103501502004011314030
8015382670020402001010004706203070040110155001305004020200141080167040
0404003011008015620010070801537210200100217007040207006001108066021566

0404001306530301800200110803020140015620070080510140203053030151001505
7005406100110615362001060600400200101000105050641074001408054001090705
0153030150401050200905010504080540820055040105014001610220050405501021
0307040050205014040010120014061001103011001535210200405103011506704400
1404020300108030150501615061214270101404270505011501550400117005302100
1632004015010804005020410083019011016301100153421034021020010010220050
1510301162640040500562008010004006018015108040202004070400601680020013
0150404020130050165520010100053015040402030140530301164270140610011030
1100183019040516001464050010301615334654061004170301470213014052200162
0080201417050113015401101003014061065507030110504301570051080167024001
6153241050702001233020200401167024001653060200169070640522004001101216
4834170203040061531900103010002170070504040515010350615040540820025704
0165040150107003016146515010350150200401131403061530900108081030030201
0307010220050111010300550620080040013064020200101000140610010220080306
0040060106402010301524003060200114040204001000302141008016306400501801
5294010100400604091200901030701022005011540010901502700600165130152145
0401404020220061022005303011030704003020640010501152850620090050400130
4050017010403105064102080550645040152750620200300400140401020021050116
4530016530301453001105013011006602150400530180070220120040070113013061
0050501152650105040640220305085014062030610050701504005301102020014002
5085014065501022150400103140465110163011001525501040200340163064004001
3064020400610010301561004020471061200120044040201030701406030130602001
0510301162640040500402022001620080100040060140610011061524506301007040
0130801105020098010700301103070130110200315011200315103070402030160113
0406100110152350620040080401301404005015015200101000530150404020301405
3030116427014061001103011001465405160014170103016152250101004004030305
2100170301501200290180170053021005040204061001306400501154030704004005
0201402010301151086502101000301125015040203040015214010301217007015040
4056040104050040570400405060404016207040504040404011030706201030704001
2020026150404013060292518650110301010015205010200601600301504050201105
0408200400610302008010004001301640307052103060103014020301601501202700
6701105012200301100151950103051330150405062040050120900701105014030705
2203060103014050301604001308083019020010100030407055012030515040601030
5501865011030110015185010402018301402081400501610083012047065016103051
5040105021501220030110080522008650104150615175010403019003014061003030
1470230101006104633011030704006400601620040130110800100614030180010100
0610703010011406011062014010703021800200111030101006151650101002001000
4030150405012080364030114055010230186408200504013015303012004015040406
1030140901701303011001403015040105040907010302310301106160301100151550
1020080120301704050204001306150704022020011050211030770401080501206550

2186501041506301233012036401080405210200340010561514401082002006801000
3010220050115160200406151200340530301406021510801622020013011006151330
1030100130157040504011406504015040630610030151030701002605040130120305
1650105050015010367302050401510803040811503010020065040030120018061502
0040113170011040081512401010040217007051030703081065107600102170070510
4001105040506403070400806608015115062006006040014020402050402006006050
1501801504016200600604005013011005504016200600605406100504013040510307
0200401403020620308030170509010615105061002001000404055011640309005010
7003011080105029160040013061501086615050107012203080301705090161509506
3070801016501201402601040024001308050401410050401301204061005040504061
0503055018650103011086161508506402003400140401020021501610401200311030
7080540010200400801501301005120040080150630610010401150750670320040051
0301640202200654020106100010501410200105303015012050140203089050150140
0420015011089050402070805010130615065010737040240400501140613005015303
0152402010400110140501301100150550101004190301504040050205011504704001
4021504001801503014340020050020180150400304134100865011016301100150450
1040301900301504030170011050140560805011080140240307015303011200106005
3030140510400610503040205010701102004740050107003030306100113062030401
0501306100113062101000301403070113065303015010176001045070402030306100
1130615035062002070040013080140540042009501530301504010502009050105040
4061001106150250630534001406100402012001105020306405220061001304040550
1165040150107003014200192150114065303011030701301102003150113014051030
7040203016011304061001106150150652001201530404005016156402040730501402
0103070400104070805450705040540820010501400161022005040550102103070400
5020501404001012001406100110301100150050102700120402050900503023080080
5040150103070402030102005014061012003011041215030700120014055010700301
1301207024001201200501406150305004012003002130120120050140540610050401
6200802050107003011304030130110080149940103014061021700704020103070801
6001105015303011301164270400130501149850102402001070050402030105015406
1001030118650150306020014100306149750620020700400130801130500405011064
0060103057010406030162001090230164090130161040701301205010100102008030
1305004014965064301600151080405550330121890120103061405220010301164002
6001640018301903011630407061650401501070030150114955062006060013014055
2006001301108040550140200313014945062004008010165012014040550703080064
0560805011620060600501070030120103061149350620090210165012014067040603
0150670109400601016501201402170070301405308070180010110306150405303015
0645040405305012014068002001301108050107370401650620104030201030611492
5062008012040552006001301240561367015506100021065303013010260507050649
0105010700301149150104030190030110307053030155070301301405220010307016
2700205010700301130654153001301306100106405220010307050680020070102010

3061127002053030110307010200400801504040403090015040614905065040610130
6015030120050020150203062022005040100830155015504051020040108020400130
8054706402001503018021781301504052200802010504065250650406102010306154
0820061401401106064021400205302100504065504045130056304001065220050405
5010210307050120504080114895063040701016501201403091261510801670509014
0928620015030113015200600130110804053060103050107003012010306114885066
0600210130151080405615108040530140701405103018065015400501076110504301
5110830141020010501205040148750640306040404005013058065130153011305016
5303014030702307501140501164030701804020301621034006010403018014865010
1004190404005020501530301506450404040070940060150401670416400110200400
8040530500402006602003007021640018030100512004008015063061001040114853
0102061030030201030705303016200107005040050114050120304057040136175020
5103070307501130630163061001050120200490521001018006201030110861014080
0702202001400203070308014842001022020031652008010004040530201030614001
8301903011630407061620029050107003011301148320066008082008030550110507
0400110106030125700503061001030540060401200800470214070505150100700150
1030614822006802060610103055015504015150707504050054082001504050160501
3011501007001501030614815061075400601052165012014040521001864055070180
6200904060103040510400110406101301560281014050306100103054647040540110
3012170070301405507015020060015010306148050102402008601301170055011620
0802050107003015030610010304006403014702504050650067024040205014003010
0501030613040705060814020101402063021030140301103070530020070501206401
1015400601080800200130164001614060301100306001070030165614795010240214
0020108030201570464006040615200100400604040307010615100720053030110307
0130180020013011080521450401406147820064903014001700240103070550150650
3070101406506200601014040307010405211050050630010004006010501081301550
4016806004006010304052006490506505001040550113011477200104100103003020
1030706564020703200405303011030114762001022040610217007040201030708016
0011050180163064005016530800803080080107003020400610610406040303110301
1506081701400404020704004010510301162640040500402022001620080100040060
1501614752001030026200107005055040402030105050153030113011642704001301
1474200102600401020850430504040030908040500540011014004020812140020200
3011473501040201830120010600656530301402081010400820029016201030110861
0140702400161472301020624020103070150114061510307030800101405018030800
5040656080503010440051014050180104400515040804020220050401008301402013
4100601503011510111030100147140108200301200680100030165654127050401300
1050405221090105308008030412001308020010600220420010501665130153080300
1201308020080025303012060604010501614705010403019003015040170012050180
4003070805018020200800101306207080501013014053030150645040704400130614
6950102020030040301504050506204001306180105085010430302053640100150161

4685010504064030150405062015014002004016402018064001010700301530301427
0150203065303015064504050642704005010700301427011308010501045040203001
0804040050205016015030115101110301001467501050406403013505015010307011
0082030700201650401501070030161503060200103505040500146650102009004005
0403015040402070401050116200900400501803010040530210050401630600501070
0301401101305004013015062009004005010305801465506504061013040610050702
0070050301640011013011050100040014068002001301640016140603011080170014
0162009005013010014645063010070101305010700301103070603200301307031065
3030150700121301504064005016080503050120140614635010504064016506201010
4008601503015200204004005018011701040340530208002001301108050405040130
2022001300630614625010810301405150704004061105043015110830110801076003
0121700704055070150803002016504011403060506104061001301155014010115708
0508040050401510200100400501201306308014614010301301217007030116200101
0400851013020405400136306146050650406101302022004004030204051030704001
0085010700301501145950102006016003015040506204008053030140011012162700
2050107003015040505062040013061458501020040040403015040505062040013080
2022005040100830120134100302030210050402140020301506200100105010700301
3016018020103011503075011404020300108040050205018014575068030400600105
1080165012014010805401101003014061040550102108001001020220050140307030
1405131040081680304006001140804001210930150404051501007200610049016240
3010101200601105021501624100306145650630801100030150400110150706015030
1504012001050020501651012080306005040305062040030205042220103505040610
3018014555010460804030150404005020630210040010907041006501301145450104
0306040301504015016301010120060165025240050401107003011301530113055014
0050401301100100200100030152020041170011040081647061101000254650365067
0200804057024001802008230130101012006011050221507613614535064030701013
0501070030130102605017024004001306140101004006018014020400670440021031
4100301100145240103013012170070301162001010400816504061013080405263010
0103070443001640530164011030706040911502200203010260507016308001030150
2200110504301511083011080130164016550107513040650670200804001040012050
1150220010606403011006145150105040640301200300265130903011640101001653
0210040204006102163070316140061022009040214020406100301624005015106001
6106064010301150108616145050102008012030140610030150402040040820021503
5061449501040301900301406100303055040080150307034001301502200150302064
0053030110307016301100801448501040306040404005020501163020640051030708
0530301240400504014040050205014061001101060640301100614475010802006040
3015040305501680020013011080301703050670200805016405504008010501405103
0406506702008050408066001030705406100504051020070013011060640305040114
0801446506402003403015200206306540014030202100830153030110081061445501
0460804030130407083090101305303015015309210605303015012008603015240400

1031401060640301100161003011403080144450610030404040050114016100301106
0640405303011005200860301131403080144340103070200816030202105064001015
0670200803011006144250105040640214020305085014068002001301108011020022
0301140203050620400615012151030701504361407015040080304003015040010311
6301100144150620081603018308010130617005200860140201314030100830305063
0610040011060640301100144050102402008603017005501163011001504507050401
0083014051314030801439501040200340140610016501206162002204006018015040
0110125103040650670200801030150620015610606404054702504015050070240500
1438501044007040301263010010307070295020307002030210050405216270020140
2165040610301650120140804001501023012405613804054061001030113060200547
0250401505007024050014375010200700504030152100170501208010202009005018
0150400110121627002050107003011501002001000168010130600405150307036203
0803011080570405040651501035080562700208014365010403060403015040506201
5014002004016530301103070130110200315012003150404020400301601408040400
1030640050180143550620090050400130610301168001001405005401000402010307
0402020040150201013040500402012020030064020200401167040318040030206400
5303011030708053030140011012102001020700400610401100404020103070200220
5012050140610011054061003030110070018650125040510307030400161434506200
8020101650120140241043003012170070301405100107005040500405703200401501
0301405001105043011080701400401433506830801013027002030153030110307050
6200400801050107003015013010014325064030704001301405303011030705063061
0040011700525019306050404020450705018002001301108014064001614060301108
0140530105010003016555018260143065303017006004001163011001431506704060
1040610030400110130203070010805011200902402001550301651080165020604003
0301030301402030307031070030165143050690200600101301405501650900301130
1506702400105011202003005303015064504050670410501070030170240010140680
0200130110805040640016140603011080504053030501130114294010307030170104
0603016517010403530305770301501405306100205078101306142840109007030176
8030165203070053030140014030203030104240013052006001301108061105043015
1108301108010200300230140530142750610040010165012061650401501070030114
2650650781040513064051030708066001305303011103061501130114255010240214
0020108013012002201130620307005040200100090113061406030110801306800200
1301108052007003011005004050402022005070277010140651080506800108040070
0114653004020103070150201301304070504050630407040013065012001005040550
4063040040014065013001080506204001406142450620020300101304052005002015
0203066015030110307030800806700305303015015401101003014061027002030153
0301103070506200400801050107003015090014061423506200400804005303011030
7040140203050700153030130100130130861401200855040404003070380100720050
4040203053030130750114040400101200130100142250670403101404020010600651
6820080103080203070028054004082002653030130800802301001421501050406403

0305408200610456200649030110801403018030064020220050405900706404020400
1341006015030115101110142050670320040051030164001040106101081065141950
6403070101304052005002015020306100853030147065011301800200130164001614
0603011080140530305011301141850640309001013040569601003012405501021080
0100621700703011612001403054014503011620060165240044008013080020013011
0801404004030900608050302030501630614175010737040240400501140610083055
0110220061013010065100812050610250400601061416506260204004040050201402
1301506734003054306003012170070161006700164030900501070030303010100405
0014155063037040060400524040050204100650130152404005040170100614017001
4050011414506402003403015504030370400601017001401200155061140011025217
0070402014001501404001012001301001413506404100400601013065701605062006
0014006010130804053031131700130315401302030530301130014013011708050130
6120080010608050302030401130301001412501010041904040050205014706301170
0510400405063061001061411506403090010130405696010030124055010210800100
4053066020013170018030660200540130203061410506307080101401030704105300
5303014050040570320040150103018020501080640050614054705010700301800702
2050102005014016140950104400540165012014065303011100302162700205010700
3012006060041004055010250680200170400102001550301504057016013011650023
0104030501204052003008104061061408506403090010405608050160150301502030
6110103006015030140309001013053030150114075062009021013016501206306104
0703011045400400501801201030120090050105040405504061406506301007010130
1650120630640903017040604004005018012010301506704040060105040405504061
4055063040704001404010200215016304070114040506101020024040050140203040
7040203061030407010303010080206270020501614045010460804030124030701202
2006525040610130504040550406525040610504040550406140350104030190030152
1001705012080102020090050180405302100504050107003012700202030700205301
0614004054001101403065403070216910810403014021627002030214025010100419
0404005020501530301506450404040007094006015040167041653050040520066021 6
4001803010051200400801506306100104011401501040301703012200504051080210
2001302140020301301090804006510410501021070030110010490400502030653030
1506450401020040080105015012001003011700550120140614005063070801014024
0103070530301501110103001008301504010501000101305090030150115090013014
0520050020170240010140613995064020840080102040203014080104510501130110
4510130504017024001050110081100830110301104510504080110083030104510530
3013010010083011030110451050404020101202003005040305301001398506208064
0010501805410701040500100306003011421053030130100541070104050010030600
3011421050404020101202003005040305301001397506504061013040550116100608
0501070030110307020220040040302040010082030700201396506802009040010501
8030130800301130110083014702170014080100830140202200530301402030700801
3955061004004001308013010080530301506306100106080200401301200241050406

1083015040400104030132006001064001040301504010830132006001050406200190
2130167040603012030401050401800200130161406030150404020100720010504030
1001394506200400801016501201404055070308006100830140513064053030110301
1642006400803060114060805030206302400203015051393501030801100030402040
0412705070150205014020501026150501021410530053030121080208013925064270
4001501101404005020140405612020030030110064055010215030107804020612020
0300640400501402050120401620200300150107003030306100504050017010403405
2003008504061061391506430160015108040520015030121890120103061140309004
0301030301504017091004055636400103001000114050120409017050405303015040
4053014053070040510052004006153050040251010601734001101060301162602050
1070030161390506430160015108040555033012189012010306153070013062004001
0040556361005200101306541107610506083011650608150107003030138940101004
0060409120090103011300105040104510640130603012001410301670410530301613
8850620020804001040610030400110130130908050203070020604013012501000400
4030501201410908151503070380120015506113010301502004011514001151030705
0620041100405501153051509006400501071615802006007800200130140070060011
7001104008401705013016601503013020110140408002001301400125052930400600
1801406030150405150307501140201105043015110830130500401405011387506304
0704004040050201402402010250508040207032004015010301405001105043015110
8301701400404020608050110307040201010002140501601503011510111010083012
0010100028002001301108050610002104051700140513501140308013865010200201
3003015040505062050305700550401504001035015010305010430153050109030600
4053030116704405291081405501165090065012040302050403640301405136809017
0810200154001315216820080652109810200240525010200362030803011080404005
0201700110400820082301620023011080402020010601010700301651385506200204
0400140506240020101503060200501120020407020060153030130100150400110110
8020020404053017001405400604012008004702504054082006015030115010070011
7001613845010200900400504030150404020704010501162009004005018053030210
1000301140501301008052200504051015103070307501130630506306100106138350
6803040060010510801401080405501021080010030202200504040010026054030201
3063061680304006001805481654011301601503015012014061382506202003001014
0701030170400655018260800200130110801306400161406030110804030701013014
0253030150610250400130100530301450701506170803001306550630610010640570
8050101306405200800101301405303015064504050642701061381506402003403018
3080101305501540011012270020611270020530301103070102004008015040404030
9001504080138050630100704001308015302100504012004070402010804005002304
1008052402012004113064020103070540063040014053030113006303010013794010
9007040610217007010220040010907050180160011050110301108610140130170240
0150110608050110030400504053042150110305062010140301005304261170052001
0100050120010024001011501100305063200101305010700301301100400150102150

4001101405103070103040040017001613785063040704008010202009005050304054
7025040800200130110808010130600402015030703405001377501040200340301406
1003011073502030700201650406103016501201406400150102301240530602004054
0013616403090014030402030210050405062001003011502030514100306137650630
4070101650120140501080200604030305010720307002056040200800103011507041
0403050120200405200800550701508030020140308014010110061147011006152503
3015017042008003015016050130160401700161375506540701040550110100091080
1501100305063200101305010700301200700508040530314051030110800100302001
0600301240530137040060120030030160150303053030130370106306137450104030
1703012200530304408301501405167042006001640130601510804054001084006405
3030120501826015108040516704137340107050301400150310802001550130140540
0840050401020034004055014010124052200405104510400183019030116304070616
5040150107003015011372506260201016501201402200150301405161402010306113
7150630801100015040011015070405501070030161521650140916110504301511083
0121680020061501100305063200101305010700301501137050610040010406100304
0011013080020013016400161406030110805303011003060014062001550301630103
0301801304006001108050113695064030701040610030400110130130908010100830
1213012030700530301100306001402160830165010506030144701640307040030307
1504052004100612006502004010030161108006040300301307031070030165136850
6200802010165012014024010301217007064010408504021200300405301620080205
0107003016960100301240018301903011630407061650401501070030110731030541
0701040500100306003011421055011100853030147061701040340207032004051030
1136750620020700400130801564270180402022005303014020307005507001470250
4013017010803005040140200401301200241030020070301103070106400601405004
0110154006010808002001301640016140603011003060010700301530301402022005
0113665010240200816030170055015062008012030130110040522004507010049040
4100405305011650401501070030120030026601503012007005015014055040303200
1030115010861501123706015030305012011365401020830121400203014001101203
0400200301136440109007030130020070301220065640030206400510307065130153
0113053030110260830100801630640050180136340108200806200501050406403012
4020103070901020084040050701405103070710770402060805015040306602004020
1341003013625065100801013040610040550124052630100530301802009016802009
0501405004815040402012001030580070210301405800702200900505200660400307
5011401700161361506200207001040513065062640010130405005010400200406152
0040401703020108050650400801040550150620010130611360506200801204056164
0014064056032001030116032004054004178080020040405263010010805010700301
1401613595062003002400601040561501401014054004178016504015010700301140
1801501401015700554004174020101306100105040455040805200660400307501140
1700161358501010040040301704053030150116403070165900301000402010801640
3103062001802030150404020506301050107003011630400110016504015010700301

151011101357506200700810405307030405103011670320017001405406100162007 0
050103065010430110801651008040010305801019405504051002008030205040200 8
050130630805801201620080501030506504064030150120140613565063040701016 5
012014050608153030140510731030405302400201301110416506709100101306520 0
102201306520010100090510080505061008050101306135550105060840301200317 0
108001013053030150183019030407052405302400201301130105064705040506301 5
010130620018020301900101000101109640506109101306530301301026010805904 0
600401306290501306140900405210901013040550122030700560805050704056080 5
012162100020010130653030130660200507016803060040010501212007013015040 4
053068504065501044030130513050120140135450101004190301704016506206530 3
011610040011650401501070030115101110135340108200301216400301655303015 0
116264001030405103070214004050051030113015303015040133040130501165090 0
640560805014051030704001001800640028200140280020013014051030704001001 8
001700110400816803060050107003015500130500301103070613524010820080620 0
405255014051030702140040500405504010010200802630100100010710412014047 0
250405200607030157016010805670240015010700301200190501301650102003154 0
301610250301103070530301214004100301351200109050130610306504053030150 6
450404020301406400104010610108108002001301640016140603012030405305303 0
150113504010307010300302025303015015061004001014040530501021010400840 5
145700147021406100308001030530301501201406134940103085161304010512002 1
501550401200240053030647055015305010240014030805110115470654706405070 1
301510213040105120021200180100040060150120140613484010833012189014055 0
140530501024001404702504010220010010306116501206306501020200300403030 1
620080100040060105011650401501070030161025030305012014013475010504064 0
301200300265303014648305069008018301620020504030150705065150301680620 0
704030125062004013015064316030150670201200301506810160301506440183015 0
642170301506210140030113464010900703017680301652030700652404007010121 0
700301402070102216200300240060180530301504054570210806150406501200100 3
016301035013016512006400301108011008510307014706506304001001065063040 0
100108053030130102601080506304001100105503301405305012405301640164056 0
805015010504064030150401020040030015303015011345401020840103070530301 6
405263010070910040050113014052630100108052102001650210700301405501105 0
230171013013445010403019003014061003011045101305303016405053200150108 0
522001550180200158020031803001030705501105026060150404012001060050168 0
020065303015040106100400103070550110502606015040801134350102005940301 2
810530301616200594001050150628103013200510805108040610040050110081406 1
030615040106100400301103070606014360403014215108040100400130134250627 0
012030405501453001053030161050608301130115042001501508030810306302100 5
040530660200653030122001850403014190200165010504064030150102110010200 8
040061200802061200120080014360401670060040015010700301613414010208401 0

3070530301640510307026400101401640527007010140153030120040130506320040
5062006001613405063040704004040050201402402010250108054153003016210100
0301403017010301506420040060650650406403016530660200640203040705303011
0200106080163040701301006133940108200301216400301655303015016400110049
0301700600110654127050705264003013021001065530301501164030701040301133
8401030707010406053030164053050206020400130905014051030703090615240510
2074006405200594005100490405301640150407006001337401082002006801000530
3015014051030702640010501530301106070110106020060016183019013040701693
0600405265070021680200400701506200600161336401090070217007010301506420
0104050050104002004040527007050604054030705050850405403070400130100180
5030110307016420040550104403013051504065061008015040212007013015040402
0306850404061335401090070301768030120307001421151080501043016002001550
1301154008400102003400400150340530470165507016800200640550705303011080
0200501608124056702400150107003016200190501301650102003154030150405063
0613015061002160301613344010820020068010005303015015400408200108053030
1405306004106040530522001001550113013066020030140016309065303014507040
0122001001008050101407006004001062006001301406103016530301250406105040
2120070130150406133340103070701040605303016660301520010144051030702001
0164301402029022004001061402001000401008050101407006004001050402120070
1301504061332401020840103070530301653066020010307053030130750114046481
6403070101301200431611001805061200802043001212007013011331501010060180
3014061003015070108002001013053030150180405507016800200400501804055070
1680020040030402030506803081013305062602010165012014021734050534051614
0660320040550140550701680020070180405507016800200704003040510301404002
3010050117001402030530301250680308106013295063040704004040050201402402
0102501080541530030162101000301403017010301506420040040500530660200640
2030407053030110200106064020200126001504053030115012504100402030504065
0503016200700400704001303010040510301404007032001700140201030150620070
0400701013285064030701013040580405263010010307053030170296803016600301
7040165062010501216800200110501000140562050650700140060105010700301103
0703010260301140501132750610080501014016431013011507870404301504080010
8040040550107016163064005103070402030408114043113040030100405304084003
0206400114017001501070030110307013061326401082002006801000530301630102
6050405010506084030110307014053066020065303016890501700132008506100805
0101405064310130501070030110307013061080020040301103070130618070800301
1030706010301325401030121700704055040162008020501070030121090106053066
0200653030116270020501070030147010064053050700610302120070130150405062
0070070403011361324401090070301768030120307001510805010430160020015501
3011540084005040102003400400150340530530301470113235068308040301405201
0306164001200106003014053020103061640560805016405301640121645135704016

5040150107003016306602003015020301322506510080101304058040526301001030
7070296803016600301704016506201050121680020013215010470110030170405020
5015020070016301100640550403069301630612050700140060153066020070401645
1365303012165040150152006604003075011700161320506200801204056405608050
1100574006110504301108015240527007010501530301410200101405014054130616
4053016401202370400130613195061006018040561640014065306602006530301216
2008020405501520021001030704010040013061421400140405504048110307030904
0013061318501080301600301704016470100180520040306146701003012404001080
0200402050116470107040163040011004005030614211070401632006004005030301
0080362006003030206507001400601804055040580101910301530301207032005018
0131750626020101650120140217312001050020162021030613010301001620880010
3080131650651008010165012063012008430014050532001503010020083011080162
0080504001301630110065303013010260108040560805016405301640121645131050
1165200206530301306602008013060040547010040250680306004030182008013155
0101006018030140610030110451013053030165306602006530301216200802040550
1220307004053053030120080100010503080520040501070260405302008010004006
0400501405302008010004006040013061405302008010004006011314401030121700
7040530640550405303012006006040550405062006006010804054531301506431013
0501070030164001100490301108050105040640301504050107069403015067403010
5010700301131326101000301401307053030150164051635064052006040307010530
3015011640307010403011312506270020101650120140265647061405303011680306
0011402550610030104061010301405263010010801100180504052100701801311506
8002007040405616306400652163060025308008050404051400114030801310501083
0190301504050506205030650100490503053080080504015014001501030530301451
7050404055040613092001090501306103065040800200130110804053014065200600
1301611050430110801401030112170070530301405270070101630640010501640530
1200106002010162640010501805308008050405306602006530301405150100015011
3011640100501406163015010403014021640564054013060147021620080206200802
0301540302016301100410030616301100140530301250680308101308200109040301
6010264050534051614064051030709003010001650101008015040301620018020301
4513102503011510111013074010900703017680301652030700200220153030150405
0168002006504704001503108052109502016040615108050104301600200155013011
5400840050401020034004001503400150406403016501050406403015303014706130
6401020871077053030150153030140540820010602010306153066020065303015067
0109106512073015064006106513090301506401010010620020504030150705065501
0680620070403012506200401108007021103061405800702400150406403016506504
0640301613055064030900104056080501165012050203064054030900103053030150
1201408040015010230124053060200405400400140012080400640301650104402189
0164010512002140610064640500641706865040610040530210050405010700301125
0405400110403011304506200601600301405201030616520060013016110504301108

0405301407014009282010306116800160010700301204040080060064051001306002
4020302100504050107003017040040400601140204020100130600240400704004040
0601804051001306002167040040400601801413061613016401200500201656100402
0504043001165012040203021005040501070030120130340101004021700704053065
3030140550703064052608105151080501043016004050532001502001802030164001
1008015040301650101008015040301530301470613025061006018030140550101008
0150403015014051060508053030116605040510410150680021001068062007040301
5070506550106200205040301250620040110800702504040580070240011008015040
3016506100801504030113015010402003401650120405501258010192700705040205
0405801019507080705050140205014010147024040020080204100162007004007040
0130130050610754006040040400502053066020065400110165303012130100270305
0680066005015020140501503061001030405400301605010306129950620070084001
4032006004053030150116107540060130100405263010010801402405102504005200
6604051030703075040050150610080150403012007008101298401090070301107600
3012030700151080143016004050532001505305018053066020065303014418105040
5501164030701040301129750105040640165012050156800200105011008153066020
0653030164020680020010304020305303012506803081012964010301217007040530
5303013066020050670061050107003016402050401650401501070030305408200650
1050406403030504061065303012504061040203020010600507001301005070016550
6306100106102503015067006105010700301405504061295401020840103070530301
6530301504058001020080301026030150216530301301026010806501040200110003
0162110020030110806405263010058030640301615103070501030401703016501020
1604030161200100803030400110049030114050112945062100012005303011030115
0153066020065308008050405303011501040061060530301150260816301100653066
0200653030140514001140168002004055016306129350696006010405170011550401
6970104030501616800200155040169701501804001100490301108020740301050404
0550406129250684031040565103011630630130600440614001200110004061133040
5064310630129150610020080104061004055020306402050404051406402050403040
5501530301250680308106129050620080120405640560805011005740061105043015
1108301108015240527007010305303014102001014050140541306113064053016401
2023704001308012895065200120405613015061008050101306103016020405613015
1309030150640011013065306602002653030121620080204055011301405400110080
5040550403021004005014057050401406128850101006018014061004040050204020
5014020504030210040010503015200206117069161008050130100128750690220040
0404020704015011690220040080150104101261545070504021700702530301402021
0901050140202902200400505085065010105060830110481130115025069022004003
0530100128650650406403013020640010308053030110307061501306406515030530
3012400201401301150210901050303010012855068200804056163064001063021005
0401502004011507006001410016306100105210904020290400501640566040055060
8202904005011284501020080120301259108403040505350161691006055040080301

1080130110504008040013061030507001013061001050404055040612835065200120
4056530301200401200590061008301131040082006401301203016230100630210050
4055040080301161000400214100301282501040301900301240103070530301640530
5067014060402010806550400803014020506100021040203013060016708006130613
0126001301402064171404020108016320060063012815010470110030170401647010
0130101006405925008040550017025015303015200205020306547053016470130362
0060030116412001630612805064420040010405210200108040580405263010040021
4002001620060013014061030165303012506504061013050107003012050700140060
1014050112795010100400403012401030705303016405608050164053016401216451
3105012006001301406103016530301250650406105010700301205070014006010130
1278501027001203014030704006161004905010700301203050102400101040084053
0400507001403020507053030118070127750627001203040550140307010530301640
5608050150620305104020704015032006003015070940060163053030125068030810
6065100300301405103070400470250203062067024001301490110012008060612102
0010018002007050120630127650640307040040400502050140203020010600402030
7005303013010260108040206080501640203016401216451361301100500618018060
0162008050112754010208710770530301611030703011055303015403020610308060
3011620080205010700301540302030703615620040040304650325410165103070540
0501020605303013075018015070405303015015078400130528190303061001070012
0011000301108014057001501050500110501500162008020501070030153200600170
0153030152009050410080562009050400130112742001041001030030201030705303
0161101030056200800400130640202001010001406100304240060106140103011217
0070402027007010162008050400130112733010301001301520060013011080110504
3015110830170140040140805200600130150401105043015110830124040010800200
1800200130110301404003010015001530301301026010801620080501402030301010
0170014020301401650401501070030115101110127250102008012030140610030110
4510130530301640530140701660405305010753030140200814016308108053030140
2008140547016109161030140170550640200810614017055063081016200802050107
0030152308001020080203011080541107106050301140501127150101004004030170
4053030150116403070165801204020506304001100101402058012050102020030040
3011630400110064020608050150510801640309004001308040101003015010430120
3070040200857022001155040800200130164001614060301100306004061053030121
4002010801200530020030070150500153030145070200653003015470501127050675
0204004040050201401610067008040206080501304040075020140170054052006590
0640526503640551231521062040080405053200150108015103070104081040610126
9401030121700702405200300280530301301026010801550610080501013065800803
0162570030150675020105010700301653030130102605070506490106309123012601
5030130164015063020110305012520030162001281301504012001050020501165040
1501070030115101110126850620200300403015200206306530205010430110307052
0059001030100830150104610453012530660200306020011070030165126750620080

1203015200206306520065040400105011301530301102110640551680125303012006
5016108091050150641020010126650620200300101407055018260651301530113014
8161530116427010301301162004011406401020040502181060403016530301506450
4012122001405501252006405200128116700600400112655062080610105015303014
0530400110030210050401620080205010700301306100506105180010405516801240
5306100203070053030150218106040301102001905030140030110065303015021200
1077046510301400301100612645062001000190405641050705107330116970101040
0821400203011640061501070030150401008301501045065010410130653066020065
3030140200814050640200810130620060013014061030121306530301250650406101
3050107003011630400110012634010208401030705303015011300501530800805040
5303014020105010001080660805301070404008060050161700540540170470240120
0830143604030116220010010130806035050620200300403011405011650401501070
0301151011101262401082002006801000530301613001050401030702030700470250
4053030126400104050012615010200801203011732030700616200802050107003012
7007061562004004030146503307501650105040640301103070653066020010307054
0050102060530301307501405001260501020024404040010306405004002820014028
0020013014020103070400100180061101030040205070501000400403080402040020
0500204020400237017001501050840610652001050020509164010805303014020200
9050410030125950101006018030140610030110451013053030165200401253030110
4001101040081690220040080530102601080415365306602006530301504040201030
1281155068002004005020160406154160205063006004005200134006156404008020
0400100130164016402040020010300706402031671640205016600164020615021640
2061215012050130100125850640301900301405201030618040205040405306400105
0406501401013011030702008020301162840060150111030614020501660016402012
1167006004004001301650401501070030115101110125740109007020031545070530
3015011421151080501043016001256401010040401070501510804053040015036501
6800200655040540820024052200405200300210125550671018030140520103061653
0301450705320044090070140560805016405301640125303013010260108016451361
6200315616504015010700301125450104030190030140610030110451013053030165
3030145070506640060101305303013010260108045136200600130140610301653030
1250401504020401200830143604030152001407063183015101100604040030703112
5350104400540301504016506201050120103061106070805303011301300600104030
6512073011040016513090301401100162006001301406103016530301250401504053
0301431604020040701014050112525064301600405200150301108064053014070140
0928201030612008020301240560805011030705010451300530301431604016200407
0105015010202003004030305012014012515063040704001402200102600530301653
1030650105040640301130653066020013065303015064504016700600400104030640
2050401645135010700301530301403070101403061620200400400501404002608401
1250401020840103070530301613001050401030705303012640010640526301009001
0100025700106124950105040640406100200649080300106405103070402020090501

0640576001064020104101253030140527007010405630400110012485010504064040
4005020501563006004005110081530301804055063006004001520040306140206 42
4056306602003013120060012164056405501401011650020501406100506304001100
4001301124750654005010405307030405305014010113040550120080203015401011
6304001100804020501041080165070964054570470250404055014010116500205050
1612465064030701040610030400110130130908050650104301108040205016600180
5120730116400165130903011640110016162140050180124550644007040301405201
0306165407001306130150406401080506210020010130124450630407010165012014
0160405501530102605070164908013010301001504050053030140011012162004003
0011243506100601804052005002016405263010010214006405516801240205068002
0010540700130613014020108016210020010130402010307016200590010501680102
0124250101004004030128105303015014053016401010040060180402030164011004
0060114080401200830143604030145070404004517050107003011301530660200450
7065303014507045705010202003004030305062010801020124150640307010130406
1004055012203070055040140510003021405005303014013020704060101040085200
3180202001340060150102020030040301504048150161240401082002006801000530
3015014053010260163060080512073011640016513090301164011001616214005018
0490200403020405301647010016405620090816405670060064056404004365001085
0102020030040301163040010018040200830120053001301600306050117001801239
5010100400403012810530301501405400440103014054570405103011640400180148
1402010307016200519001040306110103004020690100501040304050050102020030
0403015040404004517050107003011301123840103012170070216200802050107003
0120030026530301107370402001010004020501164030701804040010306400501640
2030200106006580404002400501805306602006501020200300403015040102002530
3015012002201301383014061060150301103015306602006530301504050170016123
7501020080120301107600405303015016530301107370402001010004020501164030
7016200530015702200180020013011080168106080123650102020030040301504040
4004517050107003011030153066020065303015040512002123540103070103003020
2530301501530301214002010808007022103061405800702401820013016306164020
5040201030618040207040164513616200315647025040165040150107003016123440
1020020100720065200801000404053011008506504064030140520103061162009050
6166150107003016530301301026010801645136162003156165040150107003016123
3200102204160806800200130110805504008050204005630708040013018007021103
0614058007021620080205010700301612322001090250630407040014025303016100
1500104040550102640205010240610010307013012009050301402010307080501043
0110804020620090504006015016162003151010400810300504040540010130650404
0203014016200315104030616504015010700301680070211030614058007022010306
1162009050616615010700301653030130102601080164513616200315616504015010700301612 3
3200102204160806800200130110805504008050204005630708040013018007021103
0614058007021620080205010700301612322001090250630407040014025303016100
1500104040550102640205010240610010307013012009050301402010307080501043
0110804020620090504006015016162003151010400810300504040540010130650404
0203014016200315104030616504015010700301680070211030614058007022010306
1162009050616615010700301653030130102601080405608050164053016401216451
3616200315616504015010700301501123140102084010307053030164055040502040
1803021005040530301165016004100802040050110600164102001050161230401082

0020068010005303016402030200801000106402050407006001140401200106004020
4006101200106004020263010010805303014030701050110200601301504040201041
0110805040303010010250301151011101229401082002006801000530301501530301
1610040016121091301308404004050100014040163020801228401090070217007040
4007006001140108040206040301002605303015040214002013063012274010208710
7705303016520060013014102001053030161105043018002007050641020040080020
0130110805060050010104008102006015305062010501102503050120140122650102
0021903017040530301653030150700125010803011623010001080301402050405020
1050165010400101401623010001052002190510140402050405020105018018070800
4020108050140307064020507053030180806005013011225506510080101304061004
0550121620080205010700301504018030116230100010510140402050405020105016
5010400101401623010001050620021905062003007040205040502010501301400100
3011030705010504064030180020081025030115101110122450105040640301504020
7024001504065303012026081025030115101110122340102087107705501405501028
0301530301502030640526301005010240080301140170104038002001301108014040
0100805016304052630100501028030161222501050406403012652009050220410110
7003016553030120260850180206704600105011641020010501612214010307030170
1040603016555015303011030703020640061530850318040306030301685035016122
0506403090040013040400501640201030180610530301301026010801030050401610
0805040014064054030701053030140550640307040013040550645040501020060016
4020647065303016470525062520040030106003019122005040656100504040400709
4006011404053016470161219506737010130405501161002601620080205010700301
5026081013061218501050101600301281013053030150116601030704051030170025
0180550110600406100504050801600400140161217506200207001040530703040580
3060050404052420030080220083011080405508010050040014018012165061004001
0130405652004030201080405457050680010050104050040550404004517050107003
0112155065040610130405801620080205010700301530301450702164301200300501
1214501040301900165012030206506702008030115010020010001640526507002405
1502030518040522004001101216270020405302100504050107003016506702008030
1214201213401030707010406053030150164056080501214016200101000101040084
0610010307015407050154070501200101000402010403053030150122030700121221
1007030141043001061005303015014052650700253030140570060018053030140011
0121620080204053021005040501070030165067020080301214201211410270303040
1309002601030530301501640201041014004041001402203070012101001020083012
1700701610067006405200124164055636506220080010520101304030116200802050
1070030110806400107001102004006306120940102087107705303015018053030110
3070302064001050406405501041306520010008002004040526301001080501070030
1650610080150403013061001070011208211007030141043005303016530301801600
1105015062004001301401020011050140205040102002105013011006510210070103
0709020505014001080301400120040014030804020302001310501660150301504040

6103014020302301100013030110064053014070150191030030140530501077001612
0791084050630407010140253030165303013010260507050649010660150301110200
6120092405200110450401632006005010700301201650620400130612065010200219
0301704053030150116200290164020810200257004006163030080400801670715040
0130653066020065303011670109161205506830804004020307030120010500205303
0116200207001616400250018051080404001010030170011650401501070030115101
1101204200640130170320040053030110301613067080405012012004015303011080
0100103040550107011080402030301001061301030100402050107011080404001010
0400301700140564020102001070016120320064903014001700240103070550140306
0530301502030620040130110804040070715040030640400303008030120010500204
0520120016306130103010020401504010805303014052010200107001120240103070
7010406030530301501655010250701085040101081065501025070203055040203051
0301306708040501201200401530301108001001030502030641701040301108040400
8030400600130404004701640063064020504030806012202003016106901003015647
0301240561105043015647030124040050170011201200104100103003020103070530
3016501704033011010040030140610501100200803014061015042701030701503075
0114065303012404005040140400502050130102603015021650102016040301610401
4001030161022001003011070030630660200303065604060053030501801030050404
0400405010001405011640307016120020010905030140705061030640301407050402
0130640530301501164030701801630640050161199200109025063040701014025303
0150180165400501501805303053020501043015062010655040080506204001301040
0840563040011006119850103061301400506040080040410080164670105016803060
4100140405302008010001016540050105011620080205010700303030100119750620
0601600301405201030614050531080530703108017010403540202001080800702103
0705800702500102600301307031062109301504050010260030153030171040103011
9650620030081040505310301162008020501070030165062301000104050052006084
0510307050620400405001550610080501060805303013010260507016490103040530
1640150610080501016200802050107003015011195506200802040040400502014022
1700703011610067008051049040061204013014001023014507040540013090501201
4061194506403070101304052005002015020306506100400403011301561103061501
5110306116501201406401200830143604030150705064901040565303014052700701
0130140530140611935062008010004006010405640527007040530301501201406405
1080400501640527007010305303015012014061192401030121700702150400101611
4060301504052001381501030702009401802045070504010083016517005501205014
0530301163011007001611915010306130120010916011301170055011700530500401
5030100301300506301507040604100163011001504001101405103070103040040017
0016119050102002014030120010600530301653030120020401065062002040106206
3200600106120630400100106120640025001030162008020501070030120220020401
0700161189401090070301308008030167005303016402030200801000106402040011
0106040205070200802010615011002008040203030703105303011610040040050116

5040150107003011510111011884010900702003154507053030150165504008040204
1306164020301640114050116403070161187506403070400404005016402040015014
0116506600400630660200301653030116506600400130165040150107003011510111
0118650620020300400402030703040012109301504040201007200652009050240204
1016402016180601503014020809600400105015068016004008002001301108050680
7080040060403010301004040050170011620020700161185211007030141043005303
0150116403070165901600402050401640309005010700301502109040013055040080
1610040016118450620030084005103015501652301006200403015010230681053030
1501164030701640201010810140304020170417001306602003030653030162103400
6011650401501070030115101110118350680020070404056163064003040570406016
3064057040601301200106004051080530301403070630611825063010070101305010
7003014020230140903015303014507021643012003005011181506704060101304056
1507040601630110050107003012016506204001306118050670406040040400501655
0701630640013065306602006530301167010911650401501070030115101110117950
1050406403017040530301501640020050020630611010300402040010804020507010
5010004005030647050164670400501640203020010600658016540050400501684008
0301402013410080168400804006040050111785010200801203014102050564053030
1501640203070011774010307070104060530301501150608130255040501050406403
0110302103061040200530301502030640010402007001400104020014064053040010
0530301502030640563040010040040308011762001090403016010264050535161406
5303015040280010002124100805108010301171084004061301400100301802008400
4013015200247001040610405306105040611752001241301405630640013080180871
6200802050107003014040010100301700116504015010700301151011101174200150
3012170070501020080120303050165610067008040203070011732110070301410430
0530301501805306602006530301100100130010504065306602006530301161001300
4055012203070011725015023020405504016220080016100150701301100680162200
8001802702003011620080205010700301263010010801010030160165040150107003
0116400250080402070401050152010130403011030120220010861070011171401410
0130152400250010640202630100103070922001030650191030030173200402050702
5700106524020200591030140140603015040402010307030750106550405504016017
0503014020103001000107001117040102087107705303015015303014507050401301
2009050301140640202630100525010409400306102003002130153030153070314061
1695010804200405201013040301504080301240204404010501402030213400601804
0202200506500101000400604007001116850640200340301520020630630912301309
2106100830110081030116750102008012030120021470910010654001403020210083
0110081050153030141020010640203050620400520630030140017002001010005015
0646400640203015501501040080101930110481530301402047010700161166506200
9005010405640064030110301506100160101405012050102400140470210083011080
2050630413101165506520012030501050406403015040110010200805016100830122
0400102504020220020320060011402011644010200201007200652008010004064052

2004507040013200440530110085065040640301405201030611163506100805010405
1501007200140406513090301506401010010501070030111625063020640010405220
0103070615014010140540041754001101405103070400103040017001640526301004
0030365303012002070017001501070030150650406403011405011161501050406404
0400502050153066020065303011670109164020501024001700168309016530301161
0040018030660200301653030301805013013010030180501301507020506301601011
6050643601053065506826010654004127050705062002204006010130202200450705
0107003015011159501030801100030150405020400130630190130166410003012306
1003015040200533015064658010600617020080040020608050108020220020020700
1611585064082004004020307030164009050165301670404006018050120010030110
2001001700161157506504061040610030540820061045640202200504020010190217
0051022005040103011086101407024001140501301001540010240031130630163011
0051012405400140040301700161156506200901001013040500101000301108040550
6440104055016600161155506200902404051700180162002070040050191030030150
4080101940560401700116100400150107003015011154401030707010406055015303
0127007040060180100075050191030030150402050100075010140161153501030513
3015070800200701680200703012200401668070301700600115250620090210130405
6201030150620090050104051200400616704060101301045301103014056704400501
6115150620090501040560805011306402020090505067010940060101305506450405
0670440050107003016115050108301903011030640010656214002030130750107003
0153030110103065011149506200900504001308050641020405004020120200300167
0413010015250670406010501700140530401152506200902105010701405304011525
0630092104101405304011525063004010303200140530111485010100419040400502
0501402030162103400601030804056704180402030150040141270530301506450405
0670440050107003015011147506400401904040050140140564040067041402010307
0166040206702400101301045301103014056704400501611465062009050104056080
5011306120090504053050670109400601013061145506100306001040561101030010
0306001013014050620200300101114450620200300101407053030110301704008014
0514001140108012020030053013070318301901405140011403080114350102002013
0030150405050620503018301901504001040015010301405220053030116704400301
0050011403080524002004080180108060013040840030408151300100040014030801
5103015020601030153671550403070365481660805050404020100306001070030165
1142506504061040610030200103002620010700501301150150166030110506040140
6200106003015040400200500204006013021010003014030701400502063065303011
3001401301120080013061708050106080503020304011303010011415064030701013
0601503012005002015020306530301450701540307014050130100155070108082050
1202050630160105400100021301402010400140013080020013016400161406030110
8040030100500651301154001006301510303101301022004507015403070140501301
0015160200405011015701603015070205063016010114050654070104055011010009
1080405200700106530104151308053030130308001050401139506504061054702500

1048101280405303122004001001410050620105011060705016103005040530301100
3060014068002001301640016140603014006203040108016200900501040306111385
0102402001070050130165501550350404052819021401620020804001040306111375
0104004010410205014053010304016113650640307010130500108504040532004400
6050601504001101216270020501070030161135506304701052610083012506451054
0115010030600504040611345063040701016501201405067310605101406011080506
4830105010700301162007006152567041801050608301140601301530306113350630
8011000301405201030613080014053024017050130120201030611525067040601013
0501700140530615250620090210130501070140530615250651008010130263010040
5306050130165033015040120010500204050533015012007004100306113250620060
1600301405201030618030308001050406104400540301658053030145105040113150
6403090010165012040560805016150400110121627002050107003014061003011305
0040160113050620020804001040530703090901003019090100180150400110121627
0020501070030140610030130500402030700500530105202004004006150053010510
3070304084005012302030130500402053050040805165702400168002001301103014
3060015502030615251507080200301501030063061129501061100030150405012080
5019103003015702400180155040600306050180150400110151501040011070030112
5040510307030400161128506703200104053070306400110130130908050203070020
6112750630924030130708014021502030540080140547025040510200700150206302
1005040150612120200300114050116306100400611126501030801100017005507015
0201501540110100301406101630610040050115045300103021630110040202200240
0603014056080501103070405453001640540010200700405200659005040404110502
5040202200700600170016112550610040040040203070305108014016200207001656
1002402015010400114016700600405270100165501165090065309005501204051006
8030233011501004005070016112450108309040301200317010800501301501513090
3011640110016214002030125062060401050107003016112350630100704001308015
0610040010501070030302001060052006001301200143016510801401660200461008
3011301530301103070163061001013050121400203011001500104040510307070060
0610403015670060011053050040800200704054001105016150302008010001060506
3061001061050413011700580020070506700600110214002030116500200680306004
0547025040803060080112250670320010405307030400110106030164001506083012
4051506302620307005064405504065068301903014055040140401800200130110804
0515070910061121401082002006801000305501621100703017010200603020220050
1217007030166040540660105040540110100301406101030140510307050500702103
0202200507001400700161120501010601600542001001650620405301503010055070
1655014050701640070140308011195061006080101650120140260101022170070216
4030900501070030115070060016660301507050655010501070030115010350152162
0020700140166050140308011185061004001040530703064020220010301520070070
4016301100141043001217007040527007040614052030540530301140610050690070
4004030405504054014003011007001611175061006080101650120140240563025020

3070020405104001400130506400260101304061061702003004054002604061040550
1400108405104001400700140026030110805064701070012008230152008001840050
1201040030151020010030150704053016016111650640309001016501201402140603
0150401732004051030701503060200180405303010100107003012001010001306100
4055040164030900501070030130428011155010506084030141075060402040011010
9600402030200801000501436021230116306004165981630610064040010300500108
1550401630206510200100301570051650206014053030101007001611145064030900
1040560805011650120502030615064030900140640201501007200140400121095040
1630201063060301650403014051030701503075016401401000301405103070150303
0900640522003004060150130204030704100150107052003007014005050015504040
0603250180200383012019070222008001501540610051100604006017001106064010
3011501086161404011912601520030070104005050014051507091006111350630470
1052610083012506451054011060640406100504061112506440054004020307030567
0240016540014030206530301250406101070030110401301102503015306602006530
3012165040180400104010610108106513015301130800200130164001614060301203
0405301070030117010403402010301530301306602001050160150301151011103010
0111150683080403014052010306157040307501107003012006503011670240016562
0090506562007706521650401501070030180405103070400501201040030130130100
0130164052009014055070708001065001012600301405103070402008106400121093
0140530308106200205040301507040515501068062007040301240520040110301035
0130165120064003011080405450701264002040550643101070030110401301102503
0130660200301506702400105010700301111050650406101504001101240550107003
0165120730150640061065061004001050107003030152400201608010300302040070
6061040040820061300150405221090110217007030110020103011504515015200600
1301108065506081105043015700510801503024002016110950102008011000301200
1060040050161504082001615030200801000180150103064005011300400504010454
0061300400504015230800400204005040080130110550115040158060301307080140
2150203054001101101630210050404054002030514001030063022003011005803200
3014054007006001140308015040011001040301303200501070260540610010606402
0014006001611085062520010405220030405501070030305408200610451540060060
5010806816301301700600128001000301106064050704002060140306110740108200
2006801000301547025040202200501165040161547025040162140040500400110106
0301163040705010700301611065010200400804030110735020307002061105043015
1108301108053070064052200504028001000405301501060303703011670060040015
0107003015011105501040812003014082001400501620400408200108015030600416
1060013061030200801000122003011001104501040301900301406100301704010503
0703400130614701301102400403004001308010505063040010010164120610506807
0800400601406100301501401502130110051030152003105106001601200270060016
8163013011010030164020220020040140400303701104702504010506404008030600
1406010230110018060150128001000540610010301106064070320014030611035010

2006016003015040505062050301503020080100010615022001504082001040305010
3016301100163080041004055011612006405104101108091006014030611025010403
0190016501206567006004001130102604051045101306405403020101305501162001
0403012001660053014603130370405103085040547025040106064040610070060040
0161101506304070101650120140130150673103054053014070140092852006001301
1100306150400110121627002050107003016110050103080110001550701650120615
0400110121627002040550122030700130102605670060040010101000301301026016
2001050161301026056700600400101304300200301301026016200105016152165040
6101305101302016200105016100830120010100028002001301108050620022040010
5010700301104001101507080200901601099501010060180301200144020102001601
5506081216700600110204061002004016561002157006008010300302030130109080
4006590070640103003020504081630130110805301502400206109850102002013003
0150405020620400104001140700600801040130202610400130160200260150301103
0702040010809901105011060640110301100109750105040640301306115016201030
1400240020501826030110010018011403080110070901060640200600612045307033
0233030522001030340014030801050120040080660805501204020010040060150180
3023301103012009005015020306105012004005030301100201030120090050110502
0012200301100522005403020615040011001040301060640131403061096501046080
4030130102607024004001306830901610406100108010508030600150620015510600
1301060640301100653010305010702200152200400110010404040080200300702151
5040404001653010305010500130500106064015047016610954010900704020220050
4013024020307001080640201605050610840060106402015021506304001001021700
7030166040205064066010506702008030150404020150103501700161094501040301
7030110307040203080080656153014020101000215303012001010001301100109350
6304070101650120140309126510804051402002400401306550110925063053400406
1004020501301100553014053014020153011503030703110606401101630110040530
4015090110307050680207010406100103070164001802008230130101012006011050
2215076136109150630020070101650120140654061006506702008070509010501201
4015020040461620029014023010101200601105021030701050608301202200400403
0204004040061510801502020012104003011522001100040680020013011002001300
4050680708004006010165012050107003014061003011505002006161090501030801
1000155070165012061504001101216270020405501240103011080405150100200100
0180405504015040100400501801089506500205010405170015610003012405303110
3017320030140550701508030020140308010883010101200601105022070405030602
0050306203050504065030732003011507040080300205010302045070457014022022
0015030704110606401101630110073200301405103070701006140306108750104020
0340140610016501206162002204006018040013090804040011014043016704180800
3016304010030164120033016501806930140510307015030602001801086501050406
4022030508501408015215020086040030510150405215040014001405401630110061
0855064030701013040520050020150203065303014507040520010191405011301570

4050406106064021620010910510106040529040050165700515030163011005506083
0140540013170018010845062002070010405307030400120040500301504090100506
5010506030125067020080301150700600141003061083506304070400801020200900
5010808002001301108040208030600400601064020647020305105014020220010607
0301100150400103140470250406150104001400501302100504015010700611630110
0108250101004004030305210017030165412705040130010504015500200610530308
0020013015011620029016530301216501070400601540610030106064030110010815
0620051100405100680150164051605010108400605064051502130400100506030110
0204005301620200700106800200130110801646080103054061006106064020070040
0150670200804061005040130403013011006108050104030604015080640061200290
1501030701000200801150220015040013140301502200400110121504015011301150
4040100504001406107950623010050401502200103011501163011001078501070403
1402050230901304050080130600504040203032001640201041015070910013010775
0640307040080660801530511550401632006004003055010440301108056404002002
0402002040301700550140203050700150130210052404005040150670200803011001
0765062001561060640220010755010403017030122002150401163011001074501043
1605200860301101003016107350102001000190162301005016203015051623010008
0107250630407010165012014030926100830170100680107150620801101408010030
4001051700180201907010030150110606401030115010861610704010900702008602
1613640562520040060166015030150107011620086016100301140308016100301301
1001069501010030403015085050620505011401610100304005011401106064011016
3011001068501022001004030150403040205016407050301100106750102301100030
1508501502050112003130150305011630110050670200805200860301136106640103
0702008160302022064001101065501020030018501014403011080306020016516001
6532001163011001064506200401400170014080402080020015040402032006001050
1410200101063401030702008160301700550150670200804061005040130403013011
0010625010200900150303018001021051700180541070750610615010240501270500
1051700180519070101003018010605010100419030150404005020501152400180510
1240010340050205013011001059301010120060110502107040306020018040202200
5040550102240204001034100100830113015303011030703061001130501103070100
1010081058501040301703012200504030660200105015067020080110106064030110
0610575010460804030152100170501208010202009005018015216403090080510304
0650670200801030115040011012106064040547025040150500702405001056501010
0601803040520050020115043650164570504040520050020130150436140610555010
2008012030126301001030705303017029102030700203021005040162700201402165
0406103016501201408040015010230124053060200405400134100306151012501504
0201030709010050102001003012030400105450670406010130405804052630100103
0707029506405265070024051502901130050630501153051470250408002001301506
5002001050107003030451040306110535062006016003014061003011301530301200
2040504011013080530301200204016504018011052506270301040561088001506012

4051040011050110200100301305150401611051506401015040561400110215060124
0510400110501102001003013051504018011050506260201016501201402405150700
6001801627002050203068002001301614060301504040012020024051030701508400
8030161004001616504011020010030130515016306104950620070300101304056540
0100024051507006001801200603016120080030115012160404100163011006168070
1040085506083015101060301501204015030424050010485067020080010405307030
1200800301616012301215305115070060011301102505040510200100108015030602
0011406104750102008012040610010307010601801020804020304008905061022004
0013016020040204001000302141003040610011030110064055070103064008010465
0102006016003014051650120121070300162700205010700301151080165010001040
3050120121070300162700205010700301104550104050013405200141080168290180
5803200301405400700600180104450620060160030170014020501121070300404007
0240015010305406100504016200802050107003011304030130110061043501084001
8030120010600400501610083012150406100501026150501028400801150220015030
2064005303011030701403070103003020150220070606150220053030113001050113
0115108046705050115030506201014061550405303011501350700147024020400304
0108015047050112700205303011030701501020040080141001042501052001201502
0630613011001504003040108050467040030611504001020010050402070401650401
5010700301621070300110205032006005030540610050401620022040060150107003
0113040301301100104150104020183012001060065615050102530301402081010400
8162002901801650406104030580101965240030602001107003012165040140205040
5801019501205016104050104608040301521001705012080102016200900501640202
0050020801301030100404005020700116200207001613670155061000240065250401
5040530301301026050705064904006506470640091200903020216470100400130610
3950105040640404005020501402030200106004020307001581309014702800200130
1108016460804001306405110300160150301166060024001306501710403016301020
3011680618040202200504055010240204001341005200101000530150404020301405
3030116427014061001103011001210703004051600150104401030161038501040200
3403015210017050120801020200900501801200940405103070150200940161037501
0200211000301504040050120540012004011301530516515010350180103650620059
4001060150140550140204001020010050404056320060011630110050113015406100
2163501201406103550680200604040610040400501302160503015064504056530030
1320030150640014003040205011034501040301703015040481504015240201002601
4053008180301506400140015406100303011007001196306103350108901503015062
8400130502030640203040089050610220053016020040204001000302141003040610
0110301100640550701030640080103250104050013405200141080168290180580320
0301405400700600180103150103060200403015040400502050115047040014021504
0010183019011016301100640522002004015070164007065100150301162001007080
1030506200801205240400504011070030121501162002204006015010700301301100
1029506504064052306020011402150116301100522005040306020040183019050150

640307040014055040504015040301680708004006015010700303054061005040162 0
022040060150107003011304030130110010285010460804080020013011080165007 0
400130653030113011620020700180140061023012330150640085040061200690100 1
530656050405067006004004008002001301108040201626417047025040180306004 0
203070370011620020700161027401030121700704020700600110806602156604040 0
130653030180020011080302014001562007008051014020305303015100150570054 0
202200504055010240204001341005200101000530150404020301405303011642701 4
061001103011001830190405160014640500103016102650105040640165012014061 5
040011012162700205010700301200214150709100615040540820025704050107003 0
165150103501801025501020090040050403015040402070401050116200900400501 8
050193060504015253030130750140402061216404005011564040010406014060110 8
010505063041340012800100066032004020220050404020103070701006410030110 0
102450101004190301504040050205011504704001402150400180150612142701050 1
201402007005065486530301427050301504001031163011001023506830804004020 3
070305303011301162002070018059602100306003011080402041768650406100470 2
504018030600402030703700116200207001640202007005010304020504030320010 3
070402022005040200207004020135014040023706110225010401890150402030150 1
610220040013016020040201000302110215010403017030122005040306602001050 2
030655180601026010304061001103011001020501027001203015040205090050301 5
016551806010802012005030150154061005040162008020501070030113040301301 1
001019506100400400130801520010100053015040402030140530301164270140610 0
110301100146540516001417010301610185010407014061001650120405501150400 1
101216270020501070030115010020010001620308030110805704050107003016515 0
103501805627002080101750640820040040203070306161004004003064020200700 5
010304020504030320010307040202200504020020700402013501404002370611016 5
064030704001301405303015040403070164020308905016102200400130160200402 0
100030211015501040301703012200504030660200105020306530130800102601030 4
061001103011001014501024030130800108020120050301501540610050401304030 1
301100101340109007040610217007040201030708016001105015200101000530150 4
040203014053030116427014061001103011008054061001030118650150306020014 1
003010125062002030010406100304001101301802009050203070020142050130132 0
060010130500260010700301652200507001254001250320060010210930143023016 1
011506200207004004020307030104006403013200600502030700204001200405003 0
130205040521503200600180140301521503075018040010404302305150100601301 1
005001218604003010011700110400854004082001041050102120030028110200301 3
060200101070030165610105010506084030150402102001005303014004082005011 7
040961806600567041615813090147028002001301108016460804001306100950104 4
007040301281013055015108060061702008004004020220016704110085010403017 0
301220053030120200124002004013016100306003015301301520040124001200600 6
040406350301620040100301660403003016150010500852309102001550301301030 3

0110300100010300200703011030701064006014050040110154006010808002001301
6400161406030110030600107003015303014020220050110075062004008010165012
0140405507030800640560805011620060600410030407050150201070030120010100
0304070508042005061150301670803001080170803005040150303058010083012150
2200306020040013410030210050405660505010700301306100105301061400104001
1040610530106140013015062009005010305100650650406104061003054082006104
5403070103070515030908021400202405150103410030610055064831015040011012
1650120140617005405406101100301660501402040516050504061030180110504301
5110830140540020010006127030616530405501041670060040015010700301100450
1020080120301103070140540200853030150116301100530301402010072001404061
1403015040150103070168001080150155033012189012001503012189011041506100
3506507840040400501130640201030708066001305503301163060041540820025303
0140530150101304040040601001501070030113065110025062002204006040040400
5020140640207040340205070105010001140163011004051401060240550680200701
0130132008012007013012189011041506100150104030190030140610030170401503
0703400130150220016301100200150301218901110030400405200190214008020090
1700161000506704091040561563060041040304020103070401306050155033012189
0116415064051401060213020506802007010301320080120070130110307062138140
5501026999506200801205200600130124056136701550610002106530301301026050
7050649010501070030199850104030190030110307053030155070305014055010250
7006405070018040705016301100110084020220047061404040043630580110081502
2001504706140150436410050120015030121890155033012189011041506997506304
0704004040050201402156404005002006155033014020304005011646506100830121
5022003060200400134100305303011501455011306301044005503015020140617005
3015014510700301530304408301163011006200155013014054008400504010200340
0301000504040520064901080140150707506996506430160015108040555033012189
0120103061157060613011608050803020501304001830190301163040706165040150
1070030169955010403019003011073502030700206300161000405100680504064154
0405053504040530994501040200340301107350203070020691106003014060108030
4033013301010400855033015063060041013061406030121621405308400804001301
5507016200220400601615040011012162700205010700301501993506260204004040
0502014022170070301161006700803080080504015010307040203050120140804051
2006001304051306140030110069925064030704001305020306807080030203030110
0200150301504018070800121700704054001801506308001130651502200405130613
0405120060014003011001701040315108016202001411700110400815400600140050
7030540140030600414030202001503011080605013016503301504040203021005040
4003060041004040110801630600413011009915010200801201650120405501405608
0501103070164530061507016308001630110053030150645040506704400404005020
1405010116301100405506806400101503060200405400131700110400821400203015
0404052109050405301501020103061540011012270020611270020530301103070102

0040080150404040309001504080990506430160015108040520015030121890120103
0611550701620022040060161504001101216270020501070030169895065078104051
3064051030708066001308083090161010040015040801040011014020103070506901
0010402050403060200402050104001101401404110502110988506404100400601013
0657016050620060014006010130405303113170018030315401302030698750640307
0400130140530301103070163061004005016150193060523075010403014053030121
6202003004005016100830120010100021010002301640500130165092140615504020
0590014030081680301102200402008140501301009865064030701040610030400110
1301309080502030700205401101003014061059030160011050430151108301108016
5040150107003030105301001007200301504040012109301654127030320060011040
0301530301550107402008504030100985501080200604030128101305501168020060
4001306162200300161630206436040302045070402040050107167006004041105021
1098450644005404055015062608106530301506450401103061501091103003011670
0600400140550153013080030140510307010081100102008061045110010200809835
0646704004020142140205010430153050109030600405670416436040302045070402
0563616401010016960100301210220020040130100982506403070400130140530301
1030705063061004001130088030122004011013053030150130100152150200401530
3016150121151030701504361630110053008180163070801700169815065040610130
5010700303011030615010911030030115030703150140550620040013050010850405
3010210066540201200105501140540016601405102001030140560123014055070707
5010550330150404020106213200600114020501910300301402050504008010130404
1105021109805062002070010405307030530301400110150402030700200106002030
7001061004003016012306130010200640204001660102001610160123040201030701
5030750141004041105021109795063200600400155040650640064040015108065061
0840015108030110097850108103017014004062001004006040800200130110804020
3066470800702304020800702169251301100977501020060160030150405050620503
0150408200400615030200801000400403050161506080501150403090015022001301
1009765010240647014020305019103003015011402030301001652003300301140203
0400507014020550140301140522001405141506550330110020065040140510307050
1809060010110080961405400166014053040042520033003011100170014030802006
2001000214051304809755010890150301504030140203010501140540601100697450
1043016003015040150620400615010203040150620400501130152003300301570055
0701402022001402015501403011006140540016605040140550701020066140140530
1042103050191030030114053060660680973501040301900301504015062040080520
0330030157005122001004001306140400103005001085040130208055033012036764
0050150206014041110697250107040314020504040505350130401304055040207024
0050403012006844014067004015504032006001301100971501020020130040520050
0201434001306405301014030050706405501401015070640580306005040640510410
1501025040405501040013040500970401010040060403012091200904053050470100
1301050400106100011402803011009695010200900504030150402050130110096850

6500702104061010301105020090050130110096750102001000190301504020501320
0600180151080200220400400501203050620101408015504092518030110096650109
5040540010030600620015050401050400100306005504020010600150130110020400
2004017001436040013012070504014030110096550104316030150405020104030601
0302113011643608040413016436015201013040303015030100405004020150200690
4050040201501003060041003069645062002030040014013010301003001017040151
0804020301503070368002001301108040201502040410030696350640309001015040
0110121650120140240560805011620060600501070030120103061805501071640400
8060050406962506830804030140520103061805501071640400301005005040801008
3017001040610507630169615010210110001502014064030702405103070509010050
3080960501030602004030150301605030640510301306020015010700301503016050
3080959501040301900150201501163011005011301150601240513700140516704501
2014080958506301011004056114001102150601215138015150203051510200100504
0402069575062002070040014013010301001103061550645040167024004001306402
0220050404020103013075011401670240019565010504064030301020020700652200
7005040030550403200820200490108050201013080201030130750121400209559040
3019544010820020068010003055016211007030170102006020220050140201400114
0108040206302103040013200480070210068040208007027080200680020013018010
1306004020307031070030165695350680304006004005108040400502014024020102
5010804020703200404020220010301405001020060012007652007162007400130615
1030701301608050302026020400130610300302022006561220010100021530301200
1010001301009525010403060403013061150164002004012030700265302010200300
1309515010403017030122005303010400140406101108406102060506104001309050
1301009505010202003004030150405012014061801050840105120021530401401010
0150104401010040060409120090103011022001050145105050130100949506403090
0101304056153050040130110731013080510106030121350406153015004012003007
0530805506083012135040948506307080101650120140240510250104050053030110
3014052004011405011030010804055040400603017010300165012064055010416100
2008050107003015019475062009004005040150116200900400501301001200106001
5501401011080400260206130210050404005040150204004030155014010116080507
0805010130202200400110180070210400110406102022004001101800702104001106
1202200104001106152010130403014051040014005011301506200900501030594650
6804901016501201402217007030166015040011015070506804901050107003011073
5060155070804906530301400110122700205040404030900150408054082006104564
0202200504055010240201341008040550401045115020302140020301150103070307
5011501630163061004006194550103080110003040540060120045070150205016150
3021005040501040080101910307021400203013075011405011630610040050194450
6408200400402030703016100400165670240018020200124051503075012140020170
0569435065040610405220011003024053070305408200610456103003020301301090
8040065060811070030110307014014040021400203011060640150104001405009425

0610040040040203070305240201906402030700530102605070402021002008040080
3026030116702400400130656702400180140101004006040109120090170055016941
5062002070040040203070305240201906402030700168061530301457026102200100
1700501206306163047018040400301001700161570606130116080508030205013096
0100301250171040301630102030116806165430011000302101040085060811051040
0301213014010400103013014016220010040013069405063010070400402030703052
4020190640203070010083012130153030140200810400301608050301163040010040
0130650921406155040200590014030081680301162200100400130640511016402010
0720050508501001304015040402041306116304001004001306150160815010430163
0126110103005216202003004001301402010307040202200402008140304001163017
0400301009395063047010405220024056520060013012506504061013050107003016
1504001101216270020501070030116517024004001306405704045300400130801645
3005018017005402008530301501506453001050107003014020145300403053010093
8501070403140201453013006308051000301230153830153030803010093750690200
6004001301404005015016509003011301506702400400501150305632006004008040
3070504040204507030530100150601216100170010400840530210050405010700301
2700202030700201030050401504020081306150612113061502020030011405303011
3006301620200300150107003013061001060936501040200340301406100301507056
0124200101306570601654082006700402022003010080206270020501809355061004
1903015016405101000224051501073203070040900702930400600114061110168301
6114052006590040030408140130114054068300405103070150402008405010003016
2001002301504062008090010700302015040200816415501070030110307069344010
8200200680100020220050180417013061000122001010002009800150408052530301
2001010003030511100608061603200550180200107506004083061186806040140461
5400104050620105011301540709104070191030701402008401030110861140108043
1130301009335010403019003014061003011045101305303015014030702001010002
6015030130800103012700205303011030701020040080150404040309001504080170
0525303014020190670011453004040050204015010105005013014018200151030704
0030404003001140150101050050130140140200850102002070030130100501050500
1200100230150406501050500130213015040693250101004190404005020501403070
2105061025050101050050130140182001510307040030404003001140150101050050
1301401402008501020020700301301005010505001770403015040650105050015018
0030150403167151050140500931501024064704020305501501910300301400169600
1670240040013065303014020100720014040163020130020080653064084017050130
1504069305010802006040301281013055011680200604001306541908406105100816
4001620040500117001520040500504016302052130040040200101000615213004004
0501402003016506400107301653020118030400600407020073016306005030164001
3006200704020010100064001300620070404001503130050110700301656929501044
0054016501201406163080041005303011030701200400801530301405100720014016
4020086403070200101000215806040541306116304001005010700301200606004100

9284010307040102085501405809064051073106012020030051080405805400104050
2010501615031671103070402008406150200620700305903016004017050130157005
5069210801401630110069275062004008010165012014024051073106051030701200
4008011510307053030140601506200207001013040170501615200659004004020084
0170501640540707213005050401301154070910130200385002008640170501570051
6301100692650620040080101406405200700805630708014053030113006306405501
0440510307016602301030640564200103040561202003004054130613040010050102
0200300403015040200105002030501072030700206925506402081014016040510120
2003001030130901065805303050120140653030110301309010130804051012020030
0305012014080150101202003003017005640540707253030170051630110080121090
5040170501301650020083015040120070014040530301630703692450640301900301
8308010130550120014301521001705305062040050405064030704008066080304017
0105014020400501204010307016304070140610011030100923501073704024040050
1140640013050647064001405019225010200600140610051020070050404020130050
1140201300101404020470250408030600400601064020257001013001050154082003
0167001050100030120220069215063040701014070308011000220220014061630407
0140404001320043020306920506308011000153051640309002102001003012030540
2022005020104030501203070091950102008012016501204055014056080501103070
1645300611050430151108301405400200100061506080501103070150453001630110
0170054020406101100304020506200700501061040011014020103070506901001040
2050403060200402040011040301605013016503301200300704011091850626020101
6501201402180070250104030190030180070210306502030700206917401030704010
2082022005015303011300140130115108050104301600402016500402001503013011
0015030400303110700301150303115010003026800702215080070270400404006011
5022006050130150404056110306130110066050130150404040020050020400601410
0503301200300704011017010403405200300810406106916506304070101650120140
2405103066564052200450704013060301200144053091550620020700104061003040
0110130115030908041001401010040060402022009120090170056914506504061013
0501070030110307060320030153030130703102030700201406030110804709010140
5012013200811001080052004903070310530800105014200105040640130601303052
0049082003001051045105015303014200105040809135062002040101650120140241
0430021700706530301450702001100090164020031501070030121090106054003016
0200307031050010840307015303015303013060200104006114030500401040065010
4008504065050301630110051014054001317001691250620070300101406405608050
1213015062002040101406151080162002040103015104020034020021201510200100
3020108015030703203070020691150630407010165012014050102008012030305010
7203070020155040320016002601030400140309003011080530500405040206015030
1108052103004010120065053015030703651501010818014001040501205040619105
0620200300403040205014056404007091501640206304131030405101103061103015
0686103050109110300301501610060803055016510307053030140601200207001040

3014040163020140013069095068020040010010165012014025067310604050013015
0626020105010700301501550912640500130120051900162007006908501044007040
3012403070165202200501403070200101000240510165125063080010301200105002
0501651030140400200200980011401301402010307040200814040203030908041006
5103070530301406012002070014040163020140013014020301406907501050406405
4001101240400502050151030705303014060120020700140401630208090650104400
5403012403070165653010260507030800105040403070165202200501905506902006
0010130140550165090030113015067024001050153030130102605070206308001080
0200130110805040200500201709400501690440103070301701040603016565400140
3020303042401301304706110049020220040040302040040400690350102004004040
3015040505062040013080100830122022005040307504055015064030701021400203
0140515010400150107003016130908040214002030140201030130750110700301656
1402081010004002153030120010100080190250680200400100404051401680200400
1001030656800200103065200600130125065040610130501070030154108015103011
0100090400306901506200400801014064052007008056307080140202200130063061
2006200100030610030180200600780070210301405800702108610503301660501301
5010911030016470102503020301503070320307002069005063053104052005002015
0203065303011300105011301165040610301650120140130210010300302040510307
0150200300861040064030140540302065201013040301405103011503075015050163
0689950654070104055011010009108040520070050652004030615216504061040301
4020405200190216405400410801230100506898506504061013040013170011550140
2020070300101406530301450704001101301140501301001525050406103051014054
0013501030405501401014535303012164060100168975063040701016501201402405
1025010804057032004040522001030140500405304070540130203015010720307002
0403070200101000216470530301162601080530301506450405067041050107003011
6260400130689630102062405103070400501140619001080840510307020150307031
4061620200300114053030113006306895501020200300403015070800200701665130
1530113020220050402010301108611407024001894506403070104061003055010250
3064006020041630610010306400110130180200905020307002068939001080824020
1030701501140615103070801040705040656080503080200902150408040202200504
0200101902402013410089220010260030180109303016562001902130120200410656
2001902130152020044001308913010206103003020103070656564270180103003020
1003016006513015301130402022005303014020307008904010307010300302026561
0300302010030600652819053050204004030643065305062010105018002001301640
0161406030170104288950680901014070103017040065501826040307020010100024
0015026501050253016100200600640510030600650330112020030053030163070368
8850650406104061003040011013040203070010805015705010620040500117001520
0405001030116200900501521300400402001010006152400300405014020030165064
0010730162150701504040015036510501450165010015703095040306005030150406
1220120040040128550403200600501200800600550401503200600180103003020400

1250521503200600180140140603015040307501107003016568875065100801040610
0304001101301150309080410070464006040620010040060408054816608050504040
2013005011070030165688650640307010406100304001101301150309080410020082
3016200230140014030900108015216440054003040635030140203030703107003016
5688540103070301710770301200104100400203070015012608200401003016604030
0301615020603010303013070368129013011003018088450620806400105018053030
1402030700108301504040010403013200600406400104030150401083013200600101
0650301628301100301805303015018835064070740040400502014040205070308006
4020501027091004004100301202003004020108040550140400407075010700301402
0170803004020704010200501406402020065900120064020150306600140404002020
0400652004030614020150100306001402010412008015064040010341003068825062
0022040060400540011015070404005020610083012001010005303011030705063061
0040040400502014025065301217007050673400406103014020608050116320060014
0510410169601252010130403016400640301400120040100010805064030190030170
0110200400630653030130750114030500403075016030110050406103005103018610
4030610301108613011006112700205303011030701020040080150404040309001504
0688150690080181040540013090103070405652506504061052006001301250650406
1050107003016153068504061020010030140120070050400306510410501021070030
1100490402020012405150307501214002017005688050627030104058006600108040
5200700405005303013010040206121130640400501164030704004030140404004030
7061200105002050680600400615506424006010912001005506307034006015030301
0456120065010606405213107003012140020301307501504030100103005040200300
2103070530301307501140163011007001520041001008530301162004100140687950
1040301703030102002070013016550112003151030704020301601130301005440010
0140514528053030110455010700301201030618785010200801202152166010301406
1001521503020641008013065152200802010501805625030164020830162140020301
4051501040015010700301201030618775063040701016501201404055070928301620
2003001630654127050401300105040521045105303011045203070087640101004006
0409120090103014051501045640515010240031640550166001640540011020070064
0510121504068755010403017030110307015030800801302061963066050610670601
0301630107014060168745010830190301504030206011030161060107061010810611
0200207687350105060840301107350203070020650620015610606406806061062610
1650140103060646614540010200700504063021005040150104518650615010451302
0261007010610018601530150256687240103070401020820220050113005050404001
3200470802005054061001030704010512002115150104001150400382030400687150
6440054040565040130140530201030614030900240550140101166023010403061650
4015010700301870506403070400404005020501504013012100815010100102008030
1101801501930604020103070523075010403014053030124040020200300140205015
0680160040013064040020200300114080160018010206869506200207004004001308
0114030701030030201022007060611010300102200130010501130152506202003004

0014080160011306501454100653030110801050631840013011005406100531868685
0102020030040301504015011406180105088002001301640016140603012009801070
0303010536400536105018675062020030040014040102002105014061001103011004
0030801140308020022011700510220017005301100510007126040300301101200140
3080866501030180030140610030150405050620130102200105045104030501030301
1003080114030801022001700530110011000712200401003011012001403080865501
0308013012811303011003080114030801022001700530110012206201012003010303
0151030705031403080864501050100640301504050620103068002001301640016140
6030140062030404010512002110200502030700206863501024030130800108020406
1006201200110501553011401509017006004004001200715102130401051200213011
0070016862200102600301401020830165654153003016210100030140301702006903
0110806008050104061020304030153061008301530610050620108050203061001040
6106100830128002001301640016140603011003060010700301656861506200300840
0510301107003016565610040016513090301164010100150168605010403017030122
0030403060503015020040161045301655303011045501301001504001011045301103
0155067041021890153050120010880020013011080501091103003015400654006011
0700301205303011501457001470215021100701103070420050615020080010130615
0708050101301405303015064504067045013010085950620080201016501201402401
0301217007064010408504021200300405301626020140216306021501070030120103
0611550407006006101303047030203047040050167010803001306103065303015064
5040153060103040026020140260805030602400501522002070061105043015110830
1405400200100061653061270304055010416700600400150107003012007006858506
1004001040530703010200207005020306103005040405216085040506100400105010
7003011030701406857501040301900301406100301704010200207003014702470100
4001308050191030030120501060501014016520010100050010481080168006600101
0400840550708002007018015040011011080506800660010501070030140010120017
0016856506403070400806606200100400604012503020308553010206240201030704
0060303010010083016562040610052270020685450651008010405307030400110130
1802009050801020200900501800702601240208007021001070010617010300402060
2301061402030320014008400504061402010068050401217007040201030705007021
0501103070200411003016530100853506202003004004040050140500220020302050
4061550404020103501053030130100852501020020130030150405050620503057005
5040150135015010305108060061702008004005506704400200823016200230140014
0309005040402010350105040301008515010260183017020060165640208301530130
1100830140513064053030110301164200405008505069200801013040561503060200
5400806400400640301402048113170011040085900808402010307030602001065412
7010068020051100301656849506304070400404005020140240201025010405004020
7032004051030140500104060403031108001001030510804020500702104050020015
5030124040082003140403070106301030301240201806400101070030165684850102
4021400201080130160211013062920013068002001301400140309001080528130615

4030701013015100200650409100604001406200823016200230110801404030701066
5130115403070101302101000301840018040545070684750104030190030124030701
5303016402050102610501022004013011080010030525063037040060400140104507
0501630301008465010309018030120010600656100830190100105303013014020830
1501525063037040060400140104507014052404002700206102200504055010210307
0105013010084550104400540301504015011406170014003030800410040201651702
4001130301005303015064504050670440050107003014270150140010550105013010
0844501040200340301301026050102400604003064001101301309080502030700206
8434010820020068010005501808309016547025040214004050053015321660402050
4030407050405501540820030156080501030704020220024002040201030704013060
3010080150400110125065040610501070030120131700168425010200201300301240
3070125303016010301150501025040405103070530301504013065116306100103080
0702240580070215040080203070020684150104030190030150405062040080405420
0940080103005040405103070202160850401406103005040405216085040201030701
4055365064102001010300703016514100030124052200506704105010700301420094
0013068405061004001040530703070108030013061030655064504040530601030405
2200103011620030081050150680160010501070030152200700501683950620020804
0040013080120010902301610407013011064006010305301001030110861014013017
0240015012030401050140203030610011306210100030140307011306530301501017
6001045070402030306100113030100838506100608010165012014022170070301405
6040101504001101216270020501070030168375065078104051306405103070806600
1308083090165040150408050102007005040650102003002401301501030602004030
1306020050140683650640301900301406100301130120305103055200536154001000
2530301217007040201400150140204001012001301008355068049010405405004001
1013018020090508010202009005015240201040011053030120010100053015040402
0263010010307040400600640202001902164020704060530301700600150140400101
2001301008345010403017030122005303044083016164030900501070030140610030
1200214709100808335066030240405170018054001000240515070060011640061140
2168200801700110400810300302021621405103070150840080521620020700140166
0501403080832506304070101650120140501910300301405305010764052630100400
6010050203061670200800400150601240513700113063080831506702008004001040
5307030120080030161601230124051507006001802030210050404040110301150306
0200141003068305062020030040014050660504006130050151030150670440014080
3002010805067044005110130282950101004190404005020501506704400530301200
1010001570160301402040040016153030121700704020140015014020400101200130
1008284010100400604091200901030705307031013001050406530308001053030113
0010504040014030900301108040202640901504001101216270020501070030168275
0620030081040522001030140500103005040214002030110801509200801404020301
5004014040113015108150322001091020010191306800200130110805214504014068
2650640307010130405200500201502030651013075010501103070200411005303015

0130100522005040510151030703075013063016301100682550670320010510301405
0053030140550070210104006403016506704060105010700301210340060101405018
2450103051330150405050620400130801045301103070405704033053030113006306
5101240510400140080140603011080140306061800200130110801100805010100040
0240050140070940060150180405800120070120103070200220501205016823501030
6020040301125050402013410030653030140014030203030424013061502009050405
1400110400816700616162700201401030701620029080203021005040306020040027
0020410030682250648310530301400110125010403019003015020306205062700201
0130405501805063061001010700301205078103055014030705041008215063010070
4001308015061004001050107003030200106005200600130120014303066530627030
1301110504301511083011406820506200710140160130140520065900103070405200
1761506304081040561510801509200801401030701504002006081101630110054001
0002570160301405400131700110400853030111003021627002050107003012006060
0410081950620080204004040050201402217007030116100670080301100150220061
0302163011001008301217005601030130110040522001030701680100670011020040
0630681850105006702402508501406110504301150400110813011055011630110068
1750627001203040550165507016550140301641703016420063063021005040506806
0010165012014040530142302816501050406403015040506205061502200400110122
7002050130642005015040010301101630110080200150301103070168010067001102
0040063068155062007030010140640560805011301506203051050165507050615010
6550705065501040568145010306130120010916011301170055011620080205010700
3013061001020506304131020613170011040081521650406101305101302016200105
0161200100640550170011080656510080105015502014052630100103070150307036
2010301704040060105040405504068135062004008010165012014040550703080064
0560805011030701627002080102020090050181250102020030040150201401502200
5303016163011005011301405400504008050204004030405008115064070740040400
5020501070030140206120200300501011620200300150107003030306100504050017
0104034052003008504061068105064030190030183080101305501540011012270020
6112700205303011030701020040080150404040309001504068095065040610130405
8040560805011620060600501070030140515021506802007010140205506802007010
2140020301405150104001501070030180850620200300400140401020021050501648
1653016514050130100453001130301001020060015530153030170405015064530040
0304020501011000302504065240202007005013050120010030117005103011086164
0205010261050102410530053030130100541530020022011030010130100807200102
6003014010208301656541270100680200511003016568062001041001030030201030
7065802001060022060604010501665130153080300120130802008002530301206060
4010501680550102403017680301203070065408200410080700104061055070802009
0105040804401090070406102170070102200400109070501801600110501301008035
0102020030040301504050506204001306403060150403061506201501400200401105
0130100407091013064070910656800200130164001614060301200918011030670060

0400153030120010100013010080240103070301701040603016562001550301630103
0301108050206014053068015065040610130405804056080501162006060050107003
0151080210200130540110100301406101030140205070403103054082003015608050
1030702400205303030100800200130164001614060301108014050403030100800501
0270020403015210017050120801020162009005014050080020013011080162001060
3010079950610754006010521650120140405504016200600605010700301210018802
0302100504030602002107540060141003067985066023010140405103070150602303
0613032005150307033012030405150307036306797506200900501013040500200401
3011080010030120304015030750163062030405103070307501130630163011006796
5010240200860130117005501162008020501070030130110030405104101256604030
8060192001001080121400202010307015030750630679550102006001150200100405
4702504015013005016405265070024051502030518040540084005040102003400200
1550130115030703612001200440405103070140603011503060200164020305020405
0403014080020013011080405150204050200100504040530210050401502030514020
1620010403017945061075400601052165012014012501405104001108066080405131
4030100830121627002041008079350108002007040155070165012013014052200400
1101504051015040405104001400140679250626020400140403070106402020053640
2020060403070108002001301108064001614060301108053030165679150620040040
4004040050140500545070104060403031613031108001004050050109504040201003
0600107003016579050630470104052200216200802050107003014050020065030164
0014030900301307036800200130164001614060301100306001070030153030440830
1789200104100103003020103070656505108014068002001301640016140603012030
4053030788401090070301768030120307005507016800200640550705303011080020
0142115108050104301600200155013011540084005040102003400400150340530405
1004905010100419030170805010406101700553030130110078740102083017107703
0140050120501804053020080100040050162041270405501804052700704005017864
1053001030030201030704005016405103070210100200301400501400502010504001
0806400140308040510804004041401410530040510307040050206402022006102200
5303011642701501521050400200401140130140530400301001407852610100030140
1307040050120501206080501080140403070113061060805010801404030704005400
4030704100805400301004005020501100821030601030140306100150110305062010
1402050182603011005303015064504050105301104016105067006004001601503030
4003010040050114010200405021106010701105303013011007001678450104030170
3015040148152700701130121700705270070110501804020504047022008020105040
8040201030701530750401050153030130110078350101007120030120010600400501
6150100720016205040510161502006001615030613014107015030506204001406030
1504054101401501030703075011502200405303014010200405021106010703011007
8250104513003015040151030705062050615040010049041005014030705061502630
1005010409400615504030201505014102005016301100781501050406404040050205
0153030116100400130110014060301504054101401501030703075010501202200701

0940060103054010200405021106010701105061020016830130110070017805064030
6040150501245300161504011630110010306602002610216504015015010102001683
0110301400108617001677950102402008601301170055014055040162008020501070
0301301100804001501023012405400103700120507030101012006011050240080802
0700161050700121040064030132006004007001610507001290200213016540201301
1020024006105070012120010950620400801510806008050400801050700122001093
0151010520501093015040100306004007001630103501301651200640030165402083
0162140020301204004030707001613052064540301108060150301403020400604100
3018620022040041017001204004301610307062010307010400407050200207001401
0200405021106010701105303013011007001778261010003014013070400501205011
5030403070130163011004040023117001403061001080306020030153030170403104
0610777501010060180301406100301104510130530301616704060165303011610040
0164055014010147025014010142004005011680160010611553610307054153003012
1640011050110504120307007765010403019003015040301700115011501044007011
4061405400415300504010081150400415300305303012501406010010805011030613
0140510307010084006015010700301504014054011004050140610010501200600180
1405001110084006011405501103070200500705018077550104050013015040301700
1150153030154153004040020501306102200100170050120630615040500521020040
0300501304040024002001501530301250140601001080513090301470250401405506
6028400400640301521090404020400219018080020013011080404002200800404005
0150140202001010005040501200600161402050403047016700501505001510906301
5010840064030140204812008008170014020501025415300165040150107003011510
1110774506304070400404005020140240201025010801701040340207032004053030
1103014040010440051170013080050404020200800101304020608050140201030701
6504015010700301151011107735064400510130611010300506403070101304056121
5012063061150121510307015043614015026081630110030660200301103016530301
3075011401030116301704004053030101001700167725063010070101304052005002
0162700203015303011030705062004008010162008020501070030150203064018130
6530109061306521016013065200108250405303013070314077150102008012015216
8290140500402030210050404061001530160410077040103082006801000530301615
5070530301180704020304240050120010030130750105010815507016301604005016
4020660400402030424005011103001507016301604001301650401501070030115101
1107695068308040040203070302123013011030611105303011610040018050010260
0301520050020202370163062109301650010260030110640060101303010076850640
4002040014065064240014040307010530301610001302301130130660200301103070
1407674010820020068010005303015016211007030141043005303015011640307017
6640103070103003020253030150168002001301108014064001614060301108014040
3070105303015011640307040030203070041013010030161045301640120083012005
3003016601503030140110100401200830140010230152702030153030130703765506
2003008400510301107003015303011610040016140200840400404140200230141090

4020103070402008652001106030306402030170140040540170962008230141090402
0303081764401100400501670071077053030165504053030140100400501080417050
4068030601407053030118070520040130126100670010301401109020307003047061
5010201604040170952001802061527020301100030121104540205040304701670052
4020810407050301504030400100140305004017380144070400404020504053040010
0504064020084040050164109030116304001004001301650401501070030115101110
7634010301217007053080203070047021044007015040802101000301258016001050
4053030140307010304020814020064020104101530150400410903015040103002530
3014020506302103016504015010700301151011107625010506084030128105303016
1650608161610040014050016504016161004001405004001830190301163040706165
0401616100400114017001164070914010808150340018301903011630407061650401
5010700301103070601030761501024030110001302301150306602001030701405011
6403070180404001030640050180162007008163066020030116701091653030116701
0916760506540050404040050130580513090301507065303012002070050704020490
1062006010403016200406003011080180010002301656147030140205010270100610
5015019103003014102001014050175950683080400402030703056250400318050191
0300301304070504060320040130713016219050130162006010403016200406003011
4050116504015010700301151011107585062002030040040203070305400110140203
0530301501021020307002040205014010116900808164040080308170014020501401
0152001802020307004011015500130500401109080431040305040805210020020010
2008400614054006602061402010305150640709400140960615040501020160405200
3007040170915400200180208050140101301404004100701402402070060016105020
3064020501401011080610003030125303014020700600161013075750650406405240
4005011070030153030116100400161210913013085303014020100720014040163020
6756501044007040301281013053030150116440070400130640203053030130811404
0012109164020084001301650401501070030115101110755401083301218901201030
6115040011012162700206162008020501070030167545010506084030117320307006
1510805010430160020015501301154008400504010200340040015031630110014025
3030140521500180753501083019030140610030170401502200150306004105017040
9506100830150401501314065303012504065013015030140675250104513003017040
1502400201801504011502200506306100101008301504016802007014040704043015
0408001080400405501070110200400306602003011030130750114016704060170016
7515062002204006010130405501615012520065010601060100405504050122030700
1020019050150116301100501070030116504015010700303054640405220010015043
4003061620200300150107003016465103011650401501070030305614706015030143
0015043400307505061006018040550401200105002050203061103061405670060040
0114051030130750114061025030165303012506504061016501206306749506430160
0405217007030110806405103070530301960060501405608050140530400404100140
6010230162008020501070030150630640010405504012001050020102004007485063
0708010165012014060102305630708020020504050705065150400101301650120747

5064400701016501206169070140220307004010200405021106010706466145016030
1030703010101200601105025040162008020501070030150703074630102603011660
5070163080061200105002016308001630210050401630800410040610016511670240
0400130610083012001010004020501041080163010004001302140020301305111030
1007454010307030170104060301655303016170805013061200800402030203040101
3014053030150645040506427040013010074450620806101050120090050140500400
1101301405305010250801020200900501401709301501302011015012051001049054
0163060200301530210050404003060041003066020013014010200405021810604030
1140743401082002006801000530301655062008010004006010653030110301506264
0010130801742401030121700704055040162008020501070030150604010305063061
0010140701654005010403050164816530113015301504014065500130500500301500
5303015011630110050107003012008020410030741200190501504050104030190030
3014062001503015161406550330151030705303014020084100805303012202003001
0504055014020220061022005303011642701301010120060110502110810604030130
1100640102004050218106040301655303015011630110050107003012008020410030
7405063040701014022001090253030164055040200105002016409061640704050040
5103070530301214004050016409061640708055040080506204001301162608673950
6304001001011001020080616270020110010200804056080501106540013014023066
0200405131403020130602004051030115030602001630101012006011050210015001
0401507006001410030738506507810405130640510307080660013080183019030407
0620060013014061030165303012504015040102001905030165061021903016164155
0107003016165040150107003015017375010200801203014061003011030706014001
3080120080206150110100092022005040201030130750114040550401200105002050
4107103064020220050404020103013075011406301035013016512006400301164010
1004001040081030010307040400603021400203013051110301007365010200801203
0140610030110451013053030150160150301504020409070105303016540030160200
4001000302140803070804004030501620220050402010301307501140100030230660
2003011510111073550630407010140160405504020010500206549040010040540140
5504040530320014008400504064051006805040163020130405220050404051030130
7501140630103501301651200640030116401100140550163067344010705030140015
0340515030600413064054001101060405507015020080203016100400161650401214
0020301305150163067335010460804030128101305303016141608080020013011080
5067060106530301151809122008303012001501641006114030205401101003014061
0103011800100023016561470301405501021501010030161200802061501101000920
2200504020103013075011404055040120010500205041071030613001080102010080
5010501400966024051410302163011001402165070306405104101400301000530630
1000405303014104651030140030110067325067050901016501201406010230400860
3014053020164050013014053061005070200128130165061050122003014051550101
3063073150630407010165012014060102304008603014053020165016470301640500
1301108050670200160104055040120010500201020040067305064040020101650120

1402403070153030165216320060041004056200802030121630600441006150401163
0110040206131700167293010260301166050703080016150120402003002010306140
0610001930142706200107150600301654200100301405504030703651030702800100
0653030155070305040530301450705265004020307005040200300240201025013053
0100728506100601804020200500201501630210050403075011406150103013075011
4065303012150401501130115040506401005040030521400203013051110301007275
0630100701013040610040550122030700127030616751567006004001513090301103
0140400104150170016726501050406404040050205015303011610040016110306120
0180203016402030210050402140020301164006150107003015040127030616754020
5010416700600400150107003011670060040040013016504015010700301151011107
2550623011000301405530301278501801650401501070030165306602006530301306
4001050406724506702012004056512073015064006106513090301506401010010501
0700301165040150107003016530660200653030140201030614050172340103070706
0165303016130010504051040061053030130800802030700401013054063050680160
0101306530301301026010805064513105010200801203011030705770150105040640
3011030705307001550628106405281040610025303011040011080660805501045070
4020504044002001050401650401501070030115101110722501020060160016829018
0405301407014009284020704030405501405501401014535303012164060100150107
0030113065116504015010700301306100106721501040415040560805011080162006
0114010307016829010805450705040200401618400803012104001105015303011060
7080520010141502109040050110300600505063061001040510805067020016010800
2004040526301001080501070030110200400807205010403019003014061003011045
1013053030150140550405501804020504040530640010504068007021103061405800
7021103061102001905030164651030116700600400400130165040150107003011510
1110719506501006104061003014020853030150405060815040650610002105103051
3301402088017185061006018030601503015040120010500205016405265070080070
2240521090105015303014102001014050140307018016306400501802010301530301
3075011408007025070206504008010501405200700816405165170240040013065303
0130750114024055010240208150167175068030400600400510804040050201402402
0102501080170104034020703200405303011030140012001060030116100240060180
4020140011401080402063021030502030654816540140203070330530301130063061
3155040657020030040205040150307033020301008301504020131407040516517024
0040013065303013075011402405501024020818051030701504010540621400203015
0405104105010214030110049040100830122140020301201030115030750167165061
0060180301405201030618053030130750114024020810403050406510805303013075
0114023010350130130514020810306715501010040040303059007064061045651200
6400301504051041050102140301100490406200650610455108030103501301515010
4001651200640030150405104105010214030110049040401020040502110601070240
5200150011030701501080100671450640301900301405201030618053030130750114
0240208104030504065305200180206580521004904005040809019010086200330165

0603012506030165070013012507001301680501301280501301650107030125010703
0166080503012608050301501151080405103070150240020671350620080120301405
2010306180530301307501140240208104030504061301030100150405001040011012
1620040030040013065063006001660150301163006004001308014530051030701650
1206530301214002050401690080840060114022001281301650610501220030161641
5501070030301640306015010700301506102503011524020810200650610451510805
1200640030115030750115017125010504064030122010306114062030700470250405
0630640010405005303014020815108051200640030140545070620506402081080102
0671150109601004030128105303015019601003012405501024020818040040208501
6110103002062008001050308040550708002007040050164055070800200701614055
0102402081802061350180400860303050630120127002030305067014060710401090
0702170070520060013011080405306107600110504301108040530405263010020059
1050153030142001040305010700301201030611101030053030150405302030404005
0308054005040080530301420010504061620070081805640064004030501656700600
8017005404001040061501506306100105708001640470250404030203015068020081
0206400110403050102006001406100305067014060270020303050670140601641550
1070030150406405263010050406400403064055168012150401163011005010700301
5040200802030110805067020016010501070030120507810130306602003011510111
0709200104100103003020103070530301613001050403020080100010613001050402
7007010800200130164001614060301203040530530301501403070400403017084010
8200200680100053030150151030702640010530301501808309016540309004702504
0214005040807074010208710770530301653030150401301205012602014021731405
1041011670910018051002001603016100200160301670640101004021700704053061
5504050103200160024051406200150301504016320060010501506410200107054010
3012170070405306405504030210040014054011010030140610217007050405216440
0801030570405305004061701040380020013011080140405305016301620080205010
7003015017045068308040040203070305301026010801645136530106063015103011
6100040021653030116100400116504015010700301151011107034010820020068010
0053030150116403070180405103070162004100400501302100504016214005010700
3011301702401090070217007052006001301108040530611050430110801076004053
0203070080020013015040168050106180130600504040530320016405104101709100
4006116230901061163040010010501141608080020013011080506706010653066020
0653030150622001810501070030117314050170150680200604030800200130110802
0307004702405504012001050020501405004001501023012150306020040540013410
0306170104036015030111081140501208015110815040617010403601503013040010
0140501208080020013011080416080616080502001010002160805030400100504055
0130101012006011050210307015024002020307003031504070050104041503015040
8290180106001566010200161802120010003011700530500405062015014007370114
0030106110301100510600156601020016108010205102001030800200130110805008
2101212001000530301500702806995010200601600301504082901805304001008051

0600130400100560805053040070698069850104030190030117320307006200150301
2189015040506204008020405001610405001262400501410200110501697501040301
7030122005303018016001105012030400100130201030110410960122150114010503
0400100400302041010301400960250103069650101004004030150405303013021004
0010140501301100205030400100130301100200600130150403021004001040306140
5481504030210040080150122001001220010070011008301240411050211250405103
0703040016695501010060180301406100301103070601400130808002001301108050
6510400105506050107022001405103070540200840155018030110069450101006018
0301406100301501026150501021002008018010600161060805013012030401130105
0122003011006935064701100150515150113040011008020220064005012570018015
1080164014140142115306004505030150110606401101630110069250105040640404
0050205011630206400805303011030706506230110004020501805640400306004170
0180212301405103070163060041140510307053030140705015068016001050107003
0150405013032003011006915063060014150180155040163200600105018015504016
3200600101040081530600450503015016501020012314061001510805011060640110
1630110069050102006016001623010050400804020200124110307016440020040013
0640203053030124002010400301560410040301800200130116306004140610011068
9501040301703015040148140061040301404020140016120630404020307036110250
1402010803070370014020103070530301540705016200207001406100110540610030
1060640301100700166882001041001030030201030705303016200107005062001030
0240201341008020010700501306200103002504015013140163061004005013060200
3015040520040080103070402030501021015030660200402013410021400203013051
1106872001090403015103016140550102140680020013016400161406030120304053
0306130010504027007010613001050403020080100010100306005040402003002404
0050130240202650700240202700701040308030100561281653030115021508501020
0190503016465103014003011006686200104100103003020103070530301613001014
0100306001014055010214068002001301640016140603012030405303061701040380
0200130110805040654016401020040502181060403012030510501412001501110103
0053030150402030401050408030100401020040502181060403016553030150116301
1005010700301200802041003068540101004006040912009010301405104510655070
0122006503011030140014030900301504040532006001064013060301302605501680
0200702400150405303015210451068450102402140020620065053030150404020134
1002001050020507068070106214002030150405068060040040400502014040120010
5002040203050102101503066020040201341002140020301305111068350670509010
1650120140253030140510250108066065401101003014061010301180010002301656
1470301405501021501020010001805216200207001404019008166050804051001500
1040150700600110200190501501163011005010700301504066825010506084030128
1053030150188090164055070807018040550401301030100130140550405501016001
0307070309400301740013065216200207001404019008166050657080016405070403
0203015068020081051060110040526301001503070364051507030405100150010404

0580010050140280681301026030116603080041008040205040203070047022008020
5040802001550130115400840050401020034004001503402050306004130640204001
1010604020507050200802013015060818002001005303014040080020010016405640
4002007706103060200240400504016512073014040010400165130903014040040100
1501030402070401050153030130110061210100502003007010505001405504015050
0702630101012006011050210015001040530301700600141003066805065040640301
3020640010308053030110307065303011610040016402050704051041018020804051
0410140201030116960210501406100405700140201030705303014004070501620020
7001165040150107003011510111067940108330121890120103061150400110121627
0020616200802050107003016678401090070200316520080100040405304001830190
3011630407061650401501070030153030147066775063040704001402200102600530
3015015303011610040016106100400303022001001651630470116304704001301103
0704061005015030040205040200310130696010030121453005303050104016100165
0620165040150107003011510111067620064903014001700240103070530301501530
3011610040016150709161507040604040030100700152402010050016107003015100
1500104064020103070530301540705016200207001667550620020300400402030703
0402010307054004070504040010306402020059103041020010502030632008504040
2010307030703103053030141020010140550404020104101640205636216860401801
2109141070901640401040080140164340040308016050301404006040130619101100
0301504040205040481136120080601030706110800200404040050205016162005918
0125034040050205016501027020301103014020303200164020606200216860401610
0801200403011030140201041016402056361630601000180513090301103014040040
1001700116504015010700301151011106745010200601600301504052006001301108
0656530407092841008050140101301220080201050406501460011070060040040130
6501088016040200101000501050908405052006315056404001040011700140203021
0050402140020301164006150107003015040400150908403016400150406403015040
4001509084030164053030840204017096402030308214002030116400615010700301
4017096400121093014020303081406103016732160830170102006053030150153030
1161004001651030705303014060116200207001640201030705020604011404016302
0805303014020403070140405055064030704005010230204082001633015040404004
0307014064001210930140203030813010040530308117001402050630160106724010
8200200680100053030150180405001308050134004020010100059040600401080200
9800150408015010440130601301402030400108002006104004070504020103070400
4040400164020501044020304003040201406103015063006001640563006004001308
0402050104504016200802050107003016010104061030110060804020307004013071
3012164060100400604005016290503011030708270014064040010207001401301702
6030130201140658109503016510420040040301657006100640301651005060050403
0165253030120010100030305114062001075060030140830640430165400104030140
2010307040040200867121100703014104300530301501530301161004001650164703
0164050013011030701650617040013061061004003016200230110307016506170400

6164400704005014012008301436040301507040206490501406100501503004020504
0200310130616419901804040030308170016150168002006405220050401308008050
6100040021040120083014001023015010401130641013010030113061045301130640
1200830120053003011306530301200101703001630840013016504015010700301151
0111067041020010140402081053030150140200840400501641090301103084020010
1000402010307010304001014013014017050130154010524020304003081461007030
1216806116504015010700301151011106694010307010300302025303016163080040
0501402030530301501021050101050050130190083050040200207003030801605061
3013200566001165012050162020040014040501500305003011405308050104005050
0114005012050180430615305020104030501155002001065620200400140809050153
0804006001530643065306010302030562004015015301302030110804020104008010
5303013010020506400804006010668140101004006040191200905103014051045106
3080080655040540820010804053060041060805216409040070165303012165040150
1070030114018066715010240120065040201030115030750164020220050405015200
2402013410060150301151011106661200109050130611030653030150645040405305
0643101306140103011217007040527007010801620022040060161680205040060150
1070030114016530800805040405410710640520063140510806108040018301903011
6304070616504015010700301140180665170104035103014052003008106080200220
4006010654004127050708020504006010504065062200100403015201013040301130
6530301427050620105018106040301802050400601050306641301020653030121080
2068002001301108014064001614060301108014053043065305062010501550182604
8165301530301140501402030120010600165400501550013050016306100400130653
0602006530301216504018055040862006401020040103011511003015400403020653
0301306602004010200405021106010708106040301140501100830113015303011030
7016306100400130640205010410801630100040013021400203013051110663140102
0814010307053030150120680020013016400161406030110801405303050180162008
0204005016402030120010600165040180402022005040100830123066020030140201
3410060150301151011106621200106010530301103070203070050120614211510805
0104301600405053100102009130166111001020094051045103013064053020080100
0103053030150201040301640309006162008020501070030150166014107021301308
0016308004100530301301026050701649061620080205010700301501659141053005
3030121080206506453001052010130403016540307025307501201030130750114024
5300105303015020306581401020817107705303015012063060200301470253853030
1103070601503030506201013010305010200700504065010200300240130602006571
4010302040010606405303014030206201030704059090100504030130602006302100
5040201030704051509090100410013060200665612006274661415010400165014010
3060650620015660506106261016106010706912601301626100701061001860163010
7014060164010512002110301150108616547025040501010250301686501030115010
8611402020103011501086115016551401090070120031405104006506020103061200
6001301406103016530301250650406403016512073015064006403016513090301501

0401010040301620302100504030750114062010301307501140250650406105065040
6403016405504040307030110805066006012003015020306541401030112170070405
5040501020080120303015044007016309123012601503013016401405302016550701
6550410061220030140570060016653120010500205303013010260507040549026405
3040030814001210940510307015040200816415501070030150404030900280652141
0530040510307050620105401101003014061065400640302100525050406103013012
1400203013051504050166511401020817107705303015012065103015303015708020
0302650150101001056304001001406509003017012400113014030705040524053014
0550402030010803051080168030400600150107003015016405305230050203065623
0901406563040010014065303013066020040102004050211060107081060403011503
0400100150140530610066491401090070150140052401020040103070405306100640
5200802026648130103010013015065040610130804052008020215103070530301702
9302803010001502630100405306100610082001010002110250130140530400100653
0301400110124052008020640510015001040405800100501402806471900103010001
1001500104040550401507006001640026030110801647040013040530150301006143
6021230116306004140530150301006405100150010402200693014051006801507080
2006646150102401501930601060640150104001620307005070150680708040015010
2301405400131404702504030370301167006004001405004054030900251007019030
1405400700600180520053530301150200116301100802030700504020022011060640
1630160410080140603015040121400204051030703075040050121400203013051203
0160106451401082001200680100053030150120640520063140510400610806602010
3061405504048150102161002008010403065306020065303012165040150107003016
6441501054012170070501020080120303015044007016110085062008012030140520
1030616431301026020307005010216700600400105015064102001068007022200802
0506800702250406505063061001065306020065303015010216100200801050150641
0200106530602006530301250620080201050107003015016421200104100168070501
2053030150180660507016807040061568060040061120010600164240050164114010
3070170104060530301501206403090050401301306100301504066030122005330153
0301281013064014010307012002013005303015012064040050401640400200203005
0140202170070253030130708010140639140109007012003150105040640301530301
4006108066065010504064030170402010306180530304055010416903060016530301
2164090400701616830901616214005010700301130163812001090504053043400503
0620015030150403080601301202004301108050101008015040301501637150102401
5019306040201030705303016307034005015064102004001501050406403015064504
0110306150102008012030116700600400400130165040150107003011510111063613
0102605304340050308053030130308001050406130651030113061306510301130203
0700501025010270027004063513010301001301530301506200207001013066015030
1506120010103016020164011005130903011030116401100170016405704160065653
0301506704160010501010080150403015016341301026050105040640301103070501
0200801203030530301307031050306540110100301406104020501024020810530301

8050105040640301504040207050405064020103070700684006050403011630110021
0905050102008012030305012050164020704050205040301163011005303015040840
0804020305012050180402025069022004001050107003016331701040340505310805
0102008012030165010100801504030170401353030150140530500401700140205015
2001010005001048108016800660010104008405704016470100400130801521754006
0106152200802010530301400110140400704060170015012140020301108040201030
7030750410066321701040353030577030150180577030140545070506100040021015
0105040640301506450401103061501020080120301506700600400105010700301631
1401030112170070405305012501010080150403012003002630130102604051045103
0130640530200801000103053030150201040301200802016414714050016200802040
5001650401405001620080204050016504015010700301501629141070213013080030
8004100802006001301406103016530602006524002065400201013040653030122008
0201050406302100504030750110700301214002030165306602001030703075010700
3012140020301653066020065303012165040116504015010700301151011106281200
1026005063040704001402501205303015018016800200704006116630400501616304
7040050110653011670240040013080140521030615303018012001010080611105010
0050201050150102200100130165010430163016140206080501103070630653030145
3009601003012501040161001650620165040150107003011510111062712001090217
0104060530301501206520060013016110504301216500530301450708011050430121
6500410200105012050406261200104100203070010307053030150120650102006001
2400110660150301151014020257001013001050162513010206530301210802068002
0013011080140640016140603011080140530306624141040811050100053030150120
6800200130110801406400161406030110801405303050180162008020400501653030
1161004001501402011016402030210050402140020301164006150107003011501090
6410030680020013011080140640016140603011080140530306623140102081706016
5303015012065400706050401302053030150100010110020080400105016622140108
2001200680100050120530301501801610040040061683090400501651003070403012
0156200700400803010403013020163010404001308040400902008630616050301501
0216304704005011670109400604005030662112001026005063040704001402501205
3030150180161004004006165060840050168300301608050130140020080081620010
6008309030161830901405501021830901050114051030708150313080180012007016
1176300501530702504040080160051200401501662014010307052501205303015018
0200106005040163070804001406960100301210401400103030164061004005016501
4306301504050108070800400604030165056820504005015062100020040065053024
0020140505506400640013010400130301160503011040140010108021400203011080
4020103070103040010140650510804020104008010530301301001605030110802050
6400804006010661919108401030030202530301501206800200130110801406400161
4060301108014053030661813010306004010512002153030170060040016180105084
0105120021530407024001650608406565303055364030601504040150104506081504
0661712001010050506403090010130655033015063060041020103061805040640656

105005016120020700504040018301903015040304070105040661612001090501306 1
103065303015064504053043101306527310166030407010504021400203013051105 0
140113064020105014012601030615130101005303015040100490150406110085303 0
147061421151080501043016002001550130115400840050401020034004001503405 3
060045060400183019030116304070616504015010700301661419010840155070506 4
310130640505340516140201030616131200620010001301501910300301405470101 4
064051050401064054701061215010240150120060600200606004100805303015064 5
040110306501910300301700600400105040653030110030600502001010001030804 0
550200401306401705013015017001502040021030804055020040130640550105040 1
306405503080013066111800620080401210905020412705040507006004001303011 0
065303015507030610141020040150191030013015067041050161500150113015506 4
504050670410501609141070213013080030800410080530301220200300105040613 0
010504030203070050641402008010001065220200300105012008010001013053030 1
501608120010904040016064050535309050610306400140530650501050406403013 0
102602001010007024001061045301530501024001404702504030660200301100100 1
300105040660714010900701200315104006508066080530301400180020040110004 0
021203070030708010504066015030150102813090161806200704061510049022004 0
150401301405163505040200105002010802001060013060614010900702010307053 0
301308008050120640307040050204004030140204030706540208301621400203012 0
103070530301307501610300504020506200800101406405608050113015063080010 1
406206308001050140550405801019400405305400408200620103070530301308008 0
130630660515010240140500161501400523040400814100801101020025240200104 0
500140500161510109600260201050406604140102081401030705303015012065608 0
501030705260201014050180140500126020105040660314010820012006801000530 3
014310530301200801000400601040500560805040309001061166030407010504066 0
213010206405103070506201050404015401101003014061040550705303013041310 5
040801105043015110830110804055070404003041313065404005011560119108405 0
630407010140253030150120630610030150401080020010130140506400102107001 4
057040656530301504050680600400601013066015030150405068060040060106001 4
010500115016600501205040281013053030150140560805015065014006001050107 0
030150703041340013065991401082001200680100050120530301501530301200801 0
004006016598140109060050105010160030305020400130653030120120011402601 5
030150102402084003010083012214002030120103011503075011501597140102081 4
010307053030150120650632001013014053030150405063200400650640301400140 2
050640301104055018050640301400165062040050140610030111000400211080165 0
540013065961400610064012140020501050406403011030704005012051309030150 1
513090301164010100180404005050140911700180402026503103070614670100614 0
110100530301162002070018051309030140400108001001700180595150105401217 0
070501020080120303047015303015014020200700816700600640204008306011670 8
004005011080020040404005020612009405040107001402025012050140201030708 1

5031306548165301040402010307050630104010804020400704004016402040083060
1507050630801000400630162008020501070030146405400830601640520070081670
0600110306207040163090103080163090104030102006001580101940014003064020
1012006504016506201030801643601700180405400830601167006001103062070404
0550405801019401004003080513090301405304004010018040510804005020170016
5941501024016470402030165012050102008012030150116200802050107003014020
5040080105014040080600501513090301504016200901004005018150340201030706
0103080800200130110804040022008001700165931401082001200680100053030150
1206530301103070520031701006410080400640301520200410405005306602006530
3011030112003154054001025040320060010504065706061200105002014010001200
4080020013011080431053030130102601080200315105040659212006801000168070
5303015012064055070680701050153030110607020103061805911301026050644005
1013065301085067010940060101305014306301616050301630132003015040501080
7080040060403011301590120010904040016064050534051614020103061801510801
6200315400805706016530301800200150204004030116301100800200130110805010
8070800400604015020163011004040050204010801630110040560805011040301900
5201013040301405180640050107003015015891401082001200680100053030150120
6540820065200801000406550404001320045881401090070120031501047011003011
0307050104513403015303013080080610506083015303014706130206532004501047
0110030110307040560805016405301640125010451340301530301308008040560805
0164053016401253030130102601080506451340301620020080030110306120010100
0501050406403015040506470110030110640060101305871200102600506304070400
1402501205303015011650102400804020103070530301504080302100504040400502
0203070020520010500204050110004053030145070801105043015110830180020070
5061000400240015040640400603040130603014020103011010030150403016306100
4001306165010240080530301301026010804040022008001700116504015010700301
1510111058614010900701217007053047016550703065103070530301280010006151
0801430160040505356173801440704004015040640304001001050406585140102081
4010307053030150120653030150405264005010702140040040501020053004011090
8043104030504080550406405210020020010200840065305110301540306040510480
1001500104040550102640205010240610050405012050165504064052100200200102
0084008050406406564020306470406100504050120501801610049010501130153051
1030154030604051046550406405210020020010200840080196001504064030400100
5040619600130115040640304001001050150406403050120140658415010240150193
0604051030704020301503070340201030616405640400801005005001084056304001
0016405670060080405104101168020106403060301402010301161003010640206307
4007010403050180151080166020200155040080301103011642001403020405406100
1650401106402065040110501506410200105010200600150643400605831301026040
5103070402030530301307031408040306030140201030116100301640206304001100
1040308040206307400701501804020630400110030804020103070405930603053030

1130063064054061001630400110010614020630400110010501405200649040020090
8402061361100150010404055010264020501024061001030150630901050107003011
3015821200109050130611030640550401670060040040013064056404004365001084
0563040010016405670060080163064005018053030130102601080162003151010400
8110306140550401670060040040013080166050650620400801620080201402050620
0802040063016465811301026053043400503080530301303080010504065303013080
0150401645400501506410200400116260201402405602020015303016501040010805
0101008015040301108040203014080580150010485303015040100490150406510802
1020013054011010030140610103014020507040310306513015301130530301579121
0608103003020103070501205303015011564200611550405060812161088051084002
4040010108170016578140010100401030030201030705303015012061550403080205
3050201051010605701803007080300105040615504021090505305020105506085701
8030070803001050405771301020504004300161601243001530301616200802050107
0030160128020105015303011060705010504064030180020086206080501301803020
4001305303013010260108030400110080576130103010013015019103003014040070
2400130540040820064020103070530301308008013063064055040550692504006010
5010700301540307030405504020040130110306110301630660200301103015642006
3065216701700180660030161504013015040200401405131700165751200105002018
0130400600151080164363053030120010100045070504050120630650120010030150
6200244001013080157413010206530301210802065303011030703020640064055070
8002007018050640010210140240020105303016306100400107003012001010004055
0405801019400102204507050401672002170018057019506306100106573190010808
4051030702015030602001140801030640050406530301701914100803066020030170
9105040572141053005303012108020613066020060150303020150306020016206080
5050408051010605040202190114065303015040805506085040202190114057115001
0485065100801050641201013040610030113065301408053030145070504030203010
0204507050405700516306100105101060405290400501653030145070504057005163
0610010550608405290400501654103004036200210804040050206306400640301402
0202004101650620400140501015701301040080506403090040013061010040015040
3020010600520060013016301030100110504301701400403010021020010030311030
1150400200600113063030140010030115010307040024002040301502200163011006
5103006004300161530301510300600206015030150630060010405504010010200801
7001301400100301405103070240020140308051207301164001651309030116401010
0164020104101168020405303010100501070030110301200400403015691801070800
5012050191030030141020501501910300301110306116304001100804006100019301
3010260108050630400110010162008020501070030165303013010260108050630400
1100101650401501070030156812001090502050430504015030307031611030620504
3050401503030703161530514030190030151020010030157005504015032006001150
2200506306100105010700301501430630161605030163013200301504050108070800
4006040301653030130102601080506304001100400130402030140656714010900701

2003151040065080660802301000106130400100108053030130102601080304001100
1050406520060013012110504301511083015062003001050107003015303013010260
1080304001100103080566140109007017680768018040570404005020105040010301
1054640550102640205010250204004030501205030610010305303015040308008040
2021901501030656514105300405704050201403070011030705303014070501410030
1100521090404020400219015018050109210305040304020504050165641701040316
2008050161400125001620080501804020200700816700600165040150107003011510
1110563140103070530301210802065303015040308008030120307005621100108020
0201030615060865010830190301614530030165010100104903016501010250301504
0405103070530301407050150107003017040201030618030660200301653030170910
5040656114010100400604019120090405150104530656014010900701200311504305
0404051501040013017001655914001025004004300164053012001060050120305250
6900706101401630708040550163064055040301030100130156307080140402020011
0450401632006001614020608050116304001001501405103070150240020150163065
5814010306040016403060106400108001001404013200840560805011080164310130
4050040550102200330014010802064020810104008506504061013020220061308055
7140108200121640053030116436303066020030140530200801000400601653030116
2008010004006018020613405608050116403090070014055016306530301507001270
1910301301306602005040150306020011406556110001030213061004056080501108
0405303010064059007064055070800200701804052630100108014053030140307010
5010700301201030615551100108064006150160811301150420015015303012506803
0810206134050040510410140040410014025210904040540021901170018010208055
4146490205070506490105010100801504030140010120030660200301103016530301
3075011401030116301704004053030101001700165531410702130130800405308001
0501501910300301410200106521620080201050116200401410064006100019301103
0116402018400105015064102001020302100504030750114062010301307501140216
5040140550150640707105010700301103012004004030155213010614005060816200
1060020307002006001301406103016530301250650406400404005020501306602003
0165303011030156420080103001080404007071504005018040205040200401301103
0616306602003011670109165303011670109116504015010700301151011105511200
1090217010406050120530301501524020900701014070505303015013047030121640
2084005016015030150102404004020817001615305110301400150140130116464005
0140202004011053030150155013010309001309004053060045065200594031671151
0804053014211510805010430160020015501301154008400504010200340040015034
0530600450604001830190301163040706165040150107003016549140102081710770
5012053030150121700703011610067001030152001010001463034051503042405463
0340038005014030201200150405103090508066015040011012162008020501070030
1501548120010706040505321080206550704905040405504065250401504040550408
0547140109007012030404051501040016540208301621400203014010512002130115
0104001410080530800805040530301405140011401030706015030150646081040154

6120010100506015030150640061013017001802030403015040210905040530401545
1200109050530434005030805303015070301050406530301405507030501070030120
1030615441301026016504015010700301504010451130651620080205010700303050
6306100106400610001930164002330125065040610214002030150401210905016400
6150107003011030120040040301543150102401405001521080206270020301530301
1030705062004008010801020200900501542130104008050640309001013061300105
0401020710530301302405608050150620710501070030110301200400403015411401
0900701405001102004008014100805303012202003001050406130010504030203070
0506414020080100010652202003001050120080100010130530301501540130670804
0530301200401501206400260301218901150703014020405507030506115200124110
3070154200508015636604095050130210050404020704014030110049040150307501
4021650401214002030116400615010700301151011105391301030100130150650406
1013080405200802025303014055070305020306406100164053012001060050120301
5020090050167040601615070916150704060163011004055016306501043011080150
7096405400506030121103015070120067040604020010100070406016150109070615
0704060506306100106570800164050704030203015068020081016415501070030150
4053812001090505303012108020611030653030121080206402010147012403070153
0301653730102603011630800400501506410200106530130800301506200400300102
1400203015040121090501640061501070030110301200400403015361200680100016
8070501205303015014020104101640205636216860401801210914107090164040104
0080140164340040308016050301404006040130619101100030150404020504048113
6120080601030706110800200404040050205016163060400100040010400830102601
0200217013011250313065063061004001401640307040010400810200120604040050
1651309030116220010040013016504015010700301151011105351500104853030150
6404002010130680020013014052106604006303066020030116907061620080205010
7003014610700104061053414105300130651030702021501036410530025401302050
4015010317001801020805331401090070120031550430504040061061580701800105
5060820400501652007003011005004040309001013053030150153214010307040525
3030150120653030140510072001404016100805016200600130140610301653030121
6504016304051030701700140653115010200100160801501020010053050191030030
1502010504062006001301406103012130653030125065040610130660150301110200
4053016401506100805010501070030165301501054012170070501020080120303015
0440070165308008050405303014051400114050640400201063060023012601503015
0620040110650630600210501070030152912006600801301400600405012050402810
1305303015014020501401014002030401406301026030150216250330122819030162
5033012001330161022001003011070020013301650102016040301610401400103016
1022001003011070026150160815010430163012611010300521620200300400130653
0301164270165281200102600140103070501205303015011405501025303011008061
0181309011410200105011530515040140208653051504014020816500702180140550
1021001100300404008060050165271200102201103070501205303015011301026050

5103070161000240013080402050709150180505622008001670318004030110805056
2003516505690070805057630050506801600400104001303016530301900808140221
0100030304001900801840014005011004001830190301804053016401504016100805
0114026800702103070405800702530301308008014021605030110307050640161003
0132003015261410530010300302010307050120530301501405210905040564001804
0205014010140041007050107003016506220010013016501430163012020040014040
1030164015030703302030652514010307010300302025012053030150153080080504
0530301163016016502604002011404021090501605030306162604002011404021090
5030132003030800702103070402080070252530301308008014016504040040013065
2414010200201306004404020306004506402040011010604020507020080205055070
5065504001402001012201625040034005015231200106010530301103070203070050
1206120015051030905080660801403090061501647020307003070801050406522140
1082004020250120530301501402060805011630400100400130640205040800120040
0507052001340050620400501130130912301240205010240203016401163020140013
0165040150107003011510111052118010708005016050130110030600640205070808
0600105015303014102001052014010900701301040163010404005014001653003015
0670240010501070030141020010640201030702640010501410200105303016519401
0208401030705303016402010307026400106402030210050405010700301505060402
0104510640203050102103053030141020010518401082002006801000530301640203
0200106001620029040050164020504040050703011030060050403020307002170070
3015040400150908403011030701408090505051030708053008180250104001501805
0908117001805014600140017006004004013064001880160402001010004001509084
0806200704030125052006315056400165053051507001250568205018080070250404
0208007024020501401012403070153030164001504064030140204001104008050404
0205014010140020304014050408040015040640301400150908403018205010501130
6940205040709400601040305040651714010208140103070501205303015015800102
0080301470250405240400108001200400140108040201030708150313065800102008
0505200631505640018050550405240400704004040060114080501088016040200101
0005010509084040203016401216100040024005014020307001200614040203030816
4020103070530301214002040205014010140020304014013011605030150404001509
0840301651614010820012006801000501205303015018030604100140130150104006
0013015010216704034005016402021309015040501070030140201015021301013086
4020103070815031308050524040030600416506204004030501805052404003060041
0400130301402010160505040402020063810801040013030140202101220064020101
6050400154016570180020030150404020400166001640205070800200110400130301
4020400154016400600130140015026600130140015026402040013016006402040014
0706402040016600164020400150264020400154014020103070400402008515130102
6016061400100406530081805012055018030604100140130116050301504040206121
8205014016820504001306514190010301000110015001040402050405070060016800
7021030140208007021080080141006550670060014008010206513150102401405001

615014005255067006001400111010300550401670060014001308012001950100505 1
481404001040016367501204036730142400601404004200150165121200105002012 0
010600510805303013070310611010300165200204005011060708050564040052002 0
501808062007040301250562003001706550102405300818025010400110501130150 5
640400104001140800702216257004003050563080070400130615200201605030116 5
002004005014020303081013016504015010700301151011105111401030112170070 4
053015044007012010306120018020405650640064010501070030113065013014002 4
001050130110040064030140548120080081700110400840011010603015063040701 0
501070030305264003014006010306510140102081401030705303015012064051030 7
053030126400102010306180210200100504050626400104050053015326603015063 0
407010501070030305303011030705264003011405015091401082001216400501205 3
030150114055070168002007018018309016121400501801405670018040205040155 0
110400110501700303016508130102605053053030130703106140064030150518064 0
010104008400610230110805056206040180164530050180402050405702200150510 3
070164530040060180402010160505040530081803015010400110104001303016507 5
010540217007053061510801430160012001505306004105464847040010653066020 0
653030190701050406506401090070301768030120307006151080501043016002001 5
501301154008400504010200340040015035306004105306602006530301709105040 6
530301464820304005054010308401030705303016530301504051090620018004020 0
101000501046115210906105109064702504050030500301108012020030040580203 0
700504020050020116501205018060460301140550404816302030804006001616001 5
306512004016153013020500200610303200501205016501046115250690640051090 6
470250404040020200400140405040500301505308043064020305012050180430640 2
030502010403050140400202004001404070220030150530650104611525010906105 1
090647025040502020040014040702220030140203080430650530501205018043065 05
305020104030501402031671202004001408090504020306504140102081401030705 0
120530301501530301504058001020080170805040203022001001405101506200440 0
130402061502164020612150104611521090610510906470250406046030154013080 5
660015305012050180500305003015401308051621550020066430653050201040305 0
180430653050120501202004001404060460301140550404816302030510621306809 0
503011530805481640050120501620200400140150030500505308050104005050011 0
068016050502050180501010500501301900830500402002070030304020413061108 0
530301402010906105031200107060506309010606120015040550692108050630201 1
014050114030900104014001030130164015063020110501070030150150214104601 3
061001630610010306530301161004001030804051030701680160018017080051020 0
700405803060050401620200400630501070030130060010306501180620070401306 1
004053016306100655040405610072001805010201604030161040140010301610220 0
100301630615406010030120080081700165001800620080401210905020050020615 5
040301001404050622001001301650143016301202004001404021090501605030306 5
062200100130165014301630120200400140402109050301320030304991210608530 3

0121080206405103070164530018040530164014051030140400708041700180806200
7040301230201103080120010100805012050406808070400601030801105010005012
0504061620022010501120014261801200601156302014001306405301640140510301
1670804180143002004055040404006050150180812050301161000302170011040081
0401400103011630400216498180620070401306100405301630610064056602016151
0804056100720016140110100402030530301307031040030140203016401158060301
1640064001306497110102004011010505563020801608050550401030050704020305
0295018053085050540011004901605030116400164961630670400130110504120307
0040205014010140020304014061548168016304704001301404008060050180701220
0650013050061050500401605030150404020302191401682050180104014001030110
8016960100400130140400806005016495120010220126850120550140203016401103
0140530164011630201400130621093012500102600301163042400400130640530164
0110401400103011640016494121010020040201030705012053030150140182001301
6525063016040010700301530301161004001616050612001050020130132001405504
0500261536715504010030600654816608050504040201003060010700301402022001
6100400160150301151011104935068308040040203070305303011610040016169212
0061620021906162002901165040150107003011510111049221608301701020060530
3015014052200450704052003140530201030611301030100150405005303014001101
2506200400300101305303050107030016004051030130750114064020103013075011
4065303012504061050403021400203013051504050164912001200213030200106005
3030145070140653030145070504013075015108050104301600200155013011540084
0050401020034004001503405304052200161004001501070030150203049041540301
6010264050534051614040500301030100701400404894130230110801620080205010
7003012301004002050200100010130488216500301506085450705303016530301450
7050401216500200155013011540084005040102003400400150340550306004130640
5400110106040550705020080201301630400100616304001100610301026010801670
0616405200110450401632006001616200315501070030180800702504040208007021
0500501612002070050404020504030401703040707010800113010501405220040530
2134006018048741701040301803060040013020501540110100301406101507600400
1306203060200103070150400470614015040016150220048620012002130170401508
0640061504001101060150702008020615026507001503020080100018015022001504
0180402022002165040150150140101303010415010110415040150704060150501150
2200485200190501504050104030190030301406540010760014100802001503013060
0440050402050115022004842001503012170070150100802050182601309121700540
0100306001401502200800200130164001614060301100306001080506200208040010
6405265031030706146701006140110100530301506200207001050107003014832123
0130110306130400110130200155030163010303018013040060016800200130164001
6140603011003060010805014822001041001030030201030705303016800200130164
0016140603012030405303064814010301217007040530621700703015040571804024
0550260840013080163070801040301402164408105015062810616400114025068200

8010501070030150260840013048050620040030010140601028013010301001504050
0521620040030016405200659001200656700250805506404002040013066015030305
5050102400302140020301164006150107003011001500104053030170060017001647
9200640130140770504020307005018016100400400616200290400501612001050020
1070011620200300150107003015040640203021005040214002030116400615010700
3015040507040604003064020608050164020301640110805063024003047820062001
0003017014004013011105043015110830114067180410080550330130600416200150
3015070878750408054011010030140610402020063150680640014050164006403015
1001017006080503020477200105040301214002030162002730164001501023012161
3203021005040306020027002041008020627002050180476501010041904040050205
0140564040030400100403080404003010010700301264001501023012103021005040
3060200402013410030100200150301530201400501220010021501040011010400830
6602003050406501301150103014570530301501163011005010700301475410270303
0401309002601030530301501640201041014004041001402203070047410010200830
1217007016100670030610050610082001010002110250130140530400100616301100
1402400205060110501000150850620010100805303015011630110050107003013061
0053030170406041003047320010260050630407040014025303016800200130164001
6140603015001200104053030654011010030140610521630600214050610069106040
5302003006530240530120010600655308008050405303014051400114025063060021
0501070030150260810130647240109007020031402030801610040040061650406400
5016530602006530301216504018013001050405306020050401024003105303015020
3062101000301103070402070309103053030150120140621093015040500102600301
7104010104008510307040400501140103070501050406403012007001030530301501
2014047150105402170070405306140500116414710304053010304050140501405608
0501302001060040530103040501405011620080205010700301502608101306470401
0301217007040530611010300530301162008001050305014010130122008020301162
0040030015010700301501469401090070217007040530652006001301108019008405
3030703101301530301410200101101030053030116200800105030405501200802030
1108050670200160105010700301205078101306468501050406404040050205015068
0160064056801600400130805110306180660010501910300301402030700140501467
4010900703080080670053030165303015016800200167024001666040560604010403
0308008065303015040540705021623010050180466301020630140705065303011502
6081630110061501401014054178040563006001804020301670403410060150301501
6015030140530301100501070030146540109007020031161004001640550401650608
1501070030308200100301405219011404702504030660200301653030162134006015
0107003014645010504064030120031701080010130530301501630800806530301504
0540705025062003002400601046350650781040513064051030708066001301405803
0600504040521610083010403050107003012506200300240060106530800805040530
3014051400114025010820080462506100720010405220045070110813021400164015
3030130102601080163040010050107003015026084001306461501010041904040050

2050140064030140206080501507016200418030100163040010014015067019163016
4701006405501660013016301100501070030146050640400201014024030701530301
6405263010010806010301404055168012506306100105014010130304055040220010
0170010406102008020303040540201507024001301301400100403070506301630110
0167080416153030130102601080163040011001630170400405303010100616100801
5050107003014030701030645950105040640301403070103065303015070012805017
0403301101004003014061040202190114064582001041001030030201030705303015
0140206080501450705040653010017005105014040030100151030500404040029014
1005210904040204002190114030614575010240301308001080303021005040165012
0501654020830162140020301405403070106405102071065400110140510307063040
0104056080501504013066020040510805007027001501050406403011030705303015
0404100304565063040701014022001090253030165303014507040013200440545520
0109040301601026405053516140653030150409600602125040205303015016800200
7024001504080145450640309001013040564002602014060805030201080640040500
5401101003014061030100014024001103030100010504063010001050110250305012
0140645350650406403013020640010308053030110307065470250404020200905010
1070030117005040804020307006001050164020302301100013080530301402020090
5010501452501030206400403012810530301501530301103070302064008040040770
1700180200401301108040520061300640530200801000400601640550708070180203
0685040168008050130230100301900103010001900804005020630640530400503053
0301504054082001402804515062003008400530301103013040400304001006140400
4050103064505067040310140402001060054082006530301504052008010004030404
0040615303013010260108040400304001005010306449200109025063040704001402
5303016400104010610108105303016405263010010805200608203070053030130703
1030163040010014061640014014015045070165012063010710001650120618002001
3011080162200800170014055016600130163011006162008020501070030120165062
0400130165040150107003011510111044840103082006801000530301501405507053
0301180704100306162602014080070225019103003014053074006011405015017040
3301101004003014061040205040163064005010700301501447200649030140017002
4010307053030164020263010010801409084010306402020064901080140530301103
0400210306405703180040103013040010030140510307024002050107003017200230
4020400610210804040050206303010015051515030400100140103002004013015040
1503050120630506306100102030506421013014040560805011080506806001053030
5302020040130150130100103005040200401301504015030305506306100105103051
3301509001008301200101000530301250650900104056080501405400405141005801
0196402050405801019103001000101601705055040140100030147025040402010307
0307501405004465063040704001402200102600530301640202190114013064020400
1801401030701650784001301020304010002140100040202150018040201200600110
8040206704103066020030164811030705066304001306506470904007001445501050
4064030110307030800806700530301640205070180704100306402010304002103040

5507040208020090405005200600130141020010504040205040611050430141020010
5040402050405062840014040201200114047025040404001090706200401301108040
4007071504006404003030080170011040085507001240550660840070015470653030
1402010049041003064445010403019003011065004060102620015030140516140615
0193060523075010403014053030121620200300114022702003011620080205010700
3012630100108010100305060443501020090150301200106006564020130640530301
3024425010200601600162301005040080402021100701103070402064200101620080
2050107003011670109400501165040150107003011510111044150105060840301281
0530301652006001301216500506086110504301216500530301405140018044050102
0080120301406100301103070150200905016150401410014002500615020040110801
5080120060161502650700150302008010001150220016301100501130140530610050
1201406439501020021903012810530301616501204006011406168070800140653030
1301026010804052190114030165056140802001050020506102200570403040011001
0250504050101206438501020020130030110735060615504054006505200600130121
6500420010504061550405400650110504301216500420010504061303640121400205
3030150700121301400640400501608050305012014064375010200201300301530301
1073106061101030053030120080010503080510210070103070230100501050406402
0211007011030704040023010050130400100614001405018013060200301530210050
4040030600410030660200130144084014064365062009005040040400501656404001
0120041008056100304005013021005040400640301506504040040400502041003064
3550102002190301403070106402050401645135010700301530301403070101403065
5033011630600440050140400260840143450102008012030110084010616504015010
7003015303019084010306433501040301900301281013053030161453004020504070
0600400106165040150107003015303014030701030660150301501021530614504011
0130120304006530500408200100406100301604041008082001004020606040105014
3250105040640404005020501506307013014040050161650784001306165054001306
4315010100400403030590070640610456601503030501102170054305010270020403
0152100170501208010201620090050180800200130110801620010608050506040203
0210050404003060041004295010304017030120031407050615108050104301600200
1550130115400840050401020034004001503640522005040520080100040405617320
1030614285064030701040561630708014010307016200901040306530301130126507
0030120080100010504064052650700301620080100040060180530301162002070040
5608050116403090061530081801630708017001501070030164275010506084030128
1053030166015030150705010801703016900101000301501040900120301612008003
0161200603011080506100805010501070030142650101004004030304004701800200
1301640016140603011580020070550364020220050405200801000401030116702001
6064255064082004004020307030306602003016530301167010916424501020080120
3030400470110400301200150301161004001642350683080400402030703053030116
1004001658070180040180170800112200301163020140013016504015010700301151
0111042240108200200680100053030161300105040270070106130010504030200801

0001080020013011080140640016140603011080140530306421506403019004055018
0405270070106140510307026400106110300200401301504020306010304205010210
1600162301005010804054002201061162008020501070030150401802009709100103
0419401020830171077030153030145070504013012009050301140652402026301005
0104094003064020301020030021301530301530703140641850104066040520101304
0301504080130156040600240202200402044401017005405200680504040206400110
6161004004006162002904005011030241750103075040520101304030150408013015
5001305002402022004020440105014020108020105030150105040640303030610040
0700141650620020300400402030703053030116100400180530700140400501620042
2530301402020090504100306415506504064030130206400103080530301103070614
0510306530301613030080400501402050405014008010194004057001414401030707
0104060530301630140010030304701100405010504064030110624002030515040400
6410007001641391084050630407010140253030150111010300405410204020200800
1013016100400400616200290400501615216820080105101060402029040050164056
6040055060840206060404005014122006490301400170024010307053030150140209
0010100021640064030100900101000301504030401501301402010307016800701630
6001700161504011630110040206100301700165302021400203012506504064006402
0506281013064055062840013061404005011541150630100704004040050205014001
1013014020301501024100200220140520064901080600400140640551680150401800
1000230140042410040400507014016461301260040205063011013040205064504055
0192167006004004001301650401501070030115101110410506403090010405608050
1502030653030140540309001406540020305180405608050116403090040610050020
0840021901200901510808102003050040201105043015110830157005108050610080
5010140305004040950643016001510804052001503012189012010306161101030053
0301504040541306113064053016401405507010501000400503016200802050107003
0150140850101004004030124010307053030165620080201050308020010600504016
3070801014064075010830190301504020103061640012001060030110805067020016
0106200205040301507050655010680620070403012506200401106200600130140610
3016530301250650406104065064360104056301030301150153030140011015063040
0105401011005401214002030130515040166016601030405506440070101650120616
9070140220307001008200101000211025013015063040010010653030140011012506
2008020101650120405501220307005502060403014051030704002200800653030150
4028001000216126601503015040302865303015040302821301168010050014050101
5307003014051030704002200800404506200905010130405002001241301402063061
0402063040011001050161070011301402062008001050304035061006018030140520
0500201650650406403014055040405301200106005012030214002030130515040163
0653030125065040640062002050403015070506550400680620070403012506200401
4006015030304003200600154012001060040400502040220064013017032004005303
0110301680020013011080140640016140603011080140530306401501040301703030
1403090041020010530301140610083012201030701563040050530301400110120304

0040050643016001510804055303015408200108080405563640080010215010700301
1401639950620080204004040050201402217007030116100670080402050140101470
2404002008020140556364004660150107003011401805636466040065636800102400
4061039840109007021700704053020103061640015010230140513140470250401680
3040060016161002008040050107003012016506204001306397506830804030140520
1030616200205040301507050655010680620070403012506200401106200106003011
0301506704105401402050405020400306396506440054004020307030540011014020
3053030150102102030700201550404020700100501802001503015040520080818030
0103070404005020615016600154004070502404008290180402026301005010280301
8014701404005020700140201030705303014004070501620020700161610020080400
1306170104035303013028216409040070163955064030604040400501613015040064
0400130654001100400100853030116100400116504015010700301151011103944010
1004006040912009010301104541008053030124090400701050406530660200402010
8065303014001101402010307010304004004040050165062008020400801020639350
1020080120402050140101470240206420010214002030116400615010700301504011
0010200801670109400501165040150107003011510111039250630407040014070308
0110002530301140614530040400501613670155061000240050401504053030130102
6050705064904004030214002030130511103010039150630407040014010307041053
0053030165303014001101250620080204004030214002030130511103010039050104
0301703015070105010005303015018020080205040613010260510301701940060150
4040010230138601503011030705303061504015012053060045040640105120021401
1004040015010240011015108038950104030170303010456120200124052022107003
0306015030307080064001023061501388501020200300403015040501201406180105
0840105120021530401670240018053030110049030100387506403019003014052010
3061802030700470250402700203015303011030701020040080150408038650101004
1904040050205011563040018051200640030121640018030100512006400301307504
0050130210050405608050103070301010120060140200814013013010101200601105
0230130850120401709301302038540103070525303015018010300504016100805040
0140650628400140401610080504001040082002301163015040050303845010200901
5050404053014064010301217007040530201030615210440080163061257008002001
3013040405481504030210010503080200180204056164001406162008020501070030
1501383506301800301405201030616405400264003021004005030120080201641471
4050040550140101470216200802050107003015013824010820020068010005303015
0180168309016203070047025040162140050107003011301381506200900501040513
0621700703014055070808060010130151080501043016003805010704031601503016
5201013040301653030155070304051030705014056173201030613795010403019003
0140610030110451013053030164001501023014051361008306602003015011645300
6405501401014702162008020140610053030110451080102037850102006016003015
0405200600130110806565504030210010503080150104401306013012001010001000
4002105040637750640306040530508506405504048150102100200805013040522005

0405061025030161060107061060640104006114069126013016261007010610018601
6301070140601640105120021103070307501140615010307030750114065303012150
4013010037650670320010510301615200206170698002001301640016140603011080
5040403060153065061000210530301501042001010008013755061006018030140520
1030618020307004702103064005040803745010451300301504040207040150161645
3001803011001502002001001163011001020090140203070010307040400700600164
0400200200100113011005502009050400306525050406400304020704014030100490
4030660200402013405005402086214002050404020400104001140305010102503011
0015001040530301700600170016373506403060404040050170014702200802030124
0202004011011212200150101025030165201013040301167006004004005014020200
4011013063725066020044004040050201402621400203015064030704004040050201
4025010105012200165062050203065303015064504010301412701650620601503030
3061001040500562503016402083016214002030153030151040061050120030023050
1201403715064030701040562700203015303011030705063061001065303014507050
4065140653030145070504065506306100106214002030150406514062140020301504
0562608400302140020301240540050603015066301011001020080304055040501637
0401030121700704053064051020710130654011010030140610405103012009005010
1306530301405403020101306520060013011080405301001306001302010306113010
3010015040500405501401016530301457025062004003001050107003015013695010
1004004030128105303015018010100400165457021080615040103023685064030701
0405627002030153030110307050630610010630102605010104013011080150103070
6010301630110040550122030700140101100510307040040414013012010301546101
3020015010425504014005015040405504062010301546102001950100255040140050
1504021400203013051504063674010900703013080080301670053030161300105040
5400408200290400600103664010307070601653030161300105040510400610530301
4102308008030150130100402022004507040206318106140400104006114030500404
8110400610501530301104510453015013010040205010470240050403013011650406
4001306365506703200104053070305200600116200802016200155030153616504015
0107003011030703075011070030121650401214002030130515040580101940030110
0636450640307040040400501610083015064040020400630912301210083015066023
0400403021400203013051110363506453004004040050165303014001101250620080
2040040302140020301305111036250620070300101406405608050113015063080010
1406402050630800106302140020301305150405801019400463615010504064030110
3065303016165040150107003016102503011700565670240015010700303040105120
0212601503011030615013605010202003004030150405012014061403060401801050
8501205020306110501200905013061104651040105120021501201403595064030704
0013040400501640307010530301640307052402030601030140108050631840040308
0403070524020301401080404003318130654040050115358506301007040013080154
7025040130130103501301651200640030140030750114064010512002110805063184
0040302140020301305111035750640306040150121645300116306100801630640050

1805303015064504012122001180070215080070270060040010130611010300522020
0300501306530301130142705013014020501026150501021660540302010301163017
0400214002030130511103010035650104608040301240103070530301501801630640
0501803554010208301710770301653053030150165303011301530150401406100830
1909010030165301700550135450102700120301103070530301400507030307035080
3054002504050040206080501615060805016402016050615016050640201502161501
5021704501630170400301008040307030150402013140470250405108020318504080
3535010200400404030150405020400130802022005040100830135250620108050205
3030110040500212004005040510030600404130500402053030145070106010703050
0405013514010208301200207003016400110130150402010307056304005020307003
5050104030190030128101305303016405200631405108061080400183019030116304
0706165040150107003011401634950102009015050404053014065200600130161105
0430110801410430012170070405270070180162008020501070030114018034850680
3040060040051080404005020140108040205010240208180402070320040103014050
0540110100301406101030116200802050107003011006802067024001501070030130
7013616200802050107003015040202005940610301207080120062010806400401050
1106010701105303013011007001347501020020140301200106005303016530301200
2040616200204063465010451300301704015024002018030660200301150702400164
0030750114021504011502200345506403060401501245300165303012150401530301
2001905015085050610200168301301100530301103011020019050150403011002008
0203014055040106010706081140308034440101004006040912009017005564270180
4020220061022005303015013435067010916530301161004001804020220050405101
2402040010364020103070402008107003018007024020303081306512006400301504
0104105010214030110049040634250105040640404005020501402030510130203070
0108050140204006102108050620060044001406506302014001402402010250165303
0150700121040064030110108169020021301654020130110200216530301507001212
0010950620108051080600805018020010930151010520501093015040402030100306
0011050140202200504051012402040010341001050130101012006011050210301130
6602006341301035013016512006400301654020830162140020301540307010634050
6201080502053030610010140501801200401108001001700113001014010030600105
3030120307002030110020030021050606040104030643061030506201010501220040
0301100339501083019030150406130520645403011080601503014030201063385010
2200100403015040652006001301611050430110801510364010200405021106010708
1060403015406015504054030202202003002105303015014010200401105201013040
3014003011007001337506409040060010700140510430400502014064010200403080
2010405101405401301001506100301070014051043040050201406201030151086502
1010003011250150402030700336501070201200301704010702020016104360162022
0030104005010014010200401103355010403017030116050103070201809901620200
5962018099015303015014010200401105201013040301400301100700163342001202
1301610300703012826061200105002020220020020700161740200130140110155001

3050060150301403020400130120400101301100510110303070312200301100333130
0101403070801053030120307002030110020010017010400120040162002203011050
1000302410064013010001030506201010501220030110033250108301903015040110
2506120069086141060653030150405403020211004904010108102202003002105303
0150121200840301108010309010401011006565201013040301540041508033117043
0170104060205015210951020070020504305040103025220030110052200110200207
1704203015053302160820010100021300105040100720010530301501530301450705
0406540030110017005203010501401020040110301100110072001545070436212008
4030111020020715103070306004140302011020020715308020615060814001250154
0025016506083062100215220015302100400803294010320030150191030030150401
5400102007006202157001070110501640102004015400104060105016105005013012
0200207003016010306400708006140240307015303016105005011540070800610501
2200400301100154007080061403080328401030703017010406030140050120501105
0403021004008012002008401050921080140203040020070050105012200501200407
0400120040140030110070013274010307070104060530301680070250401580070251
0200700326501040301703011030705012004070301640105120021301618650640411
0809901530301501325501020080120301281013053030150180163064005018030660
2003016530301167010913010032440108200200680100053030164020265070040203
0200801000106530301402022810105067024001805303015062840040400502050130
1003234127030128062005303016560805053030140202007008106141070214401550
1026155010250163046400660504040030407014061200800840200106005040400304
0701406080503020434004061032220010410010300302010307053030168002001301
1080140640016140603011080140403070106530301540307010564240061402020064
9010801401680600400501301003212001090403015303011030165608050530301402
0200700810651100400405504016100400400501130110300108053030150406010308
0203070030708010504065010504064030150645040110306150102008012030150650
4064030170060040010130320216082001010002130040050401007200400610830150
4040010403013200600400640010403015040108301320060040063010303011080200
1550301330640062001550301108030103030133064003192001041001030030201030
7020501200106003012041021300400504030700400613004005040770400613004005
0404020304030170750400613004005040203040301104006400203040301203014040
5303013010031850640309001013040564002602014060805030204001080665108021
0200130406103040515070403170018010208031750620040080101650120140405501
0410804052001000640014647040140110113012001503011506040400503016301100
4055012203070031650680020070404056405504010010200801030640010405004055
0102402081030530301214002010301506704102140020301504012109050164006150
1070030110301200400403013155010200901505040405301406520060013016110504
3011080405301407014009285010700301201030613144010301217007024052003002
8060150301504096010030125062004011050107003015063040010010610082001010
0025010102503015063040010010653030140011012506200802010501070030150131

3412703012200109025303016100013023012010307014050180163064005016164400
5141008016403060150180404004030601150101040130162140020301164006150107
0030303010065070240015040653030105364004030601301008020631850180312216
0830170102006053030150180530301400110122008020105040640550102110100024
0307030140513140470250401301214002030116400615010700301803040060011406
4013060130153030145070501043015013114010208301710770301651301530113096
0100301214010110040307030163061652010130403016651301530113055015303014
5300310200186013012501020080100040060403016501010080504030165010400501
1003016501010041903016501020021903013092001503012170070150100615026507
0015030200801000180150401150501150220050630610010501070030130841270301
2200109025303016530301504050168002006520059403167161510805010430160020
0155013011540084005040102003400400150340522004507016100400150107003030
4020307005040200106002402010250613010030721403015060854507053030161105
0430151108301701400402030700500200830164017050130165406604030130106003
0165800803016257003015040520095010040301200109150100301650105023016160
5030150404001653003012860150303050107306200190213011030613052002703020
3070010805011300105040520090502410610530301650107030110120040510305004
0405506200105200801201020060016530301301026010803040011004005108014001
0040030150104001080108051014020305012041003054154030160102640505310301
5062003008400650623010004006016200802050107003030301003042110070301410
4300530301640526507002530301405700600180150400110121627002040530210050
4050107003016506702008030121420303200150301461006405201030616110103005
3030150404054130611306405301640140550701050100040050301620080205010700
3015013024170104030180306001013053030150151080210200130406103060150301
7040132050115022003012156301400501205015408200205043050401503025615040
0104570014702150263010010007400130150220030021230130163061130120020700
1014061502200450705040302052150401506306100104030703011080506600601200
3016530301130153010614004030701014065301061400110004002165504008030111
0004002155040521300400140506702400108010001074052630100108050107003011
4018040015213004004020060016214002030140150540014020840400110155040214
0020301201030703075011070030165299401020830171077030165130153011301300
1080102040182001301108040202006901010700301652981406030110801306800200
1301108010300510307010806001013053030150129740110040050167007107705303
0164104300217007040530530301400110121620080205010700301501501100200803
0130750166015030301045302100504029630103501301651200640030130750165104
1050102140301100490401008301221400203012010307030750295406101003011083
0165130153011305303012944030129350102008012030140610030110307015020090
5018015013064040050115040820016150302008010001615070807016521503051001
9130140150304084001306150220015030210050405010700301103070540030408140
2012009011501030703040840013061502200150196001611501060505011507006001

6400130150220040026040020114015103070640026020140153015706061301160805
0530301803020101302922001090403012010301615022002050120080100015070916
1507040601630110065306020050404815010210020080501305306020065240020654
0020101304065303012504013020506504064030165220050405103013075011402306
6020030150401291200104100103003020103070530301613001050402700701061300
1050403020080100010805303015240202601810568060040061402060805011080140
1642400501680020013011080140640016140603011080140530302904010307050630
4070400140253030165230100405001550180154040020105040654153003011640400
2040013065220053030110040010306540050140150404006110700301461030801800
7024020800702504015018058006210040501520080124001201643400403062008060
1030704040050205016289401030701030030202530301653030140204030701065303
0116100400164020210066080550180163070804005016410530013062400120200180
0101306404007010124001700116453001615624002040013018150340201030706010
3080402050102155062001044005200800185200134005062040050113011621400200
4001301105041654153003030406100165303014507096010014020307005303110301
1200102206112001010009056240020400501164016040013061670414017001145300
3012110130610200600130114051481200207004008014051481308004005011453003
0150405068002004005040405014001200401630320080501030320015062010403050
1804020301320050405010410530016453004006016304703012510306303040103080
6530401050170109400601013061180107080061151080601008301510307010700301
5012050180110103005504060600210130652200530301100400103061008301510307
0107003013030401030624002010308053030154030701402024002010501240012021
1013063047030122400120402050102240020103065624002018010406040303110301
5010424040050101440017001165040150107003011510111028850640309001013040
5640026020140608050302010806400405005303011030151080506703200400140610
1610040016287506403070400404005020501402030200106001610049040050165200
6010401030152009005080520060706700501205016286506403090040013065064030
9004001304020301640160620040203080404002400501653066020065303015040220
0821650700180163070804004030501802855010504064040400502050112200301504
0101002140162007006530301161004001165040150107003011510111028450650781
0405130640510307080660013064052200450704052003140530512073011640016513
0903011640110016400183019030116304070616504015010700301501283401050012
0018020302028101305303016400110049030110220010612200301530301100840102
8250643016001510804052001503012189012010306180417050406530301103015200
4016803060140530801054005018052200504059007064051350408012200301402008
6701023015303013081612200301305004070102301140501163011004055012203070
0604030150405019103003015926004001010700301406100101402013015064061001
0130122003015063020110501070030128150650781040513064051030708066001306
4052200450704052003140530805105013070612006020015503016301030301240530
1640150610080501050107003012804010307052530301501802001060050401610080

5040014061801830160150301506301601013040514010602405802007040080807040
0301504011050100013051330140526081080020013011080122008005067010940060
1013053030130102601080162009081501070030112001008030302795064030900400
1304040050164020103018061020010600504016100805040014065303015361100040
0211301506100805040014064020608050130802001060050401610080504001406130
0105040104510530301502030640514520103070601030278200102600506304070400
1402530301640204001101060504040205070200802010640203020010600658012001
0080301156400640061568060040050161051407050804001100490301164240050127
7200190501504050104030190030301406540307010530301501802007005050404040
0200700506151008050504040400100805011406276212301301630611301200207001
0140612001050020120010600104006141008054020830140061050406130010504054
0208301104006102754010307070601653030161308008065504052008010004040204
7010530301613008803012402020040110620010080301402047010501910300301274
4104081050100053030150116403070165108016800401000400501130151070060012
4040060306506100805040055040500102600301164040104001306800200130150404
0203015032006001140406404002602014040012109504016100805011650401501070
0301151011102735062002080400400402030703040011013014020305303015010210
2030700204001002004008180200150510802001907011521901801807080051020070
0530620022030152190164001200405003013020504015108053020015501301154008
4005040102003400215070163010600505040550353050620400501402048146101272
2001090250630407040014025303016309803021615290104030501805010807080015
3020140040018030216152190156220025503305004020405608050150401400102500
4006530301400180020040110004002140530164015061008050105010700301305004
0627150102008012030140610030110451013053030161626020140401030010307050
6200410010130143090520200400803021652190180212004005103070501680903050
0402053050040802006001301406103016530301250406101306601503011102005301
4010080501010700301201070013016504030124020400110049016309240013016504
0150107003011510111027040103081050100053030161070011570240010510049050
4020010600520080100040680620070403061002695065078104051306405103070806
6001306405220045070405200314053010700113061504016100805011405067024001
0130405005303013010260108040530164015061008050105010700301268401030707
0601653030161300105040308070180010530301652851014053025060302010803021
5060702604004002501528305004020530301301026010804053016401506100805010
5010700301305004026740102087107705303015014030701611070602050104001105
0570414050017350550403023302010307030703140500201030150520090802001093
0150405702200170060080301100102301005010409103050203061030230110050406
4004030613011001040064030110108400801020105020012200401051200213011007
0016266200104100103003020103070530301501403070130110053050102400140308
0140830156602050405001573005050801020401900703011030120090050166015030
3051012030703503062020014081030120090050165506040010403020212003006204

0170910301200900501804017051014040050023030230110040610800702611406104
0050023030110040050023040203011005500702405004017051014053030154001401
8015400640470253030157005101081010501301100153006200701030705106160010
5651020010010307020040107003012061265501040301900301406100301104510130
5303016200802010700301400528022001000403015040152400180100200300403015
0406040300301210400110530301501804010512002130110040010401610108115013
0110040010401061010810107003011022004010512002130110070012030403015303
0151400150152200108040105120021318107003011030120040040301264506430160
0151080405200150301218901201030614001403090030110301200650301504040550
6320060010400610001930140561103061162008020501070030162006503011030140
0140309003015040405320060010165040150107003011030653030126340103070701
0406053030161530401908050113010100500630156200703012206040400601410080
5303012504061064006100019301220080201050408010100030150404300200301501
0240041005010430110805120020113026240109007030110307030165614059008085
4610101306800200130164001614060301510602002070606130014021301540307050
4010300250691081013064058030600140640510410150102140403070105507001213
0154507070803001010700301170050408002001301108014064001614060301108014
0530406501306550605700600140013040610100301108301651301530113053030126
1506403019003014055062008012030165701803001306530600130651080701021304
0610104001105013021005040402015010072001404016100805011650401501070030
1151011102604102001014030708010530301502030616304004001001140530301130
0630620080205040405504065040150404055040801680304006001502030640015010
2301405400131404702504040547025040501070030130400400100114053030113006
3066041003018620025150410164001501023014010200405021106010701501040016
4001320044058007027080200653030140302050404055040800702103070405800702
1503080080306020030120304002595010306020040301504030205016100830122010
3070156304005053030140011012030400258501040301703011030703080080670053
0301502030680020013014004608030800702240580070260150301530301708041306
3061300101404054030706540208301620304030153030151400164006301346614304
0010065303015070012405640758025750102008012030140610030110307015020090
5016150401410014002500612002901501030701000200801150220016301100546503
6400630133016720021403062565010200219030170405303016530301507001252001
0500205108040023010005301030100510805040402053030161001304040550150650
9001050107003013011005465036400630132406103011503051001913016301100570
4016504015010700301665576131403080405504013010301001301550401622003008
0541025802001000802004001000150401301105040550180540709104030504061050
4060103080550402200300504080200550240201030400240530301501301100465033
0124006301930908014030802555010504064040400502050140203051013020307001
0805015201013040301530408400506200153016106064030120200400140405101002
6402022005040550102060510804006214003014020104001105015203040510150140

5102504053030110062544010307070601653030161300105040520304010400610530
3016406033016403070301108059602541764020103070518099015303015013011003
0140301504057060400610403065504020304030121008150850615010307020304030
1530506201010501163011001203040400630194020305007024100530301501405102
5040530301100625350104030190030124010307053030164055040130103010013011
6306400301400100301405103070240020140308015010150216150200110450401503
2006001410065303013010260108030400110050130115030140616301100163040011
0040013013014001003014020103070240020501404001060703053011005303013010
2601080304001100501203040150305007021405301025030163011007001106064047
0250403010101200601105025040130403011030120040040301252506703200400510
3016960210680021001053030165200105002018017080015305807018001080150608
1800200100530301800200100101070030117005040251401030707010406053030150
1164030701653030130102601080163040011006250506200203001013060150301200
5002015020306601503011030703080080670030530301501405110814050016400640
5303014053030110080400640301200700880630140564052001104504016320060050
1070030110301200400403012495063010070400402030703054001101402030530301
5010210203070020248501010040040301103070110088062007040301270140040400
1100309403030624740102087107705303016806200704050405056080501108050307
0801401080402010307081503130805032006005018031200600120010100030683011
0301170140040405316713051090613167150620070010640205040506806400105010
7003016246506403070400165062040040301404020403070140205303011620020700
1804040050401170018015012202006113013200804040080600501802455010400501
1005303016406100610960630151309030164001630903011030701690080182442001
0902506304070400140253030150140205010230800803011660504001306106100400
3030220010011680704005016812050301541007054102107003016807010615068070
1050113014040080020080140809050805800102008050530404008002008041006505
6604040050130210050405056404001003095016243501050608403011030701100880
6200704030121701400405200410020040010040301103070652004100706064030110
3070505670400406580010200805053016800200804006150566040400403014016050
3014040010030950140201030708150313024240103082006801000530301501164030
7016562007008180402060805011080140403070105303015011640307016530312140
0203011000302101040088120503015410070164077040013061806200704013061001
6306100400501130112006050564701640013050203065055062002070040060402050
1530301403070402060805011080404005050201611605030152960050405240400800
2007014010804020103070815031306241200102600506304070400140253030168062
0070403012505608050110805030708014010804020103070815031308050530315010
0030217001801200300706200530015702200150560805012509022004001013167150
6200700106402050405068064001050107003016240200109025063040704001402530
3015011640307016530301161004001680620070403012404001040011404040040306
0170014020103070815031308040204130611670800200400604005014040042001501

6140510307081503130802006130040061405504080012004005070130190801412001
5018020307003050040500200163011030706543062530463064013061543062543016
2001800400130157060613016080508030204001308062007040301250540066020650
5100720053046306403011030706570180020030140400105014120015040305010304
0120501030685054130615070800200104001430163016239506403070400130404005
0164030701053030162005916402030102071402030700200600130140610301653030
1250406104020504050120504052900706102030700806200704030124055010216800
1200400170015053167150820501050150563080070400130805053031501000302801
6050301404001003091700162384010307010300302025303015011640307016530301
1610040016524020900701054020830162140020301504040201030703075011406402
0103070530301400407050162002070016167553030140011011670060040040013065
6080504030900410080203070030708010504061644007040030120012008005056206
0404001306806200704025056820060618062007040250562060401805053031501000
3028016050301404001003091700162375064030701040610030155010210530301464
8203040065303014648140101001050115090050117031200400105011405103070815
0313080151003095018052001010001367820504001040084702504053030840013080
1510030950180236506403019003014052010306180530301464847040010504061564
4007040013080530301464820304005240044008011401080140510307081503130805
3030146481401010010130140400806005018053030146481401010010130118016001
0501130111010300505640400104001140401670060014005014020303081013065016
0812810200604006180620070402201604018050140020040100130930123540102087
1077053030165320045051030703013200303068062007040301250510307010700301
3050040505306181309011641200150120307001080505420021008150540030670262
0060013014061030165303012504061050205015054018200110805303011003060014
0504040020105015053030810130662001005500130500505608050125090220040010
4001100309403016234401030707010406053030150180100130930116407705016233
4010820020068010005303015018016180501802005300157022001902200400405101
6050504050630610501070030302324010308200680100053030164020263010040026
0201402402070060016105020306402050140101108061000303012530301402070060
0161013023140103070701040605303016601503015010216830904006161004004006
1620024005014020501401013058002007053030116307034001306230501050406403
0120030026561001304040205011640307016530301161004001640206080501301640
4100640400103001050140205002008164001804020305002008402061605022950102
0059400403012810650102164003012810530301501530301402020040150010850405
0564001805020059400170018050200591010400850562200100400130680010840301
1080160503011630740070180107001653010080010840301507020506301601062285
0620020700400104053070306015030305400110150102106550700125200801000403
0165503301103016704105303016200150301103015067041020103061402023701630
6202003004050402001060050406404270306165040610104008501020200300403011
6820504001306402040023701630652020030040504020010600550406405401306504

0610104008400120200300403011682050400130622740102087107705303015014020
4005070130530301130063068309040301504046080403014030701053030164020501
6600180405693016004005016200106004053081309013010010401400103015070205
0630160106520060013016110504301108022650620020804004004020307030400110
1301402030530301501021020307002068070301301005061008050101700140205063
0160106140570805050402002201140540500166015030307080150406200102204050
0114051080301002006010403016200406003015070205063016010225401082002006
8010005303016530301400408200506320010201030615303013010260108016451361
6200315501070030161650401501070030150122450643016001510804052001503012
1890120103061652006001301611050430110804053014070140092820103061802008
0120656400401080550104507040205040444002001050406167019400601501402050
1045070402064200101040084020506304001100105063017101306304001003015040
2002201550400803016530301450702002201550405305131200600164012008301436
0403016522008020653030130102605070490620010220510803014001003010051080
3014001004012008301200530030150702050630160102235064030704001304040050
1640307010530301640203020030065611010300162840050110607064020302001060
0656110103001652002040050110607064020305200206563014001003014020103070
2400202224010307052530301501802001060050401630708040014063010260301502
1650102016040301610401400103016501022001001301650104301630308020010600
5040404001008050114030100506100805010170014020506301601022121020010053
0301200905050113015303012009050104004057040165040150107003016306602003
0130610010104008163073076120080030161601230140540060404020302100504016
3060050107003013050040402040011014030655033011630600440050140400260840
1220401010040060409120090103011300105040104510530301655070012100830150
4051080168030400600114030165040150107003015303011045804055010211010002
4001501023014054001314047025040564006150107003011301510808030400600114
0651080168030400600114010806015030150102402081030100830122140020301405
7040307501650102007005040650102003002405010102503015303015007028054816
5401601503015012021921608200101000213001050401007200105303016540110100
3014061040510068016100400150107003016165040150107003015040506200600601
0611050430151108301162008020501070030305010721821100703014104300530301
5018054001314047025040530301540705030421050406550102510150404051501040
0140203010101200601105023060217200640130170320040053030110301620040130
1108001006520101304030164014010003015040303090010805303014051040011050
1130150620090050103052164010208710770530301501164030701804001501023014
0204001314047025040404003030750180215501024064704020305501501910300301
4001696001670240040013065801204030603011080163060041165040150107003011
5101110214412703012806200530301653030140018002004011000400215608050102
0030010504060150301504062134154030160102306405053526088040500130125770
3015400700600153030110040015303010100170016212416080301281013053030163

0605030165002008301203051061510804608010308002001301108010706010306400
1700162114019060030143016565230100108014010307053030145300106110504301
5110830110805306100202370105040601503015040621050620030084005103014020
5011640307016530301161004001610100400150403051030704050011308020060014
0050406510307040500113080501040610108030370400504080400146470404011011
0805303011620020700162092160830170102006053030161626020140402109050405
3020103061208200150301217007015010065506085200600130110806550608110504
3011080150400115022003061001050404055040620710013060050405200600130110
8053014061105043011080150400115022003061001050406015030150408012002070
0430016140201214020200207002053030116200207001804020206015040404001080
0100170018020640108200200680100053030150153030116200801000400601660150
3018001801500108504016800108014050020550103018003015040305302100504040
4005020501640201451402056200207001640120083012007030040301450705303011
6200207001804001802007050404040080080117001804020220050401308008016100
0400240050181503402010307060103020421230130110306111050610040016106100
4003014173012001060050180164674006530301540307010200106005040163070804
0014063830110803014313061006608013065008020013080383015051080800200805
0408040014063070402005300138301203211007030141043005303015011640307016
5303011610040016401200830143604030110200800185305150201040305040302030
7005304012052003007020304004040070320017001570260638301108040110155001
3050040110908043104030504080104530150402006010400601140803830110301520
0407030127040040400504080404005040117001802060506151004906140110905040
5104808056012005040107001526118001020040402050405012050408053084010453
0110003021010400840206062001610030840013061045301504020060104006011408
0404002009081501805303052004070301638301164040016202501050608403012810
5303015011650608165203054003011030140201041012161003040013065303013010
2601080161008050162015010100400403017040530301501164030701653030116100
4001640201030701044007011403050040251030701644007018040201030701044007
0150408090190100400140200830164012008301200530030124012008301200530030
1200501040301900301103070130150164701308016540050150180530305010430150
6201065504008050620400130104008405630400110061994010820020068010005303
0150180165400501501801985010200801203011732030700204056304001001804020
6304001100501805108040206304001100101040084012008301436040301450704056
3040011004001306304001003015040430015504008030164020632006001500108504
0405632006001640564040080100500500108405630400100161975010440070403012
8101305303015011644007040013064020506304001100105010700301530301301026
0108016304001100619650683080400402030703053030116100400161521621504040
0610230116400161010040015040200230150203061520065900504040061023011640
0140050122002301601030638301660150303040010100164010530100530513015070
2050630160101955064030704004040050164050013012601503013016401504011001

0200801630201400304012083011030115216304400630912301240205010240203016
4011630201400130619450610040010405307030601503030540011015303015010210
2030700201562200100400130805303014648203040043160403011080506802017040
4005016505620030012400130630103030110301401109030116404001405002003803
0150404660130191060030150408001021301910600301402030501024001010400816
2200300161630206402030530301240020140161000400216505620030012501301804
0205070180706402010307021400804020608050150650140060040040400502040205
0153030140307050530601230404005016402030601230505402010160501030150080
2003014011090301530103040203030811935064300200104053070301021650406103
0610301621034006010308050170417001701430156704210312102001001050180105
0701041270203016017001619250620020300400402030703064020145140103070530
3011620022040030654703011630402040030620060703014020241020010130620060
1030140202530301410200102006001401101504054708020080601030706118001020
0405012050406540901030802005300301402050404530050408050110020080301610
4530150404001501026601503030104550120010030151080307501107003015018004
0200200530019150640307040040400502050140203020010600164069040050165302
0010600658012001060070694005040805010206040401709510480550610010910501
0700301103070620060014011015040547080200806010307061180010200404020504
0501205040804001464704014011011905061004004004020307030402030210050405
0107003011030702400201402040110903014020103070240020165040150107003011
5101110189401082002006801000530301501510307040500113080405501028309018
0140500161180503906405040801600504080188401030707010406053030150155063
0421050107003011030705405001140501805704060140470253042504080187501010
0400403011030701100880620070403012501022001001301650104301630305109063
0112001060020200400501400640301402048120080081700140201030702400201865
0610040040040203070302123013011030611105110890190100301108040203061854
0103012170070530802030700470210440070150408054082006402022005040801080
6004002030700501608125103011416806200704030127012400180103005106001504
0530108070504080105005013012105005013016427030124270301620083012200830
1103040010030110809019010030140201030702400201650401501070030115101110
1845061004004030140520103061616100490501070030120103061601230150108612
0080030161601230110805010200219030161645170170014054570250680640301651
2073011040016513090301401100162110020030110806501030101603016301026030
1502165010201604030161040140010301610220010030110670052810307030140301
1040016501010250301621400203016520101304030162006001301406103016530301
2504015040200230150203062200100040301610020030040301302100402056361630
6400501200230160103018341070210011003001080302140020301108016803040060
0150107003015016100830122140020301307505303015012203070018220015030110
3070405200290114080520080100040301221700703016104530125301308003011620
0400300150107003012010306118140103012170070405306405102071013065401101

0030140610530301405403020101306200150301130140550692108050630201101402
0103061130103010015040500525062004003001062140020301504053030130750114
0506404002010501070030150118040108200200680100053030150151030704050011
3080417013061000122001010002009800150408053030120010100030523051140620
0107506003014083064043016540010403014020103070402008140501179506427040
0511014040050205015303016200203001640201501007200140400121095040163020
1650401501070030115101110178506301007010130405801040704020240901450617
0413017040601013014021007050101070030130500402016200802050107003013050
0406177506440051013061101030050630100701013040561215012063061150121510
3070150108030114070240050302163011005303013075011401670240014053030101
0017001617650640307040013014053030110307016306100400501613008803016660
3012402020040110140501175501024064704020305501501910300301400169600167
0240040013061210913013088002001301108014040163020601503011510111017420
0150301504050103200160024051406405103070400120060840530140701530301405
1020010203070020150401620024001402040550401200240050805200201503050163
0167024001501070030130110061732126013014052400709100400621700703011612
0061670240015010700301504016702400150107003011200240070011722170070301
4104300530301501617010403530305610030150121700703015062001070011640309
0050107003011020010630653030128430011650401501070030165303012820405506
2810141450153030150645040700600400105040601503015040617150630100701040
6100304001101308002001301614060301501022006006040301218603016811020030
1801020090400652143020504015108050026154006404702800200130152110818014
0504014060301504053030130750114066015030170805010140220082301108010200
3400104003012030803016200155030163010303018013040060016800200130164001
6140603011003060010805011704010820030150408200301651301530113048165301
4020530161695062009005010405130621700703014055070808060010130151080501
0430160016850107040316015030165201013040301653030155070304051030702010
3061200180204056164001406162008020501070030150116740108200301216400301
1501640510307026400120103061801650102616830901616214005010700301130116
6506507013030140550703010653030140550703010201030612140020301108060150
3030515010214047025040104530164001501023015040150307501140506404002010
5010700301501165401030702002013005303015018012001060070694005040614052
8069105015103070815031308020040400701614001023013850408053030120010170
3005040562004030161809030150116450644005403014052010306165408200640522
0050404001630904051030702010306116350670312005103011501653030150116301
1005210904040540021901170015010700301162501020021903012003002640012004
0500301660805013016301640130150409010050670633016806600301504010300240
2050630250306161506200703004001305020306110813024001640153030130102601
0803040010010504030163061004001306160501020021903017040530301501513090
3016200290301216501070400601165040150107003011510111015950620080204001

3061030162002030016402020020700110506200207001801585064030704001650620
4004030140402040307010654020830162140020301402040307010640201020710615
0400110140201030706304001040205040130660200402010801503060200114020157
5064400540040203070306402010307010400407050404001306105063006001640563
0060040013080405504016403090050107003011301538402010307060150303050620
1013010305200930040205636163068040400502014050010864012008301436040301
2009300205363068040032006005001085040615650630407040014070308011000253
0301140620220050401008303055016401200830143604030120093002053630680400
3200600500108504061552001041001030030201030705303015011701040353030140
2024001101650620400140501014001200106003011610024006018015103064065553
6302030615450102004004040301504050506204001308020220050401008301153506
4030701040561008301506404002010304055040110010200805016405150215068020
0701014020550680200701021400203014051501040015010700301152501040301900
3015040301700120501403070301504020131404702504040516514007024001501030
6800702530210070214002405800702140640540030210070214002400501140620400
3021001670240014051013020221400203011640061501070030140010400150103061
5150630407010140703080110002530301140640522005040100830155015064030701
0302140020301164006150107003015016520093004020563616306804040050201405
0010864012008301436040301200930020536306801518002004005302100205010306
5030801406030110802053623010040010200504100150401082008062003060150301
2530301501402050140101701080010305303015012014065303011045501070030110
3070130152001022030400501205016510210070103070230100501050404030660200
3017024001050404030705030130115103070400502010400301530210030115030703
1406141053004020103070306602003015062010660150301103070145300165062040
0301960654014020150307032030700206149401010040060409120090103011300105
0401045102200100040301610020030040301530303010015103070165012010400301
4054003021005070405130614060150301504015806030130610010601485063040701
0165012014070506301604001306404002602014040203064002602014015304003060
0410054012030400147506304070400140703080110002530301140653030150405450
7054153004040020504040403090015040653030140140307014040050113010010200
1905061146516501209126013016261007010610018601630107014060164010512002
1501506306100400401146506903060040530508506402030140701402030615030140
7011503064020220061502200656530301108015050631840013010014550642170530
5085065100029053030150405060815040653030151000290144401030703017010406
0301656530301405201080201060801001100300108040514050180163064005016164
4005141008052404005040114030500402165040150180143506403060405305085064
0550404815010210020080501304052200504050610250301104006114061060107061
0606401040061140691260130162610070106100186016301070140601640105120021
1030130750114061501030130750114065303012150401163061001425010202003004
0301504050120140618010508401051200215304030230100164400540010200190506

1146516506201630110061415063040701016501201407050630160400130640400260
2014040203064002602014015304003060041005401203040014050640306040530508
5061481615301100186016301070140601640105120021201012153016205301427050
1630110010470250405064270400140510502303011007001400640301261007010200
8008700114530040400502040113950640306040404005016130150400640400130805
0104301402030108099015303015011050211026100701065105024010512002115210
9066138501040301703012200304004030601301100403060152200530301100700113
7501083019030150403052006001301108055016110504301108051501080990141003
0656080505806050401301401051200215304050702100020010504061364010208301
7107703014005012050140510207106540208301621400203014054030701062040011
0140510307063040010405504013066020040510805007021615022001354010820030
1216400301400501205011501030702400615020601504015020016203054030604054
0115040010200700504062030501040306040150307031615022001344010307030170
1040603014005012050115040302100400150220030107014060164001023015040470
1610030140105120021708020010700161332001090403016010262001503012170070
1030152009800140500130103010057040040180200802050406301100200600130140
6103016530301240550405040150404001200405003015040530511007200161504011
4302170053070312200401051200213011007001613246360301702020030165010802
0170301650108010193030104001021200595013010701406016401051200211030115
0457061030904040105120021401100405040167006004001615040166015030305215
0040400102301150307037001613150104030190030110457030150101303011001040
0102007005040630110014014016015030302030701310501301100505404001804001
4030202522004010512002110304002170016130506200905010405130657018030015
7080504001306304701550403021001013061101030060805050706080501073400130
1406101610040016129501040301703011030704020400308008010501640201030704
0040705011040030110400407050162002070013010101200601105021101285062006
0160030140520103061805220080201050406525065040610201030615400613040010
0855063040010214002030140515010400150107003011272001090501306103065040
5303015040203014040307030150402013107003014702405165140070240015010306
1045301655303011045501301004054003040702400400104008102001905030113064
6510301205070108002004005030612640108330121890150703016040013061200107
0050612001030021008301220150306020011501125506501006104061003040011013
0115010241004052630100400521300400405306100305004040530210050405010700
3013011002030700205101150104001400615303011504030201013063050640307010
1305010700301301100612450620108050205303061001014050180120040110800100
1700168002001301640016140603017010421235064005011005303020800200130164
0016140603011080140530302550182601430653030170060040011630110061224010
3070706016530301501530301536405008016306400140501018022001000403016100
2003004030153030612140109007021700705200600130110804053061076001105043
0110804053050108010160013011563060041050140530501201402010306115212006

0010801070606540601151080200207001050153030143160407050405040404030900
1504061205068030400600105108016501201401080540110100301406104055010240
2081053030180405306100305004050640307010130501070030130110020307002021
4002030150630400104056103001030704651030140060103010200190503014003011
0061030010307010200190503014006010304651030140030110061195065078104051
3064051030708066001306522004507052003153080506084065653030553640306015
0401030211850101004190404005020501402050152002164001530100405105014012
0304001020019050611465501205040130155033013060041050301630110061172001
0902506304070400140253030150153030145070564340020010600504040206080501
3016404100400140651207301164001651309030116401010016116200104100103003
0201030705303015015200401253030110400110104008168809016168070180100830
1405305010240014047025040405608050145070504014608120018020402050140101
4702504040205064200106302140020301305150402001050020461153010260301166
0308004100805014010130122008020301304240010504063021005040106064030106
0140204020306602001630160400501506410200400401114200109050130610306504
0530301506450404020301406800200130164001614060301203040530530301501403
0704004030111320010410010300302010307053030150140307040040301153050040
6115504020010600240015015605050615101504060060505014011240109007030130
8008030167005303016130010504054004082002904006001053030164020220050402
0010600504040201030703075010501501020200300403011306214002030130515040
1620080205010700301461014011140103012170070501020080120303061670406016
1502009005011630610061507012001630610040013016504015010700301151011101
1050640307010165012063020010600530301450705040526500403016100400161650
4014055016306109506403070101650120630405608050152162003001406010230610
0130600504052006001301108053014051200400300150403016403070410030640570
8050101306405200800101405064030704001065303015070012130148150405250102
0018002405140653676200403015010252506100200801014014055040506403070400
1080200802040013080550400805085014050113061001010400848150405014030701
0140640062001406400620015302122501020304030110307030750114062008603016
0150301506403070101620080205010911030030150203065014010306020080201406
5014010306020304010307050109110300301630400400140167024001610850640307
0101304055012040520065900120065303012140020214002030116400615010700301
5040100102008070025040570401403010049040530301450705040306602004051314
0306107506504061013040520050020130240550401001020080570025014570164517
0140302061106506100601803011301152200802010140640015010240011012010301
1503075014100306105501020080120303064705303015018030120104063010200236
5306020065400201013040653030164705012050401045010504064030301020030026
1045651041050102140301100490405303015070012202301001030705307505501803
0102002330164705012050403010010350630407010140220010902530301620040701
0501217007030150405878740265140655060803012004070106304054814610162020

0300150107003015040651108103070601503019020081405504340030610250104030
1900301240103070530301640510410140040410014021421565040400105030610150
1010041904040050205014006403011650404008060150301506450405903016005303
0145070520060013012001430140203040050120501301001005010504064040400502
0501402050140101524020200401101406010230100405200802023037030140526301
0010801622003001615010907061507040601630110016704060165610024020150104
0011401670060020069301402010068015070802006402010015001040150700600170
0169950640301900404005016547025040303703014040070060040014050040015010
2301210606404020134100306985010504064040400502050130210050405303011102
5015063040010040040308030100405704014030110049040100830165651200614025
0620080201061501030703075011402504065016301100530301307501140216504014
0530301010017001697501054021700705010200801203030628001000103070280010
0021612805412705040130010504010307053080080504053030130750105011101000
2530301307501140216200802010501405608050152162004003001140601029650102
0080120301103070530301550703080521620080201680200701404051314030801620
0802050107003011030705068400804006010302100504016501206405704014030100
4904053030145070504021400204051314030695506504061014013010301008040520
0802025303014055070303028030100015026301001630110069450630400100400110
0102008064040027002011001020080804040020022040060140206080501106540013
0140230660200402013140302080160410030186200251504101640015010230140102
0040502110601070150104001630602003012547025040150108010062140020301106
0640150104001410030693506200905010405130621700703014055070808060010130
8052006001301211050430151110830116200400300150107003012010306192506304 0
7040014070308011000253030114062170070301430011030150642001054011010030
1406106110504301511083011080107600130140205040203070030708010504017314
0808007022506200802040062140020301800702250650406400801405312006001402
0103070402008406564056418040010200160140206400110501650164703016405001
3012405103070506200519004004052001104504040205040110010200805063200600
4006402060805015063040010040013065404005014050091506453004004040050164
0400200200100140500402020011045040402060805015063200600400130640201404
5062080604001304020100150010401507006001700169050680020070404040050164
0205040130103010013014040010306400405005120730116400165130903011640101
0016150608601503030163061006501020160403016104014001030161022001003011
0700615016081501043016301265303011301506427040013030101012006011050210
0150010401507006001700168950643016001510804055503301218901201030614001
8301903011630407061650401501070030168850643016001510804052001503012189
0120103061805400101096005240091816510106026020504010302875064030704001
3014053030110307050630610040040154570530301803060010503080145705303014
5070404007006004001301005464704014011011301200150301150604040050301630
1100686506260201014040405303010664051041014002400201404040530301068013

0103010015040500521620040030010305303014507050401700550630610010405004
0510410122140020301506240020105010700303030106808550650900101301405501
6105014011301214002030150640307010130506104014055040684506503070101406
5062006010140403070105303015015064030701013061835063010070400130801402
0220045070524020631810304020103070530301840080140240550650048400116301
1008007021030140580070213060017001615040116301100165040150107003011610
0301700168250640307010405656301007014047025040550680200810405005303014
0130205067040601040550401001020080501204100640203016504061050150670409
4008018150630407040014070308011000253030114065303015103006005040925101
4030155040501614030155040320060010801001003001014030155040501620015501
3015504020038040010140305200138301504050165660100430016152001383012010
5802030700470250404020263010040060100405008050630100704004020307030540
0110140201020010610400640301530301101081020307002015800702256220080011
5030100807950640400204004040050201403200600405303016151080404001200141
8016080504040030400100700167850630708010164120140615682700801008301240
0103501301163011001510805103001305403060405002008301101006040013068002
0013012001050040030630700130520010021550130610010550130110077506440054
0305303011300501150161501030705213004002001002301501105140150305010210
2022001503070411630110076501020090015030120060400155063070100180120080
9052001002155013061001055013011001550630140150305010210202200150307041
1630110075506200406400140163070801802030700501025016702002021306800200
1801305200100215501306100105501301100105140150305010210202200150307041
1630110074501030513301504050620150153030127006701301100167515070060040
0400116301100520010021682700400501402020040110530301501540610030106064
0301100700167350101004004030305900706406158030600140615104105010214030
1301205015150307038072501010601600542001001650620405301503010080400260
3011080402050401644007015010700301404004030704100306715010200601600301
5040404005020305400408200640201030705303013080080130630802030700470250
4040400103064004050070506100400400402030703051080140162002070016561002
4020150104001140167006002006930140201006801507080200640201001500104015
0700600170016695065078104051306405103070806600130640522004507040520031
4053080183019030407062006001301406103016530301250401504050101021903016
1020019050301616415501070030161650401501070030150168506440070101650120
6169070140220307001008301200101000250101025030150630400100106530301400
1101250620080201016501204055012203070053030150402800100021612655020604
0301653070030140510307040022008006404003016014040203050180120090401692
5120010600651070030121050416510700301506304240060400130110015309026156
0470615406806151015001006153010025040800200130140025040014040150303200
6001020220015030704180481640170910307020029050503010606401104040030100
7001667501046080408002001301108016500704001306530301100720050401622003

0016163020405220030040601501302040307041001501070520030070140050500155
0404002003805018020038301201907022200800115030100805406100301060640101
0060400601700166650610060801016501201402140603015040173200164030900501
0700301103070150307501804053030101001070030120010100013061001640309005
0107003013042806550105060840301410750606402011019600402030200801000505
9816306100614360212301163060041614100020040400103005001081550401630208
0510200100301570051630600411503010070016645064030900104056080501165012
0502030615064030900140640201501007200140400121095040163020106306030165
0403014020103070150307501640140100030140201030701503030900663506200203
0040040203070304020400640470250404020150500702405006250620090050400404
0050165100701903014020400700600180520053530301102005010400820305040650
5030106064011040400301007001661401082003012164003016555014020103070214
0080402010200124507040203020010600402030700402060805011630400100180402
0102001210301162640080303703014020700160040012402060805014040040309004
0205014061001105406100301060640301100700166050644005400402030703050110
0200803016214002030110606401501040017001659506200203004004020307030203
0700470250404020507015068070405005850640301900404005016547025040303703
0140400700600400140500530103050107022001106064015047016700165750620090
0504004040050165067020080301150100200100016402015010350180200823014020
2150100200807001656401090070402022005040130240203070010806402016050506
1084006010640201502150682700102170070301660402050640660105067020080301
5040402015010350700165550620090501040513063047015504070060061013065701
8030015504030210010130611010300608050507060805010734001301406101610040
0165450104030170301103070402040030800801050164020103070400407050110400
3011040040705016200207001301010120060110502110535067031200510301405501
6405220061001304040550150650900105010700301525010703001600301103070130
1520010220301550165130903016200290301216501070400601651506301007040013
0801214002030150630400400404005016402060805015066050400620023012601503
0150620040140015050107020120030170401670202001651207301164001651309030
1164010100164950640307040040400501610083011640400204006309123012100830
1166023040013064850610040018010110161301030100150405001040011012162004
0030040013065220080120306116506204001306402070401403011004904040030750
1140216504016475062520018010110164020457028061104570216806164020103070
4004070501104003011040040705016200207001301010120060110502110465064301
6001510804052001503012189012010306115040011012162700206162008020501070
0301645506507810405130640510307080660013080101457024005040801045105040
4020501040011014018017010403155040169251150301004440108200301216400301
6555015103070214008040014030205220050404041101003040080435010810301701
4004062001004006040800200130110804020306647080070230402080070216925115
0301006510801501201404014053200600180155070501910300301140530718042501

0403019003015040150620400805200330030157005122001004001306140400103005
0010814100020015504013020655033012036764005015020601404111015030100641
5010200801203015040501206200220400601610216010302113011643608040413016
4360152010130403030150301007001640506404002040040400502014065064240014
0403070168002001301640016140603012101000403070110501402030301001403013
0110040510140601240512501140308040510140601240510250140411103011003940
1020830140103070301400501205011504004030701401301150304030701302050182
6016301100385010100419040400502050113065140601210506102501301100805201
0130403011030704058002007040500153020140601301404140307063750640307040
0130140403070110501301100203060410050620440828260505085061404301208060
1061510804608010504015108030703400116301100580103060080020013011080307
0131050152010130403030202200301100700163640103070103003020265640016140
6070260505166080140603011030110640060140500170104038002001301108014040
2030100306001070030165355067032004005103014050040201010810405004020400
1040104050040201108180140016401404005020653030125062008020400801020345
0620060160030140520103061800200130110805064608010630906105015253030120
0401140506709100106510015001040470250405303014570506800100501050107003
0133501010060180301130152308001014061200105002052104510612001050020523
0800101305004017005253030141200117001405063061001080162008020501070030
1140164052200504010083015501506403070108016504015010700301140180151006
8014080580067021401305004022008001050110108400601013053030150132506430
1600151080405652005940316711510804053061521300400405216400163021005040
1501007200107003011700516301100110072005200405005040155040161007200140
3020200155013011540084005040102003400400150340530501400183019030116304
0706165040150107003012003002631501020080120303040047015200138301660150
3011546100610400301200150301161004001801630708040050306163070804004030
5018030501010041904040050205015303015064504040201453001670416530500405
0405200660216400180150427010307015030750140402102001080404005020501629
5064030704004040050161414501530301630703400130804020301100720040012004
0500301504052320060018014014060301504030750161502140603016130012008080
0200130140203030703107003012850610040040040203070304020302100504050107
0030164020100306001070030140202200164270160150301151011102720010410010
3003020103070530301501405200190216405704060225700305303011300630616401
1004051030704030900117001651080163004040530180011403020405200190218096
0010100200230141201026501020080120301291084053030164006403012007008100
7016903015040405501700110804057021901506307031010020026470200640014030
9005108014060301504021090206125506703200101304058010407040202409024506
2009021013040014030900108040520200400640520065025303012570053068140400
1800114030801200150410064006011070030130500402040530500402350104400540
1650120140640540020013400400822001408010453012530130800301162004003001

5010700301201030612250654070104055011010009108040544010640521075400601
0530301215061075400604050850140501402070401501163011004055010911030010
3011630600170016150401163011001650401501070030116100301700162050640307
0101305020306158060301405405501130115806030150401140205040650116301100
6015030150401140201650401405303010100170016195062007030010130502030650
6460804030140540550113011850683090405085014050116301100800200130110801
6460804001304053030101001700161750627002010165012014024010301217007040
5306180020040530301405417808002004040526301001080165062007030010140640
5608050113015067046001014061650401501070030165303015067041600101550105
0406402405140620060013014061030126530301215040130610010504060150301504
0614401090070217007040530656130010004052001902110307064057040601030706
4052630100103070530301404006001350650406101304052007005040040304014054
0020070050114051030701660162008020501070030150112506830804030140520103
0616405220050401045103070201030611150650100610405520060013012620302100
5040307501140620103013075011402506504061050107003016105061008050104051
5010072001404065130903015064010100106210100030125065040610501070030195
0101004004030301045510802102001302140020301203070084030175010301800301
1306405103070268001000403012001010004051030704004070501501070030191200
9064010100400604030191200903011504515501070400605020110164270502011014
5010430140610203014034010820030150408200301250104030170301220053030440
8301140108200301504082003015303014060 2”

You might use this big number calculator to test it yourself: goodcalculators.com/big-number-calculator/

6.1.5.3 Code 3 big number

The Code 3 number till the end of Quran, from, excluding, the Iron verse is presented here. The “62040” digits length coding number of the Code 1 of the Evidence 6.1.5:

“6236601503016550330150406235601503012006490108060660610107003016234601
5060030160166063012003005040623360150301530162326015030120304062316015
0301220027006701301006230460817001460182003005040662294100703011080400
1500180503012003005040662282100617001100601100020030050406622710030600
1402003005040622610030803012200270067013010062254811680205305020104030
6662244306104030643010403062234409030153030162224815303016530100622146
0405040302815410310806220298301530140854001200401662192530400170012001
5010309010606218260201406530140550701050100011406217240062530102114104
0024006216121640050120550152008010004006016202200440828260806215131680
1530301501041080506306004106015030140010120066214840080301653030120090
5013170016213501041030640205010440203062124270114050642170404005011306

6211404004270140421701501130662104270114050642170404005011306620950642
7040014042701130620850620080120301151011103010062072004002130165201050
1300501620620085016202200303090806205200500620301201501097011501620450
6701403015067050401066203506120010405501070030162025065160405400130905
0704055010700301620150103090403030301068062005010206040301401709103070
8008101306619940104001030170410107003012030700806198501043012270020101
0700301400101200161978066005040405504016706350404054070911070030161964
0010230117005220016427010308061958010903016140030030153082004058013010
1619430010200100801301013061933062014080907020405307038061923010360504
0520013824051040200400619130102121120010940510307030602001661903010308
0040010804054102030703104030161893010803012189012202200307080801020200
4004030161885444040440701080618754906404051030701550161865410801301103
0707030940010400301618554100640301530301200150618454098301140201200411
4066183540983011080507002501030130206182543060015301405012608106181544
7061301407040310700301618057403057405302030301066179200290301216901640
0610083012169016400640018301903011630407061650401501070030113016178200
6060010803050160501301501617720090703016617640107050301507070010406105
0301604003040500617550101001030150107015506200400304050061744010833015
0620040030617350101001030140307050640307040063013020617250640307040080
6601302040500617150640307040080660130206170200211004030140400200710400
8616920050012040030140201530161685104018200150616751051402012004114066
1665106155401806165550107164040080600504014016616451080012005300107010
8065806163550107164040030100500504014018061623006805040301505703012030
1233015062040066161500650024030130012008030120601503015062010406106160
5702001100301140201200411406615957020011003011406158570200110030161572
0010260030700104061040524052200501615620064903011080140309086615520062
1003011080140200500702170014030701013080161544104300302001060030128305
5016615341053003020307001030705501661524650203052200305016050130150161
5117040352509606806150170100505250200500180614918290400120010100040301
8061481841004001102006403018061471828004001104170301661465200101200300
5200700301100500403040701050406614552001012001060052007003011005004030
4070105040806144405301407011620010301400140030016015030120049010700104
0610614315301086120220050126142152001260015004840070010406106141153014
0501605013013011006614015301100500180020013014003200600166139153017307
8002001301400307307170016138522001030060050403020307005507016800200640
5507053030110800200142115108050104301600200155013011540084005040102003
4005047040015034052200450704056173613751020023012001060040520103061400
1830190301163040706165040150107003015016136510200230120030040520103061
1510805010430160040505320015010805010202003004030162140020301305150401
6200802050107003015016135540101003015010420307006512073011640061065130

9030116401010010618050850104301530501090306004053030116427010301301162
0040114066134550102301405400131404702504013012140020301164006150107003
0110020080400140661335401010024002015108061325200594018089063040010530
3015040306602006131550102301405104001400104008501020805040501020200300
4030162140020301305150401620080205010700301502010403061302003803017030
9401040081054013060612920040130205040405220050700121510808620030165201
0130403013075040061282005300803015040200106002004100301530103061272004
1003015301030140201200411406612620041003015301030108051503075011501612
5220040010016436016570940013013020612451050127301704506061235104150704
1030806122510916005270012051090150612151090150301217080605030540050104
0305010301302061201020010530301501240307010403016119103064006270020501
4001012001611810610040030122004016161171045301103070501205014001012001
6116103090170011427061151055010107003014001012001611410703200301202200
1030150161131050100040060151200501611210100091030501605013015011302061
1140307010403014050160501301403070611040301003012403070107003016109402
0020130120220061200100161081003070504050160501301100306006107100306001
0700301202200406012120010016106501040201830140208125303016010301610550
1043012470220270020101408061045065040402001010002003140530804001830190
3011630407061650401501070030113016103501030801603080601515044200405006
1024010610040050608110805016050130115010030600410030610150104013014302
3011700566100501050106020069660995064001073016501040030166098210002001
8020220010301660972905018040010002008017001806096120060102006070301704
0501609512006010200607030170405018060942020020700203015070802006609320
2005900800100501107003016092202007620507015070800666091202004902030820
0300504030160905004880202200540705021401660892005504001308030101603011
4016608820051004001308040104001030114018060871050100018013010170204366
6086104580130180020436660851061801401040010204310403016084108002004008
0202200201097010806603066083103061301504020302001060052006001303066082
1030100140620220020704614060811036017001301030301660801088003016607910
8002001080660306607810307013015220053611000400211301607710734005407050
5040545070481301406607610207400105301401040061010700301607510100400130
1152503106066074103064006270020107003016073101003001301130115130901013
0607210900304001200150402040020070050180607110306130165200600130301503
0501660701045303015010307050160691042004001700153014055070105010001014
0660681020060703030520060105060806067105060830122700206606610501000400
6016306002504014016606510200601030305200601050608060641050608301210049
0660631010040016109701504014018060621040030030402010706050160611050050
1301620020700301100306001406606010303400170012001550301660591030010001
0170013010303016605815121007080160010130660571516608040525070024052200
4051030704044048015620010070805627002080605615110100606530301510015053

0301306602004053030110080605515110030015007025017001605415161000924640
5004002700206053151604504021600410066052151207504083080141006051151610
0400615200638015405301806050151660140660805066049151891406800200130166
0481515021406140603016604715130010001017001301030301660461513031700120
0155030166045151304001700120040100301660441518800660403003016604354906
4020015040510307060425401300403012189014051504001101216200802050107003
0166041550401040301218901201030616040540820040301216901640062002903012
1690164006165040150107003015040501204050060395220040040170015010206040
6160385220010040170014010400106037521000604010700406101080401709161603
6521002002080603552100703011402012004114066034521007030140840010011308
0603350104350301515010456603250104008030061501603066031501050107053030
7035040301603048152001040305012608101602914230130140400203051306100106
0284815103070200410010503050126081016027422010805016050130115010030600
4100306026430614064301666025430230117005230840050166024430230117005240
6010011306023104005031030600416602210412701080103060041806021510800200
4051080012002022001030110703200160205501040940301608050301154001011106
0194815100150061005006101306601848152170070270070101307001040610806017
1040011083040040410010504001030110306100106016102002070030153010501650
1605013012002070040010700104061040505327001040610103660151809018090203
0403016202200136601412041204800200130140020417001130206013140312830140
3015062840066012140301302015001200400301506302014006601150102060403014
0170910307050680018400130660104010400103015064020020400130302130206009
5050151102200306100108051007200510307020041008051304002114017001140166
0085040200201102200306100108054070506540200201805220051304002114017001
5016050130114018060074190200403012302022005016006217007096602022004051
0307029080600541608030115108016200500201806004413023011080161000950107
0030160034140061301107005067020080660024163012200600903011621350107003
0146405006600141302301108015305004010030600104030104003016000414070301
4001700402001599941702202200307080801020200400403015998200381070030406
0100203070010803055997200601017001301030301659962004006301670803003016
5995200300703011030659942003803016599340521608150103070501405005992405
2110115010301501599120022013012170070301530301527007010805990200802061
0306400504013015989200910904024051030704006030598820020700404005011405
0120020700805987400896080102080020013011030165986400290508010203012330
1103016598540070802008010201406030110301659844001003060080102030213011
0301506200900501013080159835500650024010212007659825806809040100200140
5065981570680064021620165980570680200402002006015108059795102001350107
0151080597851010001301510807040604001305977510301705503108059765108001
2001510706030597554070150700104061056365974706350401050100010130650406
0101305973701020080050401301401709405306010305972510501501070504010100

604005971510401812001501030904005970529015053040170596957030016007001 0
406105636596851030011000301500104820140013055967106064064010512002180 8
905966103061301808903011080301700550159651010021620010600520060013016 5
964110504301511083015062005006400302596310309080522004060120020700659 6
210207400504083080141005961101081013061510804006401013040500596010200 2
203012001503011030901010700301595910100300130115250340010659581030060 0
105040200207001060595710200207003014007080505012002070080595610200601 0
303020200601050659551080600101406200533014030701055015303011300140130 1
595410605040013080201020010050605953106811500100053070380595210702004 0
301320060011070030165951104580200410010700301659501066080100306001070 0
301594910307013012022004060182605948141062004053054015010200801203013 0
540805947141020410201659461410205064102010405501594530753012651406594 4
309080306100305501594370490301400170080020013016594270320030140017001 4
060301659412009015013065610050405301408059402001012006030110302400406 1
059392004110030570320010307055015938210120040030162309030150102504032 0
060010593710080141405040100306005936100306004040501605013012009005010 3
080593590080181510307014030608050302050159342100150030140350301593310 0
200193011402012004114065932100200193016140603016593190068084086301080 5
930410340501200100653025929910840405101200650405303016592821070020400 1
080162008020501070030130259274640500650670200805926465033015001048201 4
001305592541020010140303017080592441034030130020070301670059234646301 2
006801000301656592241070106104210655501592141043003020220030092501592 0
200102203017680301203070020015501301154008400504010200340040015034053 0
400183019030116304070616504015010700301501591910010200830121700704053 0
640505321700704053080162640010403040500400150406403016501050406403011 6
504008050107003015015918410530010300302010307053030168002001301640016 1
406030120304053010700301591741040830171077030153030121650406105011301 4
055040164010050140659164653005010504064030125063070801014010307040565 9
154670100151030704057001591446100630140017002001503015913464600130121 8
901304001005912465300406451300659114670640301406103016591036200230140 0
170014060301659095065040402001010002003140530400183019030116304070616 5
040150107003011301590840103012170070240520030028059075067061014024030 7
015303016590650627002010162008020501070030130259055064360101305012001 0
030140510307010200100170016590450650406101304053014080590310029507011 0
029502202004003059021006040011700120040100301659011006061406301030301 6
590010080300301240601001130805899120010902525012052200501103025898200 6
810503050150900550158971200620060405305110805012055015896120010706010 3
090106589512006250067041080660805894520059001200652140020104006150401 4
016589312006200604053051103012301005010658921200106010121608260181080 6
608058915501040102521400201040061504014018058905101001304080184202022 0

0103018412020501501605013011510111058894001008615220030400507001658884
0030600400615108014040010030165887400440800200130117001658864001008615
2200304005070016588540010030050114060301170015884506307080101650120140
2001802030126500305588350620090050102010120013011030705882506208800102
0018020301504016504015010700301406103018058815010900801840510307016306
0200114065880506301800301306550116301100405612001700165879501052080162
3010050140530511030116230100501170016587850674011000400104052162004017
0016587750620880010165040150107003015040165012016402003150107003015015
8765062200100403011522200300101501070587540105060400504053174065874506
6080150400403016080150400103080203070010806206040540140060058734064006
0040100108200504050610060105872401070503015200800504055636108080200704
0058715062009005010201012001301103070587040107050108030200120021301501
5869506220010040301545300105868406100200402140020586750610307014020120
0411406586650101030701080302001200213012140020501130205865506270020400
5240400502010700301170053011001040500586440108330163019030405501405005
8635062638403070010406104052200507040550113020586250626020101650120140
4052630100103070501200302130205861501030613012001091601301100150400110
1510307010304004001700158604010500144007040302013015227002010140658595
0104301406102506270020105010700301585850102700204030307001040610301065
8574061002004021400205856501036014020120041140658555010360108030200138
0301214002050113020585450104030170301220030601503014061001040610585340
1090070406103058525065006702404055012010306150900101301585150620060600
1040565076614056301201700165850506806400601060150301103070163014002011
7001501070030158495010808094030303010658485303070010406102004013016110
1030060805030608050203040400130406105847501043014061014020120041140405
0058465010430140610140201200411406584550102101100021550704051406584450
1043014061015506309010584340108310803020013803015016584240107050108030
2001200213015015841506307080400140506403070105840501024001201401200205
8395010900801830402010307050165838501043012506270020400302130205837202
2020013001405200690101108058362030470802016608020100306001070030158354
0102002030120220022020010001405016050130115101110583440020060016400404
1001406080504004030705833400200500702200621003011700165832400200380200
1823011700165831400200500400501220162030117001658304002009805011406030
1170015829501040301703012200530301130010501130150613004001406582840101
0040060105014020504013005040305827501040301703030200207001301655015826
5062570040050101805825401032005019103003061002651406582450105080022101
0003011030706514065823501024030110080130125120041003065822506503402402
0281901406582150104014050070194058205010204030020070301107004507056100
1070058194010200203066020030610030550158186080504001700182903016581760
7060701700130103030165816605020301200163301581560506003012406010011308

0581440020080081140608050400403070581340080307155033011700165812400200
7060401083301170016581140093002014060301170016581040020030050808903011
7001658094003040010025070010125808400301060546640301170016580740036760
6805030117001658064002003602001823011700165805400200300830068630117001
6580440030970200130070301170016580340020010603012330117001658024002004
2050140635030117001658014002006206040300301170015800520038030152008020
3014052010306157995200400100151005200400579852002100015103070700104061
0563665797520030024006040520818005796520080604070010406105636579551050
1000105013007001040610405504010200401302030579451050265400281906579351
0216540165792510600150402004030120080104061057915600190301400131700180
5790402040170501306402030170140040578912165520180657881230100010010148
6578713060050615064001076578612800100612507065785128151080150400250180
5784110030080020013011501001003004050057831290140301150229015015782540
1709103015016050130120090050103080578152004011408001001014030130205780
5200300501130017001405005779520021001805400140140500577852006010301026
0301405005777520041008051003060058095050405776510030600103001015040577
5520080201140501605013013040010057745200200240120020577352008060104101
2577252005940570680200405771540200204080890108057705200207001300504080
5769520020700400155011302057681053040055070400501805767103006001065657
6610706010201350401401657651020710130120103070140657641049040053040050
1805763105010004006015040140157621020020700301570805040080200207001061
5761102071053070302010200410140657601040701301513501575910306400660270
5758151880061510300701301165002301040301550620010406104055012057571513
0060010504020070050404005011405015756151540050402022001030157551512002
0700504040050140108057541516020040501101570160301507020506301601057531
0614030110555033015018057521065301507060805030110550652200401100408016
0050401401657511061403011054010833015018057501105043015110830120050016
5749101000950401401805748102001050403040108330140072002657471070601405
0160501301200207004001040610574610200220301540193014001317001805745402
0401705013064020301701400405744151602001301233016574315170200406151401
5504032006001574215184203070047028002001301657411518800320060016153010
3030091000165740151660801520406070802005739151502140603014011100306004
3001404005011573810300600105040305200270302030700108050157371030613016
5200600130130120505303015700600180573610307013014020220015013011008057
3510415080200300880573410706010200241405005733109070627002080573210200
2203015101301512001805731103006004008020220010301201045165730102074005
0110301203030530100805729101000955015067020080103012570015728106960410
0403014163012522005141507001572710606405001048201400130557265200516030
1240517001805725548165200371051405018057245200601600520020170012030400
1630110057235200600501401900701502017001157225200801830110805064642004

0301501150630610010572157030016001520019021572058031670010406102630100
5719580412003011570240040057185803120030180320040040610571712004014001
2002440301805716110026040011002160301805715182604001821603016571419300
5040019300150301657131100200100040017071503016571212120040040050201050
4001030110200801203013061001065141040040410014020040301200900501040610
1210200100121700704020150200700501150157111214052200103017006004001130
0504080100830140610301203070057101216903011006504082003015305070015040
1301506403020400101301809052010130403016862003014061001040610570912196
0055040506203040101305040820030114055010214068002001301640016140603012
2005708121608197020220050401735707121700201306161000301510805067040601
0130570611001541601206570512120040012701620657041215070161001014857031
7180405010100400403030501570212170070130140204107505030801610067008057
0112140020515010908110300302065700121700201504001101216270020656991216
0850632001013016501204055015698110018061735697110016010006140104081301
5696121200300130614200215108050610067001013056951211008115108050105002
1305694121405010100019303056931419020040400501204050535015692121200604
0050120803012330140020010606569112162140050120801406030140084008065690
1316801506400140080200690301108060080501040610568914001100104050120309
0803014061050156881801803014001503656871400125061285232006005030568613
1350014040012009070403015040150307501656851315613120060150307036568414
1430017026040201006801501050265683130017040200155030115030703656821601
2303010303011503070365681140012604020406501503070365680131671402015010
0306006567914140061301233016567814154080020013013070350403015677506403
0701060130204050056765064030701060130205675506803040060040510804051070
0301567440109007030112503015070567350630160400104070567250650406105470
2500104810128056715010270020403030700104061030106567050670202001013016
7020200140530301010017001656695010270020403030700104061030106566850640
2003404020501130103010016704004040061630205667501027002040303070010406
1030106566650105060840301107350203070020150156655063040704004040050201
4021101050516220030016163020566450654003001014040520168065663506107063
0130900108050101004004030150156625010270020403030700104061030106566150
6410208041020402030501205018056605010306130164020150704033090803014061
0170055659501027002040303070010406103010656585062007004007010804053050
7006101306565750610095010130406101700556565010270020403030700104061030
1065655200809040030140355012056542009010030120200200300210402004001550
1565325303015040105010001013063010309001305652270300500130500107003090
0103011610030950156515062700204005240400502014010301161003095015650501
0270020403030700104061030106564914001200801404020150101006016400160040
1300106016200151080150307036564814001640161108156471400180208002001301
3070350403015646501027002040303070010406103010656455062004110030140705

0801502004100805644406307040200410010301564350102040200120010010805150
3070380564250105401405040402010030600504030156415010270020403030700104
0610301065640501040200340301230708050203070020563950102006001301405702
4005040500563850103061301203055040301563750102700204030307001040610301
0656363090803014061014020120041140656353090803014061030563440030314061
0101305633400400100130602003011700165632400806050301233011700165631400
3200801406030117001656304006040940635030117001805629701001630506470640
0140501562812007005061120070070562712002070040011010030403018056261100
2008040011002001803018056251200300504001200300150301656241809070400180
9017030180562318020070400130602004030165622140103011217007040530470150
1040301900301654004082001080130010504030600410562114010208140103070501
2053030150153030113001050113015061300400140656201301026052200103017006
0040011300504080520020700400570055015619130104240040530150040115030421
5010300170016405200601150443006405150100306005085056181301010050014061
0405120065062007001065303170301506281013065501561713010691301030582606
5304360180301030301504065616130109016520020220220040601200207001656151
2006802061140500140550407094001306202200402083020029018056141301075040
0501200100301201030701503075050850150156131200620300404020107060501206
1734020305012017005501561212006591212003004052200405110060658008050402
0061601163086100200240060162008006006045060211050040510301705611120010
2201203040614010705040010120040500400101200170016561012006500504016306
3040540026084054001012001700150643060040501430640510307080691065609130
1026030601040604001510801501070560813010235071531740501201601201510805
0610060106560712001041004001562004100580080504020010200161005606120010
2001610040050120216201658008050405105012405103070801910656051301030700
4001580691004003030700615301309004051030705105014656041200102005407130
6160403001510805062001013020101200130110307015108050101020400405603120
0102008655031620029014024051736560212006200606520080050405110030640610
3012030700200300530301405110068056011200102009401001606270140610150220
0504080160050150156001200620300130617340205040410200501305303015363040
2040709501405015599120010601614010400106150102060405281030704017093015
0640709106559812001094006040520030050120140610506801600106200700503012
5068061055971200103804001550620038010530301412701522200300101501070559
6120068012015317405012060120504050622003001020012002130150155951200107
0606130130100016306013060501020080120303015044007011501559412006802014
0161200201300140130102603015150104515015593120010902170104060515030703
8051030400250313004015809505040501605013011501003060015015592120062070
0401101030050201040302005430150405010850160501301103070104001305559110
4006403011010810501103070200411002203070060103015590105005013016200207
0030150103673015504030703805589106608010030600805100307050120405005588

1050401010504050405809502010403015587104602020040010501501605013012608
1015586103061802030103061405005585103061802030103061558410940400105305
1103012570040500558310306400627002050203065582103090130610049013080558
1100160403017001040610202200103015580100160301210016030140080400301655
7910012008030155015090065578100120050403010100655771010012004003014001
0003021700113020557652001001801523070801050150900400557552006012700104
0610563665574520090015015220010301557352008001507001040610563655725200
6001301506200700400655715303170301506284003021302055705501102150103070
5014050055695501200100702400180515012001001700180556855012001006570403
1501030705015567523037040030205016030522020084001305566520010700170401
0100301630655655200109025608050103070501605013013025564200600164041001
4027001040610501605013011250105563200100400604030170010406102022001030
1556220076130130205561200804030150101700104061050160501301306100105560
2004010030166040300301704036555920040100301806060065558200902301100200
2170018055575401101003014061050110130160105556540140120038010305016050
1301410200103025555550150210660505011030705010200411001030255545401900
7070403505030150160501301260810155535401630301608050301240601001130655
5254011010030140610240601001130555152008010004030130516106100400301305
1655303011300105011301506200207001014065550520020700130050408055495200
2070040055011302055485200600130150680160010130302130205547520030050401
8089010400610501405504010200401302041020010302554652006601005040400200
8055455200805040060402004084055012055445010800200704052002070040030150
7040530140805543501070801300301570180300405708050400140805542501010010
3011501400110400855415010430140610227002050150206554050108001016003017
0408006600501502065539501020604030140709502050403065538501030904030150
4020504030163011005537200100601080402020306014055365010402003403015070
5535506301604001040015031080553450104010301218901130155335501052004002
6020140260805030205532200600140010614041004001050140205040130050403055
3120030023030120010700505530200220301104813015501552920080601170018290
3016552820024170013010303016552720040100301613020552620030023030102002
0700130110514066513012022004650340307010140613001050401045106130010504
0530301308001020307002013050040170052530301412001170014050620080120301
6800200404052630100108050107003013061001030650650406403016214002030116
4006150107003012140020010130615014010116504015010700301414710621400203
0116400615010700301501001040060103016200802050107003030550400801301405
4004701503070314065201013040130120015030121890115030703140655252003007
0570604001510307055242003002303058163055232007004001306101002400130552
2200100601402012004114065521200100605103090160552020030023013061001301
1700550155192005006102008601301170055013011008055182002204006016200241
4050055172006026602704050055162009005040500551520041008010203040010040

5005514200410080102030400100805513200410062002080550155121467090510052
0016055111410507015040011013050120550113020551041071501704091040500550
9141054040053040045406550814653005010502655071464404013014053040030703
6550614108640010030600504061050200700550520010601020010100050102008012
0301103070550420010607040610700104061020307008055032006100150301108020
0100501700180550220029018020220030655012005002040060400505040400130655
0020035180732003016549920059802021105006549820022080202200654972007005
0180401005496200500440301151011105495401082002006801000530301501530301
1620080100040060161200314090070161200106006553030145070564340020010600
5040402060805013016404100400140615060818002001005303011680020010016512
0730116400165130903011640101001655040200601040014016200100180530301301
0260108050630400110010506200600165303013080080504050610004002108002001
3011080506220080010506200600161080020040402050405062010605014030705012
0010030150402006010400140162001001804020103070214008056908400503050140
3070200155030163010303012004100105303016207040501070030150405801019655
0030500658090506301030301105003050050401050414061004002050140307010202
2005015494130102605220010301700600400113005040805200207004005700550154
9313067080405470650120522009805040140603015492121030050143063013070310
1406104040020080205015061004004008010208054911301026170060015150700600
1803066020030150670200801090708054901306602005067020080103011503060200
1140204020103070145130013066020040201030115030602001150154891301054012
1050020301233014005012063012330168002001301803200400406105488140103011
2170070659010001700140170965487140108361301205011501043050154861301030
1004053054065407050301103061501027002040301610502007006548513010403120
0354052003516506306100101401030702002901654841301020657006004001806513
0153011302200100040301610020030040301220054831301040024005103013040024
0062022004060120020700165482130106918260200155030110802030501548113010
1004061001611096430011053010303015103001505015480130101005001306100201
0307010100305060150154791301040020040050120010030130400200651030704761
5478130103010055040901005016158090505477130103010013013010303014010054
7630407403011510111054751447010300302010908164051043014029181640522004
0013016020016100030214100501403070103054741490200580306005040651041050
1025040203060105501803066020050401080040020015040130154731481521010001
0307020059001013080210100030140301705472144011022005303070310401506470
6400140210200100110200415013010054711447030100161200901508070800150405
0640307010608050647061014016120017001104008547014211510805010430160040
5053200150530501805306602006530301907010504065400130160200653030150401
1000130213015469148400304055064504043150306481530301504010502001031050
3010501301005468143002001306120080040203020304011301050130100546714815
2202003001130610220067041140501301005466142305103070506506201016412056

704105303014270401100140305501654651481530301704016704400130805303043 1
604030150165464147090121700705203060105220020020700507080020070105040 6
510804055040080503054631100410001404051501010060130510010200930110307 0
164011004006016305016546212984050533016501208050696011003011401654611 4
300200162008400201030618040306015040805069601100301150406506403060403 0
115040150165460110052001306160600280160010130805220025040610504080521 5
040110453011507040601403015016545912200557370505030680020013011080530 3
017370505030501150509001501654581441001001012009150202030700506415040 6
506830190301150401501654571430020040522004052412001401800200130110805 0
402410200120030011020045013015016545614902001215300530431050130170404 0
060105040807040603030470110040155040470100501502015016545512530061410 4
300160200840010304015150436801406030115060403015016545414815303015007 0
210503050140400505090014020165090040550165453110052004056417805033015 0
403013200250670067010605013015040301320050120550165452127002053030110 3
070503301660501301306100400503050115050900150165451199300530301103070 1
505108060306100105012055016545014306130652819070060040011401502200431 0
301704005501654491481150220022020030050503065215040180430020030110301 1
045105448123701501200100150704060150116301100805033015040200805070404 0
060155011030110861301005447120012400130150104030190030147400130640015 0
406403016501050406403030615040640104001023060045040306104301630610302 0
080100012200544612001802012003180130116430101306204127016308001040520 0
700400501205015445120011045010200801203015040800200130110307020070040 0
130220086503011006544412001905015303015064504040530164310403080120015 0
163060041801610020010001405400110109600140405443130130800130150104030 1
900301474001306120010500201630800141006544212006050610067010650061000 1
013061701660130614650200700400130640204005301502007004001301630110065 4
411200122012002040162002040654401200160600130154306653014054710403050 4
016702400161050690704055012200865030110054391313801302601550401620306 0
400305438191602800200130140203030703530301654371312006001402032006001 0
615108040204107010405005436140012508002001301504040204002501530301654 3
513120060604030030130703612006505051080200401003013070365434110012940 0
161406070260530301100306008010201620040040301543312001691402010030600 4
100654321200110065303050632004001304020301405431120015501402030307031 0
640015034020303070310650105026301640124020444010654301200120044040201 0
307014060301306020010542912001801000501205501402022001620080100040060 1
400301008054281200120060140530400200200601640530400503070110501405005 4
271200153405400670410501405005426120012204006011620022040060161620090 1
640521105001630010004006016405501700110804057021901163070340530200801 0
004003040540067041403020105016542512001200801301101017044054710403080 5
424120015506130103010406100400670410501220030110054235064030704004040 0

5020630200600610130131700153030130315011040604030311030140202006006106
4020265070050404020302008010001054225067010916561004001653030116427015
0154215010240200107005040203010501406100110301100542040103012170070405
1040011050130210050402040610020070050150154061001030118650150306020011
5015419506470610165012010700301406103012030700530700405100520040040520
0190215703001600541850680080610290501030140550120170120060500143130150
4050632006001040610541750647061010700301405406101610013010104008162703
0106168006600104052007008054165010100626040250850140640550401200106003
0425050110307054155062004110030150122001100040301610020013004030122002
4060100113080541450640307010140404051501003060015011302054134010705055
0330600410501405504010200401302070409101541250107703014030030150706501
0401030150705411501070954020302100162008020501070030130140805410506402
0020404001503108020103061540950690080181040540013090103070405501070030
1654085064010110040540014153002405501070030165407506701200405457064054
0015014013040550107003016540650641703014052010306180203070012006101000
4002150408054055010406304020010100040550180405501401014002030401406140
5316711030701301540450690080184053620080304055010700301654035064014020
0101000405220021700705015402506100803004040522002170070504040550107003
0165401501043014061025061004901050107003016540040620084030163010160303
0539940630704010084053016401108050107003016539850640101440540013090103
0704055010700301539750103090403011301539617065040200106003015604017001
6539517067320030030156040170015394170630510030600501605013015015393107
0618070403653921030640062002415040670440053911063003030570175053901090
0301550113020538951035010405001701040380020013011080504065388510664001
0400301540030109080653875106001654002819065386510502270010406102170070
5040104400801063040200340301461040550620090210538514010408401040830160
1013065384505703012030123301506204006538330540301201406030150620400406
1053821210200100512005065381141070255062001040550153801301040312002902
0029018053795506080301501060406005200141004050120406101080510301862003
0165201013040301320070400537832001704030110700530301504053777080145306
0103050102008012030305376701001621700702301016030160537540109007030120
2200406012826080537450101001030110083055016537350102008012030110307052
0060830550165372501027002040402050405014030705030150165371501010040040
3030520020700400305501653705010731855070481504040205040140805369501040
0630155040150709100304050053685010401030125504015070060013053673010611
0013018007021501030703061004006306536650104030170301220050403010750400
5365506200207004001401301030100505120306100213065364506504064001401301
0301002007013003061002651406536340102002030660200306100305501536250620
0902400130140653615062009024001402406010011308053605061091600301130153
0201101305359501030601000504013014017091306535840104081505154061030153

0601030805357501020604030140170910307080081013065356401090070301530301
2504061013050120550153555620306018017012007005067026015702007005306030
6010804050053545630904010833014050053535630100080567006005352510501930
6010507020305535151030140105070105010001140535051080011003014005012015
4001030110534951021608140200414030653485102140020400614030105040010301
1030610010805301403002521400201040061504014016534751030160030140110130
1108040400803060114021101050516220030016163020534651050141580691005345
5103017055031080534451080012005300107010806580534351021608100130401050
1400505090010501534251021400201620010014061530610010805501040102521400
2010400615040140180534151080160040205040108060040013050680020070400700
1040610534051050140500700104061040510068020220030020070304081061510132
0011030702030403016533951051670010406101058014060301400100300501653385
7010016301400701006700104061080533754816520414002048030123301680020013
0140030408653365481656008050200690301108060080501700180533551070165070
0115107040065200207004004020301530703503053345102001330110804020150304
0814030110100091403015015333510212005700600140570060018040522003066020
0169070805332510916003012400120804006403016530210050406506702008013653
3151010012504040530102004003058053305106160030600507137014055012010702
0090151080406100301102004008014066084011015105014050063011030702604051
0307015200600605329510400170200902009081020021620305180417014016532851
0100019301216203051804640500140180532757020011003012417064640500400270
0205326510018301140201200411406532551001830114053245100183015323501040
3017030302002070013016514065322506503403055015063061001062002070030116
7040601403040520019021220506100307103016200802050107003014120105016532
1501083019030150405307038052200512400318053204064070040656120070301270
0250305220050405407050520200144005011306305319406900204065610415070014
0068301281902050204001306202200402083020029018053185062400201040580210
1000301405450704015317506301005004040200100040504040580120031405301604
0040153165010400401041020501405301030401653155064030701013050010850404
0532004400605060500104830117005227002010504061050200700805314506403016
0405646360301103015067041016501204100653070040510052004004052001902157
0300160053135067010940060101308046360301103015067041061001605070803002
0104061053125010100419016501205014051012020030021640011030801202003004
0530401531140107072030700240510140530605310506402084001403040203050154
0110100301406101030151000301215010307050140101402030401530950620010600
4001403051080402030501530850660200440051080214002040203040153075064020
8400801020402030140530650104020034030120501040306040301307035080153054
0107050301400150340522004507050101004004030305015304506403070101650120
6302002201520060013012170070306217007030120307002053035062100012001502
2001030115011550401200106001503042105011502200106070530250101000191502

0150115030106110163011005301506406130400108007021030704058007023021001
8053005010403019001502015011502200501826016301100529950682604001306304
0203030100140301405960613011005298506406200840508503025297506301800301
5011630110015612001403080529650102004110042008103070164100065295501020
6040402010307040610301155030600410130501529450640080160040010405616100
3095018052935010402001904040050205014020500200810307016410001501529250
1082904016415040080529140102009030120400829018052905064010150405620220
0504080101915103070801980528950650500400601013065288501082904015504020
0901030164060100170015503301218901150630214020405150630215015287406920
0600301103070540605060528650103061301200109160130110015040011015103070
1030400400170015285501050263014017005012050152844010507203070047023040
0705283401050014400704020010600303070150405282401040502130040714055281
5010540801308302070940013065280506505410805054400630164652795010270020
4030170940013080527850104400540301240307016565301026050703080050402403
0701652022005015277506400804030140201010125276506200902106200902400608
0527540109007010030600103070302050165274506504040200101000120031302030
5016527350650340220220054070502400501140527250620096010140640301003016
5052715010704014024020104001105040801200610004020614082901501404001012
0013010052705010240301308001080655040506403070400608015030206400510307
0652150401504082003016530100526940103012170070504050102008012030120010
3105040801504082006110704050406530301105020305150140400101200130100526
8506704400524040050201070030117005301010061620080205010700301563640010
1060580307561200140308052675010240200107005015011405016530301450704030
7030114050130100526650101004190404005020501470630117005104004050630610
0106526550620030084005103016800200130110804020120070010700301653010052
6450620020300400140130103010054108013016200190213016704060301402030307
0364020130050110700301653010052634010100400604091200901030701106601030
0401050401104515536103070122040103004010504080152622006805066400701080
1633030251007200206040150140201007200101070030117005504015261200620010
0010801301506200801203015015040820030150645040402020090501040203045036
5107003011700550401526020010902103003020255015040820030113015052060401
0140508002100106400180190405100680200109301103011620010403061525920010
2050501208010208040530210050405010700301270020410030652582001070050801
0205064030704006080129018402010307030602001050114060301108050404040050
4014015257200640400105170018080020013014020280606001050114060301108050
4040400504011525620063005030151030165100720050401630206152201504010801
6300401801306307008002001301402030307031070030165525520010260030180109
3030165610030600504040307010130152542006490301400170024010307055015216
2005316140203061001620060165253200102202003165200801000404053021010003
0124052200506300600105010700301501525220010706030121890130110086080405

2507002168020040070180525120010706030121890110801502014030100705061704
0605015020630163011006525020010220301308001080130140400501501103005040
5303013075014015030100615027002080200107005015013410010302163011005249
2001070050402040011040301154005076004053016036801510801010030114030209
0010100030150407104040041204005248200680400105611001053001530167040601
5108016100301170015247200109040301601026405053217007040522002162008020
5010700303065246200107060301217007040530150440070165010911030030301406
3200151503070368102190402110504301140603011501074100306524520010608656
1106016002009023012010301230100501050104002002020090230170320014050052
4420069805040102004003052009023017032001804006180400504050408200301100
3060010801020040014011001294001614060702601003060010700301524320068010
0030171077030165613040705060814020101402063021030511083016400640301100
3060010700301524220010410010300302010307065620304030154102107003012020
0124005241501040050110030150404005012065240020615220040014030202400100
4906150862005040510801506008050801532008040050908110400301501200407040
0502140102004065240501040301900301406100301504010503506530407065067020
0805040105035065503301108014001022045070103050212200400301100700150670
2008040012004011650401501070030301305004053030122008006523950103060014
3017040200150301130600413010100611010300530301504014055070110501000104
0308014051400501600805010830190150412705040501042704008400140050120963
0400120040168650400120040116200802050107003030130500405303012200800523
8200109040301601026405053405161406405103070900301000165010100801504030
1620018020301451310250301151011105237200104100103003020103070205011503
0200801000161502006501503040404001150220050630610010405501401012640510
4101501021070601040520065057040165040150107003016102503015303011076001
0130406102001550130115400840050401020034004001503402030600410640204001
1010604020507020080201050140202200106070186905052640053030110301162640
0165040150107003011510111052365063040704004040050201405067340014050140
6103011620070040070400130162008020501070030115101110523550620040610140
5063070801064052004011405303015069070101304143009001301000520101304015
1030705200138301660150301154610061200150402010305164020608050116100165
0401501070030115101110523412001202164001210500400181016040014217040012
1014004001400501100400150406404001403060405020504012001060013167153042
1050150201003095015220010607052332001059002030700470252010130403016501
0504064030183019063010200236513064065530301501805103070120051900400501
6140202630100400100090410080530301103011264004005015232200102600301401
0307030110501250301100170052012501504040030110052151250140308080070250
7080020070165800702802007051030705303015200590016524001250140308015001
0485316718007021030110250301200601700165231401020830140103070301656402
0130640530301640205014010153084004020305303018002008041005230401082002

0068010005303016203167140018002004010100040024002030530301308114040200
8400403010250301151011105229140307010300302029181410053030150162001041
0010300302010307053030150116403070400305055010220040130130750400105053
0500408002001301504064001614060702601003060010700301530301522811007200
5305303015060814100142115108050104301600200155013011540084005040102003
4004001503530600410183019030407010653030125040610504062006503011030140
0140309003015040400183019030116304070616504015010700301320060010304001
5010240530301400110140201030706304001013066020052271200207004020103015
3030130750141001650401501070030121230130110306111053030116100400180141
0430012170070405305303014701522612006060015200401521001705012061520040
1301264001001700805225120020501217007015150270070614104300121608151502
6018805306020061522002004015070400400705102001005040501012065224120060
1020060704702530301307031060151400114013011608050530301803020101305303
0151400114040100805010308051007200510307020041005040654007060504057060
6700100805010305223102006001530708002004006080404002006017040050168062
0070402402050102162004040016505200631505640018040203050708002001501805
0530408507080010104008505103070161008050180304084001306150205016505103
0701610010800400305056200180040013064020436504040400502060500108504050
5650206015222120031530409007010654001101060550702008020105303011004001
0504064020103015307501530301200401203070052211200601052004015040530307
0310530301100400105040650530408507080010501505303130140813014001306165
0800810403010101303016200530015500130500505400470804040024002001501402
0101605050408001084030150405060101010101303016522012004100103003020305
3030130703410052004011000301253030150152608658053030110307030206400105
0406260400810130500108504051007200106521913200600405303070310530301100
4001050406200600130140610301653030125040610501205040529007061040203070
0530305415300301164010100164020504030470106700164530016806200704025056
1002001806180620070402505620604018050530315010003021700180521812004012
0307004702500481053030130703010200440013056080504030900410080530301464
8470400105040653030146482030400655010240530081802501040011050113015032
0060010130650540061025040505632006004001304020220053030116100400165470
3011690816505400470305056100309801605030140400100309170011025030115101
1105217401020830171077030154153003016210100030140301705216401030820062
0300530301640203020080100010640203058070180010150608180020010053030116
8002001004005015215506830804030140520103061805608050830010061050406402
0608050130120010600161008050161670109161670406016404007094006011405303
0116100400180521440109007020031545070530301655040080402041306164020301
6401140501521340108200200680100053030150180162008010004006168809040061
6807040050164056200700818040203016470402041306164020316715040501165040
1501070030115101110521250650406403013020640010308053030110307066513015

3011305303015211501024030110001302301150306602001030701405018040400103
0640050180306602003011670109165303011670109165210401030701030030202530
3016523010045105303012504061050406530301507001213015210904050402190114
0520920010904030160102615108050104301600200150301218901201030611504001
1012162700206162008020501070030165208401090070301768030120307001421151
0805010430160020015501301154008400504010200340040015035306004106540011
0106055070200802010183019030407010653030125040610504065021100040030140
6102030700704033014061030402070403104061052072001026005063040704001402
5303016150307501107003012006503016530660200653030121650401805206200106
0105303011030702030700640400304070140250625040030405005050070240030102
2006103023010016500702105030501162008020501070030140707520541040810501
0005303016530301105010004006016163064006162008020801505064510200300211
6301100804001501023012405306020040510400140040050120550122030700520440
1030121700704053064052004013012616100170080302100504016200802050107003
0112504020400110403015203200649030140017002401030705303016506503070400
1406506200604001404030701068002001301640016140603011080140403070105202
2001090403015103016402020069050608180402020069061008301280020013016400
1614060301100306005201200109025063040704001402530301650406404020504062
0080120402050408040201003060010700301655200200104100103003020103070656
4408301530620304030153080020013011080140640016140603011080140530308260
1051995063040704001402200102600530301615303113170011608050530301200600
6105030651985010830190301504050201610049018021020010030311030110504002
0060011306302200306100108040064030140204811040011050130210050404020150
1007200140504016100805016519750620060160030140520103061802030700307080
1050406530301200207005070402041306113064020301640140205304001301650401
5010700301151011105196506403070101305010100801504030150203065010504064
0303065306602003065770301530306307001301155040770130150320060010305501
0440301103011507032005010305063061001051955065100801013050101008015040
3015020306800200130164001614060301501017600530306168008050101040085303
0130660200450705040103070161008050400130506306100105010700301405519450
1010060180301406100301104510130530301501405305303012008010001050304053
0200801000400604004030401405304002008010004006014051030701660519350620
0220400604040565064901040540010120064056062001663053030130660200402030
2008010004006010163017040040530301010017001651925062080610105015303014
0530400110040520070081806470301405405103070581090302050626081054506040
2300600405501204053061003070406040016306100105016405401603120237040040
5400101200170016519150651008010130405804052630100103070702980162008020
4050016504014055012203070051905063040701016501201401604055015303013010
2605070164908055034055014010116700600400151895062700120305010100801504
0301501453001053030165306602003020501403070105303016530301306602003020

5014530050163011005061008015040301201317001518850101007120030120010600
5303016520013400301504066530301504020010600530301450701403010014010110
0206202004006151030116800805011653061520013400161200170016518750683080
4004020307030120010500205303011620020700165303013080080504016100040021
6800200130110801620030040050180513090301400108001001700180518650640307
0400404005020501402030200106004020307007010230116200700653030120020700
1030116706018057040330140610504051309030301046501700116504015010700301
1510111051855063040704004040050201402402010250108054153003016210100030
1403017010301506420040040500402010100130405501805504050620080400107003
0140064030150130100518450104030190030124010307053030164051041014004041
0014021421550650404001013065183501010041904040050205014006403011650404
0080601503015064504053030110306140205014040040707501164155010700301151
0111030100518250104030190030140610030110451013053030165303014001101216
2700205010700301406100301305004060102120018060130408102001408301305004
0201563040810403040500512006400301163040850107003013050040518140109007
0301308008030167005303016130010504051040061053030130800802030700518040
1020830171077030165640521610083010140304055040501020060016517950102403
0130800108030302100504016501205016540208301621400203014054030701064051
0207106540011014051030706304001040550401306602005010104013011080500702
1070030165517840102083017107703016064100301203040301800200130110801406
4001614060301108014053030826010517750102005190016829018040564701030701
6504015010700301150410180580101940020080206301010120060110502504058010
1940050401805303012001905015085050610200168301301100530301103011020019
0501504050101020016830304010200405021106010703011001402053030120019050
1165062016504015010700301151011105176501050406403012003002621020010084
0080653030150402009050155062840010200600165175401090070301768030120307
0050470400150310805210950201604062001550130115400840050401020034004001
5034020306004106402026507004020302008010001051745064030704004040050205
0140203020010600402030700402060805016402030164012530301301026010805064
5134006530660200653030125065040640051734010301217007050404020103504005
2001340010307040203041305165040150107003011510111051725062020030040301
5200206306530205010430110307052005900103010083015010461045301253066020
0306020011070030165517150620080120301520020630652006504040040530301640
5516801253030120065016108091030506410200105170501040301900301406100301
1045101305303016401306013011030110704106562700203015303011030701020040
0801504040403090015040651695010240200860170051630110040015010230124051
3140308044081540601104702504010400110306602002120030024065120064003015
0401041050102140301100490404020103015303013066020010501301010120060110
5021104010200405021106010703011007001651685010100601803014061003011045
1013053030164052630100530301100017116100017140308040201030153030130660

2001050150640307040041006105050670064004030406100110540610030106064030
1100700165167906902004050110502405501201809053010260108050630400110010
5010700301281053030150151665063070804001301401630610040050153030145070
1400100402002205165506307080400130140506306100400403016504015010700301
1510111051644010208301710770301656800200130110801406400161406030110801
4053030826051632006210030121890150402001802030160101014020520060013015
0401660101041004051030705303012800100014061001630640040013016504015010
7003011510111051624010820020068010005303015015303015053020080100040060
1650570101280806200704010802050109070101306505303200165051041015010255
0102004008010501400522501040011013065054130615030400100101306501050710
1306501002006010130611010300530301250202003001013050110307020507010121
0400150406403012013170011025030115101110516150650406405240400501107003
0153030116100400161610080501140305004040531671400257005010700301164001
8040400210017080200180203011030140203167150401030040204001805016516040
1020840103070530301640205010240208105303014020840203070016100805011401
6301601030640400100805011401630160162008016203014090702162060404001306
5052006315056404001040011700150568205040050140201030708150313061610080
5011404056400165053050630810405130640530308505130200180203011030150567
0320040013080400150406405056404004030705018050550140101240307015303015
0565084004018040012003154040015040640301402013170011650401501070030115
1011105159506403019003014052010306180405306400105040640563064005014020
3120060011030701620051900640202001104504040206320060016501043011080402
0630400110050107003015070530301402015501014050151585010960100403012810
5303015014051030116960100400640562002400501402020011045040402063200600
1040306501043011080402063040011001040305010700301507053030140201550101
3051574010820020068010005303016200104100530301654640405504040400104170
5010700301501026402050102307031050153030110607051564104083011050100030
1655303015018030640010504062006001301406103016530301632001050120504030
5506085660140510804020305012041003051554010208301710770301400501205011
5022001503020080100016162008020501070030305504008015030703400130150220
0515420010904030120103016150250120103016150302064002010307015022001030
0504053030150402030203040114062030502008010004006013051021304010512002
1306100130154865303012165040640010400814211800100023016561470301402050
1026150501021426402021502008020530301506450405064270400140406402050401
2002150140540610030163011007001570405010700301640105120021108055060856
6014020304005012041005153200109025063040704001402530301640205010230908
0105401101003014061040204130611306402040182001402070805040050305152506
2008020400630164666603012405400506030164051041014020103011696021061470
1402030165062010402068010050010501515130102603011660308004100804020504
0530708010504064040050307011406404001080600114024030701150165464030124

0510301506200604001040018002004011000400216103010260108014153404003200
6004040050205014020220053030121650406400501402011016306602003015063200
6001010083015040402013140216200802041006546403012405103015061003040011
0306140206470610647016700600400400130165040150107003011510111051504010
2083017107703016568002001301640016140603011080140530826010105060830114
0601301530200690403011020012301100301600301530301655149506202003001014
0705303015018260200220400403012001233017107703015040105403015040640301
4013060301606410030120304030165130153011301070030153030165514840108200
3015040820030165541530030162101000301403017065130153011301070030153030
1655147506200208040010405307030601503030152200800503015004013012030400
6530301510300600504017049040040170300160054001012003030231030705012001
0030117005150307501630514650671018030140555033012189015503301218901620
0150301218901106400601013051455061006018030140520103061405608050140516
0501805303011660505010700301201650620400130651445063040704001402200102
6005303015015303011610040016410003040040410014060805020090050400306530
3011610040011650401501070030115101110514350104030190030117320307006151
0805010430160020015030110801405501140540021001705012080514250104030170
3012200530301801600110501205040102002105013011002008020140308020080201
5016050130303011007001501910300301305004020514140103012170070405306405
2004013012616100170012102001004053021005040501070030130500402051405063
0100701013040610040550122030700104003004052630100617010403405260840041
0430040550102405601220043120065040615509084010200100108013011701040340
2050630400110010130513950651008010130406100405501220307005303015040405
2006490108052520043001404005013051385062009050101304050020012413015030
6103040562009050501030640550620090501013016304006100501030640570405063
2006001013016320060015010305137506270012030405501453001053030164020502
0090505030404003040061005016142114814020108070109501306402070405032006
0050304040032006001501030214002030130515040162008020501070030140550166
0013050630610010161008015050107003011030120040040301513640108200806200
2050115022001650401501070030301301000150263010010803070340013065014010
1301215061002605010700301150501660013061503020080100011502200506306100
1040547025040161350107003016513550683080403014052010306180560805083001
0061050406590190600405250120630640560805011030705062005006106164006114
0405318405200649010805064310130640510301200315504050628104053021005040
5014010130162001430116624005010700301651345061004190301405201030615306
6020065303015062009050106150168002006530301504013080080506100040021040
5301640164052001104504016320060015010700301501020031540301120010080303
0513321100703014104300530301501530301161004001616540050180550704020155
0140656700600803066020030140201400114064020504011050100013015010253064
5062010130102030102603015021650102016040301610401400103016102200100301

1070030630660200303065303080102001003013051504053066020010307053030118
0114051322001041001030030201030705303016130010504010307053060200930601
0530301502030621202001306301060050405103070404008036114080405504053066
0200103070530301180114065131501010060180301107600103065303015070012801
5306901103070540101100156404002020040061550103050404040070910014051302
1100703014104300530301501805303011001300105040653066020065303011610013
0040550122030700512920015030121700705200600130110804053061105043011080
4052700703013033014051030705303012400205011306306512820019021301103061
1101620024007018050105040640301104101640510410124054006102506220060010
2702003014052630100108080700100616260400810403050010850405303014051400
1805303015040455069084054007050140405501165090061632006001050140400 50
5090014020030083013061304052001104504021400203013051504016200802050107
0030132006001107003016551274010208301710770301656800200130110801406400
1614060301108014053030826051265068308040301405530301278501130153030127
8201030615507016800200640550705303011080020015108050104301600200155013
0115400840050401020034004001503405306004106550408620024054101650140101
3014052630100108024002020103061405400200103007061405501660016140515021
6140512116501206306530660200653030141850405064161020060013014061030165
3030125065040610140610043400130512571077010610053030150110306020061501
5023010001305303012400205124501030700130110802010306153066020065303015
0641810501070030150151235062006016003014055019103003012785011301501910
3003012782010306153030120020700405160501805019103003014051030707006840
0601512250627001203014054055011301103001030704055015062608106402030506
8030810140205305068030810801701040353030140550070210406105121506430160
0151080405200150301218901201030611101030053030150404054130611306405301
6401405507010501000400503051205010540217007040530805303013010260507016
4908055034055014010116700600400151195063040701016501201401604055011410
4300121700704053053030147015118506403070104056270020301103070506803081
0640550401306402050404051404051030705303012800100014061001630640050107
0030110301200400403015117506304070400140220010260053030165306602006530
3011670109165120730116400165130903011640101001804020103070530301214006
1630708040040307001804001100490402016350104105010216404100400501404001
0080300115116401082002006801000530301501801643400403050180200591640203
0200106002030700510049040201635010410501021640410080306602003014040010
3150170011650401501070030115101110511520010260050630407040014025303016
4001320044030703011640061501070030164020504016504015010700301530301708
0200101673005018016730050130101001700164020305303018608010168608018060
3013403011080168608040040203030101001700116504015010700301151011105114
5065040640301302064001030805303011030706530301507001213011101030040520
0180026010306165040150107003015078103050191030030150401063503011405015

1135062003008400510301107003015303011610040016106100400301620023012163
1504006306602003014001090704065016470301640500130121631504004001308040
4001031504001700116504015010700301151011105112200109040301601028015506
3090104050534052608306100501402530301150270070101306304056080501108050
6306100106530301522010810403014022061082061317001630660200301400109070
4065016470301640500130125063150400106550701655014030506467010405001063
5030150701655050107003011030120040040301511140103070103003020253030150
1540110100301406101630407014024051025010405001650120140501014057040651
3012005002011306203070050401050411306405604160651301560406001306405702
1200651301550013050010635050405062010140800200130110801406400161406030
1108014040307010530301501200400403015110410530010300302010307053030165
6605065303015190811630407014024051025010801701040353030140550070210406
1051095010540217007050102008012030306400150102400110115030750141006405
3021005040501070030140022014020164002205306602006530301506418105010700
3015015108401030121700705010200801203030653030146482030400653066020065
3030121650406400302030700150102060405010400604017091807094006010403050
4080160140400105013021005040501070214004004050102005300401109080431040
3050408051072001026005063040704001402530301652506900706400402030700160
1404001050130210050405210020020010200840080163011001403050646701040500
4051016050504050620051900105010700301651062006801000680703053030150161
2006763061003015040120020504050630610010304055016405504306101013030113
0140540015401501405400154015051404051016050504040205040506200519001050
1070030151052001090270104060530301501140202006184007040601053030165303
0110301102040030040061536710802030413400104003013061005303017040604100
5104401090070301308008030167005303016130010504051040061053030141023080
0803015016530301308008050401030010307050620041001013012140020301305140
3070101301030510340108200200680100053030164020302008010001065250630040
4001200650402030307031065400408200504050103080204020400610530660200216
5040165303011610040011650401501070030115101110510250610060180405504020
0105002064052003140550401650401501070030115010400180154001017020010081
5670200140805303015016800200110004002113014051030701515024002014015670
4400215105012520065408200658012005670240015010700301263010010801503070
3630103501301515010400164010200405021106010702150108010061503060200240
5200150011030701501080100405005101506100601804055040200105002064400540
4055040802140020301656250301140540010200700108015030703640105120021618
6501503060200141003 06”

You might use this big number calculator to test it yourself: goodcalculators.com/big-number-calculator/

6.1.6 Rewriting Quran based on 26

In the previous Evidence 6.1.5, we observed 3 codes that complemented each other. However, because of the mathematical property, concatenating the 3 codes together, would give us another code that represent rewriting Quran with Abjad numbers. I had observed the Code 3 (full text version) of Evidence 6.1.5, which rewrites the full text of 6236 numbered verses of Quran based on 26. I call that code, which is multiple of 26 and represents the full text of the 6236 numbered verses of Quran as Code 1 in this current chapter (6.1.6) to track all the codes to be presented under this chapter. As I mentioned, that big code is a result of mathematical property considering the other 3 codes in Chapter 6.1.5. However, this made me question whether this particular interesting coding pattern is any special and are there other similar codes that represent rewriting the full text of Quran based on number 26 as well. I then tested the exact same coding pattern using all the 6348 verses of Quran and witnessed that the resulting big coding number is also multiple of 26. I name this new code as Code 2 of this chapter. Before explaining the other codes, I illustrate these two codes here:

Code 1: It is based on rewriting the Arabic text of the verses of Quran by replacing each of the letters with the Abjad numbers as seen on the text. The *general verse indexes*, which are from 1 to **6236**, are added at the beginning of each verse. This means, this code pattern is literally re-writes the verses of Quran by replacing each of the letters with Abjad numbers as seen on the text. The coding pattern from first verse till the last verse of the 6236 numbered verses is as follows:

> [General verse index of the last verse (6236) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] [General verse index of verse (6235) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] … [General verse index of the second verse (2) | Abjad value of each letter in the verse 2 replaced at the place of the letters on the written text] [General verse index of the first verse (1) | Abjad value of each letter in the verse 1 replaced at the place of the letters on the written text]

Code 2: It is same as Code 1 but in all the 6348 verses of Quran. The coding pattern from first verse till the last verse of the 6348 verses is as follows:

> [General verse index of the last verse (6348) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] [General verse index of verse (6347) | Abjad value of each letter in the Iron verse replaced at the place of the letter on the written text] … [General verse index of the second verse (2) | Abjad value of each letter in the verse 2 replaced at the place of the letters on the written text] [General verse index of the first verse (1) | Abjad value of each letter in the verse 1 replaced at the place of the letters on the written text]

This pattern is further interesting if we write the Abjad numbers in a verse in normal order (left to right) instead of the written text order from right to left as in Arabic. If we generate that version of this pattern, then the resulting big number is still multiple of 26. Moreover, with such pattern, if we look at the part of the code that covers from verse 1 till the Iron verse (inclusive), that code is also multiple of 26.

Code 3: It is similar to Code 1 but instead of Abjad sequence, we used Abjad value of each word. Abjad value of a word is calculated by summing the abjad numbers of each letter in a word. The coding pattern from first verse till the last verse of the 6236 numbered verses is as follows:

> [General verse index of the last verse (6236) | Abjad value of each word in the verse replaced at the place of the word on the written text] [General verse index of verse (6235) | AAbjad value of each word in the verse replaced at the place of the word on the written text] … [General verse index of the second verse (2) | Abjad value of each word in the verse replaced at the place of the word on the written text] [General verse index of the first verse (1) | Abjad value of each word in the verse replaced at the place of the word on the written text]

This code, which is based on Abjad values of each word, is further interesting because if we write the code from the opposite direction, it is still multiple of 26 Namely, in both directions, this big code is multiple of 26. Moreover, in this opposite direction, if we take the part of the code from first verse till the Iron verse (inclusive), it is also multiple of 26.

Over all, with the general verse index and in the writing order (right to left as in Arabic) of the letters, words and verses, we observed 3 rewriting coding multiple of 26 out of 4 possible cases. Binomial test shows that such an event has the probability of around 1 in 4500 Here is the probability calculation of it:

```
tmp <-binom.test(3, 4,p = 1/26,alternative = c("greater"))
# tmp$p.value # 0.0002210182

tmp1 <- formatC(tmp$p.value, format = "e", digits = 2)
print(paste("The probability of", 3,
            "successes out of", 4 ,
            "(with p=1/26) is:", tmp1))

## [1] "The probability of 3 successes out of 4 (with p=1/26) is:
2.21e-04"
```

I will not include the successes of this evidence to the overall probability of this book to keep its final probability more conservative.

The R codes to reproduce and verify the three codes are presented in order below.

```
tmpfunction <- function(x){
ii <- which(x$chapter== 57 & x$verse==25)
RmHamza=T # remove Hamza characters as they do not have Abjad numbers.
tmpl <- str_split(x$text," ")
tmp <- c()
for(i in 1:length(tmpl)){
  tmpi <- unlist(tmpl[i])
  tmp <- c(tmp, paste0(rev(AbjadSeqofwordsperVerse(tmpi,
                rev_=T, rmHamza_ = RmHamza,
                abjadL_=abjadL, abjadN_=abjadN2)),
                       collapse = "" ) )
}
# General verse indexes added
tmp2 <- paste0(1:length(tmp), tmp)
return(tmp2)
}

# Code 1 (6236 verses Quran): From the first verse 1 to last verse.
tmp <- tmpfunction(nQuran) # all the Quran with 6236 general indexes.
tmp <- rev(tmp) # reverse order of verses (as in Arabic text)
tmp <- paste0(tmp, collapse = "")
print("Testing if the mod 26 for the Code 1, from verse 1 till the end
of Quran (6236) is 0:")

## [1] "Testing if the mod 26 for the Code 1, from verse 1 till the
end of Quran (6236) is 0:"

as.bigz(tmp) %% 26

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the Code 1 (in all 6236 verses of
Quran): ")

## [1] "The number of digits of the Code 1 (in all 6236 verses of
Quran): "

print(nchar(tmp))

## [1] 598233
```

```r
tmp1 <- tmp # print tmp1
###

# Code 2 (All 6348 verses Quran): From the first verse 1 to last
verse.
tmp <- tmpfunction(unQuran) # all the Quran with 6348 general indexes.
tmp <- rev(tmp) # reverse order of verses (as in Arabic text)
tmp <- paste0(tmp, collapse = "")
print("Testing if the mod 26 for the Code 2, from verse 1 till the end
of Quran (6348) is 0:")
```

```
## [1] "Testing if the mod 26 for the Code 2, from verse 1 till the
end of Quran (6348) is 0:"
```

```r
as.bigz(tmp) %% 26
```

```
## Big Integer ('bigz') :
## [1] 0
```

```r
print("The number of digits of the Code 1 (in all 6348 verses of
Quran): ")
```

```
## [1] "The number of digits of the Code 1 (in all 6348 verses of
Quran): "
```

```r
print(nchar(tmp))
```

```
## [1] 602377
```

```r
tmp2 <- tmp # print tmp2
###

# Code 3 (All 6236 verses Quran): From the first verse 1 to last
verse.
x<- nQuran
ii <- which(x$chapter== 57 & x$verse==25)
RmHamza=T # remove Hamza characters as they do not have Abjad numbers.
tmpl <- tokenize_words(x$text)
tmp <- c()
for(i in 1:length(tmpl)){
  tmpi <- unlist(tmpl[i])
  tmp <- c(tmp, paste0(rev(AbjadSeqofaWordSumValue(tmpi, rmHamza_ =
RmHamza,
```

```
                                                                    abjadL_=abjadL,
abjadN_=abjadN2)),
                        collapse = "" ) )
}
# General verse indexes added
tmp <- paste0(1:length(tmp), tmp)
tmp <- rev(tmp) # reverse order of verses (as in Arabic text)
tmp <- paste0(tmp, collapse = "")
print("Testing if the mod 26 for the Code 3, from verse 1 till the end
of Quran (6236) is 0:")

## [1] "Testing if the mod 26 for the Code 3, from verse 1 till the
end of Quran (6236) is 0:"

as.bigz(tmp) %% 26

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the Code 3 (in all 6236 verses of
Quran): ")

## [1] "The number of digits of the Code 3 (in all 6236 verses of
Quran): "

print(nchar(tmp))

## [1] 230585

tmp3 <- tmp
```

6.1.6.1 Code 1 big number

The “598233” digits length coding number of the Code 1 of the Evidence 6.1.6 is printed here:

“6236601503016550330150406235601503012006490108060660610107003016234601506003016016606301200300504062336015030153016232601503012030406231601503012200270067013010062304608170014601820030050406622941007030110804001500180503012003005040662282100617001100601100020030050406622710030600140200300504062261003080301220027006701301006225481168020530502010403066224430610403064301040306223440903015303016222481530301653010062214604050403028154103108062202983015301408540012004016621925304001700120015010309010606218260201406530140550701050100011406217240062530102114104

0024006216121640050120550152008010004006016202200440828260806215131680
1530301501041080506306004106015030140010120066214840080301653030120090
5013170016213501041030640205010440203062124270114050642170404005011306
6211404004270140421701501130662104270114050642170404005011306620950642
7040014042701130620850620080120301151011103010062072004002130165201050
1300501620620085016202200303090806205200500620301201501097011501620450
6701403015067050401066203506120010405501070030162025065160405400130905
0704055010700301620150103090403030301068062005010206040301401709103070
8008101306619940104001030170410107003012030700806198501043012270020101
0700301400101200161978066005040405504016706350404054070911070030161964
0010230117005220016427010308061958010903016140030030153082004058013010
1619430010200100801301013061933062014080907020405307038061923010360504
0520013824051040200400619130102121120010940510307030602001661903010308
0040010804054102030703104030161893010803012189012202200307080801020200
4004030161885444040440701080618754906404051030701550161865410801301103
0707030940010400301618554100640301530301200150618454098301140201200411
4066183540983011080507002501030130206182543060015301405012608106181544
7061301407040310700301618057403057405302030301066179200290301216901640
0610083012169016400640018301903011630407061650401501070030113016178200
6060010803050160501301501617720090703016617640107050301507070010406105
0301604003040500617550101001030150107015550620040030405006174401083301 5
0620040030617350101001030140307050640307040063013020617250640307040080
6601302040500617150640307040080660130206170200211004030140400200710400
8616920050012040030140201530161685104018200150616751051402012004114066
1665106155401806165550107164040080600504014016616451080012005300107010
8065806163550107164040030100500504014018061623006805040301505703012030
1233015062040066161500650024030130012008030120601503015062010406106160
5702001100301140201200411406615957020011003011406158570200110030161572
0010260030700104061040524052200501615620064903011080140309086615520062
1003011080140200500702170014030701013080161544104300302001060030128305
5016615341053003020307001030705501661524650203052200305016050130150161
5117040352509606806150170100505250200500180614918290400120010100040301
8061481841004001102006403018061471828004001104170301661465200101200300
5200700301100500403040701050406614552001012001060052007003011005004030
4070105040806144405301407011620010301400140030016015030120049010700104
0610614315301086120220050126142152001260015004840070010406106141153014
0501605013013011006614015301100500180020013014003200600166139153017307
8002001301400307307170016138522001030060050403020307005507016800200640
5507053030110800200142115108050104301600200155013011540084005040102003
4005047040015034052200450704056173613751020023012001060040520103061400

183019030116304070616504015010700301501613651020023012003004052010306 1
151080501043016004050532001501080501020200300403016214002030130515040 1
620080205010700301501613554010100301501042030700651207301164006106513 0
903011640101001061805085010430153050109030600405303011642701030130116 2
004011406613455010230140540013140470250401301214002030116400615010700 3
011002008040014066133540101002400201510806132520059401808906304001053 0
301504030660200613155010230140510400140010400850102080504050102020030 0
403016214002030130515040162008020501070030150201040306130200380301703 0
940104008105401306061292004013020504040522005070012151080862003016520 1
013040301307504006128200530080301504020010600200410030153010306127200 4
100301530103014020120041140661262004100301530103010805150307501150161 2
522004001001643601657094001301302061245105012730170450606123510415070 4
103080612251091600527001205109015061215109015030121708060503054005010 4
030501030130206120102001053030150124030701040301611910306400627002050 1
400101200161181061004003012200401616117104530110307050120501400101200 1
611610309017001142706115105501010700301400101200161141070320030120220 0
103015016113105010004006015120050161121010009103050160501301501130206 1
114030701040301405016050130140307061104030100301240307010700301610940 2
002013012022006120010016108100307050405016050130110030600610710030600 1
070030120220040601212001001610650104020183014020812530301601030161055 0
104301247022027002010140806104506504040200101000200314053080400183019 0
301163040706165040150107003011301610350103080160308060151504420040500 6
102401061004005060811080501605013011501003060041003061015010401301430 2
301170056610050105010602006966099506400107301650104003016609821000200 1
802022001030166097290501804001000200801700180609612006010200607030170 4
050160951200601020060703017040501806094202002070020301507080200660932 0
200590080010050110700301609220200762050701507080066609120200490203082 0
030050403016090500488020220054070502140166089200550400130803010160301 1
401660882005100400130804010400103011401806087105010001801301017020436 6
608610458013018002043666085106180140104001020431040301608410800200400 8
020220020109701080660306608310306130150402030200106005200600130306608 2
103010014062022002070461406081103601700130103030166080108800301660791 0
800200108066030660781030701301522005361100040021130160771073400540705 0
504054507048130140660761020740010530140104006101070030160751010040013 0
115250310606607410306400627002010700301607310100300130113011511309010 13
060721090030400120015040204002007005018060711030613016520060013030150 3
050166070104530301501030705016069104200400170015301405507010501000101 4
066068102006070303052006010506080606710506083012270020660661050100040 0
601630600250401401660651020060103030520060105060806064105060830121004 9
066063101004001610970150401401806062104003003040201070605016061105005 0

1301620020700301100306001406606010303400170012001550301660591030010001
0170013010303016605815121007080160010130660571516608040525070024052200
4051030704044048015620010070805627002080605615110100606530301510015053
0301306602004053030110080605515110030015007025017001605415161000924640
5004002700206053151604504021600410066052151207504083080141006051151610
0400615200638015405301806050151660140660805066049151891406800200130166
0481515021406140603016604715130010001017001301030301660461513031700120
0155030166045151304001700120040100301660441518800660403003016604354906
4020015040510307060425401300403012189014051504001101216200802050107003
0166041550401040301218901201030616040540820040301216901640062002903012
1690164006165040150107003015040501204050060395220040040170015010206040
6160385220010040170014010400106037521000604010700406101080401709161603
6521002002080603552100703011402012004114066034521007030140840010011308
0603350104350301515010456603250104008030061501603066031501050107053030
7035040301603048152001040305012608101602914230130140400203051306100106
0284815103070200410010503050126081016027422010805016050130115010030600
4100306026430614064301666025430230117005230840050166024430230117005240
6010011306023104005031030600416602210412701080103060041806021510800200
4051080012002022001030110703200160205501040940301608050301154001011106
0194815100150061005006101306601848152170070270070101307001040610806017
1040011083040040410010504001030110306100106016102002070030153010501650
1605013012002070040010700104061040505327001040610103660151809018090203
0403016202200136601412041204800200130140020417001130206013140312830140
3015062840066012140301302015001200400301506302014006601150102060403014
0170910307050680018400130660104010400103015064020020400130302130206009
5050151102200306100108051007200510307020041008051304002114017001140166
0085040200201102200306100108054070506540200201805220051304002114017001
5016050130114018060074190200403012302022005016006217007096602022004051
0307029080600541608030115108016200500201806004413023011080161000950107
0030160034140061301107005067020080660024163012200600903011621350107003
0146405006600141302301108015305004010030600104030104003016000414070301
4001700402001599941702202200307080801020200400403015998200381070030406
0100203070010803055997200601017001301030301659962004006301670803003016
5995200300703011030659942003803016599340521608150103070501405005992405
2110115010301501599120022013012170070301530301527007010805990200802061
0306400504013015989200910904024051030704006030598820020700404005011405
0120020700805987400896080102080020013011030165986400290508010203012330
1103016598540070802008010201406030110301659844001003060080102030213011
0301506200900501013080159835500650024010212007659825806809040100200140
5065981570680064021620165980570680200402002006015108059795102001350107

0151080597851010001301510807040604001305977510301705503108059765108001
2001510706030597554070150700104061056365974706350401050100010130650406
0101305973701020080050401301401709405306010305972510501501070504010100
6040059715104018120015010309040059705290150530401705969570300160070010
4061056365968510300110003015001048201400130559671060640640105120021808
9059661030613018089030110803017005501596510100216200106005200600130165
9641105043015110830150620050064003025963103090805220040601200207006596
2102074005040830801410059611010810130615108040064010130405005960102002
2030120015030110309010107003015959101003001301152503400106595810300600
1050402002070010605957102002070030140070805050120020700805956102006010
3030202006010506595510806001014062005330140307010550153030113001401301
5954106050400130802010200100506059531068115001000530703805952107020040
3013200600110700301659511045802004100107003016595010660801003060010700
3015949103070130120220040601826059481410620040530540150102008012030130
5408059471410204102016594614102050641020104055015945307530126514065944
3090803061003055015943704903014001700800200130165942703200301400170014
0603016594120090150130656100504053014080594020010120060301103024004061
0593920041100305703200103070550159382101200400301623090301501025040320
0600105937100801414050401003060059361003060040405016050130120090050103
0805935900801815103070140306080503020501593421001500301403503015933100
2001930114020120041140659321002001930161406030165931900680840863010805
9304103405012001006530259299108404051012006504053030165928210700204001
0801620080205010700301302592746405006506702008059264650330150010482014
0013055925410200101403030170805924410340301300200703016700592346463012
0068010003016565922410701061042106555015921410430030202200300925015920
2001022030176803012030700200155013011540084005040102003400400150340530
4001830190301163040706165040150107003015015919100102008301217007040530
6405053217007040530801626400104030405004001504064030165010504064030116
5040080501070030150159184105300103003020103070530301680020013016400161
4060301203040530107003015917410408301710770301530301216504061050113014
0550401640100501406591646530050105040640301250630708010140103070405659
1546701001510307040570015914461006301400170020015030159134646001301218
9013040010059124653004064513006591146706403014061030165910362002301400
1700140603016590950650404020010100020031405304001830190301163040706165
0401501070030113015908401030121700702405200300280590750670610140240307
0153030165906506270020101620080205010700301302590550643601013050120010
0301405103070102001001700165904506504061013040530140805903100295070110
0295022020040030590210060400117001200401003016590110060614063010303016
5900100803003012406010011308058991200109025250120522005011030258982006
8105030501509005501589712006200604053051108050120550158961200107060103

0901065895120062500670410806608058945200590012006521400201040061504014
0165893120062006040530511030123010050106589212001060101216082601810806
6080589155010401025214002010400615040140180589051010013040801842020220
0103018412020501501605013011510111058894001008615220030400507001658884
0030600400615108014040010030165887400440800200130117001658864001008615
2200304005070016588540010030050114060301170015884506307080101650120140
2001802030126500305588350620090050102010120013011030705882506208800102
0018020301504016504015010700301406103018058815010900801840510307016306
0200114065880506301800301306550116301100405612001700165879501052080162
3010050140530511030116230100501170016587850674011000400104052162004017
0016587750620880010165040150107003015040165012016402003150107003015015
8765062200100403011522200300101501070587540105060400504053174065874506
6080150400403016080150400103080203070010806206040540140060058734064006
0040100108200504050610060105872401070503015200800504055636108080200704
0058715062009005010201012001301103070587040107050108030200120021301501
5869506220010040301545300105868406100200402140020586750610307014020120
0411406586650101030701080302001200213012140020501130205865506270020400
5240400502010700301170053011001040500586440108330163019030405501405005
8635062638403070010406104052200507040550113020586250626020101650120140
4052630100103070501200302130205861501030613012001091601301100150400110
1510307010304004001700158604010500144007040302013015227002010140658595
0104301406102506270020105010700301585850102700204030307001040610301065
8574061002004021400205856501036014020120041140658555010360108030200138
0301214002050113020585450104030170301220030601503014061001040610585340
1090070406103058525065006702404055012010306150900101301585150620060600
1040565076614056301201700165850506806400601060150301103070163014002011
7001501070030158495010808094030303010658485303070010406102004013016110
1030060805030608050203040400130406105847501043014061014020120041140405
0058465010430140610140201200411406584550102101100021550704051406584450
1043014061015506309010584340108310803020013803015016584240107050108030
2001200213015015841506307080400140506403070105840501024001201401200205
8395010900801830402010307050165838501043012506270020400302130205837202
2020013001405200690101108058362030470802016608020100306001070030158354
0102002030120220022020010001405016050130115101110583440020060016400404
1001406080504004030705833400200500702200621003011700165832400200380200
1823011700165831400200500400501220162030117001658304002009805011406030
1170015829501040301703012200530301130010501130150613004001406582840101
0040060105014020504013005040305827501040301703030200207001301655015826
5062570040050101805825401032005019103003061002651406582450105080022101
0003011030706514065823501024030110080130125120041003065822506503402402

0281901406582150104014050070194058205010204030020070301107004507056100
1070058194010200203066020030610030550158186080504001700182903016581760
7060701700130103030165816605020301200163301581560506003012406010011308
0581440020080081140608050400403070581340080307155033011700165812400200
7060401083301170016581140093002014060301170016581040020030050808903011
7001658094003040010025070010125808400301060546640301170016580740036760
6805030117001658064002003602001823011700165805400200300830068630117001
6580440030970200130070301170016580340020010603012330117001658024002004
2050140635030117001658014002006206040300301170015800520038030152008020
3014052010306157995200400100151005200400579852002100015103070700104061
0563665797520030024006040520818005796520080604070010406105636579551050
1000105013007001040610405504010200401302030579451050265400281906579351
0216540165792510600150402004030120080104061057915600190301400131700180
5790402040170501306402030170140040578912165520180657881230100010010148
6578713060050615064001076578612800100612507065785128151080150400250180
5784110030080020013011501001003004050057831290140301150229015015782540
1709103015016050130120090050103080578152004011408001001014030130205780
5200300501130017001405005779520021001805400140140500577852006010301026
0301405005777520041008051003060058095050405776510030600103001015040577
5520080201140501605013013040010057745200200240120020577352008060104101
2577252005940570680200405771540200204080890108057705200207001300504080
5769520020700400155011302057681053040055070400501805767103006001065657
6610706010201350401401657651020710130120103070140657641049040053040050
1805763105010004006015040140157621020020700301570805040080200207001061
5761102071053070302010200410140657601040701301513501575910306400660270
5758151880061510300701301165002301040301550620010406104055012057571513
0060010504020070050404005011405015756151540050402022001030157551512002
0700504040050140108057541516020040501101570160301507020506301601057531
0614030110555033015018057521065301507060805030110550652200401100408016
0050401401657511061403011054010833015018057501105043015110830120050016
5749101000950401401805748102001050403040108330140072002657471070601405
0160501301200207004001040610574610200220301540193014001317001805745402
0401705013064020301701400405744151602001301233016574315170200406151401
5504032006001574215184203070047028002001301657411518800320060016153010
3030091000165740151660801520406070802005739151502140603014011100306004
3001404005011573810300600105040305200270302030700108050157371030613016
5200600130130120505303015700600180573610307013014020220015013011008057
3510415080200300880573410706010200241405005733109070627002080573210200
2203015101301512001805731103006004008020220010301201045165730102074005
0110301203030530100805729101000955015067020080103012570015728106960410

0403014163012522005141507001572710606405001048201400130557265200516030
1240517001805725548165200371051405018057245200601600520020170012030400
1630110057235200600501401900701502017001157225200801830110805064642004
0301501150630610010572157030016001520019021572058031670010406102630100
5719580412003011570240040057185803120030180320040040610571712004014001
2002440301805716110026040011002160301805715182604001821603016571419300
5040019300150301657131100200100040017071503016571212120040040050201050
4001030110200801203013061001065141040040410014020040301200900501040610
1210200100121700704020150200700501150157111214052200103017006004001130
0504080100830140610301203070057101216903011006504082003015305070015040
1301506403020400101301809052010130403016862003014061001040610570912196
0055040506203040101305040820030114055010214068002001301640016140603012
2005708121608197020220050401735707121700201306161000301510805067040601
0130570611001541601206570512120040012701620657041215070161001014857031
7180405010100400403030501570212170070130140204107505030801610067008057
0112140020515010908110300302065700121700201504001101216270020656991216
0850632001013016501204055015698110018061735697110016010006140104081301
5696121200300130614200215108050610067001013056951211008115108050105002
1305694121405010100019303056931419020040400501204050535015692121200604
0050120803012330140020010606569112162140050120801406030140084008065690
1316801506400140080200690301108060080501040610568914001100104050120309
0803014061050156881801803014001503656871400125061285232006005030568613
1350014040012009070403015040150307501656851315613120060150307036568414
1430017026040201006801501050265683130017040200155030115030703656821601
2303010303011503070365681140012604020406501503070365680131671402015010
0306006567914140061301233016567814154080020013013070350403015677506403
0701060130204050056765064030701060130205675506803040060040510804051070
0301567440109007030112503015070567350630160400104070567250650406105470
2500104810128056715010270020403030700104061030106567050670202001013016
7020200140530301010017001656695010270020403030700104061030106566850640
2003404020501130103010016704004040061630205667501027002040303070010406
1030106566650105060840301107350203070020150156655063040704004040050201
4021101050516220030016163020566450654003001014040520168065663506107063
0130900108050101004004030150156625010270020403030700104061030106566150
6410208041020402030501205018056605010306130164020150704033090803014061
0170055659501027002040303070010406103010656585062007004007010804053050
7006101306565750610095010130406101700556565010270020403030700104061030
1065655200809040030140355012056542009010030120200200300210402004001550
1565325303015040105010001013063010309001305652270300500130500107003090
0103011610030950156515062700204005240400502014010301161003095015650501

0270020403030700104061030106564914001200801404020150101006016400160040
1300106016200151080150307036564814001640161108156471400180208002001301
3070350403015646501027002040303070010406103010656455062004110030140705
0801502004100805644406307040200410010301564350102040200120010010805150
3070380564250105401405040402010030600504030156415010270020403030700104
0610301065640501040200340301230708050203070020563950102006001301405702
4005040500563850103061301203055040301563750102700204030307001040610301
0656363090803014061014020120041140656353090803014061030563440030314061
0101305633400400100130602003011700165632400806050301233011700165631400
3200801406030117001656304006040940635030117001805629701001630506470640
0140501562812007005061120070070562712002070040011010030403018056261100
2008040011002001803018056251200300504001200300150301656241809070400180
9017030180562318020070400130602004030165622140103011217007040530470150
1040301900301654004082001080130010504030600410562114010208140103070501
2053030150153030113001050113015061300400140656201301026052200103017006
0040011300504080520020700400570055015619130104240040530150040115030421
5010300170016405200601150443006405150100306005085056181301010050014061
0405120065062007001065303170301506281013065501561713010691301030582606
5304360180301030301504065616130109016520020220220040601200207001656151
2006802061140500140550407094001306202200402083020029018056141301075040
0501200100301201030701503075050850150156131200620300404020107060501206
1734020305012017005501561212006591212003004052200405110060658008050402
0061601163086100200240060162008006006045060211050040510301705611120010
2201203040614010705040010120040500400101200170016561012006500504016306
3040540026084054001012001700150643060040501430640510307080691065609130
1026030601040604001510801501070560813010235071531740501201601201510805
0610060106560712001041004001562004100580080504020010200161005606120010
2001610040050120216201658008050405105012405103070801910656051301030700
4001580691004003030700615301309004051030705105014656041200102005407130
6160403001510805062001013020101200130110307015108050101020400405603120
0102008655031620029014024051736560212006200606520080050405110030640610
3012030700200300530301405110068056011200102009401001606270140610150220
0504080160050150156001200620300130617340205040410200501305303015363040
2040709501405015599120010601614010400106150102060405281030704017093015
0640709106559812001094006040520030050120140610506801600106200700503012
5068061055971200103804001550620038010530301412701522200300101501070559
6120068012015317405012060120504050622003001020012002130150155951200107
0606130130100016306013060501020080120303015044007011501559412006802014
0161200201300140130102603015150104515015593120010902170104060515030703
8051030400250313004015809505040501605013011501003060015015592120062070

0401101030050201040302005430150405010850160501301103070104001305559110
4006403011010810501103070200411002203070060103015590105005013016200207
0030150103673015504030703805589106608010030600805100307050120405005588
1050401010504050405809502010403015587104602020040010501501605013012608
1015586103061802030103061405005585103061802030103061558410940400105305
1103012570040500558310306400627002050203065582103090130610049013080558
1100160403017001040610202200103015580100160301210016030140080400301655
7910012008030155015090065578100120050403010100655771010012004003014001
0003021700113020557652001001801523070801050150900400557552006012700104
0610563665574520090015015220010301557352008001507001040610563655725200
6001301506200700400655715303170301506284003021302055705501102150103070
5014050055695501200100702400180515012001001700180556855012001006570403
1501030705015567523037040030205016030522020084001305566520010700170401
0100301630655655200109025608050103070501605013013025564200600164041001
4027001040610501605013011250105563200100400604030170010406102022001030
1556220076130130205561200804030150101700104061050160501301306100105560
2004010030166040300301704036555920040100301806060065558200902301100200
2170018055575401101003014061050110130160105556540140120038010305016050
1301410200103025555550150210660505011030705010200411001030255545401900
7070403505030150160501301260810155535401630301608050301240601001130655
5254011010030140610240601001130555152008010004030130516106100400301305
1655303011300105011301506200207001014065550520020700130050408055495200
2070040055011302055485200600130150680160010130302130205547520030050401
8089010400610501405504010200401302041020010302554652006601005040400200
8055455200805040060402004084055012055445010800200704052002070040030150
7040530140805543501070801300301570180300405708050400140805542501010010
3011501400110400855415010430140610227002050150206554050108001016003017
0408006600501502065539501020604030140709502050403065538501030904030150
4020504030163011005537200100601080402020306014055365010402003403015070
5535506301604001040015031080553450104010301218901130155335501052004002
6020140260805030205532200600140010614041004001050140205040130050403055
3120030023030120010700505530200220301104813015501552920080601170018290
3016552820024170013010303016552720040100301613020552620030023030102002
0700130110514066513012022004650340307010140613001050401045106130010504
0530301308001020307002013050040170052530301412001170014050620080120301
6800200404052630100108050107003013061001030650650406403016214002030116
4006150107003012140020010130615014010116504015010700301414710621400203
0116400615010700301501001040060103016200802050107003030550400801301405
4004701503070314065201013040130120015030121890115030703140655252003007
0570604001510307055242003002303058163055232007004001306101002400130552

2200100601402012004114065521200100605103090160552020030023013061001301
1700550155192005006102008601301170055013011008055182002204006016200241
4050055172006026602704050055162009005040500551520041008010203040010040
5005514200410080102030400100805513200410062002080550155121467090510052
0016055111410507015040011013050120550113020551041071501704091040500550
9141054040053040045406550814653005010502655071464404013014053040030703
6550614108640010030600504061050200700550520010601020010100050102008012
0301103070550420010607040610700104061020307008055032006100150301108020
0100501700180550220029018020220030655012005002040060400505040400130655
0020035180732003016549920059802021105006549820022080202200654972007005
0180401005496200500440301151011105495401082002006801000530301501530301
1620080100040060161200314090070161200106006553030145070564340020010600
5040402060805013016404100400140615060818002001005303011680020010016512
0730116400165130903011640101001655040200601040014016200100180530301301
0260108050630400110010506200600165303013080080504050610004002108002001
3011080506220080010506200600161080020040402050405062010605014030705012
0010030150402006010400140162001001804020103070214008056908400503050140
3070200155030163010303012004100105303016207040501070030150405801019655
0030500658090506301030301105003050050401050414061004002050140307010202
2005015494130102605220010301700600400113005040805200207004005700550154
9313067080405470650120522009805040140603015492121030050143063013070310
1406104040020080205015061004004008010208054911301026170060015150700600
1803066020030150670200801090708054901306602005067020080103011503060200
1140204020103070145130013066020040201030115030602001150154891301054012
1050020301233014005012063012330168002001301803200400406105488140103011
2170070659010001700140170965487140108361301205011501043050154861301030
1004053054065407050301103061501027002040301610502007006548513010403120
0354052003516506306100101401030702002901654841301020657006004001806513
0153011302200100040301610020030040301220054831301040024005103013040024
0062022004060120020700165482130106918260200155030110802030501548113010
1004061001611096430011053010303015103001505015480130101005001306100201
0307010100305060150154791301040020040050120010030130400200651030704761
5478130103010055040901005016158090505477130103010013013010303014010054
7630407403011510111054751447010300302010908164051043014029181640522004
0013016020016100030214100501403070103054741490200580306005040651041050
1025040203060105501803066020050401080040020015040130154731481521010001
0307020059001013080210100030140301705472144011022005303070310401506470
6400140210200100110200415013010054711447030100161200901508070800150405
0640307010608050647061014016120017001104008547014211510805010430160040
5053200150530501805306602006530301907010504065400130160200653030150401

1000130213015469148400304055064504043150306481530301504010502001031050
3010501301005468143002001306120080040203020304011301050130100546714815
2202003001130610220067041140501301005466142305103070506506201016412056
7041053030142704011001403055016546514815303017040167044001308053030431
6040301501654641470901217007052030601052200200207005070800200701050406
5108040550400805030546311004100014040515010100601305100102009301103070
1640110040060163050165462129840505330165012080506960110030114016546114
3002001620084002010306180403060150408050696011003011504065064030604030
1150401501654601100520013061606002801600101308052200250406105040805215
0401104530115070406014030150165459122005573705050306800200130110805303
0173705050305011505090015016545814410010010120091502020307005064150406
5068301903011504015016545714300200405220040524120014018002001301108050
4024102001200300110200450130150165456149020012153005304310501301704040
0601050408070406030304701100401550404701005015020150165455125300614104
3001602008400103040151504368014060301150604030150165454148153030150070
2105030501404005050900140201650900405501654531100520040564178050330150
4030132002506700670106050130150403013200501205501654521270020530301103
0705033016605013013061004005030501150509001501654511993005303011030701
5051080603061001050120550165450143061306528190700600400114015022004310
3017040055016544914811502200220200300505030652150401804300200301103011
0451054481237015012001001507040601501163011008050330150402008050704040
0601550110301108613010054471200124001301501040301900301474001306400150
4064030165010504064030306150406401040010230600450403061043016306103020
0801000122005446120018020120031801301164301013062041270163080010405200
7004005012050154451200110450102008012030150408002001301103070200700400
1302200865030110065444120019050153030150645040405301643104030801200150
1630600418016100200100014054001101096001404054431301308001301501040301
9003014740013061200105002016308001410065442120060506100670106500610001
0130617016601306146502007004001306402040053015020070040013016301100654
4112001220120020401620020406544012001606001301543066530140547104030504
0167024001610506907040550122008650301100543913138013026015504016203060
4003054381916028002001301402030307035303016543713120060014020320060010
6151080402041070104050054361400125080020013015040402040025015303016543
5131200606040300301307036120065050510802004010030130703654341100129400
1614060702605303011003060080102016200400403015433120016914020100306004
1006543212001100653030506320040013040203014054311200155014020303070310
6400150340203030703106501050263016401240204440106543012001200440402010
3070140603013060200105429120018010005012055014020220016200801000400601
4003010080542812001200601405304002002006016405304005030701105014050054
2712001534054006704105014050054261200122040060116200220400601616200901

6405211050016300100040060164055017001108040570219011630703405302008010
0040030405400670414030201050165425120012008013011010170440547104030805
4241200155061301030104061004006704105012200301100542350640307040040400
5020630200600610130131700153030130315011040604030311030140202006006106
4020265070050404020302008010001054225067010916561004001653030116427015
0154215010240200107005040203010501406100110301100542040103012170070405
1040011050130210050402040610020070050150154061001030118650150306020011
5015419506470610165012010700301406103012030700530700405100520040040520
0190215703001600541850680080610290501030140550120170120060500143130150
4050632006001040610541750647061010700301405406101610013010104008162703
0106168006600104052007008054165010100626040250850140640550401200106003
0425050110307054155062004110030150122001100040301610020013004030122002
4060100113080541450640307010140404051501003060015011302054134010705055
0330600410501405504010200401302070409101541250107703014030030150706501
0401030150705411501070954020302100162008020501070030130140805410506402
0020404001503108020103061540950690080181040540013090103070405501070030
1654085064010110040540014153002405501070030165407506701200405457064054
0015014013040550107003016540650641703014052010306180203070012006101000
4002150408054055010406304020010100040550180405501401014002030401406140
5316711030701301540450690080184053620080304055010700301654035064014020
0101000405220021700705015402506100803004040522002170070504040550107003
0165401501043014061025061004901050107003016540040620084030163010160303
0539940630704010084053016401108050107003016539850640101440540013090103
0704055010700301539750103090403011301539617065040200106003015604017001
6539517067320030030156040170015394170630510030600501605013015015393107
0618070403653921030640062002415040670440053911063003030570175053901090
0301550113020538951035010405001701040380020013011080504065388510664001
0400301540030109080653875106001654002819065386510502270010406102170070
5040104400801063040200340301461040550620090210538514010408401040830160
1013065384505703012030123301506204006538330540301201406030150620400406
1053821210200100512005065381141070255062001040550153801301040312002902
0029018053795506080301501060406005200141004050120406101080510301862003
0165201013040301320070400537832001704030110700530301504053777080145306
0103050102008012030305376701001621700702301016030160537540109007030120
2200406012826080537450101001030110083055016537350102008012030110307052
0060830550165372501027002040402050405014030705030150165371501010040040
3030520020700400305501653705010731855070481504040205040140805369501040
0630155040150709100304050053685010401030125504015070060013053673010611
0013018007021501030703061004006306536650104030170301220050403010750400
5365506200207004001401301030100505120306100213065364506504064001401301

0301002007013003061002651406536340102002030660200306100305501536250620
0902400130140653615062009024001402406010011308053605061091600301130153
0201101305359501030601000504013014017091306535840104081505154061030153
0601030805357501020604030140170910307080081013065356401090070301530301
2504061013050120550153555620306018017012007005067026015702007005306030
6010804050053545630904010833014050053535630100080567006005352510501930
6010507020305535151030140105070105010001140535051080011003014005012015
4001030110534951021608140200414030653485102140020400614030105040010301
1030610010805301403002521400201040061504014016534751030160030140110130
1108040400803060114021101050516220030016163020534651050141580691005345
5103017055031080534451080012005300107010806580534351021608100130401050
1400505090010501534251021400201620010014061530610010805501040102521400
2010400615040140180534151080160040205040108060040013050680020070400700
1040610534051050140500700104061040510068020220030020070304081061510132
0011030702030403016533951051670010406101058014060301400100300501653385
7010016301400701006700104061080533754816520414002048030123301680020013
0140030408653365481656008050200690301108060080501700180533551070165070
0115107040065200207004004020301530703503053345102001330110804020150304
0814030110100091403015015333510212005700600140570060018040522003066020
0169070805332510916003012400120804006403016530210050406506702008013653
3151010012504040530102004003058053305106160030600507137014055012010702
0090151080406100301102004008014066084011015105014050063011030702604051
0307015200600605329510400170200902009081020021620305180417014016532851
0100019301216203051804640500140180532757020011003012417064640500400270
0205326510018301140201200411406532551001830114053245100183015323501040
3017030302002070013016514065322506503403055015063061001062002070030116
7040601403040520019021220506100307103016200802050107003014120105016532
1501083019030150405307038052200512400318053204064070040656120070301270
0250305220050405407050520200144005011306305319406900204065610415070014
0068301281902050204001306202200402083020029018053185062400201040580210
1000301405450704015317506301005004040200100040504040580120031405301604
0040153165010400401041020501405301030401653155064030701013050010850404
0532004400605060500104830117005227002010504061050200700805314506403016
0405646360301103015067041016501204100653070040510052004004052001902157
0300160053135067010940060101308046360301103015067041061001605070803002
0104061053125010100419016501205014051012020030021640011030801202003004
0530401531140107072030700240510140530605310506402084001403040203050154
0110100301406101030151000301215010307050140101402030401530950620010600
4001403051080402030501530850660200440051080214002040203040153075064020
8400801020402030140530650104020034030120501040306040301307035080153054

0107050301400150340522004507050101004004030305015304506403070101650120
6302002201520060013012170070306217007030120307002053035062100012001502
2001030115011550401200106001503042105011502200106070530250101000191502
0150115030106110163011005301506406130400108007021030704058007023021001
8053005010403019001502015011502200501826016301100529950682604001306304
0203030100140301405960613011005298506406200840508503025297506301800301
5011630110015612001403080529650102004110042008103070164100065295501020
6040402010307040610301155030600410130501529450640080160040010405616100
3095018052935010402001904040050205014020500200810307016410001501529250
1082904016415040080529140102009030120400829018052905064010150405620220
0504080101915103070801980528950650500400601013065288501082904015504020
0901030164060100170015503301218901150630214020405150630215015287406920
0600301103070540605060528650103061301200109160130110015040011015103070
1030400400170015285501050263014017005012050152844010507203070047023040
0705283401050014400704020010600303070150405282401040502130040714055281
5010540801308302070940013065280506505410805054400630164652795010270020
4030170940013080527850104400540301240307016565301026050703080050402403
0701652022005015277506400804030140201010125276506200902106200902400608
0527540109007010030600103070302050165274506504040200101000120031302030
5016527350650340220220054070502400501140527250620096010140640301003016
5052715010704014024020104001105040801200610004020614082901501404001012
0013010052705010240301308001080655040506403070400608015030206400510307
0652150401504082003016530100526940103012170070504050102008012030120010
3105040801504082006110704050406530301105020305150140400101200130100526
8506704400524040050201070030117005301010061620080205010700301563640010
1060580307561200140308052675010240200107005015011405016530301450704030
7030114050130100526650101004190404005020501470630117005104004050630610
0106526550620030084005103016800200130110804020120070010700301653010052
6450620020300400140130103010054108013016200190213016704060301402030307
0364020130050110700301653010052634010100400604091200901030701106601030
0401050401104515536103070122040103004010504080152622006805066400701080
1633030251007200206040150140201007200101070030117005540152612006200100
0010801301506200801203015015040820030150645040402020090501040203045036
5107003011700550401526020010902103003020255015040820030113015052060401
0140508002100106400180190405100680200109301103011620010403061525920010
2050501208010208040530210050405010700301270020410030652582001070050801
0205064030704006080129018402010307030602001050114060301108050404040050
4014015257200640400105170018080020013014020280606001050114060301108050
4040400504011525620063005030151030165100720050401630206152201504010801
6300401801306307008002001301402030307031070030165525520010260030180109

3030165610030600504040307010130152542006490301400170024010307055015216
2005316140203061001620060165253200102202003165200801000404053021010003
0124052200506300600105010700301501525220010706030121890130110086080405
2507002168020040070180525120010706030121890110801502014030100705061704
0605015020630163011006525020010220301308001080130140400501501103005040
5303013075014015030100615027002080200107005015013410010302163011005249
2001070050402040011040301154005076004053016036801510801010030114030209
0010100030150407104040041204005248200680400105611001053001530167040601
5108016100301170015247200109040301601026405053217007040522002162008020
5010700303065246200107060301217007040530150440070165010911030030301406
3200151503070368102190402110504301140603011501074100306524520010608656
1106016002009023012010301230100501050104002002020090230170320014050052
4420069805040102004003052009023017032001804006180400504050408200301100
3060010801020040014011001294001614060702601003060010700301524320068010
0030171077030165613040705060814020101402063021030511083016400640301100
3060010700301524220010410010300302010307065620304030154102107003012020
0124005241501040050110030150404005012065240020615220040014030202400100
4906150862005040510801506008050801532008040050908110400301501200407040
0502140102004065240501040301900301406100301504010503506530407065067020
0805040105035065503301108014001022045070103050212200400301100700150670
2008040012004011650401501070030301305004053030122008006523950103060014
3017040200150301130600413010100611010300530301504014055070110501000104
0308014051400501600805010830190150412705040501042704008400140050120963
0400120040168650400120040116200802050107003030130500405303012200800523
8200109040301601026405053405161406405103070900301000165010100801504030
1620018020301451310250301151011105237200104100103003020103070205011503
0200801000161502006501503040404001150220050630610010405501401012640510
4101501021070601040520065057040165040150107003016102503015303011076001
0130406102001550130115400840050401020034004001503402030600410640204001
1010604020507020080201050140202200106070186905052640053030110301162640
0165040150107003011510111052365063040704004040050201405067340014050140
6103011620070040070400130162008020501070030115101110523550620040610140
5063070801064052004011405303015069070101304143009001301000520101304015
1030705200138301660150301154610061200150402010305164020608050116100165
0401501070030115101110523412001202164001210500400181016040014217040012
1014004001400501100400150406404001403060405020504012001060013167153042
1050150201003095015220010607052332001059002030700470252010130403016501
0504064030183019063010200236513064065530301501805103070120051900400501
6140202630100400100090410080530301103011264004005015232200102600301401
0307030110501250301100170052012501504040030110052151250140308080070250

7080020070165800702802007051030705303015200590016524001250140308015001
0485316718007021030110250301200601700165231401020830140103070301656402
0130640530301640205014010153084004020305303018002008041005230401082002
0068010005303016203167140018002004010100040024002030530301308114040200
8400403010250301151011105229140307010300302029181410053030150162001041
0010300302010307053030150116403070400305055010220040130130750400105053
0500408002001301504064001614060702601003060010700301530301522811007200
5305303015060814100142115108050104301600200155013011540084005040102003
4004001503530600410183019030407010653030125040610504062006503011030140
0140309003015040400183019030116304070616504015010700301320060010304001
5010240530301400110140201030706304001013066020052271200207004020103015
3030130750141001650401501070030121230130110306111053030116100400180141
0430012170070405305303014701522612006060015200401521001705012061520040
1301264001001700805225120020501217007015150270070614104300121608151502
6018805306020061522002004015070400400705102001005040501012065224120060
1020060704702530301307031060151400114013011608050530301803020101305303
0151400114040100805010308051007200510307020041005040654007060504057060
6700100805010305223102006001530708002004006080404002006017040050168062
0070402402050102162004040016505200631505640018040203050708002001501805
0530408507080010104008505103070161008050180304084001306150205016505103
0701610010800400305056200180040013064020436504040400502060500108504050
5650206015222120031530409007010654001101060550702008020105303011004001
0504064020103015307501530301200401203070052211200601052004015040530307
0310530301100400105040650530408507080010501505303130140813014001306165
0800810403010101303016200530015500130500505400470804040024002001501402
0101605050408001084030150405060101010101303016522012004100103003020305
3030130703410052004011000301253030150152608658053030110307030206400105
0406260400810130500108504051007200106521913200600405303070310530301100
4001050406200600130140610301653030125040610501205040529007061040203070
0530305415300301164010100164020504030470106700164530016806200704025056
1002001806180620070402505620604018050530315010003021700180521812004012
0307004702500481053030130703010200440013056080504030900410080530301464
8470400105040653030146482030400655010240530081802501040011050113015032
0060010130650540061025040505632006004001304020220053030116100400165470
3011690816505400470305056100309801605030140400100309170011025030115101
1105217401020830171077030154153003016210100030140301705216401030820062
0300530301640203020080100010640203058070180010150608180020010053030116
8002001004005015215506830804030140520103061805608050830010061050406402
0608050130120010600161008050161670109161670406016404007094006011405303
0116100400180521440109007020031545070530301655040080402041306164020301

6401140501521340108200200680100053030150180162008010004006168809040061
6807040050164056200700818040203016470402041306164020316715040501165040
1501070030115101110521250650406403013020640010308053030110307066513015
3011305303015211501024030110001302301150306602001030701405018040400103
0640050180306602003011670109165303011670109165210401030701030030202530
3016523010045105303012504061050406530301507001213015210904050402190114
0520920010904030160102615108050104301600200150301218901201030611504001
1012162700206162008020501070030165208401090070301768030120307001421151
0805010430160020015501301154008400504010200340040015035306004106540011
0106055070200802010183019030407010653030125040610504065021100040030140
6102030700704033014061030402070403104061052072001026005063040704001402
5303016150307501107003012006503016530660200653030121650401805206200106
0105303011030702030700640400304070140250625040030405005050070240030102
2006103023010016500702105030501162008020501070030140707520541040810501
0005303016530301105010004006016163064006162008020801505064510200300211
6301100804001501023012405306020040510400140040050120550122030700520440
1030121700704053064052004013012616100170080302100504016200802050107003
0112504020400110403015203200649030140017002401030705303016506503070400
1406506200604001404030701068002001301640016140603011080140403070105202
2001090403015103016402020069050608180402020069061008301280020013016400
1614060301100306005201200109025063040704001402530301650406404020504062
0080120402050408040201003060010700301655200200104100103003020103070656
4408301530620304030153080020013011080140640016140603011080140530308260
1051995063040704001402200102600530301615303113170011608050530301200600
6105030651985010830190301504050201610049018021020010030311030110504002
0060011306302200306100108040064030140204811040011050130210050404020150
1007200140504016100805016519750620060160030140520103061802030700307080
1050406530301200207005070402041306113064020301640140205304001301650401
5010700301151011105196506403070101305010100801504030150203065010504064
0303065306602003065770301530306307001301155040770130150320060010305501
0440301103011507032005010305063061001051955065100801013050101008015040
3015020306800200130164001614060301501017600530306168008050101040085303
0130660200450705040103070161008050400130506306100105010700301405519450
1010060180301406100301104510130530301501405305303012008010001050304053
0200801000400604004030401405304002008010004006014051030701660519350620
0220400604040565064901040540010120064056062001663053030130660200402030
2008010004006010163017040040530301010017001651925062080610105015303014
0530400110040520070081806470301405405103070581090302050626081054506040
2300600405501204053061003070406040016306100105016405401603120237040040
5400101200170016519150651008010130405804052630100103070702980162008020

4050016504014055012203070051905063040701016501201401604055015303013010
2605070164908055034055014010116700600400151895062700120305010100801504
0301501453001053030165306602003020501403070105303016530301306602003020
5014530050163011005061008015040301201317001518850101007120030120010600
5303016520013400301504066530301504020010600530301450701403010014010110
0206202004006151030116800805011653061520013400161200170016518750683080
4004020307030120010500205303011620020700165303013080080504016100040021
6800200130110801620030040050180513090301400108001001700180518650640307
0400404005020501402030200106004020307007010230116200700653030120020700
1030116706018057040330140610504051309030301046501700116504015010700301
1510111051855063040704004040050201402402010250108054153003016210100030
1403017010301506420040040500402010100130405501805504050620080400107003
0140064030150130100518450104030190030124010307053030164051041014004041
0014021421550650404001013065183501010041904040050205014006403011650404
0080601503015064504053030110306140205014040040707501164155010700301151
0111030100518250104030190030140610030110451013053030165303014001101216
2700205010700301406100301305004060102120018060130408102001408301305004
0201563040810403040500512006400301163040850107003013050040518140109007
0301308008030167005303016130010504051040061053030130800802030700518040
1020830171077030165640521610083010140304055040501020060016517950102403
0130800108030302100504016501205016540208301621400203014054030701064051
0207106540011014051030706304001040550401306602005010104013011080500702
1070030165517840102083017107703016064100301203040301800200130110801406
4001614060301108014053030826010517750102005190016829018040564701030701
6504015010700301150410180580101940020080206301010120060110502504058010
1940050401805303012001905015085050610200168301301100530301103011020019
0501504050101020016830304010200405021106010703011001402053030120019050
1165062016504015010700301151011105176501050406403012003002621020010084
0080653030150402009050155062840010200600165175401090070301768030120307
0050470400150310805210950201604062001550130115400840050401020034004001
5034020306004106402026507004020302008010001051745064030704004040050205
0140203020010600402030700402060805016402030164012530301301026010805064
5134006530660200653030125065040640051734010301217007050404020103504005
2001340010307040203041305165040150107003011510111051725062020030040301
5200206306530205010430110307052005900103010083015010461045301253066020
0306020011070030165517150620080120301520020630652006504040040530301640
5516801253030120065016108091030506410200105170501040301900301406100301
1045101305303016401306013011030110704106562700203015303011030701020040
0801504040403090015040651695010240200860170051630110040015010230124051
3140308044081540601104702504010400110306602002120030024065120064003015

0401041050102140301100490404020103015303013066020010501301010120060110
5021104010200405021106010703011007001651685010100601803014061003011045
1013053030164052630100530301100017116100017140308040201030153030130660
2001050150640307040041006105050670064004030406100110540610030106064030
1100700165167906902004050110502405501201809053010260108050630400110010
5010700301281053030150151665063070804001301401630610040050153030145070
1400100402002205165506307080400130140506306100400403016504015010700301
1510111051644010208301710770301656800200130110801406400161406030110801
4053030826051632006210030121890150402001802030160101014020520060013015
0401660101041004051030705303012800100014061001630640040013016504015010
7003011510111051624010820020068010005303015015303015053020080100040060
1650570101280806200704010802050109070101306505303200165051041015010255
0102004008010501400522501040011013065054130615030400100101306501050710
1306501002006010130611010300530301250202003001013050110307020507010121
0400150406403012013170011025030115101110516150650406405240400501107003
0153030116100400161610080501140305004040531671400257005010700301164001
8040400210017080200180203011030140203167150401030040204001805016516040
1020840103070530301640205010240208105303014020840203070016100805011401
6301601030640400100805011401630160162008016203014090702162060404001306
5052006315056404001040011700150568205040050140201030708150313061610080
5011404056400165053050630810405130640530308505130200180203011030150567
0320040013080400150406405056404004030705018050550140101240307015303015
0565084004018040012003154040015040640301402013170011650401501070030115
1011105159506403019003014052010306180405306400105040640563064005014020
3120060011030701620051900640202001104504040206320060016501043011080402
0630400110050107003015070530301402015501014050151585010960100403012810
5303015014051030116960100400640562002400501402020011045040402063200600
1040306501043011080402063040011001040305010700301507053030140201550101
3051574010820020068010005303016200104100530301654640405504040400104170
5010700301501026402050102307031050153030110607051564104083011050100030
1655303015018030640010504062006001301406103016530301632001050120504030
5506085660140510804020305012041003051554010208301710770301400501205011
5022001503020080100016162008020501070030305504008015030703400130150220
0515420010904030120103016150250120103016150302064002010307015022001030
0504053030150402030203040114062030502008010004006013051021304010512002
1306100130154865303012165040640010400814211800100023016561470301402050
1026150501021426402021502008020530301506450405064270400140406402050401
2002150140540610030163011007001570405010700301640105120021108055060856
6014020304005012041005153200109025063040704001402530301640205010230908
0105401101003014061040204130611306402040182001402070805040050305152506

2008020400630164666603012405400506030164051041014020103011696021061470
1402030165062010402068010050010501515130102603011660308004100804020504
0530708010504064040050307011406404001080600114024030701150165464030124
0510301506200604001040018002004011000400216103010260108014153404003200
6004040050205014020220053030121650406400501402011016306602003015063200
6001010083015040402013140216200802041006546403012405103015061003040011
0306140206470610647016700600400400130165040150107003011510111051504010
2083017107703016568002001301640016140603011080140530826010105060830114
0601301530200690403011020012301100301600301530301655149506202003001014
0705303015018260200220400403012001233017107703015040105403015040640301
4013060301606410030120304030165130153011301070030153030165514840108200
3015040820030165541530030162101000301403017065130153011301070030153030
1655147506200208040010405307030601503030152200800503015004013012030400
6530301510300600504017049040040170300160054001012003030231030705012001
0030117005150307501630514650671018030140555033012189015503301218901620
0150301218901106400601013051455061006018030140520103061405608050140516
0501805303011660505010700301201650620400130651445063040704001402200102
6005303015015303011610040016410003040040410014060805020090050400306530
3011610040011650401501070030115101110514350104030190030117320307006151
0805010430160020015030110801405501140540021001705012080514250104030170
3012200530301801600110501205040102002105013011002008020140308020080201
5016050130303011007001501910300301305004020514140103012170070405306405
2004013012616100170012102001004053021005040501070030130500402051405063
0100701013040610040550122030700104003004052630100617010403405260840041
0430040550102405601220043120065040615509084010200100108013011701040340
2050630400110010130513950651008010130406100405501220307005303015040405
2006490108052520043001404005013051385062009050101304050020012413015030
6103040562009050501030640550620090501013016304006100501030640570405063
2006001013016320060015010305137506270012030405501453001053030164020502
0090505030404003040061005016142114814020108070109501306402070405032006
0050304040032006001501030214002030130515040162008020501070030140550166
0013050630610010161008015050107003011030120040040301513640108200806200
2050115022001650401501070030301301000150263010010803070340013065014010
1301215061002605010700301150501660013061503020080100011502200506306100
1040547025040161350107003016513550683080403014052010306180560805083001
0061050406590190600405250120630640560805011030705062005006106164006114
0405318405200649010805064310130640510301200315504050628104053021005040
5014010130162001430116624005010700301651345061004190301405201030615306
6020065303015062009050106150168002006530301504013080080506100040021040
5301640164052001104504016320060015010700301501020031540301120010080303

0513321100703014104300530301501530301161004001616540050180550704020155
0140656700600803066020030140201400114064020504011050100013015010253064
5062010130102030102603015021650102016040301610401400103016102200100301
1070030630660200303065303080102001003013051504053066020010307053030118
0114051322001041001030030201030705303016130010504010307053060200930601
0530301502030621202001306301060050405103070404008036114080405504053066
0200103070530301180114065131501010060180301107600103065303015070012801
5306901103070540101100156404002020040061550103050404040070910014051302
1100703014104300530301501805303011001300105040653066020065303011610013
0040550122030700512920015030121700705200600130110804053061105043011080
4052700703013033014051030705303012400205011306306512820019021301103061
1101620024007018050105040640301104101640510410124054006102506220060010
2702003014052630100108080700100616260400810403050010850405303014051400
1805303015040405506908405400705014040550116509006163200600105014040050
5090014020030083013061304052001104504021400203013051504016200802050107
0030132006001107003016551274010208301710770301656800200130110801406400
1614060301108014053030826051265068308040301405530301278501130153030127
8201030615507016800200640550705303011080020015108050104301600200155013
0115400840050401020034004001503405306004106550408620024054101650140101
3014052630100108024002020103061405400200103007061405501660016140515021
6140512116501206306530660200653030141850405064161020060013014061030165
3030125065040610140610043400130512571077010610053030150110306020061501
5023010001305303012400205124501030700130110802010306153066020065303015
0641810501070030150151235062006016003014055019103003012785011301501910
3003012782010306153030120020700405160501805019103003014051030707006840
0601512250627001203014054055011301103001030704055015062608106402030506
8030810140205305068030810801701040353030140550070210406105121506430160
0151080405200150301218901201030611101030053030150404054130611306405301
6401405507010501000400503051205010540217007040530805303013010260507016
4908055034055014010116700600400151195063040701016501201401604055011410
4300121700704053053030147015118506403070104056270020301103070506803081
0640550401306402050404051404051030705303012800100014061001630640050107
0030110301200400403015117506304070400140220010260053030165306602006530
3011670109165120730116400165130903011640101001804020103070530301214006
1630708040040307001804001100490402016350104105010216404100400501404001
0080300115116401082002006801000530301501801643400403050180200591640203
0200106002030700510049040201635010410501021640410080306602003014040010
3150170011650401501070030115101110511520010260050630407040014025303016
4001320044030703011640061501070030164020504016504015010700301530301708
0200101673005018016730050130101001700164020305303018608010168608018060

3013403011080168608040040203030101001700116504015010700301151011105114
5065040640301302064001030805303011030706530301507001213011101030040520
0180026010306165040150107003015078103050191030030150401063503011405015
1135062003008400510301107003015303011610040016106100400301620023012163
1504006306602003014001090704065016470301640500130121631504004001308040
4001031504001700116504015010700301151011105112200109040301601028015506
3090104050534052608306100501402530301150270070101306304056080501108050
6306100106530301522010810403014022061082061317001630660200301400109070
4065016470301640500130125063150400106550701655014030506467010405001063
5030150701655050107003011030120040040301511140103070103003020253030150
1540110100301406101630407014024051025010405001650120140501014057040651
3012005002011306203070050401050411306405604160651301560406001306405702
1200651301550013050010635050405062010140800200130110801406400161406030
1108014040307010530301501200400403015110410530010300302010307053030165
6605065303015190811630407014024051025010801701040353030140550070210406
1051095010540217007050102008012030306400150102400110115030750141006405
3021005040501070030140022014020164002205306602006530301506418105010700
3015015108401030121700705010200801203030653030146482030400653066020065
3030121650406400302030700150102060405010400604017091807094006010403050
4080160140400105013021005040501070214004004050102005300401109080431040
3050408051072001026005063040704001402530301652506900706400402030700160
1404001050130210050405210020020010200840080163011001403050646701040500
4051016050504050620051900105010700301651062006801000680703053030150161
2006763061003015040120020504050630610010304055016405504306101013030113
0140540015401501405400154015051404051016050504040205040506200519001050
1070030151052001090270104060530301501140202006184007040601053030165303
0110301102040030040061536710802030413400104003013061005303017040604100
5104401090070301308008030167005303016130010504051040061053030141023080
0803015016530301308008050401030010307050620041001013012140020301305140
3070101301030510340108200200680100053030164020302008010001065250630040
4001200650402030307031065400408200504050103080204020400610530660200216
5040165303011610040011650401501070030115101110510250610060180405504020
0105002064052003140550401650401501070030115010400180154001017020010081
5670200140805303015016800200110004002113014051030701515024002014015670
4400215105012520065408200658012005670240015010700301263010010801503070
3630103501301515010400164010200405021106010702150108010061503060200240
5200150011030701501080100405005101506100601804055040200105002064400540
4055040802140020301656250301140540010200700108015030703640105120021618
6501503060200141003065100710770106100530301501210100030125306020065200
9050105040530301403070103066015030307080150406410430060125108041048301

150307501696010030126015030140610010305017104030162140020301405704015030750164001501023012150306020015030602001410030509941040830110501000301655303015018030640010504063060023012601503015062004011065063060021050107003015098200660080301400600403020281013053030164020140011402168200804001306402040018014010307016601400130102030509720010601053030110307020307005011512002505013021005040214002010801301402060805011080130680020013011080521090405040219011405096401090070301308008030167005303016130010504051040061053030130800802030700530602006530301216504015010700303040047018002001301614060301800200702015800200705503640202200504052008010004010301161002160509520062001000301701400401301110504301511083011405011640307015094401083301218901201030611504001101216270020616200802050107003016405200650640520031405304052200450701453003016506100104903014052010306153060200653030121650401501070030165093401020020200314053064053080701800101506081800200100530011680020010016400110049040301650101004904030150150925063010070400402030703040011013014020301501024100154006404702800200130110108105303015011640307015091506100601804055040200105002064052630100400601008044013014051030703019803021005040214002030116400615010700301201650620101306100830150403075014065303012002070030405263010070300600400501165040150107003030501104030150902001090403016010264020130640105200150301402016140162008020501070030150401306510480402050407006006101304061030180508920062001000301530301240202001000653030120040113104008105014013014020400200100064040024002001640400902200400640206080501404005040080402050203061030216301100402070405020504030140550641501050882170070301530210050405205190065408200301510805509122125302006602405501022200800801200650166040400301804020120061670320013010100402020065050406024001005015062009005011650401501070030304001100801504030165061008015040301306100104061050874010900703017680301652030700151080501043016002001550130115400840050401020034004001503406103014020120030024055014010126405104101501024052006501070601040015040640301650105040640301102004004061050864010200202003153065305807018001080150608180020010053030180020010010107003011700504050852001026005063040704001402530301610506083015303014706130206163040011006470250401610080501501070030150405320044090070120103061304001100684008030130210050401008050150404020504010640060101308002001301640016140603015001200104053030653030130102601080161008050400130140203014065084401082008062003040202530301501620065030110301400140309003015040402032006001030400150102400110154270103070307501010700301655083501050406404040050010301400110154270103070307501010700301655083501050406404040050010301400110154270103070307501010700301655083501050406404040050010301

020501402010015001040700600141006402022002165040640030402067041030660 2
003016530301250650406400130402030140650822001022020031405301610080501 6
402050401650401501070030180510805010803060040060404020307031404016100 8
050165306602006530301216504015081200649030140017002401030706563010303 0
110802001550301330610620015503011080301030301330610508020064013017032 0
040053030110301680020013016400161406030120304053050792001090250630407 0
400140253030164040050201405010140207040656151080320070101406140603015 0
403075010140615504032006001014068002001301108033010140403070103002007 0
301103070106400601405004011015400601080800200130164001614060301100306 0
010700301655078401030701030030202656509123016200519003016200600130163 0
613016550772001041001030030201030706564001040106101081080020013016400 1
614060301203040530507640102083017107703016568002001301640016140603011 0
801405303082605075401090070301202200406012826080507450101001030110086 5
301700550150734010835103090400650724010408504030750805071501030180030 1
501027002040301504050120501140165070501040103012189015040203040130608 0
506950104010301218901504050120501140165068401070504005036501810200686 2
008050675010220010040301504050120501140180506650101004190404005020501 1
550670320040050655010501044020010100040400502050113063080506450620090 2
400130502030640205040510301220010015085065063506200900504007001050108 4
040050165062406100308301400100030217001130630805061506270020400402050 1
402010072005063070340065060506505440404005015001048301170052801505950 1
040301703012200504030107504005058506200594030113015604010130505750650 2
040214002010805056401020020501200100305501505540109007050640307040063 0
406010030550165054406350301701001640240601001130805053401090070301202 2
004060128260805052501061004030301701400406520020700400151503070350850 5
051506103005040301508504011540020033004040013005014040050115050506200 6
400104003012001503014040010120080150495062002030040013063080131315150 3
070313005063050485063075040301508504015074030150405640400307501404005 0
115047506220030040010700301140301404001012008015046506406200840508503 0
250455064020010004030150150445065208040040400309008014019851503070330 1
300506305043506702001730150850401550670200740040400501150425065002008 4
001404040010120080150415062002070040013063080103061301513005030140400 4
030704100306504050640307040013014010804020103005050640203015004013042 5
050110307050395010100626040250850140640064030140205010215020041005085 0
503850610030160030150850401550610030600400404005011503750650404001404 0
400101200801503650610049040013063080402015010030600508505035501043014 0
610405307501700550344010530122003005062200130080503340104083015040510 3
070506220013008050325069230115504050610301408050314061007504020033005 0
405063020130503050627002040301506301800301151014020501405005029406307 0
404061040011001040103015067064034030502850102006001301650103061301501 3

0100502750630613011506121615026506500670240301501114019007061212004001
5020615040040170010150630610010165012065025401090070301500508301103070
5062009010165012065024501080200400402030700302100165012040550150234010
2002013064200121305022406408105040309006502140104086406406010805020301
4030030121890114030140300301218901650195010200600130150405305006501850
1030613015040530500501750104010301218901305016121200400112200705015120
0120215051503070380501413005015051501300501150150135706802004030020080
6501257065040401306570691004013050115200105002055201806501026206040140
6500946440403090065008468005040830965007468006004020046010805006501040
1030121890114050104010301218901650051401306014013060130101001301500414
0105001400130616100030151080506704060101305003506304070101650120140217
3500250650204030163063030130150040120500150107020068650005065400300101
4040200109408306499950620010600400101404055201806499850680750101306155
0705067049010130499750107040504060120610010200121621620124996506430600
4050143064051030708069104995501030211004004015103070501010204004049945
5068006402002006010307049935010200600130150403010301006499250103061301
5040530500499140107050301400150310804990506220010040301201030614989506
1002160301506100216030164988540130040301218901140540130040301218901649
8755040104030121890114055040104030121890180498655001305001316714040050
2064985150025040125400501208049841602301233014006026498313200800200130
1400320017001498257080120058008016004981527001201540070100630601030498
0570100163014007010061700149794012002013016301303301107002022004060120
2001240049785012700204001402022001301101280497750160810200100270620080
0600802008020010307050101020400404976501270020400140202200130110128049
7550131306405302100605015055004091040304974501270020400140202200130110
1280497340110600301108040012006901004020068497250127002040014020220013
0110128049715016084001200106005051080497050127002040014020220013011012
8049695014020063060050655201801405108049685012700204001402022001301101
2804967501400600180050501501070140510804966501270020400140202200130110
1280496550140040154404964501270020400140202200130110128049635014005031
4055064504064962501270020400140202200130110128049615016081301130150160
8130117330549605012700204001402022001301101280495950132004030164006100
1103015055012049585012700204001402022001301101280495750131306405302100
6050150550040910403080200930140012009011005051080495650127002040014020
2200130110128049555014501040050330110503610020024006015040155010192300
2008010307050101020400404954501270020400140202200130110128049535013675
5201803020504014051080495250127002040014020220013011012804951501102003
4005015010701405108049505012700204001402022001301101280494950150801140
0167004948501270020400140202200130110128049475014005035220040110040801
6005040306494650127002040014020220013011012804945501401040850102615501

0250680691049445064020034030115227002010104003014050535700549435012700
2040014020220013011012804942401410013016109016503012700600610804051401
0602506402003403018020070104941501270020400140202200130110128049405013
1306605015250700507030160101307001040610804939501270020400140202200130
1101280493850154301205420064005012080140603014001003005011700180493750
1270020400140202200130110128049365012009040050400130806018506200150504
0900163001402010307030602001049355012700204001402022001301101280493450
1930602130150670080504001301670080501808002001301640016140603012001910
0150401670080504005014040070940060150160501301650330120030070401104933
5012700204001402022001301101280493250130100500301510140203010002008050
6049315012700204001402022001301101280493050130010806540610302080020013
0164001614060301108050405301601049295012700204001402022001301101280492
8401200201301630130330167002022005361010021064927501801510307050403020
4926501270020400140202200130110128049254013070130120200823011080400130
0504030120016330153064924501270020400140202200130110128049235013200403
0166306303011405504032006001049225012700204001402022001301101280492150
1101000210130600720021405501024920501101004003010501020082301320040491
9501270020400140202200130110128049185010220010004030122006501010020030
0403012200491750127002040014020220013011012804916200150504032001405040
5013301100306006491520016008030120301903090504050160501301100306004914
5012700204001402022001301101280491350181020030168090703016700283016491
2401402013014001700306005030165520180151080491140150130301570800680020
0130164910501710403011620060600400130696010030125076301164010100164909
5017104030110801610009400130149085017104030170800661570802001406030164
9075014360102003300301640350301649065012608220040100301660403003014905
5011023015403070490450160501301100306004903501200100301403070490250408
2003014901200440010040201030404507010049047010040108049002005506400150
3108050101004004030150148992009400604020010220620010100090302064898200
2730110805630708010300302064897200204405040305804020701103001150203051
4100306489620090230128403020548161301150200401140648952004100251501003
0600103003020150148942001006060401610067004055636103070200150301108050
6286010406104893200706063013080010805010402003403015014892200401610541
5701603016405470640570160301302489120024301506306106704033014075106048
9020090400504070104035085050630610010401488920027301108051200240203040
1402010306150402001060040202001802014888200440010040710770700600140515
0700600180153020150400110121627002048872007005030150670200803011341003
0648862002044050403058020020700303050120010030115020060104100306488520
0700506102170070161006700804884200100400604021700705200202405829041003
0648832007005061021700701610067008040550107011506040980580108005070564
6120041003064882200700503012162001404008015040030092405200700501410030

6488120020300504010735020307002015045070504054070504880200860240515010
3509630301130112901840510307015030602001150148792007005030129630406100
4002700204878200204405040305802002070030305012001003011502006010410030
6487720090040084030140103005201650120805481658109040510307015030602001
1501487620070050610217007050120801020804875200100708010917040080405281
9016415080487420080040084022003003020405501025406010014030150140510250
6487320029901640521004002001804053055040080510015030163060200401501487
2200300130121700203015040141000506403070106048712003001217002065302150
5010250405103070200207003011010030114870200706063013080010803017001150
1570240050148161504012003002116301100804869200700503012464050040027002
0486820020440504030580200207003030501200100301150200601041003064867200
7005061021700705012080102080486620070100504030600507137014055012060150
3017075040048652004040060406085040610108012009020090181020040510307015
0306020011501486420070050610217007050120801020804170400270020486320020
4405040305802002070030305012001003011502006010410030648622007005061021
7007050120801020804861200204405040305805101151502020040041003064860200
8020501205040301731505010701210200340048592006046816301400170010307051
5030408648582004100410020040110307014030110100400301801506107080020013
0115020038064857200405504014021406030121621150840080804856200904005018
0263010004010501522001704804855200347165065034016301100615042701627002
0808650406100405302100400270020485420060704061017005506200801203013061
0010701430110301501070954048532003004005040412003405501205001431301504
0506320060010405200190211703006004852200205010300103017014301704104061
0405507030640080485120070050301501000400140805100030125402084850200347
4051080140125013015040405134100306484920010040060402004013020640516511
6702400161627002064848200404006040200860163061001061680020070105101162
0010501648472004010030110030050165701603014002200400100148461642701653
0301643601804845506440160404005016484450620240013065062088004006484350
6237040050010483011700550408014842580300120530301506450401530601030484
1580713014008071484010306130120070050301504020010700501700548391020014
0400400202200130110128048381030010001401513001000804837106515208040064
0301648361010009164030900140516501204055013021005040865040610064835101
0021140804640500648341030613011417020305155016483310200703003012200655
5016483210501001610501000165550164831102006001301513005030151030705016
4830105040400170015809505040482910500501301620020700301501036730110030
6005501648281108164001401655501648271020216208800165550164826105400504
0301202200103015016482510806130117330151731040500482410200108066051070
6050164823107060140130150160501303060103050164822102006001200765200716
2007400130148211080610700301401051200216482010606408089010801402125010
4030401481910200106580210100030140307054507014818104201613010301001097

0164817103064001070030140010120080148161010040015040240307016540206080
5011620740013080402040015401506921080550314040050170016800200130150404
0201300501700140202403070165520080100040301706016202200501404030301130
1300816803016405001301200101220506250400310501070030148151050608301216
5060815010700301107310616304070140216160150107003011073103080020013011
0801406400161406030110801405303064814104400515040240307016565301026050
7030800504024030701652022005014030703015040405100030240203070048131105
0430151108301130142001040306150200207005070103064005040507080020070180
4812110103001008301504010501000101305090030150165090030113015067024001
0501403070504052405301406481110500501301510406040052010130403015064060
1030520060013012506504061013050107003015014810108002001061300105040305
3030150700110501470250401301110103004054007018030010501000400130400161
4060301108020304050404020648091030613016520060013015303080480810504040
0140501605013030401480710453014052200504040513410030660805013011065400
1406509003011301506702400105015019306050401525303013075011404020612164
0400501156404001040601406011301105501480610710800540601001700120304004
8051050050130153062002070030140203014804102006001301550030150030151504
0648031077030164001303014040010120080148021020022030152200400110150401
0120041003048011010009140620090230110001714048001030010001014052004603
0110300100010700147991061403015503154507047981054005040301520046045070
4797102006001530750512004100306479610200101401030705506200140400801479
5101200140416803012700201404794108611405427010301108618047931050416150
1060610021100501208047921030440080150440500479110307013011008013012656
4790106400601805200406700478910610030141043005403070478810861010861301
6550147871065301507010095010140647861061000140640202819030800140478510
6517001403503016478440635030120012416582608030103030150406478340610040
0501082022004408282606150501070122050180202200402083020029016478250640
3070101304052005002015020306203070050641217007016403090050107003030501
6478150620090501040513061101030040541020405507010501000101304061047805
0610070901051080107003014054061016100130101040084052007008047794062020
0402186016306100101910016014060301504018060201620010501647785062020030
0101407053030150182605303012001010005301405304014777506410204030140516
2008020501070030180141020506410200104014776506240020104058021010003014
0545070401477550630100500404020010004050404058012003140530160400401477
4506502301402030640015023015304014773501024050193060240570404006040400
1103080510805067040400601040306040530401477250620091090403014054012022
0050101760040545070401477150650100610130302800200130164001614060301161
0030600401477050610030160030140540110300200101000504016100306004014769
5010100419016501205015305004050010482164001103080476850650406101303025
3061004005063061001040147675061000194061004054011700524054013081405200

4014004014766501090220040040301504040207040105018016902200400301004765
5065040301210200529022004005020070130050630610010401476450650340130650
5120220220040040705024005011408020020700804763401082003012002301655501
5670450302100504015020150147624064060301217007015011006615010307053030
1504080476150101008030040150305110803021001502015011630110047605063016
0400108007021030704058007023021001647595065020406306304055012040530501
4030100040510307080691064758401050014001306151080610003013016012015108
0506707150400104757506540030010140404083065520180240515044401647565010
5200260201402102004013020103005040405304070504040515040030114064054001
0200700405215010083015014010124054001020070040540070240016165040150107
0030164755501070200682405150367658068090402002006010307050101020400404
7545063040704004040050201402110105051622003001616302047534010833012170
0704052200405110066405220040514001140250105201804752401070506400150310
8050101004004030150147515063040704004040050201405067340014050140201030
7016601620029040013061162002901801563090147505062009024001304040050140
1170052008608014749506270020400152404005020104003012001503015700547481
7044050532001501030150670410406104747506270301080066001080405501070030
1474650102700204030307001040610301068047451200106030123301200106040064
7441200640140603012006404004061047437080145040530140474270100163020220
0217007050147412006360403012008230164740706802004030180100603016473920
0640704030140010230164738200630050401002001080473720069604021400206473
6200693016473550647061010700301405406105040162008020501070030303010680
4734506303704006010130804052189012650700305004012650700164030900501070
0303050180473350104004030156100301670010017200301655303015014732506407
0910501410200114061007200504040550404102001140473150642701030130160501
3016503301400100306001406473050105040640301708050400102002070030150180
2002070064729406304024005011408040550703064008047285061000194061004053
0252169016400147275065034061200816016301100130130660200504040530210050
4050107003011040011402030700204726501024020010700505504040203010501200
6001153015303017040163070340013064725501024020010700505504040203010501
5303011030116200808047245062002070040040203070305010367150100306001030
0302050406472350645140301407050801515030020080800200130164722506706064
0301501641012151501050214060301647215010100601801406100165012040550130
2100504086504061006472050102009040050401650120140640110100504016701940
0601140804719506200900501040565100701903014054007006001804052200200401
5070164007080471850108104008167040040400405303010100700146405001080647
1740104020030120540030703130151030704004001103005040200700400140471640
1010070301810200301405103070150306020017001417010806471540103040656401
0301108040515070025080546503651507006001804714506503406120081603011006
5502020021030640080471350102405019306025067020080103015150306020017001

1060640108064712401030130121700703015068016001050107003030510115108015
0202004006471150104030604030150404001022001010001510801504361408047105
0105040640301504015108050120504015032006001804709501080200604030302022
0045070540660404708501095040520013840510307030602005030470750104020034
0406100103011503060200115011630110047065063060200403011510140202960014
0803011004705401030703014010208301655501202200301100203070020163011004
7044010100707637040030110061553640020908052009010805400120040140030210
0180470340103070401301000256200300268060040013016301100580106004055040
6036180470250630201400130130110040510301522001008047015010406030370213
8053051103011000120080470050620020504040610040130603011001401306016301
1008051030701630600470014699501040200204030140105120021801080050010482
0140013054698506100950400402050114030500401008305501800200130161406030
1220068046975064706400140640201007200140603011080646965062009024001308
0140206080501108064695501050100640303040011018002001301108064694406200
8403016301016030301008405301640110806469350620080100040060104052001860
1301264692506703510140301030301504013010301001650120469150105060840203
0700302100165012040550140522004051400114050107006001469050610706400150
3108050101004004030150146895063037040060400524040050201070030117005402
0400504008016100670046885065040080102001503011030704054061046875010430
1406105011015063016010468650651605200401000108040550107003014685506901
2006003013040010046842080150405507020806104683803040060040306100108030
4020501468220283014001700140603016468170100163050104301501646801004190
3050647064001405014679120040140014060100403018046781200601040011020013
3018046771200100640013040183018046761620070040011020017003016467541070
6801600105040501200100301220020700802001232405103070400501140650630610
0101402403070150850467420010601015010307020030082030700170120060405507
0800200130110010030040040610467320010904030115010301640010405061010850
5085015014672362006003014061020307001008301258109030150670406010406104
6712102001005012040504041504030141501040610704040060164670463603012001
2416582608030103030150406466926200100030130210066040300301706309302100
2022004408282606506306100101401030702002901804668261000305040150604014
0640110154006010801405501021406800200130164001614060301150100306004100
3064667410530065670406030110100301612301005305012050403010200207003020
3070010805014666901084050403054130230110801621005080130092405504043001
4055020010050404053021001502030514020646654107401501043061510805061300
1014040530466446306003014061020307004013060215630600414663210504023010
0213621010003012504082003011030060050404662900108082161302030506470640
0140170054661410702200101000501010040040303055033014008030716466041074
0504030530610040064001304004013054050533030610050406104659410270303040
1309002150114061043030610030130421014046584107063012402010301400404100

4100610430164090400600400130301100465741070230130800108050120502030654
0010100091140150220055010200100301100465641043003012170070301108051101
0030180200600115301530301704030703107003014655210200404400704020010600
3030701504046544105070200180203020405053108011010030146534104007010430
1401700555010200100301100646524104840610301202009028020191000205070150
8030020801700550405308010001080400502041003046514105300610010160157040
6080503020400136465041070630140610203070020069030110806008050646494108
4005504040050201402030700100830124006403015200206040013646484104007021
0100200510430130130610050409008030101404647410701003014030030150706501
0401030150705011010030400403011010030400107001464641020063013028504051
0301220010015085065608050526066064001404030705065016050130115010030600
4100306464541043100306005040602301080405302306130110030600301215010107
0801464441070610088030602003012700203020702400406100652010130121890164
6439630501660016506702008064170646424640500660200301218901686504061004
0530210040027002046413620060030120307002014001040543025215010108164127
0303011007200464041080050703091530400110060123060050301646394109083012
8640015035215040025018012020012401401406030150401503075064638210504042
7030203010200207006520090240046373105236730205040151080150400250161060
1620015108015010100301615150444080020013016463636200805040153014061515
0107615150105028010204051006801406030110301162009005010403080146353102
0040200401108040580405131403010083012162700203024634900108082140020150
4507064055040800200130190100504001401504030704100463341070270320020307
0012120040015020615040040170011463221037010300170055062008012030130110
0804055040200700504040513501162370302463141034030150120010030161004630
5063040704001402200109025303016800200130164001614060301210100040307010
5303015014629501010041904040050205015014010130304020145501402010307050
4010530301302402040130601103070165040400130301001640306015012010307050
6504010462840103070103003020253030168002001301108014064001614060301108
0140403070105303016402050104253030150640307040013010046275061004190301
4052010306153030130102601080405608050164053016401216451361621400200104
0304050053066020065303012165040150107003015065040640301140501462640108
2002006801000530301501110103004020301407015040402040030101305306602006
5303011670109400501640202630100108050140101301306004101403061504030601
1630610050203061650406400403030100150401212007013014003011004625200102
6004010307053030150140201100400153030145070402040200201501168020017040
0303010121006126703004020150307036105005016200207005040402015010030600
1501601503011510111046244010820021640053030150153030116100400165640400
5200208014001040510600140830302011050140204812810118007024020800702240
0100010130616606034001306405001509003018007025015090030150401200105002
0162504003116504015010700301151011104623506403019003014052010306180240

0104030504065014010130147021006608030140601301601022110030130121672150
4001306402060805011674030400130650550401200106005020105011060701605050
4016050130640550401200106001650620105011060704061005040406100200600601
0130165040150107003011510111046225064082004004020307030530301161004001
6402010660015010216830901805660015065040640301140501462150109601004030
1281053030150116960100163047030121405501021683090180400180501805303012
0040110301108040010400810100024001040030116304001100801020060013011030
7014051481400100025018014055010216830901801630400400100150105040640301
5040501400801019501646204010208401030705303016540705065303015040130800
8046195064300120030140520103061501109070301610066080301620080203014020
1030152002064020263010010805501076501401013014020103012285303015020306
4040050703020040130150402001050020108040207010910630530301306602004020
1080501164030701646185010404150404003070801401030701682904008053015321
4061001621090400501165010240080125021006018040201350116504015010700301
1510111046174010820020068010005303016405301200106005012030405103013200
6004001040081620029040550163064616506301007010130405200500201400120038
3011200650402050641501050107003015014615401090070200316520080100040405
3010610040030304052630100530301508400401501070030120103061530301306602
0045070405400169015068001000105010700301501461450620070300400130404005
0164020301407019284005018007023040208007022005320306100301253016200534
0013061025030140069010068040204001690116708020040013016504015010700301
1510111046134010307070104060530301501530301161004001653066020065303011
0410501021640410040013016504015010700301151011104612140109007012003165
2008010004040550404001830190301163040706165040150107003015303014706200
1802030140529001010001030701200730123701051006601030701064006018090030
1000400601805200718051930032006001702007203010350130110804053050040651
2006400301108040530500402030700463603012005001504040556361080405140106
0150168002006530301504013080080506100040021014360170202004051200400405
5010214082002001802030110307014300157040501070030165303013066020044084
0461114105300530301210802065302050104301103070520059001030100830150104
6104530125306602003060200110700301654610121020010018400802030700506450
4030703801640307040040301404030708050680160040013050102009010040640206
0620050101003084050105040153030113005014012008301436040301503060044003
0100830121106200301530660200530301100490410030460914010307010300302025
3030150120615305161521008116501206106100400301540302040540730165010504
0640301103070653066020010307054005010206053030130750180510305133015104
0851040830140526301001080162008020501070030130703700146081401030112170
0704055040162008020501070030115027007030163010740063013001050405400408
2001080530301306004103040307020010100025200704040550404020210904008040
5610940050140564030704004030400150406401605065065040640301320013063065

3084010003021050118062070401045301640120083014360403015070402064906162
0080205010700301405460712001090250630407040014025303015012064051030704
0202008090015014702504052040509224055070402010410164020507040510410180
2010700301656460613010424005303015506030434005030630210050404003060041
0010400301530301550604605120010905013061103065064310130405002001241301
1630630162008020501070030140203040011006306460412001041001030030201030
7053030150120615253030191814100151030701620041004004030102006001646031
4010100400604019120090402010451065010504064030305101506204003064020507
0601503011041018020657005402030303708015506700600140052001050020405011
0004053030140204706460214010208171077053030150120615506700600110520010
5002040501100040646011210200100184008040521500164051030705501020603013
0750180405263010010801404030708052003300301400840020506701012107001501
0504064030150705303011080020041003046001401030112170070527007010306400
1050406200155013011540084005040102003400400150353060041053066020065303
0170910504063200880010200403011030701306320083200701301103070130632008
1040701301103070601030459914010301121700704020270070103021005040404001
0306400140201630640040050161506081200315303014020400610167010940050180
5064030601061405506304001100400410430060121030614061001030150670440060
2120070130150405010803060040303030100459813010301001301506510080101301
6501203021505064608400302506306100106080302100504053030130110040203070
0201506702400400503030100530301401302016304210501506410200104020702400
5015062007001567006001400304050110004010301404001003095011700150680306
0040301306100106045971401082001200680100053030150120613001050402700701
0613001050403020080100010800200130164001614060301203040530306459612001
0706050102008012030301504400701150180530660200653030125040610403050406
4595120062140610040400502066603015090040400505090064020263010010802030
7005010761421405103051103015065040640301630660200301230100501050305014
0400505090030245941200102600506304070400140253030150120302170805040202
4120016112008004020241200150111010300530301504040203020304010504080301
0040526301001080601030140405400506030125063061001015030200801000400601
8015063051615030164011504003010003002120070130150405068030600403012030
3061001060459314010900701200315104006106080530301510307045170140210806
1504065608050103070500205010140501805002050504080405104101100680530301
4105303015067010121014050120506701012105010700301501459213010901652002
0256826040065620010064006562007704006530660200653030121650406400304591
1200107005061200300240614513002015030602001150145901401020817107705303
0150120680020013016400161406030146503530306458912001090404001606405053
4053047016405507030640510307053030128001000666030152001014405103070660
3015090053030125010501900301400120200300403016501020200300403016400110
0801504030165010100801504030127007010645881401090070176805303014507020

3070050120640540011010604055070200802010615108050104301600200155013011
5400840050401020034004001503400150406403016501050406403013060041030458
7140102081401030705303015012068002001301640016140603014650353030640550
1401017040150140101164147103050105040640301263010010805501020603013075
0110700301654586171077012009050530301202009050106458514010100400604019
1200902010451062010307054004070504040010620060014001406202507005040404
1004001405303012030200801000103045841501024018400802030150840080150145
8340203015004011650620101304050040202001010001406100304240060101630640
0400501612001008030140400501610501000301530301656080505070306002101405
0180306002105040630600210504040205040805303013010260108016100805040030
5067044001306540400501154582402050110008001320060010616306002400402080
8108015640203016010501458140203016401402030160101306402020063140204006
1016100400400616504064005016653062703011050430151108301140501458040203
0140701402020040010503064020704053030165063070130140400501640306030110
3011670440061650540013080457940530530301200801000105030802001802040561
6400140405005303013010260507016490616200802050107003015014578402030140
7011630924001306306602003011670109165303011670109116504015010700301151
0111045774053014070192810606110103005303011620080010503010453014053050
1024001404702504030660200301161001300653030130102605070164906162008020
5010700301501457640202001260016302506501020021903016402050405010451340
3014030705010400840205063025030645754020301407014030701053030163061003
0150830108040550802007040030640514010602405400802007030804052015010200
1301300506306457440550110008001530301320060010503050180020040405263010
0108050107003012608401457340530140701928180550168002001652002065303019
6006011401670240014055012203070045724052001241640556365062200800105201
0130403014054008064001700180102080457140520012006014030701053030162004
0130180070210804020701095060530301307501401652002050107003030163011004
0550122030700457040530103040164053030660501910300301104530140530501024
0014047025040405200124110307016440020015010700301501456915301801001263
0100103070401501200100301506200244001013080145684052001902110407016405
4090180530301405507030501070030120103061456740204018200116709100400680
0200130110801646080400501404001030640050140400106070305804566405301200
1060050120305303011610049063080200401301407701700180806200704030610065
7019456540530103061804006403015040510307010300100040301200900502010301
5062009005010800200404052630100108050107003014001012003014001003011510
8020020700654020840520066040030750117001805200660400307501306301650401
5010700301306100106456440201650040640202301004004040307010530301640015
0406403016501050406403030620250700302008010004006016530301130153011305
5014030701804563405120020700405400131700140530105018015912003001134100
8054001000240510400140050157016030113015062009005010305804562405161004

0040514001610454054171644005150107003016456140516511670240016405263010
0103070530301702950107003012010306118050130110017001404030703011640061
5010700303016301100204507050401632006001700110400820103017040400601050
4040550406456040517040170910080140104081401610060620015030110804301600
6550402040522005040520080100040640012004050030130205040151080405306108
0904030607050402001550165010220013003030570030200406005040200155016540
7092001010004001040305023050402001550165060120010100014050402001550115
1080506100400403014706104003015503301305004045594051651167024001653040
7066053050107504020522005040550102103070501205040801455840530200901501
3080405150203051204003200600110400301204001020010050405610043001105510
2001005040501012064557405301065004020015030164017050130130201400140205
0630201106506704004040010162008020501070030162001550130115400840050401
0200340040015034001830190301163040706165040150107003013060041053030150
1455640530103064013050102008012030150161650401501070030110306405303015
0122030700455515301500401501020080120303064051030705303012004044053021
0050405010700301521001705012080102016200900501080800200130110801620010
6010403080145544053014070192818053030130750114016520020405501220307004
5534053014070130800164053016070400801620080205010700301645524020401410
0140025001064020200905010530301162009050400501165040150107003011510111
0455140530158020070550330140530600410645504053012830901064051045106045
4940530140701308001050308053030130102601080163040010050107003016800702
2402080070263021030502030640550402009040050130530301130010630620307001
5200176122008301708004001040081480140164702150401401801001500630116430
0804056404005060050011700110400821100200301220080080162008020501070030
1404001010030170018045484053015004016015030305303012200800102030700204
0522005040100830116702400116504015010700301501630912301167024001162008
0205010700301501220307004547405301283090164054001101060405507020080204
0522005040100830165644084010307030750140216504016400183019030116304070
6165040150107003016454640530140701308001530301301026050701649061620080
2050107003014545506100601803014061003011301203051030580100013022001550
5040570160130116500230104030506470610140506200104061040550120405303037
0400604001306306020030150404077030163061200290140202002901804544506200
8020400404005020140221700703011610067008030110015022006103021630110010
0830121700560103012001503011030701620080205010700301800200701040610645
4320010410010300302010307055011030210400640301101081050110307020041100
2505100306002107010403068002001301640016140603011003060010700301530301
5011620010403061454250102403013080010802010306111030615506450405306010
3068002001301108073704026010308053030110701423101305040645414010301217
0070504040202003106402026507005040402030200801000105216504016530301107
0141621031150406100110454040101004006040100102009103016100830110301104

5105104105010214030110049040106064047025040307501121400201507040601501
1504061001101630110045395010200700504040540610010301163061080010014030
8016400905011630110056200800814030805012001003015067040400601050330150
4012008050201030115080200907001645385062004008010165012014064052080120
3070064055070163080030255301150122001005303015064504016700600400150107
0030140520090501306308045375067032001040530703040011013011508020090610
2001003015040402030681401502030514100306453650610754006010521650120140
4052100186530301400110125064831016501207001103005040405400410801130640
5200190211306405704060405507010501000114080541080161200190216170406040
5301503070365108040201502040501140108040515020404100306453550104020034
0301406100301107350203070020405502016040130110200101301682901801522002
0040121030030202004044004534401030121700701510808102005240400303704006
0114065302150200940408002001701700516301100405400104613021004006040180
0200170561200140308045335063053400140610040201200110502030652400306020
0114040201000302165303014507040307030114050130110045325010100419030150
4040050205011504704001402150400180150400530150701502080140030150400103
1163011004531401090070406102170070402010307080160011050153030113011642
7040013015803060050406510410501025040200700503014003060041006801100813
0125406100200700501700141701600120020700164530506100608040040400502014
0261008301200101000280020013011080506200220400604004040050201402506530
1217007050673400406103018015240400704004040060161105043014020400110810
8040204001210940400257001200150301103070162008020501070030180020070104
0610645295064030900101304056405301407014051080610306163040701404040013
2004302030645285010200601600165012040550160501301650330150404053021005
0404003060041004040110803061003014051030701008501070030120103061452750
1030613012001091601130117005140306100108010085303014706501504012030106
5303015015001010004006010140561030210050405062001003014003060041006320
0600150110505014704001140203080151043016303011001070030164526506470610
1650120107003011004903014706550330121890110804054001101060507076134005
0616304070140506081405507030210040050501070030120103061452550104030604
0301504010501620103014002400105011040010200700108010308309016518002004
0018301903040701501610430161030706103070400407050110400301204004070502
0020300150110507076122003011005506050107022001100030265430011000302170
0110400812005300506500130500530190806530408615200205400708006615200205
4015400304081501608151043016250160501301150109066452450630407010165012
0140217315108050104301600550330121890120103061452350650781040513064051
0307080660013080164011004006014050053030115022001630110050107003015014
5225010506084030301020030026164030900501070030120070050103011022007015
0160301004904021400201700565408200614014011060640214002053021005040645
2140104100208011700550630610010608052164400510403070016510301150610026

0140120010600501206301650401501070030301620080205010700301301100645205
0104030190030140610030110451013053030150140400200220400601650401805305
0040103070301010120060110502504045130045300652404002008020653030145070
5040501205014040010120013010045195010240200107005013011501140610301108
6101401301702400150140202130610230708010140102004114063060200301504017
0424005020140301004518401082003012006801000301656402050102610501021410
5300521080205108050680010804001402403070165110103005303015040103050620
3040400130805400102004008015013010051200400801506306100104014517501024
0200860170054051314030100830301620080205010700301301100400150102150400
1101405103070103040040017001645165010200801204054004127021650120614701
4053016501206015030120030081700164515506308011000405101704507040565401
1010030140610103015302103400601013050405303015064504067041050404030800
1504064514501010041904040050205014030705040520015001611700530210050402
1400202105064001014001614060301108020200300405304018002001301504016100
3060017001401050620015303015064504050670440014040400101200130100451350
6800200704016200700501140701620080205010700301610406040303161008301213
0114055010214068002001301640016140603011501003060014045124010208301710
7703015303015040214002030130107504004511408451040102083017107703016568
0020013016400161406030110801102002203015306450950104030170301220080020
0130122006400161406030122004408301530308045085062400704006010405130615
5040506320060010130406103018011050430151108301402040020010006167553030
1400110140400700600400140205012402030700450750102009015050404020301406
2001503014020161406170054020406101100304040010605014020402016050504061
0301301010064506506107540060105216501201404052100186163040701404001101
0604053014264505501050100104006040250850140615090013015090050501570160
3011401020045014040400301001510802102001305701603016100853030147065013
0101001700164504501040200340140610040400502064040020022040060180402010
3070103040040010400110150204004030801162008020501070030114016450350102
4030176803016520307005400408200108040522004053060041080400183019030116
3040706165040150107003011401804502506304070400404005020140600605040060
5015020150110083012402010307010095010150214002017005450150630407040040
4005020140506734004061030115214002010301107044005401302051050013540130
2010200400645005063092403012006060010700104061057016030140610040040610
6800200130164001614060301203040530306449950640307010130601503012005002
0150203065108021020013054011010030140610103014020704031040500402040010
4010405004020101081053030130100449850101004190404005020501150101212164
0010116301100501130140540038501201404001501021504001101405103070103040
0400170016449750650900101301405501403070504020307002405301406200543011
3011502030510140611085064006405011050430115040011081301105140163011006
4496506200207004001308015303014702504051045105040805613001000520090210

3070307036523010065704060103070404006006403070103070530301530800165165
5530170060040015040400101200801449550640309001013040564002602014026080
5030201073400306100830128002001301640016140603015303011003060064494506
4020810140160405400140406405110840166040018301903011630407061650401501
0700301204053070350501400110106030116820040031501070030126084014493506
5010061040610030540820061045660150303020010190217005449250101004004030
1103065303016800702110306140580070250104030190030150161101030053030150
4020507016501000105030405501449150640307010130501070030116517024004001
3061570240018020040130150405701020030010307020150307034050044905068030
4006001051080165012014010805401101003014061040550102108001001020220050
1405501021101000240307030140513140470250401301168030400600114080200401
3015040400150102405150104001644895010403017030110307040515030800806400
1210930150404051501007200656250301640208301621400203013010101200601105
0215010400141003064488506703200400402022001030140500151030708016015040
6560805030801830190304070504044875062602010165012014021406100107310305
3030140110150632001013050107003030162008010001016504015010700303030100
4486506200208040010406100304001101302030700108050155040170104038002001
3011080140640016140603011080140402030200600606448550620020300400402030
7030653080080504016100040024003065200401251080203080301102003400302008
2301402030200600601070030153030144844010301732005040217007040530405220
0400110121620080205010700301610451700544834010900702170070405306110306
1530301506450401670060040011401306110103001626020140405507010501000101
3064050534051012006504044825010540217007040530201030611675157006004001
1101030015040011015040403070170016448140103012170070252003002801570406
0104030501201200220400604020090104050051030701030400400530301400110170
4060104480401050012018013020303010644795065040610540011016530301470250
0104810128010083012201030701563040050530301400110120304004478506301007
0104061003040011018110200301801020090400615400640470280020013015211081
8010072005040140603015040530301307501140620015503016301030301801304006
0016447750650100610406100304001101521450405002101406402010030600108064
4765010504064030304001101308002001301640016140603011080501447540102083
0171077030153030150402140020301301075040044744084473506210040020040405
5012100400200180447250620020700400104053070302050160302515020060101405
0180447140109007030176803016520307002022005040130800804470401083301217
0070405110066103061301540064030113014006403011510805061006700101304469
5010504015520180302021510805067041044685010702006824051503676203070020
4467501030211004004010020024006016604506050405066023010446650610706400
1503108044655010401401100401080501010040040301501446450620040040400524
0400502014017005501446340102002030171077030140050120501100700446240104
0830121700705040560120010068016290405004461401083301166010301563040070

1805670060044604010408301103010002044595069230110801030100010305403012
0445840105001301401709445740610073014002003300501445640108200301710770
3016555015303014082005040130144555062009050104051306110103001030640507
0103064010501000101304061044545010704031405400110010403090803014061050
1445350640307010130405200500201502030610083012130114051501003060014044
5250102701301405501021406800200130164001614060301150100306001406445150
1040200340165012040550140515020305140530210050405010700301670240040610
0401200106004051445050101004190404005020501150101212164001804449501020
0300504025085014061030613011504004006401301105501444850630610010301306
5501444750102401302510801404001101301504040515010400164446501040301703
0110307040307010307040515020040060014100306444550108020060403015040110
3017050120550150670200805040444450105403012170070301504030101012006011
0502150103504100306444350102009005040165012014068002001301614060301405
1030704002021408044425010200600114061001515050020061620307002044415010
5201801510801650120540705064440401020020401100406706200764439506107064
0015035040162020040040204438506100200100040450340550116520020082301202
0040016443750670240040402050113010301041270220060180443650640200340406
1001306550152200170480443550630740070180103016504064004030501644345064
0320040050140202200610220024007007010501644335010240501930602402010400
1105015303011030701630704001305016443250104013066020040203010501530301
4127010301164150144314010200203066020040513650670200804061004053021001
5040080410030644305064010040050401501102002203015300923013009250406104
4295064101704020501130103010021700703016803001201501442850650340403070
4016301100655070163064004050044275010240306602004051341006102002070030
1405301050144265065040640150121700703011507080300201150220044254010301
2170070170056015030110300100010442450102405016004214060301104001400406
1021004002001804423506270301020300108040530244225010306130140201012122
0064020220040010401061010810651301530113044215010501006404040050205011
4055010214068002001301640016140603012200442040103070301701040603016555
0120220050405408200441950103060200401502015011504507050401200401441840
1020820040130201002008010151080441750102007005040150201501520200124053
0103010805150307501150144165010240301214002030164415408441450640307010
8066080401306030100640550708809018044135065040610130406100130655012200
1105301010064412506208061010501805303015030610010304051003060050404054
0030160501030644115064030701040561008301245300504013015701803003015506
4504050670410501070030120304010130644105067032004005103016570160301403
0705450706140550102140680020013016400161406030120304053010700301202001
2400644094010307030140102083016565301800200130110806530114060301108010
7003016564408506470610107003014054061016100130101040081627030106168006
6001040520070080440750680901014070300200703012200800200130164001614060

3012200501826044065010421703013061150180430650408200303050120501301004
4055062400201040510430150306020061030240516350640520060704060501301501
5062608104014404506402002401501801200401164020021401440350652001201008
3030402020050020150203061008301240201501034100304402506500201404020501
3011002022001501030708001001030203014011016415064401501040301900301405
1650120502030640515040309001406440050660302405108040564055070200400801
0130439950643016004050532170070108050104020034030150143985063020140015
5040520010500205520180151080402030439750630407040040400502014021564040
0500200611040030155033012030400643965064301600151080404005016501070130
1700304006608050130151054003004001401510806216201625700504080189024051
0307080191043955062002840040203167164040050155033011630600414394501040
3060401650120615040011012165040150107003014393506507840040400501130640
6103014020103070806600130412701104392501010040040301130164708007023040
5800702700104061013060013014391506200703001013040565400100024051040014
0050157016030113015062009005010305439040103014061021700705040164030900
5010700303030106804055010250402178130180304006001804389401010040060409
1200901700556427018040202200610220065530301501438850670109165303011610
0400180510805068030400600400107003018007024020305010213065402083012402
0400103410030110040015010230121060107013140306438750102406470402030550
1501910300301402050490101306438640101004006040912009017005506702400161
5250200400404001308057016030304030703055016438550680306001080020013011
0805201013040402050401503070330130050630643843010101200601105023013050
0405150307036510307015040705014270130165501438350640906004061004053021
3043130120305622008001406540120010600150400530111630110064382506490105
5040204061001700113050040401020040502122008001403064381501020060013030
1305004061803060405150307038043805010704031405150100200100018040550401
5040100400501150680601140308043795010100601801406100165012040550156701
9180540610080600400601804378501050200400100405201013040301570401361257
0050405200660151030701010030113063080437750102104120101306501054065107
0030117005504020010600150140143765062009024001308011040084005040102003
4002001550130157005620090402030401030601030140610011030110054061001080
5067020080104150643755065002050104051700121700703014055070150803002014
0308043745064400540301505012045070457014022022001503070412008160301510
1110163011006437350670320010405307030217007030124051507006001615400600
1504020022011051301510150404051020050140643725062088001015504040517001
1504001101240513140308043715010403017030122003066020010501301100805103
0406506702008010301150400110121060640150306020014100306437050642701055
3015040820030150645040150307031150306020050402030210050401503060200150
4030160164369506301604008066062040610030620302002070030550164368401010
0400604091200901030702050120103011086110700301220604040060180436750620

0440010040405103070150180405150470610700301205010200506143665064010040
0504040550401501802025025700501401804365501024030130800108050120504061
0407030110454006140903017040604004005018014364506202004003004021700703
0110804020501404004030900700140610301402070805010503064363501020010030
1601028050101002003004030147022050102610501024001030110301100150131700
1104008436250644005404055015062608106301026030150704055064901030405501
6436150102001005306580150191030053080010100505040820030120020700507030
0701050406436050101004004030302022004507052006001301611050430151108301
7014004014030203070030205016180200600764359506102040010151030701200200
6061216214054006102306435850620059001015103070320017040658008050401801
0060405400610230504082003012200802010504030150307033054816540160150301
5062010501130630643575067040310140402001060020220040040820061102006006
0180070240580070270060040010304001320048007021006804058007021507080200
6110504301511083011080405400300107040405501021504060100508502022004004
0820050640601001040514356401090070501040010200100301504030320010307050
1200100301170053075013063016301100643555062008012052150162008601700516
3011001008301405131403064354501024030660200610083014051310400840512161
3065400704004030243535067032001040530703052100701080510100125403020153
0703643525010451060550180105020098010700301130143515064270400140401200
2105050154061006510213040105120021301100700164350501027002040301521001
7050120801020200900501804055040150401004005018043495062008012052404003
0602001140215011630110040201215103070404004361404010451240204001036306
1301100434850644001004040520015001103070150165401103070150121150436150
1156802004004030110013012001070050504051020010010802030210050401503060
2001140203070020643475064400540405200150011030701501654011030701501211
5043615011630110030243465062060404006040524058053021005040121400204051
5010400140143455069020060010130140550140307050402030700240530140405150
4270140504082003011300630163011006434450630160106405400415300240020400
6040510030600164530011500150150408200301412704055010700301520101304030
1163070364343501024020010100040190600301108065651030830110801300501050
4061434240109002065614660405536309001305004050408200303022008001402405
4812003002170016434150105023012402018090164001502100306001014040700600
4001401434050102402006802030501605013015011735412705040530163070364339
5062301005040301502200103011501643385010502001004053015020140617005150
3020060060107003015018260163061004006510307040400106400601170014020220
0540705016200207004004050052006590010307016640060400304337506220200400
1404017050130162030803015040402030307036153020316713011003060010700301
6433650632006004002030700201400104054302521502003005018020041002140140
6030150403075010700301643355064400540040203070301302601510804020303070
3614540800200130140203030703107003014334401030703017107703015051003060

0503061001030800200130164001614060301100306005040405400301605010306433
3501030613013050040108004061300924055040430011502030518043325061075400
6010521650120130110250504040510400110140643315010306130110801025050401
5030602001402064330501080200604014061004040050205011880902002070030140
2050702200800508014329401020810307030150104302140020301401108055016432
8506301007040040203070301102200701501200100515030703150143275010240301
2140020301643264084325200640130120010904005303011030113018002001301108
0140640016140603011080140530107003015303019120090432440101004006040912
0090103011045400302050161504127050401300505040521045501200650515030703
5020306501401013011306214002030114010200440040050201401502004015040186
2002010301150108612030700206432340102081030705501130010140550700121086
1080130660200306020010612138120065040611108613015303015403020105012003
0023050120140643222001041004010307055011401010070130010504030703106150
0150161501200207004053671061432120062070030113001050403025106150015011
3001050403025101300101401003060010800200130164001614060301203040530304
3202006802050160501301501804051041014004041001402510106040529040050161
5282008054082001504050160501301150100700117001150161000130230113012010
3070501190010808405103070201503060200114080168002007015018043192001020
5050404020301406700104061013304050404020301405303015040530420040130406
1010400110501302100504040202200301621034006014318301026050405301408053
0301303080010504065303015064504040550620090501011030615040405305012014
0643174010100402170070108050104030190030150113015401101003014061040510
3051640560805011620060600501070030150102006016003015011650401501070030
1301100610806008020095040506200900501030700301504050107030016001510307
0506800200701040512004006431630102605040420040103013055063061001021700
7030116120014030501040301900301102004006547025040103065040530140805303
0130308001050406431520064013014077050403020307005012008010006200290504
0306431440103012170070405302010306110083012001010002800200130110805061
0002106601503015064030900105010700301103070301026030114050143133010260
5040405103070140201030618054030900470220090400501504030643125010403019
0030128101305501530301103070520031808309016180705040801530500405101060
5101060173643115062009040050104051010002301405219011700150107003016431
0506100805010405150100720014040640550102102006300405200401651309030116
4011001640522003016213400601501070030164309506200801000104051628001000
1401700163008168030164050013012001012205062504003105010700301643085063
0206400104052200103070616504015010700303010100216200106005303014507014
0611050430151108301701400408010300504040400104006114080430790108405040
4053014015040011011080506304131050107003014030701064306200105002050708
0701061626020140250510026106143052006203002001290302030400110130203070
0108050152005900103070420162005030309001080810200301502060101300105014

3044013070130120200823011080200163301540011015040643032001090501306103
0650405303015064504040203014068002001301108050107370402404005011406430
2200105002050706807010640201041014002602014028052109040504040202190114
0643012001041001300101700140570403103070656521450401405108050021406800
2001301640016140603011003060054001101504064300410408301103063016565400
4082002003005010616950100140470250405001010003013075010107003016564299
2001090220010260054127025501130010140200410023075010502030680020013011
0801610002305412703010072003015303019602630642984104300217007040530506
2008012030165308008050404054107106400183019030116304070616504015010700
3012103400601064297506307080400140403070106400110106030150706807010654
1270507052640030130210010107003016564296200649030140017002401030705501
5400140302021008301100810630912301530301840106202301001030704040060010
5303011300105018012700205303011030701020040080150630610010401429520062
0300200680100053030150115060815108053047505506088020040010010504061022
0010030110805464030113011200315103070402030160113030100400183019030116
3040706165040150107003015412705303012003002101070030120307004294200102
2030130800803016520307004052200450705061300101404053040015033014001800
6200108040018301903011630407061650401501070030164052701001665616260201
4040501010080300405010403019003011020040042934010301217007040530501040
3019003015016405501021080010030309080301540302013063065303015250700110
4030140501043015040405301670200300120200300405304014292210905050405200
6001301108053014061550405400650110504301500200841020010501205040655002
0081080530475052006001301500200841020010501205040429171077030110610030
1656130010504010072001054127028010930530301429041070230130800108030570
1603011080506200140105010700301501130110083011550150640307010615504050
6100803004016504015010700301615250650406101305010700301152303704006010
4289210200100570160301307030201020041014065017104030161008301221400203
0130750110700301530301428841043002170070405306280010004051030706405220
0450705800814405400385302103400601140470250405303011080506318105010700
3016428720010904030151030161505010270403105303014020501026150501025381
3040203014070140203061503014070115030402022006150220053030140205010230
4701304002004016214002050405303013075011402400504013010064051651702400
4001306400200401140204010040060167041802030700308042862102004055040203
0010803040547025040214002030116500200615010700301501640550102108001003
0104060403031103012022005040400100260540302013063064055010211010002403
0703014051314047025040130116100200804001406428521050105040510301104510
6130010504051030110240031053030151030140567044001405010202003004030110
3070200220510801610020080400400130650104301164010100150110601070610606
4064010512002152150109061406201030115010861107003016186505210906140501
0430150404020307020030042844010307010300302025501200410010613001050403

0100720030196021080020013016400161406030141030110040530428320010902301
7010406030165610300530500402060103051080402062007001013167140170501301
5040613167140206080501504040203030703800200130164001614060301200918042
8221050151030164003020640051030701022005303014020307005303011030154020
8801030050405108040400803040060011406428120010410010300302010307065610
4006403011010810656103063016553030180110306155064504016700600400140142
8020010905013061030650404053014050640301900301654004082001080130010504
0306004105020306548165401405307033053030113006306427920010706030110801
0010200806550330110801001020080510802102001307040330140610200700504006
1530685040610200100301401200700504003011022007015012001002010301150108
6120307002064278301020624051030704005011406405103070900108085303011103
0615506450401670060040015010700301642774010820030120068010003016553030
1501130180020013011080504030506200801000400601064052200440825068260105
2010130403016505100680504050200980400104001614060301412040042764010900
7030110307030165680020013011080140640016140603011080140530427540102083
0171077030153030120302100504050107003011030162010301108610203070020427
4100607042734084272910840103003020255011301405220011003050405102004010
8040550113014271410530010300302010307055012022002802010403061100830155
0140530501024001010400840560805011080610018013011080150400110140510200
5060427041070210011003001080655040403080015040524040020080204050053030
1450705040501205014040010120013010042698001020070170467008020030030156
0401700165250132101506800200701501605013011030701504070501170016426890
0103010002170070504040550100107005030616304070140216200802050107003015
0102505030801050608303054507010305011022001030140070320050103065401011
0057016030150900114061030170055030610010305400604012008004702504015040
5408200515010070015010306426796501006061010802003003015604050162001060
0301170450405016050130140160101304266901084050404053014016509006302100
5040506704101650120140405507030800642654105300504015040140201507001163
0110010101202003005010145104150104061065403070213017080040013061050050
1504030408400140615401402015040400120040500504032006004001406570160300
1403070420010510301426441027030304013090022022001406151030708016015040
6560805030801830190304070504042632102004055040203001080304055016405501
0210800100302022005040400100260540302013063065108080304006001802140020
3011060640150104001410030642624107025012040504050641501020103061104070
4051030706562001006405501700110805065040610130501070030161803006104516
5040150107003030653010010220070610403701154001101400309080130630163011
0030110403701150120010051503070363064261401030121100706700652008010004
0670030202200501203021005040306020030303010100410014013012030301100101
4042604104084010208504030107504005803060050401306510410501025040309123
0151040011013042597107702140020305501640513140302002070030121620080205

0107003015014258200109025063040704001402550140400103001401630407015401
1010030140610150401104001105040401200106002001503011080101003010504080
1150103070506806001013015040011011080506483010501070030150142572001041
0010300302010307055011040064030110108403015110811070030150140022006400
7400511403011510307015030750117001805703001600800200130110200400205015
4001101504064256506401601013040562001550301630103030125305068260102022
0045070501070030180162002204006015018042555064270400511014040050205015
0510030600107003015303016436016200401003030130660403003030164360400130
2004010030166040300301620015503016301030301540011015040642544010307030
1701040603016555015303012700704006018010007505019103003015040205010007
5010140164253401090070900867001301151100301014061620029050107003011301
1511003010140642524010408103065501205614705501026205010210700301170018
0506081105104003012708041510106030113065506083011064006040013064251501
0403060403015040105050130110061830190304070653030110301170450404013061
0050608150406425040108200200680100050401307504249506704400140151080402
0306402060805011054003004001401510804020306520060013011080611050430151
1083011080402061103061508504248506470640040400502010400301550330121620
0300216165078400130616801600400130152010130403014051030703075040040016
4011004006014050053030115022001630110050107003015014247501030806013015
0401506201030150401410014008400140530703506050130165033015040150130800
1501070030301150200115022001620080205010700301301100642465064831015040
0110121650120140217343060030120014151080405302001503015303011470117320
3070042455063040701016501201070030116601405501073503061410430012170070
1620080205010700301501001070050308042445062301000400402030703051080161
0003016501200100301170053016704060400130162008020501070030130110064243
5010200601600165012040550160501301650330150404053021005040400306004100
4040110803061003014051030701008640580306001406405104101501021404053016
5010780150200100405301508001010064242501024007040301504040514080162400
7040060105016405301065004020015030180162002901050180424150102006016003
0150404040082901804020142001402022002404005050900107003014020509004020
3070064240506304070400140401200105002040307010130530301501404005050900
5020306402046303130640202001902113064020704060402010307045300105015062
0040040060400404005020140642395067032004005103016520040306140201003060
0656103003020100950110700301530301150100950116301100150103070404004530
0403040546303301630110064238506304070101650120140240546303640520019021
6405704060405103070453001561314017001104008423750670761040580200150301
1030153030114701200300810406106423650610040010165012061650401501070030
1150103506423550626020101650120140250653012170070301510070190405400700
6001801045301103070104070301162840060180405150104580464050014016423450
6200905010130405610760015200600130121700703061105043015110830110801076

0030121700704051001070050304001608504011011080120090200901810200405103
0701503060200180423350648310150400110121650120656100405504043001654051
0030600107003015303015011620010403061561001504043001504016301100610083
0120010100028002001301108016200220400601804170140180423250620080120524
0400306020011402150180520101304030750130150220013006301630110053030113
0116427040013014058030600504064051041015010250403060200301405400137001
4231464050064170510070190305004051007019040204002007005013010080168002
0070150180423040103070301710770301200104100400203070019008086810219040
2110504301140603011501076152004011406030201080108616501040610108040016
1406070260505180010080422950107010191501040011400301100152002061170691
1040010180020013030615303011008050160041056140603011030110640060140500
4228501030101603030166040110157022001108015400161001151080200410061510
8020200126151006805040106016200151080307036422750104030170301220020307
0014145015305063070340065010406101080800200130110030600107003012506200
8020400304020501013010042265065040402001010002003140530400183019030116
3040706165040150107003015014225506200801204055200600130124056512073015
0640061013050107003014224501020200300403030301066562008010004006016510
3011640101004006018048165301402053011405011030110861040203050040200300
2150114050130100422350630401701505013040701802138205010261505010250406
2001006150501700110806510301150670440014040550201108015026301001630110
0642225067040601013040580405200500201800200701801200107005061200103002
4221506403070104061003011022007015012001005400110140030908021400204220
4010820030150408200301504030107504004219408421850620080120301203015052
0060600654127010804003060041001040030153030140050601506012161200140304
0550140101405708050102010403080421750102020030040521502014021502008020
6548653030121504011630110015060121612001403080421650610754006010521650
1201404052100186403070301504040545070140216820080400150102301240530602
0040540013140308042155062602010165012014040550701050100011408080020013
0110801200150016561004300164055040200500201165012040530210050405010700
3015210017050120801020162009005010808002001301108016200106010403080142
1450620020504005303014001101101805400110140201020010642135063040840020
3080301103070615103070640202006490108053181510307016100030240030670801
5040151080402030642125063020140015504061550401622020040030401705013014
0203030703107003015303014211506309240301203015052006060061008301210800
1005303012004011317001805303015070012130151012104001105013066020030501
2014062010307090901005040305040405504062010307015090901005040405504020
3021005040130602001503060200141003064210506703200101501030180205010806
4005061405470501070030180070220501020050140180100853030147065012002901
8042095010200220400403011065004060102801510805010430160040505321621163
0600414208506820040400404005020140261008301200101000280020013011080506

8200804004040050201402402030700420750102008012030153030130800102030700
2011010300302100504067045050205040303021507016308001630110053030150645
0404206506202003004004040050201405010140530301010040500420550620036010
2001503011080405004010408301108042045062860103060130603016405100150701
1080301301000130170014203506403070108066080150306020052150306020011402
6214002030121627002050107003014202506802009010105015303014001101108050
6304131050107003011030120040040301420150620108050205303061001014050180
1200401108001001700180400104010610108101070030165420050630100704004020
3070306104060401303116100030240030630210050401080640010504040205040616
0061030016506204003040500402043001161000302400304050013080940203200600
1040500510030705040405005809505040405002120040050404020100306001070030
1654199501040301703012200304030601501400200401610220050404001501023011
0501314030530301506450405067044005010700301427015014001055010501301004
1985010403017030122005303044083015010430153050109030600405670418065130
1530113010830165419750104030170301220053030120200124008040202200530301
4020307004001210930150404020100720064020200690506081804020200690615021
4060301612001200100800200130140203030703107003015303014196506483105303
0140011012165012050107003012080610203070020419550620806400105018065130
1530113010300302010030160040202200530301402030700419450620020300101306
0150301200500201502030660150301103070308008067003053030150112009024020
0155030165108016502060400303010303014020303070310700301530301419350102
0060014405053506306004106010400412705070506200220400601050107003015014
0203023400601105067041402022003011006419250650406101306015030120050020
1502030615108021020013051040013057016030150141915062002070040040014013
0103010010604030113064001830190301163040706165040150107003016200109023
0161040701301106400601014064190506403070101306015030120050020150203066
0150301100306005040200220180020013016400161406030110030600304189200109
0230170104060301655501530301270070400601805101000301224051402002201301
4052006490108050140514001501930602001010002530301400110110805063041310
5010700301501418820012021301610300703012202200440828260620250700302008
0100040060161008530301470650120029018041872123013011030613010200207006
1045418621400203013010101200601105021505002006161045301106064015010400
1410030641852001430166040530655070303014053064054002007007040501040301
9003017080501013040610418441530013014061001040610611050430151108301108
0165040150107003016150306020020090505030150141833013080010801301501020
0801203011704140616704180163011001030216301100400150102301240203060200
4020104001400204004030611630110041822170070301504014061015070808060010
4020220016704140505355076003020015030110805010700301301100641814127030
1501024020841005303015011510803020150116200220400601501070030130110041
8020015030150401210905015070506501000404040050130580170240040203015020

150116200220400601501070030301807080030130610010802001503011080506318400107001641792170070301430015067020080301163060041570160301406100400406106110300706164100015103070506800200701020015030141782170070301660506702008030121001861620020401404001101060530301511006804177412703012200109025303015015303011030110200401800680164020303061001140506200207004006080417620015030121890140550108020060403015016530301103011504200405016520060013011080130611050430110805670453060103051030110505067044001405014020031304175200180100030171077030110301402067041150164030705210306010301405220200300165303012200802013010505067044004174200150301103011050506704400651350301103014020670411030140406100110641732160820010100021510805061007200105503301506306004102010306180504064065610500501612002070050401830190304070504061530500401301107310130805101060304070504041722001200100301200141055200600130150167014004011050430151108301570051405014061001104171413002003013010260402045150670240014061001105040110700301301100641702124001080130150670200804102014063010260301507049065304070660506702008030501072030700206127001205590013010501610606405301103017030918040016140603012126014169212601301100030211030703018200901030502150140151105067020080301100641682001232002204004023010030201030705303017029102030700201650401501070030145070653030145070140010040200220405140015019306020010100025303014001101108050630413105010700301416721400200408020060406550405303013080010203070020130660200547025040530301500702105030404003010020305170011040085240201314040203001080404003071408040015010230123021005040806061040201341003064166415504053014080530301303080010504064090170504053030150404020301405010200244050630640040610416541504003014061040201030708016001105014061001106416441270303014030900410200105303011406405470250405010700301646405006417068650406100214305004041632178130140610305004040201030708016001105014061001105040110700301301100641624130020030130102601301402010451140610200114013014020102001140506702008030110015013501530301601250401502009050105040808002001301108050102005190040610301203040301402030406100110416121700208020060406550401045101305303015014020470101070030180070240202901011004190201050165270020510307080127001202010501640202200504040015010230124020134100653030110220030610010501130320050630400100400155014010140400201050670200803015040504064030320030110064160216083014061025040610130200220400403020504040202200610220024007007010501106064030110064159416080301800200130110802005900105016140205010430421050180160011050152200704103061060640304001001105062007005067020080301100641583013080010801301501020080120301410201406405160501610840060165704016504015010700301150211630400100116301100150450705040100830124051314030804157217002020081601630110080506200110065014015650670200801030141565010240501930606150400110121060640150306020

0141003064155211007030141043001061005501530301405700600180162008020804
0015010230124053060200405104001400400501204055012203070041541001650405
3030150404053050120140640526507002530301405700600180800200130110801200
1500165610040550404300140516501204053021005040165012050107003015210017
0501208010201620090050108080020013011080162001060104030614153200109023
0170104060301655303015011030025068001001013055064504050670410501070030
1610083012108001001053030164152200649030110806004001406501070130155010
1600403070104151701910701080300130640104085040501040301900303014050104
0900120200315083011043026301003017001580713014061040520070050164150216
0830170102006053030150140610301403090013040026020140260805030201073400
4061030141492001510030148163015303040610301203040301504030103004055040
5303011030701080600101305067200124054061041481001304003014061020070050
1030541270504013001050401030705200401504086200301101003010300200703016
7004001320043017010802004147506200801203015200206306501043015305010903
0600405303011670418041462105010504013012002070040010140611007200140603
0150404020303075010654001101402010200101070030165414520010220301103070
3015303040208301801650406400522020030010501640400200802054865303011070
4170015501240203070041443010260504036200600103013058015026507002150802
0040070180501040050500115040010108165010400505001150400401150220016301
1004143506200802040080501401013011030150670440070014020608050140204001
0040504020022015303014001004030506415010162008020501070030150141424010
9007030176803016520307006540040820041008070010406104001101060301100400
5040640011010603014051006414140102083017107703014005012050140540011020
0700640531671640510121504083090504064054004706104003015047040015034053
0600416150220041404010833012170070405100620301026016702400161621400501
0700303020080100018014030706540820010300302040070606150220016504015010
7003030506200801000400601065250650406106405220044082506826010530685040
6300200703015063040810501070030141392001503012189014055011620080205010
7003011030702022004004030204001008203070020641382110070501208010208040
5400700600180100830152168008410303091230121630413656700600110304053066
0200254013020400405640547025040217813016865040610040530210040027002041
3741302301108040523010040020200200100010130801620080205010700301130153
0301400110110803041310140413620010904030151030165130153011303069301107
0021100703014104300264003013021100625070030120080110004135401030703017
1077030153030150402140020301301075040041344084133501040301703012200530
3044083013010100610083012405501021080010064052200440825068260103002007
0301306850405010801852010130403011020040064132501030401703012003140705
0801300505001085503301504016240050800200130115050020061654706150100490
1070030153030440830116301100641315010430160015630600418040400294020103
0704013060154005076004053030110061521621400840080615613170011040081200

4075503301103014052200161004001501070030110010606413050102002204004030
1106500406010280151080501043016004050532162116306004130101004129501020
0801203011030702170070301540302040010085020306103021630110017005402040
6101100304020506200700501064020220040011014020103070506304001040205040
3060200402040011040301154005076004053030110061521621400840080156131700
1104008120040740505310301162008020501070030110010606412850630708010140
2403070165640030407014060805030204001080664127506403090010130405610083
0124055010210800100614530030165010102503012103621400203017080066152200
2006502800200130140010020030016412650620090050104011010040517001801020
0600151080600805040500530301130050401301800200130110805040640016140603
0110805040100709080200690301108060080506412550620200300101407010301704
0065501826055010401024001106940400161406030165401101003014061054008002
1001701040380020013016520041001008530301162004100140641245010200201300
3015040502064270180530301302412350102006016003015040505062040030620304
0705092810304002020030015010302030210050405010700301103016201030110861
4100306412250630513301151014270110506200401400530301200101000801301004
1215062006016003014052010306153030140011012162008020501070030168002001
3016400161406030141030110040530412030102061030030201030706561030030201
0030160053030141195065078104051306660301405604010130405400718040216100
4001501070030153030110350106411850102002204004030301065004040505310806
0103015466040405563653030110307016270020501070030110200400540110100301
4061064117501020080120301504040050206400200220400601615240027002080104
0011012040013410010302411650105060840301504050620180520020103050163021
7007030110200400501083061004006141155010100400403015040400502030105014
5530301501630306100400614114501020060016030150403040050205016530301250
3108040092008014010307014002006081106080503061004005014113506200703004
0013040400501654001000221700703014020104001105013021005040402022005040
4020103013075011405060811670240016411250620090504001304050021700703014
0201040011050130210050405301640306016402022001030116210501641114010820
0301200680100030165550117010403265070030120080100010530301501530301540
8200504016950100400130405608050110307016802006015010700301104127011030
1004110506504061040610030400110130203070010805012004100106130010504030
1007200301960210530301501164030701040306141095010737040240514061626020
1404001101060405210901060130655040164030900501070030161626020140400110
1060405219018041085062602010165012014040550701050100011408040530210050
4050107003011530110041004107506403070101304052005002015020306550400801
0530240307010307054001040061140501301100150405407050515030660017001405
0015017042008005016050130160401700180410650610754006010521650120140405
2100186162602014040011010604053014264105506260400810165062010403014053
0301504040530142654011010030140610217007030166050405216440080130570405

3050040617010403800200130110801401640309005010700303050163064104506803
0400600105108016501201401080204127050102402084004005015415300301621010
0030140301708002001301640016140603012009180405303013010041035062003002
4006010405170015506450405010700301200207001700165200600130125065040610
1305010700301263010040071403001548653030120020700170016410250670320040
0510301405008002001301640016140603012030405301701040357018030030153030
3010041015063010070101306110103005062030401013016501206306130100170803
0053030150645040167006004001401410050620020804001040610030400110130203
0700108050110406040303110301102006001301306020010640064030115103070108
0010010400301206040108015401504010804004040040301040030161540064050108
6080501301108064001053030140993010206240510307040050114061510307030800
1014050180308005040656080503080104400515040801008301260150303021400203
0120103070150307501150140984010100402170070510307030810651076001021700
7051040011050404097506403070400806608030401701050140204005012040103070
1630407014061001103010040965063020640040301302064001051030705303011026
0830100540040820040012060404050530554082002105041200161520080040018030
0120505305200800253030110504120015015303015064504050670440014040400101
2008013010053030150306100103080020013016400161406030110030600504040540
0301605010306409540110040050110700710770253030160103013080040504053014
0805303014510504064094415504053014080530301303080010504065506450405010
7003012205068066001065427080120253030160103014093506304070101650120107
0030150608124052003140510731061630407010700301166014055070530301200802
0103040925010506084030117320307004052200450705061300101404053040915061
0040040301405201030615210049061004903012131070030164090501020080120303
0106500404050531080601030151370011004903012270020653030110307027002050
4040403090015040804089506409040060040040202200450705401101003014061040
2050140500408850640010404055016400104020501408750640307010130405200500
2013025303044083011305004050110640060103053032003014030601303200650660
2013004004012020030051080130320013050040530301220080040865061004001040
5307030367010700200101000110220070150120010040855062002070040010405307
0303050040302050405012001003011700510806015030301502200800410030640845
0640307010165012063020022015200600130121700703061105043015110830110801
0760030153030140510017001804083506200703001013050010850402170070301405
1400180405302100504050107003012700204082506260204004040050201401610067
0050104030190030303010100654011010030140610217007030166055362101004001
0504080140814155040530140805303013030800105040613001050405210451053030
1104520307005303012002070010301405263010064054630350103040040500405220
0506300600105010700301463035504020070300100400105015004015213004004012
1400205001048301506081307505303014080501024030130800108020103061530301
2002070050404052630100510601100303030106805220050402006501030706580401

3060130305200490530301820030050408014079212301301103061301020020700302
0307001080501140198530703104050012008090405120040080310510405005501630
1180304006004017020075232006001040500800200130110807010215010520306080
1401406030150403075015303015012004004030140784170104030153030180306001
0130530301470620015501301154008400504010200340051050240802001000151006
8050408020010004053040522001610040015010700301502030407720015030110805
0407001005040040050180121700703015403020510307010085040801407621230130
1630614052010306165303014051455010700301201030615506081506702400108030
6100301506704040060105010700301407541270200300280102003002301405305303
0110301162150161564270105014006100019301162504003150107003016407450610
0400180412701105412705253030180660010203070030309004054008400504062001
5030150403030900405100680504040530407350102403015012006060030165203070
0130154011010030140610405103051640560805011620060600501070030150102006
0160030150130100550645040404001030014016427018040721050104530190306004
0427015303013010040714010900704061021700701022004001090705018016001105
0130100407050104030604030130615062015013040020040164069501043015301903
0600405303014270150140020040110501301004068216082001010002405200315062
0021903011080610140501570601653030180020016550608110504301570051080165
0608150107003030402022001610040011650401501070030141270110301004067212
3013016306120020700400101405015064030701013050107003016506403070105010
7003011064006010305301005220054082006320010652006001301200700810140101
1006143160301030301150140050110065504014066200150301218901504020501130
1030100202008020270400404003010053010260507030800103014145015303030703
6302100504051030167041050120140106050550405407050530660017001405005103
0112105040522001704200800501605013016040170016406520064903014001700240
1030705501506304070400404005020140240201025010804020703200404020220010
3014050010200600120076520071620074001306402030580020010162002030040050
1620080203015412703010800200101306402050701050100053030150180162008020
4005014064506802009040010501806513015301130203040301530402022005303014
0203070050013050040014030900108010030600470250401100306004020400154015
0692108040201003060010316715105014050040170501301504040203030750161536
7155040307034050054816608050504040201003060040632001801000301710770301
6513011040604030313010200310302020040100301660403003012006006063010303
0110307020015503012006201062001550301103070301030301200620101008301280
0200130164001614060301100306004062200151003014816301530301655501826013
0010140100306001014040108099013014306700600400105015303014120016304061
2001802027001206550401045101305303015015068030400600105108040514010804
0550102402081053030150110803075303011030115062200100103013014054270501
4011030615506450401670060040015010700301690301600301501043015303013014
0605010430153019030600405303014270180100830122140020301201030115030750

115014059401020830171077030153030150402140020301301075040040585010847 0
251250504030704003064057501040301703030200207001301655014056501080302 0
400403015040150114062003150405103070402030160114030100405550107040314 0
550402070240050404062050404050535013040130405430610011008301610083018 0
301100405350109030600403014055040204127013014052501070403140550106100 0
130204007702803011004051406307040301400100630140610103014050501020090 0
504030150402050180301100404950650070210406101030110502009005018022003 0
110040485010430140610103011040050703020103070501640474010320020501801 5
504032006001803011004046501095040540010030600620015050401050400100306 0
055040200106001501301100404550103017030150404005020401400200220400601 1
041024001003060014030436040050120705040140601030211103011004044501020 0
801203015040501206200220400601601030211301404350670403140530205201013 0
403014360804042501043160530167010080108620050405108040060080506540010 6
601700180404150109504012003002100301600105015201013040303020220030110 0
700140405010240200107005015011405011301103011086105014039506409040060 0
107001103070130113040301240307050401030501201404038506800200704055070 4
040050140374010900701250653010040362001801000301710770301140550102140 6
800200130164001614060301220040352001510030148163015303011301530150401 4
062007005040150114050130100403420015030130514090160040010083020307005 0
140332001902130140550704001000174011102006006040515070060040014032200 1
200300130150404054705015020130132001020050130150301401630110064031200 1
503011080180708001217007054780170051503040410050401502200163011004030 2
001200100301601028015030564040040410040400501402021282004013040400501 3
021630110040292001503016301904055014052128200401304020704040840010040 3
680170054028316715302030050402006001640271001601000640104085610067001 0
308017005402641540301601028015506309010405053402521402003003050101000 1
930305016170054024418050504053014015010072003017005501402321608301406 1
030506470640014017005402221200400180200930140012009011004054507064021 2
120030065200105002055201802151080506704101510805010102040040402021621 3
014053058400804050470400150340192140506083050101004004030305016200207 0
017005401820011060013015040302063080203011700670601030163010701406012 0
020700164017200110600130150108099040301504030150450704055016401620014 3
011020020700590301600240515090306001150140152001902130161041013011030 6
126100701061001860164010512002115041270200207001640142161550142703014 0
705012002190515043615015005084001306522200800180150010008002041027006 0
064013212301301103061301020020700615040540820040570404053050040653051 5
301502566401221200300642001230604001000401700520303200280020200140112 1
700706290502501910300301105060401050152200104150700126101150427020020 7
001640102140506086108030730150450705305016400921608200101000220604016 1
505040180150619701700540084180901301108050105020010040501020060016400 7

9016100061502302050109110300301640062190150010816002005200401210200340
0810200301530150200600608040052156301400501205011047025040481301010002
5010130120304010302561030200801000122003011004004215014050014603510602
0020103070150101003016501401030601504008041003064003100150701301610066
0301218604010080980103070156420040022138301240020016400104008102200200
2070050702001060030128400228110501301100804001411033014001508019030110
3007030125103070800200707001400021615501427030140705050140103060466143
0150256639992123013016306120020700400103065400110116200241030202001240
2010301515030750121400203998200138030120501010040040301307035040180020
0130110805010460804030120400183019030116304070616504015010700301307035
0401399720015030150401620080205010700303030106801620080205010700301509
0020307001309121405501021406800200130161406030115010030600140639962160
8301406101660501402410430021700704053053030130102605070506308001050107
0030150153030130102605070203080010801065301702400400130610083012601503
0150102402081808002001301108058010306002015030703150146614110399521405
0608610803073015045070530501620307005301502008010008039942150161702012
0020060065220020080100040060180515040080140501466145090064051403010301
0064001830190301163040706165040150107003011301800702103070405800702101
0002103019306003015040120010500205016531705010301204003705030166022040
3090041003030110039932196003011080105077061510503080201301100805481653
7050103065370505067060400670604005301060011700550139929120090301166010
3011504516993004001306100830121505010240208180800702103070150800702101
0002501409060080600400130163011004055040707808046614103070163060047001
3991212008403011620066040070014090600301125020140013056399021960030130
9080654020830151501040016520304015044300639892161530302052006300840200
1093016398810012003001301610300703012508260105704030123301150200600601
5013987216155014101301170046614150427020020700165063061001014010307020
0290139862160830140610302100150910015030303701502200163011006398510016
8050401530140548165810901301130652009005010140639842110070100880306020
0301270020130130205013983217813012010306152010130121890169630406100646
4050063982414006130167005067020080641706865040610040530210040027002039
8121781301504040675402030150514045033980212601301108016100400200103080
1405501021406800200130164001614060301203040405304013979215630171077030
1202200540820050101760040545070401397821700701610067001014030302102002
0700504020300108040530215050102504020020700301510307030750113977100130
4006001130117005501520060013015304030110801700521507040601403976412001
0103003017005501402040053011030701620029016163004015014055040130403011
0030950163975213701030030170055011481615301553013013070313974217002020
0816017005506200801203013011006405504020070050404051350116237063973901
5040501084001306164150805020010050404053021005040150203051402039721001

1003006577010801620080205010700301302397120020700301107005012001003016
9039705010403017030122005303044083016396950103060200403011030704013060
6396850680901014070577030122002022005018260396750620090210806608020090
2163966501081040084055070306400639655010200700504030181290160804054008
1602307501700180396450630370400601015021700702801396350620090210806608
0405200902163962501081040084055070306400803961506230110003014053015045
0350163960506200690504030140530405501395950103060200403011504127030150
4004030204001002604100306395850640307010806608052162008020803957501090
3060040301530301412701502030395650103061301504012002070015045070501630
3955506306100103016501205016395450682604030150850301501639535068019030
1508503015016395240630704040110040530130115040140639514010833013019065
5040130139505010504001802510307040400501140394950642704001406402050180
3948501090306004030153030141270130139475068090101407053030150182603946
5062008008403040550155033014004030704100306126050550330150102655010216
3070363945501010041904040050205014020214002021640018039445010240501930
6040203040139435062002070040013080139425064020840080102040203014039415
0105023011030704001502301108099013940506270012030405501653030143063939
5063061001030405208015040405501130139385064513004056150015015201013040
3011501003060040139375065023014053064001502301202200301405400804006018
0393650108103014051507040040801650401803935506410710618030151014010301
5150306020016393450109100105040520033005103070150400250163933401010060
6561200703012515070025080393250650070210406101030155092108050023030393
1501082604030150405012055011306308039304010304065640068301540100400301
8039295010800844030150405012080405160803928506830040301203080301103011
0021700139275010306020040301504030605061050163926506301007040013080130
1030301263925501082904040510307050620040400304020501639245010200600130
1150200404405003923501020021100030110801763701301392250107040315305165
1501035070013921501030602004030150403019630501639205010504064030115041
2705040550139195010506084030110735020307002015013918501060110301103070
4013060391750102006001301108051030701502020040063916501090306004030153
0301412701301391550620080084030405501805627002080391450103061301402010
1212200640202200530301391350101003016003015060815062007004006130702506
7044001391250610040040013015406100303011007001391150103060200403015040
3060110301501639105010504064030115041270504014055013909501050608403011
0735020307002015013908506200156106064010307040130603907501020060013011
0801405103070150202004006390640101004006040301912009030114051501045639
0550102400604030121400203011405150104001639045010230110003014051650120
8040515020090506390340109007030122002030150401405406100614051501035063
9025062001561060640103070150504041003063901501024056080503040301900650
6084014054001020070050406100186011030706510307015020200126390050108301

9030150401102501001860125150200300263899501050406403011504127050405501
3898501050608403011073502030700203897401051200211030704013060389650102
0060013011080510307015020200400638954010900708270025150104806389450102
4030113023016530170055013893501050608403011073502030700201501110620030
1400100490410038924010512002111050151501041506389150102330305304006140
3060114030803890501020021903015040530301130050110504340060200406400140
3070801400211103011001020040017001402009005018020827001105014015040301
1080102001105011050211030110010706030157040100030214030803889401030840
1301000251502003002803888501083019030150401030252200388750104510601022
0010301251700105013011006388650103080601301405150307038014102052164120
0180388540108330110805610030180150110502530165021163011003884506304070
4001406402010030600530301638835064008504001405064270400130110038825068
0710510301163021001803881501040103012122008004051030701000120080388050
6100950400130402030140387950630201400130130110080405400530110301100012
0080387850102002440550701630640080387740101006010501301100803876406350
3011080520090050200900508038755010403017030122002402050900140803874506
4102004005303015064553011208010138735064270400170014054061006510213030
1100700138724010306023010025220013700138714010512002130540070103005040
5016387050102006001301150100200100014050038695010504064030115041270504
0550138685010506084030110735020307002015013867501040301703011080865010
3070401306038665010200600130110805103070150202004006386550101001230140
5540010200700150307036386440109007030122002030150405305165150103506386
3506210340301407050308086501501415041003063862501090306004030153030141
2701301386150102007005040301521001705012080102020090050180386050102007
0050404051080150306020014100306385950103061301200500201405302100308004
1003063858506702005104052001500110307040580385750103018004051211680301
4055013856401083301103013040570320040501405003855401040850401263003015
1030704053050140500385450692301155040506103014080155040506302013040550
1803853501091103003016062005501201570309385240108330130901108032006004
0052003300155013851501040301900303055040080151503070315013850406100730
1520033004011307502001060020307001384950630401703013040701030801700530
5004030384840109007030176803016530170055013847501027007040250850140610
3061301150400400640130138465010400104025085014080138455010200800840301
5040400502030102200540705013063063844501042004003040042050153030140030
1100384340108330116601080512008070309180384250670309404040050130530110
0384150650104403015011140190070612120040015020615040040170011384050101
0049040301504030205011306100103839501020010010305012010501405504030101
1003011003838506301604001080070210307040580070230210018038375065020408
0010250550120383650107080200930140012009011004054507063835506807501015
5070405130630610001510801303834501022001300303057003018001023833501070

4050406012024051030708019103832501030211004004020020060103070383140107
0503014001503108038305064020020404056520168038294063070401007200405302
0103061382850109030600403015303014127013013827506304070400404005020140
1301506734001406382640103013012170070301610010170030402050138255010306
0200403011004906100830121330238245065034020070130030150400530162020014
0030150101506306100106382350620022040060105303011301530113040530301010
0170011650120405501382250104020034030123070805020307002015013821506202
0040030040217007030110807001040610405501803820501061100015020150140201
5010610001803819506100101700301501150220030610015010307010088038185010
1000191406100404005020302501930605040402010307015030501201406381750105
0406401650620400403030216301100381650104010301507015050640014004040050
2040205011630110038155063016040010800702103070405800702302100163814506
4030604006040406103014053023813506200901504001304020301403812506306106
0404055014056801006381140108330191200901030140564518053030150645040381
0506427010165012014064053167161640309005010700301162003008138095062700
2040052404005020107003013090803014061017005380850104301406101700515030
1061101630110063807506200900501040517001805481652003710514050180380650
6200600144040050164070503010038055063061301150612161380450650067024030
1501114019007061212004001502061504004017001138035010240200860130117005
5011630110063802506200600604006010510116120017001638015062002070010130
1620020700170016380050620060060106400237030237992713050109504040515010
0306001501150100306005040401110030600430014051405400804006018037982100
1500215300570240018058096003018096005040130137972901621700704053061200
6843796250133020504050680700100106103070130113040301103015067040601013
0379542001405019103003020504019008086379422016203015501072110504301140
6030115010715013793100200130040301220061405501021406800200130164001614
0603012200379248163040205301501379112002070040011030140030180379012003
7400120031730180378918090400180190301637885067032004005103016103003020
4006203040541021070030150182608037875062010805020530306100105011101030
0412001170015200401140501378640103070301100130600301656103024053050040
1003060010501103070200411002800200130164001614060301100306001070030160
1030613785506410064005504040400501170018012001502008006001301200330030
1504040203030703107003013784401030701003060030202656520040306115130050
1107003011510108103010037834010402001056401900703011010810504030110051
0030600106050613050040150302200800637825010240401090600651700180580950
5040515010030600150150160501301200104030613781506503070101406506200601
0140403070501501405306100205078101308037805062008008404503405304056405
2009050506701094006010130377950620090501040530703055301530301506450401
6700600400163778506200203001013080122001300406708015040151080405306377
7506302011015504064052620200155040804053015150303070063776506203014015

3040580140170501150104101400304070140404053015010030600150116200104030
6137755010200801203011030703061003011008106110850120504020070050103037
7450102405012001006200207001301655015301010002501014062007030030151504
0307014063773506301007010130801100306003011080560205050520040705050406
3772506703200101306110800401670194006011408040540050120401030704051506
0060403013005063063771506200902101050180912009030116100240060180405501
0701103070150604093013005063063770506260201016501201402405303200145300
4006405104101150403020400640551680110307040400600504061030137695062008
0204004040050201402406103011563090137685064706400404005020104003014050
5357005376750630100704001650620400403080112001050020130234020504030800
1410030637664010100400604091200901700510506427015016376550102406470402
0305501501910300301164270400130501404110502110402010301457014030137645
0640200340301151014061030116714004016376340108200220050401306100401306
0376250670410140405306552018015108040530376150610204004020101200130110
3070301309001080405316716405376050652018030100030010804061030155033012
1890150137595063040704004040050201401301506734001306110103006080504030
9004001304061030180375850620080084015010430701040340517001805481658109
0130140050120501375750630602004030110049065040820030147061401700515041
0020040504015050070250401503010611016301100375650630605010405220010301
5001431301504040517001802006903011080600805063755506703200104053051103
0113065109064005067010940060101308037545064090600104056405700600140054
8165810901301506200900501014037535010100419040400502050147063011700510
4004050630610010637525010240301308001080130140400501501540709153030113
0010630504040709501165040150107003030162008020501070030130110053030140
2010072001404016100805014053030101001700163751501080020070401550701650
1201301405220040011015040510150404051040014001406375050640820040040203
0703040208030600140640201041015010214016100400140530301010017001637495
0108103011701400406150405408200130137485067001005010405130640530600102
0090130804051002001000501300505016374750622020010140530500405040405301
5010030600637465068300403012030803011080405400102007001503040815014053
0510163745506826010203080108030206200155030110021603010303011306200401
0030120200440050115301010002501060403003011303744401041003015063200703
0120417010400830715040515020041002004010030163743401030703017107703012
0010410040020307001530200100400604030102003400604030030163742506403090
0404051700180200155030155040600306050301030301405305101637415064030701
0130140406405608050150406800200130140025040014040153020316713011003060
0107003015018260374050620020300101308014051041015400304070140652004050
0504016302011030373950610703015040151080150200380621507016301060050504
0400150315108015030703637385063020110550408012815504015032006001615150
1010815400104030180020013014053051016373750620080084015010430701040314

0303020501637365067032001013040510301405501506200100301504040530210015
0203051402016200104030137355061075400601052165012013013066020050404051
0400110140412703011030705200608110373450644016004051700180548165810901
3014005012050137335010307504015020140614060301504045035040547025040540
6100103070150307501140637325010402002040301504010503070361022001030200
8010001402373150640307010104061004001030110301100550330130600413010100
3730506704060180402022002400504011050137295010240301308001080301700110
5013728506700100501013061101030040540070180300105070501000400130200800
2504082003015042001050155301550645040700600400113727506703200400510301
6105020098010700301427011301030140637265064400540405612003140203016010
1305040167024001372550103060200403011670240014061001103011001070601030
3200550104403011090100150401363724506802006040406100404005013024040020
0207005010140207040402020010191630110037234010301217007015040402050604
0103064020504032005030165400504004030501030402021502001094001501163011
0037225010240301100013023011301150103070140637215063060200403040201030
1150140307010150220016301100372050627002040013014040050150110300504050
4082003013075011406150305004020030021301404005011401630110037195063060
2004040201030115011630110080500301500215077708014056270020805010505001
4051030115030602001700137185063060200403011513700151020010030121890113
0500404053022008001637175010240401401108051501090811030030206405200150
0161640410014024002050610400640301101085050850150137164010200202003165
2008010004025200300280210100030125040820030110300600620020700301702400
1504020070050400140501371550650406101304052007005040040304014054002007
0050114051030701660637145062009021013040580405150103001000180146040580
3060050406146040510410150102504015030703637135068401004040580501100700
1301103011058013013010001405100150701108015030703150137125065040610130
4058040520050020110307030610030110084100303711506308011000405804056121
2007005011401406100200700504003037104010820030171077030130107504003709
4010100400604091200901030703708501030602004030150403020501370740102083
0150120010030163706601037051200109025412702501205303015018040530311317
0018010406040303110301405200600610502030652145040152005900103070202004
0014016260201402601503015303017006001610630637041200104100140103070501
2055018002001301108013064001614060301108010300504057370103053030150120
1406561004055040430011650120640530210050405010700301521001705012080102
0162009005010808002001301108016200106010403061370313010684005303014005
0603043400503061301042400530301400506030434005030805010306130140050601
3015062009005010305805305121301101060301200204030110010810130610106030
1200204068002001301108012001220400601370212006805013014054171402001070
0504051314030804040130110481504010451505062010302001070050405135010304
0550140101453530301216406010016370112006801000140103085012055015470250

4048150401405206040150114003017501030613067400501800200130164001614060
3012060401053030150137001200620010001301180070240580070250640301900301
4701050130255040400501021030704058012140020405150104001401400161406030
1108020200300405304018002001301504016100306001700140105062001530301506
4504050670440050107003014020120200300404001012001301003699120016060013
0140520080205010200801203014107101306140010040130140522004507040520080
2050102008012030141071013065200802051030708020080205040808002001301108
0801013060040203070310700301653698200649030140017002401030705501800200
1301640016140603012101000403017053030150136972001090505040501040301900
3030140801610067008020010700503014020136200207004005040510802002070040
0101404020200407050403061304070501502010700301200101000183019030407050
1503200600115022001510805066002009901040563696200680203020107350203070
0201521700705040405507080806001013061640064010804051030701080010010130
4050532001504053016200802050107003016369526100030151080150604010130629
0501510801506040101305308008050405401100403012001415030811070030136942
0062030020068010003015022005015078301150702570011070030153030440830116
3011006369320010200815108040560123061630630625700504020061601504015108
0506308101550630600410504704001503369220010220301308008030165203070053
0301507001240012001060030121002160405504064904001004040550406560805030
4030190040550408015041270504015010809901501070030121400203011505002006
1405003691200109022001026003054127025303015015104105010214030110049040
1008301652140020301504020103011501086110700301636902006203002006801000
5501530800805040405410710640520063140510806103036892006240050305200134
0050632001051050130706120060405150100720014040161008050165130903011640
1100165303012140020506304001050107003015013688200680100071077053030150
1140307030154127050405303011030060010140501203070020550163018030400600
4040170501301621643016601503015040636874660210212001000615501630180304
0060040200408680010244330123301504061550163011803040060040400120040500
5215032006001801401406030150403075015303015012004004030136862001020505
0120801020801620080205010700301400700600140500368520010504030121400203
0126200273012640015010230124053060200405400134053021005040501070030127
0020410080206270020105016368420010700501510801306001301540150405016120
0107005061200103002100830122015030602001150136832001070050130140050150
1368220062100301108050407040604024005011406130010504070406010530301501
4001640130113061108130110640060101406368120062008301130630900301130636
8020065030113064001403090030113063679200109023016104070130110640060101
4063678200109040301530301103016560805030102074001014050180102074005040
6513090301164011001621010003012405220050630060010501070030120070050400
1405011022001001700501206306103005504030408101301530408103015301005004
0704400501610200600120076520071620074001306367771077025303011030702030

7001406367641043100306002400110640202570010130010501367541040830110501
0003016553030165303011030112001008030140400501601503011510111036742001
0260030500402010250101306402020200300250620080201054011010030140610640
2030162134006011401670406063064020170416704060101304056704400501367320
0104091005040506203040101405506450405067044005010700301620304030153040
2022005303014020307001040604030313010200310302020040100301660403003012
0060060630103030110802001550301330610620015503011080301030301330610367
2506200203004004020307030653080080504016100040024003020060016405108020
3080301102004006155066023040051030850632006004006040061102009140830506
3020140030205040631318304017005652120030010001016040012008027007017005
5012008230110640060101406367120010601053030110307020307005012140020108
0130152004070504090100501013062004070405040200407010140654030702130170
8004001306105005015040304084001406131671402030703405005809505040405002
1200400504040201003060053030163670200621065201030612002040641043002170
0704053040011010603015062002040105010700301657080200108301903013040703
0162109301403020301470901051030117010403577030153030805770301410200105
0120504036692006300503012030700201540064047028002001301521501010818040
0104043021030151501006080121860200105004008081102003013060200110700301
5303016366850670509010140240103070530301501400120060840510307020608050
2570040013080130010504010451061300105040308001053030150180150608512008
0530407066053050107504080136672001022020031652008010004040530400183019
0301163040706165040150107003016410430021700704053016200802050107003013
6662001070603012189015040165062010305278670410140501164705670060040018
0647040203050191030030150136652006200100030153030124020502001000101306
1105043015110830140205020010004001308010085303014706501601503011510111
0366420064013017032004005303011030162030210050403060200400270020410080
2062700201050163663506208064001050180651301530113080020013016140603015
0404020100720010530301200101000100301600504030540201030705303014004070
5016200207001601503011510111036624010208301717077030165654702504053030 6
0200401308020604010140615302060404013080540820050406015030305303018400
8010140366120010410010300302010307053030150113001014010030600301108041
0710701220065001305006105050040585031103061130602005201013040301307013
8002001301640016140603012009180530304408301366021020040203001080165012
0405501302100504040570110300123070801402050654003001014050102640550102
3010863659410702501204050402101000301250680700100106302100504052162008
0204100636584107025012040504030061504003014053010501652150401163011006
3657210200100501204050401670060016400680130801670780700110200400630636
5621020010070104060550110220010301108610140280400104400515016106080501
0307030800114050180400303080050130100365541070101406309123011042101406
1008301133010036542610100030140130701008301280700100101022005013010036

5341053001030030201030706565303011030701301102003150140203065802003150
4040204003016014030100365241043002170070104105010240203020010700501301
6550155035040402028190214016200208040040040500104120080610505004053030
1640610040050154816240209007011405013010036512001020505012080102080103
0602001627002080405150104001140200130070401610003021406405302100504050
1070030127002063650200107005050402030210040510301150306020011406155066
0200410240020504040515010400114063649501024020086013011700550140513140
3010083030162008020501070030130110061020040080402080113011700514016301
1006402061214270105012014070402049010501410200103032001301170051401630
1100400150102150400110140510307010304004001700163648506270020400152404
0050201040030120015030121700701610067001640309005010700303030610050612
0080013061708050800702304020800702203040101304061030180364750650406404
0524052005002015033015064270101650120302405506450401501030640050120501
8260163011003646506427010165012040201101130651520101304030303061001040
5001701040340520030081040610636455010100712003012001060065658030600106
5801030050404040010080501140653020041001065412705040130010504030100720
0301960210102200501301003644506200800840217007030110802010306150107317
0401504001101108050670601050107003016364350650401400180200100030110804
0561630407014028070800301173405302010306180183019030407065040150401301
1080307150450704020220010040010400301240204130611306402030164011406364
2506403070101306015030120050020150203062004100106130010504030100720030
1960210102200501301003641501027007040250850140614130616130164012005002
0150850163011006364050620080120524040030602001140215011568020040040301
1001301200107005050405102001001080150306020011406363950630407010165012
0140130150673103051620080205010700301100150701108030130100013011503070
3621700703011612001403054014503011620060161414501530307035065303012200
8020505011505062004014007001200155030163010303012002040302162002204006
0150107003030168070800400601501070030130110063638501040200340404005020
3024020137001470210453015070402015044905085011680708004006015010700303
0162002204006015010700301301100363750105040640150203040400501130630162
0022040060150107003030168070800400601501070030130610010306100301800702
1030140580070270320010405220045070506806100640506403019003017001102004
0063065104105010210700301213065012001003011700525040650503016200802050
1070030130110063636506404100400604001306570160550705062006001400604001
3040610417010404020303010036355010100419040400502050147063011700510400
4050630610010636345064030701013060150301200500201502030612001070050612
0010300260150303058012013012015030602001140636334010208301710770301530
3016530213020120200300524040010083015010700301105062001301003632401030
7030181400803016561008301215050102840080104050015022001505010270403103
0100363150630407040014070301605013061504020031140705063016040013030100

3630501024030130800108061104510307030402011016115016530301301008002001
3016400161406030150404020100720010504030100362920010220301103070301656
1008301163011004020220030110017001401630110040526301005070707801700110
4008530507001504030130154507057018030030170805040013063628200105900504
0405504053014062020030050401405108040530140680020013011080130640016140
6030110805200700301100500405062030401013053030150645040404004070750107
0030116704130100362790010808103003020103070202200620300108015504065504
0405200600130125040610504040307050301301501930605040405103070530501201
4063626501050406403015040110010200801301567024001805509006010302140510
3070100490410030636252006203002001290302030400110130203070010805011007
4040302040515010074065001041814051503070380405608050116403090061502001
8060150102470121502200163011008036245010504011401101610301103015108016
2001060200106030115108015020041006520051900102001001510801502020012104
0030110200100301501026405501021503070363623200680203011301107135030561
6200802014024051501073203070036223010301002004605040103006305001694060
0302011040016700501040050340510400503240515030426402007030130106040510
3070150306020018016800200701803621200680100022006521095430253016200203
0016402022001007200504016302030140300650104010507050140050351014055020
6040108012603050120410030362050105403012170070301108016500230140210100
0301506403070101650120630501503301400501024002006001403080540016050403
0201400800200130152141301540064010307040530414040064030151030701501080
0100140308036192006203003011041270504030103010061200203004661430116304
0701400110601200200641006216330120501803630105001404006210200184050401
3001014053050630407010361820010706030121700705040510070050150200401507
0405504010007105040652200507001251041050102304070105040503301504062009
1003015010705301503060162005300158162006200530015641000810200301501401
0306030636172001090250630407040014021050118301901630407016420060301108
0200410064001100021603040701501361641048301530150301620010930165704010
2613012311013080080150404661415010400141003063615210504042703020305101
3020307001080501140603015040180602040510307091006050618002001301405280
6060050130050501800200130161406030150404058030600140640510410150102140
1030116200104030801361441070230130130800301621700703011080520060013012
5065040610130501070030130255035240112700205303011030701020040080136134
1043100306001080304020501100740403020404001007401700140201025010303200
1030704020304503051620080205010700301301100636124104083017107703019120
0901030110451061008301652022005040201030130750110700301403070301164006
1501070030110200106361140103017320050402170070405302010306150107317040
1504001101108016706050107003016361040102002010072006520080100040405302
0103061400183019030116304070616504015010700301107310303609501024021400
2010801301200220113062030700504020010009011306800200130110801306400161

4060301108052007003011005004055070277010130210100030140301704020501040
0140030102200610302301005701603011501040014001301620080205010700301301
1006360820068010003014010820030165615108032007010140614060301504030750
1014061550403200600101406800200130110803301014040307010360720010260030
1401020830165652006001301108044083015306800200130110801406400161406030
1108014053010700301530304408301360614010820012006801000530301501206400
1504064030165010504064030110307053030126400106400120200300403016501020
2003004030164001100801504030165010100801504030153030127007010303605130
6531406309005012055015016050130115304086155040501008030016155030408105
0150102180301233016800200130164001614060301103070550140130115080020070
1501360414010900701768071804100805306602006530301709105040640202650700
4020302008010001064020301407014020308309010360314104601306100163061006
5303011610040011650401501070030115101110360215103653030145070501206163
0110014040530301512002801060640167001501070030120165062040013016504015
0107003011510111036011200102201507030405507030162170070301504050108070
8004054001150220036001301026030115063080018015012002206150400416015070
9115011502200163011006359913066020030115070916530301150709115040010301
1050630610010200150301108040556362301004004061035981200109050130611030
6506431013014211510805010430160035971200107060405304701650102008012030
1507030530301501359612102001005062040057016030130703020102004101406530
3014507015403070140501301005701603015070601503012030160103595130104240
0530301550603043400503063021005040163060050107003011080530301550603594
1301040010040016304001006167006001168010050014050101501050670304035931
3010301001301151080205062006131013040500405220501020010005030550104403
0110805068032004030168002004040526301001080501070030165061008015040301
5400501040305010303592140108200120068010005303015012065010700610130805
0802007010501105041203070050521021303504050510307050105041050105040640
3011605062040015026203167130301001025030115101110359115010240140500161
5014005216304040081410080162604002011402001010002400150406403016501050
4064030150670061050107003016359015010540121700704053047016520060013016
1105043011080530301405507030530660200653030150670061050107003015013589
1401030604001640306065103070163090165040150107003011510111010250301103
0705063090105400201013040653030150135881410530010300302010307050120530
3015015303015010100400165055014010140020304014013065051016050130650540
0166001150211306505501660011502113065055016600113065051015021130650510
1211080505103070815031303587140103070103003020250120530301501805680600
4006111010300164240050135861401090070530301450705012040203070050114215
4702504053167116820504005011306530301306602001670064005014020305012014
0650526301006402026301003020059140203070021381200650405056301601801701
4004050564040030160170016100830150401010840060101305303016402050401010

840060108010250301107006105012040203070050150010483050106050140060401 3
061620030040050180404004070917001801630600418040400107041700150203065 1
501501020090015020010100040170910301402030507006105011301102503014006 1
021630600440013016504015010700301151011103585121010020010300302010307 0
530301501206205010401040020304014013015055060820237016306316715040505 2
304240050113064702504016050301203030810130358414010308140103070530301 5
012064020263010010801404030701053030165053020505400104001140250108002 0
010650781013065055010701200100400501105041203070020103070815031308040 0
307705040404001010004002150406130040050402010301106640065055040130040 0
504010320040035831401082001200680100053030150120632008201030705062010 1
301020304055014010140020304014064053167110804051030701508002008014015 0
403070410050105040640301506450402030590301600158205040060105011025030 1
412001501102503030156080504002565015504064051200401620704050200315104 0
013030120400130160040015026203016004001502620400140704001502620407040 0
150262010307053030118011404020501040104002030401406505200631400104001 1
040013030120316712030150303081150110250301151011103582130104031812006 0
505682006065056704004080155064400704005470504050510307040203014080505 6
604040050130210050405056404001003094050040015040640301404008205017001 1
650401501070030115101110358113010206530301210802065303011030703020640 0
640517001704650101008015040301650102008012030170940013063580120010220 1
308008053030150404053050125010504064030120030026357912001050401312006 0
655070012530301103011107014635781200107005061200300240614513002015030 6
020011501102503011510111035771401020020120031405304701640130605506100 3
010406104054001084003576140108200501050406403012501206200650301103014 0
014030900301504040203200600103054002010130406402010307010309010107003 0
165357513010901652002025682606357412001050020120020700530301162002070 0
116504015010700301151011103573140103070103003020253030150120650101025 0
301404001600653030130660200502030640203013200504048112144084050120140 3
572121060853030121080206530301130114815063006001013065506300600106530 3
014001301602005061000302105010700301357112006410040120041005303012004 0
150120630210050401630600501070030110805303015506053053030180020080140 1
080320085040102503011030705012014035701306708040530301200401501206120 0
965055040168001001700140510110704131671108032008501050406403011030705 0
620101301020301520150367120096155040410710800100140308051300600400501 1
008153030166015030110300600400651042405303011402060805010801080600400 6
530301100400162036720103070206040151030704004070501651030705303014070 5
011070030303061004007001635691501024013013080030800410080530660200653 0
301907010504064052004015040520010600301405305062010501120040153066020 0
653030110800100170015504064013065040640305012014063568140109007012003 1
652008010004040530530301470140012002017003016120010500205303015010200 2

0170030164001900801830164053620080501090080183016400140101903016501040
1019030164001100490400403016501010049040040301640017030016003016501070
3001600301640012002190301650102002190301640011004190301650101004190301
6400140050110030165010400501100301640015040640301650105040640301640014
0306040301650104030604030150135671200102600180109305012053030150154020
8301653030140011015040502040061021080103040010140502002070016356612001
0594004020200591064001023013051603200301402050702570010305303014102001
0140501530660200653030150709165120730150104001651309030150401001610306
1301510305133013200240050320024001306502040061021080502001006356518062
0070401306100503010068002004052301001080107003017040910803061003012507
0800600400130805040010100400150116050301504048120504006030102503011605
0110356414010200201100720015301504400701650104002004015200311540065018
3019030407040065306602006530305020504040050100105040635631200106010530
3011030702030700501206501080708002170070301153080701800105501024053008
1802502050404001105040102503011605011035621401090070120031502050404001
5060840303047015303015018052006001301200143016530660200653030150420040
0504005020501635611301040318120060502082006016502070400401501030170400
8015400501076110504301511083015042004005040050205012031671303010010250
3011510111035601200104100103003020103070530301501206156109400403018002
0016405301640164052001104640580020014020500200616355911001020080506200
6014006506304001004001100102008027020030140526301001080807001006405109
0110905040214002030130515040405620051900501070030130750163558171077011
0610053030150120630140010030150105040640301530301108020612001060016301
5010403040590010100021620080205010700301530301420063557140108200120068
0100050120530301501405103070264001061130050150101008015040301270070106
4051004902501010041903015303011073103035561301042400163042140620090040
0501050404055040652850108001005040405504080510307053030116451701401610
0490301320050105040640301504035551401030604006150140101130140541714065
3066020065303011004906530660200653030115047061401700516301100217813015
0650406403011012001403063554120010500205303012002070062006001301406103
0165303016320010501205040305506085660153030130660200108040203050120410
0303553130103010013011630400110014040201080165012063064020101250150705
0630160102120070130110805064124055016301646102178130140011050161625700
1040302178130150626081035521200106010530301103070203070050120640530140
7015303019281801650406104030201030612001060030110307058300141485506030
1240206100306080660030125700170018040064030150405103070103001000101070
0301204055010701200644002010301506200900501040540010120080660030113170
0180402010307058300135511301030100130160123015064001101306150103014030
5405501660013050103010110030164020504050101006704030153030140307010410
0355012001090501306110306530301506450404053050643101306540820040202412

0016116604020241200150153030150404020409070101070030117005040301003549
1301030100130150670400404001301700163040010030161400640301504040400200
2008050120012008030140207080501050303010035481306106040530301457050120
6200124130150630610130302100504053030116451701650120410030635471200106
0101301152165002304001406156400130550400803011630106040500152001910015
0404051030704003060046306354612001200801301506410200105015200670210514
0652006701504006102501506306100101025030140550401001020080507001400601
0616703200180402030401100401302200500103051110405504058010194003011007
0016354512006200100013015306602006530301150470614080020040405263010010
8050107003016506100801504030130610010700163544141043001301730716307307
6506504064030110304002120301505354315065090030153030125065090040062003
1508301263010030140010003026200190213014001000177001640205040308060150
4064020100680504040206137001354212001090250630407040014025303015012061
5620040040301465036181020040510307015030602001804650340204001370014020
1030705303015407050162002070011650401501070030115101110354114010301121
7007050102008012030304701640510049050705010100419030130160103035401900
1030100011001500104040550401507006001640102004050211060107061060640640
1051200216865050406205040640510015001040501010250301504015070060017001
6353912006960402140020301108020307005012018062007040402010110306110301
1630708040050113015010200315403016501050406403015040530301214002010808
0070221030614058007024018200130163061640540015401531671640560805015040
5010504064030121030611025030135381401082001200680100053030150120640202
6301004004407040014050203065240400196001140108081503402010307060103064
0201030164065010430110804020501660018040512116403070400403050180530301
4507096010016540510121304056704135373010260301104510656100830130610010
5303016402051680124020306100402030700402015021402011070413070314064020
4001540150550405062005190040010101303014020316713070314065806310805010
2301005040303200305303013070314035361301020653030121080206530301103070
3020640063535120010260050630407040014025012053030150120220050402010301
1086101407024001635341401020814010307050120530301501501010080150403016
5010200801203017094001306530301100400110250301151011103533506200900400
5040405501200900400501640550708002007018035325062009005010405130640550
1401011620080205010700301708050101308400803014061030100353150101004190
4040050205018400803011700510400405063061001063530506200902101308014056
0805016405401705015504030201400170200752320060050807200330180020013011
0301140301100660501501162001040306135295067040601013080140011013020307
0010805014055020160401080506300401050620010030150404053021005040150203
0514020405304510403061352850680304006001051080165012014010805401101003
0140610405501023090801065202200501352750650100610150400110121650120616
2002901403015020040125064510540101405504015030703635263010101200601105

0230104551503070365101100305040510200401080502040013080214002030110606
4015010400141003063525506401004005040501040200340301504015011550708002
0070140500522004001101220020700504040403090015040635245067032001040530
7030200220130121700703015064105041301217007030150404055010010700503063
5235062700204005240400502010700301200150301217007016100670040530301010
0615108016410701155040163200600105011641200114030202001503014051614080
1610060805010700301140163522506304070101650120140213075010614030140015
0340530804001830190301163040706165040150107003011401352150664006010130
1100601805012050402015040640501205040801352050630407010165012014021735
0107015200100504040530108060011406080504030704001308035195061008050104
0515010072001404061704096180660040522005067041070318004030150704052650
3108013400400351850620022040060101304056405220044082168260614360162006
0015216200207001700150107003011504001101250406101405013517506304070400
4040050201402430600301217007016100670064020150106050150117005402040610
1100304040010605014021610067008035165010704031601503016550330150404050
5350130401301050403061003011008502030615145608050302015010400130150103
0063063515506501006401501183019030407050150703200180150704060615020090
2115022004052200450704056062006602015050640200340301700110200400630635
1450670320040040202200103014050040202302061070030140064030120304040201
8064001030100351350620080120405220011003024053024104310030600108030150
1180020013011080150303080017001116301100635125062002030040014013010301
0054108013016200190213016704060301402030307036586200504051080600805065
1660405003511501054014050405301306050405306050307034050035105010950405
0160501301100306001426510030600103003020506081107003013509401082003017
1077030154153003016210100030140301702030700350850647040014040550608030
1520014100405012040610108051030132007010405008002001301103011406030150
4020040130120024103507506200207004004001308017010803001306103065040550
6450404020301403002007030110307010640060140500401101540060108014055010
2140680020013016400161406030110030600107003015303013506506440051040530
7030203021005040200107005050404051400114014061002007005040030202200504
0100830165302512004008015063061001040135055010403017030122005040510802
1020013021400203013010750400350440301350320010260040103070530301501400
6404008002001101260805010200440014061410002602040017001406080501020044
0014064018200130110801404030701065001010003013075010657016030140307054
5070530301501350220062001000301530301240205020010001013061105043015110
8301402050200100040013080100853030147065011101030054301650707136546306
4013065430650704301610731013014061016300600164020220016100400160150301
1510111035012006802020014006003020130115040011012483101406490400100404
0550408020023011030140513501403080501043015305010903060040530301167043
0309003012036404051030010001700163500200620300200129030203040011013020

3070010805015400110150404020102001030530301400407050220082301108010200
3400203080301501200400403013499200102203011030703016553030150163091230
1550645040506704101405016100830165530301501220307003498200102600506304
0704001402530301501610406040303110301102003103020200401003016604030030
1200600606301030301108020015503013306106200155030110803010303013306105
3030150120040040301349720010902701040605303015015481660805020130140205
0070213064020100306001403496401020871077053030150153030140014030204004
8050140200821570260547025040544010200823016401301001520033005040800200
1301108014050163063495410408301105010003016553030150180020013016400161
4060301108014053030349450640307010130405200500201302530304408301301005
3030150306100103080020013016400161406030110030600504040540030160501030
6349390010301000217007010301405200980050405001301030100405704004050349
2200649030140017002401030705303015011630407014024051025050804057032004
0150103015200802020507810130802008020504063491200640130152100170530301
1030161010050063015620070301220604040060141008050608406565303011030155
3640306010504063490200107060301217007010301405670410501910300301501206
3061150121510307015043614070240050302163011005303013075011401670240014
0530301010017001634892001050402140020130610451306403070200101000253030
1108030413105040601503015040655091265200519005407050402010307010002601
6800200130110801406400161406030110801404020302006006053030150116200400
4030134882001040830140069030400169013012002050150120400690504080080010
0016201030040108049010016348720066008030140060040302028101305303015011
8200408002001301108030040400130660150303020460020070904001306348620064
0130140770504020307005012021901140103070200290162002050403015070550168
0620070403012200401651309030140100110502110348520010260080109305303015
0153030115240011080020013011080614001614060301108061520060090108050204
0080304200600504052830110050040204005011550110502110348450630407040040
4005020140240201025018040207032004010301405001030121501504030102607024
0016180620070401105043011080140528190614057094001308040307052203060103
0140102202003004005011030702014513501634832001090403011030120104301630
6103020020300150150104017010805301908065056103070150565401540030408510
4301625016050130115010906634824010900704030900302020030030150153030122
0200300400130105021105900701065655021305014010030301100700163481410408
1050100053030150180200802050406560805030200203001014050180200203001050
4065303020020300150154020830150140100301501040014100306348050102403013
0800108050640301900301302550645040501070030110030600170014010506200180
5303011003060017005347940102002036730205040151080150400250180140140603
0150401503075016521430205040151080500264020241040400501106016200800200
1301108010100301615506200400440702001010002400161406030110030600347840
1020830171077030165611008530301470615108050104301600347740107050301400

150340530400183019030116304070616504015010700301501347640103012170070 2
520030028012001006510507001108050120157040601040305012012002204006040 1
030615040011015103070103040040017001634755010540217007040530201030611 6
751570060040010640307020010100025303013010260507030800103050010483016 5
301020040030010504060150301504063474506830804030140520103061640522005 0
401045103070201030613473506501006104055200600130124056512073015064006 1
065130903015064010100105010700301347250105060840303054082006104534714 0
102083012140020301400110120304003470403013469506501006101305010700301 2
050806004006010130610085303014706501200290180346850640307010130501070 0
301263010010307053030170291020307002034675063092401301404005015011620 0
802050107003015030610010305101240540010350103063050040302050405012001 0
030117005108060150303015022008004100306346650624007040060104051306405 4
002007007040164030900501070030170805010130700104061080346550640307040 0
130404005020402050203065007023014061017005805007023014061010301530301 2
140020108040400500230410030501401013016403070301164006150107003013011 0
063464506208061016501202030700205701602001010001650023014050640200340 3
014060100105701603014061004004061063463200104100301401030703016561300 1
014010030600105210300618070800561004702504030703405005610080708004702 5
040307034050080708005040402010030600107003015303013462506403060404058 0
150400110125040610504013017040604005014054003013080050701040703014152 4
005011406346150102002440163061700117043014090301704060400130610400640 3
017040604001302050180346050620080201054702504016309003012008090405612 0
080181020015030602001501030634592001041001030030201030706561040064030 1
101084030203070050115400640470280020013011010810801020530301400408200 2
001500110301200900501803458501060302403053021005040405103070307501050 1
302100504016501205016345750620030024006010405170015412705040130010504 0
522190117001805301306005040320060010100463011020040080180602053070310 6
130010801020140603011080596021080121860200105004008081102003013060200 1
010700301530301345650105040640301200905015010307011008501206164020031 5
010700301504015040100400501804001501023012405613804054061001030113060 2
002030210050401503060200141003063455506200203004004020307030653080080 5
040161000400240030652004012203080301102003400306540040820050404020100 1
070010306400120030024081102003013060200105015400110150406345450102008 0
120301281013055015308008050404001830190301163040706165040150107003011 0
731030345350645401040560805013080183019030407050406520080205103070802 0
080205040345250670490107001040610530301504053042004013040610104001105 0
130210050404010100301501043030205364010018034515010202003004040520050 0
201501203021005040501070030152100170501208010201620090050180800200130 1
108016200106030100345050670320010405307030163040701070030180070240510 0
107001030601503011041014002602014022008230162002301108041608030120059 0

0344950620200300101407010301704006550182601030050404020307005040307080
1050404020101202003005040305402010108104050040204001040104050040201007
2004050040201003060010700301530301344850680708004030140520103061805303
0153650641020040051207504040400104001140653030145070622001013080601503
0130164011080622001030122005040404001040011406344750683080403014052010
3061653030153650641020010501070030302001060020307003010260301502165010
2060403016510081022001003011700400180344650650406104061003040011013020
3070010805012004100106130010504030100720030196021053030150116200104030
6134455069501001040517001405104101400404100140251010604052904005016152
1682008054082006015030115010070011700163444506202003001052165012014024
0302040010658015019306040510307015030750140134435064030704008066080167
0400404008040515010400114021620080201030344250620200300104052200240550
4010010200801700154082005504040510017001170014050051030150102105040405
2200167042008006015030160401700163441506820080405104301402278302017010
3001650120640550104161002008050107003015040344050102020030040301504016
5062040013065130903011640101001656100400165103015010210504034395064030
7010130601503012005002015020306401010030150104301203070053030110030600
3030104240013015103070601503012009801040030153030140020098018010508501
0430302053640100180343850102009015050404053014065303013080015040104510
5040804030702001010002405165116403090050107003017024001302343750630100
7010406100304001101301309080502030700204020608050140204008010600204055
0680160040016605108040400501804020150100720014010801202003005040402050
1401014002030401405040402030305402060805015040130500404020302200800343
6401020830171077030165680020013016400161406030110801030701301305004030
1530651030705065165654107010405001003060030114210107003016563435506400
5011005303020800200130164001614060301108050405306343450632006004004040
0501170018002001301504056704402017041700140500520040128002001301614060
3014061004005015400110150406343350630100701040610030400110130203070010
8050115400640470280020013015210108108014014060301504030750106170409618
0660010020023014020102001054001101504063432506704060104061003040011013
0203070010805015308008050404020611000400216200155030163010303012402040
1504054001101504063431501040301703030400110130203070010805014020501630
1640204005060301801304006001680020013016400161406030110030600540011015
0406343050620020804001040610030400110130203070010805015408200654640402
0501023070361510301165020604003013167140206080501504040203010030600501
5400110150406342950620030040050400200300240400501170014050021200400504
0402010030600501540011015040634285063200600400203070020615400640470280
0200130110108106108301504040010403013200600106400104030150401083013200
6001034275062005900400501086110300706800200130164001614060301108044083
0153063426506829040050108650660404005010853030150182608034255062008008

4021700703011080201030618052006001301110030615040011012162700206162008
0205010700301140163424506200281058006200108040580400183019030116304070
6165040150107003011401803423506100200804001070010406105701603014061004
0040610634225010200801204051012020030021650120617080300405101202003005
0404053050201040306342150640200340301603021057016030140610040040610634
2050670320040051030140500541070104050010030600301142105303013419506107
5400601015216501206530301400110121627002050110166030116160150107003015
2100170501204050034185064030900104056080501165012050203064054030900103
0530301501201408040015010230124053060200405400136156200407014040200500
2011562004070680020013011620015001656100405504043001165012040530210050
4050107003015210017050120801020162009005010808002001301108016200106010
4030613417506200801203040522001100302601503015040120010500205016104060
4030316100830121301140550102140680020013016400161406030153030110030600
1404056080501108016200208040010403061341650630801100040552006001301507
0405611050430151108301504012005190050640307010341550640307010130601503
0120050020150203065470653030180306001013053030147063414401082003017107
7030165613001050402009050105303012009050234135065040640301820080107001
0406106470250406302100504020040130153030501050607080021080341250623010
0010604052301000470250404056800200130110504110803411406200301400230100
0341040301340950105060840301704030530301501615030260405501045503015010
8016451350107003016340850102008012030301065004040505310806010301513140
3010083012270020611270020530301103070102004008015040404030900150406340
7506200802010530301540705026506504061030912301280140530685040601503018
0960040010615040114020081503070315011620010403061340650640307010806608
0167040040400103064051501040011402162008020103034055062020030010405170
0120023011030140513501403080501043015305010903060040530301167042030803
0110801622020017001803404506403070101650120630501610830110530520060013
0120014301501627030665301301110504301511083015700514063403506301007010
1304052005002013025303044083013010053030150306100103015400640470250408
0020013015211081801401406030150403075050404054003016050103063402401030
7010300302025303015015302004100106541270504013001050403010072003019602
1053030134015062080610105018053030150306100103020040100301660403003012
0060060680020013016400161406030110030600504040540030160501030634004010
3070301701040603016564020110161510072001053030115100720030408400130521
4504050101206339950630206400104052200103070616200290501070030133985010
3040170301200314070501510805010430160020015501301154008400504010200340
0180200100055033015040405501062503040018301903011630407061650401501070
0301633975067032004001501030140500400640301510010170060805030203396506
4270180101101805706016108002001501165040150107003011041270110339550630
4070400404005020140161006700306100106405303200140084005040640510068050

4021700703014051300100010406103394501020080120301259108403040505350162
1700703012205063037040060103393506200703001013040565400100024055010400
1103062170070301405133010406040303113063062170070301220506303704006010
6339250620060160030140520103061530301216200802063091230121650401501070
0301680020013016400161406030110801404030701014105300402050102610501025
3030121080203010033915065040610406100301020020700654082003020307001080
5014051030701030400102140020301201030701503075011501405802010403061339
0501024020010700501501140501653030145070400110130114050130100522005040
4001101510307030750113063016301100633895064030190030113011504001101248
3101406403070301164006150107003012006490108040015010240011016530233885
0630924030121400200130170012050104010259600400130621400205040530210050
4063040040040050201406338750620080120301130115040011012483101406525040
6105040130655040652506504061021400203014051501040015010700301802140020
3012010301150307501203070020633865064030604053050850648164020530161505
3016402010301307501615010301307501107003012150401163061006405504016403
0900501070030113015060811051040030121301214002030130511630413400130633
8550670509040014040307010530301620022015303012002070030620020504030161
3008803015070105504005130903015015130903014010016214002030150402010301
1086114030400133845010504064030305101302030700108050110083012800200130
1640016140603015303011003060033835064030170301130115301007010140660150
3030152200800503015004013012030400633824010208301710770301656103005040
5506450405067041014040307010530301501338150640307010165012063040062205
0703014001023040061023015056150161400102400700600400140062205070301305
0040201103061530301506450401670060040015010700301305004033805064030900
1040560805011650120502030640540309001030530301501201406150100200100015
0404055040680020013015215080606005040405504065810903015400700600150404
0550406129018510307015030602001504040550408052507002150700600113020803
3795010100216016501201406800200130110801620022040060180400150102301210
6064040513410030650140156506702008065062001100633785010200902400604016
5012063010260301507040549080405301407015019103003014053050107640550201
6040504040203050102400410064640500614170633775010405001340520014108016
8290180580320030140540070060018056270020803376501046080408002001301108
0165007040013062006001301406103011632001653030116427014061001103011008
0121070300405160015010440103016337550630100701040610030550102510115504
0150202004004100306337450610060801016501201402140603015040173200510200
1003015700530511030705063075040150133735010200211000301504040050120204
0012004011301203051620635040150150784001306806004001301630110061702007
0040521001800640521060196301503060200400135011403063372501020021100030
1504040050120540012004011301530516550103505030151080504024030701508501
6301100196301510805013011003371501040301900165012015305150151020010030

1570053051620305401501163011001020030023012401051200211503060200400131
4030633705010460804030140610030110307010502009050122003011003369501010
0419030150404005020501530301217007021504001011630110050113015406100216
3501201408020020504030140201041501080506400140063010260301506709100400
6301320030150640014003040205010133685010403017030150404815040152402010
0260140530081803015064001400304020501540610030301100700119630633675010
8301903015040305200600130110805501611050430110805200315150104001621400
2030165625030154001020070010801503070362610070106100186015301502566336
6401020830171077030165550110220010301200315401050130110069630530504018
0336550102009015050404020301406200150301402016140618007024020800702507
0301068007022402080070220080201054011010030140610405001105043015110830
1108040205010254640150150061530301506450404040070060040011405013011006
3364506504061040610030400110130203070010805012001503015040530301513501
8056100200861563040010011630110050113015406100216350120140803363401030
1217007040530201030616104004082005040166010102010306151011003065303014
0011012162008020501070030163362200109050130610306504053030150645040402
0301406140603011080130680020013011080501073704024040050114063361506230
1004005103016130010504040820010613001050402700701033602001041001030030
2010307053030150152006001301513005030110300501053030140500100306003011
4280102016200900501808002001301108016200106030100335920010601053030110
3070203070050154107010405001003060030153030110421080102016200104030613
3585010240301100013023011301306602003011030701406402030210050404040127
0020410080162700204005016335750670320040051030153016200203001656427016
1007200301530301450701610004002180110072004020305062030401013053030150
6450405064270400501070030150112080150610030600400615015006153030150645
0405064270400140501335650640307040040400502050140203020010600402030700
5610040016530301164270154061003030110070014010512002163355501040301703
0305101151503070365501080603012189016515010350180335450640301900405650
1806930140570060018014017050106040600130155060803014051080500230805406
1001030118650150306020014100306335350620040080101650120140705401101003
0140610503016010306405301100500170401301100500164053011005001503040810
3063352506270012030405501103005040405110196005040501030401824051406402
0110196003040850306150301026016702400116504015010700303016200802050107
0030130110063351501010080150403015040307010306165040150107003015303015
0403070103063350501040301703012006490108014024030701253030160103061402
0704015020150150306100103020220050402009050135010306530301217007020601
5030155040080307035303011080107006117001805303012150401306100105040601
5030150406334950108301903011080405503060045030400183019030116304070616
5040150107003016334850630407040040400502014024020102501804020703200401
0301140570940013080403070522030601030140102202003004003020145135016150

6085104301625016050130115010906633475063040701016501201070030150608140
5501073503064054001101060405507050200802050304001830190301163040706165
0401501070030163346501040301703015070105010003053030150156080503045131
0140501804513504063345401030703017010406030165640013053030130315018053
0301110030632001050120504033445064020810140160150610026010501400110106
0301506304070105010700301260840133435010270012030150403070103061610049
0501070030153030150403070103080405302100504050107003011504008041003063
3425065040080101304056150401163061001050116202004001050160150301260813
3414030133405067032004005103016402083015305536130120301510300302065130
1530113020060011530153030170407044001306333950102020030040301504050506
2040013062022001030170416201030140030750170014702530301400110150702050
4901013063338501020080120303012001059005050620400130802022005040540820
0130121400203012010301101003010501632004004005020140633375010240301308
0010806550406104530121350404030701102200301004170401030120412003050120
0100301201030708002008010700301501333650630407010165012014013014001101
0603011630407050107003011073101308051010603012135040615504020010600530
8055060830121350403335501010040040303052100170301614160801306800200130
1108016307050641020010130501070030301530703505200600130120014301203040
0333450620080120301830801013055012010615028060600301501030705303015040
5011306302004100106541270504013001050403010072003019602105303015012010
6506306100106040130125501204016504040050107003018290163333501020090400
5040301504050120140653030150645040550620090501051080504053050120140808
0020013015200142652150806060080333250620021903011301151100301013061830
1903040706504015040302001060053030121650040203010640307030116400615010
7003013011006333140109007090086700305501506200110010400611403050040150
3040010301101105043015110830150641020010501070030130110054005010710805
4061001030703200600803330506402003403014052650700507030160101306170403
2005002016561005504043001655040506200100301504053021005040203051410053
0301501403070104030611045070403070103070540010400611405013011003329501
0460804030128101305303015018002001301108041608030110002400130620103015
3030150608114020506081611050430150402021090506050400130652006001301200
1430153030120140011401080100040021633285010820080301281013053030150182
0080400130540610053030110070015610030110306152907030126504003058400180
4050114076502030150405150104001640510307010100028010606404061005040501
2050620011005013327506200400801016501201404055070308006530301008301501
1640307080402050152002164001515030100801410530054013020504015070750633
2650640707400404005020501070030110101202003005010130610010804051041501
0406106332550620020300400402030703065308008050401610004002400306510801
6502060400302001550301630103030140203030703540040820050406332450620090
2400130801510805065020604003010302402010400110530301200101000530150405

4011010030140610103011440200602001550301402010307053030130703501404001
0120013010033235067040604001308011108002402010400110530301200101000530
1504054011010030140610103011440200603010303014020103070530301307035014
0400101200130100332250670320040051030164020830153065200600130161030613
0110804408301530651301530113053030165633215065030701014064052006490502
0400140403070102022006332050620200300101407010301704006530301501826052
0010600301405305012014020014006001061300101401003060010202200633195010
8308040301504050620105011060708018301903040706504016214005040140180331
8506301604001013040580700104061012501301405103070400104070803317501030
6020040301404002311700140306100108040510415010406106331650644005101650
1204055016302170070301161200640530162103400601040308040567048040201202
0030016704130101006331550642701015011011650120140201030115012002400150
1061000140204051501061000115010610001501070030113065150220030610030140
5103070100850107003013011003314506407074004040050205010700301101012020
0300501013061001080405104150104061063313501020080084030150405401101003
0140610654050011050430151110830170140040515070400405040205101001306580 1
5060814706515047065040801331250630100704001308011010021620010600530301
4507014061540050107611050430151110830170140040801030050404040010400611 4
0633115064030190015305161301102001003011020305401502014061504001101405
1030706304001013066020015401108050070210104008102001003012030540202200
5012014063310501050020016301508501502061301030100130140547025040502060
4004030405502016040203040080154003001070404002009251020010050401502030
5140206330950640307010130405200500201502030615043050401100720010300302
0400120040500510301102310150401140200840530502040504030611508002001504
0809600400502070401045301702400505011630110063308501044005403012403070
1656130010504010451053030150203064002281504010454001302050133075010305
1330110100040025013040201030704013060402030140701402030615030140701150
3016301100655070168002007016100030301167040601700163306506100805010405
1501007200140406510106030155060830125062004106162002901402501040020040
4052003150640061020103061330550104030604053021005040150201501150220050
4010083015501521504011630110040510307010304001017001633045065040610524
0553021005040214002030140515010400150107003013303506200207004001040530
7030306100301405301503090641003063302501040301900301406100301104510130
5303015015303015040104520010100025165702400150404030800150406405165150
6702400101405014030701802030162103400601040305018033015010100419040400
5020501570240011405504010451655303014507050402140020216400180301003300
5062008012030202150116301100612005190040050120086016301100302100504010
6064010400611402162008020104030611060640104006114030500401040061130630
1630110015045070504010083014051314030803299501050406403015040506205062
0400110170240050801306602001501030140030602001130630150220016306100108

0405104101400404100140252109040405210904005011306306329850620020700400
1040530703020302100504020010700505040405140011401406100200700504003020
2200504054082005020306150104150700120069301250132400502014063297501030
6020040150201502030615040011014051030706304004005010440305110801106150
0400502014062004070301405103070306194008015062001001501300501150203063
2965010451300301504040050201406200401301106064010301150108001007001102
2001000301250132400502014063295506200207004001040530703054082006104566
0150303020010190210306130150620010030115020305114047025040214002030110
6064015010400141003063294501086210040301504040554011010030140610655070
3011050430157005108040515070240016329350620090501013054011010030140610
6200150301103015067041054010140515030703632925010403019003015210017050
1208010202009005018040103011080405150700250805465036515070060018032915
0670320010130150103014055011650900610083012001010002800200130110805465
0366520022040060163290501027001203015040550900130105016106064053011030
1703091103070301820090103030703180501093011030705014015110103041006180
1020010100053015040402030400403070140130403011510111050670200803011006
3289506403019003018308010130550120014301521001705305062040050406545070
5040104530121350402403070110220010606403011006328850103061301150101211
0801700521507040601406102004008040200860130117005140163011004001501021
5040011012106064040513140308032875062301100030114020702400150406140400
5011504001101214020103015063090101308015019306014020303070350620106001
2204800704300506030110032865062700201050180160011050110501004901014200
1070405306020018015016030105040890801655062001510600163285506304001001
0501801600180160805040550404003040010010501220030110032845010100601801
4061001650120405501510304065067020080103012022005040501501520022050170
0802520030150402081503201030140408001666020010100050401800102320060040
0202103108020410203060132835010504013015040205018060040013063021001106
0640110210070104030612002440103065013155012074005400151200140308020190
7010030150163282501040301703012200530301150110501106064011050152003300
3015040520200124030157010023011080504010130141630110913005040104650151
4001140308032815063099040040203070302001503015040567003612002600215504
0402010400110307030120015040060501105011650020401530513030110012001502
0069301250135040605015305122001606303130110606401080010014030803280301
0206306100501401030705303016103070501647013080400108001005010303130114
0101205010261050102203070030110032795010830190301504053030113005011050
4340060201030701003001501410200114062045070504080120030070400404040015
0180338105014050010502003140050110307050104001510400502110481208205015
0141020011050130110032785010401301106100301400200314006015040200106005
0152003140060140021110140514814003011003277501040301900301406100301504
0400635080600400130301100909010030151030709010065131403080150304001010

0601402003120107310302067041010215014003011001108400601103070103004040
0140514815400138032762001010080200106005040103014003075011403010501220
0301100803090030110301103064004050014053010100608032752001022060010300
1506216170200301200490101040081010060501301400301100140202960014030110
0501467004005010400120040140550645040436650610060106015030150405401510
3070436501044014042006140306327430102603011660105010451050110220010607
0301100501044011003040053640014030632735010403019003014061003015040105
0350220030110021002004001018010160015504032006008032725010890150301504
0203010501320060018020630400100103020250620040400110130403015011060640
1103011001070601055010440301109010015040303200136327150108309040301504
0506204005014102004001406800200130110801200123506204005011301410200400
5016040130121608050400304001001402010503040010040050141020040011060640
1103011001405306470651070030123009210501412001501140308032705010240106
1000302050110606405303011005600200904006010604013012520090504006011070
0301170018021002004001018010160055010440301108082901803269501040200340
3030120010590050620150308010307040040705011402220030110032684010820030
1200680100030165550153020080100080103020080100018010608050400403090010
5012200301100326750102403080040647055015019103003013040705040170053011
0051030701080010080106064057206805647050401070030110307054007010300504
0107003015500110004006018056470504017005654007010300504017005501304004
0010010501030320015108043680153051504053080100050108103070550104403013
0600463266501050608403011073502030700206140307061402085150104001106400
6016543001100030214030632655064030701013040520050020150203061008530301
4706501403070400306507840013061550107020010040010205401103015150442008
0326450689015053040564020305506308020104001023051103070402030413054003
0110080302100504070800120040301510307015040200863263506200703001013040
5625035070524002009028051090100540060013040030110063262501050406403015
0405062040030152301001030701509220050113063052104240030400412050111000
2001801060640401416808290163261506200703001013040561430657006004005061
1507080501050110607056304001004001302030610305010704002001005067020080
4001200401400301100632605010109160016501201405465036501401565067020080
5011507861647040530506201030506702008030159100400301803259501030602004
0301504056307013620103015641200150110507840013061080160040013064010301
1080510100301805103070400806001700180510708002001501106064040110301150
1086163258506200700810165012014040550401405465036501401565067020080102
0050680020013011080405305020405063257501050020016301405307035065401014
0530703506800200130110801680708004006015010700301103070504050501410200
5063256501046080403015040501205501405160501010840060106405150218270010
4055040580101980708004006010170103001530513070368002001301108013070506
7020080501325550650406104061003010083012506702008061060640125050402010

3070630400503254501024030121400203014001101203040032534060932525063040
7040014070308011000220220014061550680200704008054001101402010200106053
0304408301301006325150102007005040301504015011405013010080308005040656
0805030104400510140501801044005150408050120010030163040015016325050104
0306040301504050620150140020040161030030205306154020081070030154302301
5700522004270150140020040114050132495063040704004040050201401301506734
0030520015030110804055636400220805101060301213504063248506504017001040
6107078050404056155040200106005308055060830121350403247506307080400140
2200102600550110300302050100400110700301530301705090218603012004020040
4001056544013152608400301233011020040063246501020060014564001302065303
0113005040130180020013011080504064001614060301108050407078080200690301
1080600805010406106324550650406104061003040011013020307001080501120090
2402001550301651080165020601030301030301150307031501162001040301324450
6100950101304058016403090014024051030703061003017010066324350630407040
0404005020170014011403070152169108400403061040011012404002700201301100
1613170011040083242506707610405801504001101227002010504040136805401302
0504020030085040610632415065010061013015040011012165012060150301501405
4030204008002001301504052144053015032006001405103070306100301701006170
0163240506403060404058015040011012504061050401301704060400501405400301
3080050701040703011041524005011406323950102002440163061700117043014090
3017040604001306104006403017040604001302050132385010240301100830110307
0205015303011030703020640080323740103070301710770301656540208240550102
1080010010202200501323650105040640303054082006104530550163235506803040
0600105108040510700301200500201301010120060110502103070901001050120010
0301170055013234501024021400201080130180020013016140603011080521011000
5040140632335065030701014064052006490502040014040307010302022005016323
2506200203001013040520050020150203066015030110307030800806700302022005
0163231506303704006040010700301800702402030804200506201050110607030100
3230501010041904040050205014706301170051040040506306100106322950620020
4010140401001080010805020400130640510307050784001306322850104020034030
1521001705012080102016200900501808002001301108016200106030100322750103
0613012001091601130117005501302100504015061216508501700515047064100303
2265063200600403015010115061216121200400150201700111620080205010700301
3011006322550640701550404053021550402030010804053025200600130110804054
0307020200141302322450650070210501101506200703001014065303011301210100
0301800200130164001614060301108050404030701013030100322350101004190404
0050205014020501520021640015301005303017040530118002001301614060301504
0402010072001050406541070104050010030600301142105040132225062020030010
1407053030110301704005303017040530115400408200104105010212003002811020
0301306020010504062008230162002301400140309001080402010451050401322150

6200207004001401301030100530301704053011800200130118030600402030703106
6603018030020106517041700120098004030121031050401322050640307010130405
2005002013025303017040530111731850102008230150102307036106016200153030
7036120015501153013060030703612001200100800200130130703504013219506304
7010406100405302530301704053011152003300164002504005014020305012014053
5240017001001014852150400250180140140603015040402030307501680020013016
4001614060301100306005040132185062020030010140120010600530301108099015
0107003015412701030704013060653030440830130100321750102007005040301200
9401608012009404051030701502009401632165010200211000301504015150200410
0540012004011301530516515010350180321550620059400106015014055014020400
1020010050409630301163200600116301100501130154061002163501201408032145
0630534004061004040050130216050301506450405653003013200301506400140030
4020501013213506200902400404005016530081803015064001400154061003030110
0700119630632125061004001016501206165040150107003011501035016321150640
3070104061003051013020307001080501164030900140251061600405400610220304
0080321050107040314054061006405150200404150140520020405210017050120801
0202009005018032095062007030010130405612002040150200204061200204016200
2040632085061004190301501653051203054015045300140510306305030610050304
0500530516550400102503053030121640601100400163011003207506830901013068
0020013011080506460801095200570604005501044030110805012063206506504008
0400406100404005013025303014507040202001019301100207040504026202150200
1091163011003205506408200400402030703053030150620080100040060400130630
5506083013021005101060301250630370400604004030406100110301100320450640
9040060010501100102008040517001805303011642701501183019040516001464050
0103011503060200141003063203501040301703012200530305014010306070404004
0306016106080504004030900105012200400301100200102001610050404200404082
0090550130110015101001605070400803002065330540026085400120014030808200
9030110306004115303010100320250102008012040610050404005012015501530301
5064504042704004005012014015490632015010403060401502061530210050404030
7030115010400616655501204003011002030020070170020513010100400131403080
3200506440051013050107003015040506204004011044005400120090050501530020
0701530162002050301100319940102002010501000102200501802008020504065608
0503020020300101405018020020300504062008020140120020300111050630210301
0220030800805040170053011005450701200100400604051200140308020802009201
0301440020010501302100522010400115012140020301504040307054507010700301
3011003198501040110610030510307010501620401100405040406100400501302100
5220104001150150330150404001020080703011003197501040306040105064001105
0130210015300200702105010400110402010113040301151011103011003196506200
1000190405653070011550404055032006005030615240530302100130465032405501
0400150308040510301703200131955068200804004020400104524040050130240201

4001140402001060053030110501400114080301402505064404001301100501401030
6013140308031945063060200403017032001040252009001508051045240510301530
6020040105016319350630708010203070020653070011530515770116307036156460
8015102001001630600417001206304030150140030110031925010200401400170014
0102009005018020103012004013016410430060126306165610063061508501630110
0319150645300400104008120040157091100400502014010200401108010506400801
1304030115101110400301100319050104030604010506400161030701630704001301
3189401082003015040820030153030140602550165014010306050405501318840102
0020214002010301101003011050113040301151011104003011003187506703200101
7001402009005018040550703064004050040510301510030180170051021400202257
0013186501027001203015040400502040140010049012009005050603011003185401
0900703013002007030122006513015301130530301318450650307040014065068060
0400140403070106800200130164001614060301108026003013200600101070030153
0301643601013013183506440051013040580301026030150704054908040530140701
5019103003014053050107653030150645040604030030305064360101540610061540
0436318240109007030020070153061030030205040400104006164052030404005120
0401400436105013181501010010125021260504020400103652984004030140240098
1301100804107022001010005002040803180501024050193060210501040011030615
5082700130611410430012170070550270070130317950102101100030150405012040
1454530110200113010301403011008020010930141008040063178501083019030120
4127010802040040820021050306004165180020040018301903040701501610430161
0307061030704004070501104003012040040705020020300150110507076122003011
0061530610050401208180040602400803177506200703001013040565465036501401
0306040205040981013040205020160401630600413040503011510111053040504003
0110030405030141610307016400117001104008317650670761040580200109301660
5013016503301504054650350140103060302003008631755010240301308008030165
3017005501103003020504015010400616200109301100950401504030706015030115
1011103011006466145014010306050020066317450105040640301541270504020010
5002010307015030800801070030153030440830113011006140307050140103060646
6141501040014100306317350104608040301521001705012080102020090050180163
0706140309004056080501154005010010400601615216483631725010240200860170
0516301100520090240150400110140540013140308031715010100601801406100165
0120405501540610065067020080103014001101706040010806602001010005040180
0102320060040020210310802041030600416317040108200200680100010501806604
7021506083042405004030900504013013169506306020040301104308016001013010
5018060040013010606401102100701040306120024401030650131550120740054001
5120014030802019070100301631684010208301717077030153030115015501106064 0
1103167501040301703012200530301501826061530685040620015030110805040202
0062501104650151314030803166506309904004020307030602100215300240201040
0161200260021550404020104001601200150400605011050153051301060640301100

7001316540103070401020850430504050120010030110100304003020501631645062
0060600130140552006001301108040562170070301660405305010700301201030613
1635065407010405804053014070140530150107520060013012506504061013050107
0030150131625065010061040552006001301240565120730150640061065130903015
0640101001050107003013161501050406403030102003002610453160501024021400
2065012001003014001101203040060931595062301005010230100504010116403090
0501070030140307010606164030900140470250401620090400501612001050020530
3011620020700640018301903011630407061650401501070030113013158506307080
1013014050630610010405501631575064010510416302010804055012004004030131
5650661100030140570240010120070300301631555062700120405200500201670406
0301506100301031544010500120180130201030703075040031535010911030030130
7504005040103070402010250130531524010307030170104060301655501315150104
3160301108020230100400631504061004005010820120010107003013149401082003
0171077030110307030206400631485063040704001404010200210501301008020690
7050180314750105040640301504020702400150403020815038008060016314650102
2001001301204002001030070200700501631455010270070403015040506204008020
0600115301530301704070440013080314450630677040307040603015070405501314
3506701094006010140640530101000250101406314250109110300301524003075040
0140631415010403019001502014061020020700314050620070050401530130151020
0100504015020305114063139506704004010165012014040550701050100011403138
5064706101650120140405134050031375010506040515070400405014001012008013
1365063037040060101502170070280131355062009005040508503051630610010803
1345062007030010130405654001000240510400110803133401030130121700703011
6200101040085250650406101303132501040200340301263010010805150203060203
0700203131501050406405216501201404051030705120010080313050104037013018
0070210307051503075063063129301010120060110502140307054030701050151014
0530502010403061312850103061301200271080305501631275010240102200705016
0302312650102007005040301504050620400302023010010307031255010401301862
0030152307503124501040301703012200301075040030550163123401082003017107
7030165302022005016312250105040640405200500201501201406510130203070010
8050131214010900704061021700705012055015309003014061021700704057006001
8056270020803120506304070400140240307011022003011003119501010041903015
0404005020501140603015040180602015010307091006018031185010270012030150
4030205090050501615030500402003002130140050114063117501020086040301504
0400501140501163011003116501030613015302330164020100306001070030116100
4001631155010460804080020013011080165007040013064051103001601503011660
6002400130631144010100400604030160196010030121650763113501020060600403
0150401650620400130630102030116806131125010403017030122001030701301102
0031501200315040510307040203016011406311150670109165303011610040018031
1050104013066020040203010501310950610040040013012107030040530301100700

1310850103060200403015201013012189012700203107401082003017107703016530
2022005016310650105040640405200500201501201406510130203070010805013105
5010200700504030120094016080120094040510307015020094016310450102006001
3011502004044050031035010200211000301108017637013013102501070403153051
6515010350803101506304070101404010305161050350220031005010301100301504
0402030407030105013011003099501032006004030150405050620400309630110540
0504004030501030163011003098506417040610040400501302402031671504040202
2004020301003060014050620070040063097501040301703015040501200207003015
0640014001309650104030170301220010307013011020031501200315040510307040
2030160114063095506701091653030116100400180309450104013066020040203010
5013093506100400400130196304056600140530301100700130925010306020040301
9630406100400270020309140108200301710770301653020220050163090501050406
4040520050020150120140651013020307001080501217007030140570060018030895
0104041501682901801562001007080308840109007040610217007040207006001108
0660215660404001306308740630704040610220030040203062200300153051001505
7005301100308650101004190301504040050205015101240018015030500402003002
1301400501140308550102008604030150404005011405011630110030845068309010
1306800200130110805064608010501070030130835010802006040301200401167010
9400130630825067010916530301161004001803081501052001801400610230123301
5040506400850400630804010800515703093060050670620076307950610706400150
3108030785010504011505151401080506202004004001307750104030170301220010
3070130110200315012003150405103070402030160114063076506701091653030116
1004001803075501040130660200402030105013074506100400400130183019040566
0014053030110070013073501030602004030146405004002700203072401082003017
1077030165302022005016307150105040640405200500201501201406510130203070
0108050140515020305180562700208030705010270070402508501406306950103061
3011003060013011700550130685010900701630150405020400403040140090070611
5010307016601630110030674010900704061021700704020103070801600110501306
6506107064001503630655010502640170501240204401306450640307040014024020
4401107003011610040016306350670109165303011610040018030625010200123404
0030092404003009217001630615064306004004020307030705019040506700600400
4006306050650027040051017010200302025065024001305950104030170301220010
3070130110200315012003150405103070402030160114063058506701091653030116
1004001803057501040130660200402030105013056506100400400130146540566001
4053030110070013055501030602004030141704002700203054401082003017107703
0165302022005016305350105040640405200500201501201406510130203070010805
0130525010100123014702150100200100014050030515068300403012030803011080
5704050406515010350180305050105040640301504010704050406105035061840080
4055010261050102840080180304950627002010406100501220030110030485010406
3200403015040505062040030865011054005040040305010301630110030475010240

2001070050130115015013046501050406403014200192150114063045506200703004
0063010220010307013014052160850130445063040701016501201402104030701406
3011003043506307002001301207024001620305040650116301100304250670109165
3030116100400180304150104030170301220010307013011020031501200315040510
3070402030160114063040506701091653030116100400180303950104013066020040
2030105013038506100400400130186504056600140530301100700130375010306020
0403018650406100400270020303640108200301710770301653020220050163035501
0504064040520050020150120140651013020307001080501303450105040640301504
0506205080520020150305016308030334010408100104901306303250107080130050
4015030140803031506402003403011301150308001140630305010403017030122002
4020106605070013029501024030130800108030150205015303014003028506409040
0600101510804056163011003027506704031601030214650363026506611000301640
5151080162202208030255062009040050106140205062009050103055303015064504
0302450642704004040050201405010140530301010063023501061100030304010833
0140072002630225010100400403030550330140080307163021401030602301002530
3011040015040130130205065021306301407080501013040610301950650070210406
1010507600400130630185010301800301504050120550110213020080100016301740
1070503015503550020065040105030703163016501020060013011080100490501603
0103030703163015501083019030121050100830161402081030252200301450104301
4061010400101096001030200801000105017040911070030163013501010810405001
0504001040101070030163012501080300106580400800200401700163011501010060
1061050407091065107003016301050104510658010501003060010700301300950104
0301703012200130110306470405501803008506404100130140206121640400501300
7506427040040400502014040400101200801301100300650630708010203070020150
1211504363021630110030055062008001061402050670805010613004506704400700
1402050670406010305301100300350108020170153030900508014015090142705016
3011003002506427040014054061006510213030110070013001401051200211250405
1030703040016300040108200301710770301653020220050162999501050406404052
0050020150120140651013020307001080501299850102006001301150100200100014
0500299750107040315704050406106064015010350162996501020060013014050015
0803071629954010900703014693012010020080302050120801003080501802008230
1201907022200800150110606401030115010861802994501045106010220010704050
1130203011002993506202004403015011060640218901301100501704033011012004
0014030802992501010020030040405670240018029913010101200601105021515050
0200616203070020299040102002040110040676502062989506107064001503504040
5150320060018029885062007001870104033015016298750690010110003015030405
5016298650630103010054070020030030130655012985501020030018501014403011
0805067020080306020018029845067024004040205011041270220060150110606401
0301150108616298350105040640301306115020501150110196001502200150302008
0100010501704095015012982506230100504015022001030115012001080013016301

1002981501070403140205023090130680130600504040203032001640201041015070
9100130506403070400806603080200860301402040307010700301402020010220305
5014020305070015013021005304040050401301100298050620015610606402200297
9501040301703012200215040116301100297850104316052008603011010030180297
7506208011014080100304001051700180519070106064010100301802976506230110
0030150850301501506702008057702163011006405109070640530128161003018029
7550610030404040050114016100301106064040530301100297450102200100403015
0403017001402050164070503011002973501023011000301508501502050112003130
1503050101506702008030163011005200860301131403080297250102301100030140
5165012050152008603017024005015030703029715067040400340404005013056015
0303030101006297040630704040610400110010403052008603017040380296940103
0702001860302022064001102968501020030018501014403011080500702165160016
5320011630110029675062004014001700140805200860240208002001504040203200
6001050141020010296640103070200816030170055015306813040303030110029655
0102009001503030180010210517001805410707506296450102405012705001051700
1805190701010030180296350101004190301504040050205015240018030110029625
0102401030022040010363061301100296150105063604030150402050307031301020
0101000153014007006004001501030301100296050630100704004040050205011405
5010214062200100040301610020030040301220030110029595065034030402010301
3060200110700301402030660200501301100295850103061301402010121220064020
2200301100295750670404006040013015306850403030110029565010501006404040
0502050114055010214068002001301640016140603012200301100295550104030170
3012200140650670200803011002954301010120060110502400427050110307015504
0400540705020304006295350103060200403015040105030703614020810220010302
5680402040080600140304020504040020020080802952501030180030150401501617
0011540030708030110029515010200801203015040400501640030708010400301204
0030708040030708062950501050602020040705040150108040050023061410306150
1080202200504030130110029493010101200601105021507040306020015012948501
0403017030122003066020015011306100805067020080110400180294750670404006
0404020704015011504001101212570018013020301100294650630400100105018016
0018025070010307040530629455062001510301306020018010501603010030950101
3061020049010010800106294450627002010501801600110501220030110029435061
0040010130150670200804061002942501040301900301406100301400101501106064
0202200104150700162941401082003017107703016530202200501629405010504064
0405200500201501201406510130203070010805012939401020020367302050401510
8015040025014020800200130110301162001040306129385061075400601052165012
0140125014051040011060801627002041008029375010800200704055070165012013
0150048405040820030150402002070050404051040011014062936501070800160015
3040510015070140030900805101140603015040405103070307505013005050129355
0105040640165062010130120608050706001220307030293450102403012140020301

4001101203040029334060929321401730506201080660804040027002041008040206
1704130630102200402021270101403010029311401100406120010040060404005060
8151080501043016002930140130606510840015108050610030106162002901402580
2001000301506731020103061292914014015010100400403030150307031650107015
2001001504001102007006150316715040150302515022005063061001050107003016
2928150110407061409015103070162006001040304052200400110121620020700170
0150107003016292714012002016200406100030301216200401700162006730150645
3001013050107003016292612140040530301103012640010550180183019030407062
1400504062925140108200120068010005303015012064001506084054001101060530
3013042102010306180183019013040703040706504016214005040130129241501540
5108043060010654011010030140610217007030153080701800102923140150011003
0102030700307080105040650650710130610083012130153030140200810400301608
0503015063040010010130620060011530153030170405067041013050107003016292
2140161002030700501025012061620040010010403061680200601040301610080501
1700150107003016292114011004061200100400604040016015501292014012001000
5012015217007050140505321700701507080200901150220050630610010501070030
1629191401101006143604052200305064001021050107003016291814013060163011
0050630513301405291600170016150658002001301103070506300401050107003015
0408200301412706291712006203004120016120020700105014120015040305803060
0200155030163010303013070310700301656291612001050401200401006131200601
5108030703613620021406030110803070310700301202001240029151200680504054
1761502004014001403043605015040820030114061630110050408200303016436014
0530301010017001629141200102600523016018050408200301300200703011030701
0640060140500401101540060108014055010214068002001301640016140603011003
0600107003012913120010260054127026507002521080206544082826064006401013
0107003011083011030703020640062912130102605220010301700600400105011300
5040130120031504051030704020301601140301002911120010700506120030024013
0120150306020011406291012001059005220010307020080120301501206405200800
1013064057080501013014053030150645040506427010629091200104100202200501
2061200590612605053070380120030021403015040100306001070030165629081200
6384012003861600720021405501023070363131830401700564001200802700701700
5501020082301320040107003016562907120010220141535240545136501020080120
3017094001308029061200107005051020010030201080150500702301501030063062
9051200680201301601503012005002011021801620020700103040550102515080200
9041003062904120010500201060150161401705011501003060014040510100605061
4001040543025210108503029031200659140140603015040150307501654004082001
0410501021200300281102003013060200110700301656290212006300502001550301
3070361400126040650301616012303010303014020303070310700301656290112001
0601018002100150103015150800210040500290013010304510307060403003011503
0703405001502016053070330130063063090030144080102020220010301200400403

0128991301026030800140530240170501301201301405501506301007010615067040
6010405200500201501260840040128981301020651030705062040040050180151655
5301700600400150404001012001289713010260308001504021700703015062001050
1085064030701080660615103070150200290501130630150400530150701503080010
3041205012896130660200530301500702107003011700511675130120506700600400
1050120612001700162895120063005050632001013016501203021550620010165062
0104030801660301200940400200940110400301510200100301103070164001410030
6289412001024004001502002400130206301500401301530150220080013020628931
2001050020203070050102150620010066020030121890164640500614170628921401
0301121700705010403019003030150440070165101601503030405150307036405150
1002001000130602003011627002014030865040610062891120010404400405150200
4048015040011012162700205010700301406100301103011257001150301008028901
2001076506200155160015704015030703621400203011060640150104001410030628
8913010260308001615012040200300201030614050531030140556361030705062003
0081050107003012888120010608040050608161008301220150103130130500402205
0640011013062887130104002004005150304002006204168052400250050302030700
2054816530403501200100301510307030750130630162008020501070030130110062
8861200109050611041520220021080206501040200340301504016470102503020301
5030703203070020628851200635405012001003011700516700600400110406100501
2200110306602003013011006288413067006005016050130305019103003015012061
0501370014702200207003015070105030800141003028831301030600150130807006
0040014030105040010301040030106110288213010260306602003017040400700600
4001105040010301103061001051041010307040301900301800701040610628811200
1060705010200801203011030701406105012065040820030301008301700104061020
3040301288013010750400520101304030130750640140100030121406030110010030
0400406106287913010100405060816120010040060402001060070010406105503301
2189012878120065005040125515030703803040705040163040701401030115040410
0628771200638401200385063061001065010402003403030700104061010200300213
0520101304030150620010406102876120010220164007016400706405608050110801
6200220400601410030150220010200506152010130403011501030703075011306301
5011003050632001013050107003013011006287512001090220220050120650620029
0400155040080800702304020800702150307036100166013011080506300401064017
0930150630201103040550113015010306020040301504020302100150306020011406
2874120010220121700705100700504020504040309001050406120090501306180200
9050670109400604001408050630610040014024020627002041008028731200621406
1001650120620020700301166050104008405121640540070400405020306110306150
4020506450407006004005050115030101000250105012014020501826016301100287
2301026030116308004054011306510412704040030308001404005011306100108053
0301506450405064270101406405200300810406106287113061060401470620220010
3070501205010430160050613001014015108040530287012001090406173405304005

0120506100400403014706104003014306003015503401200106002030700130100286
9120010500201200625001670416148161200625004061030116704400130286812006
2500203015051670450105020010040110010800150120401550401610030117001628
6712001080761900101000400153016704060410702501204050404054001200170012
8661200107060570160301227002050403015044007016570160301216270020302286
5120069010020303070310620015501301154008400504010200340040015032030700
5040120010600203030703130050110700301202001240028641301026050670109400
6010130801630800803015004013012030162200800801020200900501286312006860
4013032001301506702400400501506403019003013011006155040302011055035305
0620400617502051030110100301061286212001070050570405062010802030405103
0130750113063010016601301108010300401064017093013020110306602003011700
5301401630110062861140108200120068010005012055018002001301640016140603
0110802006030140307010107003015307501301002860130109016520020251030701
0304040010580152400400201501030613012001091601163011006285912006761403
0900161341008050620060014061005103070550170165120040080120801130117005
5011620080205010700301301100628581200630050130651108130614006405062030
4010130617080501306120080040560805013050620304010130650610030600104056
1101030050610030600101305530155064504016700600400162857120010410040052
0041008010300302010030600620304030110802010200300530502010403061430670
0600400104030680020013016400161406030120304053010700301285612001070050
5010403017030305062010305427010307050110020080301307501070030120200124
0028554010307010300302025303016163040701402405102501080510301506703200
1040610651030704040050114040307010410080020013016400161406030110801405
3030501130128544010301217007040521090106155040080405210904005015200401
5070506803016001050107003012007008103080170016304020504050630306040010
5010700301530301403070104100180070240208007021704204020501023066020030
1170416307034001302853401082002006801000530301501530301405302008010004
0060164055040400103005040305070018040550130080070230206507001400601170
0180530660200653030125065040610501070030120103061205065070014006010501
0700301501565070014006010104008162570010403070401320040110307057040165
0120170016530660200653030121650401501070030150650406403011405012852506
3010070400402030703040011013014020305303015010210203070020521095202001
2405303014507050405108400402060805011030701640306080140061024040030600
4170018014001400300161170104031630201400501815034020103070601030402010
0104906158400180404040020304014061402040013016004006102614020301660014
0061026140204001407040061026140204014070140061026140204001660014006102
6140205016600140061026140204001540140061026140201012140061026140204006
1025040163020140050140206080501103070130632008800102004030110307013063
2008320070130110307013063200810407013011030706010302851401030707010406
0530301650530200106005080807040060105016550107240013200240040200101000

5052110500507080010501815035051030706010308018120505063200101301040013
0301160503015040470161003016285040102084010307053030165400110140203053
0301501021020307002040530210050405010700301507001400601140201650700140
0601030804030830140205040301809130110003021700162849401020840103070530
3016400110130140203053030150102102030700208007021030704020800702402010
3070506801695054702815034051030701306402010307060103040203040012006705
0013050013007030151309047025040652001059003015040402021105005067080040
0501086200380301513090302100504040012004050013050040205040403083011610
0030210403050107003016402050140101400203040501070030140205070014006010
3016504015010700301151011102848200109040301601023062001503014051614068
0020013011080501073704016200802050107003015026084001302847506408200400
4020307030306602003011670109165120730116400165130903011640101001628465
0610060180301405201030618020307004702200802050406110103001025062020030
0101301050506427010150401405806600470250404055030421030640530108004002
0011070030140550104405305050204010306405302100504050107003018030600400
6011402080020013011080405508030600400601030400183019030116304070640205
0401650401501070030153030147062845501024030110001302301130130660200301
1030701406164400540056701094005016404003040814040201030706304081405103
0701405018016306400501803066020030116701091653030116701091301002844506
3040704001402200102600530301501580620070405701916406010040013030100503
2006001030405400200401501030405501401014535303012164060100162843506710
1803014052010306180510040010653030130060010653066020065303017091050406
2842506830804030140520103061615070916150704060163061001050140550102402
0810305306602006530301103011670417001501050406403013061005012014050128
4150640301900301405201030613025306602006405103070530301801081050150680
1600104011621400200140180020040405263010010801284050105070700405103011
6400110100830140530502010501628395068002007040405504010010200801700140
5501024020810305306602006530301103011670417001628385010504064030122010
3061140620307004702504040550401001020080103064001040500150709163066020
0301265303012150401506306100106283740101004006040912009010301130010504
0104510530301640015010240400110115030750141003028362001041001030030201
0307053030150113001014053030110030600107022001103070103004010504040550
4065010303200103070103004010504040550406550921030701030040105040405504
0801405040521430201003060053030162835200190213011030613052002703020307
0010805012001550301630103030153030123010010283420019021301225700105100
2002150604120101300105040507058020090106130010504052210901080420025040
1510803012350401406030150403075010653013060050403200600101004630110200
4008014012020053070310405005501028030610405001218601037105303015012004
0040301283320010904030153030110301680020013016400161406030120304053030
6283250630708010140240103070530301658102604006540013090403070410030204

0018019020010930168002001301640016140603011080504053082601053030150120
0400403012831200650504053014080120065053053030130703104030504061512001
0420104030541032006001170018007021006801580070240014030900218605100680
5040364051006805040364051300100010103302008210804001403090020612830216
0830170102006053030165216085180680545070530301436611010300543104030513
1700110400814050140900301526081057010100221200602040530140701162008020
5010700301628292160820010100021300105040100720010530301653080080504040
5410710616304070140506081530301405107310302828200190213016263010030151
0802301004004001406105068016001051207301140010165130903014011001653030
1200207005070701021306520013400405105304001303013200282730190130166410
0030121510805308260105406011510802002070010670802004005015303015070014
0061021080282640103070103003020253030166015030303015004013015303012200
8001061300105040520065030530301104510200650103070200650200150560604040
0403063061080010154001074120105102200100013065101002003001305506400107
5202001240520033005040410061010200422062015501205313730153137108081290
4030181290401510805120300402052006503050040800200130164001614060301200
6505303012825501010040040303059007064064020302100504016306005010700301
5040130500406400150102404001101402010301150307501410030628244010820020
0680100050551200201470250405303015018050552002010504061105043015110830
1800200701610004002400301509084005042001501110002301103070402040011040
0801652002040013064020140011070030153030130140504040564001612001060040
5108040400403070501405624001208040205014010140020304014040214002030150
6100040021050107003016530800805040530301405105010001010400818120505064
3101305010700301808070400601030628234010307070601653030165308008050405
3030140550100010120010080165062010501402010140164020412705040501083019
0301640205040104011013011682050162822506830804004020307030506504064030
1510117010403530301103011626400650540050107504050108060010140403070103
0505303200125022008001013061605030140012006701030701620059001040305010
7003013080930161301320030150405220013011030612001010005010702140030161
5055014010140020304014061505101605061505400166001105026150550166001105
0261505501660016150540030670215021615051015021615054003067021216150510
1216150540030670230130150540050107501042101306505261031030705052004060
0250220080010306155040200590014013015054005010750104210130650536200805
0900808106505200190215040508008001000104001504064030303010062821506705
0901014022001026005303015014053010207120307004053620080169008081064052
0019021504016800100010501050406403030301002820506404002040014065064240
0140403070105303016402030701400401510805506206040200101000140061021630
6004400501815034020103070601030281940103070506304070400140253030164020
3010207165167032001801670320014020303010100501640203050700610104008156
3060044001308014811510801643400403050180281850620020700400402030703040

2030200106004020307001530511030701640306040061660501400604001040084020
4006102200101000140061021630600440013016504015010700301151011102817401
0200201007200652008010004040530506306100101404050620024020103061400121
0930305062109301650102109303040012109301640015001026003030506500102600
3016501050010260030304001500102600301281650102403011008301655303015015
0640307010610083014055010453030140510806107001040610281550630407010165
0120140240530320016405104101640540050603014051030704530040040610281440
1090070217007040530652006001301611050430110801650703040015040640301400
1308011000301400150908403015064020010501070030150128134010820020068010
0053030164020305303012008010001050150628400130116880901030616807010306
5303013010260108050102003154030165010201604030161022001003011030611640
0610501570603016402050403080080301630613040011013062812401030707010406
0530301613001050401020710530301502030614214815040402050401020714054004
0820064020103070530301308008013063062002050403016130088030122004011055
0180501910300301400169600702400105040650191030030140016960016702400400
1301650401501070030115101110281140108200806200530301501654004082006402
0103070530301308008013063062810506403070400130404005016403070105303016
5200600130161105043011080401030121700704053016504015010700301108053008
1803017010300400501506281050107003015012809401020840103070530301640011
0130140203053030150102106280850105040640404005020501142153050040301646
7040050153030140209007010280740109007050140052170052050182601700524030
2040050501150305062010140404003010056404007040607001130630628064010900
7053030145070656150105550626084006403070524020306010301404020516801250
6306100400640204005060301255061003040070012805401090070217007051080404
0080080114010804020604030520060013016110504301108054004082006402010307
0530301308008013063062804506270012030140553030145070201030618014530030
1216400110403070018014530057022001251030701613130630280350102402080117
0051630110061200106004056080501240015040640301650650406403015090056404
0070406070011306302802401090070217007053040550405200220103064001070030
1640500130150402604002011404055040102004013020304020302001060065302402
0301200300562608400130402050405290702080130121613501070030150128014010
2082164005303015016540040820064020103070530301308008013063062800501010
0419030150405012050115103070530301280010005015604016003016279950102700
1203015040305501530301240014153007022001453004005012170070301155070120
0410627985010270012030150405012050151030705303014005070305015604016003
0162797501010041903015040305501530301240014153007022001405481541530080
4056080501130114530040530502010403064053167150640200105010700301627964
0108200200680100053030150180168309016203070047025040162140050107003011
3012795506100601803014052010306161421541530040530163021004001306543035
0105014050040564303180145300570220012164001104030405004001509084030150

6402001050107003016279450105040640301103070203070040200862020030040615
0171301158205010130510501730165202003004061510501713018205010130105017
3012793501050406403015040580101914052170070453001030620060013014061030
1653030125065040640040400502050153030150104108058012001405240207006001
4001306543035101401405504048163020164303180105017301651050173012792506
2002070040040203070304001501024001101151080150307501615150800200806151
5030750152006602791501040812003012001060040050164082001620080100012200
3010062790506200801203018308010130550152200450705216081405018052530501
5200213020060011530153030170407041050406278940102002030130020070301220
0651301530113010083012030403015303011030170400802788506703200400130150
1030140205016150027040201501003060014050140400260880127875064030704004
0400502040205016301301030100130140400500230501301100278650104170301301
6018040610800702611406101505002301630110027855010506044708002001301108
0404005002304020301100278450671018030140540550116200290140240610301405
4001073105012783506208800400405504040400502061020020700402066050110400
8110200600604056404007006004001802782501040812003012001060040050161504
0820016150302008010001801504011502200506306100101041270504010010200805
0120550127815064030204001306151080161060600130110027805064030190015018
0150470501801550401503200600115022002779501030180014061001502061504006
1003001501030704002301000150220016301100277850627002040015240400502080
4020103070103040040010400110150204004030127775068301201510804056200150
3014055636880304002776506430160040505310804056080501162006060050107003
0120103061805501071640400806005040627755068308040301405201030618055010
7164040030100500504080277450630160400101306700104061040550102216050113
0802006903011080600805017001802773506500702104061010301600720024051012
0065040615301011006554030201550113020400202004001401080183019030407011
0307030277250670320012200301100400640301405481131700110400827715062008
0081050122002027006701627705010911030030140017405504020270067012200301
0062769506809010140240307015085051010603015060811051040030127080412768
5062004110030405470501402010200505011030701501627675010403019003014061
0030110801050307034001308022002766506470610140105010200400140122003010
0276550620200300101407010301704008054153003016210100030140301702764506
8090101407053030150182608007021030704058007021307030610030600140253013
0202570030170015301504057040501201406430650405303017006004001140276350
6270012030405501610083012405150104001302276250620086040010501803010053
0305063061001060276150640307040040400502050151030702001310130620010310
6561030030204006203040541025040301002760506100400400130801301005303050
6306100106027594010900703013002007030122006702603014001614060301220050
4030100275850620020700400130801301005303050630610010602757506403070400
4040050205011510805040680020013015040303010027565010306130120010916011

3011700550130210050401700515061216508501504706410030275550650067024030
1501114019007061212004001502061504004017001116301100275450630613013011
0014030500401630110030227535063010070400130801200155030163010303018013
0400600153064001040106101081010700301656275250620030084005103016800200
1301108040201200700107003016562751506200203004001401301030100541080130
1620019021301670406030140203013005011070030165627505066030240510804051
7001410430021700701700121240510307015084008017001104008274950670200800
4001014064052200301650120400601140802170070301240515070060014100306274
8506540701040550110100091080163303020080050404052140150803002064051504
0820063062747506220150309120090301507052006001301250650406101305010700
3015016274640101004006040912009010301405670440030205016274550101007120
0301200106006562001060020220031200600801320060040530160400401274450680
0200704040520020700507040580405200207002405150104001302505108050406800
2001301640016140603014004608030405165110083017024001630627435065200120
1008303040520050020161008301240513302550352506306100104012742506200205
0405304058040530660200168020070104030401274150103061301405121400110403
0140405134013061003011620024104030801274050620035400120040160525010200
2204006040273950690205040040202110070110307040400502080402010307010304
0040010400110140050120410027385062009050400130150404020501406103011620
0134001302737506200131040517001217007030124051080200400401507006001170
0110400827365063040170153040520307005064504030140701405306170055040520
0401000108040526301003022735506403090010130405610083012100950102140020
1501043061570606130116080508030205013062734506100216015304056400120010
6003011080506702001601020103061273350670312004052200103014055015303640
5263010061640011405064006105010700301627325062020030010130405220024055
0107003016273150650406104052200400110124055010700301627305061008030040
4052200510300600504040550107003015012729506200703001013030240012001060
0301108040530702001605027285010502630140504052405440501405015062608101
2727501081040084054002004010001080405200700802726506820080405104301402
2783020120027405501024052004011670910040080272550610040018040202200150
1654816540140204004015700550162724401030705063040704001402105011830190
1630407016400121093015040163020306020030115101110272350107040620012001
0040017005622001030114051501061651015401640102004050211503070362722506
4400510405307030214002030110606401501040014100306272150102030540301504
0165012080140562700208027205064217015030140540610061503050040501020030
0230504065011630110080271950103017014061001650120616200220400601805103
0406506702008010301271850102405019306061504001101250620015516001610606
4015030602001405002717506504061013040610030147028050010418140515030703
6180070240580070215070240018056270020153066020054011314030201020040040
0150306020015030602001405002716506200600140060101406153031540150401002

604001402715501020060011506200100405470250401501300501405002714501040 3
019003014061003030147028015001000405150307038010083012581090301405400 7
006001802713501040415050829010303010301001407030110027125062700201402 1
050200905012200301100271150105040640253050850140612700205303011030701 0
200400801303200130165501271050105006702402508501406110850640064050110 5
043011504001108130110550127095064706400140304001510540015105270850632 0
060040402050114019007061212004004040050206404004017001402050140204701 0
127075062006016003017001402050140203050040120030024040070915010306270 6
506220030040014040220030010655040506302014001404030201104020305004020 0
300213011700514011050430151108301108040515080200400165200600130111003 0
216270020616200802050107003015406100504013040301301100627055061004004 0
013080152001010005301504040203014053030116427015014055040130660200405 1
080150306020018027045010200600115020010040547025040150130050140500270 3
501030400240301502050164001101302030700108050127025010307504030120010 6
004005016120200124013075040105030750122003010062701501040301900301406 1
003015040150135010700301530304408301301008020308030110307020704050406 4
005014001064006011700180270050610020010004040550116403090050107003011 0
801050291600400130640550403061003015103070100260504013012030516501050 5
001501036730205040151080203060180200650400301200180615020040113170018 0
150108661505010701220308030170509015015103011501086180269950627002014 0
210502009050122003011002698501081040085216902200400805503523032001301 6
550126975010306130115010121108017005215070406014052010130403075013053 0
301130063064020103070308008040010501410200104020305004020030021301170 0
514054061005040162008020501070030113040301301100802696506100400400130 8
015200101000530150404020301405303011642701406100110301100805406100103 0
118650150306020014100306269550630408400203080301103070615103070626945 0
630201400155040652001050020708015040151080402030615506921080140404020 1
010060505200270304017050130110804020305016269350103020130301000290650 5
430124002504001501060200695040320060040052003300626925063020140015504 0
652001050020520168015108040203021507016301060050504040015035240203015 0
130050180269150620041100305221570010307015016800200130110805150206018 0
200410021401406030150401503075016269050103080110001003060030150701502 0
140610010120097026040201006801501003060041003062689506500702400540110 1
003014061040205014050026885064001040302030700470240205014050026875010 1
003016003015060815303012020012400802006001110030600515013005014050014 0
830401900703011506602080140190070510008004030115010030600805100080040 5
100307030115010030600805100307058095030115010030600405002686501020402 0
012001001080580950515030703405002685501095040530130605040501605013011 5
010030600410030626845064301600151080405606420080301506500200105010700 3
012683506500200163014052010306126825069008018104054001630901030704055 0

1070030162681506701200405457064054001501401304055010700301626805064170
3014052010306180203070012006101000400215040802679501040630402001010004
0550180405501401014002030401406140531671103070130126785069008018405362
0080304055010700301626775063070180512073030405501070030162676506800200
7040610003030150704055010700301626755067030016004054001309010804055010
7003012674506504064030183080141002673200109050301407050610306403014070
5080402013064065530301216409040070165120730116400165130903011640101001
8060150301103070145300165062040064020103070141053003066020030150620103
0170051080630210050405010403060403014020140606540105120021402010215304
0320085040501043011080402010307030703140640201240031655415310085303011
0801645136267250683080400402030703020010600301163070801640202200164270
1616436016167020200116504015010700301151011102671200640130170320040053
0301103016405803060014064051041015010214040307010267020010902701040605
3030150160150301504061306020052010130403015040108099010530301266971077
0106100305303015015200410010085303011620041001402668263094030162301930
1807080055040567001005040060101301101030021270030140523060105016530167
0404003163061212700161003060010503053030150645040506704400501070030150
1530167040400601803050040220080060150301151011102667200109040301601026
1620080205010700301530301154706200150301402030700504020030024020102501
8013010015040011014051030705063040010501070030125069601050641201020020
5040301162008020501070030156361080802007040040015010215040011014051030
7010304004001700162666200109050504050104030190030301406403070524053060
1030140615019306052307501040301405303015064504050642701062665200106010
5303011030702030700501214002010802030700501800200130161406030110801404
0307010530301501403070400403012664506803040060040051080404005020140108
0540110100301406104020501024020810530301266350630407040014024030701530
3013010080206304135016266240101004006040104510307030205012022001030170
4162004013011080205070715010130805620601504051206050401503070354013020
3026612006802030501605013015014020101081040500402040010401040500402011
0811070030165626604010820080620030601503012530301501550700121301800200
1301103070701004005011406030120604010652004012200823011080102003400203
0803016800200130110801404020302006006053030150120040040301265941040830
1105010003016530530301501680020013011080140640016140603011080140530265
8200102600801093053030150152008006004080020013018290400801401406030150
4030750153030150120040040301265720010220301103070301655303015016309123
0165550645040506704101405016100830165530301501220307002656200109027010
4060530301501630103030110802001550301330610620015503011080301030301330
6105303015012203070026552006801000680703053030150153030155020090501030
5103070101000240500522100670140305004022100170504062030700265440103084
0103070305303015016550680020010130600440405503060041030265350101007120

0301200106006530530301501615060811007200530301405501007200103016400140
6116304001004050053030130102601080162003155010700301626525010540217007
0405302010306180150400110121627002061620080205010700301626514010705030
1400150310804001830190301163040706165040150107003018040550102402081053
0307001040610203040301265040101007040610217007040510400110615400100025
7016030140510400140010400855040510200401080162008020501070030130171013
0626494010100400604091200901030116504015010700301415305303015016405263
0100530400260040080521650406108020220050401008301550140307030116400615
0107003014030701030626484107021001100300108030501040301900301501640526
3010051060110030168002004040526301001080501070030305504008050191030030
1101003010140307031030264740102084010307053030165400110153030140208104
0500501910300301101003010140530301600605010805400105040110805019103003
0110100301105040400170011301102501306306602005040203021005040150306020
0114062646401083301218901201030615010731704015040011011080167060501070
0301626454010200201007200652008010004040530400183019030116304070616504
0150107003018026445010240200107005040203015011405016015030115101110301
0026432001090403011030161540070060014050054030190010561530400103040151
0200100504050101206264250647040014040550608030120202200450701406105016
5470653030180306001050306217007030122050630370400601062641200649030110
8010400301263010030110407040050203062001902130110407040013015501801525
0670406010501700161152506301007010263010040530506204008080020013011080
1620010601040308012640410300402009010065309704020010261530062007010307
0510616001058054030190010561515020305151020010050405010120802639200102
0505012080102080405400700600140500501020080120303040010304018010606402
7002065010440218901626389630406100640105120021406100626374640500641706
8650406100405302100400270020410080206270020105016263620064013015210017
0530306200205040301507016550680620070403012162004016512073011640016513
0903011640110018002001301108040515020405015010700301263571077010610030
5303015015200905010504053030150200905010306120010500205303014060115108
0200207001043160406400163090670102670401690400404530800702240580070260
1503015303017080413063065303011502200163061001050113011008200101000240
5200110450401632006001501070030126342001041003040520090501030705303015
0161640309004055012506304001100105010700303050700126332006802050166003
0202810130530301501165040150107003015070708014105303015012632501050608
4030120030026402014514010307053030116200220400304020301520060060203070
0204020504010610040030153015010502030615614041306154068305303013015010
5030263150620020300400402030703040203015150200600602030700202004007040
3016705011003011640709161550401630208015265034002361700180801690151030
7053030140601162002070018020010600151080402030530301200101703005040402
0301515030703504230162630506100805010405150100720014040651309030110401

0100403016405219011401030705010200219030164052630100400303653030120020
7001700150107003012629501040026004030120030026164030601530804816530140
2053018040170501301540105250404051007200140103070530301406011620020700
1030120605040150307035401302030626281001040070301400102301103011530840
4050010406040303110301708015040151080402030262726301003011061004005040
1550180530301200101703004090070105040620307002626100108605012040108081
0200301521065400612001093015809600400801406030150402006001405012080530
3012202003001050406525010202003004020010100053030180508262520067301306
1001625040031650150061301504060320030116250400318040201030701030400101
4013014017050130140203040030816522004507053020010600658053030140014020
0840900701050406203070026241001040070301400102301216806910306405200670
0501680610306405500804001680010010304050026232001010080301601012301164
0709161550401630208040170501301540105250404051007200140103070400140630
7040401101108053030140601162002070010640530708015040164530010302622100
1040703803020504050104001102004018003020103070613013200206400110383012
6015030110805070016262146360301702020030165010401011003016501080101930
3010400102200596110103001022020030040013050140010230150120404010512002
1301501627001626204010301217007050405100700504030900241830125108042001
0504064123016510808020170301166060150303051503070310700301401200830143
6040301653030130102605070506490106162008020501070030150126194104083019
1200901030116456306100301504021093011030116456261820010200815108040560
1230616306306257005040200616015040151080506308102001550130115400840050
4010200340040015034001830190301163040706165040150107003013060041053030
1501261710010200830121700701610067006151080164107014010005040155040163
2006001050116412001140302026164104850407040110040405306261546303301640
5506921080140522005901026144010408301405606200100680504029010200150504
0211050040530400709100162008020501070030180405220010801640904006001501
4090600501700526131300101403070801053030150140200204050405301408053030
1505105040621700703015103070100820010500206601503015040200105002062164
3016200330030163012330164063503016200401003016604030030168002001301108
0504064001614060301108050405304360105303015012004004030126124105300103
0030201030705303015015401101003014061040550102309080105303015011620200
3001501070030166063403016102001905030165010102190301616415501070030161
6504015010700301501261141020010504010451053030150164001501024001101515
0307501203070020626109001010001014054102050257001030520090050103080709
1001030405001406030110301226024440103080520060013016110504301108053030
1520090501050305015090010501205040260941020010140307080105303015012001
5501301154008400504010200340040015034001830190301163040706165040150107
0030130600410530301501260820010300703016010230610306403016010230570805
0504022001001520080050403067041026074107023013013080030165203070057080

5010130140652008001013014053030150645040670410260650102403015012006060
0301652030700520060013016110504301200606005536103070230100501550400805
4002190150165250140912001060052190150180802008103070530301427010504060
1503015040626054102703030401309002601030530301501620141040040410014022
0307002604100102008301217007054011010030140610510010700506107600110504
3011080530530301301026050703080010305809701050150026032001050402140020
1306104513064030702001010002530301108030413105040601503015040626022006
2100301108050405007021053030150161510802102001305104001570160301501626
0120010410010300302010307055016104006403011010810550161008301655303015
0122030700260031052367302050404004002501640022006400740051140301151030
7015030750117001805440158002001301102004006110103004030704702504040307
0101301020302004070301307002001103014200105040402050406108064001050404
0205040640204300116100030240030405001308094020320060050405001040604030
3110301130050140401820013011080200100506402030501025030510030600402001
0100065100306004051000800405040405005100307050404050058095050404050021
2004005040402015010030600150180500702301504021020010804040050205016015
0301151011102599200107060301217007010301510451065308001055018051306400
5040550151030702400202598410200405019103003020702400106403070200101000
2530301108030413105040601503015040625974104300530301217007050203061020
0120602405140610200120606015030110200400615304083040840017003020708004
0064007080020011407057080020040302030570040015506200400406102596401090
0701030057016030153073075014020220016100400160150301151011102595506809
0400140103070501704006040301504082003011502200610083012402081220030110
0259450108103017014004064020305504008053070301020041501625935064040020
4001404030701063061003015040200533014030701055012592506470640014041070
2401210200100110200415016166010307040204005070013010080163064005018025
9150640306040404005013058048165301402053011405011030110861014050130100
2590501040301703030540820013012015030602001140625895010421704061003011
0001302301700510805012588506830190301104127015500200108002001301501200
2070030147025040200627301108015024002041003062587501030701801502015011
5010307014706541070501003060030611501421402024002030303036030110920140
6030110695040610258650647064004040050201070030140204061017005520101304
0301405110030400400620022013017078030140550781013025855064301600405608
0501400540030011401080405615601060850670406010130258450647024015507020
1030611050608301150404053040010026050107003015012583506704060101301510
8040562001080715108040530258250643016001510803020615642006140553011306
5501206302581506420016153040400501405053290853030150645040506427040014
0640205012580501040301900150203021700550405308010001080150204100150301
0611016200802050107003012001902159060013001051700180100830147063012200
4001001625795063060501024830205040405636314063631104008400801700110400

825785067032001013040550115150203051510200100103070401200862577506240 0
120530150165107060305012008020130805040640656400183019030150403040701 0
504080257650670312001501030130204055010240520040116709100400625755064 2
701804020220015016548165401402040040157005501257450104030170303051011 5
502161515030703615086200504015108015060080508015320080400509081104003 0
162573501070300160015030165012061252006121000200150506704106400120010 6
003011080506702001601016501204055015367530150830901610108105301502566 5
301502340060180257250105002001630120010600400501614200801050200700400 1
302200522001041507001110200207625715010504064030110350502030700206401 0
003015040515010350653015023400601802570501040301900301504040050201050 1
205018260400501130153011305014001403090030110801041508051030702004100 5
050305015090080128001100040257007001506503011700625695010830190301504 0
405501150400408200108040515030600416256850102002190301504030203080203 0
117006601020041630107014060162567501042170303010200207006150450705040 5
408200405704040530500406530515150104001620080050405214015080300208053 0
150234006018025665010408120030140820014005016200800301105060401050152 2
001041507001261016256550109008018405301502062030700506413040705063040 7
010653050690610001050405010911030030150406256450104030170103003020215 0
206151080150202001210400301800200130110301520040121020034005809017081 0
200301501401030603062563506200201300404005013058040206012504040205090 8
400304020306062305705090515040307062562501030701801502062001093016508 2
601030123301466147040150200600606140307061402081501040011302065014010 3
060151504058080256150104513004054020830150206406100301405010005108040 0
300805070015002008301108050140208107001501401030606466146256050107040 3
140515010020010001806604061001650120405501150400110121627002050107003 0
140610030150405150200905062559401090070301220020301504053051651501035 0
805301502340060180302100504010415070011865062558501083019030150405501 1
504004082001080515030600416255750101006018066040610016501204055015001 0
126003013040704004005012010400301510200100301504051501035061403070614 0
208515010400119630625565010421701503016501206512073011400101651309030 1
401100164001200106003013070804051030115010861615020040125064510540101 4
051503070362555501083019015030703130206530801502610070106100186015301 5
025662554501040301703030151080150202001210400301800200130110301196306 5
150103506255350102006060013014051503070380141020521641200162552401051 2
002110307014013060614200210506202001501101503010025515010307018040400 5
020501402040053011620090501656100200816301100255050630100704001308015 3
030150645040506427040014030640203080125494020200800101306110103004020 7
080501013014053030150645040506427040080130110025485061009501013065140 4
004030704100304056062001030701660205040500254750640301900301404005014 0
205011630110080405608050110301167032008025465061009501016501205014056 3

0160180170054052001022053070803023011002545401051200211101504005301217
0054003070804005011163011002544506453001040530703060150301501070110307
0521640018016301100254340105120021530301100104052002070010104008015070
4060163011002542501040301900301504030550115040053012170053070805040163
0110025415067032001051030140530703040530120010220130117001700340530703
8025405010200244016306400501470240204015090150410201305303014006253950
1045130030150404020307001030701501650520098010700301800200130164001614
0603012200402022003023011002538501027013030150404005014011008301215040
0103116301100253750102403013080010804020612164040050140400502041003030
1100253650104217015301501211504361630110025355068020170153040400501104
0030130105001404003015700514054061006510213030110070012534501040301705
2150206302100504054300200401051200211501040014100306253350620020504053
0404005018015150307501202001240200207001700562532506100803004057016030
1504040562101000301240522005063006001050107003012531501010040040303012
0020700611080065011002008030150620015610606401501040014100306253050102
6018150210802061521501040013042006005040528301100500405012050161101030
0608050403090040013080540110100301406103096010030150107164030170800506
2529501040301900150201501150301061105030610010302022002170070504058805
0405400604050103062528506200700501014017001170430140903017040601013061
0863012402020070050114050130100252750623011000301405801158012009150401
5901005050800200130110400150150150620010130801200407030140510307030191
0400840512161306515070400403022526506289010150404051306405608050120090
5050670109400601013015050645040405705040400553014053040125255068002007
0404052200200207005070405302504082003015040200155030163010303012402063
0201050403010025245061075400601052165012014040550401620060060501070030
1210018802030210050403060200210754006014100306252350620090050104051306
1542005067010940060101308040540052400805400100024051040014003022522506
2009050104051306405200659005070130620015030140556365070506802010130501
0816200802050107003014030701063025215010100419040400502050147063011700
5104004050630610010625205063037040060400130801040011014020102001603037
0504050160501301100306002519506200801204055040820030120020700240564020
4005301200207001010700301170051167513012050670060040010501162008020501
0700301201200170016251850670320040015010301655040080200106003016200300
3012402063025064006403015100101700608050302025175064301600301405804004
0501801430600301203021005040200300230150307031406251650682601020308010
8030202004010030166040300301620015503016301030301100306001070030165625
1550680020070401540011015070405619006808401801006014060301150307036251
4506440051040530703013026013138015108015030703640524104040050110601620
0800200130110801503070362513506504061013080110810300302014030150401503
0703614051501004008080110040020014005012080020013016400161406030150116

2008020501070030120010403061251250104030190030110735020307002040505351
0735020307008055064504053011050140550403010010504062511506100803004054
0010300600504040561080040020015040301301506708030010130640580306001406
4051041015010214040307010251050630407010520040124056306100301255061002
6010130250950640200204041270302550182601430650408200301700600400116301
1006250850642701801501130153011305501510301108650130130660200504020302
1005040150306020011406250750680020070404058010083015064030701013040520
0500201302103021005040200207006107040504020020700170054020501520021640
0153010055301550645040167006004001401250650630160104056307080101407030
1601013025055068090101407030020070301220053030150182608014004608030530
3011301553011405108050120630250450620030050104058002001301504055301167
0060040014012503506200400801013020015503016301030301506826010250250620
0608400601013065400412705070506200220400601013054507050406800200130164
0016140603011080504053062501506809040014040301063014020306100517651700
1805100040410803091230110307010083012807001005030225005010307018015020
5011504305040515070060040013016530700600400505011504200163024995010270
1301405501021406800200130161406030115010030600140624985010440160014109
0840515030703104008405167042030400400301714080249750104030190015020150
1150301061101630110024965063016040040203070304020502016040651080404008
0200400114010301167032001616800202004001302495506800202001015504040517
0011506012166081140308024945010200600114061001547021501300501654030190
0400501205102001005040150409010040206249350630100704001308014020200207
0051080121400204020103011503075014100302492501080200604030115020305161
3005050406405150103501804706301405150100490405002491501043016001650120
1406401709301506302011013014603405150307031406249050640307040013040400
5020501200207003013051163016018040510301108650130132001301203021001503
0602001140624895065040610405801151502030515102001005040405302100400504
0114024885063061301306020011402051012150400110308020070130065302512004
0080130240130815001100080011630110030224874010307030170104060301656800
2001301614060301108030610030140307010102200301100248650620090240040400
5016200860301506400140080140203050040200300213011700530516403090050107
0030110635030116200601640526301005105130248550627030104056567040400601
1301500484040522005040200207005040405104001101402484506800200704053080
1000108040564052160860150303022004001001248310440051504061066030191200
9030121890150405064030704006080169022004008090220040040302030100248210
7600506307005050130210050402040011017024005080130660200150103014003060
2001130630150220016301100305302100504021700702405150203051150163062481
1030613018089030110801405501024054001400403061522005040510121501040011
0130630163011006248010610040030305210017030162010072005050850110072002
0301605013015103070200299016513090301220305120040162479101002162001060

0202200100720065108040550400805030110504301511083015200574055040131671
5215070400401401030120105010705044040013062478108002004002030703020015
5030180120091682608030103030115015040615262001000302100660403003017063
0930210020220044082826065063061001014010307020029018024771040604030316
1401730501203020220050404001002605403020130630624761055030110306130400
1101302030700108050140550201604010805063004010506200100301504040530210
0150203051402040530451040308012475101002164300152006001301217007030652
2004001101250406104030680200601504010735020307002062474106050400406103
0120307002061540010605080150400110120400400120307002030110024731200109
0240050204100610407011050400200300840302200301100247210407015401101003
0140610520030085061205080053001070405305018010200207005070800200701504
0624711010030010130630800101308010145702400150408010451050404020501040
0110140180647080070230402080070217010403155040192513011002470104565103
0702140080522005124003140500246910610008052200404110907065503301100200
6504014051030705018090600101100809614054001660140530400428015504013020
1802468103021013020304064306003015200330010307020304130540411103011005
0191030030151030160660680246710880040013061510801409004001302050162466
1020070400130615108070634001301203050124651010030040080550330150401402
0503200600101308020367306203064701700550140411101503010080246410216010
3021130116436080404130164360152010130403030150301007001624631407705304
3504030610605080302100504040411030115045704100306246214030701050472200
3010065108620103011080010010501302100504050120010030123037040013061008
3012030403015303011030170400802461120020700405305004810615061004001040
5307030410706301504051080150802009061102200701501200100515030750120307
0020624601408005130614030900801600101308050406406564001830190301504030
4070105040624591403090030408504021600410064061010030110830305636301400
5070624581403070525069108101306405803060014064051041015010214040307010
2457130610053010800200650408200301530507001504013015701803003017080504
0013070010406102456160405130170406040013080504082003030400169013014007
0300600653036701301070143015067024001070010406102455140040113061367015
1080102004001302454180908090170110015200700108024531806050102200158060
5010301008030123301507020506301601062452140610130140400500230501510010
2009405305004013061001070015063061001014024030701508502451120030070130
1404005002305014055010250640080160040010245011002007700104061050104020
0340301200300850620069030110806008050104061024491304085401101003014061
0405301606510805010430160024481200765401101003014061030408105501805507
0800200701504024471200207001504305040201501040014100610026041001401250
1504020103070901005020307002024461403070103003020706066513015301130107
0030153030140205301140501244518060504010301108055080605050304050055010
0200850301802017051030704003090010700301205301103012009005016580306004

0050301470640203050166016040130306100400501511083011080203050180257001
8030110024441060805010304003066020307002061540070025080306602003012005
0015040580021004008002100805216200902104030140240020090230110024431020
0401601102029600140803011002442103061002100200400403063010101200601105
0250102400100200803061004005014001030060010501106012002130610400108302
7006001400130401502111030110024411020040140010907080150702400400130124
4016308004054001012007001207050401405062001511030110024391060640150103
0170320010104008501080201705103070820025050301630110024381020040116701
0916105067024001805040820030140202200501652404005040080140501406100110
3021005040506200154053030110041003062437170805013061200800405302030401
0130613061004051030170320010130150620010130801243610605080106064053016
4020530117005163011008020016600530146031303704053032006001802435102004
0160301101003012030700208015150807001008040610030155010750401200176115
0304081502030615020304022047064015080306001140163011002434104706404040
0803060018040202200504028001000402010307030810501404004200140145703014
0201030703019801150608147064020220040204701040301406100110301100180601
5012800100054061001030110606407032008024331020040160301405308001620470
2504020406100150400804100150180301100243210800200400302200201030140030
3706102005001103070130614053011002431106064011020406100507020303701140
6243010440051405001830190304070650401621400504030200180100030105016242
9106541008010280010005103070303081050406102800100040201030703081080510
8016100094001306402015010072001404001210950401630202428106306030165040
3014020103070150307506504010130120069301250134020150470166402064705040
4020150103501410030101012006011050211024271045140654061005067020080308
0016242640510300100014040103015040405103001000805465032506702008040570
2400180242510300600400130612020048016004001301602102008230110801100102
0094053022008001801041270220060150110606401030115010861410030624241020
7400504017320307006151080501043016002001550130115400840050401020034005
0470400150324231030703014001320043014053020103061804001830190301304070
4100150406405400110504062422101081013061510804006401013040505353050180
1402003405220040011050405501242110100216200106005303016200860301504051
0307015040052002011406150110196001503020080100010301502200215040115012
4201105043015110830157005108001004001405018001100400501140800100180150
2009801070030164001501023015040150131401030702020050065050301630110024
1910100216121700704300115010150403070400306306005030170670031080402050
2309013068013060050404020303200164020104101507091001308020086030140204
0307010700301402020010220305501402030507001501302100530404005040130110
0241810606406506200152200215040116301100143605200860301101003018024171
0400150010820081603018308010130620081604102016705090140501167050901408
0100304002050104010108014010030162416103070130140050120501806004001301

5030100241510606405801060056080501080603618024141070604001550140520086
0504051030130106001040510907064053012817001801610030130230110024131010
0301504030615062050501140161010030400501140110606401101630110024121030
7040060150404061030183080141006180901640010140500402041020167040318024
1110305004030140204001001020092125700106140520086024020800200150404020
1320060010501501410200105012008160305017005501163011002410106350301162
0060164055010240520040116707150400802409102004008015040216004100621700
7024020400860108012700205303011030701620040080400130402030106106064040
5303011002408104001405005410207040380506702008010306400802407108800601
5030120030081050165501073014061040204706403011002406106601501204040050
1130650850580306005013014706402050102615050102307031805305004020086022
0501040015030802405106064011020200860215080020015040150320060040030150
4001031301100240410216270020801530201504001101515010200141003062403102
0060015200140040203200600501550406402041070501510806402015010030600155
0402402105503011030613040011013020307001080501402040170501167020016163
0202401104003004001250504013167152150320060018014014060301504030750161
3026015108040203020306061454080020013014020303070310700301240010605010
1306102200308001013021400201080102200450701540307030110023991030613015
0620010030130121408030110023981045405005100306001030030201097011070030
1150220030110023971060640110140202200504080301100239610306400627002050
4010307021700703015011501030110861410015012395104530170240015040103070
4013060301620220050405101220150103410040527007040013063010101200601105
0215070403060200180202200130660200150113061008051104001802394102001670
4060114020704010505011801600400130301100239310100091050161150103070920
0801050180160050150501150220013011002392103006001061200207004001053070
3015010301306100530130610080239110100095501506702008010301125700123901
0200207001080110504001306104001101220660016400501257001238910608050302
0400705099016238810606401102004100103070400103405005010440305110805010
5060400500230801506400802015040080640100030150402015010350801608050400
3040010065078400130615501070200100400102020401103012015070320080530802
0105040103070402030413053061004008020400600110300404007001238710501070
1030707050904003061050405284020103070400101003016530647061030647057006
0011030816030124010301510030103080401030110805108070010018040062140030
1108051080700100150123861086101402040110301150108617001238510200600152
0040201030701505040410030623841060640110203066040010400614100301100238
3120010902150240050202050123821200105002020200207005062381120010500202
0826050102023801020040110805202003001623791020071524430012378106001506
2001523771030515040120010761030307031623761030610016510080102375105016
0305040541007030308162374102004011030200601062373102004901030820030012
2003011002372101000955015067020080103012570012371102002203011504001101

5040201020050302370102006001510166020010100050401800102320060040020815
0310301204104040800162369103061301154002001060154107050608060040013061
5700600301100236810706040051081051700180151100301802367106064011015100
3013011002366102006001220014015108010306104050100010307015230051615103
0701206400110190701053011002365106064011020501040102203040014062364104
2004008051657024001615250406101305040155070205049010130802363107060400
1402608050302010734003015108060014120151040015701603015012362102002070
0305130903014010016105042701801501130153011305303011501105050123611086
1014030704040060180204002004006001150162360106960410040301416301220501
2010307050703060018020220015011050123591060640110104650151400114030802
3581045200150301103070431616021002155040402010400110307030120015040060
5011050116500204015305130301100801200150101200700123571060640500104820
1400130562356105060830114060130153065130153011305303012355108060016200
6030140307010550180306100301220053400501623541020050030140084001406140
5501021406800200130110801406400161406030110801405302353106400601300200
7030110307050408200301235210307030140016140603016800200130110030600504
0401301075040023511030060010504030520020700400130123501010030040030501
2001003012010307015030750114023495923481720200405307040604006148150404
0550406084003055020010050404053021001502030514020623471430140610052200
7005040065010100400403015220030024003020501603025150200601014050180234
6146504082003014053030703106040018301903011630407061650401501070030150
1234514200805401101003014061051040014053020623441470405470640519081410
0302343142705040820030110400113018002001301640016140603011080504030205
0123421430670060040010501504082003030101000250101406234114306504082003
0301670450123401453012330120060040068002001301100300504006550405020098
0400104001614060301412040023391411101030040400103410030233814306504082
0030170060040011630110062337145705040820030145070700600400150401301570
1803003015062030401013023361420064050531030150104020034030110066050623
3514806504082003011030150101004004030120030085040610233414704053047050
1405014051030703037040013080233317140576400501020080120301103070501091
1030030115030602001150120040040301233214800405103070506506201064054004
1270250620080201060130202331177040530165062010305530153030150645040167
0060040016233014200801501040011063061001014055002005062329144021700703
0150405304405063061001014024002050601302023281457050408200301450707006
0040014012101000301703091232714306613014050104006130301100615040011012
2008020107003014001012008012326142004020010600612165002022004507020010
6004001830190301400110100123016104516440051501070030153030141071062325
1450380708001615012040200300655040506403070106080570160301140162170070
3011401506470610140161200170011040081440504082003015304440103080530130
8003011080501205040301002324110102006150015001506081405502001005040405

3021001502030514020623231104505060816140110040200106005010100102008030
1101165040150107003030162008020501070030130110040015010215040011014051
0307010304004001700162322110500315108050104030190030120070050616100400
1501070030110350504050023211108001004014040082022001030705012015420016
1301402050405016232011030901521030614055010700301240307015085030405002
3191104007050408200301103070430014051015701030030205040507075050304050
0231811050034050533068405502008008503040500501091103003016405502003008
5030202200680231711010300201040306302100504051501003060015015016050130
1200207001013061231611083200600180660304004014017001150160501301306100
1062315110406053040307040030554004127030200299016542701801405501021406
8002001301640016140603012200231411060502022005012014062030700501021406
1508030600140615010410150102140530202200200401213013075040050140623131
1010040050120504015041270504050020065010400301550330120304002312110300
7065200202151080405100720040530614013060130116100030151080506704060101
3023111104001405470650120550121010003012541270504082003014706104003015
0470400150323101101030050640309001013065503301506306004102010306180183
0190304070650401621400504013012309110100050610030108066080400165300301
1670240016513090301167018001803060040547025040803060080230811020261436
0162006005040820030140011014051030701030400400170011501024003161501045
5040406301010120060164010512002151020070050406865070401503040850404064
0415102007005040501010250301504040510307053030140705015010700301201030
6123071103070150120405150708020062306110250110010490501205501601020041
2140020301108020020700162305110800200405220045070501206512073016513090
3012530512004011050120623041102501306602005012064706301100419050120550
1301070140601214002030110802002070016230311025050620015516001150400408
2005040530150256623021103505150220010065040101301200693012501350405150
1041506230111025013066020050120619030600405012055011060640214002030110
8020020700162300110307010049050160304053015030703615040040820050404053
0150256622991102501503070313020626100701061001860153015025653030150645
0405064270101406405307400701140308022981101003001022001704250620113011
0607010220067041653030150645040506704400140640203074007016229711080810
2501205501102200203020080100040060160201030704013060301100229611030401
0502003516205040320013054005040040305010304010512002111010400530150704
0050121000120013011002295110306501910300303050620400805040820030150402
1700702060401050180160011050140021110229411090705040820030305012050191
0300301501501910300301427040013040021110229311066019120090204511050702
4001802040011040301404030703015040105013410010501400211102292110103002
0507010501000101306200902101306704060101301404270400403040021110510213
0301100700122911102501100104905012055014010512002121400203011080200207
0016229050670320010150103016151030705040680020013015002005050850150122

8950650406101304056530801000108040562004013011080010070015200608301406
1040520070050162288501024030130800108040610301506403019003015020301505
0640011040610200902164052704060122874010900704061045300405040162008020
5010700303030106804055010250402178130180304006001802286401010040060409
1200901700556427018040202200610220053030150162285506201080502053030610
0101405018012004011080010017001550182604306504070060040010501530305012
0140228450620040040105108010700301100830130610040102004050211060107020
3070022831108500702140610640064014061064004306406101030704013060301622
8211010030012001231050307031040306104004301621200262281110840040414051
2073016513090301210501906164005020140501011202001240105030703622801102
5010503070362140020301105014001530301427010501301100227911029045403011
0805012050404030205080102016301100510301400200130018022781101000220401
4005012014066601200401206215012014050620015400600111022771102008011010
3004001034100304010200401101630110053040840015406100524004001802276110
6050140610301403020150308014069050408200303040020070050105011030610080
1481200300230150405010200400140180150107010200100610220030016103020802
2751105031292002010307091001604005306005030170700322010301107562274110
2006020400840020220030703410010507840013011540084005040151415080227311
0605040110605040050206170053021004004010504001030110400301100530600503
0170700310301800160040301151318022721109010015012040524007002400501805
4003040880227111080010040120040150120615040540820066015030305101530703
5030650105103070652022003011002030700203011002270110100022014030620030
0210506060401040306401301000103050620101050140030110022691102071401301
0002030251302022003066020015011405013011002268110100400400502050120504
0504082003012700670110501400301100226711066012003002153030500404008015
0862001510301150306020018012138405506450404007006004001802266110100200
3001501204015305150404007002400501700140102004021400203011080200207001
6226511085007021040610640064010406106430640610510307040130606226411090
7012001235020104030651043016212002622631101004005012065120761504305040
1501508622621102904020830151501040016561002214002030170060010108101102
2611103007065200202168260501405103011086180212008403015040540610010307
0320060080226011066030110305001305006015030140302040013012040010130110
0510110303070312200301100225911010300204004030630210050402040010030600
4100650105103070652022003011002030700203011002258110400702002203015040
4001000302410061200100170104001200401400501206401301000103050620101050
1220030110022571104060302100504053030703504030101081054060140130100022
0200300250150111020020711022561108002002200530703162610070103015040500
2001061050500200102255110306205043050401030258012001001701040012004014
0050120610101200650401030164030140080600105016225411010030022002010170
4250201403061210300601200301307040030016105040409007030150561050122003

0110022531108060014505220010415070012252110200207542702022004004082002
0020700225190701052022501481522005412702202003001013061830190130407030
4070103080522001100306320010501205040804816530140205301140501103011086
1040203050040200300215011405013010022491444053050040215010363061022004
0014030204805040050130210020082301480503010220040014030203014144020082
3015012063030100224813068155070506100021013015108050104301600224713075
0606420080301400150340530400501204001830190301163040706165040150107003
0150122461675103060200610400110116700600400161620080201402405053405617
3203070022451507654011010030140610405304010100501308040530140701400928
8051011003064052200400110121620080205010700301201030612244170509050650
6081040550150626081040561105043015110830110804051070603080050107003012
2431301407015010200606001301240201025050305301002242130750501020080120
3030405053150440070115011103061105064504010412701670060040010501162008
0205010700301260880122411704060506701094006010130165012061020020700507
0191000108040550107014005012050107003012240180020070501020080120303070
0104061040505315080020070622391704034051507040380200690301108060080506
8007021080364010700104061040580070215020200400622381100810220047065012
0612045307031022004706131700180102200504054082001700530110022371210050
5301670194006011406562005900105011670196011408022361200910051030701000
2008011050640013011001200150530703170011040081660080501301100501080490
3015010210616017001104008410483012002710506400122351404200405501026402
0501023070315610021050650107018020010600102200510801050204014030110022
3414604055010261505010230703400501103070132006002030307035030580800200
1301108050646080403631406363110501501050200100301170011016301100223313
0610050651008010506412010130140610014055064504043650104603015010210003
0217001104008223212260702400140500223112002600510430140215098141006203
0700202230120040060155064504040530307035040304061001030707030940015436
6040300301703094010003021700110400822291226070240014050022281200601015
0200401504053030610050606105060830117353080183019030407065040150401401
6222712002050121700705270070108052200103014200104050052700705080660804
0309005040140130110022261506084051080700600400400501140162700704005011
4015010502001003011700110150301001406100154507043665104085010701080220
0100040015436604030030122001000401000302170011040082225122607024001802
2241226010300302050405150104001680020013011080530150204015012223120020
7005504040201030706304001603010050105020010030110700507020506301601062
2221200290510307070960400403014030106140020307001020040150705400307080
1406202200504054082001405750201320060040060106140543001110003021050120
2200412001801830190140562150120614053075020540084005012065501044030110
8050104010400105010401301000305012080200143301140162221140820022001001
6512075504012001060014052200140530421050115042001802220120080206150110

1000914051005200105011501030060080501050406405162150120804013010003011
4016221912901000550108060302070060011020304040512006501206152107015014
0042001802008230110805063040701050102016040304005012080550108060301140
1221812002905103070709400604004030140301061400220102501602050102610501
0210012008017005301100221712003151030704007006004001304001030063030110
0540110018080010050105014102001012001431510801436801405680108001050116
2180153051140709400601510200100305111040011700110400811003095018022161
2007007010504305040400100030241001050281904001308015470210300507020400
3016050130110022151200290107040701094006040050302050120303010014030130
1100221412002050110103004001034100306080502001010002510207160805040030
4001001301100530400100801401301000110100301700110400811003095018022131
2006070102004015040105010052004001306400106050140210507006001640013030
1100221212002901070407010940060400503020501301001403013011002211120040
1110103004001034100301530511002001000400301540010020060013011001510020
0600550108060301108012202001700110400811003095018022101200207005504020
3050048110400810300507010503016040013080105040070240015018030110022091
2004012030109070113061200219053030113005011050434006030110022081200260
0529840040301401030702002904008010206220712002901070407010940060400503
0205013011002206143002004004030701404050403070400501103070207024001305
1060640530301100220514030701504305040515040307061504507050405408200515
0104001150412705040142701436802204190901001405200150011030701440020018
0100025015020140203070030110022031237020082301108053010260700600400165
2002070015015019103003011301510501605011406400683014001060501050180520
0600903011030115010617001400101200130110022021290501700515020080605040
1501010030410030150141000150400151400803030110017613140308022011220060
2008230110805301026070060040018014054006811060501405501027040340110003
0214030802200121008108004016150102008230170403401000302110400882002113
0514008030106064030110070016219914706404052030540301503070361640309001
4030405150203051102001003012030400621981301064055064504016431050304706
4040530302217007030140530303703016260201402405700600161063054082003016
7002006801000301202200621971421170011644005105030801045301103014057044
0050161200100640550170011080656510080105015502014052630100103070150307
0315015141040040410014010605061550708002007018052200400110122002070050
4040403090015040621961675162007005011406104001101167006004001610083015
2168008410303091230121620080205010700301304131065010200700504065010200
3002401301501030602004030130602005014062195130210021700703014051040011
0615010306130155060405104001400501130140522001620080100040060106104530
1405137001165040610501601503017050401406219413043103002005002015016050
1301501206305004030205040601503030501200100301170051080150802009041003
0621931802009040155070164310403061567010016404055011650900802001503015

0640200340301101200621921100264040550102150307036405301621034006010403
0804056704804040040707501070030110101202003001641503061001040610621911
4800705010308004030170060040040400502014064056080501100306001306800200
1301640016140603011003060040540045300114021901304250104030190030306010
2647040203040561050645040110306154001020070065506700600400400801522002
0040150701006080805033015040501206010302113011643608040413016436015201
0130403030150301007001621891481202200403090010130612008001816304070140
1643661519081130152001022013065200101000902004110001013021400203011700
5301401504003010611050630610010651080140405010100803004050104020034030
1102004008021400203017080066218814706404020303070350503014040040707302
5200403061402015010030600140201506404001034100301809020220010307016800
2007062187148140550402004110005040308040515020030086572001280020013011
0200400630123301200106050406106218613040120010600612165002022004507020
0106004001830190301400110100123016110504301511083015501075065023016301
4030121851200440010040103003020103070530301501206811020030156200700400
1401030058290180800200130140012505293040060018014060301504051503075011
4020110504301511083013050040405302200800162184121007020010600612165002
0010600651008301530305101306301203015052183120090400504050120140653030
1506450405506200905010510805305020400403062182148110220022020030014030
1050400103011030610010615300620070103070510616001056151080100805011401
0307051080202301001082901805200405002910816218112309530701094006040050
3080120061000156140829010612180110030714107090829040080140603015040150
1260815103070306020010620400503504012001060050104006105011022001060708
0217914306613014020504030100115015020040050153030121301561001305303011
3001404003010020400503400306004700113063062178148110220022020030011306
1022005303016515020302177130320020166040500580950504040500212004005040
2010030600107003012400200802015200618106565281905303011002176123010050
4015504012001060050431301022001030140044200501030654010110057016030150
9001140621751421570054102400501509001140301100560805030403019006565400
5033060046217412008050770161301402050402005002011501520061810656528190
3030110080200405005305012062173120055014053013060015020038061101030055
0404030900400403061530201400400150104005033011400302021721702007140550
1021503070363060050214051508080862150701504050104005031405481301503070
3501030320013050040405302200800162171110080400200404005060862165003014
0705020101200130110307015108050101020400401002002400601660450605040120
0800600121105005066023010625700504020061601504015108050630810200155013
0140540084005040102003400504704001503405302010306121701304070506081504
0200317010800501301501400183019030116304070616504015010700301501216911
0080400200404001606212003003016010256363011063001030540301201402165001
1000101650010100040060105016151004120060405291811200150501040301900303

0150440070115012008020103080130050406504061030801300504080402022005040
1008301301006216819200805200401501206516570240016150200207005070523010
0150308010001504070940013061105043015110830155010741020040040550702015
0107047040013065536506410200101030070301651410003012405220050670410501
0700301704020608050200290162167148400304055064504043400503065400140302
0303042401302022002140020504020103011086114030400162166148154020810802
0200300101306103065040550645040405301407040601652200902180020013016400
1614060301210100053016500230140240307015303013010021651706040016414716
5010506051014050013050040580520108016500230621641430020017005504022001
0013010220050104510501106070301006400106050170012022002002070016530301
1300105011301216314100020307003070180105011030030503061004001306216214
8140550404051080400804006040013061200519001200401301405108020014040013
0803010301001301405403070101404054004702403070110220030100405230204055
0401500657026050630610010621010003012140320040523020405604160560406005
0630610010640523020405702120055001305005063061001060216114360404051030
7050700600400503040520040110307016230100050107003013011004052403070140
5220015011050240510307016502116301100804052004014055010250670715040010
7001151080210200130570160301501610085303014706501164030701030405103070
1502005007012030700206216014211700116830804005030640540030401080402064
1070106140206403200104020103070162005900105014055012159148140202502007
0300101306809304001030655040100720024020400110308014017091020711510120
0900501030805501044030110301570054020100200624020481165007021804040050
0230140240307014020220016301100406108007026114061015050023016301100404
0050023040204055040301011003011004055010216301604001030405150500702203
0700206215812702004055040400103040306120012008040550404001030630405103
0704007030916304109063012510701200700960124052302063014030030140017006
5010401030140017004052301005064610020040561900110010140526084006215714
3002004011030653043400503080303080010504064400540301658053030145105040
5303014001101504020307005504056380108040563014030030140017004058002001
0040040022001000170016501040103014001700405805205070200617400400703091
7001604030030110200400621561100802004040202004015040402030101051065400
4082005040402022004020302003005010805203011030116618053030113015064270
1014064056404003074007017001621551270020530301103070102004008015040404
0309001504080501025019306024051030705064001101306305530155064504016700
6004001150406100130652154199300170011503010041003015301550645040670450
5030800200130164001614060301220015022001630110080164011007001405263010
0103070150922006215310454051504764052200216504015104008040550110083012
4051250201030709010050508502152144011650023014030109081501027830110140
3070503040515050070240500215114470501050608052030110804055017001103070
1502200800802150143002001502004015040150301010565408200205043050401504

0011502200163011008080520301103015104008030110617001214912370150400110
1504016501204010100200301680520301218901501400260840121481720031410709
0151030701405063070133015016214713040705060814051014056302503015305501
0780020013011030701401503070315012146180601500104830117005216504061040
3050140520015001103070206080507060012203070308021451270020130150630610
0105014055168015040320060040054030204002002204051012130130640307050405
2405301402144143065303017006004001163011005010700301200700501062143142
1510805010500201402142150608120031405305014001830190301506304070105010
7003015010504064030120030021065504305040141043001601220070050103014010
1002141136705303070310403062140020301542701030703075011070030153030440
8301214012001022040052002206307003015040103065305020104030620304030110
8020102003005305020104030614306700600400104030107003015303044083013010
0621391301026020307005010210004002161524008016004001306204001309022005
3400130610506083011406013015308016704400140110150408200301167041615303
0116704130100213817063006004054107106506202105011007001303050620060010
6213713067080403015022004706501205011502200501826050630610010621361436
0501100700130305062006001040510307010304001017001530210050404030703011
6400615010700301501165040640013061521650401301002135130107504005150307
5065002040103070601503011030705120010040030515010020080150120010062134
1200107005061200300240130120150306020011406307501008301265150307501100
8301262133180108030402021501035200600130147061317001808002001301165020
6013010101200601105023054702504015030100621321701040357040504065150100
2001000180800200130150404057804006010501412001802131120062500405067020
0801102050900130105016200101902800200130164001614060301220013011306530
7501140400403070410030301100213012006860401060640110205090013010501506
7020080530301100804051370013010101200601105023016018040015010240011017
0604001060640150104001410030621291200640010050160501301501206100180501
3015103006004040020604013017001102200540820050101760050620304040040400
5016303010021281200680201301506403019003011021805108021020013013031405
3030703640530500401003060010501103070200411008002001301640016140603011
0030600107003015303015011620010403061212714104311003060050650067024030
1501114001802006140190070150201700111630110061504001101216200802040550
1240561732030700212612001070604051504740026001403020405053405161401409
0614020261104070405563610307054011010030140610405200300850655064504011
0306140530434005030803030800105040644005403016580530301451050406212512
0010902120010260054127025012055014020501026105010214105300530301210802
0301002124130660200120304014060301504040510307015030750305010501040940
5063004010520101304080020013011080501206303010021231306602001200300253
0301500702116301100501130110453014051370011650406105016015030170504014
0621221306602001200300213014005020305102200501826030100562001005012140

0201501030703075040010400820101002003050406505030614060301108010100200
4006180200600750404001022030506201061212113010210052010130403016530301
2104001400611806020150103070400407071402014060301910060400612120120010
3804001530130600200155013012003804008025070630106005050405503203050620
4006121191706250108002001301504015030200380400104008203050406505030163
0110062118120068020130160150301200500201102180305004030205040501200100
3011700510806015030301508020090410030621171200105900800702304058007025
0120630653050040250640011013050120010030117005305004021640011050110307
0503301660501301400704040031501030301002116120010220201030705012053080
0805012022005040540820013012115130102061501030705220304340013040500201
0301150108611070030125025700503015010300501030621141301030100130140307
0301504040400104006114061022002004015040862003013010086200301507020506
3016010621131301026010451655040240307014020220080540030201300103070304
0701030203010021121606101050120200300301560401700165250132101506800200
7015016050130110307015040705011700162111120016060013015010403019003014
1071013065010504064030305408200618030065140501200100301504030750506211
0110065750120309123015013091230110057610083011330100621091200109050150
1930602050430504010303070316100490320060040105032006001610049030600440
1050306004122003010062108146408401401100402022002050070210501106070203
0530801505243540080301030301504062107146530040501202003803015012001005
0120038030150120010063010303011006010001030160403003012063043051309030
1401001210613010684001504005060304340013061503060200504020302100150306
0200141005040550602105130103010013012080130600506500230101301700161550
4020632006001030800200130150402050678040060103016412050162104120010905
0150103070203043400130405004001404030180708006511083018070800201501007
0013017001210313010301001101030040510301502020040040042041003020150400
2500501130630621021301030600206700600400130170016520010100015010307010
2004008040030201030115010861107003015070205065040080103016412050162101
1301026030800161040701520060013011080658010407015700510805012050406210
0130104008050640309001013064052140020506200100102010306180550104010252
1400201040061504080405401401260150130206704504061020991301080080400150
1003060050404020010500201030704051503080080640012109301504040515010072
0062008230162002301108040515030408640411050215040200204100306209817010
2400521501030704020301643400130405004040020080201402402010020010001080
8102003015040180901100402010307030602001080102006001520014005108040204
1070105014040050401401209713010206402030164340013040500129018402010307
0306020010612002301250134020280606001050140400504018012096120068020501
6050130150120640400800200701200230110301402013501403080511011301506704
4005040308002008230110802008003014020604017001620951401082004020250120
5501530800805040161000400240030200823011080203080301402030103710107003

0140202200209413010206202200210802065019306040510307020306010301041270
5012093120062001000130150191030030140547010140640547064130613016301640
1301108040520200130062030320062030106002405103070230316204006902405504
0400709400601504077804006016209212006806401734020617340505350180405504
0207024005040802570013011002091130103010013015400102007005020504008130
5401101003014061010301504002006001501030103070400402002010700301170052
0400101200130110020901501094001003060050403043601130110060103021130116
4360804041301643601520101304030301503010070016208912001022015011010009
1301405410710140804058066005065012001003011080550670304030152003300301
6601503030550400801301201501020011040030111062003011503070314066015030
1291812022005012030150301007001620881801066004001301400110130123060200
5014061521640309008052009024051001503014640500150104001650630613011522
7002050113014001101301230602005050115070504014062087120069604021400203
0110802030700501201410430012170070156270070406154011010030140610302100
1562030540508501301510200100504050162086120067008405012020220021700705
0152170070506801600106540040820050632001062200100140510153010606301405
2200103015061000400210506704105010700301201030612085130106840013064020
5070200800301803002050620304010130805506450404040040707501070030116704
1301002084120062746614150104001680070210307050101025030180070215030800
8041003068002001301640016140603011080504024030701202200620831301020640
5103070201503060200114064020270070101300105016140204082001013001050140
2024030701402022002082150102401647050160501303050120501910300301501405
5010210007501050191030030150150608110510400301163061001010412703030100
6208113010301001301404005002305015065090040065440825062103400604008040
2067041040610208012102001005062010501106070301006510400405063061001064
0560620020103015068001000501060805200403061402020098010700301301001504
1070105040506306100106080402020064901080200220101404011003060061207914
1048615200138165062030100207814104311003060050650067024030150111400180
2006140190070150201700111630110062077130102605067010940060101308016308
0080301500401301203016220080080102020090050120761200686040130320013015
0670240040050150640301900301306100107001106350405700162010301506704040
0601070015250670404006010140240307015085020751200680504052001241103070
1630654865012001003011080202200400200207001700161200100640550170011080
6565100801050155020140526301001030701503070362074120064006040121385200
6001301250650406101305010700301501026205010215030703501200100301400120
0100170016207312006801000140103085012055014058102604005065100804001305
0203065440828260101301103005040501650510805040680020013016702603014001
6140603015308260400207212001022016307050630610010140701030170400655018
2602071130102603002007030110700103011610004002130170015063061001014020
5530157040501206303010020701200680501301405410710140616200207001030501

2001003011700510801508020090410030620691401090070130610050630610040030
4020501150015015201013040301504070060040016501050230124020220040201809
0180120681200684401406304040505310801010030400802006001153015303017040
3070340013065402083015040202200201030110861140402030700206715620020402
0220045070510106050120203070030202066130693012330110003024005030680020
0130110020060040050302050118200408002001301108030040400130620651306106
0405507050120201030613020416803016200902301670406030150140307052203060
1030140801004001306206413010614005060816200106002030700401010040060403
0160196010030121650764040030201700130102030116806162063130610604050120
4570301501457030121680616543001100030210104008506081105104003012130140
1040010301301401622001004001306206212006905040501205501304001003011080
8020060101308015019306051030630150307034100801406309004030400100504061
0083012130153030140200810400301608050301163040010040013062061130102601
6065300818050120550115073011622001004001306206012001022011096005012040
5304001005014020110164051007200505085010013040151030060040204130611630
4001004001306205912001090212001026005412702501205501200410010613001050
4030100720030196021020220050120581200660840140630404701004008096023013
0201596024001306201005070103015306301000402041030703400130620571200660
1040130610040530301008015632004002022005040540820011000400214055070508
0020070400140162056120068020522003050191030030150120650109110300301501
6600116501205010200700240301501205512001070024002007002400130630102603
0150216501020604030165100810220010030117004001620541200680100050102161
3030501205501805010830190165062040050140206068050108014024030701402022
0020531200101000901050110220014020140540820012200301006540820030150403
0700301815031405308008060016205214010200201306100140530301006140520055
0400130680114053030100400130801405130206114054812002203012045070501000
3021014011501608150104301630126511011301164270400130120220010800100620
5113067006004014064070040470100400802006001153015303017040307034001302
0501301080080400200220164001320042002201520060013030680070210307040580
0702150308008080102020090050120491200690084020220019705012014062022001
9705040130656130654405013020204812006203004040510706050120201030618050
4064065615107060153010706065200600130141200150406204712006844014064070
0401513090104050535301503070340500410200505040301300501401510805301503
0370530317030141020010501205040204612001090212001026005412702650700220
2200210802068650470250405062001003015040150203051402062045120010404400
1515020040480306100301151030701008801510801610060808015108020040040150
2004015102001002030550501150420011700162044130660200500702501040085010
2700704015020140610200600120076520071620074001306151030703080010140501
8030800504065608050301044005101405018010440051504020431210608201030704
0610301206080502108020202140020120010012042120063005040511003010121400

2054011010030140610530320060050651005070108052001019515040730150160501
3020620411301090804005150309080103003020621608301650105060301447016403
0704003064020220050401308008016100040024003052009024020015503015101150
3070363010303015101150684080501040010120015503016301030301150307036204
0130637050160501301501206200106003012517042003003012501605013017041062
0391401030112170070405301504400701520060013012506504061013050107003015
0162038120010220120031405305014001830190301506304070105010700301501050
4064030120030021064061001105104003030104510501200100301170055012037120
0109085010200801203030405053150307036150470404004705016402040820010501
4020220010607020361200102400400163070140162002400103065200403061563060
0414020436040301163060041030640205636166601030520060013014706131700180
1530804040016015016402060805013040400506081404005060815012035120010805
0200500201402015030703650105026301640124020150444016405103070520020301
4020301504420040500203413067080401470650120620011043013013060016601380
4104300601210306115030141270402010307015050070214051306147061317001802
0331200102201630705030704003065010400200408002001301108050460804003021
4002030110803010101200601105021030115010800100620321200620300142705012
0550186507040150304085040510200700203113010206105064504016700600400400
1301301010120060110502301045515030703621400203011060640150104001620302
0010902301701040603016555011504001101504051020050305306815020200121070
0301109010013014360403011030140120083014360403015040130103054270210200
6011070030150182602029506506084040550107003016161004001501070030170405
3030150120285062002040101404010010800108020400130640510307050784001306
5303012130120200290140620029016202750102002190303020010600653040400200
2905010306524040021006701403050040216210017080404002100170501620265010
4400540301240307016565301026050703080050402403070165202200501506081105
1040030124053041365506083015900706403016540208301220220030102601030170
4120255068030400600105108016501201401080540110100301406104055010240208
1030202200501651080168030400600150107003011030704002603013070314050120
2450102020030040301504050120140618010508401051200215304070240015012010
3011501086140500202350108301903015040305200600130110805501655060811050
4301108051501040016202240101004006040912009010301514565124003154070501
3012002013002021501020200300403015040201040306180105085303014005011005
4015012040105120021501202040108200200680100030154702504020220050116830
9016203070047025040162140040500530153266030116304070501070030302022005
0140500201950640309001040560805011650120502030640515040309001406302100
5040201030701509090100140150402008164155010700301103070620184010301217
0070405306301030100701400402017506830801013027002030153030110307050620
0400801050107003015012700203015303011030701620040080400304012008170056
3013081700527002030140204005060301809040014030163061004001306201640108

2002006801000530301501804170130610001220010100020098001504080525303012
0010100030305114062001075060030140830640430165400104030140201030704020
0814050120155064270400511014040050205015303014004070501620020300161210
9130130853030140201007200140401630208020145064030190040562170070301405
7006001805627002080405504030660200405134100306201350670509010165012014
0280660030167063301601230530301151001700180530301407050124002008020805
0120403020504014100020015100720015104001105501040940550401400501205102
0010013050040530301220080062012506403090010130405640030407014060805030
2010806400615608050507030413400608050302010400140040610201140108200200
6801000301547025040202200501162002906164513405001650400801404702504016
2003155010700303020220050140500201050620060160030140552006001301108040
5501402003130200950630801100030140520103061640520019021640570406064052
6301001030705303017029501070030120103061200850102008012030140610030110
4510130530301501652006001301103070110504301511083011628400601405501220
3070020074010900702170070405306530301504028001000405103070801200490200
8020301282003005040502030650140101301250104094052301006520020150401301
5501401014702504053030122008020504020065062700120301405201030616530301
4001101250650406101305010700301270020301102004008010140501200540103012
1700704053065303014051045101305303014001101250650406101305010700301501
2004501024010220070501603017005610403701510301506483010107003015016030
2003002540307010140501506306100104055014030705041003062003501040306040
3030102003002610456165040150107003014002500103010083012202200504060410
0301862005307503010020025064030701013040520050020130220040080404005011
4050116301100307501014024030701530301651015012040510115030421700162001
5062020030040524055010700301655063064001050107003011030705501930601405
0120005063020640010405220010307061650401501070030110307050193060530601
0305501199940103200301501910300301504053030127007040060180501200100301
4001200100170018019985063040701016501201405060812405200314055010735030
6521095110855010108503080504064065610500501612002070050401830190304070
5040199750630407010165012014050608124052003116200290501070030150107350
3061001253030145070140648050104020450701401996506403070400404005020501
4020302001060065530301450701405011301030100150405005303014570216200400
3004001306199540109007021700704020306530301301026050704040044901402660
3011610067004006154006250047024041003074008040205010213060044020501401
0116700600400400130619945063040704004040050201407050301604003061300105
0401045106130010504030800105020306548165401402030703305303011300630619
9350680304006004005108040400502014054011010030140610402030505010210306
5253030140206302101405015401504010220011055401506204005014020501021306
0044020501401015067006004004001500120501561004702504015307100040080010
0501040030120165062040013061992506307080400140403070105303015011301080

2040201030705303014040030703410061541020640047025014010130116800100504
0013064040045170170015303014570216806161991506200207004004020307030402
0900701010100023016200205040301613008803015070105501061022001003011070
0140010165016081301630470301220040110530301501199050104030604030301020
0300265408200610456103003020301501102400214002030120103070150307506130
6510307014105300202150103640560805015040405103070141053005401302010805
0070250406106198950646080101650120140221700703011006801217007040515047
5303013010260507016490616200802050107003011988506200400801016501201404
0550703080064030603017001040610530301103011610030161987506270012030402
0501306100301405103011610030180205064504067045015020501070030115061202
0030013065150220016301100405120200300162020030015010700301101200170016
1986506200900501040513064055070808060010130802170070301164030900501070
0301101200170016198550624007040060104051306162008020501070030305070061
0130405001410530054013020504050070250406106198450620080120301405200500
2016155062002050104050053030140040705050680200701019835010240301100013
0230120103070140501801630640050180198250640306040040203070304020103070
5400407050404001020307002040206012402010100400301021200606200830140201
0100400301021200604020303070361501502013012330150404020303070361301309
0010030600140404020303070353030161981501081030117014004061500150011520
0170300161520012616158016901504064020400401100140610640205070900406101
5506806004006040014006102401705013014630350404020303070361502060402040
0610250404020303070353030161980506504061040610030400110130203070010805
0153030113015052060401014014060301631080400120060060402001093011030116
2001040301197950620020300400402030703054108013016200190213016704060301
4020303070361101030050640307040013040204001540150692504040203200600153
0301619782001041001030030201030705303015012200100165612009023018403020
1301570160301200401140680020013016400161406030121010005303061977401010
0400604091200901030706563047030122004011050406651064006010305200106002
4001101305536101405010151306401030703020656103001030702004100101304020
2114054815010303200130500405303012200800619765064030701013040520050020
1302530304408301506640060103051200536120060550401008050106580150608110
0720015040515010072005040610300103070200410010130120630404014270130500
4053030122008001975506403070400130404005016403070105303015013015004013
0153030162200800400130801974506701094006010130611010300800200130164001
6140603015040110072004053020304010130140530301506450405064270106197350
6200802010405530301400407050265065040610309123012801400121093015040402
0100720065480865010502402031671504040203030703613167140206080501504040
2030307035303016197250648310530301540705028011660510804058040550140101
4002030401401030704051007200104120021630800805010700301140801007200301
1080800702103070402080070230800805303016197120010410040103070530301501

1101030040307047024030701013010203020040703013070020011030142001050404
0205040640201806400104050040201003060053030161970506200208040010406100
3051013020307001080501601503030180300510805501630180304006004021200300
1550692504032006001013030700202200302601020306018040012004050030130205
0401030204050019695063002007010140406200330030150406140061023012330150
4010700600400150130850301103012022001086161968506301007010406100305101
3020307001080501150608110072006120020605504050670060040040021507013016
3010600503014001200405005040619675010220013003030110001016019030160015
0230404650020080501025040550692108014040402010100605052002703040170501
3011080402030501619665067040601040610030510130203070010805011540064047
0280020013015211081801401406030150403075015303016196550650406104061003
0540820061045651080168030400600110700301405305010240030130121400203012
0103070150307501140619644010301217007040530640610301405103066580405301
4070150191030030140530501078020302100504040401103011503060200141003053
0301400196350692008040405501620015030140530501402003130105060830140530
5012700203014054005060301809040065065200201014053030506307031061962506
4041004006010130657016050620060014006010130405303113170018010406040303
1103014052006006105020306521450401510307020200400140405403090026015030
1530301700600161063061961401020830171077030165610307013013050040301530
3066603013050040520060013012506504061013050107003030196050640208101401
6013012120040030110805604104015065103070520604010152200300214066050404
0610030150401020016400101959401090020656146604055363090010500501301240
5481200300217001619585065400300101404053065501826040015023015303050630
7031061957506200400804004040050201407050301604003053030140040515010072
0014040121090505064030701013014030506307031061956506403070400806608016
7040040400804051501040011402162008020103019555062020030010405220024020
5040100102008017001402050702008003018030020170014050019545062001340051
0301802008003014020604017001405005303015040805407050504040202140619535
0610040040053030120010100080112901650104301530680020013016400161406030
1108014053061952506252001801011018048165301651405015010505001501053011
6700600400400130530301301100619515062004061014050630708010640510068050
4040522005068016001019505062002204006010130405652010130403016521450408
0020013011080140640016140603011080140436010530306194950620060014405653
0301436030101403003016501040103015070530130900110804001010300504053030
1100306001401030116200104030611948401082008062003040202200501808066004
0010307040570060011061194750107370402405140804052301004001080405700600
1106119465062007030010130500108504021700703014051040011061800200130140
5253030180606001050140011010603011620020405010700301504018011945506200
2080400104053070306405103013075014060150303050102400302002070030120103
0115030750162002730164001501023012194450640307040013040400502050120020

7003013051163016018040510301108650130132001301203021005040150306020011
4061943506302064001040522001030706162002905010700301194250640307010165
0120630200220152006001301200313065506081105043011080405501062503016403
0900140470250405303011080162003155010700301619415062010805020530306100
5050151504200117001103003015030610014050119405010270012016501204055011
6200802050107003014030701030651080506803040060010107003014053050102103
0193950640307010130601503012005002015020306110085103070147061030240064
0105040530301500702101304055014010145353030121640601001619385010200901
5050404053014063080010504010451013053030150180405145103070902008400501
1937501027002040301521001705012080102016200900501808002001301108016200
1060805301308003015103070400100850404055040653030110455040405504080400
6100019301162504003165303011642701501130660200540130201080150500702410
0306193650102403011000130230113013060200301103070305804053021005040501
0700301307080203070020103005040550645040150402008130615061211306508501
0300504055064504015042701405303011300630162020030015010700301301100619
3550610754006010521650120140405210018616304070140400110106040521901801
9345064030900104056080501165012050203065303014054030900140640530210050
4050107003013070802030700202022002004011040011061520101304030140510400
1400501130150620090050103051933506304070400404005020140255033011630600
4140201030704013060506306100105010210952010130403014051806400400501070
0301193250101004004030153030110731020307002050613001014015108040530200
1550130115400840050401020034001550630600410504704001503193150101004004
0301200144070503062001060052006001301200143065506081105043015700510801
6506081501070030301200106001630110040202200307501170014016100400150107
0030303010100619305010200220400403011065004060102308015108050104301600
4050532162116306004180192950630407040040400502014024010307053030150110
3026605040304070501502014040306030116100301804056080501104030190052010
1304030140518064004005010700301192850102008012030110307066030164061030
1107600301501403070301164006150107003013011004051080506100130040040400
5020501070030110101202003005010130610010640510760010540110100301406104
0500192750620070300101305001085040217007030140514001640510068050408010
0603014051030702006008047016100301504040550110502530301104001804053021
0050405010700301200204041001926506200710140160130140307020010100024055
0630800105010700301200176150406540110100301406105304012040520017611630
4081030192550103061301200109160116301100402022003075011700140405303010
1001700161924501020022040060403012810130550150650307010140650620060101
4040307010530301501402003130192350620022040060404056520020504040526301
0052006001301250650406101305010700301804816530140205301192250650070210
5011015062007030010140611081200101000400164011921506100306001040561101
0300506100306001013053030150645040506704105010700301619205065030704001

4065062006040014040307010530301619194010820020068010003053030150115690
8400130530301540705016470400501619185062002070040013080110030600101305
0402010030600105040801191750644005104054035030126400140130706191650644
0054004020307030130260612001550164020241040400501106016200800200130110
8010100301619155062002030040040203070306530800805040161000400240030651
0802006001640203080301102004006155066023040051030855040163200600400604
0061102009140830550401630201400302008230120060060107003016561914506200
2070010406100305101302030700108050155016301180304006004080020013011080
4020301200700140619135063010070104061003040011013020307001080501520040
1240012006006040406350301620040100301660403003016200155030163010303014
0203020060060619125062002080400104061003051013020307001080501400120040
5003013020504062150701301630106005030165064001073016702007301524020304
0025010191150640106040051080200330055040621200300550404020301401406030
1504030750110700301651910501070403140201453013006306200101315504063010
2603014901005303011030706190950640307040013014010030600106550107615622
0200400302001040830163011000230163010600301619084010820080620030402022
0050160805013011003002130151010003012165062040040304302103014020301100
5001304084006190750682006040050108650681020040050108301403151080402030
6190650630201400155040670801504068041510804020301510030600401705013016
1905501024040109060065170018058095050405016050130110030600190450620200
3001014070103017040010083012800200130164001614060301100306001903506100
4001801501130153011305501162007005015015412705040130010504010307052004
0150408620030125201013040301307501019025062020030010140701030170400655
0182605630370400604001308053030120040110400119015010100103012010400110
1040082022004270161900501043160301504050206202200440828260801899506306
1001014022020049010010800102050140307050410030618985064030701080660802
0060011530153030170405063070310501070030118975010107540060403012015010
8020150118965010202003004030150708002007016200406400140270490180189550
6304070101650120140701894501070403140550301605030202200680189350108007
0501200100301163070350107003011892501040604001004030110307015030750114
0201891501024030120010700503011501105013010061890501050406403030208150
3800806001640510307050784001306405504013167152150704004014010301201050
1070504404001301889401090070301501200100301610501500403015040170260201
5010400141003061888401030703011001306003016520220050118873010403301880
9030188090180510400130570160301501610083012130114055010214068002001301
6400161406030115010030600140618865062602010165012014040550701050100011
4080188550108290405810903014054007006001801884501050401140061023012330
1504050640085010165012061883501080020070401550701650120801504001101405
1501040016188250103060200403012003830121890127002041003061881501024040
1401230140550164055040150401004005018018805010403019003052010130121890

1501205016187950105040640303051013020307001080501187840101004030102602
3015501618775010406064004030304001101302030700108050118763010360504052
0013840510307015020094016153080160151030170150307038018755010100200300
4058109030140540070060018018745065407010405400200206010803040550120200
4070301873501030701804040050205011040015021306530110018725010403017030
1507020550504030611630110018715067600400130653030116100400161870506880
0804001308010801080013065501301100186950620030024006010550104403013051
1361868501082904070691004013065200214501200401301203070051030115010800
1006186750620040640050010816800401648140205040400804003010130640520012
4170240016301030301504070910022030512200601801866506100419030150161008
3012201501040016186550620040040105108016501201402201501033021630110018
6450620020504040610040205013011001863506306020040301963030113140308018
6250102002110003015040301550115020041005400120040113011861501070403140
5635040301501963030113011860501040200340406100103011503060200115011630
1100185950630602004030115101402029600140803011001858506301800301130152
2005408200504095010010504063011001857501095011003015040502040013080100
8301220150200300216301100185650620030024004028020022030110506040501103
0701050640400200300213011001855401030704013010002202003002501501303640
0130163011001854506303640205040150130110014013060163011008051030701630
6004700118534010512002180108005070405102506185240103013012170070301651
0217007050161851401082003012006801000301150110501104127010250185050103
2006004021550404051406290501510804056040101301849501030211004004020020
0601030701501660013010005040405200649010801401507075061848501050401401
3060215630600411847506107064001503108050101004004030150118464066010040
7340550402123020302162157026015301845501070403140547064030405053501618
4450106110003015040207024001504013015019306040510307020306010301041270
5011843401010040060401030709120090170053011001842501090306004030140550
4020412701301184150107040314055010610001306800200130110804053050501071
3010504001061000114022200301100184040630704030140010063014061010301183
9501020090050403015040205018030110018385065007021040610103011050200900
5018022003011001837501043014061010301550703030120103070501618364010320
0205018015504032006001803011001835506506040140850403019030905040540010
0306002003002304360130502014030301100183450104316030170405062040013012
0301406010302111030110018335010431603017040506201050110216010302113011
8325067040314053020520101304030143608018315010431605301670100801086200
5040510804006008050654001066017001801830506506040140850403019030905040
1200300210030160010501520101304030302022003011007001618294064060301200
1505040302100504051501003060050133016182850650604014085040301903090504
0501605013011501003060041003061827401030704010208550140520030081065202
2005016182650102006001400604030115040307041003064020504050104041004006

0403011504030704100306182550650020016301508506400104050610108505085030
1501618245010507160025304040050114065640201501010060180140140603015040
1503075018081001630811020030115030602001618234063070402004100213015307
5050140655010176001504507013011030050405016182250101007120025304040060
3050406300101704015108040203015030703618215067640103003020504015108015
0400250161060162001510801501010030161515044408002001301618205010240215
3005702400180704060301100200400601504013011819401032005019103003020504
0151509008086181850102009001503030151501076136200214060301108015030703
4100306181750620068604040610050850302150200190214002002060140501163011
0030181650632007010510801630900801406030150401212405103070150840080630
6181550103061301550604003060041006525065040610130181450104020034030126
3010010805203060502030700201813506107540060105216501201301306602005040
4051040011014061812501030613017010300108020302100504015030602001410030
6181150690080183053015016200207003011503075050850150118105010200900504
0170011650120140610083012130152010130403013075050140180950101004190301
5040400502050152010130403012150104001400140630180850650340302050120020
7003015103070307501070030115101110163011006180750620060014006010140615
3031540150401002604001401806406307040214002015306130151020010050401502
0305114061805506403070108066080304013014055301061670400404001061630201
1040520070018045010403060401650120630162008020501070030146101402200180
3501024050120010062140020301400110120304002003011802212301301630612002
0700103064816530165140501164030701030652162007005010306601503030100013
0217005180121608301701020060530301501400260201406080503020530301107310
3018002001503014055636103001000400650120091005040405301021200601799418
0901301108050105020010040700104061050104020034030110200400617982001510
0301481630153030167200264001614060301680020013012001010008002001301304
2400406101797401100400501670071077053030150153060200547068030600405303
0150260840013080179630123301550403067400304052002040501205016405200204
0530301450706405200204016200204041006179530150040130140203015022008006
4052150307080801020402030501024006405608050116403090050107003015020160
4010804040050206061794301675040402030140302100504040400406010011650620
4004030613060200301702400506204006704235021020010030311030115020060011
5022001640309005010700301306100108021700703014051040011040610601503012
0070050161793165405400410801640580200940510301440020010130405606200107
0501004050107095401792200190213015108090600300400406103040520060061014
0501506403019003013040701014070130801100053030150260840013061791216083
0140610010406105010504064030306104301630610302008010001150220017901704
3021004006150220010400102007005040651309030140101004010503070312200178
9170430170104060301022005011001860163010701406012002203011030701030256
1070030153030440830117881406030110801306800200130110801030050405303011

0307010806001014065030705014061080600501404030704002050115022001787506
2002030010405307030400120040500301504040510072001640510301106540060150
3015040541080130703180513090301164010100103015022004020084030120400102
4507070200710700200101000416210400102007005040400502060110501150220017
8640108200200680100020501801050190705040610504055018010507024005040806
0150301504012001050020503030800150550122001785401509013014270505011050
2610502503161504014302301170053070312200401051200213011007001617842001
8020406309003050160501301501156908400130530301400407050164704005016564
0400301601403020504040201400161783200155030163010303014020302006006065
0102101420040100301660403003014020302006006061782200155013014020302006
0060652004012200823011080102003400302030803014020302006006064020301100
7200400120040500301504052320060018014014060301504030750168002001301640
0161406030110030600107003015303011781301306001306510807010213040610104
0011050130210050405105013070612006040515010072001404016100805010651309
0301164010100101650401501070030110412703030100178020015030110301402020
0109040501801670400404003010053010260507016308001030141450153030163070
3617792001200100301601026155063090104050531778200162301200144054061001
6308161200802053030140040705016304250107003011030120040040301177713001
0140530301307080106501040301900301530301308001065200600130110806110504
3015110830110804002150030130610030121650401501070030153030140025001017
7620012001005040153014080020013011006805040400500400315500102600520033
0020550010260054030203050040617755062002070040010405307030601503030301
5004013015303012200800106152200507001250108302015302011040064001774140
6030110801570200806400215001530901521095200330020521095403020130500405
3030122008008010202004004030117734013060151080405400108400405220050700
1215108050104301600200155013011540084005040102003400400150340018301903
0116304070616504015010700301306004161772401030121700704053050104030190
0301501302100504050640400202003001140240020080201050110600200904024040
0501140640206002009040215011404020608050116406306105064063040013080103
0404002340060180402040067045011301501930605040402010307010305012014064
0204008030600180402040047066100830147064020470653030150120040130110800
1001403050191030030130110061771901084050401503014015020029040115070731
1501030701660402015010453053030115014563016301100103005040530301217007
0504015070506501000404040050130580170240040203015020150116200220400601
5010700303018070800301301100801701040353030167200261770710770253030110
3070203070014061769410431003060024001106402025700101300105011008301280
0200130164001614060301100306005303015012004004030117684107023013013080
0301652030700103001030701626020140405062004100101308090170406101080810
2003015240044003001414020020405301407014052200216200802050107003013050
0401767900103010002170070510120065040640010402651406501204030205040400

6403015104001106510001060104120101306570200340010176641049014050401010
0601064050535101200650401765410507020012330202160061684008040060161764
4107068016006104011004080160050403020307004054702504080020013014020505
0206050306176350104030190030150203055030405220040510301108618015040030
4010805046704003061150800200150404020503200600503040530602003016200802
0501070030130110061762506302064004030130206400103080530301103070615064
0400107001140103070502002905030615030260150145410065303011030703020640
0501301150301406176150650406403013020640010308053030110307065303015070
0121301501930602402010400150501150305012014065412705040130010504010307
0504010530301502030640203050040200300213015085050140530602004053040030
1100176050102405019306021506400180150612142701050120140701506490400501
5064102004001503050040200300213014040050150116301100104060403031103014
0202006006106402026507005040402030200801000103040206704108002001301640
0161406030120091802030053030110801405306020040030110017592102004051030
1150506704400140402030010803015016524040030602001140215020080201501163
0110064055168011080405104101164200804001501023012405306020040540013530
3011301405403070101304054702504050107003016464050064170686504061004020
3021005040501070030112504020400110403011758410408105010003053030150180
1701040380020013011080504064040050116200802040050110606403011006175741
0430030102170070501404002008020501030640205041071304040020020300501030
4020220050700140070016175640109007040202200504013024020307001080640201
6050506108400601064020150215068270010621700703016604020506406601050670
2008030150404020135017001402010307053030154070501620020700154061003010
6064030110070016175520062030020012903020304001101302030700108050153030
1401101240520020700620065030110301400140309003015040204061003200600150
1150400110121060640150306020014100306175440102083017107703016561300105
0401045106130010504053030130800108040530501021030540610050160302130130
6602005040150306020011406175341070230130800108020103061136701550610002
1065303013010260507050649010652006001301103070110504301511083015062840
0601050107003011752410430021700705040501020080120303030106680020013011
0801406400161406030110801405301070030153030117514104083017107703019120
0901030140522005070012200650301103014001403090030150406015030132006004
0030201030151503075012140020200301175021400203014030705450705040640205
0102610501021410530053030121080203010013060200404006030162008020501070
0301306100106174920014301102100705040302001802030140307010606608050302
0260204001404030701017010403200204030153030804053021005040501070030120
0204041006174821608301701020060656540208302100704013040208105303016158
0120091504015901005050800200130110400150150116200104030611747216083011
5010307061000130230120103070140501802050108064005061405470501070030180
0702205010200501405016174621400203014015450706400250010613001014053030

1684010174521400203031302030530301507001213015101210400110501306602003
0501201406510200700613167140530150307036203021005040130602001503060200
1410030617441001613061030650405303015040203014040307030150402013140470
2405165140070240015010306110220070140208515030750120307002061743214051
0301667041510301522020030011306530301427015014002004011405013010058007
0220020501050402178130150406201030130750114025068200801021400203014051
5010400150107003016174220015030150102008012030110210070616100400150107
0030110210070203040015309006401014153020120015501301154008400504010200
3400506100400403014706104003015503301305004017411001650405303015040405
3014061003001520060013012170070306110504301511083011080217007040530174
0415504053014080530301303080010504063010260301507016490640520020401620
0802050107003030501073023061003015040200519002401800200130110804030701
0130140255061025040040140564060301001202003005303016307036400260201402
6080503020103070401011006550408011739211007050120801020804054007006001
4050016200802050107003030400103040180203021005040306020021075400601410
0306173841701040301803060010130530301501530301470610400110104008405200
1450401210200100308400615702001100167050901402405210904001620080205010
7003013017101306170104036015030110453053030113001063050116504015010700
3016011010403080117010403200401301530303021040064030152403020618002001
3015240070910061301233015240020010601501200100501630617372140040510301
6400302064005103070651301530113010220065301005040820030125062008020104
0562010301150108611070030140510307063040040030404011530210050404003060
0410054011080201503060200120307002017362140506086405301026940018301903
0116304070616504015010700301173526301003015010409400530301200207002130
1530301200207002405263010050104094006165040150107003011734215015040510
3011045106130010504030800105303015013010052200504051015103070307501130
6301620080205010700301306100106173370140040130152006001301108011050430
1511083011406110504301511083012168200806200410010613001050403010072003
0196021053030117322001430166040530655070303014053020103061800200130110
8050646080106309061050152530301200401140506709100106510015001040470250
4053030145705068001005010501070030161731200143011021007040705080404002
0029014024020103070401306017302123020504040510307050630600410520101304
0301640540011020070064053167164051012150408309050406155063060041050470
4001503172920014301102100704053020103061510106030155060830125062004106
5105013070612006040515010072001404016100805016513090301164011001640522
0053611000400211620029050107003016172821608301660506801600106405220050
6300600106309061050152530301200401140506309010501070030161727100150010
4030150680010050101306530301457025068061050107003011726212301301630612
0020700400101405011040701655040201008301202200504020103013075011405014
0307010504080117254154030160102640505340516140621608301660405302010306

1521644008013057040530500406170104038002001301108014040530501630530162
1034006010403050107003016105060830140522003016213400601501070030301724
3015004013015303012200800102030700208002001301108050020401080601503017
0805010140140161803257001080427301140180309123016100830153030122008001
0203070020530500404277014004061510308110004002120015030110805103070506
4100610140406110212001427301060301304040081801520041002510461400301608
0140140603015040307501172320015100301481630165610300302010030160053030
1301004051030701003060030152130040080510030600201610030600120200300530
3016307034012006503016400140309003011064006040030540120010902301610407
0130110640060103053010012008001306170805040560805013050620304010130110
3061550645040404007006004001801301005303013010080020013016400161406030
1220050403010017223019013016641000301240530130900615200206170698002001
3016400161406030110805040436010530306172130130800108013015010200801203
0117041406510003012265140651801000302103014030110301510802096012201301
1030024053050621034006010130550645040506704105010700301610083015670453
0172030184030141043006565303011080506304131040561300105040152210901080
1007016903013060200106540080106005040520101304030165440824702003018260
1061719301100500301218603011030050106170409618066001002002301402010200
1010700301651718301650405506450404053014065304200401308016604061002530
3014120011700164056080501214016200101000101040084061002140200101000101
3053030150153030120040150405506900808105803060050406510410501025040400
1210070405301717200155030122200160630103030128060040060406550406522005
3504063061003012006015040402050401660171630170400403012001022030154153
0030162101000301403017017152001410040254507010300302064147400140640182
0013018001010004001406105005013020304084001404030701053030117144154061
0030203062007005040400501140501522005040510151030703075011306301620080
2050107003013061001061713211007030141043003020220050164054030900103070
6015030305200801000406700302022005016400130500403014053021005040400306
0041006550608301302100510106030122050630370400601061712506430160015108
0405200150301218901201030616405100150701108030130100013012010306164052
2002162008020501070030120103061410431003060010803015011121200400150201
7001140530610023708023704005016171150630100701040610030400110130203070
0108050130201301108080070210307015800702308008050648161402101006010501
6509020010100065016509030106005067020076215070150404001503640012006134
0040709100800200130110806171050620020804001040610030400110130203070010
8050120015503013010303011030010001050105050015010367151080307034001200
4050030130205040612001550161060162001510803070368002001301440107003016
5617095065010064004020220011003024020307030400110130130908010200401301
2002410104060403031301020031030202004010030166040300301200600606300200
7030110307010640060140500155062004004407020010100024001614060301708020

0107003015303011708506504061013060150301200500201502030610083012022005
0402010301307501107003016214002030140011012030400200403011707506504061
0406100305408200610456103003020301090804006510410501021070030110010490
4005020306102004008010150010485012014021230130110306130520027040590901
0010805012041003017065010402003403014061003015070150601242001013061300
5050401035080150200905040513162700204100405501165090063060200301601104
0060117001104008170550630100704001308011610040015010700303020010600520
0600130120014306405302100504050107003015210017050120801020162009005010
8080020013011080162001060104030801102001003013051504040510301108650130
1320013012030210050401503060200114061704501020200300403015040150114065
3030150182606105070240015040615015200109021030705303011030167041103010
2605700530100170350620070300101304056540010002570160301405104001400615
3030121700705040510300110004051040014005011650401801170250620200300404
0561301530301240520050020150406101406170150680020070401550704056151030
7050620040108002001301640016140603011080510150405010120617005010403017
0303020020700130165501200315040510307040530160400140616995010504064024
0090200863066015030120050020114061698506200204010405640520040116704031
7001405104304005020140620103015108650210100030112501504020307001697501
0830190301210501008301614030604010508064005200600130161105043011080101
0306400501800200130164001614060301200918050010418130130106140050401050
4004030706203040301504010504001040014100220016964010208301401030703016
5550113001014030801093010220050110400660015010261050102501910300301100
0750501470250406423015040402021365036030150401050320060017001102506081
4100611008102200153070341003021005040101106200301061400170054002111030
1100614360530162006006300200703011030705106217080200616955010504015303
0113005012009040163060041301100651062151030110618060610103070163060041
4030801694401082003012006801000301655501102200402030200801000400601806
6030110016935010109160015020150115026507001503020080100040060115012111
0163011001692506403070400130140530301504040307011050140203030100140301
3011001200109024400200180553610307051100301200103002301135011403080169
1401041003012030130800108030205015303014001630110016905064508040050113
0630806061081020043130105014056213011002001070301400309080140306168950
1070403140203051210506400161200109024001101021536103070561003018017005
1090104010021625700116885010408120030140820016564020305303012008010001
0406103014020103070210200500400130301100168750101091600301502050161501
0307053030120200500141003053030140016301100168650105060840301200317010
8001013053030150180200290106100400105040550115010307053030150404100106
0011700568060610150130110080606104005013020501116301100168550630513404
0050170015106001680606102404003070801404040040307030530110016845010100
4904004030110731053030150115010307010049040063010203011503080618051374

0570180022150103620080030115030516150604071077030115101110163011005103
0701630600414030801683506200801203014061003011301530301862005040601101
0130550153030186200504016601104001306510600168060610504016606084008016
2570011050211016825064030704001301405303015040403070165303011030110507
8610500262030011405013011001681501020301530150405062040061180020085062
0400104008806061020020700400140080400530301400163011001680401090020658
0507830150405150107040080010216806061010307010806011103011006405507010
3064006167940102083014010307030165550117010403405210501040011050153030
1106070301040320029080120040140206080501402030400306603023011001678506
1004190301501615108015030210011040030120010703016151080150201040030151
0200100301301601616775010900801821010003030150201406150403070140213011
5045300140610020060205021501150121110163061008040201021103011670320011
6765010402018301200106006561030530301402081061102110305070011010400880
0200130182002150308080606101080404009200801403021005040653030150401100
5006404020103070700600141004020121501164030704004030140520010220301100
1103501690306005504016601104006011403080167550640301900301700115015450
7015070140040150436504013017006001505015303017001704030110016745010506
0840301504020120050150155012040150481700600801200102201600103001215305
0171077030115101110163011001673506809040014024030701530301615012040200
3004040050130110040530154210403065608050108080606101520060180302100504
0530600110020060410080100200601050116301100167240103070403070107003020
1006806130050504040013200470802005053030113001050113012030403015010410
8051600170060011030501201408060610301504202030700205106001170650401532
0060040060140500510600117063021004054001070612142801671501040301900301
1073502030700205617365805308200108043650405617316301100167050102700120
4040050205015617314080163011001669501010020016015020140680020013011080
4608050301501031404040040307041003053030140016301100166840107075215016
2001070230408521350403062030403017016904100805016301100166750641008040
0170014040510307016302100161630110016665061002001603040205012001070301
1540010150700640507001405005106001308200108051011006030130703405715324
0575314030801665506304070101650120140260104002400130802066001150110501
3011005160015103011061806061010307016306004140306166450640307010130601
5030120050020150203065150403070140304030706700305501615180010026100701
0608050108053181301103005040530301504040550701050100010501201404056214
0520040150010850401630600414030616635063020640040301302064001030805103
0706400302064005103070530301301402083015011030050405303015040402050701
0501000114065100200804004021621504016306004164816212504016306004400130
1050211030110061662301020630610050140103070530301301100405100500640564
0011403080402029181050113015210505040014003053030150401100500640506400
6400104008402070405306020015030301100166120010601030102020307002001070

2301020414750615016001900808506150305120010405061501030140042001504007
0180025700510100025014015012111016301100405103014004200405400701800216
4364057014004016840080140306166050104081200301408200165619008018200106
0053030180302100504051060011030704020400504011402013015103070402050401
3053011001659506900801830530150163040020501501600115070403060200180301
0203011504070504015012111016301100405102110301167032001403080165850670
3200104053070304053051103011623010050117001155068020070104053070304053
0182001080405400701800216307031550110400803030110061657506307018030150
1651215507046120050601630110016565062200100400130610450704020303010201
3080521050640014004030501801655501030750403012001060015016301020301108
0611050150620040013014020102150404020306001210506400101301100405715324
0575314030616545062002050405304056405802007080510307016306004808060610
5660011361653506100400101650120616504015010700303020010600520060013012
0031306165250105060840301200317010800501306130050504015040040820022109
0501300105001081550401624001080020013011080806061030150204020307002061
6514010307090010808105018002001301501017600103070105030703130110016505
0104015010204015010430406103012050130110054030201403080106080503059030
6004006015210506400101203040301301100616494010820020068010001022005011
0220040820014013016603012520014013060805030150110608050102002114061648
5010501016003014102010451013053030150162101000301255060014030105014030
7010302030700164750101004190301504030550165608050507054004612001501100
8301908908501301710770301400120040140030110066050405103070150403070140
5303030018503010056080505070806061050400461200700150202960014030110016
4640103070505410202102200501505104101507091001040013030156605030130121
4053016018020220010301703200130110030660200301513140308052105064001012
0304030130110061645506200907010510806601503015001100010510804017020307
0047025040104001104050016445065090840014040130103010013015053040400404
1001405030201104143007026020307004702504010400110405001643506302014001
4040130103010013015302506010805620070080404004908140801214501050607026
0506702007400301100164250640307010405307030601503011030170320011030703
0400160211020060016200800600400130250607026068013707026050530201105014
0604001200100270260108015040080110010490301151018060610164150630602001
8053010614002402010250115015401470220020416140550401350107003013011006
1640501040301702401308130130106140025085014064013081500110008001163011
0016395062002704001106200303040400502050110110620010801050640080113040
3011510111040016021102006001620080060040013025060702606801370702605053
0201105014060400120010027026010200110501203040301301100616385010506070
8002503603011080500230805220020020700501910300301516050180202200450701
0502002070011405504031505501509001070030303011006163750110400804006040
0510801070030120040130110800100560120050402001093013020140080230901080

2006001301140161200406005220010100601080140204811401503603011028190110
1636506403070101306015030120050020150203064010100301501043012030700511
0113011642704001301200401530301301402083015015019306050401525303013075
0114040206121640400501156404001040601406011301550645040506427040014016
3520015100301481630153030140120010600506100200804004021220011503603011
0281901101634506200203001013060150301200500201502030660150301103070615
0103070530301308008050402030700103005040530301220200300505011503050120
1402610070106100186016401051200211010121530404007024001616335062008012
0405520060013012405653030125065040610130406100530404002020040010501102
2001050403070140401402030700140201040011050130210053010614002140204001
2501301550110072004004017091402010400110130301100163250105060840301504
0201200501501530106140021501025055040200109301302014001726001060120010
0680304081105012001105012006001301301100612004060020090701105012001105
0114054813011005011040080503603015704030600461631501081040085505036010
3040011013011612001404702504040530142405001630401030703017010406030165
5501505410205507080200908052200530213400601801629501030513301504050201
6505103012901505410201050708020090400130165103011050506704101404010301
2815036030122003011001628501020010001903015040150620103065050360103052
0040114030708010403050103064090704006018056080505070540046120041003065
1080105050400403010700301502030700804003011001627401020020203040130117
0055011200300217005140530303001850301006505104101507091006550200220155
0101200140308050510307032006001400301100615010206050550405481630204004
0016120400405053040044007016505103014003060200150520020402400704060140
3080162650102403013080010801512005030150112815801000300410056080505070
1514008046120040071077030140012004015501044030110805660503011006162550
1010916003015040400502020501202507003010200801000400601617005507080020
0701806061016244010900705020410205015020410205040550130110020024504041
0059010401001012001403080162350101004190301504065640027002080200245040
4100590104010050120501616225010270012030150406564001004908030210050404
1005901040100501205011530515040451300453006106080505070105040046120010
5301100162140103012170070615036010501130116602030512412001504017314040
0301100212301104301541060110803016200245040590104010040041006212301110
0240060161620501090306004030115041270504055011300880301666030155070802
0090503020307002052200501520021012005011306301524056524004054100306161
9506403019003018308010130550110165004050608110220055015303017001704030
1100203040010540030110062162130140010030100065608050507015400102108065
1040030154004612006161850105060840301107350203070020614030706140208515
0104001543001100030214030616175064030701013060150301200500201502030652
0040110307023011000530301650010418130130106140050405403070503068002001
3011080806061030150204020307002061430657006004005061150708050105011060

7051650040104020020154001200401302009040504051200400300110700301301100
6161650104517301504051080165012065464704040512004606002504050025620030
0616155063040701014024010307053030165701800256200601640130100017005102
0030021103011005630410304180405420016163060200180520011060400136161450
6809040014010307050170400604030153030163010403200290801200401402060805
0140203040030660302301100270020404259010401001030701613616135010100419
0150206306150305040640240050114062107003015302018015070140040450708060
6101502020040061002400605015025700150115012111016301100161250620210130
0704051211613616115062007030010130405617005405200401240550102504003051
0301150108616233014002110100010805630703105011670403165216257001403080
1610506200601600301700115015290705085062107003015302015010301630110016
0950630801100055070404005016210700301530201105018016001652162570040050
1105050781030105013011001608506900801830530150162703010670400200101410
0015070405306020011607506890150305301501680606101030701504014001302030
1401501211101630110016065010307018040400502050152001106030180070259100
4003010233014002110100010805610030168060610163040010040013040550403010
1100301100160550108301901406100547025040165062040064020102153640203030
6001018002001568200916180606101630400100116045010240301308001080301501
2150152907050850615040150102110301281566001680606103016301100700116035
0103010160303040011015400660016806061010805012041003016024010208401030
7020220050110018601640105120021302100504020106211030701540400114020261
0070103011030706201030705400407050404001065001041813013010614005040204
0307010620220020102400310203070020616015010240647050160501303050191030
0301501141020203016410201080204006600110307020110620090901004001301050
2110301100160050104316010304054001012002004010030166040300301612206202
0030070481400101200105014002111051021308060610301100700115995010308011
0003015040305302100504040050205016501200100301170052010301150108611402
9090100301506081201030709010050508501598506301007040040203070301102200
7015012001005150307501150115975010240301214002030140011012030400200301
1596506304070400140703080110002202200140651030703020640065427018053020
2004013017032001051030168002001301640016140603012101000530306159550620
0900400504015011620090040050161594506304017015014020400501204010307016
3040701506504061013050107003030301006159350105040640303010200207006590
0706406100830157005108020136204168052400250050140306020030112501504020
1030709010050130206159250107040316015030165503301504040505350130401302
0220054030204004040064051003060020307003062022004082005040130115915010
8030400600405063017101306548165401601503013070330202200130063061590506
8309040153051640309002102001003012030510302022005012014061589501040200
3401650120651080168020040011401640309005010700301702400164055040150103
5015040401301030100130180020013011080416080301507050655010510100263061

4020302100504050620010030150405012013063080158850105060840301200317010
8001013053030150180200290161587501020020170030301020020700203070040011
0106030150257001040015060830150130103030150401803076200155030110802009
5130903014010016158650620090504001304050011030615040530301506450404020
3014062001503014020604040080164030900501070030110301165020200400130615
8520010902506304070400140255011610009400130620704021400504064002004011
4020401004006018015842001026005063040701014025501405301407012022004055
0108061030140301302050161583210200405504020300108030405501640550102108
0010030202200504040010026054030201306306510808030400600180214002030110
6064015010400141003061582906100504020010100040521090504056806403015016
3021005040405612142701014020130150642701014013065427010140405102004010
8020400130801581700670034020010100019702022001300140130180020013016400
1614060301400401414015108050104301600550330110808016470605010700301140
1615804102001014030301708020220050120220013001401301800200130164001614
0603014004014140151080501043016001579100105300620010807151080405302001
5030110808016100300501070030114018015784107060610100300405504080550700
1213016080504030204001304001104061015774647040303130130152006006501406
1576465300404061020307006601503015307064034040610203070052006001301217
0070801600504030510130203070010805011575410430040103015700600150154030
1900105610200100301700600117001202200700600120307002061574210240040020
0101000405641714062022002004011314030103005040530301506450405067041010
4003014054005301405507040050100011408040560805011640309005020306405150
4030900140615734109086401011001550402010307059010050102001003011250150
4020307001572468020040301480200301601025401101003014061065507030570051
0801670240016157146200640301420063016010262001503014054200618054011010
0301406105406100404100101570410300200250670200802004011406506702008020
0401167024001805103040650670200801030115695010240501930606150400110121
0606401503060200141003061568464050040047021402050104403014702130115108
0165010001040305012015675010405001340520011041080168290180581090301164
0309005010700301400700600161504054082002570401650401501070030161210703
0015010350150200401131403061566210100200402070401050116210040020016270
0120655040651076001021700705104001105040506403070400806603040170105014
0204005012040103070163040701406100110615659108405063040704001402102200
5011102005900402012006564040070060040016530301504040201030707701109520
0140610011030110015647107702150103070400501140620150403200302095200130
6306180107080015010802012005030150163061004001404012001050020510080501
4021070300110163011001563464640108200102200501510301162640040500402022
0016200801000400601615624107022402050409630406100140683019040610061465
4061006186504061002190114030500404020210901050110100110030040205040200
3101304061001106156121050151030164003020640051030705303012130110100108

0640014064007094006011408130901301130141020015015507040201550114010301
4020803016001501410200114061506081100720055040105010072006102200504055
0102103070400502050140400101200140610011030110015604103002003014010308
3014005013020501130050140150301640110803070805050161150612142701014020
2004005050120200401400204001309012107030011016301100155990010808240201
0307015011406501050406404040050205014020302001060053030140010100215585
0104608040800200130110801650070400130640511030016015030116606002400130
6960100301250171040301630110204030116806140610011061557910840406102170
0704020103070801600110501620010600240201200110501501710403016301102040
3011690100504001306520010100053015040402030140530301164270140610011030
1100121070300405160015010440103016155641070225010403019003015040105140
6202200450705406604015554680050403010360504052001381510307015020094016
1530801601510301701503070315020040113140308015542102001002829030160103
0182903014054706405014052190114015210904055012040012004011301481402050
4040080400301013063010303015040709100220305122006018020103011630901050
3020220030602001501963011016301100155341043005020200103011061615610040
2021030501630301100155241020050140403070400302050161008504020400150210
8015030140400403070410030163011001551410300200303200402050406010301108
0108001080506760040013065303011610040018040203020059150510400150213065
4061001103011004001101060301506304070101650120302100504065103015067020
0510540610051361550210907040610170053011006170200700405210018006405210
6019630150306020040013140306154946420040200101000217007040510400140550
1620220020040113410055011700550708002007014010512002111015482105040516
1401030830401051200215011547963040610010801503041310102003002301540013
6706200301401051200215070257001403080154641034041040855014001023013051
4020103070540012020026530301400408200530301200401504050102370400116301
1001545210370103003017005501160010300103070217005676370150164301110400
3010611040030110015442610070101001860112006504061001860121515020030028
0400208800805401011005400120040161543963040610010301150306020011501806
0040013016301100580106004055040603616405200205051030130904001304051041
0110120014030801542700105083037021350150023014080401306030110014013060
1630110010200300230124010512002115030602004001341003061541464050030147
0213014052200162008020464050050113011510801650100010403050120154050104
0500134052001104108016829018058109030116403090050107003017006001615397
1077030110610030165202200501700104061010760050406150405408200257040165
0401501070030161830190150103501502004011314030801538267002040200101000
4706203070040110155001305004020200141080167040040400301100801562001007
0801537210200100217007040207006001108066021566040400130653030180020011
0803020140015620070080510140203053030151001505700540610011061536200106
0600400200101000105050641074001408054001090705015303015040105020090501

0504080540820055040105014001610220050405501021030704005020501404001012
0014061001103011001535210200405103011506704400140402030010803015050161
5061214270101404270505011501550400117005302100163200401501080400502041
0083019011016301100153421034021020010010220050151030116264004050056200
8010004006018015108040202004070400601680020013015040402013005016552001
0100053015040402030140530301164270140610011030110018301904051600146405
0010301615334654061004170301470213014052200162008020141705011301540110
1003014061065507030110504301570051080167024001615324105070200123302020
0401167024001653060200169070640522004001101216483417020304006153190010
3010002170070504040515010350615040540820025704016504015010700301614651
5010350150200401131403061530900108081030030201030701022005011101030055
0620080040013064020200101000140610010220080306004006010640201030152400
3060200114040204001000302141008016306400501801529401010040060409120090
1030701022005011540010901502700600165130152145040140402022006102200530
3011030704003020640010501152850620090050400130405001701040310506410208
0550645040152750620200300400140401020021050116453001653030145300110501
3011006602150400530180070220120040070113013061005050115265010504064022
0305085014062030610050701504005301102020014002508501406550102215040010
3140465110163011001525501040200340163064004001306402040061001030156100
4020471061200120044040201030701406030130602001051030116264004050040202
2001620080100040060140610011061524506301007040013080110502009801070030
1103070130110200315011200315103070402030160113040610011015235062004008
0401301404005015015200101000530150404020301405303011642701406100110301
1001465405160014170103016152250101004004030305210017030150120029018017
0053021005040204061001306400501154030704004005020140201030115108650210
1000301125015040203040015214010301217007015040405604010405004057040040
5060404016207040504040404011030706201030704001202002615040401306029251
8650110301010015205010200601600301504050201105040820040061030200801000
4001301640307052103060103014020301601501202700670110501220030110015195
0103051330150405062040050120900701105014030705220306010301405030160400
1308083019020010100030407055012030515040601030550186501103011001518501
0402018301402081400501610083012047065016103051504010502150122003011008
0522008650104150615175010403019003014061003030147023010100610463301103
0704006400601620040130110800100614030180010100061070301001140601106201
4010703021800200111030101006151650101002001000403015040501208036403011
4055010230186408200504013015303012004015040406103014090170130301100140
3015040105040907010302310301106160301100151550102008012030170405020400
1306150704022020011050211030770401080501206550218650104150630123301203
6401080405210200340010561514401082002006801000301022005011516020040615
1200340530301406021510801622020013011006151330103010013015704050401140

6504015040630610030151030701002605040130120305165010505001501036730205
0401510803040811503010020065040030120018061502004011317001104008151240
1010040217007051030703081065107600102170070510400110504050640307040080
6608015115062006006040014020402050402006006050150180150401620060060400
5013011005504016200600605406100504013040510307020040140302062030803017
0509010615105061002001000404055011640309005010700301108010502916004001
3061501086615050107012203080301705090161509506307080101650120140260104
0024001308050401410050401301204061005040504061050305501865010301108616
1508506402003400140401020021501610401200311030708054001020040080150130
1005120040080150630610010401150750670320040051030164020220065402010610
0010501410200105303015012050140203089050150140042001501108905040207080
5010130615065010737040240400501140613005015303015240201040011014050130
1100150550101004190301504040050205011504704001402150400180150301434002
0050020180150400304134100865011016301100150450104030190030150403017001
1050140560805011080140240307015303011200106005303014051040061050304020
5010701102004740050107003030306100113062030401050130610011306210100030
1403070113065303015010176001045070402030306100113061503506200207004001
3080140540042009501530301504010502009050105040406100110615025063053400
1406100402012001105020306405220061001304040550116504015010700301420019
2150114065303011030701301102003150113014051030704020301601130406100110
6150150652001201530404005016156402040730501402010307040010407080545070
5040540820010501400161022005040550102103070400502050140400101200140610
0110301100150050102700120402050900503023080080504015010307040203010200
5014061012003011041215030700120014055010700301130120702400120120050140
6150305004012003002130120120050140540610050401620080205010700301130403
0130110080149940103014061021700704020103070801600110501530301130116427
0400130501149850102402001070050402030105015406100103011865015030602001
4100306149750620020700400130801130500405011064006010305701040603016200
1090230164090130161040701301205010100102008030130500401496506430160015
1080405550330121890120103061405220010301164002600164001830190301163040
7061650401501070030150114955062006060013014055200600130110804055014020
0313014945062004008010165012014040550703080064056080501162006060050107
0030120103061149350620090210165012014067040603015067010940060101650120
1402170070301405308070180010110306150405303015064504040530501201406800
2001301108050107370401650620104030201030611492506200801204055200600130
1240561367015506100021065303013010260507050649010501070030114915010403
0190030110307053030155070301301405220010307016270020501070030113065415
3001301306100106405220010307050680020070102010306112700205303011030701
0200400801504040403090015040614905065040610130601503012005002015020306
2022005040100830155015504051020040108020400130805470640200150301802178

1301504052200802010504065250650406102010306154082006140140110606402140
0205302100504065504045130056304001065220050405501021030705012050408011
4895063040701016501201403091261510801670509014092862001503011301520060
0130110804053060103050107003012010306114885066060021013015108040561510
8040530140701405103018065015400501076110504301511083014102001050120504
0148750640306040404005013058065130153011305016530301403070230750114050
1164030701804020301621034006010403018014865010100419040400502050153030
1506450404040070940060150401670416400110200400804053050040200660200300
7021640018030100512004008015063061001040114853010206103003020103070530
3016200107005040050114050120304057040136175020510307030750113063016306
1001050120200490521001018006201030110861014080070220200140020307030801
4842001022020031652008010004040530201030614001830190301163040706162002
9050107003011301148320066008082008030550110507040011010603012570050306
1001030540060401200800470214070505150100700150103061482200680206061010
3055015504015150707504050054082001504050160501301150100700150103061481
5061075400601052165012014040521001864055070180620090406010304051040011
0406101301560281014050306100103054647040540110301217007030140550701502
0060015010306148050102402008601301170055011620080205010700301503061001
0304006403014702504050650067024040205014003010050103061304070506081402
0101402063021030140301103070530020070501206401101540060108080020013016
4001614060301100306001070030165614795010240214002010803020157046400604
0615200100400604040307010615100720053030110307013018002001301108052145
0401406147820064903014001700240103070550150650307010140650620060101404
0307010405211050050630010004006010501081301550401680600400601030405200
6490506505001040550113011477200104100103003020103070656402070320040530
3011030114762001022040610217007040201030708016001105018016306400501653
0800803080080107003020400610610406040303110301150608170140040402070400
4010510301162640040500402022001620080100040060150161475200103002620010
7005055040402030105050153030113011642704001301147420010260040102085043
0504040030908040500540011014004020812140020200301147350104020183012001
0600656530301402081010400820029016201030110861014070240016147230102062
4020103070150114061510307030800101405018030800504065608050301044005101
4050180104400515040804020220050401008301402013410060150301151011103010
0147140108200301200680100030165654127050401300105040522109010530800803
0412001308020010600220420010501665130153080300120130802008002530301206
0604010501614705010403019003015040170012050180400307080501802020080010
1306207080501013014053030150645040704400130614695010202003004030150405
0506204001306180105085010430302053640100150161468501050406403015040506
2015014002004016402018064001010700301530301427015020306530301506450405
0642704005010700301427011308010501045040203001080404005020501601503011

5101110301001467501050406403013505015010307011008203070020165040150107
0030161503060200103505040500146650102009004005040301504040207040105011
6200900400501803010040530210050401630600501070030140110130500401301506
2009004005010305801465506504061013040610050702007005030164001101301105
0100040014068002001301640016140603011080170014016200900501301001464506
3010070101305010700301103070603200301307031065303015070012130150406400
5016080503050120140614635010504064016506201010400860150301520020400400
5018011701040340530208002001301108050405040130202200130063061462501081
0301405150704004061105043015110830110801076003012170070405507015080300
2016504011403060506104061001301155014010115708050804005040151020010040
0501201306308014614010301301217007030116200101040085101302040540013630
6146050650406101302022004004030204051030704001008501070030150114595010
2006016003015040506204008053030140011012162700205010700301504050506204
0013061458501020040040403015040505062040013080202200504010083012013410
0302030210050402140020301506200100105010700301301601802010301150307501
1404020300108040050205018014575068030400600105108016501201401080540110
1003014061040550102108001001020220050140307030140513104008168030400600
1140804001210930150404051501007200610049016240301010120060110502150162
4100306145650630801100030150400110150706015030150401200105002050165101
2080306005040305062040030205042220103505040610301801455501046080403015
0404005020630210040010907041006501301145450104030604030150401501630101
0120060165025240050401107003011301530113055014005040130110010020010003
0152020041170011040081647061101000254650365067020080405702400180200823
0130101012006011050221507613614535064030701013050107003013010260501702
4004001306140101004006018014020400670440021031410030110014524010301301
2170070301162001010400816504061013080405263010010307044300164053016401
1030706040911502200203010260507016308001030150220011050430151108301108
0130164016550107513040650670200804001040012050115022001060640301100614
5150105040640301200300265130903011640101001653021004020400610216307031
6140061022009040214020406100301624005015106001610606401030115010861614
5050102008012030140610030150402040040820021503506144950104030190030140
6100303055040080150307034001301502200150302064005303011030701630110080
1448501040306040404005020501163020640051030708053030124040050401404005
0205014061001101060640301100614475010802006040301504030550168002001301
1080301703050670200805016405504008010501405103040650670200805040806600
1030705406100504051020070013011060640305040114080144650640200340301520
0206306540014030202100830153030110081061445501046080403013040708309010
1305303015015309210605303015012008603015240400103140106064030110016100
3011403080144450610030404040050114016100301106064040530301100520086030
1131403080144340103070200816030202105064001015067020080301100614425010

5040640214020305085014068002001301108011020022030114020305062040061501
2151030701504361407015040080304003015040010311630110014415062008160301
8308010130617005200860140201314030100830305063061004001106064030110014
4050102402008603017005501163011001504507050401008301405131403080143950
1040200340140610016501206162002204006018015040011012510304065067020080
1030150620015610606404054702504015050070240500143850104400704030126301
0010307070295020307002030210050405216270020140216504061030165012014080
4001501023012405613804054061001030113060200547025040150500702405001437
5010200700504030152100170501208010202009005018015040011012162700205010
7003011501002001000168010130600405150307036203080301108057040504065150
1035080562700208014365010403060403015040506201501400200401653030110307
0130110200315012003150404020400301601408040400103064005018014355062009
0050400130610301168001001405005401000402010307040202004015020101304050
0402012020030064020200401167040318040030206400530301103070805303014001
1012102001020700400610401100404020103070200220501205014061001105406100
3030110070018650125040510307030400161434506200802010165012014024104300
3012170070301405100107005040500405703200401501030140500110504301108070
1400401433506830801013027002030153030110307050620040080105010700301501
3010014325064030704001301405303011030705063061004001170052501930605040
4020450705018002001301108014064001614060301108014053010501000301655501
8260143065303017006004001163011001431506704060104061003040011013020307
0010805011200902402001550301651080165020604003030103030140203030703107
0030165143050690200600101301405501650900301130150670240010501120200300
5303015064504050670410501070030170240010140680020013011080504064001614
0603011080504053030501130114294010307030170104060301651701040353030577
0301501405306100205078101306142840109007030176803016520307005303014001
4030203030104240013052006001301108061105043015110830110801020030023014
0530142750610040010165012061650401501070030114265065078104051306405103
0708066001305303011103061501130114255010240214002010801301200220113062
0307005040200100090113061406030110801306800200130110805200700301100500
4050402022005070277010140651080506800108040070011465300402010307015020
1301304070504050630407040013065012001005040550406304004001406501300108
0506204001406142450620020300101304052005002015020306601503011030703080
0806700305303015015401101003014061027002030153030110307050620040080105
0107003015090014061423506200400804005303011030704014020305070015303013
0100130130861401200855040404003070380100720050404020305303013075011404
0400101200130100142250670403101404020010600651682008010308020307002805
4004082002653030130800802301001421501050406403030540820061045620064903
0110801403018030064020220050405900706404020400134100601503011510111014
2050670320040051030164001040106101081065141950640307010130405200500201

5020306100853030147065011301800200130164001614060301108014053030501130
1141850640309001013040569601003012405501021080010062170070301161200140
3054014503011620060165240044008013080020013011080140400403090060805030
2030501630614175010737040240400501140610083055011022006101301006510081
2050610250400601061416506260204004040050201402130150673400305430600301
2170070161006700164030900501070030303010100405001415506303704006040052
4040050204100650130152404005040170100614017001405001141450640200340301
5504030370400601017001401200155061140011025217007040201400150140400101
2001301001413506404100400601013065701605062006001400601013080405303113
1700130315401302030530301130014013011708050130612008001060805030203040
1130301001412501010041904040050205014706301170051040040506306100106141
1506403090010130405696010030124055010210800100405306602001317001803066
0200540130203061410506307080101401030704105300530301405004057032004015
0103018020501080640050614054705010700301800702205010200501401614095010
4400540165012014065303011100302162700205010700301200606004100405501025
0680200170400102001550301504057016013011650023010403050120405200300810
4061061408506403090010405608050160150301502030611010300601503014030900
1013053030150114075062009021013016501206306104070301104540040050180120
1030120090050105040405504061406506301007010130165012063064090301704060
4004005018012010301506704040060105040405504061405506304070400140401020
0215016304070114040506101020024040050140203040704020306103040701030301
0080206270020501614045010460804030124030701202200652504061013050404055
0406525040610504040550406140350104030190030152100170501208010202009005
0180405302100504050107003012700202030700205301061400405400110140306540
3070216910810403014021627002030214025010100419040400502050153030150645
0404040070940060150401670416530500405200660216400180301005120040080150
6306100104011401501040301703012200504051080210200130214002030130109080
4006510410501021070030110010490400502030653030150645040102004008010501
5012001003011700550120140614005063070801014024010307053030150111010300
1008301504010501000101305090030150115090013014052005002017024001014061
3995064020840080102040203014080104510501130110451013050401702400105011
0081100830110301104510504080110083030104510530301301001008301103011045
1050404020101202003005040305301001398506208064001050180541070104050010
0306003011421053030130100541070104050010030600301142105040402010120200
3005040305301001397506504061013040550116100608050107003011030702022004
0040302040010082030700201396506802009040010501803013080030113011008301
4702170014080100830140202200530301402030700801395506100400400130801301
0080530301506306100106080200401301200241050406108301504040010403013200
6001064001040301504010830132006001050406200190213016704060301203040105
0401800200130161406030150404020100720010504030100139450620040080101650

1201404055070308006100830140513064053030110301164200640080306011406080
5030206302400203015051393501030801100030402040041270507015020501402050
1026150501021410530053030121080208013925064270400150110140400502014040
5612020030030110064055010215030107804020612020030064040050140205012040
1620200300150107003030306100504050017010403405200300850406106139150643
0160015108040520015030121890120103061140309004030103030150401709100405
5636400103001000114050120409017050405303015040405301405307004051005200
4006153050040251010601734001101060301162602050107003016139050643016001
5108040555033012189012010306153070013062004001004055636100520010130654
1107610506083011650608150107003030138940101004006040912009010301130010
5040104510640130603012001410301670410530301613885062002080400104061003
0400110130130908050203070020604013012501000400403050120141090815150307
0380120015506113010301502004011514001151030705062004110040550115305150
9006400501071615802006007800200130140070060011700110400840170501301660
1503013020110140408002001301400125052930400600180140603015040515030750
1140201105043015110830130500401405011387506304070400404005020140240201
0250508040207032004015010301405001105043015110830170140040402060805011
0307040201010002140501601503011510111010083012001010002800200130110805
0610002104051700140513501140308013865010200201300301504050506205030570
0550401504001035015010305010430153050109030600405303011670440529108140
5501165090065012040302050403640301405136809017081020015400131521682008
0652109810200240525010200362030803011080404005020170011040082008230162
0023011080402020010601010700301651385506200204040014050624002010150306
0200501120020407020060153030130100150400110110802002040405301700140540
0604012008004702504054082006015030115010070011700161384501020090040050
4030150404020704010501162009004005018053030210100030114050130100805220
0504051015103070307501130630506306100106138350680304006001051080140108
0405501021080010030202200504040010026054030201306306168030400600180548
1654011301601503015012014061382506202003001014070103017040065501826080
0200130110801306400161406030110804030701013014025303015061025040013010
0530301450701506170803001306550630610010640570805010130640520080010130
1405303015064504050642701061381506402003403018308010130550154001101227
0020611270020530301103070102004008015040404030900150408013805063010070
4001308015302100504012004070402010804005002304100805240201200411306402
0103070540063040014053030113006303010013794010900704061021700701022004
0010907050180160011050110301108610140130170240015011060805011003040050
4053042150110305062010140301005304261170052001010005012001002400101150
1100305063200101305010700301301100400150102150400110140510307010304004
0017001613785063040704008010202009005050304054702504080020013011080801
0130600402015030703405001377501040200340301406100301107350203070020165

0406103016501201406400150102301240530602004054001361640309001403040203
0210050405062001003011502030514100306137650630407010165012014050108020
0604030305010720307002056040200800103011507041040305012020040520080055
0701508030020140308014010110061147011006152503301501704200800301501605
0130160401700161375506540701040550110100091080150110030506320010130501
0700301200700508040530314051030110800100302001060030124053013704006012
0030030160150303053030130370106306137450104030170301220053030440830150
1405167042006001640130601510804054001084006405303012050182601510804051
6704137340107050301400150310802001550130140540084005040102003400405501
4010124052200405104510400183019030116304070616504015010700301501137250
6260201016501201402200150301405161402010306113715063080110001504001101
5070405501070030161521650140916110504301511083012168002006150110030506
3200101305010700301501137050610040010406100304001101308002001301640016
1406030110805303011003060014062001550301630103030180130400600110805011
3695064030701040610030400110130130908010100830121301203070053030110030
6001402160830165010506030144701640307040030307150405200410061200650200
4010030161108006040300301307031070030165136850620080201016501201402401
0301217007064010408504021200300405301620080205010700301696010030124001
8301903011630407061650401501070030110731030541070104050010030600301142
1055011100853030147061701040340207032004051030113675062002070040013080
1564270180402022005303014020307005507001470250401301701080300504014020
0401301200241030020070301103070106400601405004011015400601080800200130
1640016140603011003060010700301530301402022005011366501024020081603017
0055015062008012030130110040522004507010049040410040530501165040150107
0030120030026601503012007005015014055040303200103011501086150112370601
5030305012011365401020830121400203014001101203040020030113644010900703
0130020070301220065640030206400510307065130153011305303011026083010080
1630640050180136340108200806200501050406403012402010307090102008404005
0701405103070710770402060805015040306602004020134100301362506510080101
3040610040550124052630100530301802009016802009050140500481504040201200
1030580070210301405800702200900505200660400307501140170016136150620020
7001040513065062640010130405005010400200406152004040170302010805065040
0801040550150620010130611360506200801204056164001406405603200103011603
2004054004178080020040405263010010805010700301140161359506200300240060
1040561501401014054004178016504015010700301140180150140101570055400417
4020101306100105040455040805200660400307501140170016135850101004004030
1704053030150116403070165900301000402010801643103062001802030150404020
5063010501070030116304001100165040150107003011510111013575062007008104
0530703040510301167032001700140540610016200700501030650104301108016510
0080400103058010194055040510020080302050402008050130630805801201620080

5010305065040640301501201406135650630407010165012014050608153030140510
7310304053024002013011104165067091001013065200102201306520010100090510
0805050610080501013061355501050608403012003170108001013053030150183019
0304070524053024002013011301050647050405063015010130620018020301900101
0001011096405061091013065303013010260108059040600401306290501306140900
4052109010130405501220307005608050507040560805012162100020010130653030
1306602005070168030600400105012120070130150404053068504065501044030130
5130501201401354501010041903017040165062065303011610040011650401501070
0301151011101353401082003012164003016553030150116264001030405103070214
0040500510301130153030150401330401305011650900640560805014051030704001
0018006400282001402800200130140510307040010018001700110400816803060050
1070030155001305003011030706135240108200806200405255014051030702140040
5004055040100102008026301001000107104120140470250405200607030157016010
8056702400150107003012001905013016501020031540301610250301103070530301
2140041003013512001090501306103065040530301506450404020301406400104010
6101081080020013016400161406030120304053053030150113504010307010300302
0253030150150610040010140405305010210104008405145700147021406100308001
0305303015012014061349401030851613040105120021501550401200240053030647
0550153050102400140308051101154706547064050701301510213040105120021200
1801000400601501201406134840108330121890140550140530501024001404702504
0102200100103061165012063065010202003004030301620080100040060105011650
4015010700301610250303050120140134750105040640301200300265303014648305
0690080183016200205040301507050651503016806200704030125062004013015064
3160301506702012003015068101603015064401830150642170301506210140030113
4640109007030176803016520307006524040070101210700301402070102216200300
2400601805303015040545702108061504065012001003016301035013016512006400
3011080110085103070147065063040010010650630400100108053030130102601080
5063040011001055033014053050124053016401640560805015010504064030150401
0200400300153030150113454010208401030705303016405263010070910040050113
0140526301001080521020016502107003014055011050230171013013445010403019
0030140610030110451013053030164050532001501080522001550180200158020031
8030010307055011050260601504040120010600501680020065303015040106100400
1030705501105026060150408011343501020059403012810530301616200594001050
1506281030132005108051080406100400501100814061030615040106100400301103
0706060143604030142151080401004001301342506270012030405501453001053030
1610506083011301150420015015080308103063021005040530660200653030122001
8504030141902001650105040640301501021100102008040061200802061200120080
0143604016700600400150107003016134140102084010307053030164051030702640
0101401640527007010140153030120040130506320040506200600161340506304070
4004040050201402402010250108054153003016210100030140301701030150642004

0060650650406403016530660200640203040705303011020010608016304070130100
6133940108200301216400301655303015016400110049030170060011065412705070
5264003013021001065530301501164030701040301133840103070701040605303016
4053050206020400130905014051030703090615240510207400640520059400510049
0405301640150407006001337401082002006801000530301501405103070264001050
1530301106070110106020060016183019013040701693060040526507002168020040
0701506200600161336401090070217007010301506420010405005010400200404052
7007050604054030705050850405403070400130100180503011030701642004055010
4403013051504065061008015040212007013015040402030685040406133540109007
0301768030120307001421151080501043016002001550130115400840010200340040
0150340530470165507016800200640550705303011080020050160812405670240015
0107003016200190501301650102003154030150405063061301506100216030161334
4010820020068010005303015015400408200108053030140530600410604053052200
1001550113013066020030140016309065303014507040012200100100805010140700
6004001062006001301406103016530301250406105040212007013015040613334010
3070701040605303016660301520010144051030702001016430140202902200400106
1402001000401008050101407006004001050402120070130150406133240102084010
3070530301653066020010307053030130750114046481640307010130120043161100
1805061200802043001212007013011331501010060180301406100301507010800200
1013053030150180405507016800200400501804055070168002004003040203050680
3081013305062602010165012014021734050534051614066032004055014055070168
0020070180405507016800200704003040510301404002301005011700140203053030
1250680308106013295063040704004040050201402402010250108054153003016210
1000301403017010301506420040040500530660200640203040705303011020010606
4020200126001504053030115012504100402030504065050301620070040070400130
3010040510301404007032001700140201030150620070040070101328506403070101
3040580405263010010307053030170296803016600301704016506201050121680020
0110501000140562050650700140060105010700301103070301026030114050113275
0610080501014016431013011507870404301504080010804004055010701616306400
5103070402030408114043113040030100405304084003020640011401700150107003
0110307013061326401082002006801000530301630102605040501050608403011030
7014053066020065303016890501700132008506100805010140506431013050107003
0110307013061080020040301103070130618070800301103070601030132540103012
1700704055040162008020501070030121090106053066020065303011627002050107
0030147010064053050700610302120070130150405062007007040301136132440109
0070301768030120307001510805010430160020015501301154008400504010200340
0400150340530530301470113235068308040301405201030616400120010600301405
3020103061640560805016405301640121645135704016504015010700301630660200
3015020301322506510080101304058040526301001030707029680301660030170401
6506201050121680020013215010470110030170405020501502007001630110064055

0403069301630612050700140060153066020070401645136530301216504015015200
6604003075011700161320506200801204056405608050110057400611050430110801
5240527007010501530301410200101405014054130616405301640120237040013061
3195061006018040561640014065306602006530301216200802040550152002100103
0704010040013061421400140405504048110307030904001306131850108030160030
1704016470100180520040306146701003012404001080020040205011647010704016
3040011004005030614211070401632006004005030301008036200600303020650700
1400601804055040580101910301530301207032005018013175062602010165012014
0217312001050020162021030613010301001620880010308013165065100801016501
2063012008430014050532001503010020083011080162008050400130163011006530
3013010260108040560805016405301640121645131050116520020653030130660200
8013060040547010040250680306004030182008013155010100601803014061003011
0451013053030165306602006530301216200802040550122030700405305303012008
0100010503080520040501070260405302008010004006040050140530200801000400
6040013061405302008010004006011314401030121700704053064055040530301200
6006040550405062006006010804054531301506431013050107003016400110049030
1108050105040640301504050107069403015067403010501070030113132610100030
1401307053030150164051635064052006040307010530301501164030701040301131
2506270020101650120140265647061405303011680306001140255061003010406101
0301405263010010801100180504052100701801311506800200704040561630640065
2163060025308008050404051400114030801310501083019030150405050620503065
0100490503053080080504015014001501030530301451705040455040613092001 09
0501306103065040800200130110804053014065200600130161105043011080140103
0112170070530301405270070101630640010501640530120010600201016264001050
1805308008050405306602006530301405150100015011301164010050140616301501
0403014021640564054013060147021620080206200802030154030201630110041003
0616301100140530301250680308101308200109040301601026405053405161406405
1030709003010001650101008015040301620018020301451310250301151011101307
4010900703017680301652030700200220153030150405016800200650470400150310
8052109502016040615108050104301600200155013011540084005040102003400400
1503400150406403016501050406403015303014706130640102087107705303015015
3030140540820010602010306153066020065303015067010910651207301506400610
6513090301506401010010620020504030150705065501068062007040301250620040
1108007021103061405800702400150406403016505650406403016130550640309001 0
4056080501165012050203064054030900103053030150120140804001501023012405
3060200405400400140012080400640301650104402189016401051200214061006464
0500641706865040610040530210050405010700301125040540011040301130450620
0601600301405201030616520060013016110504301108040530140701400928201030
6116800160010700301204040080060064051001306002402030210050405010700301
7040040400601140204020100130600240400704004040060180405100130600216704

0040400601801413061613016401200500201656100402050404300116501204020302
1005040501070030120130340101004021700704053065303014055070306405260810
5151080501043016004050532001502001802030164001100801504030165010100801
5040301530301470613025061006018030140550101008015040301501405106050805
3030116605040510410150680021001068062007040301507050655010620020504030
1250620040110800702504040580070240011008015040301650610080150403011301
5010402003401650120405501258010192700705040205040580101950708070505014
0205014010147024040020080204100162007004007040013013005061075400604004
0400502053066020065400110165303012130100270305068006600501502014050150
3061001030405400301605010306129950620070084001403200600405303015011610
7540060130100405263010010801402405102504005200660405103070307504005015
0610080150403012007008101298401090070301107600301203070015108014301600
4050532001505305018053066020065303014418105040550116403070104030112975
0105040640165012050156800200105011008153066020065303016402068002001030
4020305303012506803081012964010301217007040530530301306602005067006105
0107003016402050401650401501070030305408200650105040640303050406106530
3012504061040203020010600507001301005070016550630610010610250301506700
6105010700301405504061295401020840103070530301653030150405800102008030
1026030150216530301301026010806501040200110003016211002003011080640526
3010058030640301615103070501030401703016501020160403016120010080303040
0110049030114050112945062100012005303011030115015306602006530800805040
5303011501040061060530301150260816301100653066020065303014051400114016
8002004055016306129350696006010405170011550401697010403050161680020015
5040169701501804001100490301108020740301050404055040612925068403104056
5103011630630130600440614001200110004061133040506431063012915061002008
0104061004055020306402050404051406402050403040550153030125068030810612
9050620080120405640560805011005740061105043015110830110801524052700701
0305303014102001014050140541306113064053016401202370400130801289506520
0120405613015061008050101306103016020405613015130903015064001101306530
6602002653030121620080204055011301405400110080504055040302100400501405
7050401406128850101006018014061004040050204020501402050403021004001050
3015200206117069161008050130100128750690220040040402070401501169022004
0080150104101261545070504021700702530301402021090105014020290220040050
5085065010105060830110481130115025069022004003053010012865065040640301
3020640010308053030110307061501306406515030530301240020140130115021090
1050303010012855068200804056163064001063021005040150200401150700600141
0016306100105210904020290400501640566040055060820290400501128450102008
0120301259108403040505350161691006055040080301108013011050400804001306
1030507001013061001050404055040612835065200120405653030120040120059006
1008301131040082006401301203016230100630210050405504008030116100040021

4100301282501040301900301240103070530301640530506701406040201080655040
0803014020506100021040203013060016708006130613012600130140206417140402
0108016320060063012815010470110030170401647010013010100640592500804055
0017025015303015200205020306547053016470130362006003011641200163061280
5064420040010405210200108040580405263010040021400200162006001301406103
0165303012506504061013050107003012050700140060101405011279501010040040
3012401030705303016405608050164053016401216451310501200600130140610301
6530301250650406105010700301205070014006010130127850102700120301403070
4006161004905010700301203050102400101040084053040050700140302050705303
0118070127750627001203040550140307010530301640560805015062030510402070
4015032006003015070940060163053030125068030810606510030030140510307040
0470250203062067024001301490110012008060612102001001800200705012063012
7650640307040040400502050140203020010600402030700530301301026010804020
6080501640203016401216451361301100500618018060016200805011275401020871
0770530301611030703011055303015403020610308060301162008020501070030154
0302030703615620040040304650325410165103070540050102060530301307501801
5070405303015015078400130528190303061001070012001100030110801405700150
1050500110501500162008020501070030153200600170015303015200905041008056
2009050400130112742001041001030030201030705303016110103005620080040013
0640202001010001406100304240060106140103011217007040202700701016200805
0400130112733010301001301520060013011080110504301511083017014004014080
5200600130150401105043015110830124040010800200180020013011030140400301
0015001530301301026010801620080501402030301010017001402030140165040150
1070030115101110127250102008012030140610030110451013053030164053014070
1660405305010753030140200814016308108053030140200814054701610916103014
0170550640200810614017055063081016200802050107003015230800102008020301
1080541107106050301140501127150101004004030170405303015011640307016580
1204020506304001100101402058012050102020030040301163040011006402060805
0150510801640309004001308040101003015010430120307004020085702200115504
0800200130164001614060301100306004061053030121400201080120053002003007
0150500153030145070200653003015470501127050675020400404005020140161006
7008040206080501304040075020140170054052006590064052650364055123152106
2040080405053200150108015103070104081040610126940103012170070240520030
0280530301301026010801550610080501013065800803016257003015067502010501
0700301653030130102605070506490106309123012601503013016401506302011030
5012520030162001281301504012001050020501165040150107003011510111012685
0620200300403015200206306530205010430110307052005900103010083015010461
0453012530660200306020011070030165126750620080120301520020630652006504
0400105011301530301102110640551680125303012006501610809105015064102001
0126650620200300101407055018260651301530113014816153011642701030130116

2004011406401020040502181060403016530301506450401212200140550125200640
5200128116700600400112655062080610105015303014053040011003021005040162
0080205010700301306100506105180010405516801240530610020307005303015021
8106040301102001905030140030110065303015021200107704651030140030110061
2645062001000190405641050705107330116970101040082140020301164006150107
0030150401008301501045065010410130653066020065303014020081405064020081
0130620060013014061030121306530301250650406101305010700301163040011001
2634010208401030705303015011300501530800805040530301402010501000108066
0805301070404008060050161700540540170470240120083014360403011622001001
0130806035050620200300403011405011650401501070030115101110126240108200
2006801000530301613001050401030702030700470250405303012640010405001261
5010200801203011732030700616200802050107003012700706156200400403014650
3307501650105040640301103070653066020010307054005010206053030130750140
5001260501020024404040010306405004002820014028002001301402010307040010
0180061101030040205070501000400403080402040020050020402040023701700150
1050840610652001050020509164010805303014020200905041003012595010100601
8030140610030110451013053030165200401253030110400110104008169022004008
0530102601080415365306602006530301504040201030128115506800200400502016
0406154160205063006004005200134006156404008020040010013016401640204002
0010300706402031671640205016600164020615021640206121501205013010012585
0640301900301405201030618040205040405306400105040650140101301103070200
8020301162840060150111030614020501660016402012116700600400400130165040
1501070030115101110125740109007020031545070530301501142115108050104301
6001256401010040401070501510804053040015036501680020065504054082002405
2200405200300210125550671018030140520103061653030145070532004409007014
0560805016405301640125303013010260108016451361620031561650401501070030
1125450104030190030140610030110451013053030165303014507050664006010130
5303013010260108045136200600130140610301653030125040150402040120083014
3604030152001407063183015101100604040030703112535010440054030150401650
6201050120103061106070805303011301300600104030651207301104001651309030
1401100162006001301406103016530301250401504053030143160402004070101405
0112525064301600405200150301108064053014070140092820103061200802030124
0560805011030705010451300530301431604016200407010501501020200300403030
5012014012515063040704001402200102600530301653103065010504064030113065
3066020013065303015064504016700600400104030640205040164513501070030153
0301403070101403061620200400400501404002608401125040102084010307053030
1613001050401030705303012640010640526301009001010002570010612495010504
0640406100200649080300106405103070402020090501064057600106402010410125
3030140527007010405630400110012485010504064040400502050156300600400501
1008153030180405506300600400152004030614020642405630660200301312006001

2164056405501401011650020501406100506304001100400130112475065400501040
5307030405305014010113040550120080203015401011630400110080402050104108
0165070964054570470250404055014010116500205050161246506403070104061003
0400110130130908050650104301108040205016600180512073011640016513090301
1640110016162140050180124550644007040301405201030616540700130613015040
6401080506210020010130124450630407010165012014016040550153010260507016
4908013010301001504050053030140011012162004003001124350610060180405200
5002016405263010010214006405516801240205068002001054070013061301402010
8016210020010130402010307016200590010501680102012425010100400403012810
5303015014053016401010040060180402030164011004006011408040120083014360
4030145070404004517050107003011301530660200450706530301450704570501020
2003004030305062010801020124150640307010130406100405501220307005504014
0510003021405005303014013020704060101040085200318020200134006015010202
0030040301504048150161240401082002006801000530301501405301026016306008
0512073011640016513090301164011001616214005018049020040302040530164701
0016405620090816405670060064056404004365001085010202003004030116304001
0018040200830120053001301600306050117001801239501010040040301281053030
1501405400440103014054570405103011640400180148140201030701620051900104
0306110103004020690100501040304050050102020030040301504040400451705010
7003011301123840103012170070216200802050107003012003002653030110737040
2001010004020501164030701804040010306400501640203020010600658040400240
0501805306602006501020200300403015040102002530301501200220130138301406
1060150301103015306602006530301504050170016123750102008012030110760040
5303015016530301107370402001010004020501164030701620053001570220018002
0013011080168106080123650102020030040301504040400451705010700301103015
3066020065303015040512002123540103070103003020253030150153030121400201
0808007022103061405800702401820013016306164020504020103061804020704016
4513616200315647025040165040150107003016123440102002010072006520080100
0404053011008506504064030140520103061162009050616615010700301653030130
1026010801645136162003156165040150107003016123320010220416080680020013
0110805504008050204005630708040013018007021103061405800702162008020501
0700301612322001090250630407040014025303016100150010404055010264020501
0240610010307013012009050301402010307080501043011080402062009050400601
5016162003151010400810300504040540010130650404020301401620031510403061
6504015010700301680070211030614058007022010306116200905061661501070030
1653030130102601080405608050164053016401216451361620031561650401501070
0301501123140102084010307053030164055040502040180302100504053030116501
6004100802040050110600164102001050161230401082002006801000530301640203
0200801000106402050407006001140401200106004020400610120010600402026301
0010805303014030701050110200601301504040201041011080504030301001025030

1151011101229401082002006801000530301501530301161004001612109130130840
4004050100014040163020801228401090070217007040400700600114010804020604
0301002605303015040214002013063012274010208710770530301652006001301410
2001053030161105043018002007050641020040080020013011080506005001010400
8102006015305062010501102503050120140122650102002190301704053030165303
0150700125010803011623010001080301402050405020105016501040010140162301
0001052002190510140402050405020105018018070800402010805014030706402050
7053030180806005013011225506510080101304061004055012162008020501070030
1504018030116230100010510140402050405020105016501040010140162301000105
0620021905062003007040205040502010501301400100301103070501050406403018
0020081025030115101110122450105040640301504020702400150406530301202608
1025030115101110122340102087107705501405501028030153030150203064052630
1005010240080301140170104038002001301108014040010080501630405263010050
1028030161222501050406403012652009050220410110700301655303012026085018
0206704600105011641020010501612214010307030170104060301655501530301103
0703020640061530850318040306030301685035016122050640309004001304040050
1640201030180610530301301026010801030050401610080504001406405403070105
3030140550640307040013040550645040501020060016402064706530301647052506
2520040030106003019122005040656100504040400709400601140405301647016121
9506737010130405501161002601620080205010700301502608101306121850105010
1600301281013053030150116601030704051030170025018055011060040610050405
0801600400140161217506200207001040530703040580306005040405242003008022
0083011080405508010050040014018012165061004001013040565200403020108040
5457050680010050104050040550404004517050107003011215506504061013040580
1620080205010700301530301450702164301200300501121450104030190016501203
0206506702008030115010020010001640526507002405150203051804052200400110
1216270020405302100504050107003016506702008030121420121340103070701040
6053030150164056080501214016200101000101040084061001030701540705015407
0501200101000402010403053030150122030700121221100703014104300106100530
3015014052650700253030140570060018053030140011012162008020405302100504
0501070030165067020080301214201211410270303040130900260103053030150164
0201041014004041001402203070012101001020083012170070161006700640520012
4164055636506220080010520101304030116200802050107003011080640010700110
2004006306120940102087107705303015018053030110307030206400105040640550
1041306520010008002004040526301001080501070030165061008015040301306100
1070011208211007030141043005303016530301801600110501506200400130140102
0011050140205040102002105013011006510210070103070902050501400108030140
0120040014030804020302001310501660150301504040610301402030230110001303
0110064053014070150191030030140530501077001612079108405063040701014025
3030165303013010260507050649010660150301110200612009240520011045040163

2006005010700301201650620400130612065010200219030170405303015011620029
0164020810200257004006163030080400801670715040013065306602006530301167
0109161205506830804004020307030120010500205303011620020700161640025001
8051080404001010030170011650401501070030115101110120420064013017032004
0053030110301613067080405012012004015303011080010010304055010701108040
2030301001061301030100402050107011080404001010040030170014056402010200
1070016120320064903014001700240103070550140306053030150203062004013011
0804040070715040030640400303008030120010500204052012001630613010301002
0401504010805303014052010200107001120240103070701040603053030150165501
0250701085040101081065501025070203055040203051030130670804050120120040
1530301108001001030502030641701040301108040400803040060013040400470164
0063064020504030806012202003016106901003015647030124056110504301564703
0124040050170011201200104100103003020103070530301650170403301101004003
0140610501100200803014061015042701030701503075011406530301240400504014
0400502050130102603015021650102016040301610401400103016102200100301107
0030630660200303065604060053030501801030050404040040501000140501164030
7016120020010905030140705061030640301407050402013064053030150116403070
1801630640050161199200109025063040701014025303015018016540050150180530
3053020501043015062010655040080506204001301040084056304001100611985010
3061301400506040080040410080164670105016803060410014040530200801000101
6540050105011620080205010700303030100119750620060160030140520103061405
0531080530703108017010403540202001080800702103070580070250010260030130
7031062109301504050010260030153030171040103011965062003008104050531030
1162008020501070030165062301000104050052006084051030705062040040500155
0610080501060805303013010260507016490103040530164015061008050101620080
2050107003015011195506200802040040400502014022170070301161006700805104
9040061204013014001023014507040540013090501201406119450640307010130405
2005002015020306506100400403011301561103061501511030611650120140640120
0830143604030150705064901040565303014052700701013014053014061193506200
8010004006010405640527007040530301501201406405108040050164052700701030
5303015012014061192401030121700702150400101611406030150405200138150103
0702009401802045070504010083016517005501205014053030116301100700161191
5010306130120010916011301170055011700530500401503010030130050630150704
0604100163011001504001101405103070103040040017001611905010200201403012
0010600530301653030120020401065062002040106206320060010612063040010010
6120640025001030162008020501070030120220020401070016118940109007030130
8008030167005303016402030200801000106402040011010604020507020080201061
5011002008040203030703105303011610040040050116504015010700301151011101
1884010900702003154507053030150165504008040204130616402030164011405011
6403070161187506403070400404005016402040015014011650660040063066020030

1653030116506600400130165040150107003011510111011865062002030040040203
0703040012109301504040201007200652009050240204101640201618060150301402
0809600400105015068016004008002001301108050680708004006040301030100404
0050170011620020700161185211007030141043005303015011640307016590160040
2050401640309005010700301502109040013055040080161004001611845062003008
4005103015501652301006200403015010230681053030150116403070164020101081
0140304020170417001306602003030653030162103400601165040150107003011510
1110118350680020070404056163064003040570406016306405704060130120010600
4051080530301403070630611825063010070101305010700301402023014090301530
3014507021643012003005011181506704060101304056150704060163011005010700
3012016506204001306118050670406040040400501655070163064001306530660200
6530301167010911650401501070030115101110117950105040640301704053030150
1640020050020630611010300402040010804020507010501000400503064705016467
0400501640203020010600658016540050400501684008030140201341008016840080
4006040050111785010200801203014102050564053030150164020307001177401030
7070104060530301501150608130255040501050406403011030210306104020053030
1502030640010402007001400104020014064053040010053030150203064056304001
0040040308011762001090403016010264050535161406530301504028001000212410
0805108010301171084004061301400100301802008400401301520024700104061040
5306105040611752001241301405630640013080180871620080205010700301404001
0100301700116504015010700301151011101174200150301217007050102008012030
3050165610067008040203070011732110070301410430053030150180530660200653
0301100100130010504065306602006530301161001300405501220307001172501502
3020405504016220080016100150701301100680162200800180270200301162008020
5010700301263010010801010030160165040150107003011640025008040207040105
0152010130403011030120220010861070011171401410013015240025001064020263
0100103070922001030650191030030173200402050702570010652402020059103014
0140603015040402010307030750106550405504016017050301402010300100010700
1117040102087107705303015015303014507050401301200905030114064020263010
0525010409400306102003002130153030153070314061169501080420040520101304
0301504080301240204404010501402030213400601804020220050650010100040060
4007001116850640200340301520020630630912301309210610083011008103011675
0102008012030120021470910010654001403020210083011008105015303014102001
0640203050620400520630030140017002001010005015064640064020301550150104
0080101930110481530301402047010700161166506200900501040564006403011030
1506100160101405012050102400140470210083011080205063041310116550652001
2030501050406403015040110010200805016100830122040010250402022002032006
0011402011644010200201007200652008010004064052200450704001320044053011
0085065040640301405201030611163506100805010405150100720014040651309030
1506401010010501070030111625063020640010405220010307061501401014054004

1754001101405103070400103040017001640526301004003036530301200207001700
1501070030150650406403011405011161501050406404040050205015306602006530
3011670109164020501024001700168309016530301161004001803066020030165303
0301805013013010030180501301507020506301601011605064360105306550682601
0654004127050705062002204006010130202200450705010700301501115950103080
1100030150405020400130630190130166410003012306100301504020053301506465
8010600617020080040020608050108020220020020700161158506408200400402030
7030164009050165301670404006018050120010030110200100170016115750650406
1040610030540820061045640202200504020010190217005102200504010301108610
1407024001140501301001540010240031130630163011005101240540014004030170
0161156506200901001013040500101000301108040550644010405501660016115550
6200902404051700180162002070040050191030030150408010194056040170011610
0400150107003015011154401030707010406055015303012700704006018010007505
0191030030150402050100075010140161153501030513301507080020070168020070
3012200401668070301700600115250620090210130405620103015062009005010405
1200400616704060101301045301103014056704400501611515062009050104056080
5011306402020090505067010940060101305506450405067044005010700301611505
0108301903011030640010656214002030130750107003015303011010306501114950
6200900504001308050641020405004020120200300167041301001525067040601050
1700140530401152506200902105010701405304011525063009210410140530401152
5063004010303200140530111485010100419040400502050140203016210340060103
0804056704180402030150040141270530301506450405067044005010700301501114
7506400401904040050140140564040067041402010307016604020670240010130104
5301103014056704400501611465062009050104056080501130612009050405305067
0109400601013061145506100306001040561101030010030600101301405062020030
0101114450620200300101407053030110301704008014051400114010801202003005
3013070318301901405140011403080114350102002013003015040505062050301830
1901504001040015010301405220053030116704400301005001140308052400200408
0180108060013040840030408151300100040014030801510301502060103015367155
0403070365481660805050404020100306001070030165114250650406104061003020
0103002620010700501301150150166030110506040140620010600301504040020050
0204006013021010003014030701400502063065303011300140130112008001306170
8050106080503020304011303010011415064030701013060150301200500201502030
6530301450701540307014050130100155070108082050120205063016010540010002
1301402010400140013080020013016400161406030110804003010050065130115400
1006301510303101301022004507015403070140501301001516020040501101570160
3015070205063016010114050654070104055011010009108040520070010653010415
1308053030130308001050401139506504061054702500104810128040530312200400
1001410050620105011060705016103005040530301100306001406800200130164001
6140603014006203040108016200900501040306111385010240200107005013016550

1550350404052819021401620020804001040306111375010400401041020501405301
0304016113650640307010130500108504040532004400605060150400110121627002
0501070030161135506304701052610083012506451054011501003060050404061134
5063040701016501201405067310605101406011080506483010501070030116200700
6152567041801050608301140601301530306113350630801100030140520103061308
0014053024017050130120201030611525067040601013050170014053061525062009
0210130501070140530615250651008010130263010040530605013016503301504012
0010500204050533015012007004100306113250620060160030140520103061803030
8001050406104400540301658053030145105040113150640309001016501204056080
5016150400110121627002050107003014061003011305004016011305062002080400
1040530703090901003019090100180150400110121627002050107003014061003013
0500402030700500530105202004004006150053010510307030408400501230203013
0500402053050040805165702400168002001301103014306001550203061525150708
0200301501030063061129501061100030150405012080501910300301570240018015
5040600306050180150400110151501040011070030112504051030703040016112850
6703200104053070306400110130130908050203070020611275063092403013070801
4021502030540080140547025040510200700150206302100504015061212020030011
4050116306100400611126501030801100017005507015020150154011010030140610
1630610040050115045300103021630110040202200240060301405608050110307040
5453001640540010200700405200659005040404110502504020220070060017001611
2550610040040040203070305108014016200207001656100240201501040011401670
0600405270100165501165090065309005501204051006803023301150100400507001
6112450108309040301200317010800501301501513090301164011001621400203012
5062060401050107003016112350630100704001308015061004001050107003030200
1060052006001301200143016510801401660200461008301130153030110307016306
1001013050121400203011001500104040510307070060061040301567006001105305
0040800200704054001105016150302008010001060506306100106105041301170058
0020070506700600110214002030116500200680306004054702504080306008011225
0670320010405307030400110106030164001506083012405150630262030700506440
5504065068301903014055040140401800200130110804051507091006112140108200
2006801000305501621100703017010200603020220050121700703016604054066010
5040540110100301406101030140510307050500702103020220050700140070016112
0501010601600542001001650620405301503010055070165501405070164007014030
8011195061006080101650120140260101022170070216403090050107003011507006
0016660301507050655010501070030115010350152162002070014016605014030801
1185061004001040530703064020220010301520070070401630110014104300121700
7040527007040614052030540530301140610050690070400403040550405401400301
1007001611175061006080101650120140240563025020307002040510400140013050
6400260101304061061702003004054002604061040550140010840510400140070014
0026030110805064701070012008230152008001840050120104003015102001003015

0704053016016111650640309001016501201402140603015040173200405103070150
3060200180405303010100107003012001010001306100405504016403090050107003
0130428011155010506084030141075060402040011010960040203020080100050143
6021230116306004165981630610064040010300500108155040163020651020010030
1570051650206014053030101007001611145064030900104056080501165012050203
0615064030900140640201501007200140400121095040163020106306030165040301
4051030701503075016401401000301405103070150303090064052200300406015013
0204030704100150107052003007014005050015504040060325018020038301201907
0222008001501540610051100604006017001106064010301150108616140401191260
1520030070104005050014051507091006111350630470105261008301250645105401
1060640406100504061112506440054004020307030567024001654001403020653030
1250406101070030110401301102503015306602006530301216504018040010401061
0108106513015301130800200130164001614060301203040530107003011701040340
2010301530301306602001050160150301151011103010011115068308040301405201
0306157040307501107003012006503011670240016562009050656200770652165040
1501070030180405103070400501201040030130130100013016405200901405507070
8001065001012600301405103070402008106400121093014053030810620020504030
1507040515501068062007040301240520040110301035013016512006400301108040
5450701264002040550643101070030110401301102503013066020030150670240010
5010700301111050650406101504001101240550107003016512073015064006106506
1004001050107003030152400201608010300302040070606104004082006130015040
5221090110217007030110020103011504515015200600130110806550608110504301
5700510801503024002016110950102008011000301200106004005016150408200161
5030200801000180150103064005011300400504010454006130040050401523080040
0204005040080130110550115040158060301307080140215020305400110110163021
0050404054002030514001030063022003011005803200301405400700600114030801
5040011001040301303200501070260540610010606402001400600161108506252001
0405220030405501070030305408200610451540060060501080681630130170060012
8001000301106064050704002060140306110740108200200680100030154702504020
2200501165040161547025040162140040500400110106030116304070501070030161
1065010200400804030110735020307002061105043015110830110805307006405220
0504028001000405301501060303703011670060040015010700301501110550104081
2003014082001400501620400408200108015030600416106001306103020080100012
2003011001104501040301900301406100301704010503070340013061470130110240
0403004001308010505063040010010164120610506807080040060140610030150140
1502130110051030152003105106001601200270060016816301301101003016402022
0020040140400303701104702504010506404008030600140601023011001806015012
8001000540610010301106064070320014030611035010200601600301504050506205
0301503020080100010615022001504082001040305010301630110016308004100405
5011612006405104101108091006014030611025010403019001650120656700600400

1130102604051045101306405403020101305501162001040301200166005301460313
0370405103085040547025040106064040610070060040016110150630407010165012
0140130150673103054053014070140092852006001301110030615040011012162700
2050107003016110050103080110001550701650120615040011012162700204055012
2030700130102605670060040010101000301301026016200105016130102605670060
0400101304300200301301026016200105016152165040610130510130201620010501
6100830120010100028002001301108050620022040010501070030110400110150708
0200901601099501010060180301200144020102001601550608121670060011020406
1002004016561002157006008010300302030130109080400659007064010300302050
4081630130110805301502400206109850102002013003015040502062040010400114
0700600801040130202610400130160200260150301103070204001080990110501106
0640110301100109750105040640301306115016201030140024002050182603011001
0018011403080110070901060640200600612045307033023303052200103034001403
0801050120040080660805501204020010040060150180302330110301200900501502
0306105012004005030301100201030120090050110502001220030110052200540302
0615040011001040301060640131403061096501046080403013010260702400400130
6830901610406100108010508030600150620015510600130106064030110065301030
5010702200152200400110010404040080200300702151504040400165301030501050
0130500106064015047016610954010900704020220050401302402030700108064020
1605050610840060106402015021506304001001021700703016604020506406601050
6702008030150404020150103501700161094501040301703011030704020308008065
6153014020101000215303012001010001301100109350630407010165012014030912
6510804051402002400401306550110925063053400406100402050130110055301405
3014020153011503030703110606401101630110040530401509011030705068020701
0406100103070164001802008230130101012006011050221507613610915063002007
0101650120140654061006506702008070509010501201401502004046162002901402
3010101200601105021030701050608301202200400403020400404006151080150202
0012104003011522001100040680020013011002001300405068070800400601016501
2050107003014061003011505002006161090501030801100015507016501206150400
1101216270020405501240103011080405150100200100018040550401504010040050
1801089506500205010405170015610003012405303110301732003014055070150803
0020140308010883010101200601105022070405030602005030620305050406503073
2003011507040080300205010302045070457014022022001503070411060640110163
0110073200301405103070701006140306108750104020034014061001650120616200
2204006018040013090804040011014043016704180800301630401003016412003301
6501806930140510307015030602001801086501050406402203050850140801521502
0086040030510150405215040014001405401630110061085506403070101304052005
0020150203065303014507040520010191405011301570405040610606402162001091
0510106040529040050165700515030163011005506083014054001317001801084506
2002070010405307030400120040500301504090100506501050603012506702008030

115070060014100306108350630407040080102020090050108080020013011080402 0
803060040060106402064702030510501402022001060703011001504001031404702 5
040615010400140050130210050401501070061163011001082501010040040303052 1
001703016541270504013001050401550020061053030800200130150116200290165 3
030121650107040060154061003010606403011001081506200511004051006801501 6
405160501010840060506405150213040010050603011002040053016202007001068 0
020013011080164608010305406100610606402007004001506702008040610050401 3
040301301100610805010403060401508064006120029015010307010002008011502 2
001504001314030150220040011012150401501130115040401005040014061079506 2
301005040150220010301150116301100107850107040314020502309013040500801 3
060050404020303200164020104101507091001301077506403070400806608015305 1
155040163200600400305501044030110805640400200204020020403017005501402 0
305070015013021005240400504015067020080301100107650620015610606402200 1
075501040301703012200215040116301100107450104316052008603011010030161 0
735010200100019016230100501620301505162301000801072506304070101650120 1
403092610083017010068010715062080110140801003040010517001802019070100 3
015011060640103011501086161070401090070200860216136405625200400601660 1
503015010701162008601610030114030801610030130110010695010100304030150 8
505062050501140161010030400501140110606401101630110010685010220010040 3
015040304020501640705030110010675010230110003015085015020501120031301 5
030501163011005067020080520086030113610664010307020081603020220640011 0
106550102003001850101440301108030602001651600165320011630110010645062 0
040140017001408040208002001504040203200600105014102001010634010307020 0
816030170055015067020080406100504013040301301100106250102009001503030 1
800102105170018054107075061061501024050127050010517001805190701010030 1
801060501010041903015040400502050115240018051012400103400502050130110 0
105930101012006011050210704030602001804020220050405501022402040010341 0
010083011301530301103070306100113050110307010010100810585010403017030 1
220050403066020010501506702008011010606403011006105750104608040301521 0
017050120801020200900501801521640309008051030406506702008010301150400 1
101210606404054702504015050070240500105650101006018030405200500201150 4
365016457050404052005002013015043614061055501020080120301263010010307 0
530301702910203070020302100504016270020140216504061030165012014080400 1
501023012405306020040540013410030615101250150402010307090100501020010 0
301203040010545067040601013040580405263010010307070295064052650700240 5
150290113005063050115305147025040800200130150650020010501070030304510 4
030611053506200601600301406100301130153030120020405040110130805303012 0
020401650401801105250627030104056108800150601240510400110501102001003 0
130515040161105150640101504056140011021506012405104001105011020010030 1
305150401801105050626020101650120140240515070060018016270020502030680 0

2001301614060301504040012020024051030701508400803016100400161650401102
0010030130515016306104950620070300101304056540010002405150700600180120
0603016120080030115012160404100163011006168070104008550608301510106030
1501204015030424050010485067020080010405307030120080030161601230121530
5115070060011301102505040510200100108015030602001140610475010200801204
0610010307010601801020804020304008905061022004001301602004020400100030
2141003040610011030110064055070103064008010465010200601600301405165012
0121070300162700205010700301151080165010001040305012012107030016270020
5010700301104550104050013405200141080168290180580320030140540070060018
0104450620060160030170014020501121070300404007024001501030540610050401
6200802050107003011304030130110061043501084001803012001060040050161008
3012150406100501026150501028400801150220015030206400530301103070140307
0103003020150220070606150220053030113001050113011510804670505011503050
6201014061550405303011501350700147024020400304010801504705011270020530
3011030701501020040080141001042501052001201502063061301100150400304010
8050467040030611504001020010050402070401650401501070030162107030011020
5032006005030540610050401620022040060150107003011304030130110010415010
4020183012001060065615050102530301402081010400816200290180165040610403
0580101965240030602001107003012165040140205040580101950120501610405010
4608040301521001705012080102016200900501640202005002080130103010040400
5020700116200207001613670155061000240065250401504053030130102605070506
4904006506470640091200903020216470100400130610395010504064040400502050
1402030200106004020307001581309014702800200130110801646080400130640511
0300160150301166060024001306501710403016301020301168061804020220050405
5010240204001341005200101000530150404020301405303011642701406100110301
1001210703004051600150104401030161038501040200340301521001705012080102
0200900501801200940405103070150200940161037501020021100030150404005012
0540012004011301530516515010350180103650620059400106015014055014020400
1020010050404056320060011630110050113015406100216350120140610355068020
0604040610040400501302160503015064504056530030132003015064001400304020
5011034501040301703015040481504015240201002601405300818030150640014001
5406100303011007001196306103350108901503015062840013050203064020304008
9050610220053016020040204001000302141003040610011030110064055070103064
0080103250104050013405200141080168290180580320030140540070060018010315
0103060200403015040400502050115047040014021504001018301901101630110064
0522002004015070164007065100150301162001007080103050620080120524040050
4011070030121501162002204006015010700301301100102950650406405230602001
1402150116301100522005040306020040183019050150640307040014055040504015
0403016807080040060150107003030540610050401620022040060150107003011304
0301301100102850104608040800200130110801650070400130653030113011620020

7001801400610230123301506400850400612006901001530656050405067006004004
0080020013011080402016264170470250401803060040203070370011620020700161
0274010301217007040207006001108066021566040400130653030180020011080302
0140015620070080510140203053030151001505700540202200504055010240204001
3410052001010005301504040203014053030116427014061001103011001830190405
1600146405001030161026501050406401650120140615040011012162700205010700
3012002141507091006150405408200257040501070030165150103501801025501020
0900400504030150404020704010501162009004005018050193060504015253030130
7501404020612164040050115640400104060140601108010505063041340012800100
0660320040202200504040201030707010064100301100102450101004190301504040
0502050115047040014021504001801506121427010501201402007005065486530301
4270503015040010311630110010235068308040040203070305303011301162002070
0180596021003060030110804020417686504061004702504018030600402030703700
1162002070016402020070050103040205040303200103070402022005040200207004
0201350140400237061102250104018901504020301501610220040013016020040201
0003021102150104030170301220050403066020010502030655180601026010304061
0011030110010205010270012030150402050900503015016551806010802012005030
1501540610050401620080205010700301130403013011001019506100400400130801
5200101000530150404020301405303011642701406100110301100146540516001417
0103016101850104070140610016501204055011504001101216270020501070030115
0100200100016203080301108057040501070030165150103501805627002080101750
6408200400402030703061610040040030640202007005010304020504030320010307
0402022005040200207004020135014040023706110165064030704001301405303015
0404030701640203089050161022004001301602004020100030211015501040301703
0122005040306602001050203065301308001026010304061001103011001014501024
0301308001080201200503015015406100504013040301301100101340109007040610
2170070402010307080160011050152001010005301504040203014053030116427014
0610011030110080540610010301186501503060200141003010125062002030010406
1003040011013018020090502030700201420501301320060010130500260010700301
6522005070012540012503200600102109301430230161011506200207004004020307
0301040064030132006005020307002040012004050030130205040521503200600180
1403015215030750180400104043023051501006013011005001218604003010011700
1104008540040820010410501021200300281102003013060200101070030165610105
0105060840301504021020010053030140040820050117040961806600567041615813
0901470280020013011080164608040013061009501044007040301281013055015108
0600617020080040040202200167041100850104030170301220053030120200124002
0040130161003060030153013015200401240012006006040406350301620040100301
6604030030161500105008523091020015503013010303011030010001030020070301
1030701064006014050040110154006010808002001301640016140603011003060010
7003015303014020220050110075062004008010165012014040550703080064056080

5011620060600410030407050150201070030120010100030407050804200506115030
1670803001080170803005040150303058010083012150220030602004001341003021
0050405660505010700301306100105301061400104001104061053010614001301506
2009005010305100650650406104061003054082006104540307010307051503090802
1400202405150103410030610055064831015040011012165012014061700540540610
1100301660501402040516050504061030180110504301511083014054002001000612
7030616530405501041670060040015010700301100450102008012030110307014054
0200853030150116301100530301402010072001404061140301504015010307016800
1080150155033012189012001503012189011041506100350650784004040050113064
0201030708066001305503301163060041540820025303014053015010130404004060
1001501070030113065110025062002204006040040400502014064020704034020507
0105010001140163011004051401060240550680200701013013200801200701301218
9011041506100150104030190030140610030170401503070340013015022001630110
0200150301218901110030400405200190214008020090170016100050670409104056
1563060041040304020103070401306050155033012189011641506405140106021302
0506802007010301320080120070130110307062138140550102699950620080120520
0600130124056136701550610002106530301301026050705064901050107003019985
0104030190030110307053030155070305014055010250700640507001804070501630
1100110084020220047061404040043630580110081502200150470614015043641005
0120015030121890155033012189011041506997506304070400404005020140215640
4005002006155033014020304005011646506100830121502200306020040013410030
5303011501455011306301044005503015020140617005301501451070030153030440
8301163011006200155013014054008400504010200340030100050404052006490108
0140150707506996506430160015108040555033012189012010306115706061301160
8050803020501304001830190301163040706165040150107003016995501040301900
3011073502030700206300161000405100680504064154040505350404053099450104
0200340301107350203070020691106003014060108030403301330101040085503301
5063060041013061406030121621405308400804001301550701620022040060161504
0011012162700205010700301501993506260204004040050201402217007030116100
6700803080080504015010307040203050120140804051200600130405130614003011
0069925064030704001305020306807080030203030110020015030150401807080012
1700704054001801506308001130651502200405130613040512006001400301100170
1040315108016202001411700110400815400600140050703054014003060041403020
2001503011080605013016503301504040203021005040400306004100404011080163
0600413011009915010200801201650120405501405608050110307016453006150701
6308001630110053030150645040506704400404005020140501011630110040550680
6400101503060200405400131700110400821400203015040405210905040530150102
0103061540011012270020611270020530301103070102004008015040404030900150
4080990506430160015108040520015030121890120103061155070162002204006016
1504001101216270020501070030169895065078104051306405103070806600130808

3090161010040015040801040011014020103070506901001040205040306020040205
0104001101401404110502110988506404100400601013065701605062006001400601
0130405303113170018030315401302030698750640307040013014053030110307016
3061004005016150193060523075010403014053030121620200300400501610083012
0010100021010002301640500130165092140615504020059001403008168030110220
0402008140501301009865064030701040610030400110130130908050203070020540
1101003014061059030160011050430151108301108016504015010700303010530100
1007200301504040012109301654127030320060011040030153030155010740200850
4030100985501080200604030128101305501168020060400130616220030016163020
6436040302045070402040050107167006004041105021109845064400540405501506
2608106530301506450401103061501091103003011670060040014055015301308003
0140510307010081100102008061045110010200809835064670400402014214020501
0430153050109030600405670416436040302045070402056361640101001696010030
1210220020040130100982506403070400130140530301103070506306100400113008
8030122004011013053030150130100152150200401530301615012115103070150436
1630110053008180163070801700169815065040610130501070030301103061501091
1030030115030703150140550620040013050010850405301021006654020120010550
1140540016601405102001030140560123014055070707501055033015040402010621
3200600114020501910300301402050504008010130404110502110980506200207001
0405307030530301400110150402030700200106002030700106100400301601230613
0010200640204001660102001610160123040201030701503075014100404110502110
9795063200600400155040650640064040015108065061084001510803011009785010
8103017014004062001004006040800200130110804020306647080070230402080070
2169251301100977501020060160030150405050620503015040820040061503020080
1000400403050161506080501150403090015022001301100976501024064701402030
5019103003015011402030301001652003300301140203040050701402055014030114
0522001405141506550330110020065040140510307050180906001011008096140540
0166014053040042520033003011100170014030802006200100021405130480975501
0890150301504030140203010501140540601100697450104301600301504015062040
0615010203040150620400501130152003300301570055070140202200140201550140
3011006140540016605040140550701020066140140530104210305019103003011405
3060660680973501040301900301504015062040080520033003015700512200100400
1306140400103005001085040130208055033012036764005015020601404111069725
0107040314020504040505350130401304055040207024005040301200684401406700
4015504032006001301100971501020020130040520050020143400130640530101403
0050706405501401015070640580306005040640510410150102504040550104001304
0500970401010040060403012091200904053050470100130105040010610001140280
3011009695010200900504030150402050130110096850650070210406101030110502
0090050130110096750102001000190301504020501320060018015108020022040040
0501203050620101408015504092518030110096650109504054001003060062001505

0401050400100306005504020010600150130110020400200401700143604001301207
0504014030110096550104316030150405020104030601030211301164360804041301
6436015201013040303015030100405004020150200690405004020150100306004100
3069645062002030040014013010301003001017040151080402030150307036800200
1301108040201502040410030696350640309001015040011012165012014024056080
5011620060600501070030120103061805501071640400806005040696250683080403
0140520103061805501071640400301005005040801008301700104061050763016961
5010210110001502014064030702405103070509010050308096050103060200403015
0301605030640510301306020015010700301503016050308095950104030190015020
1501163011005011301150601240513700140516704501201408095850630101100405
6114001102150601215138015150203051510200100504040206957506200207004001
4013010301001103061550645040167024004001306402022005040402010301307501
1401670240019565010504064030301020020700652200700504003055040320082020
0490108050201013080201030130750121400209559040301954401082002006801000
3055016211007030170102006020220050140201400114010804020630210304001320
0480070210068040208007027080200680020013018010130600402030703107003016
5695350680304006004005108040400502014024020102501080402070320040402022
0010301405001020060012007652007162007400130615103070130160805030202602
0400130610300302022006561220010100021530301200101000130100952501040306
0403013061150164002004012030700265302010200300130951501040301703012200
5303010400140406101108406102060506104001309050130100950501020200300403
0150405012014061801050840105120021530401401010015010440101004006040912
0090103011022001050145105050130100949506403090010130405615305004013011
0731013080510106030121350406153015004012003007053080550608301213504094
8506307080101650120140240510250104050053030110301405200401140501103001
0804055040400603017010300165012064055010416100200805010700301501947506
2009004005040150116200900400501301001200106001550140101108040026020613
0210050404005040150204004030155014010116080507080501013020220040011018
0070210400110406102022004001101800702104001106120220010400110615201013
0403014051040014005011301506200900501030594650680490101650120140221700
7030166015040011015070506804901050107003011073506015507080490653030140
0110122700205040404030900150408054082006104564020220050405501024020134
1008040550401045115020302140020301150103070307501150163016306100400619
4550103080110003040540060120045070150205016150302100504050104008010191
0307021400203013075011405011630610040050194450640820040040203070301610
0400165670240018020200124051503075012140020170056943506504061040522001
1003024053070305408200610456103003020301301090804006506081107003011030
7014014040021400203011060640150104001405009425061004004004020307030524
0201906402030700530102605070402021002008040080302603011670240040013065
6702400180140101004006040109120090170055016941506200207004004020307030

5240201906402030700168061530301457026102200100170050120630616304701804
0400301001700161570606130116080508030205013096010030125017104030163010
2030116806165430011000302101040085060811051040030121301401040010301301
4016220010040013069405063010070400402030703052402019064020307001008301
2130153030140200810400301608050301163040010040013065092140615504020059
0014030081680301162200100400130640511016402010072005050850100130401504
0402041306116304001004001306150160815010430163012611010300521620200300
4001301402010307040202200402008140304001163017040030100939506304701040
5220024056520060013012506504061013050107003016150400110121627002050107
0030116517024004001306405704045300400130801645300501801700540200853030
1501506453001050107003014020145300403053010093850107040314020145301300
6308051000301230153830153030803010093750690200600400130140400501501650
9003011301506702400400501150305632006004008040307050404020450703053010
0150601216100170010400840530210050405010700301270020203070020103005040
1504020081306150612113061502020030011405303011300630162020030015010700
3013061001060936501040200340301406100301507056012420010130657060165408
2006700402022003010080206270020501809355061004190301501640510100022405
1501073203070040900702930400600114061110168301611405200659004003040814
0130114054068300405103070150402008405010003016200100230150406200809001
0700302015040200816415501070030110307069344010820020068010002022005018
0417013061000122001010002009800150408052530301200101000303051110060806
1603200550180200107506004083061186806040140461540010405062010501130154
0709104070191030701402008401030110861140108043113030100933501040301900
3014061003011045101305303015014030702001010002601503013080010301270020
5303011030701020040080150404040309001504080170052530301402019067001145
3004040050204015010105005013014018200151030704003040400300114015010105
0050130140140200850102002070030130100501050500120010023015040650105050
0130213015040693250101004190404005020501403070210506102505010105005013
0140182001510307040030404003001140150101050050130140140200850102002070
0301301005010505001770403015040650105050015018003015040316715105014050
0931501024064704020305501501910300301400169600167024004001306530301402
0100720014040163020130020080653064084017050130150406930501080200604030
1281013055011680200604001306541908406105100816400162004050011700152004
0500504016302052130040040200101000615213004004050140200301650640010730
1653020118030400600407020073016306005030164001300620070402001010006400
1300620070404001503130050110700301656929501044005401650120140616308004
1005303011030701200400801530301405100720014016402008640307020010100021
5806040541306116304001005010700301200606004100928401030704010208550140
5809064051073106012020030051080405805400104050201050161503167110307040
2008406150200620700305903016004017050130157005506921080140163011006927

5062004008010165012014024051073106051030701200400801151030705303014060
1506200207001013040170501615200659004004020084017050164054070721300505
0401301154070910130200385002008640170501570051630110069265062004008010
1406405200700805630708014053030113006306405501044051030701660230103064
0564200103040561202003004054130613040010050102020030040301504020010500
2030501072030700206925506402081014016040510120200300103013090106580530
3050120140653030110301309010130804051012020030030501201408015010120200
3003017005640540707253030170051630110080121090504017050130165002008301
5040120070014040530301630703692450640301900301830801013055012001430152
1001705305062040050405064030704008066080304017010501402040050120401030
7016304070140610011030100923501073704024040050114064001305064706400140
5019225010200600140610051020070050404020130050114020130010140402047025
0408030600400601064020257001013001050154082003016700105010003012022006
9215063040701014070308011000220220014061630407014040400132004302030692
0506308011000153051640309002102001003012030540202200502010403050120307
0091950102008012016501204055014056080501103070164530061105043015110830
1405400200100061506080501103070150453001630110017005402040610110030402
0506200700501061040011014020103070506901001040205040306020040204001104
0301605013016503301200300704011091850626020101650120140218007025010403
0190030180070210306502030700206917401030704010208202200501530301130014
0130115108050104301600402016500402001503013011001503040030311070030115
0303115010003026800702215080070270400404006011502200605013015040405611
0306130110066050130150404040020050020400601410050330120030070401101701
0403405200300810406106916506304070101650120140240510306656405220045070
4013060301200144053091550620020700104061003040011013011503090804100140
1010040060402022009120090170056914506504061013050107003011030706032003
0153030130703102030700201406030110804709010140501201320081100108005200
4903070310530800105014200105040640130601303052004908200300105104510501
5303014200105040809135062002040101650120140241043002170070653030145070
2001100090164020031501070030121090106054003016020030703105001084030701
5303015303013060200104006114030500401040065010400850406505030163011005
1014054001317001691250620070300101406405608050121301506200204010140615
1080162002040103015104020034020021201510200100302010801503070320307002
0691150630407010165012014050102008012030305010720307002015504032001600
2601030400140309003011080530500405040206015030110805210300401012006505
3015030703651501010818014001040501205040619105062020030040304020501405
6404007091501640206304131030405101103061103015068610305010911030030150
1610060803055016510307053030140601200207001040301404016302014001306909
5068020040010010165012014025067310604050013015062602010501070030150155
0912640500130120051900162007006908501044007040301240307016520220050140

3070200101000240510165125063080010301200105002050165103014040020020098
0011401301402010307040200814040203030908041006510307053030140601200207
0014040163020140013014020301406907501050406405400110124040050205015103
0705303014060120020700140401630208090650104400540301240307016565301026
0507030800105040403070165202200501905506902006001013014055016509003011
3015067024001050153030130102605070206308001080020013011080504020050020
1709400501690440103070301701040603016565400140302030304240130130470611
0049020220040040302040040400690350102004004040301504050506204001308010
0830122022005040307504055015064030701021400203014051501040015010700301
6130908040214002030140201030130750110700301656140208101000400215303012
0010100080190250680200400100404051401680200400100103065680020010306520
0600130125065040610130501070030154108015103011010009040030690150620040
0801014064052007008056307080140202200130063061200620010003061003018020
0600780070210301405800702108610503301660501301501091103001647010250302
0301503070320307002069005063053104052005002015020306530301130010501130
1165040610301650120140130210010300302040510307015020030086104006403014
0540302065201013040301405103011503075015050163068995065407010405501101
0009108040520070050652004030615216504061040301402040520019021640540041
0801230100506898506504061013040013170011550140202007030010140653030145
0704001101301140501301001525050406103051014054001350103040550140101453
5303012164060100168975063040701016501201402405102501080405703200404052
2001030140500405304070540130203015010720307002040307020010100021647053
0301162601080530301506450405067041050107003011626040013068963010206240
5103070400501140619001080840510307020150307031406162020030011405303011
3006306895501020200300403015070800200701665130153011302022005040201030
1108611407024001894506403070104061003055010250306400602004163061001030
6400110130180200905020307002068939001080824020103070150114061510307080
1040705040656080503080200902150408040202200504020010190240201341008922
0010260030180109303016562001902130120200410656200190213015202004400130
8913010206103003020103070656564270180103003020100301600651301530113040
2022005303014020307008904010307010300302026561030030201003060065281905
3050204004030643065305062010105018002001301640016140603017010428895068
0901014070103017040065501826040307020010100024001502650105025301610020
0600640510030600650330112020030053030163070368885065040610406100304001
1013040203070010805015705010620040500117001520040500103011620090050152
1300400402001010006152400300405014020030165064001073016215070150404001
5036510501450165010015703095040306005030150406122012004004012855040320
0600501200800600550401503200600180103003020400125052150320060018014014
0603015040307501107003016568875065100801040610030400110130115030908041
0070464006040620010040060408054816608050504040201300501107003016568865

0640307010406100304001101301150309080410020082301620023014001403090010
8015216440054003040635030140203030703107003016568854010307030171077030
1200104100400203070015012608200401003016604030030161502060301030301307
0368129013011003018088450620806400105018053030140203070010830150404001
0403013200600406400104030150401083013200600101065030162830110030180530
3015018835064070740040400502014040205070308006402050102709100400410030
1202003004020108040550140400407075010700301402017080300402070401020050
1406402020065900120064020150306600140404002020040065200403061402015010
0306001402010412008015064040010341003068825062002204006040054001101507
0404005020610083012001010005303011030705063061004004040050201402506530
1217007050673400406103014020608050116320060014051041016960125201013040
3016400640301400120040100010805064030190030170011020040063065303013075
0114030500403075016030110050406103005103018610403061030110861301100611
2700205303011030701020040080150404040309001504068815069008018104054001
3090103070405652506504061052006001301250650406105010700301615306850406
1020010030140120070050400306510410501021070030110049040202001240515030
7501214002017005688050627030104058006600108040520070040500530301301004
0206121130640400501164030704004030140404004030706120010500205068060040
0615506424006010912001005506307034006015030301045612006501060640521310
7003012140020301307501504030100103005040200300210307053030130750114016
3011007001520041001008530301162004100140687950104030170303010200207001
3016550112003151030704020301601130301005440010014051452805303011045501
0700301201030618785010200801202152166010301406100152150302064100801306
5152200802010501805625030164020830162140020301405150104001501070030120
1030618775063040701016501201404055070928301620200300163065412705040130
0105040521045105303011045203070087640101004006040912009010301405150104
5640515010240031640550166001640540011020070064051012150406875501040301
7030110307015030800801302061963066050610670601030163010701406016874501
0830190301504030206011030161060107061010810611020020768735010506084030
1107350203070020650620015610606406806061062610165014010306064661454001
0200700504063021005040150104518650615010451302026100701061001860153015
0256687240103070401020820220050113005050404001320047080200505406100103
0704010512002115150104001150400382030400687150644005404056504013014053
0201030614030900240550140101166023010403061650401501070030187050640307
0400404005020501504013012100815010100102008030110180150193060402010307
0523075010403014053030124040020200300140205015068016004001306404002020
0300114080160018010206869506200207004004001308011403070103003020102200
7060611010300102200130010501130152506202003004001408016001130650145410
0653030110801050631840013011005406100531868685010202003004030150401501
1406180105088002001301640016140603012009801070030301053640053610501867

5062020030040014040102002105014061001103011004003080114030802002201170
0510220017005301100510007126040300301101200140308086650103018003014061
0030150405050620130102200105045104030501030301100308011403080102200170
0530110011000712200401003011012001403080865501030801301281130301100308
0114030801022001700530110012206201012003010303015103070503140308086450
1050100640301504050620103068002001301640016140603014006203040401051200
2110200502030700206863501024030130800108020406100620120011050155301140
1509017006004004001200715102130401051200213011007001686220010260030140
1020830165654153003016210100030140301702006903011080600805010406102030
4030153061008301530610050620108050203061001040610610083012800200130164
0016140603011003060010700301656861506200300840051030110700301656561004
0016513090301164010100150168605010403017030122003040306050301502004016
1045301655303011045501301001504001011045301103015506704102189015305012
0010880020013011080501091103003015400654006011070030120530301150145700
1470215021100701103070420050615020080010130615070805010130140530301506
4504067045013010085950620080201016501201402401030121700706401040850402
1200300405301626020140216306021501070030120103061155040700600610130304
7030203047040050167010803001306103065303015064504015306010304002602014
0260805030602400501522002070061105043015110830140540020010006165306127
0304055010416700600400150107003012007006858506100400104053070301020020
7005020306103005040405216085040506100400105010700301103070140685750104
0301900301406100301704010200207003014702470100400130805019103003012050
1060501014016520010100050010481080168006600101040084055070800200701801
5040011011080506800660010501070030140010120017001685650640307040080660
6200100400604012503020308553010206240201030704006030301001008301656204
0610052270020685450651008010405307030400110130180200905080102020090050
1800702601240208007021001070010617010300402060230106140203032001400840
0504061402010068050401217007040201030705007021050110307020041100301653
0100853506202003004004040050140500220020302050406155040402010350105303
0130100852501020020130030150405050620503057005504015013501501030510806
0061702008004005506704400200823016200230140014030900504040201035010504
0301008515010260183017020060165640208301530130110083014051306405303011
0301164200405008505069200801013040561503060200540080640040064030140204
8113170011040085900808402010307030602001065412701006802005110030165684
9506304070400404005020140240201025010405004020703200405103014050010406
0403031108001001030510804020500702104050020015503012404008200314040307
0106301030301240201806400101070030165684850102402140020108013016021101
3062920013068002001301400140309001080528130615403070101301510020065040
9100604001406200823016200230110801404030701066513011540307010130210100
0301840018040545070684750104030190030124030701530301640205010261050102

2004013011080010030525063037040060400140104507050163030100846501030901
8030120010600656100830190100105303013014020830150152506303704006040014
0104507014052404002700206102200504055010210307010501301008455010440054
0301504015011406170014003030800410040201651702400113030100530301506450
4050670440050107003014270150140010550105013010084450104020034030130102
6050102400604003064001101301309080502030700206843401082002006801000550
1808309016547025040214004050053015321660402050403040705040550154082003
0156080501030704020220024002040201030704013060301008015040011012506504
0610501070030120131700168425010200201300301240307012530301601030115050
1025040405103070530301504013065116306100103080070224058007021504008020
3070020684150104030190030150405062040080405420094008010300504040510307
0202160850401406103005040405216085040201030701405536506410200101030070
3016514100030124052200506704105010700301420094001306840506100400104053
0703070108030013061030655064504040530601030405220010301162003008105015
0680160010501070030152200700501683950620020804004001308012001090230161
0407013011064006010305301001030110861014013017024001501203040105014020
3030610011306210100030140307011306530301501017600104507040203030610011
3030100838506100608010165012014022170070301405604010150400110121627002
0501070030168375065078104051306405103070806600130808309016504015040805
0102007005040650102003002401301501030602004030130602005014068365064030
1900301406100301130120305103055200536154001000253030121700704020140015
0140204001012001301008355068049010405405004001101301802009050801020200
9005015240201040011053030120010100053015040402026301001030704040060064
0202001902164020704060530301700600150140400101200130100834501040301703
0122005303044083016164030900501070030140610030120021470910080833506603
0240405170018054001000240515070060011640061140216820080170011040081030
0302021621405103070150840080521620020700140166050140308083250630407010
1650120140501910300301405305010764052630100400601005020306167020080040
0150601240513700113063080831506702008004001040530703012008003016160123
0124051507006001802030210050404040110301150306020014100306830506202003
0040014050660504006130050151030150670440014080300201080506704400511013
0282950101004190404005020501506704400530301200101000157016030140204004
0016153030121700704020140015014020400101200130100828401010040060409120
0901030705307031013001050406530308001053030113001050404001403090030110
8040202640901504001101216270020501070030168275062003008104052200103014
0500103005040214002030110801509200801404020301500401404011301510815032
2001091020010191306800200130110805214504014068265064030701013040520050
0201502030651013075010501103070200411005303015013010052200504051015103
0703075013063016301100682550670320010510301405005303014055007021010400
6403016506704060105010700301210340060101405018245010305133015040505062

0400130801045301103070405704033053030113006306510124051040014008014060
3011080140306061800200130110801100805010100040024005014007094006015018
0405800120070120103070200220501205016823501030602004030112505040201341
0030653030140014030203030424013061502009050405140011040081670061616270
0201401030701620029080203021005040306020040027002041003068225064831053
0301400110125010403019003015020306205062700201013040550180506306100101
0700301205078103055014030705041008215063010070400130801506100400105010
7003030200106005200600130120014303066530627030130111050430151108301140
6820506200710140160130140520065900103070405200176150630408104056151080
1509200801401030701504002006081101630110054001000257016030140540013170
0110400853030111003021627002050107003012006060041008195062008020400404
0050201402217007030116100670080301100150220061030216301100100830121700
5601030130110040522001030701680100670011020040063068185010500670240250
8501406110504301150400110813011055011630110068175062700120304055016550
7016550140301641703016420063063021005040506806001016501201404053014230
2816501050406403015040506205061502200400110122700205013064200501504001
0301101630110080200150301103070168010067001102004006306815506200703001
0140640560805011301506203051050165507050615010655070506550104056814501
0306130120010916011301170055011620080205010700301306100102050630413102
0613170011040081521650406101305101302016200105016120010064055017001108
0656510080105015502014052630100103070150307036201030170404006010504040
5504068135062004008010165012014040550703080064056080501103070162700208
0102020090050181250102020030040150201401502200530301616301100501130140
5400504008050204004030405008115064070740040400502050107003014020612020
0300501011620200300150107003030306100504050017010403405200300850406106
8105064030190030183080101305501540011012270020611270020530301103070102
0040080150404040309001504068095065040610130405804056080501162006060050
1070030140515021506802007010140205506802007010214002030140515010400150
1070030180850620200300400140401020021050501648165301651405013010045300
1130301001020060015530153030170405015064530040030402050101100030250406
5240202007005013050120010030117005103011086164020501026105010241053005
3030130100541530020022011030010130100807200102600301401020830165654127
0100680200511003016568062001041001030030201030706580200106002206060401
0501665130153080300120130802008002530301206060401050168055010240301768
0301203070065408200410080700104061055070802009010504080440109007040610
2170070102200400109070501801600110501301008035010202003004030150405050
6204001306403060150403061506201501400200401105013010040709101306407091
0656800200130164001614060301200918011030670060040015303012001010001301
0080240103070301701040603016562001550301630103030110805020601405306801
5065040610130405804056080501162006060050107003015108021020013054011010

0301406101030140205070403103054082003015608050103070240020530303010080
0200130164001614060301108014050403030100800501027002040301521001705012
0801020162009005014050080020013011080162001060301007995061075400601052
1650120140405504016200600605010700301210018802030210050403060200210754
0060141003067985066023010140405103070150602303061303200515030703301203
0405150307036306797506200900501013040500200401301108001003012030401503
0750163062030405103070307501130630163011006796501024020086013011700550
1162008020501070030130110030405104101256604030806019200100108012140020
2010307015030750630679550102006001150200100405470250401501300501640526
5070024051502030518040540084005040102003400200155013011503070361200120
0440405103070140603011503060200164020305020405040301408002001301108040
5150204050200100504040530210050401502030514020162001040301794506107540
0601052165012014012501405104001108066080405131403010083012162700204100
8079350108002007040155070165012013014052200400110150405101504040510400
1400140679250626020400140403070106402020053640202006040307010800200130
1108064001614060301108053030165679150620040040400404005014050054507010
4060403031613031108001004050050109504040201003060010700301657905063047
0104052200216200802050107003014050020065030164001403090030130703680020
0130164001614060301100306001070030153030440830178920010410010300302010
3070656505108014068002001301640016140603012030405303078840109007030176
8030120307005507016800200640550705303011080020014211510805010430160020
0155013011540084005040102003400400150340530405100490501010041903017080
5010406101700553030130110078740102083017107703014005012050180405302008
0100040050162041270405501804052700704005017864105300103003020103070400
5016405103070210100200301400501400502010504001080640014030804051080400
4041401410530040510307040050206402022006102200530301164270150152105040
0200401140130140530400301001407852610100030140130704005012050120608050
1080140403070113061060805010801404030704005400403070410080540030100400
5020501100821030601030140306100150110305062010140205018260301100530301
5064504050105301104016105067006004001601503030400301004005011401020040
5021106010701105303013011007001678450104030170301504014815270070113012
1700705270070110501804020504047022008020105040804020103070153075040105
0153030130110078350101007120030120010600400501615010072001620504051016
1502006001615030613014107015030506204001406030150405410140150103070307
5011502200405303014010200405021106010703011007825010451300301504015103
0705062050615040010049041005014030705061502630100501040940061550403020
1505014102005016301100781501050406404040050205015303011610040013011001
4060301504054101401501030703075010501202200701094006010305401020040502
1106010701105061020016830130110070017805064030604015050124530016150401
1630110010306602002610216504015015010102001683011030140010861700167795

0102402008601301170055014055040162008020501070030130110080400150102301
2405400103700120507030101012006011050240080802070016105070012104006403
0132006004007001610507001290200213016540201301102002400610507001212001
0950620400801510806008050400801050700122001093015101052050109301504010
0306004007001630103501301651200640030165402083016214002030120400403070
7001613052064540301108060150301403020400604100301862002204004101700120
4004301610307062010307010400407050200207001401020040502110601070110530
3013011007001778261010003014013070400501205011503040307013016301100404
0023117001403061001080306020030153030170403104061077750101006018030140
6100301104510130530301616704060165303011610040016405501401014702501401
0142004005011680160010611553610307054153003012164001105011050412030700
7765010403019003015040301700115011501044007011406140540041530050401008
1150400415300305303012501406010010805011030613014051030701008400601501
0700301504014054011004050140610010501200600180140500111008400601140550
1103070200500705018077550104050013015040301700115015303015415300404002
0501306102200100170050120630615040500521020040030050130404002400200150
1530301250140601001080513090301470250401405506602840040064030152109040
4020400219018080020013011080404002200800404005015014020200101000504050
1200600161402050403047016700501505001510906301501084006403014020481200
8008170014020501025415300165040150107003011510111077450630407040040400
5020140240201025010801701040340207032004053030110301404001044005117001
3080050404020200800101304020608050140201030701650401501070030115101110
7735064400510130611010300506403070101304056121501206306115012151030701
5043614015026081630110030660200301103016530301307501140103011630170400
4053030101001700167725063010070101304052005002016270020301530301103070
5062004008010162008020501070030150203064018130653010906130652101601306
5200108250405303013070314077150102008012015216829014050040203021005040
4061001530160410077040103082006801000530301615507053030118070402030424
0050120010030130750105010815507016301604005016402066040040203042400501
1103001507016301604001301650401501070030115101110769506830804004020307
0302123013011030611105303011610040018050010260030152005002020237016306
2109301650010260030110640060101303010076850640400204001406506424001404
0307010530301610001302301130130660200301103070140767401082002006801000
5303015016211007030141043005303015011640307017664010307010300302025303
0150168002001301108014064001614060301108014040307010530301501164030704
0030203070041013010030161045301640120083012005300301660150303014011010
0401200830140010230152702030153030130703765506200300840051030110700301
5303011610040016140200840400404140200230141090402010307040200865200110
6030306402030170140040540170962008230141090402030308176440110040050167
0071077053030165504053030140100400501080417050406803060140705303011807

0520040130126100670010301401109020307003047061501020160404017095200180
2061527020301100030121104540205040304701670052402081040705030150403040
0100140305004017380144070400404020504053040010050406402008404005016410
9030116304001004001301650401501070030115101110763401030121700705308020
3070047021044007015040802101000301258016001050405303014030701030402081
4020064020104101530150400410903015040103002530301402050630210301650401
5010700301151011107625010506084030128105303016165060816161004001405001
6504016161004001405004001830190301163040706165040161610040011401700116
4070914010808150340018301903011630407061650401501070030110307060103076
1501024030110001302301150306602001030701405011640307018040400103064005
0180162007008163066020030116701091653030116701091676050654005040404005
0130580513090301507065303012002070050704020490106200601040301620040600
3011080180010002301656147030140205010270100610501501910300301410200101
4050175950683080400402030703056250400318050191030030130407050406032004
0130713016219050130162006010403016200406003011405011650401501070030115
1011107585062002030040040203070305400110140203053030150102102030700204
0205014010116900808164040080308170014020501401015200180202030700401101
5500130500401109080431040305040805210020020010200840061405400660206140
2010305150640709400140960615040501020160405200300704017091540020018020
8050140101301404004100701402402070060016105020306402050140101108061000
3030125303014020700600161013075750650406405240400501107003015303011610
0400161210913013085303014020100720014040163020675650104400704030128101
3053030150116440070400130640203053030130811404001210916402008400130165
0401501070030115101110755401083301218901201030611504001101216270020616
2008020501070030167545010506084030117320307006151080501043016002001550
1301154008400504010200340040015031630110014025303014052150018075350108
3019030140610030170401502200150306004105017040950610083015040150131406
5303012504065013015030140675250104513003017040150240020180150401150220
0506306100101008301504016802007014040704043015040800108040040550107011
0200400306602003011030130750114016704060170016751506200220400601013040
5501615012520065010601060100405504050122030700102001905015011630110050
1070030116504015010700303054640405220010015043400306162020030015010700
3016465103011650401501070030305614706015030143001504340030750506100601
8040550401200105002050203061103061405670060040011405103013075011406102
5030165303012506504061016501206306749506430160040521700703011080640510
3070530301960060501405608050140530400404100140601023016200802050107003
0150630640010405504012001050020102004007485063070801016501201406010230
5630708020020504050705065150400101301650120747506440070101650120616907
0140220307004010200405021106010706466145016030103070301010120060110502
5040162008020501070030150703074630102603011660507016308006120010500201

630800163021005040163080041004061001651167024004001306100830120010100
0402050104108016301000400130214002030130511103010074540103070301701040
6030165530301617080501306120080040203020304010130140530301506450405064
2704001301007445062080610105012009005014050040011013014053050102508010
2020090050140170930150130201101501205100104905401630602003015302100504
0400306004100306602001301401020040502181060403011407434010820020068010
0053030165506200801000400601065303011030150626400101308017424010301217
0704055040162008020501070030150604010305063061001014070165400501040305
0164816530113015301504014065500130500500301500530301501163011005010700
3012008020410030741200190501504050104030190030301406200150301516140655
0330151030705303014020084100805303012202003001050405501402022006102200
5303011642701301010120060110502110810604030130110064010200405021810604
0301655303015011630110050107003012008020410030740506304070101402200109
0253030164055040200105002016409061640704050040510307053030121400405001
6409061640708055040080506204001301162608673950630400100101100102008061
6270020110010200804056080501106540013014023066020040513140302013060200
4051030115030602001630101012006011050210015001040150700600141003073850
6507810405130640510307080660013080183019030407062006001301406103016530
3012504015040102001905030165061021903016164155010700301616504015010700
3015017375010200801203014061003011030706014001308012008020615011010009
2022005040201030130750114040550401200105002050410710306402022005040402
0103013075011406301035013016512006400301164010100400104008103001030704
0400603021400203013051110301007365010200801203014061003011045101305303
0150160150301504020409070105303016540030160200400100030214080307080400
4030501620220050402010301307501140100030230660200301151011107355063040
7010140160405504020010500206549040010040540140550404053032001400840050
4064051006805040163020130405220050404051030130750114063010350130165120
0640030116401100140550163067344010705030140015034051503060041306405400
1101060405507015020080203016100400161650401214002030130515016306733501
0460804030128101305303016141608080020013011080506706010653030115180912
2008303012001501641006114030205401101003014061010301180010002301656147
0301405501021501010030161200802061501101000920220050402010301307501140
4055040120010500205041071030613001080102010080501050140096602405141030
2163011001402165070306405104101400301000530630100040530301410465103014
0030110067325067050901016501201406010230400860301405302016405001301405
3061005070200128130165061050122003014051550101306307315063040701016501
2014060102304008603014053020165016470301640500130110805067020016010405
5040120010500201020040067305064040020101650120140240307015303016521632
0060041004056200802030121630600441006150401163011004020613170016729301
0260301166050703080016150120402003002010306140061000193014270620010715

0600301654200100301405504030703651030702800100065303015507030504053030
1450705265004020307005040200300240201025013053010072850610060180402020
0500201501630210050403075011406150103013075011406530301215040150113011
5040506401005040030521400203013051110301007275063010070101304061004055
0122030700127030616751567006004001513090301103014040010415017001672650
1050406404040050205015303011610040016110306120018020301640203021005040
2140020301164006150107003015040127030616754020501041670060040015010700
3011670060040040013016504015010700301151011107255062301100030140553030
1278501801650401501070030165306602006530301306400105040672450670201200
4056512073015064006106513090301506401010010501070030116504015010700301
6530660200653030140201030614050172340103070706016530301613001050405104
0061053030130800802030700401013054063050680160010130653030130102601080
5064513105010200801203011030705770150105040640301103070530700155062810
6405281040610025303011040011080660805501045070402050404400200105040165
0401501070030115101110722501020060160016829018040530140701400928402070
4030405501405501401014535303012164060100150107003011306511650401501070
0301306100106721501040415040560805011080162006011401030701682901080545
0705040200401618400803012104001105015303011060708052001014150210904005
0110300600505063061001040510805067020016010800200404052630100108050107
0030110200400807205010403019003014061003011045101305303015014055040550
1804020504040530640010504068007021103061405800702110306110200190503016
4651030116700600400400130165040150107003011510111071950650100610406100
3014020853030150405060815040650610002105103051330140208801718506100601
8030601503015040120010500205016405265070080070224052109010501530301410
2001014050140307018016306400501802010301530301307501140800702507020650
4008010501405200700816405165170240040013065303013075011402405501024020
8150167175068030400600400510804040050201402402010250108017010403402070
3200405303011030140012001060030116100240060180402014001140108040206302
1030502030654816540140203070330530301130063061315504065702003004020504
0150307033020301008301504020131407040516517024004001306530301307501140
2405501024020818051030701504010540621400203015040510410501021403011004
9040100830122140020301201030115030750167165061006018030140520103061805
3030130750114024020810403050406510805303013075011402301035013013051402
0810306715501010040040303059007064061045651200640030150405104105010214
0301100490406200650610455108030103501301515010400165120064003015040510
4105010214030110049040401020040502110601070240520015001103070150108010
0671450640301900301405201030618053030130750114024020810403050406530520
0180206580521004904005040809019010086200330165060301250603016507001301
2507001301680501301280501301650107030125010703016608050301260805030150
1151080405103070150240020671350620080120301405201030618053030130750114

0240208104030504061301030100150405001040011012162004003004001306506300
6001660150301163006004001308014530051030701650120653030121400205040169
0080840060114022001281301650610501220030161641550107003030164030601501
0700301506102503011524020810200650610451510805120064003011503075011501
7125010504064030122010306114062030700470250405063064001040500530301402
0815108051200640030140545070620506402081080102067115010960100403012810
5303015019601003012405501024020818040040208501611010300206200800105030
8040550708002007040050164055070800200701614055010240208180206135018040
0860303050630120127002030305067014060710401090070217007052006001301108
0405306107600110504301108040530405263010020059105015303014200104030501
0700301201030611101030053030150405302030404005030805400504008053030142
0010504061620070081805640064004030501656700600801700540400104006150150
6306100105708001640470250404030203015068020081020640011040305010200600
1406100305067014060270020303050670140601641550107003015040640526301005
0406400403064055168012150401163011005010700301504020080203011080506702
0016010501070030120507810130306602003011510111070920010410010300302010
3070530301613001050403020080100010613001050402700701080020013016400161
4060301203040530530301501403070400403017084010820020068010005303015015
1030702640010530301501808309016540309004702504021400504080707401020871
0770530301653030150401301205012602014021731405104101167091001805100200
1603016100200160301670640101004021700704053061550405010320016002405140
6200150301504016320060010501506410200107054010301217007040530640550403
0210040014054011010030140610217007050405216440080103057040530500406170
1040380020013011080140405305016301620080205010700301501704506830804004
0203070305301026010801645136530106063015103011610004002165303011610040
0116504015010700301151011107034010820020068010005303015011640307018040
5103070162004100400501302100504016214005010700301130170240109007021700
7052006001301108040530611050430110801076004053020307008002001301504016
8050106180130600504040530320016405104101709100400611623090106116304001
0010501141608080020013011080506706010653066020065303015062200181050107
0030117314050170150680200604030800200130110802030700470240550401200105
0020501405004001501023012150306020040540013410030617010403601503011108
1140501208015110815040617010403601503013040010014050120808002001301108
0416080616080502001010002160805030400100504055013010101200601105021030
7015024002020307003031504070050104041503015040829018010600156601020016
1802120010003011700530500405062015014007370114003010611030110051060015
6601020016108010205102001030800200130110805008210121200100053030150070
2806995010200601600301504082901805304001008051060013040010056080505304
0070698069850104030190030117320307006200150301218901504050620400802040
5001610405001262400501410200110501697501040301703012200530301801600110

5012030400100130201030110410960122150114010503040010040030204101030140
0960250103069650101004004030150405303013021004001014050130110020503040
0100130301100200600130150403021004001040306140548150403021004008015012
2001001220010070011008301240411050211250405103070304001669550101006018
0301406100301103070601400130808002001301108050651040010550605010702200
1405103070540200840155018030110069450101006018030140610030150102615050
1021002008018010600161060805013012030401130105012200301100693506470110
0150515150113040011008020220064005012570018015108016401414014211530600
4505030150110606401101630110069250105040640404005020501163020640080530
3011030706506230110004020501805640400306004170018021230140510307016306
0041140510307053030140705015068016001050107003015040501303200301100691
5063060014150180155040163200600105018015504016320060010104008153060045
0503015016501020012314061001510805011060640110163011006905010200601600
1623010050400804020200124110307016440020040013064020305303012400201040
0301560410040301800200130116306004140610011068950104030170301504014814
0061040301404020140016120630404020307036110250140201080307037001402010
3070530301540705016200207001406100110540610030106064030110070016688200
1041001030030201030705303016200107005062001030024020134100802001070050
1306200103002504015013140163061004005013060200301504052004008010307040
2030501021015030660200402013410021400203013051110687200109040301510301
6140550102140680020013016400161406030120304053030613001050402700701061
3001050403020080100010100306005040402003002404005013024020265070024020
2700701040308030100561281653030115021508501020019050301646510301400301
1006686200104100103003020103070530301613001014010030600101405501021406
8002001301640016140603012030405303061701040380020013011080504065401640
1020040502181060403012030510501412001501110103005303015040203040105040
8030100401020040502181060403016553030150116301100501070030120080204100
3068540101004006040912009010301405104510655070012200650301103014001403
0900301504040532006001064013060301302605501680020070240015040530301521
0451068450102402140020620065053030150404020134100200105002050706807010
6214002030150405068060040040400502014040120010500204020305010210150306
6020040201341002140020301305111068350670509010165012014025303014051025
0108066065401101003014061010301180010002301656147030140550102150102001
0001805216200207001404019008166050804051001500104015070060011020019050
1501163011005010700301504066825010506084030128105303015018809016405507
0807018040550401301030100130140550405501016001030707030940030174001306
5216200207001404019008166050657080016405070403020301506802008105106011
0040526301001503070364051507030405100150010404058001005014028068130102
6030116603080041008040205040203070047022008020504080200155013011540084
0050401020034004001503402050306004130640204001101060402050705020080201

3015060818002001005303014040080020010016405640400200770610306020024040
0504016512073014040010400165130903014040040100150103040207040105015303
0130110061210100502003007010505001405504015050070263010101200601105021
0015001040530301700600141003066805065040640301302064001030805303011030
7065303011610040016402050704051041018020804051041014020103011696021050
1406100405700140201030705303014004070501620020700116504015010700301151
0111067940108330121890120103061150400110121627002061620080205010700301
6678401090070200316520080100040405304001830190301163040706165040150107
0030153030147066775063040704001402200102600530301501530301161004001610
6100400303022001001651630470116304704001301103070406100501503004020504
0200310130696010030121453005303050104016100165062016504015010700301151
0111067620064903014001700240103070530301501530301161004001615070916150
7040604040030100700152402010050016107003015100150010406402010307053030
1540705016200207001667550620020300400402030703040201030705400407050404
0010306402020059103041020010502030632008504040201030703070310305303014
1020010140550404020104101640205636216860401801210914107090164040104008
0140164340040308016050301404006040130619101100030150404020504048113612
0080601030706110800200404040050205016162005918012503404005020501650102
7020301103014020303200164020606200216860401610080120040301103014020104
1016402056361630601000180513090301103014040040100170011650401501070030
1151011106745010200601600301504052006001301108065653040709284100805014
0101301220080201050406501460011070060040040130650108801604020010100050
1050908405052006315056404001040011700140203021005040214002030116400615
0107003015040400150908403016400150406403015040400150908403016405303084
0204017096402030308214002030116400615010700301401709640012109301402030
3081406103016732160830170102006053030150153030116100400165103070530301
4060116200207001640201030705020604011404016302080530301402040307014040
5055064030704005010230204082001633015040404004030701406400121093014020
3030813010040530308117001402050630160106724010820020068010005303015018
0405001308050134004020010100059040600401080200980015040801501044013060
1301402030400108002006104004070504020103070400404040016402050104402030
4003040201406103015063006001640563006004001308040205010450401620080205
0107003016010104061030110060804020307004013071301216406010040060400501
6290503011030708270014064040010207001401301702603013020114065810950301
6510420040040301657006100640301651005060050403016525303012001010003030
5114062001075060030140830640430165400104030140201030704004020086712110
0703014104300530301501530301161004001650164703016405001301103070165061
7040013061061004003016200230110307016506170400616440070400501401200830
1436040301507040206490501406100501503004020504020031013061641990180404
0030308170016150168002006405220050401308008050610004002104012008301400

1023015010401130641013010030113061045301130640120083012005300301130653
0301200101703001630840013016504015010700301151011106704102001014040208
1053030150140200840400501641090301103084020010100040201030701030400101
4013014017050130154010524020304003081461007030121680611650401501070030
1151011106694010307010300302025303016163080040050140203053030150102105
0101050050130190083050040200207003030801605061301320056600116501205016
2020040014040501500305003011405308050104005050011400501205018043061530
5020104030501155002001065620200400140809050153080400600153064306530601
0302030562004015015301302030110804020104008010530301301002050640080400
6010668140101004006040191200905103014051045106308008065504054082001080
4053060041060805216409040070165303012165040150107003011401806671501024
0120065040201030115030750164020220050405015200240201341006015030115101
1106661200109050130611030653030150645040405305064310130614010301121700
7040527007010801620022040060161680205040060150107003011401653080080504
0405410710640520063140510806108040018301903011630407061650401501070030
1140180665170104035103014052003008106080200220400601065400412705070802
0504006010504065062200100403015201013040301130653030142705062010501810
6040301802050400601050306641301020653030121080206800200130110801406400
1614060301108014053043065305062010501550182604816530153030114050140203
0120010600165400501550013050016306100400130653060200653030121650401805
5040862006401020040103011511003015400403020653030130660200401020040502
1106010708106040301140501100830113015303011030701630610040013064020501
0410801630100040013021400203013051110663140102081401030705303015012068
0020013016400161406030110801405303050180162008020400501640203012001060
0165040180402022005040100830123066020030140201341006015030115101110662
1200106010530301103070203070050120614211510805010430160040505310010200
9130166111001020094051045103013064053020080100010305303015020104030164
0309006162008020501070030150166014107021301308001630800410053030130102
6050701649061620080205010700301501659141053005303012108020650645300105
2010130403016540307025307501201030130750114024530010530301502030658140
1020817107705303015012063060200301470253853030110307060150303050620101
3010305010200700504065010200300240130602006571401030204001060640530301
4030206201030704059090100504030130602006302100504020103070405150909010
0410013060200665612006274661415010400165014010306065062001566050610626
1016106010706912601301626100701061001860163010701406016401051200211030
1150108616547025040501010250301686501030115010861140202010301150108611
5016551401090070120031405104006506020103061200600130140610301653030125
0650406403016512073015064006403016513090301501040101004030162030210050
4030750114062010301307501140250650406105065040640301640550404030703011
0805066006012003015020306541401030112170070405504050102008012030301504

4007016309123012601503013016401405302016550701655041006122003014057006
0016653120010500205303013010260507040549026405304003081400121094051030
7015040200816415501070030150404030900280652141053004051030705062010540
1101003014061065400640302100525050406103013012140020301305150405016651
1401020817107705303015012065103015303015708020030265015010100105630400
1001406509003017012400113014030705040524053014055040203001080305108016
8030400600150107003015016405305230050203065623090140656304001001406530
3013066020040102004050211060107081060403011503040010015014053061006649
1401090070150140052401020040103070405306100640520080202664813010301001
3015065040610130804052008020215103070530301702930280301000150263010040
5306100610082001010002110250130140530400100653030140011012405200802064
0510015001040405800100501402806471900103010001100150010404055040150700
6001640026030110801647040013040530150301006143602123011630600414053015
0301006405100150010402200693014051006801507080200664615010240150193060
1060640150104001620307005070150680708040015010230140540013140470250403
0370301167006004001405004054030900251007019030140540070060018052005353
0301150200116301100802030700504020022011060640163016041008014060301504
0121400204051030703075040050121400203013051203016010645140108200120068
0100053030150120640520063140510400610806602010306140550404815010216100
2008010403065306020065303012165040150107003016644150105401217007050102
0080120303015044007016110085062008012030140520103061643130102602030700
5010216700600400105015064102001068007022200802050680070225040650506306
1001065306020065303015010216100200801050150641020010653060200653030125
0620080201050107003015016421200104100168070501205303015018066050701680
7040061568060040061120010600164240050164114010307017010406053030150120
6403090050401301306100301504066030122005330153030128101306401401030701
2002013005303015012064040050401640400200203005014020217007025303013070
8010140639140109007012003150105040640301530301400610806606501050406403
0170402010306180530304055010416903060016530301216409040070161683090161
6214005010700301130163812001090504053043400503062001503015040308060130
1202004301108050101008015040301501637150102401501930604020103070530301
6307034005015064102004001501050406403015064504011030615010200801203011
6700600400400130165040150107003011510111063613010260530434005030805303
0130308001050406130651030113061306510301130203070050102501027002700406
3513010301001301530301506200207001013066015030150612001010301602016401
1005130903011030116401100170016405704160065653030150670416001050101008
0150403015016341301026050105040640301103070501020080120303053030130703
1050306540110100301406104020501024020810530301805010504064030150404020
7050405064020103070700684006050403011630110021090505010200801203030501
2050164020704050205040301163011005303015040840080402030501205018040202

5069022004001050107003016331701040340505310805010200801203016501010080
1504030170401353030150140530500401700140205015200101000500104810801680
0660010104008405704016470100400130801521754006010615220080201053030140
0110140400704060170015012140020301108040201030703075041006632170104035
3030577030150180577030140545070506100040021015010504064030150645040110
3061501020080120301506700600400105010700301631140103011217007040530501
2501010080150403012003002630130102604051045103013064053020080100010305
3030150201040301200802016414714050016200802040500165040140500162008020
4050016504015010700301501629141070213013080030800410080200600130140610
3016530602006524002065400201013040653030122008020105040630210050403075
0110700301214002030165306602001030703075010700301214002030165306602006
5303012165040116504015010700301151011106281200102600506304070400140250
1205303015018016800200704006116630400501616304704005011065301167024004
0013080140521030615303018012001010080611105010005020105015010220010013
0165010430163016140206080501103070630653030145300960100301250104016100
1650620165040150107003011510111062712001090217010406053030150120652006
0013016110504301216500530301450708011050430121650041020010501205040626
1200104100203070010307053030150120650102006001240011066015030115101402
0257001013001050162513010206530301210802068002001301108014064001614060
3011080140530306624141040811050100053030150120680020013011080140640016
1406030110801405303050180162008020400501653030116100400150140201101640
2030210050402140020301164006150107003011501090641003068002001301108014
0640016140603011080140530306623140102081706016530301501206540070605040
1302053030150100010110020080400105016622140108200120068010005012053030
1501801610040040061683090400501651003070403012015620070040080301040301
3020163010404001308040400902008630616050301501021630470400501167010940
0604005030662112001026005063040704001402501205303015018016100400400616
5060840050168300301608050130140020080081620010600830903016183090140550
1021830901050114051030708150313080180012007016117630050153070250404008
0160051200401501662014010307052501205303015018020010600504016307080400
1406960100301210401400103030164061004005016501430630150405010807080040
0604030165056820504005015062100020040065053024002014050550640064001301
0400130301160503011040140010108021400203011080402010307010304001014065
0510804020104008010530301301001605030110802050640080400601066191910840
1030030202530301501206800200130110801406400161406030110801405303066181
3010306004010512002153030170060040016180105084010512002153040702400165
0608406565303055364030601504040150104506081504066171200101005050640309
0010130655033015063060041020103061805040640656105005016120020700504040
0183019030150403040701050406616120010905013061103065303015064504053043
1013065273101660304070105040214002030130511050140113064020105014012601

0306151301010053030150401004901504061100853030147061421151080501043016
0020015501301154008400504010200340040015034053060045060400183019030116
3040706165040150107003016614190108401550705064310130640505340516140201
0306161312006200100013015019103003014054701014064051050401064054701061
2150102401501200606002006060041008053030150645040110306501910300301700
6004001050406530301100306005020010100010308040550200401306401705013015
0170015020400210308040550200401306405501050401306405503080013066111800
6200804012109050204127050405070060040013030110065303015507030610141020
0401501910300130150670410501615001501130155064504050670410501609141070
2130130800308004100805303012202003001050406130010504030203070050641402
0080100010652202003001050120080100010130530301501608120010904040016064
0505353090506103064001405306505010504064030130102602001010007024001061
0453015305010240014047025040306602003011001001300105040660714010900701
2003151040065080660805303014001800200401100040021203070030708010504066
0150301501028130901618062007040615100490220040150401301405163505040200
1050020108020010600130606140109007020103070530301308008050120640307040
0502040040301402040307065402083016214002030120103070530301307501610300
5040205062008001014064056080501130150630800101406206308001050140550405
8010194004053054004082006201030705303013080080130630660515010240140500
1615014005230404008141008011010200252402001040500140500161510109600260
2010504066041401020814010307053030150120656080501030705260201014050180
1405001260201050406603140108200120068010005303014310530301200801000400
6010405005608050403090010611660304070105040660213010206405103070506201
0504040154011010030140610405507053030130413105040801105043015110830110
8040550704040030413130654040050115601191084050630407010140253030150120
6306100301504010800200101301405064001021070014057040656530301504050680
6004006010130660150301504050680600400601060014010500115016600501205040
2810130530301501405608050150650140060010501070030150703041340013065991
4010820012006801000501205303015015303012008010004006016598140109060050
1050101600303050204001306530301201200114026015030150102402084003010083
0122140020301201030115030750115015971401020814010307053030150120650632
0010130140530301504050632004006506403014001402050640301104055018050640
3014001650620400501406100301110004002110801650540013065961400610064012
1400205010504064030110307040050120513090301501513090301164010100180404
0050501409117001804020265031030706146701006140110100530301162002070018
0513090301404001080010017001805951501054012170070501020080120303047015
3030150140202007008167006006402040083060116708004005011080020040404005
0206120094050401070014020250120501402010307081503130654816530104040201
0307050630104010804020400704004016402040083060150705063080100040063016
2008020501070030146405400830601640520070081670060011030620704016309010

3080163090104030102006001580101940014003064020101200650401650620103080
1643601700180405400830601167006001103062070404055040580101940100400308
0513090301405304004010018040510804005020170016594150102401647040203016
5012050102008012030150116200802050107003014020504008010501404008060050
1513090301504016200901004005018150340201030706010308080020013011080404
0022008001700165931401082001200680100053030150120653030110307052003170
1006410080400640301520200410405005306602006530301103011200315405400102
5040320060010504065706061200105002014010001200408002001301108043105303
0130102601080200315105040659212006801000168070530301501206405507068070
1050153030110607020103061805911301026050644005101306530108506701094006
0101305014306301616050301630132003015040501080708004006040301130159012
0010904040016064050534051614020103061801510801620031540080570601653030
1800200150204004030116301100800200130110805010807080040060401502016301
1004040050204010801630110040560805011040301900520101304030140518064005
0107003015015891401082001200680100053030150120654082006520080100040655
0404001320045881401090070120031501047011003011030705010451340301530301
3080080610506083015303014706130206532004501047011003011030704056080501
6405301640125010451340301530301308008040560805016405301640125303013010
2601080506451340301620020080030110306120010100050105040640301504050647
0110030110640060101305871200102600506304070400140250120530301501165010
2400804020103070530301504080302100504040400502020307002052001050020405
0110004053030145070801105043015110830180020070506100040024001504064040
0603040130603014020103011010030150403016306100400130616501024008053030
1301026010804040022008001700116504015010700301151011105861401090070121
7007053047016550703065103070530301280010006151080143016004050535617380
1440704004015040640304001001050406585140102081401030705303015012065303
0150405264005010702140040040501020053004011090804310403050408055040640
5210020020010200840065305110301540306040510480100150010404055010264020
5010240610050405012050165504064052100200200102008400805040640656402030
6470406100504050120501801610049010501130153051103015403060405104655040
6405210020020010200840080196001504064030400100504061960013011504064030
4001001050150406403050120140658415010240150193060405103070402030150307
0340201030616405640400801005005001084056304001001640567006008040510410
1168020106403060301402010301161003010640206307400701040305018015108016
6020200155040080301103011642001403020405406100165040110640206504011050
1506410200105010200600150643400605831301026040510307040203053030130703
1408040306030140201030116100301640206304001100104030804020630740070150
1804020630400110030804020103070405930603053030113006306405406100163040
0110010614020630400110010501405200649040020090840206136110015001040405
5010264020501024061001030150630901050107003011301582120010905013061103

0640550401670060040040013064056404004365001084056304001001640567006008
0163064005018053030130102601080162003151010400811030614055040167006004
0040013080166050650620400801620080201402050620080204006301646581130102
6053043400503080530301303080010504065303013080015040164540050150641020
0400116260201402405602020015303016501040010805010100801504030110804020
3014080580150010485303015040100490150406510802102001305401101003014061
0103014020507040310306513015301130530301579121060810300302010307050120
5303015011564200611550405060812161088051084002404001010817001657814001
0100401030030201030705303015012061550403080205305020105101060570180300
7080300105040615504021090505305020105506085701803007080300105040577130
1020504004300161601243001530301616200802050107003016012802010501530301
1060705010504064030180020086206080501301803020400130530301301026010803
0400110080576130103010013015019103003014040070240013054004082006402010
3070530301308008013063064055040550692504006010501070030154030703040550
4020040130110306110301630660200301103015642006306521670170018066003016
1504013015040200401405131700165751200105002018013040060015108016436305
3030120010100045070504050120630650120010030150620024400101308015741301
0206530301210802065303011030703020640064055070800200701805064001021014
0240020105303016306100400107003012001010004055040580101940010220450705
0401672002170018057019506306100106573190010808405103070201503060200114
0801030640050406530301701914100803066020030170910504057214105300530301
2108020613066020060150303020150306020016206080505040805101060504020219
0114065303015040805506085040202190114057115001048506510080105064120101
3040610030113065301408053030145070504030203010020450705040570051630610
0105101060405290400501653030145070504057005163061001055060840529040050
1654103004036200210804040050206306400640301402020200410165062040014050
1015701301040080506403090040013061010040015040302001060052006001301630
1030100110504301701400403010021020010030311030115040020060011306303014
0010030115010307040024002040301502200163011006510300600430016153030151
0300600206015030150630060010405504010010200801700130140010030140510307
0240020140308051207301164001651309030116401010016402010410116802040530
3010100501070030110301200400403015691801070800501205019103003014102050
1501910300301110306116304001100804006100019301301026010805063040011001
0162008020501070030165303013010260108050630400110010165040150107003015
6812001090502050430504015030307031611030620504305040150303070316153051
4030190030151020010030157005504015032006001150220050630610010501070030
1501430630161605030163013200301504050108070800400604030165303013010260
1080506304001100400130402030140656714010900701200315104006508066080230
1000106130400100108053030130102601080304001100105040652006001301211050
4301511083015062003001050107003015303013010260108030400110010308056614

0109007017680768018040570404005020105040010301105464055010264020501025
0204004030501205030610010305303015040308008040202190150103065651410530
0405704050201403070011030705303014070501410030110052109040402040021901
5018050109210305040304020504050165641701040316200805016140012500162008
0501804020200700816700600165040150107003011510111056314010307053030121
0802065303015040308008030120307005621100108020020103061506086501083019
0301614530030165010100104903016501010250301504040510307053030140705015
0107003017040201030618030660200301653030170910504065611401010040060401
9120090405150104530656014010900701200311504305040405150104001301700165
5914001025004004300164053012001060050120305250690070610140163070804055
0163064055040301030100130156307080140402020011045040163200600161402060
8050116304001001501405103070150240020150163065581401030604001640306010
6400108001001404013200840560805011080164310130405004055010220033001401
0802064020810104008506504061013020220061308055714010820012164005303011
6436303066020030140530200801000400601653030116200801000400601802061340
5608050116403090070014055016306530301507001270191030130130660200504015
0306020011406556110001030213061004056080501108040530301006405900706405
5070800200701804052630100108014053030140307010501070030120103061555110
0108064006150160811301150420015015303012506803081020613405004051041014
0040410014025210904040540021901170018010208055414649020507050649010501
0100801504030140010120030660200301103016530301307501140103011630170400
4053030101001700165531410702130130800405308001050150191030030141020010
6521620080201050116200401410064006100019301103011640201840010501506410
2001020302100504030750114062010301307501140216504014055015064070710501
0700301103012004004030155213010614005060816200106002030700200600130140
6103016530301250650406400404005020501306602003016530301103015642008010
3001080404007071504005018040205040200401301103061630660200301167010916
5303011670109116504015010700301151011105511200109021701040605012053030
1501524020900701014070505303015013047030121640208400501601503015010240
4004020817001615305110301400150140130116464005014020200401105303015015
5013010309001309004053060045065200594031671151080405301421151080501043
0160020015501301154008400504010200340040015034053060045060400183019030
1163040706165040150107003016549140102081710770501205303015012170070301
1610067001030152001010001463034051503042405463034003800501403020120015
0405103090508066015040011012162008020501070030150154812001070604050532
1080206550704905040405504065250401504040550408054714010900701203040405
1501040016540208301621400203014010512002130115010400141008053080080504
0530301405140011401030706015030150646081040154612001010050601503015064
0061013017001802030403015040210905040530401545120010905053043400503080
5303015070301050406530301405507030501070030120103061544130102601650401

5010700301504010451130651620080205010700303050630610010640061000193016
4002330125065040610214002030150401210905016400615010700301103012004004
0301543150102401405001521080206270020301530301103070506200400801080102
0200900501542130104008050640309001013061300105040102071053030130240560
8050150620710501070030110301200400403015411401090070140500110200400801
4100805303012202003001050406130010504030203070050641402008010001065220
2003001050120080100010130530301501540130670804053030120040150120640026
0301218901150703014020405507030506115200124110307015420050801563660409
5050130210050404020704014030110049040150307501402165040121400203011640
0615010700301151011105391301030100130150650406101308040520080202530301
4055070305020306406100164053012001060050120301502009005016704060161507
0916150704060163011004055016306501043011080150709640540050603012110301
5070120067040604020010100070406016150109070615070406050630610010657080
0164050704030203015068020081016415501070030150405381200109050530301210
8020611030653030121080206402010147012403070153030165373010260301163080
0400501506410200106530130800301506200400300102140020301504012109050164
0061501070030110301200400403015361200680100016807050120530301501402010
4101640205636216860401801210914107090164040104008014016434004030801605
0301404006040130619101100030150404020504048113612008060103070611080020
0404040050205016163060400100040010400830102601020021701301125031306506
3061004001401640307040010400810200120604040050165130903011622001004001
3016504015010700301151011105351500104853030150640400201013068002001301
4052106604006303066020030116907061620080205010700301461070010406105341
4105300130651030702021501036410530025401302050401501031700180102080533
1401090070120031550430504040061061580701800105506082040050165200700301
1005004040309001013053030150153214010307040525303015012065303014051007
2001404016100805016200600130140610301653030121650401630405103070170014
0653115010200100160801501020010053050191030030150201050406200600130140
6103012130653030125065040610130660150301110200405301640150610080501050
1070030165301501054012170070501020080120303015044007016530800805040530
3014051400114050640400201063060023012601503015062004011065063060021050
1070030152912006600801301400600405012050402810130530301501402050140101
4002030401406301026030150216250330122819030162503301200133016102200100
3011070020013301650102016040301610401400103016102200100301107002615016
0815010430163012611010300521620200300400130653030116427016528120010260
0140103070501205303015011405501025303011008061018130901141020010501153
0515040140208653051504014020816500702180140550102100110030040400806005
0165271200102201103070501205303015011301026050510307016100024001308040
2050709150180505622008001670318004030110805056200351650569007080505763
0050506801600400104001303016530301900808140221010003030400190080184001

4005011004001830190301804053016401504016100805011402680070210307040580
0702530301308008014021605030110307050640161003013200301526141053001030
0302010307050120530301501405210905040564001804020501401014004100705010
7003016506220010013016501430163012020040014040103016401503070330203065
2514010307010300302025012053030150153080080504053030116301601650260400
2011404021090501605030306162604002011404021090503013200303080070210307
0402080070252530301308008014016504040040013065241401020020130600440402
0306004506402040011010604020507020080205055070506550400140200101220162
5040034005015231200106010530301103070203070050120612001505103090508066
0801403090061501647020307003070801050406522140108200402025012053030150
1402060805011630400100400130640205040800120040050705200134005062040050
1130130912301240205010240203016401163020140013016504015010700301151011
1052118010708005016050130110030600640205070808060010501530301410200105
2014010900701301040163010404005014001653003015067024001050107003014102
0010640201030702640010501410200105303016519401020840103070530301640201
0307026400106402030210050405010700301505060402010451064020305010210305
3030141020010518401082002006801000530301640203020010600162002904005016
4020504040050703011030060050403020307002170070301504040015090840301103
0701408090505051030708053008180250104001501805090811700180501460014001
7006004004013064001880160402001010004001509084080620070403012505200631
5056400165053051507001250568205018080070250404020800702402050140101240
3070153030164001504064030140204001104008050404020501401014002030401405
0408040015040640301400150908403018205010501130694020504070940060104030
5040651714010208140103070501205303015015800102008030147025040524040010
8001200400140108040201030708150313065800102008050520063150564001805055
0405240400704004040060114080501088016040200101000501050908404020301640
1216100040024005014020307001200614040203030816402010307053030121400204
0205014010140020304014013011605030150404001509084030165161401082001200
6801000501205303015018030604100140130150104006001301501021670403400501
6402021309015040501070030140201015021301013086402010307081503130805052
4040030600416506204004030501805052404003060041040013030140201016050504
0402020063810801040013030140202101220064020101605040015401657018002003
0150404020400166001640205070800200110400130301402040015401640060013014
0015026600130140015026402040013016006402040014070640204004016600164020 40
0150264020400154014020103070400402008515130102601606140010040653008180
5012055018030604100140130116050301504040206121820501401682050400130651
4190010301000110015001040402050405070060016800702103014020800702108008
0141006550670060014008010206513150102401405001615014005255067006001400
1110103005504016700600140013080120019501005051481404001040016367501204
0367301424006014040042001501651212001050020120010600510805303013070310

611010300165200204005011060708050564040052002050180806200704030125056 2
003001706550102405300818025010400110501130150564040010400114080070221 6
257004003050563080070400130615200201605030116500200400501402030308101 3
016504015010700301151011105111401030112170070405301504400701201030612 0
018020405650640064010501070030113065013014002400105013011004006403014 0
548120080081700110400840011010603015063040701050107003030526400301400 6
010306510140102081401030705303015012064051030705303012640010201030618 0
210200100504050626400104050053015326603015063040701050107003030530301 1
030705264003011405015091401082001216400501205303015011405507016800200 7
018018309016121400501801405670018040205040155011040011050170030301650 8
130102605053053030130703106140064030150518064001010400840061023011080 5
056206040180164530050180402050405702200150510307016453004006018040201 0
160505040530081803015010400110104001303016507501054021700705306151080 1
430160012001505306004105464847040010653066020065303019070105040650640 1
090070301768030120307006151080501043016002001550130115400840050401020 0
340040015035306004105306602006530301709105040653030146482030400505401 0
308401030705303016530301504051090620018004020010100050104611521090610 5
109064702504050030500301108012020030040580203070050402005002011650120 5
018060460301140550404816302030804006001616001530651200401615301302050 0
200610303200501205016501046115250690640051090647025040404002020040014 0
405040500301505308043064020305012050180430640203050201040305014040020 2
004001404070220030150530650104611525010906105109064702504050202004001 4
040702200301402030804306505305012050180430650530502010403050140203167 1
202004001408090504020306504140102081401030705012053030150153030150405 8
001020080170805040203022001001405101506200440013040206150216402061215 0
104611521090610510906470250406046030154013080566001530501205018050030 5
003015401308051621550020066430653050201040305018043065305012050120200 4
001404060460301140550404816302030510621306809050301153080548164005012 0
501620200400140150030500505308050104005050011006801605050205018050101 0
500501301900830500402002070030304020413061108053030140201090610503120 0
107060506309010606120015040550692108050630201101405011403090010401400 1
030130164015063020110501070030150150214104601306100163061001030653030 1
161004001030804051030701680160018017080051020070040580306005040162020 0
400630501070030130060010306501180620070401306100405301630610065504040 5
610072001805010201604030161040140010301610220010030163061540601003012 0
080081700165001800620080401210905020050020615504030100140405062200100 1
301650143016301202004001404021090501605030306506220010013016501430163 0
120200400140402109050301320030304991210608530301210802064051030701645 3
001804053016401405103014040070804170018080620070403012302011030801200 1
010080501205040680807040060103080110501000501205040616200220105011200 1

4261801200601156302014001306405301640140510301167080418014300200405504
0404006050150180812050301161000302170011040081040140010301163040021649
8180620070401306100405301630610064056602016151080405610072001614011010
0402030530301307031040030140203016401158060301164006400130649711010200
4011010505563020801608050550401030050704020305029501805308505054001100
4901605030116400164961630670400130110504120307004020501401014002030401
4061548168016304704001301404008060050180701220065001305006105050040160
5030150404020302191401682050180104014001030110801696010040013014040080
6005016495120010220126850120550140203016401103014053016401163020140013
0621093012500102600301163042400400130640530164011040140010301164001649
4121010020040201030705012053030150140182001301652506301604001070030153
0301161004001616050612001050020130132001405504050026153671550401003060
0654816608050504040201003060010700301402022001610040016015030115101110
4935068308040040203070305303011610040016169212006162002190616200290116
5040150107003011510111049221608301701020060530301501405220045070405200
3140530201030611301030100150405005303014001101250620040030010130530305
0107030016004051030130750114064020103013075011406530301250406105040302
1400203013051504050164912001200213030200106005303014507014065303014507
0504013075015108050104301600200155013011540084005040102003400400150340
5304052200161004001501070030150203049041540301601026405053405161404050
0301030100701400404894130230110801620080205010700301230100400205020010
0010130488216500301506085450705303016530301450705040121650020015501301
1540084005040102003400400150340550306004130640540011010604055070502008
0201301630400100616304001100610301026010801670061640520011045040163200
6001616200315501070030180800702504040208007021050050161200207005040402
0504030401703040707010800113010501405220040530213400601804874170104030
1803060040013020501540110100301406101507600400130620306020010307015040
0470614015040016150220048620012002130170401508064006150400110106015070
2008020615026507001503020080100018015022001504018040202200216504015015
0140101303010415010110415040150704060150501150220048520019050150405010
4030190030301406540010760014100802001503013060044005040205011502200484
2001503012170070150100802050182601309121700540010030600140150220080020
0130164001614060301100306001080506200208040010640526503103070614670100
6140110100530301506200207001050107003014832123013011030613040011013020
0155030163010303018013040060016800200130164001614060301100306001080501
4822001041001030030201030705303016800200130164001614060301203040530306
4814010301217007040530621700703015040571804024055026084001308016307080
1040301402164408105015062810616400114025068200801050107003015026084001
3048050620040030010140601028013010301001504050052162004003001640520065
9001200656700250805506404002040013066015030305505010240030214002030116

4006150107003011001500104053030170060017001647920064013014077050402030
7005018016100400400616200290400501612001050020107001162020030015010700
3015040640203021005040214002030116400615010700301504050704060400306402
0608050164020301640110805063024003047820062001000301701400401301110504
3015110830114067180410080550330130600416200150301507087875040805401101
0030140610402020063150680640014050164006403015100101700608050302047720
0105040301214002030162002730164001501023012161320302100504030602002700
2041008020627002050180476501010041904040050205014056404003040010040308
0404003010010700301264001501023012103021005040306020040201341003010020
0150301530201400501220010021501040011010400830660200305040650130115010
3014570530301501163011005010700301475410270303040130900260103053030150
1640201041014004041001402203070047410010200830121700701610067003061005
0610082001010002110250130140530400100616301100140240020506011050100015
0850620010100805303015011630110050107003013061005303017040604100304732
0010260050630407040014025303016800200130164001614060301500120010405303
0654011010030140610521630600214050610069106040530200300653024053012001
0600655308008050405303014051400114025063060021050107003015026081013064
7240109007020031402030801610040040061650406400501653060200653030121650
4018013001050405306020050401024003105303015020306210100030110307040207
0309103053030150120140621093015040500102600301710401010400851030704040
0501140103070501050406403012007001030530301501201404715010540217007040
5306140500116414710304053010304050140501405608050130200106004053010304
0501405011620080205010700301502608101306470401030121700704053061101030
0530301162008001050305014010130122008020301162004003001501070030150146
9401090070217007040530652006001301108019008405303070310130153030141020
0101101030053030116200800105030405501200802030110805067020016010501070
0301205078101306468501050406404040050205015068016006405680160040013080
5110306180660010501910300301402030700140501467401090070308008067005303
0165303015016800200167024001666040560604010403030800806530301504054070
5021623010050180466301020630140705065303011502608163011006150140101405
4178040563006001804020301670403410060150301501601503014053030110050107
0030146540109007020031161004001640550401650608150107003030820010030140
5219011404702504030660200301653030162134006015010700301464501050406403
0120031701080010130530301501630800806530301504054070570250620030024006 0
1046350650781040513064051030708066001301405803060050404052161008301040
3050107003012506200300240060106530800805040530301405140011402501082008
0462506100720010405220045070110813021400164015303013010260108016304001
0050107003015026084001306461501010041904040050205014006403014020608050
1507016200418030100163040010014015067019163016470100640550166001301630
1100501070030146050640400201014024030701530301640526301001080601030140

4055168012506306100105014010130304055040220010017001040610200802030304
0540201507024001301301400100403070506301630110016708041615303013010260
1080163040011001630170400405303010100616100801505010700301403070103064
5950105040640301403070103065303015070012805017040330110100400301406104
0202190114064582001041001030030201030705303015014020608050145070504065
3010017005105014040030100151030500404040029014100521090404020400219011
4030614575010240301308001080303021005040165012050165402083016214002030
1405403070106405102071065400110140510307063040010405608050150401306602
0040510805007027001501050406403011030705303015040410030456506304070101
4022001090253030165303014507040013200440545520010904030160102640505351
6140653030150409600602125040205303015016800200702400150408014545064030
9001013040564002602014060805030201080640040500540110100301406103010001
4024001103030100010504063010001050110250305012014064535065040640301302
0640010308053030110307065470250404020200905010107003011700504080402030
7006001050164020302301100013080530301402020090501050145250103020640040
3012810530301501530301103070302064008040040770170018020040130110804052
0061300640530200801000400601640550708070180203068504016800805013023010
0301900103010001900804005020630640530400503053030150405408200140280451
5062003008400530301103013040400304001006140400405010306450506704031014
0402001060054082006530301504052008010004030404004061530301301026010804
0400304001005010306449200109025063040704001402530301640010401061010810
5303016405263010010805200608203070053030130703103016304001001406164001
4014015045070165012063010710001650120618002001301108016220080017001405
5016600130163011006162008020501070030120165062040013016504015010700301
1510111044840103082006801000530301501405507053030118070410030616260201
4080070225019103003014053074006011405015017040330110100400301406104020
5040163064005010700301501447200649030140017002401030705303016402026301
0010801409084010306402020064901080140530301103040021030640570318004010
3013040010030140510307024002050107003017200230402040061021080404005020
6303010015051515030400100140103002004013015040150305012063050630610010
2030506421013014040560805011080506806001053030530202004013015013010010
3005040200401301504015030305506306100105103051330150900100830120010100
0530301250650900104056080501405400405141005801019640205040580101910300
1000101601705055040140100030147025040402010307030750140500446506304070
4001402200102600530301640202190114013064020400180140103070165078400130
1020304010002140100040202150018040201200600110804020670410306602003016
4811030705066304001306506470904007001445501050406403011030703080080670
0530301640205070180704100306402010304002103040550704020802009040500520
0600130141020010504040205040611050430141020010504040205040506284001404
0201200114047025040404001090706200401301108040400707150400640400303008

0170011040085507001240550660840070015470653030140201004904100306444501
0403019003011065004060102620015030140516140615019306052307501040301405
3030121620200300114022702003011620080205010700301263010010801010030506
0443501020090150301200106006564020130640530301302442501020060160016230
1005040080402021100701103070402064200101620080205010700301167010940050
1165040150107003011510111044150105060840301281053030165200600130121650
0506086110504301216500530301405140018044050102008012030140610030110307
0150200905016150401410014002500615020040110801508012006016150265070015
0302008010001150220016301100501130140530610050120140643950102002190301
2810530301616501204006011406168070800140653030130102601080405219011403
0165056140802001050020506102200570403040011001025050405010120643850102
0020130030110735060615504054006505200600130121650042001050406155040540
0650110504301216500420010504061303640121400205303015070012130140064040
0501608050305012014064375010200201300301530301107310606110103005303012
0080010503080510210070103070230100501050406402021100701103070404002301
0050130400100614001405018013060200301530210050404003060041003066020013
0144084014064365062009005040040400501656404001012004100805610030400501
3021005040400640301506504040040400502041003064355010200219030140307010
6402050401645135010700301530301403070101403065503301163060044005014040
0260840143450102008012030110084010616504015010700301530301908401030643
3501040301900301281013053030161453004020504070060040010616504015010700
3015303014030701030660150301501021530614504011013012030400653050040820
0100406100301604041008082001004020606040105014325010504064040400502050
1506307013014040050161650784001306165054001306431501010040040303059007
0640610456601503030501102170054305010270020403015210017050120801020162
0090050180800200130110801620010608050506040203021005040400306004100429
5010304017030120031407050615108050104301600200155013011540084005040102
0034004001503640522005040520080100040405617320103061428506403070104056
1630708014010307016200901040306530301130126507003012008010001050406405
2650700301620080100040060180530301162002070040560805011640309006153008
1801630708017001501070030164275010506084030128105303016601503015070501
0801703016900101000301501040900120301612008003016120060301108050610080
5010501070030142650101004004030304004701800200130164001614060301158002
0070550364020220050405200801000401030116702001606425506408200400402030
7030306602003016530301167010916424501020080120303040047011040030120015
0301161004001642350683080400402030703053030116100400165807018004018017
0800112200301163020140013016504015010700301151011104224010820020068010
0053030161300105040270070106130010504030200801000108002001301108014064
0016140603011080140530306421506403019004055018040527007010614051030702
6400106110300200401301504020306010304205010210160016230100501080405400

2201061162008020501070030150401802009709100103041940102083017107703015
3030145070504013012009050301140652402026301005010409400306402030102003
0021301530301530703140641850104066040520101304030150408013015604060024
0202200402044401017005405200680504040206400110616100400400616200290400
5011030241750103075040520101304030150408013015500130500240202200402044
0105014020108020105030150105040640303030610040070014165062002030040040
2030703053030116100400180530700140400501620042253030140202009050410030
6415506504064030130206400103080530301103070614051030653030161303008040
0501402050405014008010194004057001414401030707010406053030163014001003
0304701100405010504064030110624002030515040400641000700164139108405063
0407010140253030150111010300405410204020200800101301610040040061620029
0400501615216820080105101060402029040050164056604005506084020606040400
5014122006490301400170024010307053030150140209001010002164006403010090
0101000301504030401501301402010307016800701630600170016150401163011004
0206100301700165302021400203012506504064006402050628101306405506284001
3061404005011541150630100704004040050205014001101301402030150102410020
0220140520064901080600400140640551680150401800100023014004241004040050
7014016461301260040205063011013040205064504055019216700600400400130165
0401501070030115101110410506403090010405608050150203065303014054030900
1406540020305180405608050116403090040610050020084002190120090151080810
2003050040201105043015110830157005108050610080501014030500404095064301
6001510804052001503012189012010306161101030053030150404054130611306405
3016401405507010501000400503016200802050107003015014085010100400403012
4010307053030165620080201050308020010600504016307080101406407501083019
0301504020103061640012001060030110805067020016010620020504030150705065
5010680620070403012506200401106200600130140610301653030125065040610406
5064360104056301030301150153030140011015063040010540101100540121400203
0130515040166016601030405506440070101650120616907014022030700100820010
1000211025013015063040010010653030140011012506200802010165012040550122
0307005502060403014051030704002200800653030150402800100021612660150301
5040302865303015040302821301168010050014050101530700301405103070400220
0800404506200905010130405002001241301402063061040206304001100105016107
0011301402062008001050304035061006018030140520050020165065040640301405
5040405301200106005012030214002030130515040163065303012506504064006200
2050403015070506550400680620070403012506200401400601503030400320060015
4012001060040400502040220064013017032004005303011030168002001301108014
0640016140603011080140530306401501040301703030140309004102001053030114
0610083012201030701563040050530301400110120304004005064301600151080405
5303015408200108080405563640080010215010700301140163995062008020400404
0050201402217007030116100670080402050140101470240400200802014055636400

466015010700301140180563646604006563680010240040610398401090070217007 0
405302010306164001501023014051314047025040168030400600161610020080400 5
010700301201650620400130639750683080403014052010306162002050403015070 5
065501068062007040301250620040110620010600301103015067041054014020504 0
502040030639650644005400402030703054001101402030530301501021020307002 0
155040402070010050180200150301504052008081803001030704040050206150166 0
015400407050240400829018040202630100501028030180147014040050207001402 0
103070530301400407050162002070016161002008040013061701040353030130282 1
640904007016395506403060404040050161301504006404001306540011004001008 5
303011610040011650401501070030115101110394401010040060409120090103011 0
454100805303012409040070105040653066020040201080653030140011014020103 0
701030400400404005016506200802040080102063935010200801204020501401014 7
024020642001021400203011640061501070030150401100102008016701094005011 6
504015010700301151011103925063040704001407030801100025303011406145300 4
040050161367015506100024005040150405303013010260507050649040040302140 0
203013051110301003915063040704001401030704105300530301653030140011012 5
062008020400403021400203013051110301003905010403017030150701050100053 0
301501802008020504061301026051030170194006015040400102301386015030110 3
070530306150401501205306004504064010512002140110040400150102400110151 0
803895010403017030301045612020012405202210700303060150303070800640010 2
306150138850102020030040301504050120140618010508401051200215304016702 4
001805303011004903010038750640301900301405201030618020307004702504027 0
020301530301103070102004008015040803865010100419040400502050115630400 1
805120064003012164001803010051200640030130750400501302100504056080501 0
307030101012006014020081401301301010120060110502301308501204017093013 0
203854010307052530301501801030050401610080504001406506284001404016100 8
050400104008200230116301504005030384501020090150504040530140640103012 1
700704053020103061521044008016306125700800200130130404054815040302100 1
050308020018020405616400140616200802050107003015013835063018003014052 0
103061640540026400302100400503012008020164147140500405501401014702162 0
080205010700301501382401082002006801000530301501801683090162030700470 2
504016214005010700301130138150620090050104051306217007030140550708080 6
001013015108050104301600380501070403160150301652010130403016530301550 7
030405103070501405617320103061379501040301900301406100301104510130530 3
016400150102301405136100830660200301501164530064055014010147021620080 2
014061005303011045108010203785010200601600301504052006001301108065655 0
403021001050308015010440130601301200101000100040021050406377506403060 4
053050850640550404815010210020080501304052200504050610250301610601070 6
106064010400611406912601301626100701061001860163010701406016401051200 2
110307030750114061501030703075011406530301215040130100376506703200105 1

0301615200206170698002001301640016140603011080504040306015306506100021
0530301501042001010008013755061006018030140520103061802030700470210306
4005040803745010451300301504040207040150161645300180301100150200200100
1163011001020090140203070010307040400700600164040020020010011301100550
2009050400306525050406400304020704014030100490403066020040201340500540
2086214002050404020400104001140305010102503011001500104053030170060017
0016373506403060404040050170014702200802030124020200401101121220015010
1025030165201013040301167006004004005014020200401101306372506602004400
4040050201402621400203015064030704004040050201402501010501220016506205
0203065303015064504010301412701650620601503030306100104050056250301640
2083016214002030153030151040061050120030023050120140371506403070104056
2700203015303011030705063061001065303014507050406514065303014507050406
5506306100106214002030150406514062140020301504056260840030214002030124
0540050603015066301011001020080304055040501637040103012170070405306405
1020710130654011010030140610405103012009005010130653030140540302010130
6520060013011080405301001306001302010306113010301001504050040550140101
6530301457025062004003001050107003015013695010100400403012810530301501
8010100400165457021080615040103023685064030701040562700203015303011030
7050630610010630102605010104013011080150103070601030163011004055012203
0700140101100510307040040414013012010301546101302001501042550401400501
5040405504062010301546102001950100255040140050150402140020301305150406
3674010900703013080080301670053030161300105040540040820029040060010366
4010307070601653030161300105040510400610530301410230800803015013010040
2022004507040206318106140400104006114030500404811040061050153030110451
0453015013010040205010470240050403013011650406400130636550670320010405
3070305200600116200802016200155030153616504015010700301103070307501107
0030121650401214002030130515040580101940030110063645064030704004040050
1610083015064040020400630912301210083015066023040040302140020301305111
0363506453004004040050165303014001101250620080204004030214002030130511
1036250620070300101406405608050113015063080010140640205063080010630214
0020301305150405801019400463615010504064030110306530301616504015010700
3016102503011700565670240015010700303040105120021260150301103061501360
5010202003004030150405012014061403060401801050850120502030611050120090
5013061104651040105120021501201403595064030704001304040050164030701053
0301640307052402030601030140108050631840040308040307052402030140108040
4003318130654040050115358506301007040013080154702504013013010350130165
1200640030140030750114064010512002110805063184004030214002030130511103
5750640306040150121645300116306100801630640050180530301506450401212200
1180070215080070270060040010130611010300522020030050130653030113014270
5013014020501026150501021660540302010301163017040021400203013051110301

0035650104608040301240103070530301501801630640050180355401020830171077
0301653053030150165303011301530150401406100830190901003016530170055013
5450102700120301103070530301400507030307035080305400250405004020608050
1615060805016402016050615016050640201502161501502170450163017040030100
8040307030150402013140470250405108020318504080353501020040040403015040
5020400130802022005040100830135250620108050205303011004050021200400504
0510030600404130500402053030145070106010703050040501351401020830120020
7003016400110130150402010307056304005020307003505010403019003012810130
5303016405200631405108061080400183019030116304070616504015010700301140
1634950102009015050404053014065200600130161105043011080141043001217007
0405270070180162008020501070030114018034850680304006004005108040400502
0140108040205010240208180402070320040103014050054011010030140610103011
6200802050107003011006802067024001501070030130701361620080205010700301
5040202005940610301207080120062010806400401050110601070110530301301100
7001347501020020140301200106005303016530301200204061620020406346501045
1300301704015024002018030660200301150702400164003075011402150401150220
0345506403060401501245300165303012150401530301200190501508505061020016
8301301100530301103011020019050150403011002008020301405504010601070608
1140308034440101004006040912009017005564270180402022006102200530301501
3435067010916530301161004001804020220050405101240204001036402010307040
2008107003018007024020303081306512006400301504010410501021403011004904
0634250105040640404005020501402030510130203070010805014020400610210805
0620060044001406506302014001402402010250165303015070012104006403011010
8169020021301654020130110200216530301507001212001095062010805108060080
5018020010930151010520501093015040402030100306001105014020220050405101
2402040010341001050130101012006011050210301130660200634130103501301651
2006400301654020830162140020301540307010634050620108050205303061001014
0501801200401108001001700113001014010030600105303012030700203011002003
0021050606040104030643061030506201010501220040030110033950108301903015
0406130520645403011080601503014030201063385010220010040301504065200600
1301611050430110801510364010200405021106010708106040301540601550405403
0202220200300210530301501401020040110520101304030140030110070013375064 0
9040060010700140510430400502014064010200403080201040510140540130100150
6100301070014051043040050201406201030151086502101000301125015040203070
0336501070201200301704010702020016104360162022003010400501001401020040
1103355010403017030116050103070201809901620200596201809901530301501401
0200401105201013040301400301100700163342001202130161030070301282606120
0105002020220020020700161740200130140110155001305006015030140302040013
0120400101301100510110303070312200301100333130010140307080105303012030
7002030110020010017010400120040162002203011050100030241006401301000103

0506201010501220030110033250108301903015040110250612006908614106065303
0150405403020211004904010108102202003002105303015012120084030110801030
9010401011006565201013040301540041508033117043017010406020501521095102
0070020504305040103025220030110052200110200207170420301505330216082001
0100021300105040100720010530301501530301450705040654003011001700520301
0501401020040110301100110072001545070436212008403011102002071510307030
6004140302011020020715308020615060814001250154002501650608306210021522
0015302100400803294010320030150191030030150401540010200700620215700107
0110501640102004015400104060105016105005013012020020700301601030640070
8006140240307015303016105005011540070800610501220040030110015400708006
1403080328401030703017010406030140050120501105040302100400801200200840
1050921080140203040020070050105012200501200407040012004014003011007001
3274010307070104060530301680070250401580070251020070032650104030170301
1030705012004070301640105120021301618650640411080990153030150132550102
0080120301281013053030150180163064005018030660200301653030116701091301
0032440108200200680100053030164020265070040203020080100010653030140202
2810105067024001805303015062840040400502050130100323412703012806200530
3016560805053030140202007008106141070214401550102615501025016304640066
0504040030407014061200800840200106005040400304070140608050302043400406
1032220010410010300302010307053030168002001301108014064001614060301108
0140403070106530301540307010564240061402020064901080140168060040050130
1003212001090403015303011030165608050530301402020070081065110040040550
4016100400400501130110300108053030150406010308020307003070801050406501
0504064030150645040110306150102008012030150650406403017006004001013032
0216082001010002130040050401007200400610830150404001040301320060040064
0010403015040108301320060040063010303011080200155030133064006200155030
1108030103030133064003192001041001030030201030702050120010600301204102
1300400504030700400613004005040770400613004005040402030403017075040061
3004005040203040301104006400203040301203014040530301301003185064030900
1013040564002602014060805030204001080665108021020013040610304051507040
3170018010208031750620040080101650120140405501041080405200100064001464
7040140110113012001503011506040400503016301100405501220307003165068002
0070404056405504010010200801030640010405004055010240208103053030121400
2010301506704102140020301504012109050164006150107003011030120040040301
3155010200901505040405301406520060013016110504301108040530140701400928
5010700301201030613144010301217007024052003002806015030150409601003012
5062004011050107003015063040010010610082001010002501010250301506304001
0010653030140011012506200802010501070030150131341270301220010902530301
6100013023012010307014050180163064005016164400514100801640306015018040
4004030601150101040130162140020301164006150107003030301006507024001504

0653030105364004030601301008020631850180312216083017010200605303015018
0530301400110122008020105040640550102110100024030703014051314047025040
1301214002030116400615010700301803040060011406401306013015303014507050
1043015013114010208301710770301651301530113096010030121401011004030703
0163061652010130403016651301530113055015303014530031020018601301250102
0080100040060403016501010080504030165010400501100301650101004190301650
1020021903013092001503012170070150100615026507001503020080100018015040
1150501150220050630610010501070030130841270301220010902530301653030150
4050168002006520059403167161510805010430160020015501301154008400504010
2003400400150340522004507016100400150107003030402030700504020010600240
2010250613010030721403015060854507053030161105043015110830170140040203
0700500200830164017050130165406604030130106003016580080301625700301504
0520095010040301200109150100301650105023016160503015040400165300301286
0150303050107306200190213011030613052002703020307001080501130010504052
0090502410610530301650107030110120040510305004040550620010520080120102
0060016530301301026010803040011004005108014001004003015010400108010805
1014020305012041003054154030160102640505310301506200300840065062301000
4006016200802050107003030301003042110070301410430053030164052650700253
0301405700600180150400110121627002040530210050405010700301650670200803
0121420303200150301461006405201030616110103005303015040405413061130640
5301640140550701050100040050301620080205010700301501302417010403018030
6001013053030150151080210200130406103060150301704013205011502200301215
6301400501205015408200205043050401503025615040010457001470215026301001
0007400130150220030021230130163061130120020700101406150220045070504030
2052150401506306100104030703011080506600601200301653030113015301061400
4030701014065301061400110004002165504008030111000400215504052130040014
0506702400108010001074052630100108050107003011401804001521300400402006
0016214002030140150540014020840400110155040214002030120103070307501107
0030165299401020830171077030165130153011301300108010204018200130110804
0202006901010700301652981406030110801306800200130110801030051030701080
6001013053030150129740110040050167007107770530301641043002170070405305 3
0301400110121620080205010700301501501100200803013075016601503030104530
2100504029630103501301651200640030130750165104105010214030110049040100
8301221400203012010307030750295406101003011083016513015301130530301294
4030129350102008012030140610030110307015020090501801501306404005011504
0820016150302008010001615070807016521503051001913014015030408400130615
0220015030210050405010700301103070540030408140201200901150103070304084
0013061502200150196001611501060505011507006001640013015022004002604002
0114015103070640026020140153015706061301160805053030180302010130292200
1090403012010301615022002050120080100015070916150704060163011006530602

0050404815010210020080501305306020065240020654002010130406530301250401
3020506504064030165220050405103013075011402306602003015040129120010410
0103003020103070530301613001050402700701061300105040302008010001080530
3015240202601810568060040061402060805011080140164240050168002001301108
0140640016140603011080140530302904010307050630407040014025303016523010
0405001550180154040020105040654153003011640400204001306522005303011004
0010306540050140150404006110700301461030801800702402080070250401501805
8006210040501520080124001201643400403062008060103070404005020501628940
1030701030030202530301653030140204030701065303011610040016402021006608
0550180163070804005016410530013062400120200180010130640400701012400170
0116453001615624002040013018150340201030706010308040205010215506200104
4005200800185200134005062040050113011621400200400130110504165415300303
0406100165303014507096010014020307005303110301120010220611200101000905
6240020400501164016040013061670414017001145300301211013061020060013011
4051481200207004008014051481308004005011453003015040506800200400504040
5014001200401630320080501030320015062010403050180402030132005040501041
0530016453004006016304703012510306303040103080653040105017010940060101
3061180107080061151080601008301510307010700301501205018011010300550406
0600210130652200530301100400103061008301510307010700301303040103062400
2010308053030154030701402024002010501240012021101306304703012240012040
2050102240020103065624002018010406040303110301501042404005010144001700
1165040150107003011510111028850640309001013040564002602014060805030201
0806400405005303011030151080506703200400140610161004001628750640307040
0404005020501402030200106001610049040050165200601040103015200900508052
0060706700501205016286506403090040013065064030900400130402030164016062
0040203080404002400501653066020065303015040220082165070018016307080400
4030501802855010504064040400502050112200301504010100214016200700653030
1161004001165040150107003011510111028450650781040513064051030708066001
3064052200450704052003140530512073011640016513090301164011001640018301
9030116304070616504015010700301501283401050012001802030202810130530301
6400110049030110220010612200301530301100840102825064301600151080405200
1503012189012010306180417050406530301103015200401680306014053080105400
5018052200504059007064051350408012200301402008670102301530301308161220
0301305004070102301140501163011004055012203070060403015040501910300301
5926004001010700301406100101402013015064061001013012200301506302011050
1070030128150650781040513064051030708066001306405220045070405200314053
0805105013070612006020015503016301030301240530164015061008050105010700
3012804010307052530301501802001060050401610080504001406180183016015030
1506301601013040514010602405802007040080807040030150401105010001305133
0140526081080020013011080122008005067010940060101305303013010260108016

2009081501070030112001008030302795064030900400130404005016402010301806
1020010600504016100805040014065303015361100040021130150610080504001406
4020608050130802001060050401610080504001406130010504010451053030150203
0640514520103070601030278200102600506304070400140253030164020400110106
0504040205070200802010640203020010600658012001008030115640064006156806
0040050161051407050804001100490301164240050127720019050150405010403019
0030301406540307010530301501802007005050404040020070050615100805050404
0400100805011406276212301301630611301200207001014061200105002012001060
0104006141008054020830140061050406130010504054020830110400610275401030
7070601653030161308008065504052008010004040204701053030161300880301240
2020040110620010080301402047010501910300301274410408105010005303015011
6403070165108016800401000400501130151070060012404006030650610080504005
5040500102600301164040104001306800200130150404020301503200600114040640
4002602014040012109504016100805011650401501070030115101110273506200208
0400400402030703040011013014020305303015010210203070020400100200400818
0200150510802001907011521901801807080051020070053062002203015219016400
1200405003013020504015108053020015501301154008400504010200340021507016
3010600505040550353050620400501402048146101272200109025063040704001402
5303016309803021615290104030501805010807080015302014004001803021615219
0156220025503305004020405608050150401400102500400653030140018002004011
0004002140530164015061008050105010700301305004062715010200801203014061
0030110451013053030161626020140401030010307050620041001013014309052020
0400803021652190180212004005103070501680903050040205305004080200600130
1406103016530301250406101306601503011102005301401008050101070030120107
0013016504030124020400110049016309240013016504015010700301151011102704
0103081050100053030161070011570240010510049050402001060052008010004068
0620070403061002695065078104051306405103070806600130640522004507040520
0314053010700113061504016100805011405067024001013040500530301301026010
8040530164015061008050105010700301268401030707060165303016130010504030
8070180010530301652851014053025060302010803021506070260400400250152830
5004020530301301026010804053016401506100805010501070030130500402674010
2087107705303015014030701611070602050104001105057041405001735055040302
3302010307030703140500201030150520090802001093015040570220017006008030
1100102301005010409103050203061030230110050406400403061301100104006403
0110108400801020105020012200401051200213011007001626620010410010300302
0103070530301501403070130110053050102400140308014083015660205040500157
3005050801020401900703011030120090050166015030305101203070350306202001
4081030120090050165506040010403020212003006204017091030120090050180401
7051014040050023030230110040610800702611406104005002303011004005002304
0203011005500702405004017051014053030154001401801540064047025303015700

5101081010501301100153006200701030705106160010565102001001030702004010
7003012061265501040301900301406100301104510130530301620080201070030140
0528022001000403015040152400180100200300403015040604030030121040011053
0301501804010512002130110040010401610108115013011004001040106101081010
7003011022004010512002130110070012030403015303015140015015220010804010
5120021318107003011030120040040301264506430160015108040520015030121890
1201030614001403090030110301200650301504040550632006001040061000193014
0561103061162008020501070030162006503011030140014030900301504040532006
0010165040150107003011030653030126340103070701040605303016153040190805
0113010100500630156200703012206040400601410080530301250406106400610001
9301220080201050408010100030150404300200301501024004100501043011080512
0020113026240109007030110307030165614059008085461010130680020013016400
1614060301510602002070606130014021301540307050401030025069108101306405
8030600140640510410150102140403070105507001213015450707080300101070030
1170050408002001301108014064001614060301108014053040650130655060570060
0140013040610100301108301651301530113053030126150640301900301405506200
8012030165701803001306530600130651080701021304061010400110501302100504
0402015010072001404016100805011650401501070030115101110260410200101403
0708010530301502030616304004001001140530301130063062008020504040550406
5040150404055040801680304006001502030640015010230140540013140470250404
0547025040501070030130400400100114053030113006306604100301862002515041
0164001501023014010200405021106010701501040016400132004405800702708020
0653030140302050404055040800702103070405800702150308008030602003012030
4002595010306020040301504030205016100830122010307015630400505303014001
1012030400258501040301703011030703080080670053030150203068002001301400
4608030800702240580070260150301530301708041306306130010140405403070654
0208301620304030153030151400164006301346614304001006530301507001240564
0758025750102008012030140610030110307015020090501615040141001400250061
2002901501030701000200801150220016301100546503640063013301672002140306
2565010200219030170405303016530301507001252001050020510804002301000530
1030100510805040402053030161001304040550150650900105010700301301100546
5036400630132406103011503051001913016301100570401650401501070030166557
6131403080405504013010301001301550401622003008054102580200100080200400
1000150401301105040550180540709104030504061050406010308055040220030050
4080200550240201030400240530301501301100465033012400630193090801403080
2555010504064040400502050140203051013020307001080501520101304030153040
8400506200153016106064030120200400140405101002640202200504055010206051
0804006214003014020104001105015203040510150140510250405303011006254401
0307070601653030161300105040520304010400610530301640603301640307030110
8059602541764020103070518099015303015013011003014030150405706040061040

3065504020304030121008150850615010307020304030153050620101050116301100
1203040400630194020305007024100530301501405102504053030110062535010403
0190030124010307053030164055040130103010013011630640030140010030140510
3070240020140308015010150216150200110450401503200600141006530301301026
0108030400110050130115030140616301100163040011004001301301400100301402
0103070240020501404001060703053011005303013010260108030400110050120304
0150305007021405301025030163011007001106064047025040301010120060110502
5040130403011030120040040301252506703200400510301696021068002100105303
0165200105002018017080015305807018001080150608180020010053030180020010
0101070030117005040251401030707010406053030150116403070165303013010260
1080163040011006250506200203001013060150301200500201502030660150301103
0703080080670030530301501405110814050016400640530301405303011008040064
0301200700880630140564052001104504016320060050107003011030120040040301
2495063010070400402030703054001101402030530301501021020307002024850101
0040040301103070110088062007040301270140040400110030940303062474010208
7107705303016806200704050405056080501108050307080140108040201030708150
3130805032006005018031200600120010100030683011030117014004040531671305
1090613167150620070010640205040506806400105010700301624650640307040016
5062040040301404020403070140205303011620020700180404005040117001801501
2202006113013200804040080600501802455010400501100530301640610061096063
0151309030164001630903011030701690080182442001090250630407040014025303
0150140205010230800803011660504001306106100400303022001001168070400501
6812050301541007054102107003016807010615068070105011301404008002008014
0809050805800102008050530404008002008041006505660404005013021005040505
6404001003095016243501050608403011030701100880620070403012170140040520
0410020040010040301103070652004100706064030110307050567040040658001020
0805053016800200804006150566040400403014016050301404001003095014020103
0708150313024240103082006801000530301501164030701656200700818040206080
5011080140403070105303015011640307016530312140020301100030210104008812
0503015410070164077040013061806200704013061001630610040050113011200605
0564701640013050203065055062002070040060402050153030140307040206080501
1080404005050201611605030152960050405240400800200701401080402010307081
5031306241200102600506304070400140253030168062007040301250560805011080
5030708014010804020103070815031308050530315010003021700180120030070620
0530015702200150560805012509022004001013167150620070010640205040506806
4001050107003016240200109025063040704001402530301501164030701653030116
1004001680620070403012404001040011404040040306017001402010307081503130
8040204130611670800200400604005014040042001501614051030708150313080200
6130040061405504080012004005070130190801412001501802030700305004050020
0163011030706543062530463064013061543062543016200180040013015706061301

6080508030204001308062007040301250540066020650510072005304630640301103
0706570180020030140400105014120015040305010304012050103068505413061507
0800200104001430163016239506403070400130404005016403070105303016200591
6402030102071402030700200600130140610301653030125040610402050405012050
4052900706102030700806200704030124055010216800120040017001505316715082
0501050150563080070400130805053031501000302801605030140400100309170016
2384010307010300302025303015011640307016530301161004001652402090070105
4020830162140020301504040201030703075011406402010307053030140040705016
2002070016167553030140011011670060040040013065608050403090041008020307
0030708010504061644007040030120012008005056206040400130680620070402505
6820060618062007040250562060401805053031501000302801605030140400100309
1700162375064030701040610030155010210530301464820304006530301464814010
1001050115090050117031200400105011405103070815031308015100309501805200
1010001367820504001040084702504053030840013080151003095018023650640301
9003014052010306180530301464847040010504061564400704001308053030146482
0304005240044008011401080140510307081503130805303014648140101001013014
0400806005018053030146481401010010130118016001050113011101030050564040
0104001140401670060014005014020303081013065016081281020060400618062007
0402201604018050140020040100130930123540102087107705303016532004505103
0703013200303068062007040301250510307010700301305004050530618130901164
1200150120307001080505420021008150540030670262006001301406103016530301
2504061050205015054018200110805303011003060014050404002010501505303081
0130662001005500130500505608050125090220040010400110030940301623440103
0707010406053030150180100130930116407705016233401082002006801000530301
5018016180501802005300157022001902200400405101605050405063061050107003
0302324010308200680100053030164020263010040026020140240207006001610502
0306402050140101108061000303012530301402070060016101302314010307070104
0605303016601503015010216830904006161004004006162002400501402050140101
3058002007053030116307034001306230501050406403012003002656100130404020
5011640307016530301161004001640206080501301640410064040010300105014020
5002008164001804020305002008402061605022950102005940040301281065010216
4003012810530301501530301402020040150010850405056400180502005940017001
8050200591010400850562200100400130680010840301108016050301163074007018
0107001653010080010840301507020506301601062285062002070040010405307030
6015030305400110150102106550700125200801000403016550330110301670410530
3016200150301103015067041020103061402023701630620200300405040200106005
0406404270306165040610104008501020200300403011682050400130640204002370
1630652020030040504020010600550406405401306504061010400840012020030040
3011682050400130622740102087107705303015014020400507013053030113006306
8309040301504046080403014030701053030164020501660018040569301600400501

6200106004053081309013010010401400103015070205063016010652006001301611
0504301108022650620020804004004020307030400110130140203053030150102102
0307002068070301301005061008050101700140205063016010614057080505040200
2201140540500166015030307080150406200102204050011405108030100200601040
3016200406003015070205063016010225401082002006801000530301653030140040
8200506320010201030615303013010260108016451361620031550107003016165040
1501070030150122450643016001510804052001503012189012010306165200600130
1611050430110804053014070140092820103061802008012065640040108055010450
7040205040444002001050406167019400601501402050104507040206420010104008
4020506304001100105063017101306304001003015040200220155040080301653030
1450702002201550405305131200600164012008301436040301652200802065303013
0102605070490620010220510803014001003010051080301400100401200830120053
0030150702050630160102235064030704001304040050164030701053030164020302
0030065611010300162840050110607064020302001060065611010300165200204005
0110607064020305200206563014001003014020103070240020222401030705253030
1501802001060050401630708040014063010260301502165010201604030161040140
0103016501022001001301650104301630308020010600504040400100805011403010
0506100805010170014020506301601022121020010053030120090505011301530301
2009050104004057040165040150107003016306602003013061001010400816307307
6120080030161601230140540060404020302100504016306005010700301305004040
2040011014030655033011630600440050140400260840122040101004006040912009
0103011300105040104510530301655070012100830150405108016803040060011403
0165040150107003015303011045804055010211010002400150102301405400131404
7025040564006150107003011301510808030400600114065108016803040060011401
0806015030150102402081030100830122140020301405704030750165010200700504
0650102003002405010102503015303015007028054816540160150301501202192160
8200101000213001050401007200105303016540110100301406104051006801610040
0150107003016165040150107003015040506200600601061105043015110830116200
8020501070030305010721821100703014104300530301501805400131404702504053
0301540705030421050406550102510150404051501040014020301010120060110502
3060217200640130170320040053030110301620040130110800100652010130403016
4014010003015040303090010805303014051040011050113015062009005010305216
4010208710770530301501164030701804001501023014020400131404702504040400
3030750180215501024064704020305501501910300301400169600167024004001306
5801204030603011080163060041165040150107003011510111021441270301280620
0530301653030140018002004011000400215608050102003001050406015030150406
2134154030160102306405053526088040500130125770301540070060015303011004
0015303010100170016212416080301281013053030163060503016500200830120305
1061510804608010308002001301108010706010306400170016211401906003014301
6565230100108014010307053030145300106110504301511083011080530610020237

0105040601503015040621050620030084005103014020501164030701653030116100
4001610100400150403051030704050011308020060014005040651030704050011308
0501040610108030370400504080400146470404011011080530301162002070016209
2160830170102006053030161626020140402109050405302010306120820015030121
7007015010065506085200600130110806550608110504301108015040011502200306
1001050404055040620710013060050405200600130110805301406110504301108015
0400115022003061001050406015030150408012002070043001614020121402020020
7002053030116200207001804020206015040404001080010017001802064010820020
0680100053030150153030116200801000400601660150301800180150010850401680
0108014050020550103018003015040305302100504040400502050164020145140205
6200207001640120083012007030040301450705303011620020700180400180200705
0404040080080117001804020220050401308008016100040024005018150340201030
7060103020421230130110306111050610040016106100400301417301200106005018
0164674006530301540307010200106005040163070804001406383011080301431306
1006608013065008020013080383015051080800200805040804001406307040200530
0138301203211007030141043005303015011640307016530301161004001640120083
0143604030110200800185305150201040305040302030700530401205200300702030
4004040070320017001570260638301108040110155001305004011090804310403050
4080104530150402006010400601140803830110301520040703012704004040050408
0404005040117001802060506151004906140110905040510480805601200504010700
1526118001020040402050405012050408053084010453011000302101040084020606
2001610030840013061045301504020060104006011408040400200908150180530305
2004070301638301164040016202501050608403012810530301501165060816520305
4003011030140201041012161003040013065303013010260108016100805016201501
0100400403017040530301501164030701653030116100400164020103070104400701
1403050040251030701644007018040201030701044007015040809019010040014020
0830164012008301200530030124012008301200530030120050104030190030110307
0130150164701308016540050150180530305010430150620106550400805062040013
0104008405630400110061994010820020068010005303015018016540050150180198
5010200801203011732030700204056304001001804020630400110050180510804020
6304001100101040084012008301436040301450704056304001100400130630400100
3015040430015504008030164020632006001500108504040563200600164056404008
0100500500108405630400100161975010440070403012810130530301501164400704
0013064020506304001100105010700301530301301026010801630400110061965068
3080400402030703053030116100400161521621504040061023011640016101004001
5040200230150203061520065900504040061023011640014005012200230160103063
8301660150303040010100164010530100530513015070205063016010195506403070
4004040050164050013012601503013016401504011001020080163020140030401208
3011030115216304400630912301240205010240203016401163020140013061945061
0040010405307030601503030540011015303015010210203070020156220010040013

0805303014648203040043160403011080506802017040400501650562003001240013
0630103030110301401109030116404001405002003803015040466013019106003015
0408001021301910600301402030501024001010400816220030016163020640203053
0301240020140161000400216505620030012501301804020507018070640201030702
1400804020608050150650140060040040400502040205015303014030705053060123
0404005016402030601230505402010160501030150080200301401109030153010304
0203030811935064300200104053070301021650406103061030162103400601030805
0170417001701430156704210312102001001050180105070104127020301601700161
9250620020300400402030703064020145140103070530301162002204003065470301
1630402040030620060703014020241020010130620060103014020253030141020010
2006001401101504054708020080601030706118001020040501205040654090103080
2005300301402050404530050408050110020080301610453015040400150102660150
3030104550120010030151080307501107003015018004020020053001915064030704
0040400502050140203020010600164069040050165302001060065801200106007069
4005040805010206040401709510480550610010910501070030110307062006001401
1015040547080200806010307061180010200404020504050120504080400146470401
4011011905061004004004020307030402030210050405010700301103070240020140
2040110903014020103070240020165040150107003011510111018940108200200680
1000530301501510307040500113080405501028309018014050016118050390640504
0801600504080188401030707010406053030150155063042105010700301103070540
5001140501805704060140470253042504080187501010040040301103070110088062
0070403012501022001001301650104301630305109063011200106002020040050140
0640301402048120080081700140201030702400201865061004004004020307030212
3013011030611105110890190100301108040203061854010301217007053080203070
0470210440070150408054082006402022005040801080600400203070050160812510
3011416806200704030127012400180103005106001504053010807050408010500501
3012105005013016427030124270301620083012200830110304001003011080901901
0030140201030702400201650401501070030115101110184506100400403014052010
3061616100490501070030120103061601230150108612008003016160123011080501
0200219030161645170170014054570250680640301651207301104001651309030140
1100162110020030110806501030101603016301026030150216501020160403016104
0140010301610220010030110670052810307030140301104001650101025030162140
0203016520101304030162006001301406103016530301250401504020023015020306
2200100040301610020030040301302100402056361630640050120023016010301834
1070210011003001080302140020301108016803040060015010700301501610083012
2140020301307505303015012203070018220015030110307040520029011408052008
0100040301221700703016104530125301308003011620040030015010700301201030
6118140103012170070405306405102071013065401101003014061053030140540302
0101306200150301130140550692108050630201101402010306113010301001504050
0525062004003001062140020301504053030130750114050640400201050107003015

0118040108200200680100053030150151030704050011308041701306100012200101
0002009800150408053030120010100030523051140620010750600301408306404301
6540010403014020103070402008140501179506427040051101404005020501530301
6200203001640201501007200140400121095040163020165040150107003011510111
0178506301007010130405801040704020240901450617041301704060101301402100
7050101070030130500402016200802050107003013050040617750644005101306110
1030050630100701013040561215012063061150121510307015010803011407024005
0302163011005303013075011401670240014053030101001700161765064030704001
3014053030110307016306100400501613008803016660301240202004011014050117
5501024064704020305501501910300301400169600167024004001306121091301308
8002001301108014040163020601503011510111017420015030150405010320016002
4051406405103070400120060840530140701530301405102001020307002015040162
0024001402040550401200240050805200201503050163016702400150107003013011
0061732126013014052400709100400621700703011612006167024001501070030150
4016702400150107003011200240070011722170070301410430053030150161701040
3530305610030150121700703015062001070011640309005010700301102001063065
3030128430011650401501070030165303012820405506281014145015303015064504
0700600400105040601503015040617150630100701040610030400110130800200130
1614060301501022006006040301218603016811020030180102009040065214302050
4015108050026154006404702800200130152110818014050401406030150405303013
0750114066015030170805010140220082301108010200340010400301203080301620
0155030163010303018013040060016800200130164001614060301100306001080501
1704010820030150408200301651301530113048165301402053016169506200900501
0405130621700703014055070808060010130151080501043016001685010704031601
5030165201013040301653030155070304051030702010306120018020405616400140
6162008020501070030150116740108200301216400301150164051030702640012010
3061801650102616830901616214005010700301130116650650701303014055070301
0653030140550703010201030612140020301108060150303051501021404702504010
4530164001501023015040150307501140506404002010501070030150116540103070
2002013005303015018012001060070694005040614052806910501510307081503130
8020040400701614001023013850408053030120010170300504056200403016180903
0150116450644005403014052010306165408200640522005040400163090405103070
2010306116350670312005103011501653030150116301100521090404054002190117
0015010700301162501020021903012003002640012004050030166080501301630164
0130150409010050670633016806600301504010300240205063025030616150620070
3004001305020306110813024001640153030130102601080304001001050403016306
1004001306160501020021903017040530301501513090301620029030121650107040
0601165040150107003011510111015950620080204001306103016200203001640202
0020700110506200207001801585064030704001650620400403014040204030701065
4020830162140020301402040307010640201020710615040011014020103070630400

1040205040130660200402010801503060200114020157506440054004020307030640
2010307010400407050404001306105063006001640563006004001308040550401640
3090050107003011301538402010307060150303050620101301030520093004020563
6163068040400502014050010864012008301436040301200930020536306804003200
6005001085040615650630407040014070308011000253030114062022005040100830
3055016401200830143604030120093002053630680400320060050010850406155200
1041001030030201030705303015011701040353030140202400110165062040014050
1014001200106003011610024006018015103064065553630203061545010200400404
0301504050506204001308020220050401008301153506403070104056100830150640
4002010304055040110010200805016405150215068020070101402055068020070102
1400203014051501040015010700301152501040301900301504030170012050140307
0301504020131404702504040516514007024001501030680070253021007021400240
5800702140640540030210070214002400501140620400302100167024001405101302
0221400203011640061501070030140010400150103061515063040701014070308011
0002530301140640522005040100830155015064030701030214002030116400615010
7003015016520093004020563616306804040050201405001086401200830143604030
1200930020536306801518002004005302100205010306503080140603011080205362
3010040010200504100150401082008062003060150301253030150140205014010170
1080010305303015012014065303011045501070030110307013015200102203040050
1205016510210070103070230100501050404030660200301702400105040403070503
0130115103070400502010400301530210030115030703140614105300402010307030
6602003015062010660150301103070145300165062040030196065401402015030703
2030700206149401010040060409120090103011300105040104510220010004030161
0020030040301530303010015103070165012010400301405400302100507040513061
4060150301504015806030130610010601485063040701016501201407050630160400
1306404002602014040203064002602014015304003060041005401203040014750630
4070400140703080110002530301140653030150405450705415300404002050404040
3090015040653030140140307014040050113010010200190506114651650120912601
3016261007010610018601630107014060164010512002150150630610040040114650
6903060040530508506402030140701402030615030140701150306402022006150220
0656530301108015050631840013010014550642170530508506510002905303015040
5060815040653030151000290144401030703017010406030165653030140520108020
1060801001100300108040514050180163064005016164400514100805240400504011
4030500402165040150180143506403060405305085064055040481501021002008050
1304052200504050610250301104006114061060107061060640104006114069126013
0162610070106100186016301070140601640105120021103013075011406150103013
0750114065303012150401163061001425010202003004030150405012014061801050
8401051200215304030230100164400540010200190506114651650620163011006141
5063040701016501201407050630160400130640400260201404020306400260201401
5304003060041005401203040014050640306040530508506148161530110018601630

1070140601640105120021201012153016205301427050163011001047025040506427
0400140510502303011007001400640301261007010200800870011453004040050204
0113950640306040404005016130150400640400130805010430140203010809901530
3015011050211026100701065105024010512002115210906613850104030170301220
0304004030601301100403060152200530301100700113750108301903015040305200
6001301108055016110504301108051501080990141003065608050580605040130140
1051200215304050702100020010504061364010208301710770301400501205014051
0207106540208301621400203014054030701062040011014051030706304001040550
4013066020040510805007021615022001354010820030121640030140050120501150
1030702400615020601504015020016203054030604054011504001020070050406203
0501040306040150307031615022001344010307030170104060301400501205011504
0302100400150220030107014060164001023015040470161003014010512002170802
0010700161332001090403016010262001503012170070103015200980014050013010
3010057040040180200802050406301100200600130140610301653030124055040504
0150404001200405003015040530511007200161504011430217005307031220040105
1200213011007001613246360301702020030165010802017030165010801019303010
4001021200595013010701406016401051200211030115045706103090404010512002
1401100405040167006004001615040166015030305215004040010230115030703700
1613150104030190030110457030150101303011001040010200700504063011001401
4016015030302030701310501301100505404001804001403020252200401051200211
0304002170016130506200905010405130657018030015708050400130630470155040
3021001013061101030060805050706080501073400130140610161004001612950104
0301703011030704020400308008010501640201030704004070501104003011040040
7050162002070013010101200601105021101285062006016003014052010306180522
0080201050406525065040610201030615400613040010085506304001021400203014
0515010400150107003011272001090501306103065040530301504020301404030703
0150402013107003014702405165140070240015010306104530165530301104550130
1004054003040702400400104008102001905030113064651030120507010800200400
5030612640108330121890150703016040013061200107005061200103002100830122
0150306020011501125506501006104061003040011013011501024100405263010040
0521300400405306100305004040530210050405010700301301100203070020510115
0104001400615303011504030201013063050640307010130501070030130110061245
0620108050205303061001014050180120040110800100170016800200130164001614
0603017010421235064005011005303020800200130164001614060301108014053030
2550182601430653030170060040011630110061224010307070601653030150153030
1536405008016306400140501018022001000403016100200300403015303061214010
9007021700705200600130110804053061076001105043011080405305010801016001
3011563060041050140530501201402010306115212006001080107060654060115108
0200207001050153030143160407050405040404030900150406120506803040060010
5108016501201401080540110100301406104055010240208105303018040530610030

5004050640307010130501070030130110020307002021400203015063040010405610
3001030704651030140060103010200190503014003011006103001030701020019050
3014006010304651030140030110061195065078104051306405103070806600130652
2004507052003153080506084065653030553640306015040103021185010100419040
4005020501402050152002164001530100405105014012030400102001905061146550
1205040130155033013060041050301630110061172001090250630407040014025303
0150153030145070564340020010600504040206080501301640410040014065120730
1164001651309030116401010016116200104100103003020103070530301501520040
1253030110400110104008168809016168070180100830140530501024001404702504
0405608050145070504014608120018020402050140101470250404020506420010630
2140020301305150402001050020461153010260301166030800410080501401013012
2008020301304240010504063021005040106064030106014020402030660200163016
0400501506410200400401114200109050130610306504053030150645040402030140
6800200130164001614060301203040530530301501403070400403011132001041001
0300302010307053030150140307040040301153050040611550402001060024001501
5605050615101504060060505014011240109007030130800803016700530301613001
0504054004082002904006001053030164020220050402001060050404020103070307
5010501501020200300403011306214002030130515040162008020501070030146101
4011140103012170070501020080120303061670406016150200900501163061006150
7012001630610040013016504015010700301151011101105064030701016501206302
0010600530301450705040526500403016100400161650401405501630610950640307
0101650120630405608050152162003001406010230610013060050405200600130110
8053014051200400300150403016403070410030640570805010130640520080010140
5064030704001065303015070012130148150405250102001800240514065367620040
3015010252506100200801014014055040506403070400108020080204001308055040
0805085014050113061001010400848150405014030701014064006200140640062001
5302122501020304030110307030750114062008603016015030150640307010162008
0205010911030030150203065014010306020080201406501401030602030401030705
0109110300301630400400140167024001610850640307010130405501204052006590
0120065303012140020214002030116400615010700301504010010200807002504057
0401403010049040530301450705040306602004051314030610750650406101304052
0050020130240550401001020080570025014570164517014030206110650610060180
3011301152200802010140640015010240011012010301150307501410030610550102
0080120303064705303015018030120104063010200236530602006540020101304065
3030164705012050401045010504064030301020030026104565104105010214030110
0490405303015070012202301001030705307505501803010200233016470501205040
3010010350630407010140220010902530301620040701050121700703015040587874
0265140655060803012004070106304054814610162020030015010700301504065110
8103070601503019020081405504340030610250104030190030124010307053030164
0510410140040410014021421565040400105030610150101004190404005020501400

6403011650404008060150301506450405903016005303014507052006001301200143
0140203040050120501301001005010504064040400502050140205014010152402020
0401101406010230100405200802023037030140526301001080162200300161501090
7061507040601630110016704060165610024020150104001140167006002006930140
2010068015070802006402010015001040150700600170016995064030190040400501
6547025040303703014040070060040014050040015010230121060640402013410030
6985010504064040400502050130210050405303011102501506304001004004030803
0100405704014030110049040100830165651200614025062008020106150103070307
5011402504065016301100530301307501140216504014053030101001700169750105
4021700705010200801203030628001000103070280010002161280541270504013001
0504010307053080080504053030130750105011101000253030130750114021620080
2010501405608050152162004003001140601029650102008012030110307053030155
0703080521620080201680200701404051314030801620080205010700301103070506
8400804006010302100504016501206405704014030100490405303014507050402140
0204051314030695506504061014013010301008040520080202530301405507030302
8030100015026301001630110069450630400100400110010200806404002700201100
1020080804040020022040060140206080501106540013014023066020040201314030
2080160410030186200251504101640015010230140102004050211060107015010400
1630602003012547025040150108010062140020301106064015010400141003069350
6200905010405130621700703014055070808060010130805200600130121105043015
1108301162004003001501070030120103061925063040704001407030801100025303
0114062170070301430011030150642001054011010030140610611050430151108301
1080107600130140205040203070030708010504017314080800702250620080204006
2140020301800702250650406400801405312006001402010307040200840656405641
8040010200160140206400110501650164703016405001301240510307050620051900
4004052001104504040205040110010200805063200600400640206080501506304001
0040013065404005014050091506453004004040050164040020020010014050040202
0011045040402060805015063200600400130640201404506208060400130402010015
0010401507006001700169050680020070404040050164020504013010301001301404
0010306400405005120730116400165130903011640101001615060860150303016306
1006501020160403016104014001030161022001003011070061501608150104301630
1265303011301506427040013030101012006011050210015001040150700600170016
8950643016001510804055503301218901201030614001830190301163040706165040
1501070030168850643016001510804052001503012189012010306180540010109600
5240091816510106026020504010302875064030704001301405303011030705063061
0040040154570530301803060010503080145705303014507040400700600400130100
5464704014011011301200150301150604040050301630110068650626020101404040
5303010664051041014002400201404040530301068013010301001504050052162004
0030010305303014507050401700550630610010405004051041012214002030150624
0020105010700303030106808550650900101301405501610501401130121400203015

0640307010130506104014055040684506503070101406506200601014040307010530
3015015064030701013061835063010070400130801402022004507052402063181030
4020103070530301840080140240550650048400116301100800702103014058007021
3060017001615040116301100165040150107003011610030170016825064030701040
5656301007014047025040550680200810405005303014013020506704060104055040
1001020080501204100640203016504061050150670409400801815063040704001407
0308011000253030114065303015103006005040925101403015504050161403015504
0320060010801001003001014030155040501620015501301550402003804001014030
5200138301504050165660100430016152001383012010580203070047025040402026
3010040060100405008050630100704004020307030540011014020102001061040064
0301530301101081020307002015800702256220080011503010080795064040020400
4040050201403200600405303016151080404001200141801608050404003040010070
0167850630708010164120140615682700801008301240010350130116301100151080
5103001305403060405002008301101006040013068002001301200105004003063070
0130520010021550130610010550130110077506440054030530301130050115016150
1030705213004002001002301501105140150305010210202200150307041163011007
6501020090015030120060400155063070100180120080905200100215501306100105
5013011001550630140150305010210202200150307041163011007550620040640014
0163070801802030700501025016702002021306800200180130520010021550130610
0105501301100105140150305010210202200150307041163011007450103051330150
4050620150153030127006701301100167515070060040040011630110052001002168
2700400501402020040110530301501540610030106064030110070016735010100400
4030305900706406158030600140615104105010214030130120501515030703807250
1010601600542001001650620405301503010080400260301108040205040164400701
5010700301404004030704100306715010200601600301504040400502030540040820
0640201030705303013080080130630802030700470250404040010306400405007050
6100400400402030703051080140162002070016561002402015010400114016700600
2006930140201006801507080200640201001500104015070060017001669506507810
4051306405103070806600130640522004507040520031405308018301903040706200
6001301406103016530301250401504050101021903016102001905030161641550107
0030161650401501070030150168506440070101650120616907014022030700100830
1200101000250101025030150630400100106530301400110125062008020101650120
4055012203070053030150402800100021612655020604030165307003014051030704
0022008006404003016014040203050180120090401692512001060065107003012105
0416510700301506304240060400130110015309026156047061540680615101500100
6153010025040800200130140025040014040150303200600102022001503070418048
1640170910307020029050503010606401104040030100700166750104608040800200
1301108016500704001306530301100720050401622003001616302040522003004060
1501302040307041001501070520030070140050500155040400200380501802003830
1201907022200800115030100805406100301060640101006040060170016665061006

0801016501201402140603015040173200164030900501070030110307015030750180
4053030101001070030120010100013061001640309005010700301304280655010506
0840301410750606402011019600402030200801000505981630610061436021230116
3060041614100020040400103005001081550401630208051020010030157005163060
0411503010070016645064030900104056080501165012050203061506403090014064
0201501007200140400121095040163020106306030165040301402010307015030750
1640140100030140201030701503030900663506200203004004020307030402040064
0470250404020150500702405006250620090050400404005016510070190301402040
0700600180520053530301102005010400820305040650503010606401104040030100
7001661401082003012164003016555014020103070214008040201020012450704020
3020010600402030700402060805011630400100180402010200121030116264008030
3703014020700160040012402060805014040040309004020501406100110540610030
1060640301100700166050644005400402030703050110020080301621400203011060
6401501040017001659506200203004004020307030203070047025040402050701506
8070405005850640301900404005016547025040303703014040070060040014050053
0103050107022001106064015047016700165750620090050400404005016506702008
0301150100200100016402015010350180200823014020215010020080700165640109
0070402022005040130240203070010806402016050506108400601064020150215068
2700102170070301660402050640660105067020080301504040201501035070016555
0620090501040513063047015504070060061013065701803001550403021001013061
1010300608050507060805010734001301406101610040016545010403017030110307
0402040030800801050164020103070400407050110400301104004070501620020700
1301010120060110502110535067031200510301405501640522006100130404055015
0650900105010700301525010703001600301103070130152001022030155016513090
3016200290301216501070400601651506301007040013080121400203015063040040
0404005016402060805015066050400620023012601503015062004014001505010702
0120030170401670202001651207301164001651309030116401010016495064030704
0040400501610083011640400204006309123012100830116602304001306485061004
0018010110161301030100150405001040011012162004003004001306522008012030
6116506204001306402070401403011004904040030750114021650401647506252001
8010110164020457028061104570216806164020103070400407050110400301104004
0705016200207001301010120060110502110465064301600151080405200150301218
9012010306115040011012162700206162008020501070030164550650781040513064
0510307080660013080101457024005040801045105040402050104001101401801701
0403155040169251150301004440108200301216400301655501510307021400804001
4030205220050404041101003040080435010810301701400406200100400604080020
0130110804020306647080070230402080070216925115030100651080150120140401
4053200600180155070501910300301140530718042501040301900301504015062040
0805200330030157005122001004001306140400103005001081410002001550401302
0655033012036764005015020601404111015030100641501020080120301504050120

6200220400601610216010302113011643608040413016436015201013040303015030
1007001640506404002040040400502014065064240014040307016800200130164001
6140603012101000403070110501402030301001403013011004051014060124051250
1140308040510140601240510250140411103011003940102083014010307030140050
1205011504004030701401301150304030701302050182601630110038501010041904
0400502050113065140601210506102501301100805201013040301103070405800200
7040500153020140601301404140307063750640307040013014040307011050130110
0203060410050620440828260505085061404301208060106151080460801050401510
8030703400116301100580103060080020013011080307013105015201013040303020
2200301100700163640103070103003020265640016140607026050516608014060301
1030110640060140500170104038002001301108014040203010030600107003016535
5067032004005103014050040201010810405004020400104010405004020110818014
0016401404005020653030125062008020400801020345062006016003014052010306
1800200130110805064608010630906105015253030120040114050670910010651001
5001040470250405303014570506800100501050107003013350101006018030113015
2308001014061200105002052104510612001050020523080010130500401700525303
0141200117001405063061001080162008020501070030114016405220050401008301
5501506403070108016504015010700301140180151006801408058006702140130500
4022008001050110108400601013053030150132506430160015108040565200594031
6711510804053061521300400405216400163021005040150100720010700301170051
6301100110072005200405005040155040161007200140302020015501301154008400
5040102003400400150340530501400183019030116304070616504015010700301200
3002631501020080120303040047015200138301660150301154610061040030120015
0301161004001801630708040050306163070804004030501803050101004190404005
0205015303015064504040201453001670416530500405040520066021640018015042
7010307015030750140402102001080404005020501629506403070400404005016141
4501530301630703400130804020301100720040012004050030150405232006001801
4014060301504030750161502140603016130012008080020013014020303070310700
3012850610040040040203070304020302100504050107003016402010030600107003
0140202200164270160150301151011102720010410010300302010307053030150140
5200190216405704060225700305303011300630616401100405103070403090011700
1651080163004040530180011403020405200190218096001010020023014120102650
1020080120301291084053030164006403012007008100701690301504040550170011
0804057021901506307031010020026470200640014030900510801406030150402109
0206125506703200101304058010407040202409024506200902101304001403090010
8040520200400640520065025303012570053068140400180011403080120015041006
4006011070030130500402040530500402350104400540165012014064054002001340
0400822001408010453012530130800301162004003001501070030120103061225065
4070104055011010009108040544010640521075400601053030121506107540060405
0850140501402070401501163011004055010911030010301163060017001615040116

301100165040150107003011610030170016205064030701013050203061580603014054055011301130115806030150401140205040650116301100601503015040114020165040140530301010017001619506200703001013050203065064608040301405405501130118506830904050850140501163011008002001301108016460804001304053030101001700161750627002010165012014024010301217007040530618002004053030140541780800200404052630100108016506200703001014064056080501130150670460010140616504015010700301653030150670416001015501050406402405140620060013014061030126530301215040130610010504060150301504061440109007021700704053065613001000405200190211030706405704060103070640526301001030705303014040060013506504061013040520070050400403040140540020070050114051030701660162008020501070030150112506830804030140520103061640522005040104510307020103061115065010061040552006001301262030210050403075011406201030130750114025065040610501070030161050610080501040515010072001404065130903015064010100106210100030125065040610501070030195010100400403030104551080210200130214002030120307008403017501030180030113064051030702680010004030120010100040510307040040705015010700301912009064010100400604030191200903011504515501070400605020110164270502011014501043014061020301403401082003015040820030125010403017030122005303044083011401082003015040820030153010140602632050104103064030153010140602632412164005012055015200801000400601620220044082826080632313168015303015010410805063060041060150301400101200663228400803016530301200905013170016321401082003015040820030153030

2050104402030631942701140506421704040050113066318404004270140421701501
1306631742701140506421704040050113066316506427040014042701130631550620
0801203011510111030100631440108200301504082003015303014060263132004002
1301652010501300501631220085016202200303090806311200500620301201501097
0115016310401082003015040820030153030140602630950670140301506705040106
6308506120010405501070030163075065160405400130905070405501070030163065
0103090403030301068063055010206040301401709103070800810130663044010400
1030170410107003012030700806303501043012270020101070030140010120016302
4010820030150408200301530301406026301806600504040550401670635040405407
0911070030163004001023011700522001642701030806299801090301614003003015
3082004058013010162983001020010080130101306297401082003015040820030153
0301406026296306201408090702040530703806295301036050405200138240510402
0040062943010212112001094051030703060200166293301030800400108040541020
3070310403016292301080301218901220220030708080102020040040301629140108
2003015040820030153030140602629054440404407010806289549064040510307015
5016288541080130110307070309400104003016287541006403015303012001506286
5409830114020120041140662855409830110805070025010301302062845430600153
0140501260810628354470613014070403107003016282574030574053020303010662
8140108200301504082003015303014060262802002903012169016400610083012169
0164006400183019030116304070616504015010700301130162792006060010803050
1605013015016278200907030166277401082003015040820030153030140602627640
1070503015070700104061050301604003040500627550101001030150107015506200
4003040500627440108330150620040030627350101001030140307050640307040063
0130206272506403070400806601302040500627150640307040080660130206270200
2110040301404002007104008626920050012040030140201530162684010820030150
4082003015303014060262675104018200150626651051402012004114066265510615
5401806264550107164040080600504014016626351080012005300107010806580626
2550107164040030100500504014018062613006805040301505703012030123301506
2040066260500650024030130012008030120601503015062010406106259570200110
0301140201200411406625857020011003011406257570200110030162564010820030
1504082003015303014060262552001026003070010406104052405220050162542006
4903011080140309086625320062100301108014020050070217001403070101308016
2524104300302001060030128305501662514105300302030700103070550166250465
0203052200305016050130150162491704035250960680624817010050525020050018
0624718290400120010100040301806246184100400110200640301806245182800400
1104170301662444010820030150408200301530301406026243520010120030052007
0030110050040304070105040662425200101200106005200700301100500403040701
0504080624140530140701162001030140014003001601503012004901070010406106
2401530108612022005012623915200126001500484007001040610623815301405016
0501301301100662371530110050018002001301400320060016623615301730780020

0130140030730717001623540108200301504082003015303014060262345220010300
6005040302030700550701680020064055070530301108002001421151080501043016
0020015501301154008400504010200340050470400150340522004507040561736233
5102002301200106004052010306140018301903011630407061650401501070030150
1623251020023012003004052010306115108050104301600405053200150108050102
0200300403016214002030130515040162008020501070030150162315401010030150
1042030700651207301164006106513090301164010100106180508501043015305010
9030600405303011642701030130116200401140662305501023014054001314047025
0401301214002030116400615010700301100200804001406622954010100240020151
0806228520059401808906304001053030150403066020062275501023014051040014
0010400850102080504050102020030040301621400203013051504016200802050107
0030150201040306226401082003015040820030153030140602622520038030170309
4010400810540130606224200401302050404052200507001215108086200301652010
1304030130750400622320053008030150402001060020041003015301030622220041
0030153010301402012004114066221200410030153010301080515030750115016220
4010820030150408200301530301406026219220040010016436016570940013013020
6218510501273017045060621751041507041030806216510916005270012051090150
6215510901503012170806050305400501040305010301302062141020010530301501
2403070104030162131030640062700205014001012001621210610040030122004016
1621110453011030705012050140010120016210103090170011427062091055010107
0030140010120016208107032003012022001030150162071050100040060151200501
6206101000910305016050130150113020620540307010403014050160501301403070
6204403010030124030701070030162034020020130120220061200100162021003070
5040501605013011003060062011003060010700301202200406012120010016200401
0820030150408200301530301406026199501040201830140208125303016010301619
8501043012470220270020101408061975065040402001010002003140530804001830
1903011630407061650401501070030113016196501030801603080601515044200405
0061954010610040050608110805016050130115010030600410030619450104013014
3023011700566193501050106020069661925064001073016501040030166191401082
0030150408200301530301406026190210002001802022001030166189290501804001
0002008017001806188120060102006070301704050161871200601020060703017040
5018061862020020700203015070802006618520200590080010050110700301618420
2007620507015070800666183202004902030820030050403016182401082003015040
8200301530301406026181500488020220054070502140166180200550400130803010
1603011401661792005100400130804010400103011401806178105010001801301017
0204366617710458013018002043666176106180140104001020431040301617510800
2004008020220020109701080660306617410306130150402030200106005200600130
3066173103010014062022002070461406172103601700130103030166171108800301
6617040108200301504082003015303014060261691080020010806603066168103070
1301522005361100040021130161671073400540705050405450704813014066166102

0740010530140104006101070030161651010040013011525031060661641030640062
7002010700301616310100300130113011513090101306162109003040012001504020
4002007005018061611030613016520060013030150305016616010453030150103070
5016159104200400170015301405507010501000101406615810200607030305200601
0506080615710506083012270020661561050100040060163060025040140166155102
0060103030520060105060806154105060830121004906615310100400161097015040
1401806152104003003040201070605016151105005013016200207003011003060014
0661501030340017001200155030166149103001000101700130103030166148401082
0030150408200301530301406026147151210070801600101306614615166080405250
7002405220040510307040440480156200100708056270020806145151101006065303
0151001505303013066020040530301100806144151100300150070250170016143151
6100092464050040027002061421516045040216004100661411512075040830801410
0614015161004006152006380154053018061391516601406608050661381518914068
0020013016613715150214061406030166136151300100010170013010303016613515
1303170012001550301661341513040017001200401003016613315188006604030030
1661324010820030150408200301530301406026131549064020015040510307061305
4013004030121890140515040011012162008020501070030166129550401040301218
9012010306161285408200403012169016400620029030121690164006165040150107
0030150405012040500612752200400401700150102060406161265220010040170014
0104001061255210006040107004061010804017091616124521002002080612352100
7030114020120041140661225210070301408400100113080612150104350301515010
4566120501040080300615016030661195010501070530307035040301611848152001
0403050126081016117142301301404002030513061001061164815103070200410010
5030501260810161154220108050160501301150100306004100306114430614064301
6661134302301170052308400501661124302301170052406010011306111401082003
0150408200301530301406026110104005031030600416610910412701080103060041
8061085108002004051080012002022001030110703200161075501040940301608050
3011540010111061064815100150061005006101306610548152170070270070101307
0010406108061041040011083040040410010504001030110306100106103102002070
0301530105016501605013012002070040010700104061040505327001040610103661
0218090180902030403016202200136610112041204800200130140020417001130206
1001403128301403015062840066099140301302015001200400301506302014006609
8501020604030140170910307050680018400130660974010400103015064020020400
1303021302060965050151102200306100108051007200510307020041008051304002
1140170011401660955040200201102200306100108054070506540200201805220051
3040021140170015016050130114018060944190200403012302022005016093217007
0966020220040510307029080609241608030115108016200500201806091413023011
0801610009501070030160904140061301107005067020080660894163012200600903
0116213501070030146405006608841302301108015305004010030600104030104003
0160874140703014001700402001608641702202200307080801020200400403016085

2003810700304060100203070010803056084200601017001301030301660832004006
3016708030030166082200300703011030660812003803016608040108200301504082
0030153030140602607940521608150103070501405006078405211011501030150160
7720022013012170070301530301527007010806076200802061030640050401301607
5200910904024051030704006030607420020700404005011405012002070080607340
0896080102080020013011030166072400290508010203012330110301660714007080
2008010201406030110301660704001003060080102030213011030150620090050101
3080160695500650024010212007660685806809040100200140506606757068006402
1620166066570680200402002006015108060655102001350107015108060645101000
1301510807040604001306063510301705503108060625108001200151070603060615
4070150700104061056366060706350401050100010130650406010130605970102008
0050401301401709405306010306058510501501070504010100604006057510401812
0015010309040060565290150530401706055570300160070010406105636605451030
0110003015001048201400130560534010820030150408200301530301406026052106
0640640105120021808906051103061301808903011080301700550160501010021620
0106005200600130166049110504301511083015062005006400302604810309080522
0040601200207006604710207400504083080141006046101081013061510804006401
0130405006045102002203012001503011030901010700301604410100300130115250
3400106604310300600105040200207001060604210200207003014007080505012002
0700806041102006010303020200601050660401080600101406200533014030701055
0153030113001401301603910605040013080201020010050606038106811500100053
0703806037107020040301320060011070030166036104580200410010700301660351
0660801003060010700301603410307013012022004060182606033401082003015040
8200301530301406026032141062004053054015010200801203013054080603114102
0410201660301410205064102010405501602930753012651406602830908030610030
5501602770490301400170080020013016602670320030140017001406030166025200
9015013065610050405301408060242001012006030110302400406106023200411003
0570320010307055016022210120040030162309030150102504032006001060211008
0141405040100306006020100306004040501605013012009005010308060199008018
1510307014030608050302050160182100150030140350301601710020019301140201
2004114066016100200193016140603016601540108200301504082003015303014060
2601490068084086301080601341034050120010065302601291084040510120065040
5303016601121070020400108016200802050107003013026010464050065067020080
6009465033015001048201400130560084102001014030301708060074103403013002
0070301670060064646301200680100030165660054107010610421065550160044104
3003020220030092501600320010220301768030120307002001550130115400840050
4010200340040015034053040018301903011630407061650401501070030150160021
0010200830121700704053064050532170070405308016264001040304050040015040
6403016501050406403011650400805010700301501600141053001030030201030705
3030168002001301640016140603012030405301070030160004104083017107703015

3030121650406105011301405504016401005014065999465300501050406403012506
3070801014010307040565998467010015103070405700159974610063014001700200
1503015996464600130121890130400100599546530040645130065994467064030140
6103016599336200230140017001406030165992401082003015040820030153030140
6025991506504040200101000200314053040018301903011630407061650401501070
0301130159904010301217007024052003002805989506706101402403070153030165
9885062700201016200802050107003013025987506436010130501200100301405103
0701020010017001659865065040610130405301408059851002950701100295022020
0400305984100604001170012004010030165983100606140630103030165982100803
0030124060100113080598112001090252501205220050110302598020068105030501
5090055015979120062006040530511080501205501597812001070601030901065977
1200625006704108066080597652005900120065214002010400615040140165975120
0620060405305110301230100501065974120010601012160826018108066080597355
0104010252140020104006150401401805972510100130408018420202200103018412
0205015016050130115101110597140010086152200304005070016597040030600400
6151080140400100301659694004408002001301170016596840010086152200304005
0700165967400100300501140603011700159664010820030150408200301530301406
0259655063070801016501201402001802030126500305596450620090050102010120
0130110307059635062088001020018020301504016504015010700301406103018059
6250109008018405103070163060200114065961506301800301306550116301100405
6120017001659605010520801623010050140530511030116230100501170016595950
6740110004001040521620040170016595850620880010165040150107003015040165
0120164020031501070030150159575062200100403011522200300101501070595640
1050604005040531740659555066080150400403016080150400103080203070010806
2060405401400600595440640060040100108200504050610060105953401070503015
2008005040556361080802007040059525062009005010201012001301103070595140
1070501080302001200213015015950506220010040301545300105949406100200402
1400205948506103070140201200411406594750101030701080302001200213012140
0205011302059465062700204005240400502010700301170053011001040500594540
1083301630190304055014050059445062638403070010406104052200507040550113
0205943506260201016501201404052630100103070501200302130205942501030613
0120010916013011001504001101510307010304004001700159414010500144007040
3020130152270020101406594050104301406102506270020105010700301593950102
7002040303070010406103010659384061002004021400205937501036014020120041
1406593650103601080302001380301214002050113020593550104030170301220030
6015030140610010406105934401090070406103059335065006702404055012010306
1509001013015932506200606001040565076614056301201700165931506806400601
0601503011030701630140020117001501070030159305010808094030303010659294
0108200301504082003015303014060259285303070010406102004013016110103006
0805030608050203040400130406105927501043014061014020120041140405005926

5010430140610140201200411406592550102101100021550704051406592450104301
4061015506309010592340108310803020013803015016592240107050108030200120
0213015015921506307080400140506403070105920501024001201401200205919501
0900801830402010307050165918501043012506270020400302130205917202202001
3001405200690101108059162030470802016608020100306001070030159154010200
2030120220022020010001405016050130115101110591440020060016400404100140
6080504004030705913400200500702200621003011700165912400200380200182301
1700165911400200500400501220162030117001659104002009805011406030117001
5909401082003015040820030153030140602590850104030170301220053030113001
0501130150613004001406590740101004006010501402050401300504030590650104
0301703030200207001301655015905506257004005010180590440103200501910300
3061002651406590350105080022101000301103070651406590250102403011008013
0125120041003065901506503402402028190140659005010401405007019405899501
0204030020070301107004507056100107005898401020020306602003061003055015
8976080504001700182903016589660706070170013010303016589560502030120016
3301589460506003012406010011308058934002008008114060805040040307058924
0080307155033011700165891400200706040108330117001658904009300201406030
1170016588940020030050808903011700165888400304001002507001012588740030
1060546640301170016588640036760680503011700165885400200360200182301170
0165884400200300830068630117001658834003097020013007030117001658824002
0010603012330117001658814002004205014063503011700165880400200620604030
0301170015879401082003015040820030153030140602587852003803015200802030
1405201030615877520040010015100520040058765200210001510307070010406105
6366587552003002400604052081800587452008060407001040610563658735105010
0010501300700104061040550401020040130203058725105026540028190658715102
1654016587051060015040200403012008010406105869560019030140013170018058
6840204017050130640203017014004058671216552018065866123010001001014865
8651306005061506400107658641280010061250706586312815108015040025018058
6211003008002001301150100100300405005861129014030115022901501586054017
0910301501605013012009005010308058595200401140800100101403013020585852
0030050113001700140500585752002100180540014014050058565200601030102603
0140500585552004100805100306005809505040585451003060010300101504058535
2008020114050160501301304001005852520020024012002058515200806010410125
8505200594057068020040584954020020408089010805848520020700130050408058
4752002070040015501130205846105304005507040050180584510300600106565844
1070601020135040140165843102071013012010307014065842104904005304005018
0584110501000400601504014015840102002070030157080504008020020700106158
3910207105307030201020041014065838104070130151350158371030640066027058
3640108200301504082003015303014060258351518800615103007013011650023010
4030155062001040610405501205834151300600105040200700504040050114050158

3315154005040202200103015832151200207005040400501401080583115160200405
0110157016030150702050630160105830106140301105550330150180582910653015
0706080503011055065220040110040801600504014016582810614030110540108330
1501805827110504301511083012005001658261010009504014018058251020010504
0304010833014007200265824107060140501605013012002070040010406105823102
0022030154019301400131700180582240204017050130640203017014004058211516
0200130123301658201517020040615140155040320060015819151842030700470280
0200130165818151880032006001615301030300910001658171516608015204060708
0200581615150214060301401110030600430014040050115815103006001050403052
0027030203070010805015814103061301652006001301301205053030157006001805
8131030701301402022001501301100805812104150802003008805811107060102002
4140500581010907062700208058091020022030151013015120018058081030060040
0802022001030120104516580710207400501103012030305301008058061010009550
1506702008010301257001580510696041004030141630125220051415070015804106
0640500104820140013055803520051603012405170018058025481652003710514050
1805801520060160052002017001203040016301100580052006005014019007015020
1700115799520080183011080506464200403015011506306100105798570300160015
2001902157975803167001040610263010057965804120030115702400400579558031
2003018032004004061057941200401400120024403018057931100260400110021603
0180579218260400182160301657911930050400193001503016579011002001000400
1707150301657894010820030150408200301530301406025788121200400400502010
5040010301102008012030130610010651410400404100140200403012009005010406
1012102001001217007040201502007005011501578712140522001030170060040011
3005040801008301406103012030700578612169030110065040820030153050700150
4013015064030204001013018090520101304030168620030140610010406105785121
9600550405062030401013050408200301140550102140680020013016400161406030
1220057841216081970202200504017357831217002013061610003015108050670406
0101305782110015416012065781121200400127016206578012150701610010148577
9171804050101004004030305015778121700701301402041075050308016100670080
5777121400205150109081103003020657761217002015040011012162700206577512
1608506320010130165012040550157741100180617357731100160100061401040813
0157721212003001306142002151080506100670010130577112110081151080501050
0213057701214050101000193030576914190200404005012040505350157681212006
0400501208030123301400200106065767121621400501208014060301400840080657
6613168015064001400802006903011080600805010406105765140011001040501203
0908030140610501576418018030140015036576314001250612852320060050305762
1313500140400120090704030150401503075016576113156131200601503070365760
1414300170260402010068015010502657591300170402001550301150307036575816
0123030103030115030703657571400126040204065015030703657561316714020150
1003060065755141400613012330165754141540800200130130703504030157535064

0307010601302040500575250640307010601302057515068030400600405108040510
7003015750401090070301125030150705749506301604001040705748401082003015
0408200301530301406025747506504061054702500104810128057465010270020403
0307001040610301065745506702020010130167020200140530301010017001657445
0102700204030307001040610301065743506402003404020501130103010016704004
0400616302057425010270020403030700104061030106574150105060840301107350
2030700201501574050630407040040400502014021101050516220030016163020573
9506540030010140405201680657385061070630130900108050101004004030150157
3750102700204030307001040610301065736506410208041020402030501205018057
3550103061301640201507040330908030140610170055734501027002040303070010
4061030106573350620070040070108040530507006101306573250610095010130406
1017005573150102700204030307001040610301065730200809040030140355012057
2920090100301202002003002104020040015501572825303015040105010001013063
0103090013057272703005001305001070030900103011610030950157265062700204
0052404005020140103011610030950157255010270020403030700104061030106572
4140012008014040201501010060164001600401300106016200151080150307036572
3140016401611081572214001802080020013013070350403015721501027002040303
0700104061030106572050620041100301407050801502004100805719406307040200
4100103015718501020402001200100108051503070380571750105401405040402010
0306005040301571650102700204030307001040610301065715501040200340301230
7080502030700205714501020060013014057024005040500571350103061301203055
0403015712501027002040303070010406103010657113090803014061014020120041
1406571030908030140610305709400303140610101305708400400100130602003011
7001657074008060503012330117001657064003200801406030117001657054006040
9406350301170018057047010016305064706400140501570312007005061120070070
5702120020700400110100304030180570111002008040011002001803018057001200
3005040012003001503016569918090704001809017030180569818020070400130602
0040301656974010820030150408200301530301406025696140103011217007040530
4701501040301900301654004082001080130010504030600410569514010208140103
0705012053030150153030113001050113015061300400140656941301026052200103
0170060040011300504080520020700400570055015693130104240040530150040115
0304215010300170016405200601150443006405150100306005085056921301010050
0140610405120065062007001065303170301506281013065501569113010691301030
5826065304360180301030301504065690130109016520020220220040601200207001
6568912006802061140500140550407094001306202200402083020029018056881301
0750400501200100301201030701503075050850150156871200620300404020107060
5012061734020305012017005501568612006591212003004052200405110060658008
0504020061601163086100200240060162008006006045060211050040510301705685
1200102201203040614010705040010120040500400101200170016568412006500504
0163063040540026084054001012001700150643060040501430640510307080691065

683130102603060104060400151080150107056821301023507153174050120160120 1
510805061006010656811200104100400156200410058008050402001020016100568 0
120010200161004005012021620165800805040510501240510307080191065679130 1
030700400158069100400303070061530130900405103070510501465678120010200 5
407130616040300151080506200101302010120013011030701510805010102040040 5
677120010200865503162002901402405173656761200620060652008005040511003 0
640610301203070020030053030140511006805675120010200940100160627014061 0
150220050408016005015015674120062030013061734020504041020050130530301 5
363040204070950140501567312001060161401040010615010206040528103070401 7
093015064070910656721200109400604052003005012014061050680160010620070 0
503012506806105671120010380400155062003801053030141270152220030010150 1
070567012006801201531740501206012050405062200300102001200213015015669 1
200107060613013010001630601306050102008012030301504400701150156681200 6
802014016120020130014013010260301515010451501566712001090217010406051 5
030703805103040025031300401580950504050160501301150100306001501566612 0
062070040110103005020104030200543015040501085016050130110307010400130 5
566540108200301504082003015303014060256641040064030110108105011030702 0
041100220307006010301566310500501301620020700301501036730155040307038 0
566210660801003060080510030705012040500566110504010105040504058095020 1
040301566010460202004001050150160501301260810156591030618020301030614 0
500565810306180203010306156571094040010530511030125700405005656103064 0
062700205020306565510309013061004901308056541001604030170010406102022 0
010301565310016030121001603014008040030165652100120080301550150900656 5
110012005040301010065650101001200400301400100030217001130205649520010 0
180152307080105015090040056485200601270010406105636656475200900150152 2
001030156465200800150700104061056365645520060013015062007004006564453 0
317030150628400302130205643550110215010307050140500564255012001007024 0
018051501200100170018056415501200100657040315010307050156405230370400 3
020501603052202008400130563952001070017040101003016306563852001090256 0
805010307050160501301302563720060016404100140270010406105016050130112 5
010563620010040060403017001040610202200103015635200761301302056342008 0
403015010170010406105016050130130610010563320040100301660403003017040 3
656322004010030180606006563120090230110020021700180563054011010030140 6
105011013016010562954014012003801030501605013014102001030256285501502 1
066050501103070501020041100103025627540190070704035050301501605013012 6
081015626540163030160805030124060100113065625540110100301406102406010 0
113056244010820030150408200301530301406025623520080100040301305161061 0
040030130516553030113001050113015062002070010140656225200207001300504 0
805621520020700400550113020562052006001301506801600101303021302056195 2
003005040180890104006105014055040102004013020410200103025618520066010 0

5040400200805617520080504006040200408405501205616501080020070405200207
0040030150704053014080561550107080130030157018030040570805040014080561
4501010010301150140011040085613501043014061022700205015020656125010800
1016003017040800660050150206561150102060403014070950205040306561050103
0904030150402050403016301100560920010060108040202030601405608501040200
3403015070560750630160400104001503108056065010401030121890113015605550
1052004002602014026080503020560420060014001061404100400105014020504013
0050403056032003002303012001070050560220022030110481301550156012008060
1170018290301656002002417001301030301655992004010030161302055982003002
3030102002070013011051406651301202200465034030701014061300105040104510
6130010504053030130800102030700201305004017005253030141200117001405062
0080120301680020040405263010010805010700301306100103065065040640301621
4002030116400615010700301214002001013061501401011650401501070030141471
0621400203011640061501070030150100104006010301620080205010700303055040
0801301405400470150307031406520101304013012001503012189011503070314065
5972003007057060400151030705596200300230305816305595200700400130610100
2400130559420010060140201200411406559320010060510309016055922003002301
3061001301170055015591200500610200860130117005501301100805590200220400
6016200241405005589200602660270405005588200900504050055872004100801020
3040010040500558620041008010203040010080558520041006200208055015584146
7090510052001605583141050701504001101305012055011302055824107150170409
1040500558114105404005304004540655801465300501050265579146440401301405
3040030703655781410864001003060050406105020070055772001060102001010005
0102008012030110307055762001060704061070010406102030700805575200610015
0301108020010050170018055742002901802022003065573200500204006040050504
0400130655722003518073200301655712005980202110500655702002208020220065
5692007005018040100556820050044030115101110556740108200301504082003015
3030140602556640108200200680100053030150153030116200801000400601612003
1409007016120010600655303014507056434002001060050404020608050130164041
0040014061506081800200100530301168002001001651207301164001651309030116
4010100165504020060104001401620010018053030130102601080506304001100105
0620060016530301308008050405061000400210800200130110805062200800105062
0060016108002004040205040506201060501403070501200100301504020060104001
4016200100180402010307021400805690840050305014030702001550301630103030
1200410010530301620704050107003015040580101965500305006580905063010303
0110500305005040105041406100400205014030701020220050155651301026052200
1030170060040011300504080520020700400570055015564130670804054706501205
2200980504014060301556312103005014306301307031014061040400200802050150
6100400400801020805562130102617006001515070060018030660200301506702008
0109070805561130660200506702008010301150306020011402040201030701451300

1306602004020103011503060200115015560130105401210500203012330140050120
6301233016800200130180320040040610555914010301121700706590100017001401
7096555814010836130120501150104305015557130103010040530540654070503011
0306150102700204030161050200700655561301040312003540520035165063061001
0140103070200290165555130102065700600400180651301530113022001000403016
1002003004030122005554130104002400510301304002400620220040601200207001
6555313010691826020015503011080203050155521301010040610016110964300110
5301030301510300150501555113010100500130610020103070101003050601501555
0130104002004005012001003013040020065103070476155491301030100550409010
0501615809050554813010301001301301030301401005547304074030115101110554
6401082003015040820030153030140602554514470103003020109081640510430140
2918164052200400130160200161000302141005014030701030554414902005803060
0504065104105010250402030601055018030660200504010800400200150401301554
3148152101000103070200590010130802101000301403017055421440110220053030
7031040150647064001402102001001102004150130100554114470301001612009015
0807080015040506403070106080506470610140161200170011040085540142115108
0501043016004050532001505305018053066020065303019070105040654001301602
0065303015040110001302130155391484003040550645040431503064815303015040
1050200103105030105013010055381430020013061200800402030203040113010501
3010055371481522020030011306102200670411405013010055361423051030705065
0620101641205670410530301427040110014030550165535148153030170401670440
0130805303043160403015016553414709012170070520306010522002002070050708
0020070105040651080405504008050305533110041000140405150101006013051001
0200930110307016401100400601630501655321298405053301650120805069601100
3011401655311430020016200840020103061804030601504080506960110030115040
6506403060403011504015016553011005200130616060028016001013080522002504
0610504080521504011045301150704060140301501655291220055737050503068002
0013011080530301737050503050115050900150165528144100100101200915020203
0700506415040650683019030115040150165527143002004052200405241200140180
0200130110805040241020012003001102004501301501655261490200121530053043
1050130170404006010504080704060303047011004015504047010050150201501655
2512530061410430016020084001030401515043680140603011506040301501655241
4815303015007021050305014040050509001402016509004055016552311005200405
6417805033015040301320025067006701060501301504030132005012055016552212
7002053030110307050330166050130130610040050305011505090015016552119930
0530301103070150510806030610010501205501655201430613065281907006004001
1401502200431030170400550165519148115022002202003005050306521504018043
0020030110301104510551812370150120010015070406015011630110080503301504
0200805070404006015501103011086130100551740108200301504082003015303014
0602551612001240013015010403019003014740013064001504064030165010504064

0303061504064010400102306004504030610430163061030200801000122005515120
0180201200318013011643010130620412701630800104052007004005012050155141
2001104501020080120301504080020013011030702007004001302200865030110065
5131200190501530301506450404053016431040308012001501630600418016100200
1000140540011010960014040551213013080013015010403019003014740013061200
1050020163080014100655111200605061006701065006100010130617016601306146
5020070040013064020400530150200700400130163011006551012001220120020401
6200204065509120016060013015430665301405471040305040167024001610506907
0405501220086503011005508131380130260155040162030604003055071916028002
0013014020303070353030165506131200600140203200600106151080402041070104
0500550514001250800200130150404020400250153030165504131200606040300301
3070361200650505108020040100301307036550311001294001614060702605303011
0030600801020162004004030155021200169140201003060041006550112001100653
0305063200400130402030140550012001550140203030703106400150340203030703
1065010502630164012402044401065499120012004404020103070140603013060200
1054981200180100050120550140202200162008010004006014003010080549712001
2006014053040020020060164053040050307011050140500549612001534054006704
1050140500549512001220400601162002204006016162009016405211050016300100
0400601640550170011080405702190116307034053020080100040030405400670414
0302010501654941200120080130110101704405471040308054931200155061301030
1040610040067041050122003011005492506403070400404005020630200600610130
1317001530301303150110406040303110301402020060061064020265070050404020
3020080100010549150670109165610040016530301164270150154905010240200107
0050402030105014061001103011005489401030121700704051040011050130210050
4020406100200700501501540610010301186501503060200115015488401082003015
0408200301530301406025487506470610165012010700301406103012030700530700
4051005200400405200190215703001600548650680080610290501030140550120170
1200605001431301504050632006001040610548550647061010700301405406101610
0130101040081627030106168006600104052007008054845010100626040250850140
6405504012001060030425050110307054835062004110030150122001100040301610
0200130040301220024060100113080548250640307010140404051501003060015011
3020548140107050550330600410501405504010200401302070409101548050107703
0140300301507065010401030150705479501070954020302100162008020501070030
1301408054785064020020404001503108020103061547750690080181040540013090
1030704055010700301654765064010110040540014153002405501070030165475506
7012004054570640540015014013040550107003016547450641703014052010306180
2030700120061010004002150408054735010406304020010100040550180405501401
0140020304014061405316711030701301547250690080184053620080304055010700
3016547150640140200101000405220021700705015470506100803004040522002170
0705040405501070030165469501043014061025061004901050107003016546840620

0840301630101603030546740630704010084053016401108050107003016546650640
1014405400130901030704055010700301546550103090403011301546417065040200
1060030156040170016546317067320030030156040170015462170630510030600501
6050130150154611070618070403654601030640062002415040670440054591063003
0305701750545810900301550113020545751035010405001701040380020013011080
5040654565106640010400301540030109080654555106001654002819065454510502
2700104061021700705040104400801063040200340301461040550620090210545314
0104084010408301601013065452505703012030123301506204006545130540301201
4060301506204004061054501210200100512005065449141070255062001040550154
4813010403120029020029018054475506080301501060406005200141004050120406
1010805103018620030165201013040301320070400544632001704030110700530301
5040544570801453060103050102008012030305444701001621700702301016030160
5443401082003015040820030153030140602544240109007030120220040601282608
0544150101001030110083055016544050102008012030110307052006083055016543
9501027002040402050405014030705030150165438501010040040303052002070040
0305501654375010731855070481504040205040140805436501040063015504015070
9100304050054355010401030125504015070060013054343010611001301800702150
1030703061004006306543350104030170301220050403010750400543250620020700
4001401301030100505120306100213065431506504064001401301030100200701300
3061002651406543040102002030660200306100305501542950620090240013014065
4285062009024001402406010011308054275061091600301130153020110130542650
1030601000504013014017091306542540104081505154061030153060103080542450
1020604030140170910307080081013065423401090070301530301250406101305012
0550154225620306018017012007005067026015702007005306030601080405005421
5630904010833014050054205630100080567006005419510501930601050702030554
1851030140105070105010001140541751080011003014005012015400103011054165
1021608140200414030654155102140020400614030105040010301103061001080530
1403002521400201040061504014016541451030160030140110130110804040080306
0114021101050516220030016163020541351050141580691005412510301705503108
0541151080012005300107010806580541051021608100130401050140050509001050
1540951021400201620010014061530610010805501040102521400201040061504014
0180540851080160040205040108060040013050680020070400700104061054075105
0140500700104061040510068020220030020070304081061510132001103070203040
3016540651051670010406101058014060301400100300501654055701001630140070
1006700104061080540454816520414002048030123301680020013014003040865403
5481656008050200690301108060080501700180540251070165070011510704006520
0207004004020301530703503054015102001330110804020150304081403011010009
1403015015400510212005700600140570060018040522003066020016907080539951
0916003012400120804006403016530210050406506702008013653985101001250404
0530102004003058053975106160030600507137014055012010702009015108040610

0301102004008014066084011015105014050063011030702604051030701520060060
5396510400170200902009081020021620305180417014016539551010001930121620
3051804640500140180539457020011003012417064640500400270020539351001830
1140201200411406539251001830114053915100183015390401082003015040820030
1530301406025389501040301703030200207001301651406538850650340305501506
3061001062002070030116704060140304052001902122050610030710301620080205
0107003014120105016538750108301903015040530703805220051240031805386406
4070040656120070301270025030522005040540705052020014400501130630538540
6900204065610415070014006830128190205020400130620220040208302002901805
3845062400201040580210100030140545070401538350630100500404020010004050
4040580120031405301604004015382501040040104102050140530103040165381506
4030701013050010850404053200440060506050010483011700522700201050406105
0200700805380506403016040564636030110301506704101650120410065307004051
0052004004052001902157030016005379506701094006010130804636030110301506
7041061001605070803002010406105378501010041901650120501405101202003002
1640011030801202003004053040153774010707203070024051014053060537650640
2084001403040203050154011010030140610103015100030121501030705014010140
2030401537550620010600400140305108040203050153745066020044005108021400
2040203040153735064020840080102040203014053725010402003403012050104030
6040301307035080153714010705030140015034052200450705010100400403030501
5370506403070101650120630200220152006001301217007030621700703012030700
2053695062100012001502200103011501155040120010600150304210501150220010
6070536850101000191502015011503010611016301100536750640613040010800702
1030704058007023021001805366501040301900150201501150220050182601630110
0536550682604001306304020303010014030140596061301100536450640620084050
8503025363506301800301501163011001561200140308053625010200411004200810
3070164100065361501020604040201030704061030115503060041013050153605064
0080160040010405616100309501805359501040200190404005020501402050020081
0307016410001501535850108290401641504008053574010200903012040082901805
3565064010150405620220050408010191510307080198053555065050040060101306
5354501082904015504020090103016406010017001550330121890115063021402040
5150630215015353406920060030110307054060506053525010306130120010916013
0110015040011015103070103040040017001535150105026301401700501205015350
4010507203070047023040070534940105001440070402001060030307015040534840
1040502130040714055347501054080130830207094001306534650650541080505440
0630164653455010270020403017094001308053445010440054030124030701656530
1026050703080050402403070165202200501534350640080403014020101012534250
6200902106200902400608053414010900701003060010307030205016534050650404
0200101000120031302030501653395065034022022005407050240050114053385062
0096010140640301003016505337401082003015040820030153030140602533650107

0401402402010400110504080120061000402061408290150140400101200130100533
5501024030130800108065504050640307040060801503020640051030706521504015
0408200301653010053344010301217007050405010200801203012001031050408015
0408200611070405040653030110502030515014040010120013010053335067044005
2404005020107003011700530101006162008020501070030156364001010605803075
6120014030805332501024020010700501501140501653030145070403070301140501
3010053315010100419040400502050147063011700510400405063061001065330506
2003008400510301680020013011080402012007001070030165301005329506200203
0040014013010301005410801301620019021301670406030140203030703640201300
5011070030165301005328401010040060409120090103070110660103004010504011
0451553610307012204010300401050408015327200680506640070108016330302510
0720020604015014020100720010107003011700550401532620062001000108013015
0620080120301501504082003015064504040202009050104020304503651070030117
0055040153252001090210300302025501504082003011301505206040101405080021
0010640018019040510068020010930110301162001040306153242001020505012080
1020804053021005040501070030127002041003065323200107005080102050640307
0400608012901840201030703060200105011406030110805040404005040140153222
0064040010517001808002001301402028060600105011406030110805040404005040
1153212006300503015103016510072005040163020615220150401080163004018013
0630700800200130140203030703107003016553202001026003018010930301656100
3060050404030701013015319200649030140017002401030705501521620053161402
0306100162006016531820010220200316520080100040405302101000301240522005
0630060010501070030150153172001070603012189013011008608040525070021680
2004007018053162001070603012189011080150201403010070506170406050150206
3016301100653152001022030130800108013014040050150110300504053030130750
1401503010061502700208020010700501501341001030216301100531420010700504
0204001104030115400507600405301603680151080101003011403020900101000301
5040710404004120400531320068040010561100105300153016704060151080161003
0117001531220010904030160102640505321700704052200216200802050107003030
6531120010706030121700704053015044007016501091103003030140632001515030
7036810219040211050430114060301150107410030653102001060865611060160020
0902301201030123010050105010400200202009023017032001405005309200698050
4010200400305200902301703200180400618040050405040820030110030600108010
2004001401100129400161406070260100306001070030153082006801000301710770
3016561304070506081402010140206302103051108301640064030110030600107003
0153072001041001030030201030706562030403015410210700301202001240053064
0108200301504082003015303014060253055010400501100301504040050120652400
2061522004001403020240010049061508620050405108015060080508015320080400
5090811040030150120040704005021401020040653045010403019003014061003015
0401050350653040706506702008050401050350655033011080140010220450701030

5021220040030110070015067020080400120040116504015010700303013050040530
3012200800653035010306001430170402001503011306004130101006110103005303
0150401405507011050100010403080140514005016008050108301901504127050405
0104270400840014005012096304001200401686504001200401162008020501070030
3013050040530301220080053022001090403016010264050534051614064051030709
0030100016501010080150403016200180203014513102503011510111053012001041
0010300302010307020501150302008010001615020065015030404040011502200506
3061001040550140101264051041015010210706010405200650570401650401501070
0301610250301530301107600101304061020015501301154008400504010200340040
0150340203060041064020400110106040205070200802010501402022001060701869
0505264005303011030116264001650401501070030115101110530050630407040040
4005020140506734001405014061030116200700400704001301620080205010700301
1510111052995062004061014050630708010640520040114053030150690701013041
4300900130100052010130401510307052001383016601503011546100612001504020
1030516402060805011610016504015010700301151011105298120012021640012105
0040018101604001421704001210140040014005011004001504064040014030604050
2050401200106001316715304210501502010030950152200106070529720010590020
3070047025201013040301650105040640301830190630102002365130640655303015
0180510307012005190040050161402026301004001000904100805303011030112640
0400501529620010260030140103070301105012503011001700520125015040400301
1005215125014030808007025070800200701658007028020070510307053030152005
9001652400125014030801500104853167180070210301102503012006017001652954
0102083014010307030165640201306405303016402050140101530840040203053030
1800200804100529440108200200680100053030162031671400180020040101000400
2400203053030130811404020084004030102503011510111052934010820030150408
2003015303014060252921403070103003020291814100530301501620010410010300
3020103070530301501164030704003050550102200401301307504001050530500408
0020013015040640016140607026010030600107003015303015291110072005305303
0150608141001421151080501043016002001550130115400840050401020034004001
5035306004101830190304070106530301250406105040620065030110301400140309
0030150404001830190301163040706165040150107003013200600103040015010240
5303014001101402010307063040010130660200529012002070040201030153030130
7501410016504015010700301212301301103061110530301161004001801410430012
1700704053053030147015289120060600152004015210017050120615200401301264
0010017008052881200205012170070151502700706141043001216081515026018805
3060200615220020040150704004007051020010050405010120652871200601020060
7047025303013070310601514001140130116080505303018030201013053030151400
1140401008050103080510072005103070200410050406540070605040570606700100
8050103052861020060015307080020040060804040020060170400501680620070402
4020501021620040400165052006315056400180402030507080020015018050530408

5070800101040085051030701610080501803040840013061502050165051030701610
0108004003050562001800400130640204365040404005020605001085040505650206
0152851200315304090070106540011010605507020080201053030110040010504064
0201030153075015303012004012030700528412006010520040150405303070310530
3011004001050406505304085070800105015053031301408130140013061650800810
4030101013030162005300155001305005054004708040400240020015014020101605
0504080010840301504050601010101013030165283120041001030030203053030130
7034100520040110003012530301501526086580530301103070302064001050406260
4008101305001085040510072001065282132006004053030703105303011004001050
4062006001301406103016530301250406105012050405290070610402030700530305
4153003011640101001640205040304701067001645300168062007040250561002001
8061806200704025056206040180505303150100030217001805281120040120307004
7025004810530301307030102004400130560805040309004100805303014648470400
1050406530301464820304006550102405300818025010400110501130150320060010
1306505400610250405056320060040013040202200530301161004001654703011690
8165054004703050561003098016050301404001003091700110250301151011105280
4010820030150408200301530301406025279401020830171077030154153003016210
1000301403017052784010308200620300530301640203020080100010640203058070
1800101506081800200100530301168002001004005015277506830804030140520103
0618056080508300100610504064020608050130120010600161008050161670109161
6704060164040070940060114053030116100400180527640109007020031545070530
3016550400804020413061640203016401140501527540108200200680100053030150
1801620080100040061688090400616807040050164056200700818040203016470402
0413061640203167150405011650401501070030115101110527450650406403013020
6400103080530301103070665130153011305303015273501024030110001302301150
3066020010307014050180404001030640050180306602003011670109165303011670
1091652724010307010300302025303016523010045105303012504061050406530301
5070012130152109040504021901140527120010904030160102615108050104301600
2001503012189012010306115040011012162700206162008020501070030165270401
0900703017680301203070014211510805010430160020015501301154008400504010
2003400400150353060041065400110106055070200802010183019030407010653030
1250406105040650211000400301406102030700704033014061030402070403104061
0526920010260050630407040014025303016150307501107003012006503016530660
2006530301216504018052682001060105303011030702030700640400304070140250
6250400304050050500702400301022006103023010016500702105030501162008020
5010700301407075267410408105010005303016530301105010004006016163064006
1620080208015050645102003002116301100804001501023012405306020040510400
1400400501205501220307005266401030121700704053064052004013012616100170
0803021005040162008020501070030112504020400110403015265200649030140017
0024010307053030165065030704001406506200604001404030701068002001301640

0161406030110801404030701052642001090403015103016402020069050608180402
0200690610083012800200130164001614060301100306005263200109025063040704
0014025303016504064040205040620080120402050408040201003060010700301655
2622001041001030030201030706564408301530620304030153080020013011080140
6400161406030110801405303082601052614010820030150408200301530301406025
2605063040704001402200102600530301615303113170011608050530301200600610
5030652595010830190301504050201610049018021020010030311030110504002006
0011306302200306100108040064030140204811040011050130210050404020150100
7200140504016100805016525850620060160030140520103061802030700307080105
0406530301200207005070402041306113064020301640140205304001301650401501
0700301151011105257506403070101305010100801504030150203065010504064030
3065306602003065770301530306307001301155040770130150320060010305501044
0301103011507032005010305063061001052565065100801013050101008015040301
5020306800200130164001614060301501017600530306168008050101040085303013
0660200450705040103070161008050400130506306100105010700301405525550101
0060180301406100301104510130530301501405305303012008010001050304053020
0801000400604004030401405304002008010004006014051030701660525450620022
0400604040565064901040540010120064056062001663053030130660200402030200
8010004006010163017040040530301010017001652535062080610105015303014053
0400110040520070081806470301405405103070581090302050626081054506040230
0600405501204053061003070406040016306100105016405401603120237040040540
0101200170016525250651008010130405804052630100103070702980162008020405
0016504014055012203070052515063040701016501201401604055015303013010260
5070164908055034055014010116700600400152505062700120305010100801504030
1501453001053030165306602003020501403070105303016530301306602003020501
4530050163011005061008015040301201317001524940108200301504082003015303
0140602524850101007120030120010600530301652001340030150406653030150402
0010600530301450701403010014010110020620200400615103011680080501165306
1520013400161200170016524750683080400402030703012001050020530301162002
0700165303013080080504016100040021680020013011080162003004005018051309
0301400108001001700180524650640307040040400502050140203020010600402030
7007010230116200700653030120020700103011670601805704033014061050405130
9030301046501700116504015010700301151011105245506304070400404005020140
2402010250108054153003016210100030140301701030150642004004050040201010
0130405501805504050620080400107003014006403015013010052445010403019003
0124010307053030164051041014004041001402142155065040400101306524350101
0041904040050205014006403011650404008060150301506450405303011030614020
5014040040707501164155010700301151011103010052425010403019003014061003
0110451013053030165303014001101216270020501070030140610030130500406010
2120018060130408102001408301305004020156304081040304050051200640030116

3040850107003013050040524140109007030130800803016700530301613001050405
1040061053030130800802030700524040102083017107703016564052161008301014
0304055040501020060016523950102403013080010803030210050401650120501654
0208301621400203014054030701064051020710654001101405103070630400104055
0401306602005010104013011080500702107003016552384010208301710770301606
4100301203040301800200130110801406400161406030110801405303082601052374
0108200301504082003015303014060252365010200519001682901804056470103070
1650401501070030115041018058010194002008020630101012006011050250405801
0194005040180530301200190501508505061020016830130110053030110301102001
9050150405010102001683030401020040502110601070301100140205303012001905
0116506201650401501070030115101110523550105040640301200300262102001008
4008065303015040200905015506284001020060016523440109007030176803012030
7005047040015031080521095020160406200155013011540084005040102003400400
1503402030600410640202650700402030200801000105233506403070400404005020
5014020302001060040203070040206080501640203016401253030130102601080506
4513400653066020065303012506504064005232401030121700705040402010350400
5200134001030704020304130516504015010700301151011105231506202003004030
1520020630653020501043011030705200590010301008301501046104530125306602
0030602001107003016552305062008012030152002063065200650404004053030164
0551680125303012006501610809103050641020010522950104030190030140610030
1104510130530301640130601301103011070410656270020301530301103070102004
0080150404040309001504065228501024020086017005163011004001501023012405
1314030804408154060110470250401040011030660200212003002406512006400301
5040104105010214030110049040402010301530301306602001050130101012006011
0502110401020040502110601070301100700165227501010060180301406100301104
5101305303016405263010053030110001711610001714030804020103015303013066
0200105015064030704004100610505067006400403040610011054061003010606403
0110070016522690690200405011050240550120180905301026010805063040011001
0501070030128105303015015225506307080400130140163061004005015303014507
0140010040200220522450630708040013014050630610040040301650401501070030
1151011105223401020830171077030165680020013011080140640016140603011080
1405303082605222401082003015040820030153030140602522120062100301218901
5040200180203016010101402052006001301504016601010410040510307053030128
0010001406100163064004001301650401501070030115101110522040108200200680
1000530301501530301505302008010004006016505701012808062007040108020501
0907010130650530320016505104101501025501020040080105014005225010400110
1306505413061503040010010130650105071013065010020060101306110103005303
0125020200300101305011030702050701012104001504064030120131700110250301
1510111052195065040640524040050110700301530301161004001616100805011403
0500404053167140025700501070030116400180404002100170802001802030110301

4020316715040103004020400180501652184010208401030705303016402050102402
0810530301402084020307001610080501140163016010306404001008050114016301
6016200801620301409070216206040400130650520063150564040010400117001505
6820504005014020103070815031306161008050114040564001650530506308104051
3064053030850513020018020301103015056703200400130804001504064050564040
0403070501805055014010124030701530301505650840040180400120031540400150
4064030140201317001165040150107003011510111052175064030190030140520103
0618040530640010504064056306400501402031200600110307016200519006402020
0110450404020632006001650104301108040206304001100501070030150705303014
0201550101405015216501096010040301281053030150140510301169601004006405
6200240050140202001104504040206320060010403065010430110804020630400110
0104030501070030150705303014020155010130521540108200200680100053030162
0010410053030165464040550404040010417050107003015010264020501023070310
5015303011060705214410408301105010003016553030150180306400105040620060
0130140610301653030163200105012050403055060856601405108040203050120410
0305213401020830171077030140050120501150220015030200801000161620080205
0107003030550400801503070340013015022005212200109040301201030161502501
2010301615030206400201030701502200103005040530301504020302030401140620
3050200801000400601305102130401051200213061001301548653030121650406400
1040081421180010002301656147030140205010261505010214264020215020080205
3030150645040506427040014040640205040120021501405406100301630110070015
7040501070030164010512002110805506085660140203040050120410052112001090
2506304070400140253030164020501023090801054011010030140610402041306113
0640204018200140207080504005030521050620080204006301646666030124054005
0603016405104101402010301169602106147014020301650620104020680100500105
0152093010260301166030800410080402050405307080105040640400503070114064
0400108060011402403070115016546403012405103015062006040010400180020040
1100040021610301026010801415340400320060040400502050140202200530301216
5040640050140201101630660200301506320060010100830150404020131402162008
0204100654640301240510301506100304001103061402064706106470167006004004
0013016504015010700301151011105208401082003015040820030153030140602520
7401020830171077030165680020013016400161406030110801405308260101050608
3011406013015302006904030110200123011003016003015303016552065062020030
0101407053030150182602002204004030120012330171077030150401054030150406
4030140130603016064100301203040301651301530113010700301530301655205401
0820030150408200301655415300301621010003014030170651301530113010700301
5303016552045062002080400104053070306015030301522008005030150040130120
3040065303015103006005040170490400401703001600540010120030302310307050
1200100301170051503075016305203506710180301405550330121890155033012189
0162001503012189011064006010130520250610060180301405201030614056080501

4051605018053030116605050107003012016506204001306520150630407040014022
0010260053030150153030116100400164100030400404100140608050200900504003
0653030116100400116504015010700301151011105200501040301900301173203070
0615108050104301600200150301108014055011405400210017050120805199501040
3017030122005303018016001105012050401020021050130110020080201403080200
8020150160501303030110070015019103003013050040205198401030121700704053
0640520040130126161001700121020010040530210050405010700301305004020519
7506301007010130406100405501220307001040030040526301006170104034052608
4004104300405501024056012200431200650406155090840102001001080130117010
4034020506304001100101305196506510080101304061004055012203070053030150
4040520064901080525200430014040050130519550620090501013040500200124130
1503061030405620090505010306405506200905010130163040061005010306405704
0506320060010130163200600150103051945062700120304055014530010530301640
2050200905050304040030400610050161421148140201080701095013064020704050
3200600503040400320060015010302140020301305150401620080205010700301405
5016600130506306100101610080150501070030110301200400403015193401082008
0620020501150220016504015010700303013010001502630100108030703400130650
1401013012150610026050107003011505016600130615030200801000115022005063
0610010405470250401613501070030165192506830804030140520103061805608050
8300100610504065901906004052501206306405608050110307050620050061061640
0611404053184052006490108050643101306405103012003155040506281040530210
0504050140101301620014301166240050107003016519150610041903014052010306
1530660200653030150620090501061501680020065303015040130800805061000400
2104053016401640520011045040163200600150107003015010200315403011200100
8030305190211007030141043005303015015303011610040016165400501805507040
2015501406567006008030660200301402014001140640205040110501000130150102
5306450620101301020301026030150216501020160403016104014001030161022001
0030110700306306602003030653030801020010030130515040530660200103070530
3011801140518920010410010300302010307053030161300105040103070530602009
3060105303015020306212020013063010600504051030704040080361140804055040
5306602001030705303011801140651885010100601803011076001030653030150700
1280153069011030705401011001564040020200400615501030504040400709100140
5187211007030141043005303015018053030110013001050406530660200653030116
1001300405501220307005186200150301217007052006001301108040530611050430
1108040527007030130330140510307053030124002050113063065185200190213011
0306111016200240070180501050406403011041016405104101240540061025062200
6001027020030140526301001080807001006162604008104030500108504053030140
5140018053030150404055069084054007050140405501165090061632006001050140
4005050900140200300830130613040520011045040214002030130515040162008020
5010700301320060011070030165518440102083017107703016568002001301108014

0640016140603011080140530308260518340108200301504082003015303014060251
8250683080403014055303012785011301530301278201030615507016800200640550
7053030110800200151080501043016002001550130115400840050401020034004001
5034053060041065504086200240541016501401013014052630100108024002020103
0614054002001030070614055016600161405150216140512116501206306530660200
6530301418504050641610200600130140610301653030125065040610140610043400
1305181710770106100530301501103060200615015023010001305303012400205180
5010307001301108020103061530660200653030150641810501070030150151795062
0060160030140550191030030127850113015019103003012782010306153030120020
7004051605018050191030030140510307070068400601517850627001203014054055
0113011030010307040550150626081064020305068030810140205305068030810801
7010403530301405500702104061051775064301600151080405200150301218901201
0306111010300530301504040541306113064053016401405507010501000400503051
7650105402170070405308053030130102605070164908055034055014010116700600
4001517550630407010165012014016040550114104300121700704053053030147015
1745064030701040562700203011030705068030810640550401306402050404051404
0510307053030128001000140610016306400501070030110301200400403015173506
3040704001402200102600530301653066020065303011670109165120730116400165
1309030116401010018040201030705303012140061630708040040307001804001100
4904020163501041050102164041004005014040010080300115172401082002006801
0005303015018016434004030501802005916402030200106002030700510049040201
6350104105010216404100803066020030140400103150170011650401501070030115
1011105171200102600506304070400140253030164001320044030703011640061501
0700301640205040165040150107003015303017080200101673005018016730050130
1010017001640203053030186080101686080180603013403011080168608040040203
0301010017001165040150107003011510111051705065040640301302064001030805
3030110307065303015070012130111010300405200180026010306165040150107003
0150781030501910300301504010635030114050151695062003008400510301107003
0153030116100400161061004003016200230121631504006306602003014001090704
0650164703016405001301216315040040013080404001031504001700116504015010
7003011510111051682001090403016010280155063090104050534052608306100501
4025303011502700701013063040560805011080506306100106530301522010810403
0140220610820613170016306602003014001090704065016470301640500130125063
1504001065507016550140305064670104050010635030150701655050107003011030
1200400403015167401030701030030202530301501540110100301406101630407014
0240510250104050016501201405010140570406513012005002011306203070050401
0504113064056041606513015604060013064057021200651301550013050010635050
4050620101408002001301108014064001614060301108014040307010530301501200
4004030151664105300103003020103070530301656605065303015190811630407014
0240510250108017010403530301405500702104061051655010540217007050102008

0120303064001501024001101150307501410064053021005040501070030140022014
0201640022053066020065303015064181050107003015015164401030121700705010
2008012030306530301464820304006530660200653030121650406400302030700150
1020604050104006040170918070940060104030504080160140400105013021005040
5010702140040040501020053004011090804310403050408051632001026005063040
7040014025303016525069007064004020307001601404001050130210050405210020
0200102008400801630110014030506467010405004051016050504050620051900105
0107003016516220068010006807030530301501612006763061003015040120020504
0506306100103040550164055043061010130301130140540015401501405400154015
0514040510160505040402050405062005190010501070030151612001090270104060
5303015011402020061840070406010530301653030110301102040030040061536710
8020304134001040030130610053030170406041005160401082003015040820030153
0301406025159401090070301308008030167005303016130010504051040061053030
1410230800803015016530301308008050401030010307050620041001013012140020
3013051403070101301030515840108200200680100053030164020302008010001065
2506300404001200650402030307031065400408200504050103080204020400610530
6602002165040165303011610040011650401501070030115101110515750610060180
4055040200105002064052003140550401650401501070030115010400180154001017
0200100815670200140805303015016800200110004002113014051030701515024002
0140156704400215105012520065408200658012005670240015010700301263010010
8015030703630103501301515010400164010200405021106010702150108010061503
0602002405200150011030701501080100405005156506100601804055040200105002
0644005404055040802140020301656250301140540010200700108015030703640105
1200216186501503060200141003065155710770106100530301501210100030125306
0200652009050105040530301403070103066015030307080150406410430060125108
0410483011503075016960100301260150301406100103050171040301621400203014
0570401503075016400150102301215030602001503060200141003051544104083011
0501000301655303015018030640010504063060023012601503015062004011065063
0600210501070030151532006600803014006004030202810130530301640201400114
0216820080400130640204001801401030701660140013010203051522001060105303
0110307020307005011512002505013021005040214002010801301402060805011080
1306800200130110805210904050402190114051514010900703013080080301670053
0301613001050405104006105303013080080203070053060200653030121650401501
0700303040047018002001301614060301800200702015800200705503640202200504
0520080100040103011610021605150200620010003017014004013011105043015110
8301140650168002006530301504052008010004064104300217007052006001301108
0614019850620104050012008090405120040080310510405005400125020018020301
2370150010100030500402041306130163016401301108020050012040064020501022
0060018040065501076653062703011050430151108301140501164030701514940108
3301218901201030611504001101216270020616200802050107003016405200650640

5200314053040522004507014530030165061001049030140520103061530602006530
3012165040150107003016514840102002020031405306405308070180010150608180
0200100530301168002001001640011004904030165010100490403015015147506301
0070400402030703040011013014020301501024100154006404702800200130110108
1053030150116403070151465061006018040550402001050020640526301004006010
0804401301405103070301980302100504021400203011640061501070030120165062
0101306100830150403075014065303012002070030405263010070300600400501165
0401501070030305011040301514520010904030160102640201306401052001503014
0201614016200802050107003015040130651048040205040700600610130406103018
0514420062001000301530301240202001000653030120040113104008105014013014
0204002001000640400240020016404009022004006402060805014040050400804020
5020306103021630110040207040502050403014055064150105143217007030153021
0050405200519006540820030151080550912212530200660240550102220080080120
0650166040400301804020120061670320013010100402020065050406024001005015
0620090050116504015010700303040011008015040301650610080150403013061001
0406105142401090070301768030165203070015108050104301600200155013011540
0840050401020034004001503406103014020120030024055014010126405104101501
0240520065010706010400150406403016501050406403011020040040610514140102
0020200315306530580701800108015060818002001005303018002001001010700301
1700504051402001026005063040704001402530301610506083015303014706130206
1630400110064702504016100805015010700301504053200440900701201030613040
0110068400803013021005040100805015040402050401064006010130800200130164
0016140603015001200104053030653030130102601080161008050400130140203014
0651394010820080620030402025303015016200650301103014001403090030150404
0203200600103040015010240011015427010307030750101070030165513850105040
6404040050205014020100150010407006001410064020220021650406400304020670
4103066020030165303012506504064001304020301406513720010220200314053016
1008050164020504016504015010700301805108050108030600400604040203070314
0401610080501653066020065303012165040151362006490301400170024010307065
6301030301108020015503013306106200155030110803010303013306105135200640
1301703200400530301103016800200130164001614060301203040530513420010902
5063040704001402530301640400502014050101402070406561510803200701014061
4060301504030750101406155040320060010140680020013011080330101404030701
0300200703011030701064006014050040110154006010808002001301640016140603
0110030600107003016551334010307010300302026565091230162005190030162006
0013016306130165513220010410010300302010307065640010401061010810800200
1301640016140603012030405305131401020830171077030165680020013016400161
4060301108014053030826051304010820030150408200301530301406025129401090
0703012022004060128260805128501010010301100865301700550151274010835103
0904006512640104085040307508051255010301800301501027002040301504050120

5011401651245010401030121890150402030401306080512350104010301218901504
0501205011401651224010705040050365018102006862008051215010220010040301
5040501205011401805120501010041904040050205011550670320040051195010501
0440200101000404005020501130630805118506200902400130502030640205040510
3012200100150850651175062009005040070010501084040050165116406100308301
4001000302170011306308051155062700204004020501402010072005063070340065
1145065054404040050150010483011700528015113501040301703012200504030107
5040051125062005940301130156040101305111506502040214002010805110401020
0205012001003055015109401090070506403070400630406010030550165108406350
3017010016402406010011308051074010900703012022004060128260805106501061
0040303017014004065200207004001515030703508505105506103005040301508504
0115400200330040400130050140400501151045062006400104003012001503014040
0101200801510350620020300400130630801313151503070313005063051025063075
0403015085040150740301504056404003075014040050115101506220030040010700
3011403014040010120080151005064062008405085030250995064020010004030150
1509850652080400404003090080140198515030703301300506305097506702001730
1508504015506702007400404005011509650650020084001404040010120080150955
0620020700400130630801030613015130050301404004030704100306509450640307
0400130140108040201030050506402030150040130425050110307050935010100626
0402508501406400640301402050102150200410050850509250610030160030150850
4015506100306004004040050115091506504040014040400101200801509050610049
0400130630804020150100306005085050895010430140610405307501700550884010
5301220030050622001300805087401040830150405103070506220013008050865069
2301155040506103014080508540610075040200330050405063020130508450627002
0403015063018003011510140205014050050834063070404061040011001040103015
0670640340305082501020060013016501030613015013010050815063061301150612
1615080506500670240301501114019007061212004001502061504004017001015063
0610010165012065079401090070301500508301103070506200901016501206507850
1080200400402030700302100165012040550150774010200201306420012130507640
6408105040309006507540104086406406010805074301403003012189011403014030
0301218901650735010200600130150405305006507250103061301504053050050715
0104010301218901305070121200400112200705069120012021505150307038050681
3005015051501300501150150675706802004030020080650665706504040130657069
1004013050655200105002055201806506426206040140650634644040309006506246
8005040830965061468006004020046010805060501040103012189011405010401030
1218901650591401306014013060130101001301505814010500140013061610003015
1080506704060101305057506304070101650120140217350565065020403016306303
0130150040120505550107020068650545065400300101404020010940830650535062
0010600400101404055201806505250680750101306155070506704901013050515010
7040504060120610010200121621620125050506430600405014306405103070806910

5049501030211004004015103070501010204004050485506800640200200601030705
0475010200600130150403010301006504650103061301504053050050454010705030
1400150310805044506220010040301201030615043506100216030150610021603016
5042540130040301218901140540130040301218901650415504010403012189011405
5040104030121890180504055001305001316714040050206503915002504012540050
1208050381602301233014006026503713200800200130140032001700150365708012
0058008016005035527001201540070100630601030503457010016301400701006170
0150334010820030150408200301530301406025032401200201301630130330110700
2022004060120200124005031501270020400140202200130110128050305016081020
0100270620080060080200802001030705010102040040502950127002040014020220
0130110128050285013130640530210060501505500409104030502750127002040014
0202200130110128050264011060030110804001200690100402006850255012700204
0014020220013011012805024501608400120010600505108050235012700204001402
0220013011012805022501402006306005065520180140510805021501270020400140
2022001301101280502050140060018005050150107014051080501950127002040014
0202200130110128050185014004015440501750127002040014020220013011012805
0165014005031405506450406501550127002040014020220013011012805014501608
1301130150160813011733055013501270020400140202200130110128050125013200
4030164006100110301505501205011501270020400140202200130110128050105013
1306405302100605015055004091040308020093014001200901100505108050095012
7002040014020220013011012805008501450104005033011050361002002400601504
0155010192300200801030705010102040040500750127002040014020220013011012
8050065013675520180302050401405108050055012700204001402022001301101280
5004501102003400501501070140510805003501270020400140202200130110128050
0250150801140016700500150127002040014020220013011012805000501400503522
0040110040801600504030649995012700204001402022001301101280499850140104
0850102615501025068069104997506402003403011522700201010400301405053570
0549965012700204001402022001301101280499540141001301610901650301270060
0610804051401060250640200340301802007010499450127002040014020220013011
0128049935013130660501525070050703016010130700104061080499250127002040
0140202200130110128049915015430120542006400501208014060301400100300501
1700180499050127002040014020220013011012804989501200904005040013080601
8506200150504090016300140201030703060200104988501270020400140202200130
1101280498750193060213015067008050400130167008050180800200130164001614
0603012001910015040167008050400501404007094006015016050130165033012003
0070401104986501270020400140202200130110128049855013010050030151014020
3010002008050604984501270020400140202200130110128049835013001080654061
0302080020013016400161406030110805040530160104982501270020400140202200
1301101280498140120020130163013033016700202200536101002106498050180151
0307050403020497950127002040014020220013011012804978401307013012020082

301108040013005040301200163301530649775012700204001402022001301101280 4
976501320040301663063030114055040320060010497550127002040014020220013 0
110128049745011010002101306007200214055010249735011010040030105010200 8
230132004049725012700204001402022001301101280497150102200100040301220 0
650101002003004030122004970501270020400140202200130110128049692001505 0
403200140504050133011003060064968200160080301203019030905040501605013 0
110030600496750127002040014020220013011012804966501810200301680907030 1
670028301649654014020130140017003060050301655201801510804964401501303 0
157080068002001301649635017104030116200606004001306960100301250763011 6
401010016496250171040301108016100094001301496150171040301708006615708 0
200140603016496050143601020033003016403503016495950126082200401003016 6
040300301495850110230154030704957501605013011003060049565012001003014 0
307049555040820030149544010820030150408200301530301406024953200440010 0
402010304045070100490470100401080495220055064001503108050101004004030 1
501495120094006040200102206200101000903020649502002730110805630708010 3
003020649492002044050403058040207011030011502030514100306494820090230 1
284030205481613011502004011406494720041002515010030600103003020150149 4
620010060604016100670040556361030702001503011080506286010406104945200 7
060630130800108050104020034030150149442004016105415701603016405470640 5
701603013024943200243015063061067040330140751060494220090400504070104 0
350850506306100104014941200273011080512002402030401402010306150402001 0
600402020018020149402004400100407107707006001405150700600180153020150 4
001101216270020493920070050301506702008030113410030649382002044050403 0
580200207003030501200100301150200601041003064937200700506102170070161 0
067008049362001004006040217007052002024058290410030649352007005061021 7
007016100670080405501070115060409805801080050705646120041003064934200 7
005030121620014040080150400300924052007005014100306493320020300504010 7
350203070020150450705040540705049322008602405150103509630301130112901 8
405103070150306020011501493120070050301296304061004002700204930200204 4
050403058020020700303050120010030115020060104100306492920090040084030 1
401030052016501208054816581090405103070150306020011501492820070050610 2
170070501208010208049272001007080109170400804052819016415080492620080 0
400840220030030204055010254060100140301501405102506492520029901640521 0
040020018040530550400805100150301630602004015014924200300130121700203 0
150401410005064030701060492320030012170020653021505010250405103070200 2
070030110100301149222007060630130800108030170011501570240050148161504 0
120030021163011008049212007005030124640500400270020492020020440504030 5
802002070030305012001003011502006010410030649192007005061021700705012 0
801020804918200701005040306005071370140550120601503017075040049172004 0
400604060850406101080120090200901810200405103070150306020011501491620 0

7005061021700705012080102080417040027002049152002044050403058020020700
3030501200100301150200601041003064914200700506102170070501208010208049
1320020440504030580510115150202004004100306491220080205012050403017315
0501070121020034004911200604681630140017001030705150304086491020041004
1002004011030701403011010040030180150610708002001301150200380649092004
0550401402140603012162115084008080490820090400501802630100040105015220
0170480490720034716506503401630110061504270162700208086504061004053021
0040027002049062006070406101700550620080120301306100107014301103015010
7095404905200300400504041200340550120500143130150405063200600104052001
9021170300600490420020501030010301701430170410406104055070306400804903
2007005030150100040014080510003012540208490220034740510801401250130150
4040513410030649012001004006040200401302064051651167024001616270020649
0020040400604020086016306100106168002007010510116200105016489920040100
3011003005016570160301400220040010014898401082003015040820030153030140
6024897164270165303016436018048965064401604040050164895506202400130650
6208800400648945062370400500104830117005504080148935803001205303015064
5040153060103048925807130140080714891103061301200700503015040200107005
0170054890102001404004002022001301101280488910300100014015130010008048
8810651520804006403016488710100091640309001405165012040550130210050408
6504061006488610100211408046405006488510306130114170203051550164884102
0070300301220065550164883105010016105010001655501648821020060013015130
0503015103070501648811050404001700158095050404880105005013016200207003
0150103673011003060055016487911081640014016555016487810202162088001655
5016487710540050403012022001030150164876108061301173301517310405004875
1020010806605107060501648741070601401301501605013030601030501648731020
0600120076520071620074001301487210806107003014010512002164871106064080
8901080140212501040304014870102001065802101000301403070545070148691042
0161301030100109701648681030640010700301400101200801486710100400150402
4030701654020608050116207400130804020400154015069210805503140400501700
1680020013015040402013005017001402024030701655200801000403017060162022
0050140403030113013008168030164050013012001012205062504003105010700301
4866105060830121650608150107003011073106163040701402161601501070030110
7310308002001301108014064001614060301108014053030648651044005150402403
0701656530102605070308005040240307016520220050140307030150404051000302
4020307004864110504301511083011301420010403061502002070050701030640050
4050708002007018048631101030010083015040105010001013050900301501650900
3011301506702400105014030705040524053014064862105005013015104060400520
1013040301506406010305200600130125065040610130501070030150148611080020
0106130010504030530301507001105014702504013011101030040540070180300105
0100040013040016140603011080203040504040206486010306130165200600130153

0308048591050404001405016050130304014858104530140522005040405134100306
6080501301106540014065090030113015067024001050150193060504015253030130
7501140402061216404005011564040010406014060113011055014857107108005406
0100170012030400485610500501301530620020700301402030148551020060013015
5003015003015150406485410770301640013030140400101200801485310200220301
5220040011015040101200410030485210100091406200902301100017140485110300
1000101405200460301103001000107001485010614030155031545070484910540050
4030152004604507048481020060015307505120041003064847102001014010307055
0620014040080148461012001404168030127002014048451086114054270103011086
1804844105041615010606100211005012080484310304400801504405004842103070
1301100801301265648411064006018052004067004840106100301410430054030704
8391086101086130165501483810653015070100950101406483710610001406402028
1903080014048361065170014035030164835401082003015040820030153030140602
4834406350301200124165826080301030301504064833406100400501082022004408
2826061505010701220501802022004020830200290164832506403070101304052005
0020150203062030700506412170070164030900501070030305016483150620090501
0405130611010300405410204055070105010001013040610483050610070901051080
1070030140540610161001301010400840520070080482940620200402186016306100
1019100160140603015040180602016200105016482850620200300101407053030150
1826053030120010100053014053040148275064102040301405162008020501070030
1801410205064102001040148265062400201040580210100030140545070401482550
6301005004040200100040504040580120031405301604004014824506502301402030
6400150230153040148235010240501930602405704040060404001103080510805067
0404006010403060405304014822506200910904030140540120220050101760040545
0704014821506501006101303028002001301640016140603011610030600401482050
6100301600301405401103002001010005040161003060040148195010100419016501
2050153050040500104821640011030804818506504061013030253061004005063061
0010401481750610001940610040540117005240540130814052004014004014816501
0902200400403015040402070401050180169022004003010048155065040301210200
5290220040050200701300506306100104014814506503401306505120220220040040
7050240050114080200207008048134010820030120023016555015670450302100504
0150201501481240640603012170070150110066150103070530301504080481150101
0080300401503051108030210015020150116301100481050630160400108007021030
7040580070230210016480950650204063063040550120405305014030100040510307
0806910648084010500140013061510806100030130160120151080506707150400104
8075065400300101404040830655201802405150444016480650105200260201402102
0040130201030050404053040705040405150400301140640540010200700405215010
0830150140101240540010200700405400702400161650401501070030164805501070
2006824051503676580680904020020060103070501010204004048045063040704004
0400502014021101050516220030016163020480340108330121700704052200405110

0664052200405140011402501052018048024010705064001503108050101004004030
1501480150630407040040400502014050673400140501402010307016601620029040
0130611620029018015630901480050620090240013040400501401170052008608014
7995062700204001524040050201040030120015030157005479817044050532001501
0301506704104061047975062703010800660010804055010700301479650102700204
0303070010406103010680479512001060301233012001060400647941200640140603
0120064040040610479370801450405301404792701001630202200217007050147912
0063604030120082301647907068020040301801006030164789200640704030140010
2301647882006300504010020010804787200696040214002064786200693016478540
1082003015040820030153030140602478450647061010700301405406105040162008
0205010700303030106804783506303704006010130804052189012650700305004012
6507001640309005010700303050180478250104004030156100301670010017200301
6553030150147815064070910501410200114061007200504040550404102001140478
0506427010301301605013016503301400100306001406477950105040640301708050
4001020020700301501802002070064778406304024005011408040550703064008047
7750610001940610040530252169016400147765065034061200816016301100130130
6602005040405302100504050107003011040011402030700204775501024020010700
5055040402030105012006001153015303017040163070340013064774501024020010
7005055040402030105015303011030116200808047735062002070040040203070305
0103671501003060010300302050406477250645140301407050801515030020080800
2001301647715067060640301501641012151501050214060301647705010100601801
4061001650120405501302100504086504061006476950102009040050401650120140
6401101005040167019400601140804768506200900501040565100701903014054007
0060018040522002004015070164007080476750108104008167040040400405303010
1007001464050010806476640104020030120540030703130151030704004001103005
0402007004001404765401010070301810200301405103070150306020017001417010
8064764401030406564010301108040515070025080546503651507006001804763506
5034061200816030110065502020021030640080476250102405019306025067020080
1030151503060200170011060640108064761401030130121700703015068016001050
1070030305101151080150202004006476050104030604030150404001022001010001
5108015043614080475950105040640301504015108050120504015032006001804758
5010802006040303020220045070540660404757501095040520013840510307030602
0050304756501040200340406100103011503060200115011630110047555063060200
4030115101402029600140803011004754401030703014010208301655501202200301
1002030700201630110047534010100707637040030110061553640020908052009010
8054001200401400302100180475240103070401301000256200300268060040013016
3011005801060040550406036180475150630201400130130110040510301522001008
0475050104060303702138053051103011000120080474950620020504040610040130
6030110014013060163011008051030701630600470014748501040200204030140105
1200218010800500104820140013054747506100950400402050114030500401008305

5018002001301614060301220068047465064706400140640201007200140603011080
6474550620090240013080140206080501108064744501050100640303040011018002
0013011080647434062008403016301016030301008405301640110806474250620080
1000400601040520018601301264741506703510140301030301504013010301001650
1204740501050608402030700302100165012040550140522004051400114050107006
0014739506107064001503108050101004004030150147385063037040060400524040
0502010700301170054020400504008016100670047375065040080102001503011030
7040540610473650104301406105011015063016010473550651605200401000108040
5501070030147345069012006003013040010047332080150405507020806104732803
0400600403061001080304020501473120283014001700140603016473070100163050
1043015016472910041903050647064001405014728120040140014060100403018047
2712006010400110200133018047261200100640013040183018047251620070040011
0200170030164724401082003015040820030153030140602472341070680160010504
0501200100301220020700802001232405103070400501140650630610010140240307
0150850472220010601015010307020030082030700170120060405507080020013011
0010030040040610472120010904030115010301640010405061010850508501501472
0362006003014061020307001008301258109030150670406010406104719210200100
5012040504041504030141501040610704040060164718463603012001241658260803
0103030150406471726200100030130210066040300301706309302100202200440828
2606506306100101401030702002901804716261000305040150604014064011015400
6010801405501021406800200130164001614060301150100306004100306471541053
0065670406030110100301612301005305012050403010200207003020307001080501
4714901084050403054130230110801621005080130092405504043001405502001005
0404053021001502030514020647134107401501043061510805061300101404053047
1246306003014061020307004013060215630600414711210504023010021362101000
3012504082003011030060050404710900108082161302030506470640014017005470
9410702200101000501010040040303055033014008030716470841074050403053061
0040064001304004013054050533030610050406104707410270303040130900215011
4061043030610030130421014047064107063012402010301400404100410061043016
4090400600400130301100470541070230130800108050120502030654001010009114
0150220055010200100301100470441043003012170070301108051101003018020060
0115301530301704030703107003014703210200404400704020010600303070150404
7024105070200180203020405053108011010030147014104007010430140170055501
0200100301100647004104840610301202009028020191000205070150803002080170
0550405308010001080400502041003046994105300610010160157040608050302040
0136469841070630140610203070020069030110806008050646974108400550404005
0201402030700100830124006403015200206040013646964104007021010020051043
0130130610050409008030101404695410701003014030030150706501040103015070
5011010030400403011010030400107001469441020063013028504051030122001001
5085065608050526066064001404030705065016050130115010030600410030646934

1043100306005040602301080405302306130110030600301215010107080146924107
0610088030602003012700203020702400406100652010130121890164691963050166
0016506702008064170646904640500660200301218901686504061004053021004002
7002046893620060030120307002014001040543025215010108164127030301100720
0468841080050703091530400110060123060050301646874109083012864001503521
5040025018012020012401401406030150401503075064686210504042703020301020
0207006520090240046853105236730205040151080150400250161060162001510801
5010100301615150444080020013016468436200805040153014061515010761515010
5028010204051006801406030110301162009005010403080146833102004020040110
8040580405131403010083012162700203024682900108082140020150450706405504
0800200130190100504001401504030704100468141070270320020307001212004001
5020615040040170011468021037010300170055062008012030130110080405504020
0700504040513501162370302467941034030150120010030161004678401082003015
0408200301530301406024677506304070400140220010902530301680020013016400
1614060301210100040307010530301501467650101004190404005020501501401013
0304020145501402010307050401053030130240204013060110307016504040013030
1001640306015012010307050650401046754010307010300302025303016800200130
1108014064001614060301108014040307010530301640205010425303015064030704
0013010046745061004190301405201030615303013010260108040560805016405301
6401216451361621400200104030405005306602006530301216504015010700301506
5040640301140501467340108200200680100053030150111010300402030140701504
0402040030101305306602006530301167010940050164020263010010805014010130
1306004101403061504030601163061005020306165040640040303010015040121200
7013014003011004672200102600401030705303015014020110040015303014507040
2040200201501168020017040030301012100612670300402015030703610500501620
0207005040402015010030600150160150301151011104671401082002164005303015
0153030116100400165640400520020801400104051060014083030201105014020481
2810118007024020800702240010001013061660603400130640500150900301800702
5015090030150401200105002016250400311650401501070030115101110467050640
3019003014052010306180240010403050406501401013014702100660803014060130
1601022110030130121672150400130640206080501167403040013065055040120010
6005020105011060701605050401605013064055040120010600165062010501106070
4061005040406100200600601013016504015010700301151011104669506408200400
4020307030530301161004001640201066001501021683090180566001506504064030
1140501466850109601004030128105303015011696010016304703012140550102168
3090180400180501805303012004011030110804001040081010002400104003011630
4001100801020060013011030701405148140010002501801405501021683090180163
0400400100150105040640301504050140080101950164667401020840103070530301
6540705065303015040130800804666506430012003014052010306150110907030161
0066080301620080203014020103015200206402026301001080550107650140101301

4020103012285303015020306404005070302004013015040200105002010804020701
0910630530301306602004020108050116403070164665501040415040400307080140
1030701682904008053015321406100162109040050116501024008012502100601804
0201350116504015010700301151011104664401082002006801000530301640530120
0106005012030405103013200600400104008162002904055016306466350630100701
0130405200500201400120038301120065040205064150105010700301501466240109
0070200316520080100040405301061004003030405263010053030150840040150107
0030120103061530301306602004507040540016901506800100010501070030150146
6150620070300400130404005016402030140701928400501800702304020800702200
5320306100301253016200534001306102503014006901006804020400169011670802
0040013016504015010700301151011104660401030707010406053030150153030116
1004001653066020065303011041050102164041004001301650401501070030115101
1104659401082003015040820030153030140602465814010900701200316520080100
0404055040400183019030116304070616504015010700301530301470620018020301
4052900101000103070120073012370105100660103070106400601809003010004006
0180520071805193003200600170200720301035013011080405305004065120064003
0110804053050040203070046360301200500150404055636108040514010601501680
0200653030150401308008050610004002101436017020200405120040040550102140
8200200180203011030701430015704050107003016530301306602004408404657141
0530053030121080206530205010430110307052005900103010083015010461045301
2530660200306020011070030165465612102001001840080203070050645040307038
0164030704004030140403070805068016004001305010200901004064020606200501
0100308405010504015303011300501401200830143604030150306004400301008301
2110620030153066020053030110049041003046551401030701030030202530301501
2061530516152100811650120610610040030154030204054073016501050406403011
0307065306602001030705400501020605303013075018051030513301510408510408
3014052630100108016200802050107003013070370014654140103011217007040550
4016200802050107003011502700703016301074006301300105040540040820010805
3030130600410304030702001010002520070404055040402021090400804056109400
5014056403070400403040015040640160506506504064030132001306306530840100
0302105011806207040104530164012008301436040301507040206490616200802050
1070030140546531200109025063040704001402530301501206405103070402020080
9001501470250405204050922405507040201041016402050704051041018020107003
0165646521301042400530301550603043400503063021005040400306004100104003
0153030155060465112001090501306110306506431013040500200124130116306301
6200802050107003014020304001100630646501200104100103003020103070530301
5012061525303019181410015103070162004100400403010200600164649140101004
0060401912009040201045106501050406403030510150620400306402050706015030
1104101802065700540203030370801550670060014005200105002040501100040530
3014020470646481401020817107705303015012061550670060011052001050020405

0110004064647121020010018400804052150016405103070550102060301307501804
0526301001080140403070805200330030140084002050670101210700150105040640
3015070530301108002004100304646140103011217007052700701030640010504062
0015501301154008400504010200340040015035306004105306602006530301709105
0406320088001020040301103070130632008320070130110307013063200810407013
0110307060103046451401030112170070402027007010302100504040400103064001
4020163064004005016150608120031530301402040061016701094005018050640306
0106140550630400110040041043006012103061406100103015067044006021200701
3015040501080306004030303010046441301030100130150651008010130165012030
2150506460840030250630610010608030210050405303013011004020307002015067
0240040050303010053030140130201630421050150641020010402070240050150620
0700156700600140030405011000401030140400100309501170015068030600403013
0610010604643140108200120068010005303015012061300105040270070106130010
5040302008010001080020013016400161406030120304053030646421200107060501
0200801203030150440070115018053066020065303012504061040305040646411200
6214061004040050206660301509004040050509006402026301001080203070050107
6142140510305110301506504064030163066020030123010050105030501404005050
9003024640120010260050630407040014025303015012030217080504020241200161
1200800402024120015011101030053030150404020302030401050408030100405263
0100108060103014040540050603012506306100101503020080100040060180150630
5161503016401150400301000300212007013015040506803060040301203030610010
6046391401090070120031510400610608053030151030704517014021080615040656
0805010307050020501014050180500205050408040510410110068053030141053030
1506701012101405012050670101210501070030150146381301090165200202568260
4006562001006400656200770400653066020065303012165040640030463712001070
0506120030024061451300201503060200115014636140102081710770530301501206
8002001301640016140603014650353030646351200109040400160640505340530470
1640550703064051030705303012800100066603015200101440510307066030150900
5303012501050190030140012020030040301650102020030040301640011008015040
3016501010080150403012700701064634140109007017680530301450702030700501
2064054001101060405507020080201061510805010430160020015501301154008400
5040102003400400150340015040640301650105040640301306004103046331401020
8140103070530301501206800200130164001614060301465035303064055014010170
4015014010116414710305010504064030126301001080550102060301307501107003
0165463217107701200905053030120200905010646311401010040060401912009020
1045106201030705400407050404001062006001400140620250700504040410040014
0530301203020080100010304630150102401840080203015084008015014629401082
0030150408200301530301406024628402030150040116506201013040500402020010
1000140610030424006010163064004005016120010080301404005016105010003015
3030165608050507030600210140501803060021050406306002105040402050408053

0301301026010801610080504003050670440013065404005011546274020501100080
0132006001061630600240040208081080156402030160105014626402030164014020
3016010130640202006314020400610161004004006165040640050166530627030110
5043015110830114050146254020301407014020200400105030640207040530301650
6307013014040050164030603011030116704400616505400130804624405305303012
0080100010503080200180204056164001404050053030130102605070164906162008
0205010700301501462340203014070116309240013063066020030116701091653030
1167010911650401501070030115101110462240530140701928106061101030053030
1162008001050301045301405305010240014047025040306602003011610013006530
3013010260507016490616200802050107003015014621402020012600163025065010
2002190301640205040501045134030140307050104008402050630250306462040203
0140701403070105303016306100301508301080405508020070400306405140106024
0540080200703080405201501020013013005063064619405501100080015303013200
6001050305018002004040526301001080501070030126084014618405301407019281
8055016800200165200206530301960060114016702400140550122030700461740520
0124164055636506220080010520101304030140540080640017001801020804616405
2001200601403070105303016200401301800702108040207010950605303013075014
0165200205010700303016301100405501220307004615405301030401640530306605
0191030030110453014053050102400140470250404052001241103070164400200150
1070030150146141530180100126301001030704015012001003015062002440010130
8014613405200190211040701640540901805303014055070305010700301201030614
6124020401820011670910040068002001301108016460804005014040010306400501
4040010607030580461140530120010600501203053030116100490630802004013014
0770170018080620070403061006570194610405301030618040064030150405103070
1030010004030120090050201030150620090050108002004040526301001080501070
0301400101200301400100301151080200207006540208405200660400307501170018
0520066040030750130630165040150107003013061001064609402016500406402023
0100400404030701053030164001504064030165010504064030306202507003020080
1000400601653030113015301130550140307018046084051200207004054001317001
4053010501801591200300113410080540010002405104001400501570160301130150
6200900501030580460740516100400405140016104540541716440051501070030164
6064051651167024001640526301001030705303017029501070030120103061180501
3011001700140403070301164006150107003030163011002045070504016320060017
0011040082010301704040060105040405504064605405170401709100801401040814
0161006062001503011080430160065504020405220050405200801000406400120040
5003013020504015108040530610809040306070504020015501650102200130030305
7003020040600504020015501654070920010100040010403050230504020015501650
6012001010001405040200155011510805061004004030147061040030155033013050
0404604405165116702400165304070660530501075040205220050405501021030705
0120504080146034053020090150130804051502030512040032006001104003012040

0102001005040561004300110551020010050405010120646024053010650040200150
3016401705013013020140014020506302011065067040040400101620080205010700
3016200155013011540084005040102003400400150340018301903011630407061650
4015010700301306004105303015014601405301030640130501020080120301501616
5040150107003011030640530301501220307004600153015004015010200801203030
6405103070530301200404405302100504050107003015210017050120801020162009
0050108080020013011080162001060104030801459940530140701928180530301307
5011401652002040550122030700459840530140701308001640530160704008016200
8020501070030164597402040141001400250010640202009050105303011620090504
0050116504015010700301151011104596405301580200705503301405306004106459
5405301283090106405104510604594405301407013080010503080530301301026010
8016304001005010700301680070224020800702630210305020306405504020090400
5013053030113001063062030700152001761220083017080040010400814801401647
0215040140180100150063011643008040564040050600500117001104008211002003
0122008008016200802050107003014040010100301700180459340530150040160150
3030530301220080010203070020405220050401008301167024001165040150107003
0150163091230116702400116200802050107003015012203070045924053012830901
6405400110106040550702008020405220050401008301656440840103070307501402
1650401640018301903011630407061650401501070030164591405301407013080015
3030130102605070164906162008020501070030145904010820030150408200301530
3014060245895061006018030140610030113012030510305801000130220015505040
5701601301165002301040305064706101405062001040610405501204053030370400
6040013063060200301504040770301630612002901402020029018045885062008020
4004040050201402217007030116100670080301100150220061030216301100100830
1217005601030120015030110307016200802050107003018002007010406106458720
0104100103003020103070550110302104006403011010810501103070200411002505
1003060021070104030680020013016400161406030110030600107003015303015011
6200104030614586501024030130800108020103061110306155064504053060103068
0020013011080737040260103080530301107014231013050406458540103012170070
5040402020031064020265070050404020302008010001052165040165303011070141
6210311504061001104584401010040060401001020091030161008301103011045105
1041050102140301100490401060640470250403075011214002015070406015011504
0610011016301100458350102007005040405406100103011630610800100140308016
4009050116301100562008008140308050120010030150670404006010503301504012
0080502010301150802009070016458250620040080101650120140640520801203070
0640550701630800302553011501220010053030150645040167006004001501070030
1405200905013063080458150670320010405307030400110130115080200906102001
0030150404020306814015020305141003064580506107540060105216501201404052
1001865303014001101250648310165012070011030050404054004108011306405200
1902113064057040604055070105010001140805410801612001902161704060405301

5030703651080402015020405011401080405150204041003064579501040200340301
4061003011073502030700204055020160401301102001013016829018015220020040
1210300302020040440045784010301217007015108081020052404003037040060114
0653021502009404080020017017005163011004054001046130210040060401800200
1705612001403080457750630534001406100402012001105020306524003060200114
0402010003021653030145070403070301140501301100457650101004190301504040
0502050115047040014021504001801504005301507015020801400301504001031163
0110045754010900704061021700704020103070801600110501530301130116427040
0130158030600504065104105010250402007005030140030600410068011008130125
4061002007005017001417016001200207001645745061006080400404005020140261
0083012001010002800200130110805062002204006040040400502014025065301217
0070506734004061030180152404007040040400601611050430140204001108108040
2040012109404002570012001503011030701620080205010700301800200701040610
6457350640309001013040564053014070140510806103061630407014040400132004
3020306457250102006016001650120405501605013016503301504040530210050404
0030600410040401108030610030140510307010085010700301201030614571501030
6130120010916011301170051403061001080100853030147065015040120301065303
0150150010100040060101405610302100504050620010030140030600410063200600
1501105050147040011402030801510430163030110010700301645705064706101650
1201070030110049030147065503301218901108040540011010605070761340050616
3040701405060814055070302100400505010700301201030614569501040306040301
5040105016201030140024001050110400102007001080103083090165180020040018
3019030407015016104301610307061030704004070501104003012040040705020020
3001501105070761220030110055060501070220011000302654300110003021700110
4008120053005065001305005301908065304086152002054007080066152002054015
4003040815016081510430162501605013011501090664568506304070101650120140
2173151080501043016005503301218901201030614567506507810405130640510307
0806600130801640110040060140500530301150220016301100501070030150145665
0105060840303010200300261640309005010700301200700501030110220070150160
3010049040214002017005654082006140140110606402140020530210050406456540
1041002080117005506306100106080521644005104030700165103011506100260140
1200106005012063016504015010700303016200802050107003013011006456450104
0301900301406100301104510130530301501404002002204006016504018053050040
1030703010101200601105025040451300453006524040020080206530301450705040
5012050140400101200130100456350102402001070050130115011406103011086101
4013017024001501402021306102307080101401020041140630602003015040170424
0050201403010045624010820030120068010003016564020501026105010214105300
5210802051080506800108040014024030701651101030053030150401030506203040
4001308054001020040080150130100512004008015063061001040145615010240200
8601700540513140301008303016200802050107003013011004001501021504001101

4051030701030400400170016456050102008012040540041270216501206147014053
0165012060150301200300817001645595063080110004051017045070405654011010
0301406101030153021034006010130504053030150645040670410504040308001504
0645585010100419040400502050140307050405200150016117005302100504021400
2021050640010140016140603011080202003004053040180020013015040161003060
0170014010506200153030150645040506704400140404001012001301004557506800
2007040162007005011407016200802050107003016104060403031610083012130114
0550102140680020013016400161406030115010030600140455640102083017107703
0153030150402140020301301075040045554084554401082003015040820030153030
1406024553401020830171077030165680020013016400161406030110801102002203
0153064552501040301703012200800200130122006400161406030122004408301530
3080455150624007040060104051306155040506320060010130406103018011050430
1511083014020400200100061675530301400110140400700600400140205012402030
7004550501020090150504040203014062001503014020161406170054020406101100
3040400106050140204020160505040610301301010064549506107540060105216501
2014040521001861630407014040011010604053014264548501050100104006040250
8501406150900130150900505015701603011401020045014040400301001510802102
0013057016030161008530301470650130101001700164547501040200340140610040
4005020640400200220400601804020103070103040040010400110150204004030801
1620080205010700301140164546501024030176803016520307005400408200108040
5220040530600410804001830190301163040706165040150107003011401804545506
3040704004040050201406006050400605015020150110083012402010307010095010
1502140020170054544506304070400404005020140506734004061030115214002010
3011070440054013020510500135401302010200400645435063092403012006060010
7001040610570160301406100400406106800200130164001614060301203040530306
4542506403070101306015030120050020150203065108021020013054011010030140
6101030140207040310405004020400104010405004020101081053030130100454150
1010041904040050205011501012121640010116301100501130140540038501201404
0015010215040011014051030701030400400170016454050650900101301405501403
0705040203070024053014062005430113011502030510140611085064006405011050
4301150400110813011051401630110064539506200207004001308015303014702504
0510451050408056130010005200902103070307036523010065704060103070404006
0064030701030705303015308001651655530170060040015040400101200801453850
6403090010130405640026020140260805030201073400306100830128002001301640
0161406030153030110030600645375064020810140160405400140406405110840166
0400183019030116304070616504015010700301204053070350501400110106030116
8200400315010700301260840145365065010061040610030540820061045660150303
0200101902170054535501010040040301103065303016800702110306140580070250
1040301900301501611010300530301504020507016501000105030405501453450640
3070101305010700301165170240040013061570240018020040130150405701020030

0103070201503070340500453350680304006001051080165012014010805401101003
0140610405501021080010010202200501405501021101000240307030140513140470
2504013011680304006001140802004013015040400150102405150104001645325010
4030170301103070405150308008064001210930150404051501007200656250301640
2083016214002030130101012006011050215010400141003064531506703200400402
0220010301405001510307080160150406560805030801830190304070504045305062
6020101650120140214061001073103053030140110150632001013050107003030162
0080100010165040150107003030301004529506200208040010406100304001101302
0307001080501550401701040380020013011080140640016140603011080140402030
2006006064528506200203004004020307030653080080504016100040024003065200
4012510802030803011020034003020082301402030200600601070030153030145274
0103017320050402170070405304052200400110121620080205010700301610451700
5452640109007021700704053061103061530301506450401670060040011401306110
1030016260201404055070105010001013064050534051012006504045255010540217
0070405302010306116751570060040011101030015040011015040403070170016452
4401030121700702520030028015704060104030501201200220400604020090104050
0510307010304004005303014001101704060104523401050012018013020303010645
2250650406105400110165303014702500104810128010083012201030701563040050
5303014001101203040045215063010070104061003040011018110200301801020090
4006154006404702800200130152110818010072005040140603015040530301307501
1406200155030163010303018013040060016452050650100610406100304001101521
4504050021014064020100306001080645195010504064030304001101308002001301
6400161406030110805014518401020830171077030153030150402140020301301075
0400451740845164010820030150408200301530301406024515506210040020040405
5012100400200180451450620020700400104053070302050160302515020060101405
0180451340109007030176803016520307002022005040130800804512401083301217
0070405110066103061301540064030113014006403011510805061006700101304511
5010504015520180302021510805067041045105010702006824051503676203070020
4509501030211004004010020024006016604506050405066023010450850610706400
1503108045075010401401100401080501010040040301501450650620040040400524
0400502014017005501450540102002030171077030140050120501100700450440104
0830121700705040560120010068016290405004503401083301166010301563040070
1805670060045024010408301103010002045015069230110801030100010305403012
0450040105001301401709449940610073014002003300501449840108200301710770
3016555015303014082005040130144975062009050104051306110103001030640507
0103064010501000101304061044965010704031405400110010403090803014061050
1449550640307010130405200500201502030610083012130114051501003060014044
9450102701301405501021406800200130164001614060301150100306001406449350
1040200340165012040550140515020305140530210050405010700301670240040610
0401200106004051449250101004190404005020501150101212164001804491501020

0300504025085014061030613011504004006401301105501449050630610010301306
5501448950102401302510801404001101301504040515010400164488501040301703
0110307040307010307040515020040060014100306448750108020060403015040110
3017050120550150670200805040448650105403012170070301504030101012006011
0502150103504100306448550102009005040165012014068002001301614060301405
1030704002021408044845010200600114061001515050020061620307002044835010
5201801510801650120540705064482401020020401100406706200764481506107064
0015035040162020040040204480506100200100040450340550116520020082301202
0040016447950670240040402050113010301041270220060180447850640200340406
1001306550152200170480447750630740070180103016504064004030501644765064
0320040050140202200610220024007007010501644755010240501930602402010400
1105015303011030701630704001305016447450104013066020040203010501530301
4127010301164150144734010200203066020040513650670200804061004053021001
5040080410030644725064010040050401501102002203015300923013009250406104
4715064101704020501130103010021700703016803001201501447050650340403070
4016301100655070163064004050044695010240306602004051341006102002070030
1405301050144685065040640150121700703011507080300201150220044674010301
2170070170056015030110300100010446650102405016004214060301104001400406
1021004002001804465506270301020300108040530244645010306130140201012122
0064020220040010401061010810651301530113044635010501006404040050205011
4055010214068002001301640016140603012200446240103070301701040603016555
0120220050405408200446150103060200401502015011504507050401200401446040
1020820040130201002008010151080445950102007005040150201501520200124053
0103010805150307501150144585010240301214002030164457408445640108200301
5040820030153030140602445550640307010806608040130603010064055070880901
8044545065040610130406100130655012200110530101006445350620806101050180
5303015030610010304051003060050404054003016050103064452506403070104056
1008301245300504013015701803003015506450405067041050107003012030401013
0644515067032004005103016570160301403070545070614055010214068002001301
6400161406030120304053010700301202001240064450401030703014010208301656
5301800200130110806530114060301108010700301656444950647061010700301405
4061016100130101040081627030106168006600104052007008044485068090101407
0300200703012200800200130164001614060301220050182604447501042170301306
1150180430650408200303050120501301004446506240020104051043015030602006
1030240516350640520060704060501301501506260810401444550640200240150180
1200401164020021401444450652001201008303040202005002015020306100830124
0201501034100304443506500201404020501301100202200150103070800100103020
3014011016415064442501040301900301405165012050203064051504030900140644
4150660302405108040564055070200400801013044405064301600405053217007010
8050104020034030150144395063020140015504052001050020552018015108040203

0443850630407040040400502014021564040050020061104003015503301203040064
4375064301600151080404005016501070130170030400660805013015105400300400
1401510806216201625700504080189024051030708019104436506200284004020316
7164040050155033011630600414435501040306040165012061504001101216504015
0107003014434506507840040400501130640610301402010307080660013041270110
4433501010040040301130164708007023040580070270010406101306001301443250
6200703001013040565400100024051040014005015701603011301506200900501030
5443140103014061021700705040164030900501070030303010680405501025040217
8130180304006001804430401010040060409120090170055642701804020220061022
0065530301501442950670109165303011610040018051080506803040060040010700
3018007024020305010213065402083012402040010341003011004001501023012106
0107013140306442850102406470402030550150191030030140205049010130644274
0101004006040912009017005506702400161525020040040401308057016030304 03
0703055016442650680306001080020013011080520101304040205040150307033013
0050630644253010101200601105023013050040515030703651030701504070501427
0130165501442450640906004061004053021304313012030562200800140654012001
0600150400530111630110064423506490105504020406100170011305004040102004
0502122008001403064422501020060013030130500406180306040515030703804421
5010704031405150100200100018040550401504010040050115068060114030804420
5010100601801406100165012040550156701918054061008060040060180441950105
0200400100405201013040301570401361257005040520066015103070101003011306
3080441850102104120101306501054065107003011700550402001060015014014417
5062009024001308011040084005040102003400200155013015700562009040203040
1030601030140610011030110054061001080506702008010415064416506500205010
4051700121700703014055070150803002014030804415506440054030150501204507
0457014022022001503070412008160301510111016301100644145067032001040530
7030217007030124051507006001615400600150402002201105130151015040405102
0050140644135062088001015504040517001150400110124051314030804412501040
3017030122003066020010501301100805103040650670200801030115040011012106
0640150306020014100306441150642701055301504082003015064504015030703115
0306020050402030210050401503060200150403016016441050630160400806606204
0610030620302002070030550164409401010040060409120090103070205012010301
1086110700301220604040060180440850620044001004040510307015018040515047
0610700301205010200506144075064010040050404055040150180202502570050140
1804406501024030130800108050120504061040703011045400614090301704060400
4005018014405506202004003004021700703011080402050140400403090070014061
0301402070805010503064404501020010030160102805010100200300403014702205
0102610501024001030110301100150131700110400844035064400540405501506260
8106301026030150704055064901030405501644025010200100530658015019103005
3080010100505040820030120020700507030070105040644015010100400403030202

2004507052006001301611050430151108301701400401403020307003020501618020
0600764400506102040010151030701200200606121621405400610230643995062005
9001015103070320017040658008050401801006040540061023050408200301220080
2010504030150307033054816540160150301506201050113063064398506704031014
0402001060020220040040820061102006006018007024058007027006004001030400
1320048007021006804058007021507080200611050430151108301108040540030010
7040405501021504060100508502022004004082005064060100104051439740109007
0501040010200100301504030320010307050120010030117005307501306301630110
0643965062008012052150162008601700516301100100830140513140306439550102
4030660200610083014051310400840512161306540070400403024394506703200104
0530703052100701080510100125403020153070364393501045106055018010502009
8010700301130143925064270400140401200210505015406100651021304010512002
1301100700164391501027002040301521001705012080102020090050180405504015
0401004005018043905062008012052404003060200114021501163011004020121510
3070404004361404010451240204001036306130110043895064400100404052001500
1103070150165401103070150121150436150115680200400403011001301200107005
0504051020010010802030210050401503060200114020307002064388506440054040
5200150011030701501654011030701501211504361501163011003024387506206040
4006040524058053021005040121400204051501040014014386506902006001013014
0550140307050402030700240530140405150427014050408200301130063016301100
6438550630160106405400415300240020400604051003060016453001150015015040
8200301412704055010700301520101304030116307036438450102402001010004019
0600301108065651030830110801300501050406143834010900206561466040553630
9001305004050408200303022008001402405481200300217001643825010502301240
2018090164001502100306001014040700600400140143815010240200680203050160
5013015011735412705040530163070364380506230100504030150220010301150164
3795010502001004053015020140617005150302006006010700301501826016306100
4006510307040400106400601170014020220054070501620020700400405005200659
0010307016640060400304378506220200400140401705013016203080301504040203
0307036153020316713011003060010700301643775063200600400203070020140010
4054302521502003005018020041002140140603015040307501070030164376506440
0540040203070301302601510804020303070361454080020013014020303070310700
3014375401030703017107703015051003060050306100103080020013016400161406
0301100306005040405400301605010306437450103061301305004010800406130092
4055040430011502030518043735061075400601052165012013011025050404051040
0110140643725010306130110801025050401503060200140206437150108020060401
4061004040050205011880902002070030140205070220080050801437040102081030
7030150104302140020301401108055016436950630100704004020307030110220070
1501200100515030703150143685010240301214002030164367408436640108200301
5040820030153030140602436520064013012001090400530301103011301800200130

1108014064001614060301108014053010700301530301912009043644010100400604
0912009010301104540030205016150412705040130050504052104550120065051503
0703502030650140101301130621400203011401020044004005020140150200401504
0186200201030115010861203070020643634010208103070550113001014055070012
1086108013066020030602001061213812006504061110861301530301540302010501
2003002305012014064362200104100401030705501140101007013001050403070310
6150015016150120020700405367106143612006207003011300105040302510615001
5011300105040302510130010140100306001080020013016400161406030120304053
0304360200680205016050130150180405104101400404100140251010604052904005
0161528200805408200150405016050130115010070011700115016100013023011301
2010307050119001080840510307020150306020011408016800200701501804359200
1020505040402030140670010406101330405040402030140530301504053042004013
0406101040011050130210050404020220030162103400601435830102605040530140
8053030130308001050406530301506450404055062009050101103061504040530501
2014064357401010040217007010805010403019003015011301540110100301406104
0510305164056080501162006060050107003015010200601600301501165040150107
0030130110061080600802009504050620090050103070030150405010703001600151
0307050680020070104051200400643563010260504042004010301305506306100102
1700703011612001403050104030190030110200400654702504010306504053014080
5303013030800105040643552006401301407705040302030700501200801000620029
0504030643544010301217007040530201030611008301200101000280020013011080
5061000210660150301506403090010501070030110307030102603011405014353301
0260504040510307014020103061805403090047022009040050150403064352501040
3019003012810130550153030110307052003180830901618070504080153050040510
1060510106017364351506200904005010405101000230140521901170015010700301
6435050610080501040515010072001404064055010210200630040520040165130903
0116401100164052200301621340060150107003016434950620080100010405162800
1000140170016300816803016405001301200101220506250400310501070030164348
5063020640010405220010307061650401501070030301010021620010600530301450
7014061105043015110830170140040801030050404040010400611408043479010840
5040405301401504001101108050630413105010700301403070106434620010500205
0708070106162602014025051002610614345200620300200129030203040011013020
3070010805015200590010307042016200503030900108081020030150206010130010
5014344401307013012020082301108020016330154001101504064343200109050130
6103065040530301506450404020301406800200130110805010737040240400501140
6434220010500205070680701064020104101400260201402805210904050404020219
0114064341200104100130010170014057040310307065652145040140510805002140
6800200130164001614060301100306005400110150406434041040830110306301656
5400408200200300501061695010014047025040500101000301307501010700301656
4339200109022001026005412702550113001014020041002307501050203068002001

3011080161000230541270301007200301530301960263064338410430021700704053
0506200801203016530800805040405410710640018301903011630407061650401501
0700301210340060106433750630708040014040307010640011010603015070680701
0654127050705264003013021001010700301656433620064903014001700240103070
5501540014030202100830110081063091230153030184010620230100103070404006
0010530301130010501801270020530301103070102004008015063061001040143352
0062030020068010005303015011506081510805304750550608802004001001050406
1022001003011080546403011301120031510307040203016011303010040018301903
0116304070616504015010700301541270530301200300210107003012030700433420
0102203013080080301652030700405220045070506130010140405304001503301400
1800620010804001830190301163040706165040150107003016405270100166561626
0201404050101008030040501040301900301102004004333401030121700704053050
1040301900301501640550102108001003030908030154030201306306530301525070
0110403014050104301504040530167020030012020030040530401433221090505040
5200600130110805301406155040540065011050430150020084102001050120504065
5002008108053047505200600130150020084102001050120504043317107703011061
0030165613001050401007200105412702801093053030143304107023013080010803
0570160301108050620014010501070030150113011008301155015064030701061550
4050610080300401650401501070030161525065040610130501070030115230370400
6010432921020010057016030130703020102004101406501710403016100830122140
0203013075011070030153030143284104300217007040530628001000405103070640
5220045070580081440540038530210340060114047025040530301108050631810501
0700301643272001090403015103016150501027040310530301402050102615050102
5381304020301407014020306150301407011503040202200615022005303014020501
0230470130400200401621400205040530301307501140240050401301006405165170
2400400130640020040114020401004006016704180203070030804326210200405504
0203001080304054702504021400203011650020061501070030150164055010210800
1003010406040303110301202200504040010026054030201306306405501021101000
2403070301405131404702504013011610020080400140643252105010504051030110
4510613001050405103011024003105303015103014056704400140501020200300403
0110307020022051080161002008040040013065010430116401010015011060107061
0606406401051200215215010906140620103011501086110700301618650521090614
0501043015040402030702003004324401030701030030202550120041001061300105
0403010072003019602108002001301640016140603014103011004053043232001090
2301701040603016561030053050040206010305108040206200700101316714017050
1301504061316714020608050150404020303070380020013016400161406030120091
8043222105015103016400302064005103070102200530301402030700530301103015
4020880103005040510804040080304006001140643212001041001030030201030706
5610400640301101081065610306301655303018011030615506450401670060040014
0143202001090501306103065040405301405064030190030165400408200108013001

0504030600410502030654816540140530703305303011300630643192001070603011
0801001020080655033011080100102008051080210200130704033014061020070050
4006153068504061020010030140120070050400301102200701501200100201030115
0108612030700206431830102062405103070400501140640510307090010808530301
1103061550645040167006004001501070030164317401082003012006801000301655
3030150113018002001301108050403050620080100040060106405220044082506826
0105201013040301650510068050405020098040010400161406030141204004316401
0900703011030703016568002001301108014064001614060301108014053043154010
2083017107703015303012030210050405010700301103016201030110861020307002
0431410060704313408431240108200301504082003015303014060243119108401030
0302025501130140522001100305040510200401080405501130143104105300103003
0201030705501202200280201040306110083015501405305010240010104008405608
0501108061001801301108015040011014051020050604309410702100110030010806
5504040308001504052404002008020405005303014507050405012050140400101200
1301004308800102007017046700802003003015604017001652501321015068002007
0150160501301103070150407050117001643079001030100021700705040405501001
0700503061630407014021620080205010700301501025050308010506083030545070
1030501102200103014007032005010306540101100570160301509001140610301700
5503061001030540060401200800470250401504054082005150100700150103064306
9650100606101080200300301560405016200106003011704504050160501301401601
0130430590108405040405301401650900630210050405067041016501201404055070
3080064304410530050401504014020150700116301100101012020030050101405104
1501040610654030702130170800400130610500501504030408400140615401402015
0404001200405005040320060040014065701603014030704200105103014303410270
3030401309002202200140615103070801601504065608050308018301903040705040
4302210200405504020300108030405501640550102108001003020220050404001002
6054030201306306510808030400600180214002030110606401501040014100306430
1410702501204050405064150102010306110407040510307065620010064055017001
1080506504061013050107003016180300610451650401501070030306530100102200
7061040370115400110140030908013063016301100301104037011501200100515030
7036306430040103012110070670065200801000406700302022005012030210050403
0602003030301010041001401301203030110010140429941040840102085040301075
0400580306005040130651041050102504030912301510400110130429871077021400
2030550164051314030200207003012162008020501070030150142972001090250630
4070400140255014040010300140163040701540110100301406101504011040011050
4040120010600200150301108010100301050408011501030705068060010130150400
1101108050648301050107003015014296200104100103003020103070550110400640
3011010840301511081107003015014002200640074005114030115103070150307501
1700180570300160080020013011020040020501540011015040642955064016010130
4056200155030163010303012530506826010202200450705010700301801620022040

0601501804294506427040051101404005020501505100306001070030153030164360
1620040100303013066040300303016436040013020040100301660403003016200155
0301630103030154001101504064293401030703017010406030165550153030127007
0400601801000750501910300301504020501000750101401642924010900709008670
0130115110030101406162002905010700301130115110030101406429140104081030
6550120561470550102620501021070030117001805060811051040030127080415101
0603011306550608301106400604001306429050104030604030150401050501301100
6183019030407065303011030117045040401306100506081504064289401082002006
8010005040130750428850670440014015108040203064020608050110540030040014
0151080402030652006001301108061105043015110830110804020611030615085042
8750647064004040050201040030155033012162003002161650784001306168016004
0013015201013040301405103070307504004001640110040060140500530301150220
0163011005010700301501428650103080601301504015062010301504014100140084
0014053070350605013016503301504015013080015010700303011502001150220016
2008020501070030130110064285506483101504001101216501201402173430600301
2001415108040530200150301530301147011732030700428450630407010165012010
7003011660140550107350306141043001217007016200802050107003015010010700
5030804283506230100040040203070305108016100030165012001003011700530167
0406040013016200802050107003013011006428250102006016001650120405501605
0130165033015040405302100504040030600410040401108030610030140510307010
0864058030600140640510410150102140405301650107801502001004053015080010
1006428150102400704030150404051408016240070400601050164053010650040200
1503018016200290105018042805010200601600301504040400829018040201420014
0202200240400505090010700301402050900402030700642795063040704001404012
0010500204030701013053030150140400505090050203064020463031306402020019
0211306402070406040201030704530010501506200400400604004040050201406427
8506703200400510301652004030614020100306006561030030201009501107003015
3030115010095011630110015010307040400453004030405463033016301100642775
0630407010165012014024054630364052001902164057040604051030704530015613
1401700110400842765067076104058020015030110301530301147012003008104061
0642755061004001016501206165040150107003011501035064274506260201016501
2014025065301217007030151007019040540070060018010453011030701040703011
6284006018040515010458046405001401642735062009050101304056107600152006
0013012170070306110504301511083011080107600301217007040510010700503040
0160850401101108012009020090181020040510307015030602001804272506483101
5040011012165012065610040550404300165405100306001070030153030150116200
1040306156100150404300150401630110061008301200101000280020013011080162
0022040060180417014018042715062008012052404003060200114021501805201013
0403075013015022001300630163011005303011301164270400130140580306005040
6405104101501025040306020030140540013700142704640500641705100701903050

0405100701904020400200700501301008016800200701501804269401030703017107
7030120010410040020307001900808681021904021105043011406030115010761520
0401140603020108010861650104061010804001614060702605051800100804268501
0701019150104001140030110015200206117069110400101800200130306153030110
0805016004105614060301103011064006014050042675010301016030301660401101
5702200110801540016100115108020041006151080202001261510068050401060162
0015108030703642665010403017030122002030700141450153050630703400650104
0610108080020013011003060010700301250620080204003040205010130100426550
6504040200101000200314053040018301903011630407061650401501070030150142
6450620080120405520060013012405651207301506400610130501070030142635010
2020030040303030106656200801000400601651030116401010040060180481653014
0205301140501103011086104020305004020030021501140501301004262506304017
0150501304070180213820501026150501025040620010061505017001108065103011
5067044001404055020110801502630100163011006426150670406010130405804052
0050020180020070180120010700506120010300242605064030701040610030110220
0701501200100540011014003090802140020425940108200301504082003015040301
0750400425840842574010820030150408200301530301406024256506200801203012
0301505200606006541270108040030600410010400301530301400506015060121612
0014030405501401014057080501020104030804255501020200300405215020140215
0200802065486530301215040116301100150601216120014030804254506107540060
1052165012014040521001864030703015040405450701402168200804001501023012
4053060200405400131403080425350626020101650120140405507010501000114080
8002001301108012001500165610043001640550402005002011650120405302100504
0501070030152100170501208010201620090050108080020013011080162001060104
0308014252506200205040053030140011011018054001101402010200106425150630
4084002030803011030706151030706402020064901080531815103070161000302400
3067080150401510804020306425050630201400155040615504016220200400304017
0501301402030307031070030153030142495063092403012030150520060600610083
0121080010053030120040113170018053030150700121301510121040011050130660
2003050120140620103070909010050403050404055040620103070150909010050404
0550402030210050401306020015030602001410030642485067032001015010301802
0501080640050614054705010700301800702205010200501401801008530301470650
1200290180424750102002204004030110650040601028015108050104301600405053
2162116306004142465068200404004040050201402610083012001010002800200130
1108050682008040040400502014024020307004245501020080120301530301308001
0203070020110103003021005040670450502050403030215070163080016301100530
3015064504042445062020030040040400502014050101405303010100405004243506
2003601020015030110804050040104083011080424250628601030601306030164051
0015070110803013010001301700142415064030701080660801503060200521503060
2001140262140020301216270020501070030142405068020090101050153030140011

0110805063041310501070030110301200400403014239506201080502053030610010
1405018012004011080010017001804001040106101081010700301654238506301007
0400402030703061040604013031161000302400306302100504010806400105040402
0504061600610300165062040030405004020430011610003024003040500130809402
0320060010405005100307050404050058095050404050021200400504040201003060
0107003016542375010403017030122003040306015014002004016102200504040015
0102301105013140305303015064504050670440050107003014270150140010550105
0130100423650104030170301220053030440830150104301530501090306004056704
1806513015301130108301654235501040301703012200530301202001240080402022
0053030140203070040012109301504040201007200640202006905060818040202006
9061502140603016120012001008002001301402030307031070030153030142345064
8310530301400110121650120501070030120806102030700204233506208064001050
1806513015301130103003020100301600402022005303014020307004232506200203
0010130601503012005002015020306601503011030703080080670030530301501120
0902402001550301651080165020604003030103030140203030703107003015303014
2315010200600144050535063060041060104004127050705062002204006010501070
0301501402030234006011050670414020220030110064230506504061013060150301
2005002015020306151080210200130510400130570160301501422950620020700400
4001401301030100106040301130640018301903011630407061650401501070030162
0010902301610407013011064006010140642285064030701013060150301200500201
5020306601503011003060050402002201800200130164001614060301100306003042
2720010902301701040603016555015303012700704006018051010003012240514020
0220130140520064901080501405140015019306020010100025303014001101108050
6304131050107003015014226200120213016103007030122022004408282606202507
0030200801000400601610085303014706501200290180422521230130110306130102
0020700610454224214002030130101012006011050215050020061610453011060640
1501040014100306422320014301660405306550703030140530640540020070070405
0104030190030170805010130406104222415300130140610010406106110504301511
0830110801650401501070030161503060200200905050301501422130130800108013
0150102008012030117041406167041801630110010302163011004001501023012402
0306020040201040014002040040306116301100422021700703015040140610150708
0806001040202200167041405053550760030200150301108050107003013011006421
9412703015010240208410053030150115108030201501162002204006015010700301
3011004218200150301504012109050150705065010004040400501305801702400402
0301502015011620022040060150107003030180708003013061001080200150301108
0506318400107001642172170070301430015067020080301163060041570160301406
1004004061061103007061641000151030705068002007010200150301421621700703
0166050670200803012100186162002040140400110106053030151100680421541270
3012200109025303015015303011030110200401800680164020303061001140506200
2070040060804214200150301218901405501080200604030150165303011030115042

0040501652006001301108013061105043011080567045306010305103011050506704
4001405014020031304213200180100030171077030110301402067041150164030705
2103060103014052202003001653030122008020130105050670440042122001503011
0301105050670440065135030110301402067041103014040610011064211216082001
0100021510805061007200105503301506306004102010306180504064065610500501
6120020700504018301903040705040615305004013011073101308051010603040705
0404210200120010030120014105520060013015016701400401105043015110830157
0051405014061001104209413002003013010260402045150670240014061001105040
1107003013011006420821240010801301506702008041020140630102603015070490
6530407066050670200803050107203070020612700120550900130105016106064053
0110301703091804001614060301212601420721260130110003021103070301820090
1030502150140151105067020080301100642062001232002204004023010030201030
7053030170291020307002016504015010700301450706530301450701400100402002
2040514001501930602001010002530301400110110805063041310501070030142052
1400200408020060406550405303013080010203070020130660200547025040530301
5007021050304040030100203051700110400852402013140402030010804040030714
0804001501023012302100504080606104020134100306420441550405301408053030
1303080010504064090170504053030150404020301405010200244050630640040610
4203415040030140610402010307080160011050140610011064202412703030140309
0041020010530301140640547025040501070030164640500641706865040610021430
5004042012178130140610305004040201030708016001105014061001105040110700
3013011006420041300200301301026013014020104511406102001140130140201020
0114050670200803011001501350153030160125040150200905010504080800200130
1108050102005190040610301203040301402030406100110419921700208020060406
5504010451013053030150140204701010700301800702402029010110041902010501
6527002051030708012700120201050164020220050404001501023012402013410065
3030110220030610010501130320050630400100400155014010140400201050670200
8030150405040640303200301100641982160830140610250406101302002204004030
2050404020220061022002400700701050110606403011006419741608030180020013
0110802005900105016140205010430421050180160011050152200704103061060640
3040010011050620070050670200803011006419630130800108013015010200801203
0141020140640516050161084006016570401650401501070030115021163040010011
6301100150450705040100830124051314030804195217002020081601630110080506
2001100650140156506702008010301419450102405019306061504001101210606401
5030602001410030641932110070301410430010610055015303014057006001801620
0802080400150102301240530602004051040014004005012040550122030700419210
0165040530301504040530501201406405265070025303014057006001808002001301
1080120015001656100405504043001405165012040530210050401650120501070030
1521001705012080102016200900501080800200130110801620010601040306141912
0010902301701040603016553030150110300250680010010130550645040506704105

0107003016100830121080010010530301641902006490301108060040014065010701
3015501016004030701041897019107010803001306401040850405010403019003030
1405010409001202003150830110430263010030170015807130140610405200700501
6418821608301701020060530301501406103014030900130400260201402608050302
0107340040610301418720015100301481630153030406103012030403015040301030
0405504053030110307010806001013050672001240540610418610013040030140610
2007005010305412705040130010504010307052004015040862003011010030103002
0070301670040013200430170108020041855062008012030152002063065010430153
0501090306004053030116704180418421050105040130120020700400101406110072
0014060301504040203030750106540011014020102001010700301654183200102203
0110307030153030402083018016504064005220200300105016404002008020548653
0301107041700155012402030700418230102605040362006001030130580150265070
0215080200400701805010400505001150400101081650104005050011504004011502
2001630110041815062008020400805014010130110301506704400700140206080501
4020400100405040200220153030140010040305064150101620080205010700301501
4180401090070301768030165203070065400408200410080700104061040011010603
0110040050406400110106030140510064179401020830171077030140050120501405
4001102007006405316716405101215040830905040640540047061040030150470400
1503405306004161502200417840108330121700704051006203010260167024001616
2140050107003030200801000180140307065408200103003020400706061502200165
0401501070030305062008010004006010652506504061064052200440825068260105
3068504063002007030150630408105010700301417720015030121890140550116200
8020501070030110307020220040040302040010082030700206417621100705012080
1020804054007006001801008301521680084103030912301216304136567006001103
0405306602002540130204004056405470250402178130168650406100405302100400
2700204175413023011080405230100400202002001000101308016200802050107003
0113015303014001101108030413101404174200109040301510301651301530113030
6930110700211007030141043002640030130211006250700301200801100041734010
3070301710770301530301504021400203013010750400417240841714010820030150
4082003015303014060241705010403017030122005303044083013010100610083012
4055010210800100640522004408250682601030020070301306850405010801852010
1304030110200400641695010304017030120031407050801300505001085503301504
0162400508002001301150500200616547061501004901070030153030440830116301
1006416850104301600156306004180404002940201030704013060154005076004053
0301100615216214008400806156131700110400812004075503301103014052200161
0040015010700301100106064167501020022040040301106500406010280151080501
0430160040505321621163060041301010041665010200801203011030702170070301
5403020400100850203061030216301100170054020406101100304020506200700501
0640202200400110140201030705063040010402050403060200402040011040301154
0050760040530301100615216214008400801561317001104008120040740505310301

1620080205010700301100106064165506307080101402403070165640030407014060
8050302040010806641645064030900101304056100830124055010210800100614530
0301650101025030121036214002030170800661522002006502800200130140010020
0300164163506200900501040110100405170018010200600151080600805040500530
3011300504013018002001301108050406400161406030110805040100709080200690
3011080600805064162506202003001014070103017040065501826055010401024001
1069404001614060301654011010030140610540080021001701040380020013016520
0410010085303011620041001406416150102002013003015040502064270180530301
3024160501020060160030150405050620400306203040705092810304002020030015
0103020302100504050107003011030162010301108614100306415950630513301151
0142701105062004014005303012001010008013010041585062006016003014052010
3061530301400110121620080205010700301680020013016400161406030141030110
0405304157301020610300302010307065610300302010030160053030141565065078
1040513066603014056040101304054007180402161004001501070030153030110350
1064155501020022040040303010650040405053108060103015466040405563653030
1103070162700205010700301102004005401101003014061064154501020080120301
5040400502064002002204006016152400270020801040011012040013410010302415
3501050608403015040506201805200201030501630217007030110200400501083061
0040061415250101004004030150404005020301050145530301501630306100400614
1515010200600160301504030400502050165303012503108040092008014010307014
0020060811060805030610040050141505062007030040013040400501654001000221
7007030140201040011050130210050404020220050404020103013075011405060811
6702400164149506200905040013040500217007030140201040011050130210050405
3016403060164020220010301162105016414840108200301200680100030165550117
0104032650700301200801000105303015015303015408200504016950100400130405
6080501103070168020060150107003011041270110301004147506504061040610030
4001101302030700108050120041001061300105040301007200301960210530301501
1640307010403061414650107370402405140616260201404001101060405210901060
1306550401640309005010700301616260201404001101060405219018041455062602
0101650120140405507010501000114080405302100504050107003011530110041004
1445064030701013040520050020150203065504008010530240307010307054001040
0611405013011001504054070505150306600170014050015017042008005016050130
1604017001804143506107540060105216501201404052100186162602014040011010
6040530142641425062604008101650620104030140530301504040530142654011010
0301406102170070301660504052164400801305704053050040617010403800200130
1108014016403090050107003030501630641415068030400600105108016501201401
0802041270501024020840040050154153003016210100030140301708002001301640
0161406030120091804053030130100414050620030024006010405170015506450405
0107003012002070017001652006001301250650406101305010700301263010040071
4030015486530301200207001700164139506703200400510301405008002001301640

0161406030120304053017010403570180300301530303010041385063010070101306
1101030050620304010130165012063061301001708030053030150645040167006004
0014014137506200208040010406100304001101302030700108050110406040303110
3011020060013013060200106400640301151030701080010010400301206040108015
4015040108040040400403010400301615400640501086080501301108064001053030
1413630102062405103070400501140615103070308001014050180308005040656080
5030801044005150408010083012601503030214002030120103070150307501150141
3540101004021700705103070308106510760010217007051040011050404134506403
0704008066080304017010501402040050120401030701630407014061001103010041
3350630206400403013020640010510307053030110260830100540040820040012060
4040505305540820021050412001615200800400180300120505305200800253030110
5041200150153030150645040506704400140404001012008013010053030150306100
1030800200130164001614060301100306005040405400301605010306413240110040
0501107007107702530301601030130800405040530140805303014510504064131415
5040530140805303013030800105040655064504050107003012205068066001065427
0801202530301601030141305063040701016501201070030150608124052003140510
7310616304070107003011660140550705303012008020103041295010506084030117
3203070040522004507050613001014040530412850610040040301405201030615210
0490610049030121310700301641275010200801203030106500404050531080601030
1513700110049030122700206530301103070270020504040403090015040804126506
4090400600400402022004507054011010030140610402050140500412550640010404
0550164001040205014124506403070101304052005002013025303044083011305004
0501106400601030530320030140306013032006506602013004004012020030051080
1303200130500405303012200800412350610040010405307030367010700200101000
1102200701501200100412250620020700400104053070303050040302050405012001
0030117005108060150303015022008004100306412150640307010165012063020022
0152006001301217007030611050430151108301108010760030153030140510017001
8041205062007030010130500108504021700703014051400180405302100504050107
0030127002041195062602040040400502014016100670050104030190030303010100
6540110100301406102170070301660553621010040010504080141184155040530140
8053030130308001050406130010504052104510530301104520307005303012002070
0103014052630100640546303501030400405004052200506300600105010700301463
0355040200703001004001050150040152130040040121400205001048301506081307
5053030141175010240301308001080201030615303012002070050404052630100510
6011003030301068052200504020065010307065804013060130305200490530301820
0300504080141162123013011030613010200207003020307001080501140198530703
1040500120080904051200400803105104050055016301180304006004017020075232
0060010405008002001301108070102150105203060801401406030150403075015303
0150120040040301411541701040301530301803060010130530301470620015501301
1540084005040102003400510502408020010001510068050408020010004053040522

0016100400150107003015020304114200150301108050407001005040040050180121
7007030154030205103070100850408014113212301301630614052010306165303014
0514550107003012010306155060815067024001080306100301506704040060105010
7003014112412702003002801020030023014053053030110301162150161564270105
0140061000193011625040031501070030164111506100400180412701105412705253
0301806600102030700303090040540084005040620015030150403030900405100680
5040405304110501024030150120060600301652030700130154011010030140610405
1030516405608050116200606005010700301501020060160030150130100550645040
4040010300140164270180410910501045301903060040427015303013010041084010
9007040610217007010220040010907050180160011050130100410750104030604030
1306150620150130400200401641065010430153019030600405303014270150140020
0401105013010041052160820010100024052003150620021903011080610140501570
6016530301800200165506081105043015700510801650608150107003030402022001
6100400116504015010700301412701103010041042123013016306120020700400101
4050150640307010130501070030165064030701050107003011064006010305301005
2200540820063200106520060013012007008101401011006143160301030301150140
0501100655040141032001503012189015040205011301030100202008020270400404
0030100530102605070308001030141450153030307036302100504051030167041050
1201401060505504054070505306600170014050051030112105040522001704200800
5016050130160401700164102200649030140017002401030705501506304070400404
0050201402402010250108040207032004040202200103014050010200600120076520
0716200740013064020305800200101620020300400501620080203015412703010800
2001013064020507010501000530301501801620080204005014101506802009040010
5018065130153011302030403015304020220053030140203070050013050040014030
9001080100306004702504011003060040204001540150692108040201003060010316
7151050140500401705013015040402030307501615367155040307034050054816608
0505040402010030600410020018010003017107703016513011040604030313010200
3103020200401003016604030030120060060630103030110307020015503012006201
0620015503011030703010303012006201010083012800200130164001614060301100
3060040992001510030148163015303016555018260130010140100306001014040108
0990130143067006004001050153030141200163040982001802027001206550401045
1013053030150150680304006001051080405140108040550102402081053030150110
8030753030110301150622001001030130140542705014011030615506450401670060
0400150107003016903016003015010430153030130140975010430153019030600405
3030142701801008301221400203012010301150307501150140964010208301710770
3015303015040214002030130107504004095401082003015040820030153030140602
4094501084702512505040307040030640935010403017030302002070013016550140
9250108030204004030150401501140620031504051030704020301601140301004091
5010704031405504020702400504040620504040505350130401304090306100110083
0161008301803011004089501090306004030140550402041270130140885010704031

4055010610001302040077028030110040874063070403014001006301406101030140
8650102009005040301504020501803011004085506500702104061010301105020090
0501802200301100408450104301406101030110400507030201030705016408340103
2002050180155040320060018030110040825010950405400100306006200150504010
5040010030600550402001060015013011004081501030170301504040050204014002
0022040060110410240010030600140304360400501207050401406010302111030110
0408050102008012030150405012062002204006016010302113014079506704031405
3020520101304030143608040785010431605301670100801086200504051080400600
8050654001066017001804077501095040120030021003016001050152010130403030
2022003011007001407650102402001070050150114050113011030110861050140755
0640904006001070011030701301130403012403070504010305012014040745068002
0070405507040400501407340109007012506530100407220018010003017107703011
4055010214068002001301640016140603012200407120015100301481630153030113
0153015040140620070050401501140501301004070200150301305140901600400100
8302030700501406920019021301405507040010001740111020060060405150700600
4001406820012003001301504040547050150201301320010200501301503014016301
1006406720015030110801807080012170070547801700515030404100504015022001
6301100406620012001003016010280150305640400404100404005014020212820040
1304040050130216301100406520015030163019040550140521282004013040207040
4084001004036801700540643167153020300504020060016406310016010006401040
8561006700103080170054062415403016010280155063090104050534061214020030
0305010100019303050161700540604180505040530140150100720030170055014059
2160830140610305064706400140170054058212004001802009301400120090110040
5450706405721200300652001050020552018021510805067041015108050101020400
4040562162130140530584008040504704001503405521405060830501010040040303
0501620020700170054054200110600130150403020630802030117006706010301630
1070140601200207001640532001106001301501080990403015040301504507040550
1640522001430110200207005903016002405150903060011501405120019021301610
4101301103061261007010610018601640105120021150412702002070016405021615
5014270301407050120021905150436150150050840013065222008001801500100080
0204102700600640492123013011030613010200207006150405408200405704040530
5004065305153015025664048212003006420012306040010004017005203032002800
2020014047217007062905025019103003011050604010501522001041507001261011
5042702002070016404621405060861080307301504507053050164045216082001010
0022060401615050401801506197017005404441809013011080501050200100405010
2006001640439016100061502302050109110300301640422190150010816002005200
4012102003400810200301530150200600608040412156301400501205011047025040
4813010100025010130120304010302561030200801000122003011004040215014050
0146035106020020103070150101003016501401030601504008041003064039100150
7013016100660301218604010080980103070156420040382138301240020016400104

0081022002002070050702001060030128400228110501301100804037411033014001
5080190301103007030125103070800200707001403621615501427030140705050140
1030604661430150256640352123013016306120020700400103065400110116200241
0302020012402010301515030750121400204034200138030120501010040040301307
0350401800200130110805010460804030120400183019030116304070616504015010
7003013070350401403320015030150401620080205010700303030106801620080205
0107003015090020307001309121405501021406800200130161406030115010030600
1406403221608301406101660501402410430021700704053053030130102605070506
3080010501070030150153030130102605070203080010801065301702400400130610
0830126015030150102402081808002001301108058010306002015030703150146614
1104031214050608610803073015045070530501620307005301502008010008040302
1501617020120020060065220020080100040060180515040080140501466145090064
0514030103010064001830190301163040706165040150107003011301800702103070
4058007021010002103019306003015040120010500205016531705010301204003705
0301660220403090041003030110040292196003011080105077061510503080201301
1008054816537050103065370505067060400670604005301060011700550140289120
0903011660103011504516993004001306100830121505010240208180800702103070
1508007021010002501409060080600400130163011004055040707808046614103070
1630600470014027212008403011620066040070014090600301125020140013056402
6219600301309080654020830151501040016520304015044300640252161530302052
0063008402001093016402410012003001301610300703012508260105704030123301
1502006006015014023216155014101301170046614150427020020700165063061001
0140103070200290140222160830140610302100150910015030303701502200163011
0064021100168050401530140548165810901301130652009005010140640202110070
1008803060200301270020130130205014019217813012010306152010130121890169
6304061006464050064018414006130167005067020080641706865040610040530210
0400270020401721781301504040675402030150514045034016212601301108016100
4002001030801405501021406800200130164001614060301203040405304014015215
6301710770301202200540820050101760040545070401401421700701610067001014
0303021020020700504020300108040530215050102504020020700301510307030750
1140131001304006001130117005501520060013015304030110801700521507040601
4040124120010103003017005501402040053011030701620029016163004015014055
0401304030110030950164011213701030030170055011481615301553013013070314
0102170020200816017005506200801203013011006405504020070050404051350116
2370640099015040501084001306164150805020010050404053021005040150203051
4020400810011003006577010801620080205010700301302400720020700301107005
0120010030169040064010820030150408200301530301406024005501040301703012
2005303044083016400450103060200403011030704013060640035068090101407057
7030122002022005018260400250620090210806608020090216400150108104008405
5070306400640005010200700504030181290160804054008160230750170018039995

0630370400601015021700702801399850620090210806608040520090216399750108
1040084055070306400803996506230110003014053015045035016399550620069050
4030140530405501399450103060200403011504127030150400403020400100260410
0306399350640307010806608052162008020803992501090306004030153030141270
1502030399150103061301504012002070015045070501630399050630610010301650
1205016398950682604030150850301501639885068019030150850301501639874063
0704040110040530130115040140639864010833013019065504013013985501050400
1802510307040400501140398450642704001406402050180398350109030600403015
3030141270130139825068090101407053030150182603981506200800840304055015
5033014004030704100306126050550330150102655010216307036398050101004190
4040050205014020214002021640018039795010240501930604020304013978506200
2070040013080139775064020840080102040203014039765010502301103070400150
2301108099013975506270012030405501653030143063974506306100103040520801
5040405501130139735064513004056150015015201013040301150100306004013972
5065023014053064001502301202200301405400804006018039715010810301405150
7040040801650401803970506410710618030151014010301515030602001639695010
9100105040520033005103070150400250163968401010060656120070301251507002
5080396750650070210406101030155092108050023030396650108260403015040501
2055011306308039654010304065640068301540100400301803964501080084403015
0405012080405160803963506830040301203080301103011002170013962501030602
0040301504030605061050163961506301007040013080130103030126396050108290
4040510307050620040400304020501639595010200600130115020040440500395850
1020021100030110801763701301395750107040315305165150103507001395650103
0602004030150403019630501639555010504064030115041270504055013954501050
6084030110735020307002015013953501060110301103070401306039525010200600
1301108051030701502020040063951501090306004030153030141270130139505062
0080084030405501805627002080394950103061301402010121220064020220053030
1394850101003016003015060815062007004006130702506704400139475061004004
0013015406100303011007001394650103060200403015040306011030150163945501
0504064030115041270504014055013944501050608403011073502030700201501394
3506200156106064010307040130603942501020060013011080140510307015020200
4006394140101004006040301912009030114051501045639405010240060403012140
0203011405150104001639395010230110003014051650120804051502009050639384
0109007030122002030150401405406100614051501035063937506200156106064010
3070150504041003063936501024056080503040301900650608401405400102007005
0406100186011030706510307015020200126393550108301903015040110250100186
0125150200300263934501050406403011504127050405501393350105060840301107
3502030700203932401051200211030704013060393150102006001301108051030701
5020200400639304010900708270025150104806392950102403011302301653017005
5013928501050608403011073502030700201501110620030140010049041003927401

051200211105015150104150639265010233030530400614030601140308039255010 2
002190301504053030113005011050434006020040640014030708014002111030110 0
102004001700140200900501802082700110501401504030110801020011050110502 1
103011001070603015704010003021403080392440103084013010002515020030028 0
392350108301903015040103025220039225010451060102200103012517001050130 1
100639215010308060130140515030703801410205216412001803920401083301108 0
561003018015011050253016502116301100391950630407040014064020100306005 3
030163918506400850400140506427040013011003917506807105103011630210018 0
391650104010301212200800405103070100012008039155061009504001304020301 4
039145063020140013013011008040540053011030110001200803913501020024405 5
070163064008039124010100601050130110080391140635030110805200900502009 0
050803910501040301703012200240205090014080390950641020040053030150645 5
301120801013908506427040017001405406100651021303011007001390740103060 2
301002522001370013906401051200213054007010300504050163905501020060013 0
115010020010001405003904501050406403011504127050405501390350105060840 3
011073502030700201501390250104030170301108086501030704013060390150102 0
060013011080510307015020200400639005010100123014055400102007001503070 3
638994010900703012200203015040530516515010350638985062103403014070503 0
808650150141504100306389750109030600403015303014127013013896501020070 0
504030152100170501208010202009005018038955010200700504040510801503060 2
001410030638945010306130120050020140530210030800410030638935067020051 0
405200150011030704058038925010301800405121168030140550138914010833011 0
301304057032004050140500389040104085040126300301510307040530501405003 8
895069230115504050610301408015504050630201304055018038885010911030030 1
606200550120157030938874010833013090110803200600400520033001550138865 0
104030190030305504008015150307031501388540610073015200330040113075020 0
106002030700138845063040170301304070103080170053050040303883401090070 3
017680301653017005501388250102700704025085014061030613011504004006401 3
013881501040010402508501408013880501020080084030150404005020301022005 4
070501306306387950104200400304004205015303014003011003878401083301166 0
108051200807030918038775067030940404005013053011003876506501044030150 1
114019007061212004001502061504004017001138755010100490403015040302050 1
130610010387450102001001030501201050140550403010110030110038735063016 0
400108007021030704058007023021001803872506502040800102505501203871501 0
708020093014001200901100405450706387050680750101550704051306306100015 1
080130386950102200130030305700301800102386850107040504060120240510307 0
801910386750103021100400402002006010307038664010705030140015031080386 5
506402002040405652016803864406307040100720040530201030613863501090306 0
040301530301412701301386250630407040040400502014013015067340014063861 4
010301301217007030161001017003040205013860501030602004030110049061008 3

0121330238595065034020070130030150400530162020014003015010150630610010
6385850620022040060105303011301530113040530301010017001165012040550138
5750104020034030123070805020307002015013856506202004003004021700703011
0807001040610405501803855501061100015020150140201501061000180385450610
0101700301501150220030610015010307010088038535010100019140610040400502
0302501930605040402010307015030501201406385250105040640165062040040303
0216301100385150104010301507015050640014004040050204020501163011003850
5063016040010800702103070405800702302100163849506403060400604040610301
4053023848506200901504001304020301403847506306106040405501405680100638
4640108330191200901030140564518053030150645040384550642701016501201406
4053167161640309005010700301162003008138445062700204005240400502010700
3013090803014061017005384350104301406101700515030106110163011006384250
6200900501040517001805481652003710514050180384150620060014404005016407
0503010038405063061301150612161383950650067024030150111401900706121200
4001502061504004017001138385010240200860130117005501163011006383750620
0600604006010510116120017001638365062002070010130162002070017001638355
0620060060106400237030238342713050109504040515010030600150115010030600
5040401110030600430014051405400804006018038332100150021530057024001805
8096003018096005040130138322901621700704053061200684383125013302050405
0680700100106103070130113040301103015067040601013038304200140501910300
3020504019008086382922016203015501072110504301140603011501071501382810
0200130040301220061405501021406800200130164001614060301220038274816304
0205301501382612002070040011030140030180382512003740012003173018038241
8090400180190301638234010820030150408200301530301406023822506703200400
5103016103003020400620304054102107003015018260803821506201080502053030
6100105011101030041200117001520040114050138204010307030110013060030165
6103024053050040100306001050110307020041100280020013016400161406030110
0306001070030160103061381950641006400550404040050117001801200150200800
6001301200330030150404020303070310700301381840103070100306003020265652
0040306115130050110700301151010810301003817401040200105640190070301101
0810504030110051003060010605061305004015030220080063816501024040109060
0651700180580950504051501003060015015016050130120010403061381550650307
0101406506200601014040307050150140530610020507810130803814506200800840
4503405304056405200905050670109400601013038135062009050104053070305530
1530301506450401670060040016381250620020300101308012200130040670801504
0151080405306381150630201101550406405262020015504080405301515030307006
3810506203014015304058014017050115010410140030407014040405301501003060
0150116200104030613809501020080120301103070306100301100810611085012050
4020070050103038085010240501200100620020700130165501530101000250101406
2007030030151504030701406380750630100701013080110030600301108056020505

0520040705050406380650670320010130611080040167019400601140804054005012
0401030704051506006040301300506306380550620090210105018091200903011610
0240060180405501070110307015060409301300506306380450626020101650120140
2405303200145300400640510410115040302040064055168011030704040060050406
1030138035062008020400404005020140240610301156309013802506470640040400
5020104003014050535700538015063010070400165062040040308011200105002013
0234020504030800141003063800401010040060409120090170051050642701501637
9950102406470402030550150191030030116427040013050140411050211040201030
1457014030137985064020034030115101406103011671400401637974010820022005
0401306100401306037965067041014040530655201801510804053037955061020400
4020101200130110307030130900108040531671640537945065201803010003001080
4061030155033012189015013793506304070400404005020140130150673400130611
0103006080504030900400130406103018037925062008008401501043070104034051
7001805481658109013014005012050137915063060200403011004906504082003014
7061401700515041002004050401505007025040150301061101630110037905063060
5010405220010301500143130150404051700180200690301108060080506378950670
3200104053051103011306510906400506701094006010130803788506409060010405
6405700600140054816581090130150620090050101403787501010041904040050205
0147063011700510400405063061001063786501024030130800108013014040050150
1540709153030113001063050404070950116504015010700303016200802050107003
0130110053030140201007200140401610080501405303010100170016378550108002
0070401550701650120130140522004001101504051015040405104001400140637845
0640820040040203070304020803060014064020104101501021401610040014053030
1010017001637835010810301170140040615040540820013013782506700100501040
5130640530600102009013080405100200100050130050501637815062202001014053
0500405040405301501003060063780506830040301203080301108040540010200700
1503040815014053051016377950682601020308010803020620015503011002160301
0303011306200401003012020044005011530101000250106040300301130377840104
1003015063200703012041701040083071504051502004100200401003016377740103
0703017107703012001041004002030700153020010040060403010200340060403003
0163776506403090040405170018020015503015504060030605030103030140530510
1637755064030701013014040640560805015040680020013014002504001404015302
0316713011003060010700301501826037745062002030010130801405104101540030
4070140652004050050401630201103037735061070301504015108015020038062150
7016301060050504040015031510801503070363772506302011055040801281550401
5032006001615150101081540010403018002001301405305101637715062008008401
5010430701040314030302050163770506703200101304051030140550150620010030
1504040530210015020305140201620010403013769506107540060105216501201301
3066020050404051040011014041270301103070520060811037685064401600405170
0180548165810901301400501205013767501030750401502014061406030150404503

5040547025040540610010307015030750114063766501040200204030150401050307
0361022001030200801000140237655064030701010406100400103011030110055033
0130600413010100376450670406018040202200240050401105013763501024030130
8001080301700110501376250670010050101306110103004054007018030010507050
1000400130200800250408200301504200105015530155064504070060040011376150
6703200400510301610502009801070030142701130103014063760506440054040561
2003140203016010130504016702400137595010306020040301167024001406100110
3011001070601030320055010440301109010015040136375850680200604040610040
4005013024040020020700501014020704040202001019163011003757401030121700
7015040402050604010306402050403200503016540050400403050103040202150200
1094001501163011003756501024030110001302301130115010307014063755506306
0200403040201030115014030701015022001630110037545062700204001301404005
0150110300504050408200301307501140615030500402003002130140400501140163
0110037535063060200404020103011501163011008050030150021507770801405627
0020805010505001405103011503060200170013752506306020040301151370015102
0010030121890113050040405302200800163751501024040140110805150109081103
0030206405200150016164041001402400205061040064030110108505085015013750
4010200202003165200801000402520030028021010003012504082003011030060062
0020700301702400150402007005040014050137495065040610130405200700504004
0304014054002007005011405103070166063748506200902101304058040515010300
1000180146040580306005040614604051041015010250401503070363747506840100
4040580501100700130110301105801301301000140510015070110801503070315013
7465065040610130405804052005002011030703061003011008410030374550630801
1000405804056121200700501140140610020070050400303744401082003017107703
0130107504003743401010040060409120090103070374250103060200403015040302
0501374140102083015012001003016374060103739401082003015040820030153030
1406023738120010902541270250120530301501804053031131700180104060403031
1030140520060061050203065214504015200590010307020200400140162602014026
0150301530301700600161063063737120010410014010307050120550180020013011
0801306400161406030110801030050405737010305303015012014065610040550404
3001165012064053021005040501070030152100170501208010201620090050108080
0200130110801620010601040306137361301068400530301400506030434005030613
0104240053030140050603043400503080501030613014005060130150620090050103
0580530512130110106030120020403011001081013061010603012002040680020013
0110801200122040060137351200680501301405417140200107005040513140308040
4013011048150401045150506201030200107005040513501030405501401014535303
0121640601001637341200680100014010308501205501547025040481504014052060
4015011400301750103061306740050180020013016400161406030120604010530301
5013733120062001000130118007024058007025064030190030147010501302550404
0050102103070405801214002040515010400140140016140603011080202003004053

0401800200130150401610030600170014010506200153030150645040506704400501
0700301402012020030040400101200130100373212001606001301405200802050102
0080120301410710130614001004013014052200450704052008020501020080120301
4107101306520080205103070802008020504080800200130110808010130600402030
7031070030165373120064903014001700240103070550180020013016400161406030
1210100040301705303015013730200109050504050104030190030301408016100670
0802001070050301402013620020700400504051080200207004001014040202004070
5040306130407050150201070030120010100018301903040705015032006001150220
0151080506600200990104056372920068020302010735020307002015217007050404
0550708080600101306164006401080405103070108001001013040505320015040530
1620080205010700301637282610003015108015060401013062905015108015060401
0130530800805040540110040301200141503081107003013727200620300200680100
0301502200501507830115070257001107003015303044083011630110063726200102
0081510804056012306163063062570050402006160150401510805063081015506306
0041050470400150337252001022030130800803016520307005303015070012400120
0106003012100216040550406490400100404055040656080503040301900405504080
1504127050401501080990150107003012140020301150500200614050037242001090
2200102600305412702530301501510410501021403011004904010083016521400203
0150402010301150108611070030163723200620300200680100055015308008050404
0541071064052006314051080610303722200624005030520013400506320010510501
3070612006040515010072001404016100805016513090301164011001653030121400
2050630400105010700301501372120068010007107705303015011403070301541270
5040530301103006001014050120307002055016301803040060040401705013016216
4301660150301504063720466021021200100061550163018030400600402004086800
1024433012330150406155016301180304006004040012004050052150320060018014
0140603015040307501530301501200400403013719200102050501208010208016200
8020501070030140070060014050037182001050403012140020301262002730126400
1501023012405306020040540013405302100504050107003012700204100802062700
2010501637172001070050151080130600130154015040501612001070050612001030
0210083012201503060200115013716200107005013014005015013715200621003011
0805040704060402400501140613001050407040601053030150140016401301130611
0813011064006010140637142006200830113063090030113063713200650301130640
0140309003011306371220010902301610407013011064006010140637112001090403
0153030110301656080503010207400101405018010207400504065130903011640110
0162101000301240522005063006001050107003012007005040014050110220010017
0050120630610300550403040810130153040810301530100500407044005016102006
0012007652007162007400130637107107702530301103070203070014063709410431
0030600240011064020257001013001050137084104083011050100030165530301653
0301103011200100803014040050160150301151011103707200102600305004020102
5010130640202020030025062008020105401101003014061064020301621340060114

0167040606306402017041670406010130405670440050137062001040910050405062
0304010140550645040506704400501070030162030403015304020220053030140203
0700104060403031301020031030202004010030166040300301200600606301030301
1080200155030133061062001550301108030103030133061037055062002030040040
2030703065308008050401610004002400302006001640510802030803011020040061
5506602304005103085063200600400604006110200914083050630201400302050406
3131830401700565212003001000101604001200802700701700550120082301106400
6010140637042001060105303011030702030700501214002010801301520040705040
9010050101306200407040504020040701014065403070213017080040013061050050
1504030408400140613167140203070340500580950504040500212004005040402010
0306005303016370320062106520103061200204064104300217007040530400110106
0301506200204010501070030165708020010830190301304070301621093014030203
0147090105103011701040357703015303080577030141020010501205040370220063
0050301203070020154006404702800200130152150101081804001040430210301515
0100608012186020010500400808110200301306020011070030153030163701506705
0901014024010307053030150140012006084051030702060805025700400130801300
1050401045106130010504030800105303015018015060851200805304070660530501
0750408013700200102202003165200801000404053040018301903011630407061650
4015010700301641043002170070405301620080205010700301369920010706030121
8901504016506201030527867041014050116470567006004001806470402030501910
3003015013698200620010003015303012402050200100010130611050430151108301
4020502001000400130801008530301470650160150301151011103697200640130170
3200400530301103016203021005040306020040027002041008020627002010501636
9650620806400105018065130153011308002001301614060301504040201007200105
3030120010100010030160050403054020103070530301400407050162002070016015
0301151011103695401020830171077030165654702504053030602004013080206040
1014061530206040401308054082005040601503030530301840080101403694200104
1001030030201030705303015011300101401003060030110804107107012200650013
0500610505004058503110306113060200520101304030130701380020013016400161
4060301200918053030440830136934010820030150408200301530301406023692210
2004020300108016501204055013021005040405701103001230708014020506540030
0101405010264055010230108636914107025012040504021010003012506807001001
0630210050405216200802041006369041070250120405040300615040030140530105
0165215040116301100636892102001005012040504016700600164006801308016707
8070011020040063063688210200100701040605501102200103011086101402804001
0440051501610608050103070308001140501804003030800501301003687410701014
0630912301104210140610083011330100368626101000301401307010083012807001
0010102200501301003685410530010300302010307065653030110307013011020031
5014020306580200315040402040030160140301003684410430021700701041050102
4020302001070050130165501550350404020281902140162002080400400405001041

2008061050500405303016406100400501548162402090070114050130100368320010
2050501208010208010306020016270020804051501040011402001300704016100030
2140640530210050405010700301270020636822001070050504020302100405103011
5030602001140615506602004102400205040405150104001140636815010240200860
1301170055014051314030100830301620080205010700301301100610200400804020
8011301170051401630110064020612142701050120140704020490105014102001030
3200130117005140163011004001501021504001101405103070103040040017001636
8050627002040015240400502010400301200150301217007016100670016403090050
1070030303061005061200800130617080508007023040208007022030401013040610
3018036795065040640405240520050020150330150642701016501203024055064504
0150103064005012050182601630110036785064270101650120402011011306515201
0130403030306100104050017010403405200300810406106367750101007120030120
0106006565803060010658010300504040400100805011406530200410010654127050
4013001050403010072003019602101022005013010036765062008008402170070301
1080201030615010731704015040011011080506706010501070030163675506504014
0018020010003011080405616304070140280708003011734053020103061801830190
3040706504015040130110803071504507040202200100400104003012402041306113
0640203016401140636745064030701013060150301200500201502030620041001061
3001050403010072003019602101022005013010036735010270070402508501406141
3061613016401200500201508501630110063672506200801205240400306020011402
1501156802004004030110013012001070050504051020010010801503060200114063
6715063040701016501201401301506731030516200802050107003011001507011080
3013010001301150307036217007030116120014030540145030116200601614145015
3030703506530301220080205050115050620040140070012001550301630103030120
0204030216200220400601501070030301680708004006015010700301301100636705
0104020034040400502030240201370014702104530150704020150449050850116807
0800400601501070030301620022040060150107003013011003669501050406401502
0304040050113063016200220400601501070030301680708004006015010700301306
1001030610030180070210301405800702703200104052200450705068061006405064
0301900301700110200400630651041050102107003012130650120010030117005250
4065050301620080205010700301301100636685064041004006040013065701605507
0506200600140060400130406104170104040203030100366750101004190404005020
5014706301170051040040506306100106366650640307010130601503012005002015
0203061200107005061200103002601503030580120130120150306020011406366540
1020830171077030153030165302130201202003005240400100830150107003011050
6200130100366440103070301814008030165610083012150501028400801040500150
2200150501027040310301003663506304070400140703016050130615040200311407
0506301604001303010036625010240301308001080611045103070304020110161150
1653030130100800200130164001614060301504040201007200105040301003661200
1022030110307030165610083011630110040202200301100170014016301100405263

0100507070780170011040085305070015040301301545070570180300301708050400
1306366020010590050404055040530140620200300504014051080405301406800200
1301108013064001614060301108052007003011005004050620304010130530301506
4504040400407075010700301167041301003659900108081030030201030702022006
2030010801550406550404052006001301250406105040403070503013015019306050
4040510307053050120140636585010504064030150401100102008013015670240018
0550900601030214051030701004904100306365720062030020012903020304001101
3020307001080501100740403020405150100740650010418140515030703804056080
5011640309006150200180601501024701215022001630110080365650105040114011
0161030110301510801620010602001060301151080150200410065200519001020010
0151080150202001210400301102001003015010264055010215030703636552006802
0301130110713503056162008020140240515010732030700365430103010020046050
4010300630500169406003020110400167005010400503405104005032405150304264
0200703013010604051030701503060200180168002007018036532006801000220065
2109543025301620020300164020220010072005040163020301403006501040105070
5014005035101405502060401080126030501204100303652501054030121700703011
0801650023014021010003015064030701016501206305015033014005010240020060
0140308054001605040302014008002001301521413015400640103070405304140400
6403015103070150108001001403080365120062030030110412705040301030100612
0020300466143011630407014001106012002006410062163301205018036301050014
0400621020018405040130010140530506304070103650200107060301217007050405
1007005015020040150704055040100071050406522005070012510410501023040701
0504050330150406200910030150107053015030601620053001581620062005300156
4100081020030150140103060306364920010902506304070400140210501183019016
3040701642006030110802004100640011000216030407015013648410483015301503
0162001093016570401026130123110130800801504046614150104001410030636472
1050404270302030510130203070010805011406030150401806020405103070910060
5061800200130140528060600501300505018002001301614060301504040580306001
4064051041015010214010301162001040308013646410702301301308003016217007
0301108052006001301250650406101305010700301302550352401127002053030110
3070102004008013645410431003060010803040205011007404030204040010074017
0014020102501030320010307040203045030516200802050107003013011006364441
0408301710770301912009010301104510610083016520220050402010301307501107
0030140307030116400615010700301102001063643401030173200504021700704053
0201030615010731704015040011011080167060501070030163642401020020100720
0652008010004040530201030614001830190301163040706165040150107003011073
1030364150102402140020108013012002201130620307005040200100090113068002
0013011080130640016140603011080520070030110050040550702770101302101000
3014030170402050104001400301022006103023010057016030115010400140013016
2008020501070030130110063640200680100030140108200301656151080320070101

4061406030150403075010140615504032006001014068002001301108033010140403
0701036392001026003014010208301656520060013011080440830153068002001301
1080140640016140603011080140530107003015303044083013638401082003015040
8200301530301406023637140108200120068010005303015012064001504064030165
0105040640301103070530301264001064001202003004030165010202003004030164
0011008015040301650101008015040301530301270070103036361306531406309005
0120550150160501301153040861550405010080300161550304081050150102180301
2330168002001301640016140603011030705501401301150800200701501363514010
9007017680718041008053066020065303017091050406402026507004020302008010
0010640203014070140203083090103634141046013061001630610065303011610040
0116504015010700301151011103633151036530301450705012061630110014040530
3015120028010606401670015010700301201650620400130165040150107003011510
1110363212001022015070304055070301621700703015040501080708004054001150
2200363113010260301150630800180150120022061504004160150709115011502200
1630110063630130660200301150709165303011507091150400103011050630610010
2001503011080405563623010040040610362912001090501306110306506431013014
2115108050104301600362812001070604053047016501020080120301507030530301
5013627121020010050620400570160301307030201020041014065303014507015403
0701405013010057016030150706015030120301601036261301042400530301550603
0434005030630210050401630600501070030110805303015506036251301040010040
0163040010061670060011680100500140501015010506703040362413010301001301
1510802050620061310130405004052205010200100050305501044030110805068032
0040301680020040405263010010805010700301650610080150403015400501040305
0103036231401082001200680100053030150120650107006101308050802007010501
1050412030700505210213035040505103070501050410501050406403011605062040
0150262031671303010010250301151011103622150102401405001615014005216304
0400814100801626040020114020010100024001504064030165010504064030150670
0610501070030163621150105401217007040530470165200600130161105043011080
5303014055070305306602006530301506700610501070030150136201401030604001
6403060651030701630901650401501070030115101110102503011030705063090105
4002010130406530301501361914105300103003020103070501205303015015303015
0101004001650550140101400203040140130650510160501306505400166001150211
3065055016600115021130650550166001130650510150211306505101211080505103
0708150313036181401030701030030202501205303015018056806004006111010300
1642400501361714010900705303014507050120402030700501142154702504053167
1168205040050113065303013066020016700640050140203050120140650526301006
4020263010030200591402030700213812006504050563016018017014004050564040
0301601700161008301504010108400601013053030164020504010108400601080102
5030110700610501204020307005015001048305010605014006040130616200300400
5018040400407091700180163060041804040010704170015020306515015010200900

1502001010004017091030140203050700610501130110250301400610216306004400
1301650401501070030115101110361612101002001030030201030705303015012062
0501040104002030401401301505506082023701630631671504050523042400501130
6470250401605030120303081013036151401030814010307053030150120640202630
1001080140403070105303016505302050540010400114025010800200106507810130
6505501070120010040050110504120307002010307081503130804003077050404040
0101000400215040613004005040201030110664006505504013004005040103200400
3614140108200120068010005303015012063200820103070506201013010203040550
1401014002030401406405316711080405103070150800200801401504030704100501
0504064030150645040203059030160015820504006010501102503014120015011025
0303015608050400256501550406405120040162070405020031510400130301204001
3016004001502620301600400150262040014070400150262040704001502620103070
5303011801140402050104010400203040140650520063140010400110400130301203
1671203015030308115011025030115101110361313010403181200605056820060650
5670400408015506440070400547050405051030704020301408050566040400501302
1005040505640400100309405004001504064030140400820501700116504015010700
3011510111036121301020653030121080206530301103070302064006405170017046
5010100801504030165010200801203017094001306361112001022013080080530301
5040405305012501050406403012003002636101200105040131200606550700125303
0110301110701463609120010700506120030024061451300201503060200115011025
0301151011103608140102002012003140530470164013060550610030104061040540
0108400360714010820050105040640301250120620065030110301400140309003015
0404020320060010305400201013040640201030701030901010700301653606130109
0165200202568260636051200105002012002070053030116200207001165040150107
0030115101110360414010307010300302025303015012065010102503014040016006
5303013066020050203064020301320050404811214408405012014036031210608530
3012108020653030113011481506300600101306550630060010653030140013016020
0506100030210501070030136021200641004012004100530301200401501206302100
5040163060050107003011080530301550605305303018002008014010803200850401
0250301103070501201403601130670804053030120040150120612009650550401680
0100170014051011070413167110803200850105040640301103070506201013010203
0152015036712009615504041071080010014030805130060040050110081530301660
1503011030060040065104240530301140206080501080108060040065303011004001
6203672010307020604015103070400407050165103070530301407050110700303030
6100400700163600150102401301308003080041008053066020065303019070105040
6405200401504052001060030140530506201050112004015306602006530301108001
0017001550406401306504064030501201406359914010900701200316520080100040
4053053030147014001200201700301612001050020530301501020020170030164001
9008018301640536200805010900801830164001401019030165010401019030164001
1004904004030165010100490400403016400170300160030165010703001600301640

0120021903016501020021903016400110041903016501010041903016400140050110
0301650104005011003016400150406403016501050406403016400140306040301650
1040306040301501359812001026001801093050120530301501540208301653030140
0110150405020400610210801030400101405020020700163597120010594004020200
5910640010230130516032003014020507025700103053030141020010140501530660
2006530301507091651207301501040016513090301504010016103061301510305133
0132002400503200240013065020400610210805020010063596180620070401306100
5030100680020040523010010801070030170409108030610030125070800600400130
8050400101004001501160503015040481205040060301025030116050110359514010
2002011007200153015044007016501040020040152003115400650183019030407040
0653066020065303050205040400501001050406359412001060105303011030702030
7005012065010807080021700703011530807018001055010240530081802502050404
0011050401025030116050110359314010900701200315020504040015060840303047
0153030150180520060013012001430165306602006530301504200400504005020501
6359213010403181200605020820060165020704004015010301704008015400501076
1105043015110830150420040050400502050120316713030100102503011510111035
9112001041001030030201030705303015012061561094004030180020016405301640
1640520011046405800200140205002006163590110010200805062006014006506304
0010040011001020080270200301405263010010808070010064051090110905040214
0020301305150404056200519005010700301307501635891710770110610053030150
1206301400100301501050406403015303011080206120010600163015010403040590
0101000216200802050107003015303014200635881401082001200680100050120530
3015014051030702640010611300501501010080150403012700701064051004902501
0100419030153030110731030358713010424001630421406200900400501050404055
0406528501080010050404055040805103070530301164517014016100490301320050
1050406403015040358614010306040061501401011301405417140653066020065303
0110049065306602006530301150470614017005163011002178130150650406403011
0120014030635851200105002053030120020700620060013014061030165303016320
0105012050403055060856601530301306602001080402030501204100303584130103
0100130116304001100140402010801650120630640201012501507050630160102120
0701301108050641240550163016461021781301400110501616257001040302178130
1506260810358312001060105303011030702030700501206405301407015303019281
8016504061040302010306120010600301103070583001414855060301240206100306
0806600301257001700180400640301504051030701030010001010700301204055010
7012006440020103015062009005010405400101200806600301131700180402010307
0583001358213010301001301601230150640011013061501030140305405501660013
0501030101100301640205040501010067040301530301403070104100358112001090
5013061103065303015064504040530506431013065408200402024120016116604020
2412001501530301504040204090701010700301170050403010035801301030100130
1506704004040013017001630400100301614006403015040404002002008050120012

0080301402070805010503030100357913061060405303014570501206200124130150
6306101303021005040530301164517016501204100306357812001060101301152165
0023040014061564001305504008030116301060405001520019100150404051030704
0030600463063577120012008013015064102001050152006702105140652006701504
0061025015063061001010250301405504010010200805070014006010616703200180
4020304011004013022005001030511104055040580101940030110070016357612006
2001000130153066020065303011504706140800200404052630100108050107003016
5061008015040301306100107001635751410430013017307163073076506504064030
1103040021203015053574150650900301530301250650900400620031508301263010
0301400100030262001902130140010001770016402050403080601504064020100680
5040402061370013573120010902506304070400140253030150120615620040040301
4650361810200405103070150306020018046503402040013700140201030705303015
4070501620020700116504015010700301151011103572140103011217007050102008
0120303047016405100490507050101004190301301601030357119001030100011001
5001040405504015070060016401020040502110601070610606406401051200216865
0504062050406405100150010405010102503015040150700600170016357012006960
4021400203011080203070050120180620070404020101103061103011630708040050
1130150102003154030165010504064030150405303012140020108080070221030614
0580070240182001301630616405400154015316716405608050150405010504064030
1210306110250301356914010820012006801000530301501206402026301004004407
0400140502030652404001960011401080815034020103070601030640201030164065
0104301108040205016600180405121164030704004030501805303014507096010016
5405101213040567041356830102603011045106561008301306100105303016402051
6801240203061004020307004020150214020110704130703140640204001540150550
4050620051900400101013030140203167130703140658063108050102301005040303
2003053030130703140356713010206530301210802065303011030703020640063566
1200102600506304070400140250120530301501202200504020103011086101407024
0016356514010208140103070501205303015015010100801504030165010200801203
0170940013065303011004001102503011510111035644010820030150408200301530
3014060235635062009004005040405501200900400501640550708002007018035625
0620090050104051306405501401011620080205010700301708050101308400803014
0610301003561501010041904040050205018400803011700510400405063061001063
5605062009021013080140560805016405401705015504030201400170200752320060
0508072003301800200130110301140301100660501501162001040306135595067040
6010130801400110130203070010805014055020160401080506300401050620010030
1504040530210050401502030514020405304510403061355850680304006001051080
1650120140108054011010030140610405501023090801065202200501355750650100
6101504001101216501206162002901403015020040125064510540101405504015030
7036355630101012006011050230104551503070365101100305040510200401080502
0400130802140020301106064015010400141003063555506401004005040501040200

3403015040150115507080020070140500522004001101220020700504040403090015
0406355450670320010405307030200220130121700703015064105041301217007030
1504040550100107005030635535062700204005240400502010700301200150301217
0070161006700405303010100615108016410701155040163200600105011641200114
0302020015030140516140801610060805010700301140163552506304070101650120
1402130750106140301400150340530804001830190301163040706165040150107003
0114013551506640060101301100601805012050402015040640501205040801355050
6304070101650120140217350107015200100504040530108060011406080504030704
0013080354950610080501040515010072001404061704096180660040522005067041
0703180040301507040526503108013400400354850620022040060101304056405220
0440821682606143601620060015216200207001700150107003011504001101250406
1014050135475063040704004040050201402430600301217007016100670064020150
1060501501170054020406101100304040010605014021610067008035465010704031
6015030165503301504040505350130401301050403061003011008502030615145608
0503020150104001301501030063063545506501006401501183019030407050150703
2001801507040606150200902115022004052200450704056062006602015050640200
3403017001102004006306354450670320040040202200103014050040202302061070
0301400640301203040402018064001030100354350620080120405220011003024053
0241043100306001080301501180020013011080150303080017001116301100635425
0620020300400140130103010054108013016200190213016704060301402030307036
5862005040510806008050651660405003541501054014050405301306050405306050
3070340500354050109504050160501301100306001426510030600103003020506081
1070030135394010820030171077030154153003016210100030140301702030700353
8506470400140405506080301520014100405012040610108051030132007010405008
0020013011030114060301504020040130120024103537506200207004004001308017
0108030013061030650405506450404020301403002007030110307010640060140500
4011015400601080140550102140680020013016400161406030110030600107003015
3030135365064400510405307030203021005040200107005050404051400114014061
0020070050400302022005040100830165302512004008015063061001040135355010
4030170301220050405108021020013021400203013010750400353440301353340108
2003015040820030153030140602353220010260040103070530301501400640400800
2001101260805010200440014061410002602040017001406080501020044001406401
8200130110801404030701065001010003013075010657016030140307054507053030
1501353120062001000301530301240205020010001013061105043015110830140205
0200100040013080100853030147065011101030054301650707136546306401306543
0650704301610731013014061016300600164020220016100400160150301151011103
5302006802020014006003020130115040011012483101406490400100404055040802
0023011030140513501403080501043015305010903060040530301167043030900301
2036404051030010001700163529200620300200129030203040011013020307001080
5015400110150404020102001030530301400407050220082301108010200340020308

0301501200400403013528200102203011030703016553030150163091230155064504
0506704101405016100830165530301501220307003527200102600506304070400140
2530301501610406040303110301102003103020200401003016604030030120060060
6301030301108020015503013306106200155030110803010303013306105303015012
0040040301352620010902701040605303015015481660805020130140205007021306
4020100306001403525401020871077053030150153030140014030204004805014020
0821570260547025040544010200823016401301001520033005040800200130110801
4050163063524410408301105010003016553030150180020013016400161406030110
8014053030352350640307010130405200500201302530304408301301005303015030
6100103080020013016400161406030110030600504040540030160501030635229001
0301000217007010301405200980050405001301030100405704004050352120064903
0140017002401030705303015011630407014024051025050804057032004015010301
5200802020507810130802008020504063520200640130152100170530301103016101
0050063015620070301220604040060141008050608406565303011030155364030601
0504063519200107060301217007010301405670410501910300301501206306115012
1510307015043614070240050302163011005303013075011401670240014053030101
0017001635182001050402140020130610451306403070200101000253030110803041
3105040601503015040655091265200519005407050402010307010002601680020013
0110801406400161406030110801404020302006006053030150116200400403013517
2001040830140069030400169013012002050150120400690504080080010001620103
0040108049010016351620066008030140060040302028101305303015011820040800
2001301108030040400130660150303020460020070904001306351520064013014077
0504020307005012021901140103070200290162002050403015070550168062007040
3012200401651309030140100110502110351420010260080109305303015015303011
5240011080020013011080614001614060301108061520060090108050204008030420
0600504052830110050040204005011550110502110351350630407040040400502014
0240201025018040207032004010301405001030121501504030102607024001618062
0070401105043011080140528190614057094001308040307052203060103014010220
2003004005011030702014513501635122001090403011030120104301630610302002
0300150150104017010805301908065056103070150565401540030408510430162501
6050130115010906635114010900704030900302020030030150153030122020030040
0130105021105900701065655021305014010030301100700163510410408105010005
3030150180200802050406560805030200203001014050180200203001050406530302
0020300150154020830150140100301501040014100306350950102403013080010805
0640301900301302550645040501070030110030600170014010506200180530301100
3060017005350840102002036730205040151080150400250180140140603015040150
3075016521430205040151080500264020241040400501106016200800200130110801
0100301615506200400440702001010002400161406030110030600350740102083017
1077030165611008530301470615108050104301600350640107050301400150340530
4001830190301163040706165040150107003015013505401030121700702520030028

0120010065105070011080501201570406010403050120120022040060401030615040
0110151030701030400400170016350450105402170070405302010306116751570060
0400106403070200101000253030130102605070308001030500104830165301020040
0300105040601503015040635035068308040301405201030616405220050401045103
0702010306135025065010061040552006001301240565120730150640061065130903
0150640101001050107003013501501050608403030540820061045350040102083012
1400203014001101203040034994030134984010820030150408200301530301406023
4975065010061013050107003012050806004006010130610085303014706501200290
1803496506403070101305010700301263010010307053030170291020307002034955
0630924013014040050150116200802050107003015030610010305101240540010350
1030630500403020504050120010030117005108060150303015022008004100306349
4506240070400601040513064054002007007040164030900501070030170805010130
7001040610803493506403070400130404005020402050203065007023014061017005
8050070230140610103015303012140020108040400500230410030501401013016403
0703011640061501070030130110063492506208061016501202030700205701602001
0100016500230140506402003403014060100105701603014061004004061063491200
1041003014010307030165613001014010030600105210300618070800561004702504
0307034050056100807080047025040307034050080708005040402010030600107003
0153030134905064030604040580150400110125040610504013017040604005014054
0030130800507010407030141524005011406348950102002440163061700117043014
0903017040604001306104006403017040604001302050180348850620080201054702
5040163090030120080904056120080181020015030602001501030634872001041001
0300302010307065610400640301101084030203070050115400640470280020013011
0108108010205303014004082002001500110301200900501803486501060302403053
0210050404051030703075010501302100504016501205016348550620030024006010
4051700154127050401300105040522190117001805301306005040320060010100463
0110200400801806020530703106130010801020140603011080596021080121860200
1050040080811020030130602001010700301530301348450105040640301200905015
0103070110085012061640200315010700301504015040100400501804001501023012
4056138040540610010301130602002030210050401503060200141003063483506200
2030040040203070306530800805040161000400240030652004012203080301102003
4003065400408200504040201001070010306400120030024081102003013060200105
0154001101504063482501020080120301281013055015308008050404001830190301
1630407061650401501070030110731030348150645401040560805013080183019030
4070504065200802051030708020080205040348050670490107001040610530301504
0530420040130406101040011050130210050404010100301501043030205364010018
0347950102020030040405200500201501203021005040501070030152100170501208
0102016200900501808002001301108016200106030100347850670320010405307030
1630407010700301800702405100107001030601503011041014002602014022008230
1620023011080416080301200590034775062020030010140701030170400655018260

1030050404020307005040307080105040402010120200300504030540201010810405
0040204001040104050040201007200405004020100306001070030153030134765068
0708004030140520103061805303015365064102004005120750404040010400114065
3030145070622001013080601503013016401108062200103012200504040400104001
1406347550683080403014052010306165303015365064102001050107003030200106
0020307003010260301502165010206040301651008102200100301170040018034745
0650406104061003040011013020307001080501200410010613001050403010072003
0196021053030150116200104030613473506950100104051700140510410140040410
0140251010604052904005016152168200805408200601503011501007001170016347
2506202003001052165012014024030204001065801501930604051030701503075014
0134715064030704008066080167040040400804051501040011402162008020103034
7050620200300104052200240550401001020080170015408200550404051001700117
0014050051030150102105040405220016704200800601503016040170016346950682
0080405104301402278302017010300165012064055010416100200805010700301504
0346850102020030040301504016506204001306513090301164010100165610040016
5103015010210504034675064030701013060150301200500201502030640101003015
0104301203070053030110030600303010424001301510307060150301200980104003
0153030140020098018010508501043030205364010018034665010200901505040405
3014065303013080015040104510504080403070200101000240516511640309005010
7003017024001302346550630100701040610030400110130130908050203070020402
0608050140204008010600204055068016004001660510804040050180402015010072
0014010801202003005040402050140101400203040140504040203030540206080501
5040130500404020302200800346440102083017107703016568002001301640016140
6030110801030701301305004030153065103070506516565410701040500100306003
0114210107003016563463506400501100530302080020013016400161406030110805
0405306346250632006004004040050117001800200130150405670440201704170014
0500520040128002001301614060301406100400501540011015040634615063010070
1040610030400110130203070010805011540064047028002001301521010810801401
4060301504030750106170409618066001002002301402010200105400110150406346
0506704060104061003040011013020307001080501530800805040402061100040021
6200155030163010303012402040150405400110150406345950104030170303040011
0130203070010805014020501630164020400506030180130400600168002001301640
0161406030110030600540011015040634585062002080400104061003040011013020
3070010805015408200654640402050102307036151030116502060400301316714020
6080501504040203010030600501540011015040634575062003004005040020030024
0400501170014050021200400504040201003060050154001101504063456506320060
0400203070020615400640470280020013011010810610830150404001040301320060
0106400104030150401083013200600103455506200590040050108611030070680020
0130164001614060301108044083015306345450682904005010865066040400501085
3030150182608034535062008008402170070301108020103061805200600130111003

0615040011012162700206162008020501070030114016345250620028105800620010
8040580400183019030116304070616504015010700301140180345150610020080400
1070010406105701603014061004004061063450501020080120405101202003002165
0120617080300405101202003005040405305020104030634495064020034030160302
1057016030140610040040610634485067032004005103014050054107010405001003
0600301142105303013447506107540060101521650120653030140011012162700205
0110166030116160150107003015210017050120405003446506403090010405608050
1165012050203064054030900103053030150120140804001501023012405306020040
5400136156200407014040200500201156200407068002001301162001500165610040
5504043001165012040530210050405010700301521001705012080102016200900501
0808002001301108016200106010403061344550620080120304052200110030260150
3015040120010500205016104060403031610083012130114055010214068002001301
6400161406030153030110030600140405608050110801620020804001040306134445
0630801100040552006001301507040561105043015110830150401200519005064030
7010344350640307010130601503012005002015020306547065303018030600101305
3030147063442401082003017107703016561300105040200905010530301200905023
4415065040640301820080107001040610647025040630210050402004013015303050
1050607080021080344050623010001060405230100047025040405680020013011050
4110803439406200301400230100034384030134374010820030150408200301530301
4060234365010506084030170403053030150161503026040550104550301501080164
5135010700301634355010200801203030106500404050531080601030151314030100
8301227002061127002053030110307010200400801504040403090015040634345062
0080201053030154070502650650406103091230128014053068504060150301809600
4001061504011402008150307031501162001040306134335064030701080660801670
4004040010306405150104001140216200802010303432506202003001040517001200
2301103014051350140308050104301530501090306004053030116704203080301108
0162202001700180343150640307010165012063050161083011053052006001301200
1430150162703066530130111050430151108301570051406343050630100701013040
5200500201302530304408301301005303015030610010301540064047025040800200
1301521108180140140603015040307505040405400301605010306342940103070103
0030202530301501530200410010654127050401300105040301007200301960210530
3013428506208061010501805303015030610010302004010030166040300301200600
6068002001301640016140603011003060050404054003016050103063427401030703
0170104060301656402011016151007200105303011510072003040840013052145040
5010120634265063020640010405220010307061620029050107003013425501030401
7030120031407050151080501043016002001550130115400840050401020034001802
0010005503301504040550106250304001830190301163040706165040150107003016
3424506703200400150103014050040064030151001017006080503020342350642701
8010110180570601610800200150116504015010700301104127011034225063040704
0040400502014016100670030610010640530320014008400504064051006805040217

0070301405130010001040610342150102008012030125910840304050535016217007
0301220506303704006010342050620070300101304056540010002405501040011030
6217007030140513301040604030311306306217007030122050630370400601063419
5062006016003014052010306153030121620080206309123012165040150107003016
8002001301640016140603011080140403070101410530040205010261050102530301
2108020301003418506504061040610030102002070065408200302030700108050140
5103070103040010214002030120103070150307501150140580201040306134175010
2402001070050150114050165303014507040011013011405013010052200504040011
0151030703075011306301630110063416506403019003011301150400110124831014
0640307030116400615010700301200649010804001501024001101653023415506309
2403012140020013017001205010401025960040013062140020504053021005040630
4004004005020140634145062008012030113011504001101248310140652504061050
4013065504065250650406102140020301405150104001501070030180214002030120
1030115030750120307002063413506403060405305085064816402053016150530164
0201030130750161501030130750110700301215040116306100640550401640309005
0107003011301506081105104003012130121400203013051163041340013063412506
7050904001404030701053030162002201530301200207003062002050403016130088
0301507010550400513090301501513090301401001621400203015040201030110861
1403040013411501050406403030510130203070010805011008301280020013016400
1614060301530301100306003410506403017030113011530100701014066015030301
5220080050301500401301203040063409401020830171077030165610300504055064
5040506704101404030701053030150134085064030701016501206304006220507030
1400102304006102301505615016140010240070060040014006220507030130500402
0110306153030150645040167006004001501070030130500403407506403090010405
6080501165012050203064054030900103053030150120140615010020010001504040
5504068002001301521508060600504040550406581090301540070060015040405504
0612901851030701503060200150404055040805250700215070060011302080340650
1010021601650120140680020013011080162002204006018040015010230121060640
4051341003065014015650670200806506200110063405501020090240060401650120
6301026030150704054908040530140701501910300301405305010764055020160405
0404020305010240041006464050061417063404501040500134052001410801682901
8058032003014054007006001805627002080340350104608040800200130110801650
0704001306200600130140610301163200165303011642701406100110301100801210
7030040516001501044010301634025063010070104061003055010251011550401502
0200400410030634015061006080101650120140214060301504017320051020010030
1570053051103070506307504015013400501020021100030150404005012020400120
0401130120305162063504015015078400130680600400130163011006170200700405
2100180064052106019630150306020040013501140306339950102002110003015040
4005012054001200401130153051655010350503015108050402403070150850163011
0019630151080501301100339850104030190016501201530515015102001003015700

5305162030540150116301100102003002301240105120021150306020040013140306
3397501046080403014061003011030701050200905012200301100339650101004190
3015040400502050153030121700702150400101163011005011301540610021635012
0140802002050403014020104150108050640014006301026030150670910040063013
2003015064001400304020501013395501040301703015040481504015240201002601
4053008180301506400140030402050154061003030110070011963063394501083019
0301504030520060013011080550161105043011080520031515010400162140020301
6562503015400102007001080150307036261007010610018601530150256633934010
2083017107703016555011022001030120031540105013011006963053050401803392
5010200901505040402030140620015030140201614061800702402080070250703010
6800702240208007022008020105401101003014061040500110504301511083011080
4020501025464015015006153030150645040404007006004001140501301100633915
0650406104061003040011013020307001080501200150301504053030151350180561
0020086156304001001163011005011301540610021635012014080339040103012170
0704053020103061610400408200504016601010201030615101100306530301400110
1216200802050107003016338920010905013061030650405303015064504040203014
0614060301108013068002001301108050107370402404005011406338850623010040
0510301613001050404082001061300105040270070103387200104100103003020103
0705303015015200600130151300503011030050105303014050010030600301142801
0201620090050180800200130110801620010603010033862001060105303011030702
0307005015410701040500100306003015303011042108010201620010403061338550
1024030110001302301130130660200301103070140640203021005040404012700204
1008016270020400501633845067032004005103015301620020300165642701610072
0030153030145070161000400218011007200402030506203040101305303015064504
0506427040050107003015011208015061003060040061501500615303015064504050
6427040014050133835064030704004040050205014020302001060040203070056100
4001653030116427015406100303011007001401051200216338250104030170303051
0115150307036550108060301218901651501035018033815064030190040565018069
3014057006001801401705010604060013015506080301405108050023080540610010
3011865015030602001410030633805062004008010165012014070540110100301406
1050301601030640530110050017040130110050016405301100500150304081030633
7950627001203040550110300504040511019600504050103040182405140640201101
9600304085030615030102601670240011650401501070030301620080205010700301
3011006337850101008015040301504030701030616504015010700301530301504030
7010306337750104030170301200649010801402403070125303016010306140207040
1502015015030610010302022005040200905013501030653030121700702060150301
5504008030703530301108010700611700180530301215040130610010504060150301
5040633765010830190301108040550306004503040018301903011630407061650401
5010700301633755063040704004040050201402402010250180402070320040103011
4057094001308040307052203060103014010220200300400302014513501615060851

0430162501605013011501090663374506304070101650120107003015060814055010
7350306405400110106040550705020080205030400183019030116304070616504015
0107003016337350104030170301507010501000305303015015608050304513101405
0180451350406337240103070301701040603016564001305303013031501805303011
1003063200105012050403371506402081014016015061002601050140011010603015
0630407010501070030126084013370501027001203015040307010306161004905010
7003015303015040307010308040530210050405010700301150400804100306336950
6504008010130405615040116306100105011620200400105016015030126081336840
3013367401082003015040820030153030140602336650670320040051030164020830
1530553613012030151030030206513015301130200600115301530301704070440013
0633655010202003004030150405050620400130620220010301704162010301400307
5017001470253030140011015070205049010130633645010200801203030120010590
0505062040013080202200504054082001301214002030120103011010030105016320
0400400502014063363501024030130800108065504061045301213504040307011022
0030100417040103012041200305012001003012010307080020080107003015013362
5063040701016501201401301400110106030116304070501070030110731013080510
1060301213504061550402001060053080550608301213504033615010100400403030
5210017030161416080130680020013011080163070506410200101305010700303015
3070350520060013012001430120304003360506200801203018308010130550120106
1502806060030150103070530301504050113063020041001065412705040130010504
0301007200301960210530301501201065063061001060401301255012040165040400
5010700301829016335950102009040050403015040501201406530301506450405506
2009050105108050405305012014080800200130152001426521508060600803358506
2002190301130115110030101306183019030407065040150403020010600530301216
5004020301064030703011640061501070030130110063357401090070900867003055
0150620011001040061140305004015030400103011011050430151108301506410200
1050107003013011005400501071080540610010307032006008033565064020034030
1405265070050703016010130617040320050020165610055040430016550405062001
0030150405302100504020305141005303015014030701040306110450704030701030
7054001040061140501301100335550104608040301281013053030150180020013011
0804160803011000240013062010301530301506081140205060816110504301504020
2109050605040013065200600130120014301530301201400114010801000400216335
4501082008030128101305303015018200804001305406100530301100700156100301
1030615290703012650400305840018040501140765020301504051501040016405103
0701010002801060640406100504050120506200110050133535062004008010165012
0140405507030800653030100830150116403070804020501520021640015150301008
0141053005401302050401507075063352506407074004040050205010700301101012
0200300501013061001080405104150104061063351506200203004004020307030653
0800805040161000400240030651080165020604003020015503016301030301402030
3070354004082005040633505062009024001308015108050650206040030103024020

1040011053030120010100053015040540110100301406101030114402006020015503
0140201030705303013070350140400101200130100334950670406040013080111080
0240201040011053030120010100053015040540110100301406101030114402006030
1030301402010307053030130703501404001012001301003348506703200400510301
6402083015306520060013016103061301108044083015306513015301130530301656
3347506503070101406405200649050204001404030701020220063346506202003001
0140701030170400653030150182605200106003014053050120140200140060010613
0010140100306001020220063345501083080403015040506201050110607080183019
0304070650401621400504014018033445063016040010130405807001040610125013
0140510307040010407080334350103060200403014040023117001403061001080405
1041501040610633425064400510165012040550163021700703011612006405301621
0340060104030804056704804020120200300167041301010063341506427010150110
1165012014020103011501200240015010610001402040515010610001150106100015
0107003011306515022003061003014051030701008501070030130110033405064070
7400404005020501070030110101202003005010130610010804051041501040610633
3950102008008403015040540110100301406106540500110504301511083017014004
0515070400405040205101001306580150608147065150470650408013338506301007
0400130801101002162001060053030145070140615400501076110504301511083017
0140040801030050404040010400611406333750640301900153051613011020010030
1102030540150201406150400110140510307063040010130660200154011080500702
1010400810200100301203054020220050120140633365010500200163015085015020
6130103010013014054702504050206040040304055020160402030400801540030010
7040400200925102001005040150203051402063335506403070101304052005002015
0203061504305040110072001030030204001200405005103011023101504011402008
4053050204050403061150800200150408096004005020704010453017024005050116
3011006333450104400540301240307016561300105040104510530301502030640022
8150401045400130205013333501030513301101000400250130402010307040130604
0203014070140203061503014070115030163011006550701680020070161000303011
6704060170016333250610080501040515010072001404065101060301550608301250
6200410616200290140250104002004040520031506400610201030613331501040306
0405302100504015020150115022005040100830155015215040116301100405103070
1030400101700163330506504061052405530210050402140020301405150104001501
0700301332950620020700400104053070303061003014053015030906410030633285
0104030190030140610030110451013053030150153030150401045200101000251657
0240015040403080015040640516515067024001014050140307018020301621034006
0104030501803327501010041904040050205015702400114055040104516553030145
0705040214002021640018030100332650620080120302021501163011006120051900
4005012008601630110030210050401060640104006114021620080201040306110606
4010400611403050040104006113063016301100150450705040100830140513140308
0332550105040640301504050620506204001101702400508013066020015010301400

3060200113063015022001630610010804051041014004041001402521090404052109
0400501130630633245062002070040010405307030203021005040200107005050404
0514001140140610020070050400302022005040540820050203061501041507001200
6930125013240050201406332350103060200401502015020306150400110140510307
0630400400501044030511080110615004005020140620040703014051030703061940
0801506200100150130050115020306332250104513003015040400502014062004013
0110606401030115010800100700110220010003012501324005020140633215062002
0700400104053070305408200610456601503030200101902103061301506200100301
1502030511404702504021400203011060640150104001410030633205010862100403
0150404055401101003014061065507030110504301570051080405150702400163319
5062009050101305401101003014061062001503011030150670410540101405150307
0363318501040301900301521001705012080102020090050180401030110804051507
0025080546503651507006001803317506703200101301501030140550116509006100
8301200101000280020013011080546503665200220400601633165010270012030150
4055090013010501610606405301103017030911030703018200901030307031805010
9301103070501401511010304100618010200101000530150404020304004030701401
3040301151011105067020080301100633155064030190030183080101305501200143
0152100170530506204005040654507050401045301213504024030701102200106064
0301100633145010306130115010121108017005215070406014061020040080402008
6013011700514016301100400150102150400110121060640405131403080331350623
0110003011402070240015040614040050115040011012140201030150630901013080
1501930601402030307035062010600122048007043005060301100331250627002010
5018016001105011050100490101420010704053060200180150160301050408908016
5506200151060016331150630400100105018016001801608050405504040030400100
1050122003011003310501010060180140610016501204055015103040650670200801
0301202200504050150152002205017008025200301504020815032010301404080016
6602001010005040180010232006004002021031080204102030601330950105040130
1504020501806004001306302100110606401102100701040306120024401030650131
5501207400540015120014030802019070100301501633085010403017030122005303
0115011050110606401105015200330030150405202001240301570100230110805040
1013014163011091300504010465015140011403080330750630990400402030703020
0150301504056700361200260021550404020104001103070301200150400605011050
1165002040153051303011001200150200693012501350406050153051220016063031
3011060640108001001403080330630102063061005014010307053030161030705016
4701308040010800100501030313011401012050102610501022030700301100330550
1083019030150405303011300501105043400602010307010030015014102001140620
4507050408012003007040040404001501803381050140500105020031400501103070
5010400151040050211048120820501501410200110501301100330450104013011061
0030140020031400601504020010600501520031400601400211101405148140030110
0330350104030190030140610030150404006350806004001303011009090100301510

3070901006513140308015030400101006014020031201073103020670410102150140
0301100110840060110307010300404001405148154001380330220010100802001060
0504010301400307501140301050122003011008030900301103011030640040500140
5301010060803301200102206001030015062161702003012004901010400810100605
0130140030110014020296001403011005014670040050104001200401405506450404
3665061006010601503015040540151030704365010440140420061403063300301026
0301166010501045105011022001060703011005010440110030400536400140306329
9501040301900301406100301504010503502200301100210020040010180101600155
0403200600803298501089015030150402030105013200600180206304001001030202
5062004040011013040301501106064011030110010706010550104403011090100150
4030320013632975010830904030150405062040050141020040014068002001301108
0120012350620400501130141020040050160401301216080504003040010014020105
0304001004005014102004001106064011030110014053064706510700301230092105
0141200150114030803296501024010610003020501106064053030110056002009040
0601060401301252009050400601107003011700180210020040010180101600550104
4030110808290180329550104020034030301200105900506201503080103070400407
0501140222003011003294401082003012006801000301655501530200801000801030
2008010001801060805040040309001050122003011003293501024030800406470550
1501910300301304070504017005301100510307010800100801060640572068056470
5040107003011030705400701030050401070030155001100040060180564705040170
0565400701030050401700550130400400100105010303200151080436801530515040
5308010005010810307055010440301306004632925010506084030110735020307002
0614030706140208515010400110640060165430011000302140306329150640307010
1304052005002015020306100853030147065014030704003065078400130615501070
2001004001020540110301515044200803290506890150530405640203055063080201
0400102305110307040203041305400301100803021005040708001200403015103070
1504020086328950620070300101304056250350705240020090280510901005400600
1304003011006328850105040640301504050620400301523010010307015092200501
1306305210424003040041205011100020018010606404014168082901632875062007
0300101304056143065700600400506115070805010501106070563040010040013020
3061030501070400200100506702008040012004014003011006328650101091600165
0120140546503650140156506702008050115078616470405305062010305067020080
3015910040030180328550103060200403015040563070136201030156412001501105
0784001306108016004001306401030110805101003018051030704008060017001805
1070800200150110606404011030115010861632845062007008101650120140405504
0140546503650140156506702008010200506800200130110804053050204050632835
0105002001630140530703506540101405307035068002001301108016807080040060
1501070030110307050405050141020050632825010460804030150405012055014051
6050101084006010640515021827001040550405801019807080040060101701030015
3051307036800200130110801307050670200805013281506504061040610030100830

1250670200806106064012505040201030706304005032805010240301214002030140
0110120304003279406093278401082003015040820030153030140602327750630407
0400140703080110002202200140615506802007040080540011014020102001060530
3044083013010063276501020070050403015040150114050130100803080050406560
8050301044005101405018010440051504080501200100301630400150163275501040
3060403015040506201501400200401610300302053061540200810700301543023015
7005220042701501400200401140501327450630407040040400502014013015067340
0305200150301108040556364002208051010603012135040632735065040170010406
1070780504040561550402001060053080550608301213504032725063070804001402
2001026005501103003020501004001107003015303017050902186030120040200404
0010565440131526084003012330110200400632715010200600145640013020653030
1130050401301800200130110805040640016140603011080504070780802006903011
0806008050104061063270506504061040610030400110130203070010805011200902
4020015503016510801650206010303010303011503070315011620010403013269506
1009501013040580164030900140240510307030610030170100663268506304070400
4040050201700140114030701521691084004030610400110124040027002013011001
6131700110400832675067076104058015040011012270020105040401368054013020
5040200300850406106326650650100610130150400110121650120601503015014054
0302040080020013015040521440530150320060014051030703061003017010061700
1632655064030604040580150400110125040610504013017040604005014054003013
0800507010407030110415240050114063264501020024401630617001170430140903
0170406040013061040064030170406040013020501326350102403011008301103070
2050153030110307030206400803262401030703017107703016565402082405501021
0800100102022005013261501050406403030540820061045305501632605068030400
6001051080405107003012005002013010101200601105021030709010010501200100
3011700550132595010240214002010801301800200130161406030110805210110005
0401406325850650307010140640520064905020400140403070103020220050163257
5062002030010130405200500201502030660150301103070308008067003020220050
1632565063037040060400107003018007024020308042005062010501106070301003
2555010100419040400502050147063011700510400405063061001063254506200204
0101404010010800108050204001306405103070507840013063253501040200340301
5210017050120801020162009005018080020013011080162001060301003252501030
6130120010916011301170055013021005040150612165085017005150470641003032
5150632006004030150101150612161212004001502017001116200802050107003013
0110063250506407015504040530215504020300108040530252006001301108040540
3070202001413023249506500702105011015062007030010140653030113012101000
3018002001301640016140603011080504040307010130301003248501010041904040
0502050140205015200216400153010053030170405301180020013016140603015040
4020100720010504065410701040500100306003011421050401324750620200300101
4070530301103017040053030170405301154004082001041050102120030028110200

3013060200105040620082301620023014001403090010804020104510504013246506
2002070040014013010301005303017040530118002001301180306004020307031066
6030180300201065170417001200980040301210310504013245506403070101304052
0050020130253030170405301117318501020082301501023070361060162001530307
0361200155011530130600307036120012001008002001301307035040132445063047
0104061004053025303017040530111520033001640025040050140203050120140535
2400170010010148521504002501801401406030150404020303075016800200130164
0016140603011003060050401324350620200300101401200106005303011080990150
1070030154127010307040130606530304408301301003242501020070050403012009
4016080120094040510307015020094016324150102002110003015040151502004100
5400120040113015305165150103501803240506200594001060150140550140204001
0200100504096303011632006001163011005011301540610021635012014080323950
6305340040610040400501302160503015064504056530030132003015064001400304
0205010132385062009024004040050165300818030150640014001540610030301100
7001196306323750610040010165012061650401501070030115010350163236506403
0701040610030510130203070010805011640309001402510616004054006102203040
0803235501070403140540610064051502004041501405200204052100170501208010
2020090050180323450620070300101304056120020401502002040612002040162002
0406323350610041903015016530512030540150453001405103063050306100503040
5005305165504001025030530301216406011004001630110032325068309010130680
0200130110805064608010952005706040055010440301108050120632315065040080
4004061004040050130253030145070402020010193011002070405040262021502001
0911630110032305064082004004020307030530301506200801000400604001306305
5060830130210051010603012506303704006040040304061001103011003229506409
0400600105011001020080405170018053030116427015011830190405160014640500
1030115030602001410030632285010403017030122005303050140103060704040040
3060161060805040040309001050122004003011002001020016100504042004040820
0905501301100151010016050704008030020653305400260854001200140308082009
0301103060041153030101003227501020080120406100504040050120155015303015
0645040427040040050120140154906322650104030604015020615302100504040307
0301150104006166555012040030110020300200707170020513010100400131403080 3
2255064400510130501070030150405062040040110440054001200900505015300200
7015301620020503011003224401020020105010001022005018020080205040656080
5030200203001014050180200203005040620080201401200203001110506302103010
2200308008050401700530110054507012001004006040512001403080208020092010
3014400200105013021005220104001150121400203015040403070545070107003013
0110032235010401106100305103070105016204011004050404061004005013021005
2201040011501503301504040010200807030110032225010403060401050640011050
1302100153002007021050104001104020101130403011510111030110032215062001
0001904056530700115504040550320060050306152405303021001304650324055010

4001503080405103017032001322050682008040040204001045240400501302402014
0011404020010600530301105014001140803014025050644040013011005014010306
0131403080321950630602004030170320010402520090015080510452405103015306
0200401050163218506307080102030700206530700115305157701163070361564608
0151020010016306004170012063040301501400301100321750102004014001700140
1020090050180201030120040130164104300601263061656100630615085016301100
3216506453004001040081200401570911004005020140102004011080105064008011
3040301151011104003011003215501040306040105064001610307016307040013013
2144010820030150408200301530301406025501650140103060504055013213401020
0202140020103011010030110501130403011510111040030110032125067032001017
0014020090050180405507030640040500405103015100301801700510214002022570
0132115010270012030150404005020401400100490120090050506030110032104010
9007030130020070301220065130153011305303013209506503070400140650680600
4001404030701068002001301640016140603011080260030132006001010700301530
3016436010130132085064400510130405803010260301507040549080405301407015
0191030030140530501076530301506450406040300303050643601015406100615400
4363207401090070300200701530610300302050404001040061640520304040051200
4014004361050132065010100101250212605040204001036529840040301402400981
3011008041070220010100050020408032055010240501930602105010400110306155
0827001306114104300121700705502700701303204501021011000301504050120401
4545301102001130103014030110080200109301410080400632035010830190301204
1270108020400408200210503060041651800200400183019030407015016104301610
3070610307040040705011040030120400407050200203001501105070761220030110
0615306100504012081800406024008032025062007030010130405654650365014010
3060402050409810130402050201604016306004130405030115101110530405040030
1100304050301416103070164001170011040083201506707610405802001093016605
0130165033015040546503501401030603020030086320050102403013080080301653
0170055011030030205040150104006162001093011009504015040307060150301151
0111030110064661450140103060500200663199501050406403015412705040200105
0020103070150308008010700301530304408301130110061403070501401030606466
1415010400141003063198501046080403015210017050120801020200900501801630
7061403090040560805011540050100104006016152164836319750102402008601700
5163011005200902401504001101405400131403080319650101006018014061001650
1204055015406100650670200801030140011017060400108066020010100050401800
1023200600400202103108020410306004163195401082002006801000105018066047
0215060830424050040309005040130131945063060200403011043080160010130105
0180600400130106064011021007010403061200244010306501315501207400540015
1200140308020190701003016319340102083017107703015303011501550110606401
1031925010403017030122005303015018260615306850406200150301108050402020
0625011046501513140308031915063099040040203070306021002153002402010400

1612002600215504040201040016012001504006050110501530513010606403011007
0013190401030704010208504305040501200100301101003040030205016318950620
0606001301405520060013011080405621700703016604053050107003012010306131
8850654070104058040530140701405301501075200600130125065040610130501070
0301501318750650100610405520060013012405651207301506400610651309030150
6401010010501070030131865010504064030301020030026104531855010240214002
0650120010030140011012030400609318440108200301504082003015303014060231
8350623010050102301005040101164030900501070030140307010606164030900140
4702504016200904005016120010500205303011620020700640018301903011630407
0616504015010700301130131825063070801013014050630610010405501631815064
0105104163020108040550120040040301318050661100030140570240010120070300
3016317950627001204052005002016704060301506100301031784010500120180130
2010307030750400317750109110300301307504005040103070402010250130531764
0103070301701040603016555013175501043160301108020230100400631744061004
0050108201200101070030131734010820030171077030110307030206400631725063
0407040014040102002105013010080206907050180317150105040640301504020702
4001504030208150380080600163170501022001001301204002001030070200700501
6316950102700704030150405062040080200600115301530301704070440013080316
8506306770403070406030150704055013167506701094006010140640530101000250
1014063166501091103003015240030750400140631655010403019001502014061020
0207003164506200700504015301301510200100504015020305114063163506704004
0101650120140405507010501000114031625064706101650120140405134050031615
0105060405150704004050140010120080131605063037040060101502170070280131
5950620090050405085030516306100108031585062007030010130405654001000240
5104001108031574010301301217007030116200101040085250650406101303156501
0402003403012630100108051502030602030700203155501050406405216501201404
0510307051200100803154501040370130180070210307051503075063063153301010
1200601105021403070540307010501510140530502010403061315250103061301200
2710803055016315150102401022007050160302315050102007005040301504050620
4003020230100103070314950104013018620030152307503148501040301703012200
3010750400305501631474010820030171077030165302022005016314650105040640
4052005002015012014065101302030700108050131454010900704061021700705012
0550153090030140610217007040570060018056270020803144506304070400140240
3070110220030110031435010100419030150404005020501140603015040180602015
0103070910060180314250102700120301504030205090050501615030500402003002
1301400501140631415010200860403015040400501140501163011003140501030613
0153023301640201003060010700301161004001631395010460804080020013011080
1650070400130640511030016015030116606002400130631384010100400604030160
1960100301216507631375010200606004030150401650620400130630102030116806
1313650104030170301220010307013011020031501200315040510307040203016011

4063135506701091653030116100400180313450104013066020040203010501313350
6100400400130121070300405303011007001313250103060200403015201013012189
0127002031314010820030171077030165302022005016313050105040640405200500
2015012014065101302030700108050131295010200700504030120094016080120094
0405103070150200940163128501020060013011502004044050031275010200211000
3011080176370130131265010704031530516515010350803125506304070101404010
3051610503502200312450103011003015040402030407030105013011003123501032
0060040301504050506204003096301105400504004030501030163011003122506417
0406100404005013024020316715040402022004020301003060014050620070040063
1215010403017030150405012002070030150640014001312050104030170301220010
3070130110200315012003150405103070402030160114063119506701091653030116
1004001803118501040130660200402030105013117506100400400130196304056600
1405303011007001311650103060200403019630406100400270020311540108200301
7107703016530202200501631145010504064040520050020150120140651013020307
0010805012170070301405700600180311350104041501682901801562001007080311
2401090070406102170070402070060011080660215660404001306311140630704040
6102200300402030622003001530510015057005301100311050101004190301504040
0502050151012400180150305004020030021301400501140310950102008604030150
4040050114050116301100310850683090101306800200130110805064608010501070
0301310750108020060403012004011670109400130631065067010916530301161004
0018031055010520018014006102301233015040506400850400631044010800515703
0930600506706200763103506107064001503108031025010504011505151401080506
2020040040013101501040301703012200103070130110200315012003150405103070
4020301601140631005067010916530301161004001803099501040130660200402030
1050130985061004004001301830190405660014053030110070013097501030602004
0301464050040027002030964010820030171077030165302022005016309550105040
6404052005002015012014065101302030700108050140515020305180562700208030
9450102700704025085014063093501030613011003060013011700550130925010900
7016301504050204004030401400900706115010307016601630110030914010900704
0610217007040201030708016001105013090506107064001503630895010502640170
5012402044013088506403070400140240204401107003011610040016308750670109
1653030116100400180308650102001234040030092404003009217001630855064306
0040040203070307050190405067006004004006308450650027040051017010200302
0250650240013083501040301703012200103070130110200315012003150405103070
4020301601140630825067010916530301161004001803081501040130660200402030
1050130805061004004001301465405660014053030110070013079501030602004030
1417040027002030784010820030171077030165302022005016307750105040640405
2005002015012014065101302030700108050130765010100123014702150100200100
0140500307550683004030120308030110805704050406515010350180307450105040
6403015040107040504061050350618400804055010261050102840080180307350627

0020104061005012200301100307250104063200403015040505062040030865011054
0050400403050103016301100307150102402001070050130115015013070501050406
4030142001921501140630695062007030040063010220010307013014052160850130
6850630407010165012014021040307014063011003067506307002001301207024001
6203050406501163011003066506701091653030116100400180306550104030170301
2200103070130110200315012003150405103070402030160114063064506701091653
0301161004001803063501040130660200402030105013062506100400400130186504
0566001405303011007001306150103060200403018650406100400270020306040108
2003017107703016530202200501630595010504064040520050020150120140651013
0203070010805013058501050406403015040506205080520020150305016308030574
0104081001049013063056501070801300504015030140803055506402003403011301
1503080011406305450104030170301220024020106605070013053501024030130800
1080301502050153030140030525064090400600101510804056163011003051506704
0316010302146503630505066110003016405151080162202208030495062009040050
1061402050620090501030553030150645040304850642704004040050201405010140
5303010100630475010611000303040108330140072002630465010100400403030550
3301400803071630454010306023010025303011040015040130130445065021306301
4070805010130406103043506500702104061010507600400130630425010301800301
5040501205501102130200801000163041401070503015503550020065040105030703
1630405010200600130110801004905016030103030703163039501083019030121050
1008301614020810302522003038501043014061010400101096001030200801000105
0170409110700301630375010108104050010504001040101070030163036501080300
1065804008002004017001630355010100601061050407091065107003016303450104
5106580105010030600107003013033501040301703012200130110306470405501803
0325064041001301402061216404005013031506427040040400502014040400101200
8013011003030506307080102030700201501211504363021630110030295062008001
0614020506708050106130285067044007001402050670406010305301100302750108
0201701530309005080140150901427050163011003026506427040014054061006510
2130301100700130254010512002112504051030703040016302440108200301710770
3016530202200501630235010504064040520050020150120140651013020307001080
5013022501020060013011501002001000140500302150107040315704050406106064
0150103501630205010200600130140500150803071630194010900703014693012010
0200803020501208010030805018020082301201907022200800150110606401030115
0108618030185010451060102200107040501130203011003017506202004403015011
0606402189013011005017040330110120040014030803016501010020030040405670
2400180301530101012006011050215150500200616203070020301440102002040110
0406765020630135061070640015035040405150320060018030125062007001870104
0330150163011506900101100030150304055016301050630103010054070020030030
1306550130095010200300185010144030110805067020080306020018030085067024
0040402050110412702200601501106064010301150108616300750105040640301306

11502050115011019600150220015030200801000105017040950150130065062301005040150220010301150120010800130163011003005501070403140205023090130680130600504040203032001640201041015070910013050640307040080660308020086030140204030701070030140202001022030550140203050700150130210053040400504013011003004506200156106064022003003501040301703012200215040116301100300250104316052008603011010030180300150620801101408010030400105170018051907010606401010030180300050623011000301508503015015067020080577021630110064051090706405301281610030180299950610030404040050114016100301106064040530301100299850102200100403015040301700140205016407050301100299750102301100030150850150205011200313015030501015067020080301630110052008603011314030802996501023011000301405165012050152008603017024005015030703029955067040400340404005013056015030303010100629944063070404061040011001040305200860301704038029934010307020018603020220640011029925010200300185010144030110805007021651600165320011630110029915062004014001700140805200860240208002001504040203200600105014102001029904010307020081603017005501530681304030303011002989501020090015030301800102105170018054107075062988501024050127050010517001805190701010030180298750101004190301504040050205015240018030110029865010240103002204001036306130110029855010506360403015040205030703130102001010001530140070060040015010303011002984506301007040040400502050114055010214062200100040301610020030040301220030110029835065034030304020103013060200110700301402030660200501301100298250103061301402010121220064020220030110029815067040400604001301530685040303011002980501050100640404005020501140550102140680020013016400161406030122003011002979501040301703012200140650670200803011002978301010120060110502150704030602001501297250104030170301220030660200150113061008050670200801104001802971506704040060404020704015011504001101212570018013020301100297050630400100105018016001802507001030704053062969506200151030130602001801050160301003095010130610200490100108001062968506270020105018016001105012200301100296750610040010130150670200804061002966501040301900301406100301400101501106064020220010415070016296540108200301710770301653020220050162964501050406404052005002015012014065101302030700108050129634010200203673020504015108015040025014020800200130110301162001040306129625061075400601052165012014012501405104001106080162700204100802961501080020070405507016501201301500484050408200301504020020700504040510400110140629605010708001600153040510015070140030900805101140603

015040405103070307505013005050129595010504064016506201013012060805070 6
001220307030295850102403012140020301400110120304002957406092956401082 0
030150408200301530301406022955140173050620108066080404002700204100804 0
206170413063010220040202127010140301002954140110040612001004006040400 5
060815108050104301600295314013060651084001510805061003010616200290140 2
580200100030150673102010306129521401401501010040040303015030703165010 7
015200100150400110200700615031671504015030251502200506306100105010700 3
016295115011040706140901510307016200600104030405220040011012162002070 0
170015010700301629501401200201620040610003030121620040170016200673015 0
645300101305010700301629491214004053030110301264001055018018301903040 7
062140050406294814010820012006801000530301501206400150608405400110106 0
530301304210201030618018301901304070304070650401621400504013012947150 1
540510804306001065401101003014061021700703015308070180010294614015001 1
003010203070030708010504065065071013061008301213015303014020081040030 1
608050301506304001001013062006001153015303017040506704101305010700301 6
294514016100203070050102501206162004001001040306168020060104030161008 0
501170015010700301629441401100406120010040060404001601550129431401200 1
000501201521700705014050532170070150708020090115022005063061001050107 0
030162942140110100614360405220030506400102105010700301629411401306016 3
011005063051330140529160017001615065800200130110307050630040105010700 3
015040820030141270629401200620300412001612002070010501412001504030580 3
060020015503016301030301307031070030165629391200105040120040100613120 0
601510803070361362002140603011080307031070030120200124002938120068050 4
054176150200401400140304360501504082003011406163011005040820030301643 6
014053030101001700162937120010260052301601805040820030130020070301103 0
701064006014050040110154006010801405501021406800200130164001614060301 1
003060010700301293612001026005412702650700252108020654408282606400640 1
013010700301108301103070302064006293513010260522001030170060040010501 1
300504013012003150405103070402030160114030100293412001070050612003002 4
013012015030602001140629331200105900522001030702008012030150120640520 0
800101306405708050101301405303015064504050642701062932120010410020220 0
501206120059061260505307038012003002140301504010030600107003016562931 1
200638401200386160072002140550102307036313183040170056400120080270070 1
700550102008230132004010700301656293012001022014153524054513650102008 0
120301709400130802929120010700505102001003020108015050070230150103006 3
062928120068020130160150301200500201102180162002070010304055010251508 0
200904100306292712001050020106015016140170501150100306001404051010060 5
061400104054302521010850302926120065914014060301504015030750165400408 2
001041050102120030028110200301306020011070030165629251200630050200155 0
301307036140012604065030161601230301030301402030307031070030165629241 2

0010601018002100150103015150800210040500292313010304510307060403003011
5030703405001502016053070330130063063090030144080102020220010301200400
4030129221301026030800140530240170501301201301405501506301007010615067
0406010405200500201501260840040129211301020651030705062040040050180151
6555301700600400150404001012001292013010260308001504021700703015062001
0501085064030701080660615103070150200290501130630150400530150701503080
0103041205012919130660200530301500702107003011700511675130120506700600
4001050120612001700162918120063005050632001013016501203021550620010165
0620104030801660301200940400200940110400301510200100301103070164001410
0306291712001024004001502002400130206301500401301530150220080013020629
1612001050020203070050102150620010066020030121890164640500614170629151
4010301121700705010403019003030150440070165101601503030405150307036405
1501002001000130602003011627002014030865040610062914120010404400405150
2004048015040011012162700205010700301406100301103011257001150301008029
1312001076506200155160015704015030703621400203011060640150104001410030
6291213010260308001615012040200300201030614050531030140556361030705062
0030081050107003012911120010608040050608161008301220150103130130500402
2050640011013062910130104002004005150304002006204168052400250050302030
7002054816530403501200100301510307030750130630162008020501070030130110
0629091200109050611041520220021080206501040200340301504016470102503020
3015030703203070020629081200635405012001003011700516700600400110406100
5012200110306602003013011006290713067006005016050130305019103003015012
0610501370014702200207003015070105030800141003029061301030600150130807
0060040014030105040010301040030106110290513010260306602003017040400700
6004001105040010301103061001051041010307040301900301800701040610629041
2001060705010200801203011030701406105012065040820030301008301700104061
0203040301290313010750400520101304030130750640140100030121406030110010
0300400406106290213010100405060816120010040060402001060070010406105503
3012189012901120065005040125515030703803040705040163040701401030115040
4100629001200638401200385063061001065010402003403030700104061010200300
2130520101304030150620010406102899120010220164007016400706405608050110
8016200220400601410030150220010200506152010130403011501030703075011306
3015011003050632001013050107003013011006289812001090220220050120650620
0290400155040080800702304020800702150307036100166013011080506300401064
0170930150630201103040550113015010306020040301504020302100150306020011
4062897120010220121700705100700504020504040309001050406120090501306180
2009050670109400604001408050630610040014024020627002041008028961200621
4061001650120620020700301166050104008405121640540070400405020306110306
1504020506450407006004005050115030101000250105012014020501826016301100
2895301026030116308004054011306510412704040030308001404005011306100108

0530301506450405064270101406405200300810406106289413061060401470620220
0103070501205010430160050613001014015108040530289312001090406173405304
0050120506100400403014706104003014306003015503401200106002030700130100
2892120010500201200625001670416148161200625004061030116704400130289112
0062500203015051670450105020010040110010800150120401550401610030117001
6289012001080761900101000400153016704060410702501204050404054001200170
0128891200107060570160301227002050403015044007016570160301216270020302
2888120069010020303070310620015501301154008400504010200340040015032030
7005040120010600203030703130050110700301202001240028871301026050670109
4006010130801630800803015004013012030162200800801020200900501288612006
8604013032001301506702400400501506403019003013011006155040302011055035
3050620400617502051030110100301061288512001070050570405062010802030405
1030130750113063010016601301108010300401064017093013020110306602003011
7005301401630110062884140108200120068010005012055018002001301640016140
6030110802006030140307010107003015307501301002883130109016520020251030
7010304040010580152400400201501030613012001091601163011006288212006761
4030900161341008050620060014061005103070550170165120040080120801130117
0055011620080205010700301301100628811200630050130651108130614006405062
0304010130617080501306120080040560805013050620304010130650610030600104
0561101030050610030600101305530155064504016700600400162880120010410040
0520041008010300302010030600620304030110802010200300530502010403061430
6700600400104030680020013016400161406030120304053010700301287912001070
0505010403017030305062010305427010307050110020080301307501070030120200
1240028784010820030150408200301530301406022877401030701030030202530301
6163040701402405102501080510301506703200104061065103070404005011404030
7010410080020013016400161406030110801405303050113012876401030121700704
0521090106155040080405210904005015200401507050680301600105010700301200
7008103080170016304020504050630306040010501070030153030140307010410018
0070240208007021704204020501023066020030117041630703400130287540108200
2006801000530301501530301405302008010004006016405504040010300504030507
0018040550130080070230206507001400601170018053066020065303012506504061
0501070030120103061205065070014006010501070030150156507001400601010400
8162570010403070401320040110307057040165012017001653066020065303012165
0401501070030150650406403011405012874506301007040040203070304001101301
4020305303015010210203070020521095202001240530301450705040510840040206
0805011030701640306080140061024040030600417001801400140030016117010403
1630201400501815034020103070601030402010010490615840018040404002030401
4061402040013016004006102614020301660014006102614020400140704006102614
0204014070140061026140204001660014006102614020501660014006102614020400
1540140061026140201012140061026140204006102504016302014005014020608050

1103070130632008800102004030110307013063200832007013011030701306320081
0407013011030706010302873401030707010406053030165053020010600508080704
0060105016550107240013200240040200101000505211050050708001050181503505
1030706010308018120505063200101301040013030116050301504047016100301628
7240102084010307053030165400110140203053030150102102030700204053021005
0405010700301507001400601140201650700140060103080403083014020504030180
9130110003021700162871401020840103070530301640011013014020305303015010
2102030700208007021030704020800702402010307050680169505470281503405103
0701306402010307060103040203040012006705001305001300703015130904702504
0652001059003015040402021105005067080040050108620038030151309030210050
4040012004050013050040205040403083011610003021040305010700301640205014
0101400203040501070030140205070014006010301650401501070030115101110287
0200109040301601023062001503014051614068002001301108050107370401620080
2050107003015026084001302869506408200400402030703030660200301167010916
5120730116400165130903011640101001628685061006018030140520103061802030
7004702200802050406110103001025062020030010130105050642701015040140580
6600470250404055030421030640530108004002001107003014055010440530505020
4010306405302100504050107003018030600400601140208002001301108040550803
0600400601030400183019030116304070640205040165040150107003015303014706
2867501024030110001302301130130660200301103070140616440054005670109400
5016404003040814040201030706304081405103070140501801630640050180306602
0030116701091653030116701091301002866506304070400140220010260053030150
1580620070405701916406010040013030100503200600103040540020040150103040
5501401014535303012164060100162865506710180301405201030618051004001065
3030130060010653066020065303017091050406286450683080403014052010306161
5070916150704060163061001050140550102402081030530660200653030110301167
0417001501050406403013061005012014050128635064030190030140520103061302
5306602006405103070530301801081050150680160010401162140020014018002004
0405263010010801286250105070700405103011640011010083014053050201050162
8615068002007040405504010010200801700140550102402081030530660200653030
1103011670417001628605010504064030122010306114062030700470250404055040
1001020080103064001040500150709163066020030126530301215040150630610010
6285940101004006040912009010301130010504010451053030164001501024040011
0115030750141003028582001041001030030201030705303015011300101405303011
0030600107022001103070103004010504040550406501030320010307010300401050
4040550406550921030701030040105040405504080140504052143020100306005303
0162857200190213011030613052002703020307001080501200155030163010303015
3030123010010285620019021301225700105100200215060412010130010504050705
8020090106130010504052210901080420025040151080301235040140603015040307
5010653013060050403200600101004630110200400801401202005307031040500550

1028030610405001218601037105303015012004004030128552001090403015303011
0301680020013016400161406030120304053030628545063070801014024010307053
0301658102604006540013090403070410030204001801902001093016800200130164
0016140603011080504053082601053030150120040040301285320065050405301408
0120065053053030130703104030504061512001042010403054103200600117001800
7021006801580070240014030900218605100680504036405100680504036405130010
0010103302008210804001403090020612852216083017010200605303016521608518
0680545070530301436611010300543104030513170011040081405014090030152608
1057010100221200602040530140701162008020501070030162851216082001010002
1300105040100720010530301653080080504040541071061630407014050608153030
1405107310302850200190213016263010030151080230100400400140610506801600
1051207301140010165130903014011001653030120020700507070102130652001340
0405105304001303013200284930190130166410003012151080530826010540601151
0802002070010670802004005015303015070014006102108028484010307010300302
0253030166015030303015004013015303012200800106130010504052006503053030
1104510200650103070200650200150560604040040306306108001015400107412010
5102200100013065101002003001305506400107520200124052003300504041006101
0200422062015501205313730153137108081290403018129040151080512030040205
2006503050040800200130164001614060301200650530301284750101004004030305
9007064064020302100504016306005010700301504013050040640015010240400110
1402010301150307501410030628464010820020068010005055120020147025040530
3015018050552002010504061105043015110830180020070161000400240030150908
4005042001501110002301103070402040011040080165200204001306402014001107
0030153030130140504040564001612001060040510804040040307050140562400120
8040205014010140020304014040214002030150610004002105010700301653080080
5040530301405105010001010400818120505064310130501070030180807040060103
0628454010307070601653030165308008050405303014055010001012001008016506
2010501402010140164020412705040501083019030164020504010401101301168205
0162844506830804004020307030506504064030151011701040353030110301162640
0650540050107504050108060010140403070103050530320012502200800101306160
5030140012006701030701620059001040305010700301308093016130132003015040
5220013011030612001010005010702140030161505501401014002030401406150510
1605061505400166001105026150550166001105026150550166001615054003067021
5021615051015021615054003067021216150510121615054003067023013015054005
0107501042101306505261031030705052004060025022008001030615504020059001
4013015054005010750104210130650536200805090080810650520019021504050800
8001000104001504064030303010062843506705090101402200102600530301501405
3010207120307004053620080169008081064052001902150401680010001050105040
6403030301002842506404002040014065064240014040307010530301640203070140
0401510805506206040200101000140061021630600440050181503402010307060103

0284140103070506304070400140253030164020301020716516703200180167032001
4020303010100501640203050700610104008156306004400130801481151080164340
0403050180284050620020700400402030703040203020010600402030700153051103
0701640306040061660501400604001040084020400610220010100014006102163060
0440013016504015010700301151011102839401020020100720065200801000404053
0506306100101404050620024020103061400121093030506210930165010210930304
0012109301640015001026003030506500102600301650105001026003030400150010
2600301283850102403011008301655303015015064030701061008301405501045303
0140510806107001040610283750630407010165012014024053032001640510410164
0540050603014051030704530040040610283640109007021700704053065200600130
1611050430110801650703040015040640301400130801100030140015090840301506
4020010501070030150128354010820020068010005303016402030530301200801000
1050150628400130116880901030616807010306530301301026010805010200315403
0165010201604030161022001003011030611640061050157060301640205040308008
0301630613040011013062834401030707010406053030161300105040102071053030
1502030614214815040402050401020714054004082006402010307053030130800801
3063062002050403016130088030122004011055018050191030030140016960070240
0105040650191030030140016960016702400400130165040150107003011510111028
3340108200806200530301501654004082006402010307053030130800801306306283
2506403070400130404005016403070105303016520060013016110504301108040103
0121700704053016504015010700301108053008180301701030040050150628105010
7003015012831401020840103070530301640011013014020305303015010210628305
0105040640404005020501142153050040301646704005015303014020900701028294
0109007050140052170052050182601700524030204005050115030506201014040400
3010056404007040607001130630628284010900705303014507065615010555062608
4006403070524020306010301404020516801250630610040064020400506030125506
1003040070012827401090070217007051080404008008011401080402060403052006
0013016110504301108054004082006402010307053030130800801306306282650627
0012030140553030145070201030618014530030121640011040307001801453005702
2001251030701613130630282550102402080117005163011006120010600405608050
1240015040640301650650406403015090056404007040607001130630282440109007
0217007053040550405200220103064001070030164050013015040260400201140405
5040102004013020304020302001060065302402030120030056260840013040205040
5290702080130121613501070030150128234010208216400530301501654004082006
4020103070530301308008013063062822501010041903015040501205011510307053
0301280010005015604016003016282150102700120301504030550153030124001415
3007022001453004005012170070301155070120041062820501027001203015040501
2050151030705303014005070305015604016003016281950101004190301504030550
1530301240014153007022001405481541530080405608050113011453004053050201
0403064053167150640200105010700301628184010820020068010005303015018016

830901620307004702504016214005010700301130128175061006018030140520103061614215415300405301630210040013065430350105014050040564303180145300570220012164001104030405004001509084030150640200105010700301628165010504064030110307020307004020086202003004061501713011582050101305105017301652020030040615105017130182050101301050173012815501050406403015040580101914052170070453001030620060013014061030165303012506504064004040050205015303015010410805801200140524020700600140013065430351014014055040481630201643031801050173016510501730128145062002070040040203070304001501024001101151080150307501615150800200806151503075015200660281340108200301504082003015303014060228125010408120030120010600400501640820016200801000122003010062811506200801203018308010130550152200450705216081405018052530501520021302006001153015303017040704105040628104010200203013002007030122006513015301130100830120304030153030110301704008028095067032004001301501030140205016150027040201501003060014050140400260880128085064030704004004005020400205016301301030100130140400500230501301100280750104170301301601804061080070261140610150500230163011002806501050604470800200130110804040050023040203011002805506710180301405405501162002901402406103014054001073105012804506208800400405504040400502061020020700402066050110400811020060060405640400700600400180280350104081200301200106004005016150408200161503020080100018015040115022005063061001010412705040100102008050120550128025064030204001306151080161060600130110028015064030190015018015047050180155040150320060011502200280050103018001406100150206150400610030015010307040023010001502200163011002799506270020400152404005020804020103070103040040010400110150204004030127985068301201510804056206001501401556368803040027975064301600405053108040560805011620060600501070030120103061805501071640400806005040627965068308040301405201030618055010716404003010050050408027955063016040010130670010406104055010221605011308020069030110806008050170018027945065007021040610103016007200240510120065040615301011006554030201550113020400202004001401080183019030407011030703027935067032001220030110040064030140548113170011040082792506200800810501220020270067016279150109110300301400174055040202700670122003010062790506809010140240307015085051010603015060811051040030127080412789506200411003040547050140201020050501103070150162788501040301900301406100301108010503070340013080220027875064706101401050102004001401220030100278650620200300101407010301704008054153003016210100030140301702785506809010140705303015018260800702103070405800702130703061003060014025301302025700301700153015040570405012014064306504053030170060040011402784506270012030405501610083012405150104001302278350620086040010501803010053030506306100106027825064030704004040050205015103070200131013062001031065610300302040062030405410250403010027815061004004001308013010 0

5303050630610010602780401090070301300200703012200670260301400161406030
1220050403010027795062002070040013080130100530305063061001060277850640
3070400404005020501151080504068002001301504030301002777501030613012001
0916011301170055013021005040170051506121650850150470641003027765065006
7024030150111401900706121200400150206150400401700111630110027755063061
3013011001403050040163011003022774506301007040013080120015503016301030
3018013040060015306400104010610108101070030165627735062003008400510301
6800200130110804020120070010700301656277250620020300400140130103010054
1080130162001902130167040603014020301300501107003016562771506603024051
0804051700141043002170070170012124051030701508400801700110400827705067
0200800400101406405220030165012040060114080217007030124051507006001410
0306276950654070104055011010009108016330302008005040405214015080300206
4051504082006306276850622015030912009030150705200600130125065040610130
5010700301501627674010100400604091200901030140567044003020501627665010
1007120030120010600656200106002022003120060080132006004053016040040127
6550680020070404052002070050704058040520020700240515010400130250510805
0406800200130164001614060301400460803040516511008301702400163062764506
5200120100830304052005002016100830124051330255035250630610010401276350
6200205040530405804053066020016802007010403040127625010306130140512140
0110403014040513401306100301162002410403080127615062003540012004016052
5010200220400604027605069020504004020211007011030704040050208040201030
7010304004001040011014005012041002759506200905040013015040402050140610
3011620013400130275850620013104051700121700703012405108020040040150700
6001170011040082757506304017015304052030700506450403014070140530617005
5040520040100010804052630100302275650640309001013040561008301210095010
2140020150104306157060613011608050803020501306275550610021601530405640
0120010600301108050670200160102010306127545067031200405220010301405501
5303640526301006164001140506400610501070030162753506202003001013040522
0024055010700301627525065040610405220040011012405501070030162751506100
8030040405220051030060050404055010700301501275050620070300101303024001
2001060030110804053070200160502749501050263014050405240544050140501506
2608101274850108104008405400200401000108040520070080274750682008040510
4301402278302012002740550102405200401167091004008027465061004001804020
2200150165481654014020400401570055016274540103070506304070400140210501
1830190163040701640012109301504016302030602003011510111027445010704062
0012001004001700562200103011405150106165101540164010200405021150307036
2743506440051040530703021400203011060640150104001410030627425010203054
0301504016501208014056270020802741506421701503014054061006150305004050
1020030023050406501163011008027405010301701406100165012061620022040060
1805103040650670200801030127395010240501930606150400110125062001551600

1610606401503060200140500273850650406101304061003014702805001041814051
5030703618007024058007021507024001805627002015306602005401131403020102
0040040015030602001503060200140500273750620060014006010140615303154015
0401002604001402736501020060011506200100405470250401501300501405002735
5010403019003014061003030147028015001000405150307038010083012581090301
4054007006001802734501040415050829010303010301001407030110027335062700
2014021050200905012200301100273250105040640253050850140612700205303011
0307010200400801303200130165501273150105006702402508501406110850640064
0501105043011504001108130110550127305064706400140304001510540015105272
9506320060040402050114019007061212004004040050206404004017001402050140
2047010127285062006016003017001402050140203050040120030024040070915010
3062727506220030040014040220030010655040506302014001404030201104020305
0040200300213011700514011050430151108301108040515080200400165200600130
1110030216270020616200802050107003015406100504013040301301100627265061
0040040013080152001010005301504040203014053030116427015014055040130660
2004051080150306020018027255010200600115020010040547025040150130050140
5002724501030400240301502050164001101302030700108050127235010307504030
1200106004005016120200124013075040105030750122003010062722501040301900
3014061003015040150135010700301530304408301301008020308030110307020704
0504064005014001064006011700180272150610020010004040550116403090050107
0030110801050291600400130640550403061003015103070100260504013012030516
5010505001501036730205040151080203060180200650400301200180615020040113
1700180150108661505010701220308030170509015015103011501086180272050627
0020140210502009050122003011002719501081040085216902200400805503523032
0013016550127185010306130115010121108017005215070406014052010130403075
0130530301130063064020103070308008040010501410200104020305004020030021
3011700514054061005040162008020501070030113040301301100802717506100400
4001308015200101000530150404020301405303011642701406100110301100805406
1001030118650150306020014100306271650630408400203080301103070615103070
6271550630201400155040652001050020708015040151080402030615506921080140
4040201010060505200270304017050130110804020305016271450103020130301000
2906505430124002504001501060200695040320060040052003300627135063020140
0155040652001050020520168015108040203021507016301060050504040015035240
2030150130050180271250620041100305221570010307015016800200130110805150
2060180200410021401406030150401503075016271150103080110001003060030150
7015020140610010120097026040201006801501003060041003062710506500702400
5401101003014061040205014050027095064001040302030700470240205014050027
0850101003016003015060815303012020012400802006001110030600515013005014
0500140830401900703011506602080140190070510008004030115010030600805100
0800405100307030115010030600805100307058095030115010030600405002707501

020402001200100108058095051503070340500270650109504053013060504050160 5
013011501003060041003062705506430160015108040560642008030150650020010 5
010700301270450650020016301405201030612703506900801810405400163090103 0
704055010700301627025067012004054570640540015014013040550107003016270 1
506417030140520103061802030700120061010004002150408027005010406304020 0
101000405501804055014010140020304014061405316711030701301269950690080 1
840536200803040550107003016269850630701805120730304055010700301626975 0
680020070406100030301507040550107003016269650670300160040540013090108 0
405501070030126955065040640301830801410026944010820030150408200301530 3
014060226932001090503014070506103064030140705080402013064065530301216 4
090400701651207301164001651309030116401010018060150301103070145300165 0
620400640201030701410530030660200301506201030170051080630210050405010 4
030604030140201406065401051200214020102153040320085040501043011080402 0
103070307031406402012400316554153100853030110801645136269250683080400 4
020307030200106003011630708016402022001642701616436016167020200116504 0
150107003011510111026912006401301703200400530301103016405803060014064 0
510410150102140403070102690200109027010406053030150160150301504061306 0
200520101304030150401080990105303012689710770106100305303015015200410 0
100853030116200410014026882630940301623019301807080055040567001005040 0
601013011010300212700301405230601050165301670404003163061212700161003 0
600105030530301506450405067044005010700301501530167040400601803050040 2
200800601503011510111026872001090403016010261620080205010700301530301 1
547062001503014020307005040200300240201025018013010015040011014051030 7
050630400105010700301250696010506412010200205040301162008020501070030 1
563610808020070400400150102150400110140510307010304004001700162686200 1
090505040501040301900303014064030705240530601030140615019306052307501 0
403014053030150645040506427010626852001060105303011030702030700501214 0
020108020307005018002001301614060301108014040307010530301501403070400 4
030126845068030400600400510804040050201401080540110100301406104020501 0
240208105303012683506304070400140240307015303013010080206304135016268 2
401010040060401045103070302050120220010301704162004013011080205070715 0
101308056206015040512060504015030703540130203026812006802030501605013 0
150140201010810405004020400104010405004020110811070030165626804010820 0
806200306015030125303015015507001213018002001301103070701004005011406 0
301206040106520040122008230110801020034002030803016800200130110801404 0
203020060060530301501200400403012679410408301105010003016530530301501 6
800200130110801406400161406030110801405302678200102600801093053030150 1
520080060040800200130182904008014014060301504030750153030150120040040 3
012677200102203011030703016553030150163091230165550645040506704101405 0
161008301655303015012203070026762001090270104060530301501630103030110 8

0200155030133061062001550301108030103030133061053030150122030700267520
0680100068070305303015015303015502009050103051030701010002405005221006
7014030500402210017050406203070026744010308401030703053030150165506800
2001013060044040550306004103026735010100712003012001060065305303015016
1506081100720053030140550100720010301640014061163040010040500530301301
0260108016200315501070030162672501054021700704053020103061801504001101
2162700206162008020501070030162671401070503014001503108040018301903011
6304070616504015010700301804055010240208105303070010406102030403012670
4010100704061021700704051040011061540010002570160301405104001400104008
5504051020040108016200802050107003013017101306266940101004006040912009
0103011650401501070030141530530301501640526301005304002600400805216504
0610802022005040100830155014030703011640061501070030140307010306266841
0702100110030010803050104030190030150164052630100510601100301680020040
4052630100108050107003030550400805019103003011010030101403070310302667
4010208401030705303016540011015303014020810405005019103003011010030101
4053030160060501080540010504011080501910300301101003011050404001700113
0110250130630660200504020302100504015030602001140626664010833012189012
0103061501073170401504001101108016706050107003016266540102002010072006
5200801000404053040018301903011630407061650401501070030180266450102402
0010700504020301501140501601503011510111030100266320010904030110301615
4007006001405005403019001056153040010304015102001005040501012062662506
4704001404055060803012020220045070140610501654706530301803060010503062
1700703012205063037040060106266120064903011080104003012630100301104070
4005020306200190213011040704001301550180152506704060105017001611525063
0100701026301004053050620400808002001301108016200106010403080126604103
0040200901006530970402001026153006200701030705106160010580540301900105
6151502030515102001005040501012080265920010205050120801020804054007006
0014050050102008012030304001030401801060640270020650104402189016265896
3040610064010512002140610062657464050064170686504061004053021004002700
2041008020627002010501626562006401301521001705303062002050403015070165
5068062007040301216200401651207301164001651309030116401100180020013011
0804051502040501501070030126557107701061003053030150152009050105040530
3015020090501030612001050020530301406011510802002070010431604064001630
9067010267040169040040453080070224058007026015030153030170804130630653
0301150220016306100105011301100820010100024052001104504016320060015010
7003012654200104100304052009050103070530301501616403090040550125063040
0110010501070030305070012653200680205016600302028101305303015011650401
5010700301507070801410530301501265250105060840301200300264020145140103
0705303011620022040030402030152006006020307002040205040106100400301530
1501050203061561404130615406830530301301501050302651506200203004004020

3070304020301515020060060203070020200400704030167050110030116407091615
5040163020801526503400236170018080169015103070530301406011620020700180
2001060015108040203053030120010170300504040203015150307035042301626505
0610080501040515010072001404065130903011040101004030164052190114010307
0501020021903016405263010040030365303012002070017001501070030126495010
4002600403012003002616403060153080481653014020530180401705013015401052
5040405100720014010307053030140601162002070010301206050401503070354013
0203062648100104007030140010230110301153084040500104060403031103017080
1504015108040203026472630100301106100400504015501805303012001017030040
9007010504062030700264610010860501204010808102003015210654006120010930
1580960040080140603015040200600140501208053030122020030010504065250102
0200300402001010005303018050826452006730130610016250400316501500613015
0406032003011625040031804020103070103040010140130140170501301402030400
3081652200450705302001060065805303014001402008409007010504062030700264
4100104007030140010230121680691030640520067005016806103064055008040016
8001001030405002643200101008030160101230116407091615504016302080401705
0130154010525040405100720014010307040014063070404011011080530301406011
6200207001064053070801504016453001030264210010407038030205040501040011
0200401800302010307061301320020640011038301260150301108050700162641463
6030170202003016501040101100301650108010193030104001022005961101030010
2202003004001305014001023015012040401051200213015016270016264040103012
1700705040510070050403090024183012510804200105040641230165108080201703
0116606015030305150307031070030140120083014360403016530301301026050705
0649010616200802050107003015012639410408301912009010301164563061003015
0402109301103011645626382001020081510804056012306163063062570050402006
1601504015108050630810200155013011540084005040102003400400150340018301
9030116304070616504015010700301306004105303015012637100102008301217007
0161006700615108016410701401000504015504016320060010501164120011403020
2636410485040704011004040530626354630330164055069210801405220059010263
4401040830140560620010068050402901020015050402110500405304007091001620
0802050107003018040522001080164090400600150140906005017005263313001014
0307080105303015014020020405040530140805303015051050406217007030151030
7010082001050020660150301504020010500206216430162003300301630123301640
6350301620040100301660403003016800200130110805040640016140603011080504
0530436010530301501200400403012632410530010300302010307053030150154011
0100301406104055010230908010530301501162020030015010700301660634030161
0200190503016501010219030161641550107003016165040150107003015012631410
2001050401045105303015016400150102400110151503075012030700206263090010
1000101405410205025700103052009005010308070910010304050014060301103012
2602444010308052006001301611050430110805303015200905010503050150900105

0120504026294102001014030708010530301501200155013011540084005040102003
4004001503400183019030116304070616504015010700301306004105303015012628
2001030070301601023061030640301601023057080505040220010015200800504030
6704102627410702301301308003016520307005708050101301406520080010130140
5303015064504067041026265010240301501200606003016520307005200600130161
1050430120060600553610307023010050155040080540021901501652501409120010
6005219015018080200810307053030142701050406015030150406262541027030304
0130900260103053030150162014104004041001402203070026241001020083012170
0705401101003014061051001070050610760011050430110805305303013010260507
0308001030580970105015002623200105040214002013061045130640307020010100
0253030110803041310504060150301504062622200621003011080504050070210530
3015016151080210200130510400157016030150162621200104100103003020103070
5501610400640301101081055016100830165530301501220307002620310523673020
5040400400250164002200640074005114030115103070150307501170018054401580
0200130110200400611010300403070470250404030701013010203020040703013070
0200110301420010504040205040610806400105040402050406402043001161000302
4003040500130809402032006005040500104060403031103011300501404018200130
1108020010050640203050102503051003060040200101000651003060040510008004
0504040500510030705040405005809505040405002120040050404020150100306001
5018050070230150402102001080404005020501601503011510111026192001070603
0121700701030151045106530800105501805130640050405501510307024002026184
1020040501910300302070240010640307020010100025303011080304131050406015
0301504062617410430053030121700705020306102001206024051406102001206060
1503011020040061530408304084001700302070800400640070800200114070570800
2004030203057004001550620040040610261640109007010300570160301530730750
1402022001610040016015030115101110261540108200301504082003015303014060
2261450680904001401030705017040060403015040820030115022006100830124020
8122003011002613501081030170140040640203055040080530703010200415016261
2506404002040014040307010630610030150402005330140307010550126115064706
4001404107024012102001001102004150161660103070402040050700130100801630
6400501802610506403060404040050130580481653014020530114050110301108610
1405013010026095010403017030305408200130120150306020011406260850104217
0406100301100013023017005108050126075068301903011041270155002001080020
0130150120020700301470250402006273011080150240020410030626065010307018
0150201501150103070147065410705010030600306115014214020240020303030360
3011092014060301106950406102605506470640040400502010700301402040610170
0552010130403014051100304004006200220130170780301405507810130260450643
0160040560805014005400300114010804056156010608506704060101302603506470
2401550702010306110506083011504040530400100260501070030150126025067040
6010130151080405620010807151080405302601506430160015108030206156420061

4055301130655012063026005064200161530404005014050532908530301506450405
0642704001406402050125995010403019001502030217005504053080100010801502
0410015030106110162008020501070030120019021590600130010517001801008301
4706301220040010016259850630605010248302050404056363140636311040084008
0170011040082597506703200101304055011515020305151020010010307040120086
2596506240012053015016510706030501200802013080504064065640018301903015
0403040701050408025955067031200150103013020405501024052004011670910040
0625945064270180402022001501654816540140204004015700550125935010403017
0303051011550216151503070361508620050401510801506008050801532008040050
9081104003016259250107030016001503016501206125200612100020015050670410
6400120010600301108050670200160101650120405501536753015083090161010810
5301502566530150234006018025915010500200163012001060040050161420080105
0200700400130220052200104150700111020020762590501050406403011035050203
0700206401000301504051501035065301502340060180258950104030190030150404
0050201050120501826040050113015301130501400140309003011080104150805103
0702004100505030501509008012800110004025700700150650301170062588501083
0190301504040550115040040820010804051503060041625875010200219030150403
0203080203011700660102004163010701406016258650104217030301020020700615
0450705040540820040570404053050040653051515010400162008005040521401508
0300208053015023400601802585501040812003014082001400501620080030110506
0401050152200104150700126101625845010900801840530150206203070050641304
0705063040701065305069061000105040501091103003015040625835010403017010
3003020215020615108015020200121040030180020013011030152004012102003400
5809017081020030150140103060306258250620020130040400501305804020601250
4040205090840030402030606230570509051504030706258150103070180150206200
1093016508260103012330146614704015020060060614030706140208150104001130
2065014010306015150405808025805010451300405402083015020640610030140501
0005108040030080507001500200830110805014020810700150140103060646614625
7950107040314051501002001000180660406100165012040550115040011012162700
2050107003014061003015040515020090506257840109007030122002030150405305
1651501035080530150234006018030210050401041507001186506257750108301903
0150405501150400408200108051503060041625765010100601806604061001650120
4055015001012600301304070400400501201040030151020010030150405150103506
1403070614020851501040011963062575501042170150301650120651207301140010
1651309030140110016400120010600301307080405103011501086161502004012506
4510540101405150307036257450108301901503070313020653080150261007010610
0186015301502566257350104030170303015108015020200121040030180020013011
0301196306515010350625725010200606001301405150307038014102052164120016
2571401051200211030701401306061420021050620200150110150301002570501030
7018040400502050140204005301162009050165610020081630110025695063010070

4001308015303015064504050642704001403064020308012568402020080010130611
0103004020708050101301405303015064504050642704008013011002567506100950
1013065140400403070410030405606200103070166020504050025665064030190030
1404005014020501163011008040560805011030116703200802565506100950101650
1205014056301601801700540520010220530708030230110025644010512002111015
0400530121700540030708040050111630110025635064530010405307030601503015
0107011030705216400180163011002562401051200215303011001040520020700101
0400801507040601630110025615010403019003015040305501150400530121700530
7080504016301100256050670320010510301405307030405301200102201301170017
0034053070380255950102002440163064005014702402040150901504102013053030
1400625585010451300301504040203070010307015016505200980107003018002001
3016400161406030122004020220030230110025575010270130301504040050140110
0830121504001031163011002556501024030130800108040206121640400501404005
0204100303011002555501042170153015012115043616301100255450680201701530
4040050110400301301050014040030157005140540610065102130301100700125535
0104030170521502063021005040543002004010512002115010400141003062552506
2002050405304040050180151503075012020012402002070017005625515061008030
0405701603015040405621010003012405220050630060010501070030125505010100
4004030301200207006110800650110020080301506200156106064015010400141003
0625495010260181502108020615215010400130420060050405283011005004050120
5016110103006080504030900400130805401101003014061030960100301501071640
3017080050625485010403019001502015011503010611050306100103020220021700
7050405880504054006040501030625475062007005010140170011704301409030170
4060101306108630124020200700501140501301002546506230110003014058011580
1200915040159010050508002001301104001501501506200101308012004070301405
1030703019104008405121613065150704004030225455062890101504040513064056
0805012009050506701094006010130150506450404057050404005530140530401254
4506800200704040522002002070050704053025040820030150402001550301630103
0301240206302010504030100254350610754006010521650120140405504016200600
6050107003012100188020302100504030602002107540060141003062542506200900
5010405130615420050670109400601013080405400524008054001000240510400140
0302254150620090501040513064052006590050701306200150301405563650705068
0201013050108162008020501070030140307010630254050101004190404005020501
4706301170051040040506306100106253950630370400604001308010400110140201
0200160303705040501605013011003060025385062008012040550408200301200207
0024056402040053012002070010107003011700511675130120506700600400105011
6200802050107003012012001700162537506703200400150103016550400802001060
0301620030030124020630250640064030151001017006080503020253650643016003
0140580400405018014306003012030210050402003002301503070314062535506826
0102030801080302020040100301660403003016200155030163010303011003060010

7003016562534506800200704015400110150704056190068084018010060140603011
5030703625335064400510405307030130260131380151080150307036405241040400
5011060162008002001301108015030703625325065040610130801108103003020140
3015040150307036140515010040080801100400200140050120800200130164001614
0603015011620080205010700301200104030612531501040301900301107350203070
0204050535107350203070080550645040530110501405504030100105040625305061
0080300405400103006005040405610800400200150403013015067080300101306405
8030600140640510410150102140403070102529506304070105200401240563061003
0125506100260101302528506402002040412703025501826014306504082003017006
0040011630110062527506427018015011301530113055015103011086501301306602
0050402030210050401503060200114062526506800200704040580100830150640307
0101304052005002013021030210050402002070061070405040200207001700540205
0152002164001530100553015506450401670060040014012525506301601040563070
8010140703016010130252450680901014070300200703012200530301501826080140
0460803053030113015530114051080501206302523506200300501040580020013015
0405530116700600400140125225062004008010130200155030163010303015068260
1025215062006084006010130654004127050705062002204006010130545070504068
0020013016400161406030110805040530625205068090400140403010630140203061
0051765170018051000404108030912301103070100830128070010050302251950103
0701801502050115043050405150700600400130165307006004005050115042001630
2518501027013014055010214068002001301614060301150100306001406251750104
4016001410908405150307031040084051670420304004003017140802516501040301
9001502015011503010611016301100251550630160400402030703040205020160406
5108040400802004001140103011670320016168002020040013025145068002020010
1550404051700115060121660811403080251350102006001140610015470215013005
0165403019004005012051020010050401504090100402062512506301007040013080
1402020020700510801214002040201030115030750141003025115010802006040301
1502030516130050504064051501035018047063014051501004904050025105010430
1600165012014064017093015063020110130146034051503070314062509506403070
4001304040050205012002070030130511630160180405103011086501301320013012
0302100150306020011406250850650406104058011515020305151020010050404053
0210040050401140250750630613013060200114020510121504001103080200701300
6530251200400801302401308150011000800116301100302250640103070301701040
6030165680020013016140603011080306100301403070101022003011002505506200
9024004040050162008603015064001400801402030500402003002130117005305164
0309005010700301106350301162006016405263010051051302504506270301040565
6704040060113015004840405220050402002070050404051040011014025035068002
0070405308010001080405640521608601503030220040010012502401082003015040
8200301530301406022501104400515040610660301912009030121890150405064030
7040060801690220040080902200400403020301002500107600506307005050130210

0504020400110170240050801306602001501030140030602001130630150220016301
1003053021005040217007240515020305115016306249910306130180890301108 01
4055010240540014004030615220050405101215010400110130630163011006249810
6100400303052100170301620100720050508501100720020301605013015103070200
2990165130903012203051200401624971010021620010600202200100720065108040
5504008050301105043015110830152005740550401316715215070400401401030120
1050107050440400130624961080020040020307030200155030180120091682608030
1030301150150406152620010003021006604030030170630930210020220044082826
0650630610010140103070200290180249510406040303161401730501203020220050
4040010026054030201306306249410550301103061304001101302030700108050140
5502016040108050630040105062001003015040405302100150203051402040530451
0403080124931010021643001520060013012170070306522004001101250406104030
6802006015040107350203070020624921060504004061030120307002061540010605
0801504001101204004001203070020301100249112001090240050204100610407011
0504002003008403022003011002490104070154011010030140610520030085061205
0800530010704053050180102002070050708002007015040624891010030010130630
8001013080101457024001504080104510504040205010400110140180647080070230
4020800702170104031550401925130110024881045651030702140080522005124003
1405002487106100080522004041109070655033011002006504014051030705018090
6001011008096140540016601405304004280155040130201802486103021013020304
0643060030152003300103070203041305404111030110050191030030151030160660
6802485108800400130615108014090040013020501624841020070400130615108070
6340013012030501248310100300400805503301504014020503200600101308020367
3062030647017005501404111015030100802482102160103021130116436080404130
1643601520101304030301503010070016248114077053043504030610605080302100
5040404110301150457041003062480140307010504722003010065108620103011080
0100105013021005040501200100301230370400130610083012030403015303011030
1704008024791200207004053050048106150610040010405307030410706301504051
0801508020090611022007015012001005150307501203070020624781408005130614
0309008016001013080504064065640018301903015040304070105040624771403090
0304085040216004100640610100301108303056363014005070624761403070525069
1081013064058030600140640510410150102140403070102475130610053010800200
6504082003015305070015040130157018030030170805040013070010406102474160
4051301704060400130805040820030304001690130140070300600653036701301070
1430150670240010700104061024731400401130613670151080102004001302472180
9080901701100152007001080247118060501022001580605010301008030123301507
0205063016010624701406101301404005002305015100102009405305004013061001
0700150630610010140240307015085024691200300701301404005002305014055010
2506400801600400102468110020077001040610501040200340301200300850620069
0301108060080501040610246713040854011010030140610405301606510805010430

160024661200765401101003014061030408105501805507080020070150402465120 0
207001504305040201501040014100610026041001401250150402010307090100502 0
307002024641403070103003020706066513015301130107003015303014020530114 0
501246318060504010301108055080605050304050055010020085030180201705103 0
704003090010700301205301103012009005016580306004005030147064020305016 6
016040130306100400501511083011080203050180257001803011002462106080501 0
304003066020307002061540070025080306602003012005001504058002100400800 2
100805216200902104030140240020090230110024611020040160110202960014080 3
011002460103061002100200400403063010101200601105025010240010020080306 1
004005014001030060010501106012002130610400108302700600140013040150211 1
030110024591020040140010907080150702400400130124581630800405400101200 7
001207050401405062001511030110024571060640150103017032001010400850108 0
201705103070820025050301630110024561020040116701091610506702400180504 0
820030140202200501652404005040080140501406100110302100504050620015405 3
030110041003062455170805013061200800405302030401013061306100405103017 0
320010130150620010130801245410605080106064053016402053011700516301100 8
020016600530146031303704053032006001802453102004016030110100301203070 0
208015150807001008040610030155010750401200176115030408150203061502030 4
022047064015080306001140163011002452104706404040080306001804020220050 4
028001000402010307030810501404004200140145703014020103070301980115060 8
147064020220040204701040301406100110301100180601501280010005406100103 0
110606407032008024511020040160301405308001620470250402040610015040080 4
100150180301100245010800200400302200201030140030370610200500110307013 0
614053011002449106064011020406100507020303701140624481044005140500183 0
190304070650401621400504030200180100030105016244710654100801028001000 5
103070303081050406102800100040201030703081080510801610009400130640201 5
010072001404001210950401630202446106306030165040301402010307015030750 6
504010130120069301250134020150470166402064705040402015010350141003010 1
012006011050211024451045140654061005067020080308001624444051030010001 4
040103015040405103001000805465032506702008040570240018024431030060040 0
130612020048016004001301602102008230110801100102009405302200800180104 1
270220060150110606401030115010861410030624421020740050401732030700615 1
080501043016002001550130115400840050401020034005047040015032441103070 3
014001320043014053020103061804001830190301304070410015040640540011050 4
062440101081013061510804006401013040505353050180140200340522004001105 0
405501243910100216200106005303016200860301504051030701504005200201140 6
150110196001503020080100010301502200215040115012438110504301511083015 7
005108001004001405018001100400501140800100180150200980107003016400150 1
023015040150131401030702020050065050301630110024371010021612170070430 0
115010150403070400306306005030170670031080402050230901306801306005040 4

0203032001640201041015070910013080200860301402040307010700301402020010
2203055014020305070015013021005304040050401301100243610606406506200152
2002150401163011001436052008603011010030180243510400150010820081603018
3080101306200816041020167050901405011670509014080100304002050104010108
0140100301624341030701301400501205018060040013015030100243310606405801
0600560805010806036180243210706040015501405200860504051030130106001040
5109070640530128170018016100301302301100243110100301504030615062050501
1401610100304005011401106064011016301100243010307040060150404061030183
0801410061809016400101405004020410201670403180242910305004030140204001
0010200921257001061405200860240208002001504040201320060010501501410200
1050120081603050170055011630110024281063503011620060164055010240520040
1167071504008024271020040080150402160041006217007024020400860108012700
2053030110307016200400804001304020301061060640405303011002426104001405
0054102070403805067020080103064008024251088006015030120030081050165501
0730140610402047064030110024241066015012040400501130650850580306005013
0147064020501026150501023070318053050040200860220501040015030802423106
0640110202008602150800200150401503200600400301504001031301100242210216
2700208015302015040011015151010200141003062421102006001520014004020320
0600501550406402041070501510806402015010030600155040242010550301103061 3
0400110130203070010805014020401705011670200161630202419104003004001250
5040131671521503200600180140140603015040307501613026015108040203020306
0614540800200130140203030703107003012418106050101306102200308001013021
4002010801022004507015403070301100241710306130150620010030130121408030
1100241610454050051003060010300302010970110700301150220030110024151060
6401101402022005040803011002414103064006270020504010307021700703015011
5010301108614100150124131045301702400150401030704013060301620220050405
1012201501034100405270070400130630101012006011050215070403060200180202
2001306602001501130610080511040018024121020016704060114020704010505011
8016004001303011002411101000910501611501030709200801050180160050150501
1502200130110024101030060010612002070040010530703015010301306100530130
6100802409101000955015067020080103011257001240810200207001080110504001
3061040011012206600164005012570012407106080503020400705099016240610606
4011020041001030704001034050050104403051108050105060400500230801506400
8020150400806401000301504020150103508016080504003040010065078400130615
5010702001004001020204011030120150703200805308020105040103070402030413
0530610040080204006001103004040070012405105010701030707050904003061050
4052840201030704001010030165306470610306470570060011030816030124010301
5100301030804010301108051080700100180400621400301108051080700100150124
0410861014020401103011501086170012403102006001520040201030701505040410
0306240210606401102030660400104006141003011002401120010902150240050202

0501240012001050020202002070050623991200105002020826050102023981020040
1108052020030016239710200715244300123961060015062001523951030515040120
0107610303070316239410306100165100801023931050160305040541007030308162
3921020040110302006010623911020049010308200300122003011002390101000955
0150670200801030125700123891020022030115040011015040201020050302388102
0060015101660200101000504018001023200600400208150310301204104040800162
3871030613011540020010601541070506080600400130615700600301100238610706
0400510810517001801511003018023851060640110151003013011002384102006001
2200140151080103061040501000103070152300516151030701206400110190701053
0110023831060640110205010401022030400140623821042004008051657024001615
2504061013050401550702050490101308023811070604001402608050302010734003
0151080600141201510400157016030150123801020020700305130903014010016105
0427018015011301530113053030115011050501237910861014030704040060180204
0020040060011501623781069604100403014163012205012010307050703060018020
2200150110501237710606401101046501514001140308023761045200150301103070
4316160210021550404020104001103070301200150400605011050116500204015305
1303011008012001501012007001237510606405001048201400130562374105060830
1140601301530651301530113053030123731080600162006030140307010550180306
1003012200534005016237210200500301400840014061405501021406800200130110
8014064001614060301108014053023711064006013002007030110307050408200301
2370103070301400161406030168002001301100306005040401301075040023691030
0600105040305200207004001301236810100300400305012001003012010307015030
7501140236759236640108200301504082003015303014060223651720200405307040
6040061481504040550406084003055020010050404053021001502030514020623641
4301406100522007005040065010100400403015220030024003020501603025150200
6010140501802363146504082003014053030703106040018301903011630407061650
4015010700301501236214200805401101003014061051040014053020623611470405
4706405190814100302360142705040820030110400113018002001301640016140603
0110805040302050123591430670060040010501504082003030101000250101406235
8143065040820030301670450123571453012330120060040068002001301100300504
0065504050200980400104001614060301412040023561411101030040400103410030
2355143065040820030170060040011630110062354145705040820030145070700600
4001504013015701803003015062030401013023531420064050531030150104020034
0301100660506235214806504082003011030150101004004030120030085040610235
1147040530470501405014051030703037040013080235017140576400501020080120
3011030705010911030030115030602001150120040040301234914800405103070506
5062010640540041270250620080201060130202348177040530165062010305530153
0301506450401670060040016234714200801501040011063061001014055002005062
3461440217007030150405304405063061001014024002050601302023451457050408
2003014507070060040014012101000301703091234414306613014050104006130301

1006150400110122008020107003014001012008012343142004020010600612165002
0220045070200106004001830190301400110100123016104516440051501070030153
0301410710623421450380708001615012040200300655040506403070106080570160
3011401621700703011401506470610140161200170011040081440504082003015304
4401030805301308003011080501205040301002341110102006150015001506081405
5020010050404053021001502030514020623401104505060816140110040200106005
0101001020080301101165040150107003030162008020501070030130110040015010
2150400110140510307010304004001700162339110500315108050104030190030120
0700506161004001501070030110350504050023381108001004014040082022001030
7050120154200161301402050405016233711030901521030614055010700301240307
0150850304050023361104007050408200301103070430014051015701030030205040
5070750503040500233511050034050533068405502008008503040500501091103003
0164055020030085030202200680233411010300201040306302100504051501003060
0150150160501301200207001013061233311083200600180660304004014017001150
1605013013061001062332110406053040307040030554004127030200299016542701
8014055010214068002001301640016140603012200233111060502022005012014062
0307005010214061508030600140615010410150102140530202200200401213013075
0400501406233011010040050120504015041270504050020065010400301550330120
3040023291103007065200202151080405100720040530614013060130116100030151
0805067040601013023281104001405470650120550121010003012541270504082003
0147061040030150470400150323271101030050640309001013065503301506306004
1020103061801830190304070650401621400504013012326110100050610030108066
0804001653003011670240016513090301167018001803060040547025040803060080
2325110202614360162006005040820030140011014051030701030400400170011501
0240031615010455040406301010120060164010512002151020070050406865070401
5030408504040640415102007005040501010250301504040510307053030140705015
0107003012010306123241103070150120405150708020062323110250110010490501
2055016010200412140020301108020020700162322110800200405220045070501206
5120730165130903012530512004011050120623211102501306602005012064706301
1004190501205501301070140601214002030110802002070016232011025050620015
5160011504004082005040530150256623191103505150220010065040101301200693
0125013504051501041506231811025013066020050120619030600405012055011060
6402140020301108020020700162317110307010049050160304053015030703615040
0408200504040530150256623161102501503070313020626100701061001860153015
0256530301506450405064270101406405307400701140308023151101003001022001
7042506201130110607010220067041653030150645040506704400140640203074007
0162314110808102501205501102200203020080100040060160201030704013060301
1002313110304010502003516205040320013054005040040305010304010512002111
0104005301507040050121000120013011002312110306501910300303050620400805
0408200301504021700702060401050180160011050140021110231111090705040820

0303050120501910300301501501910300301427040013040021110231011066019120
0902045110507024001802040011040301404030703015040105013410010501400211
1023091101030020507010501000101306200902101306704060101301404270400403
0400211105102130301100700123081102501100104905012055014010512002121400
2030110802002070016230750670320010150103016151030705040680020013015002
0050508501501230650650406101304056530801000108040562004013011080010070
0152006083014061040520070050162305501024030130800108040610301506403019
0030150203015050640011040610200902164052704060123044010900704061045300
4050401620080205010700303030106804055010250402178130180304006001802303
4010100400604091200901700556427018040202200610220053030150162302506201
0805020530306100101405018012004011080010017001550182604306504070060040
0105015303050120140230150620040040105108010700301100830130610040102004
0502110601070203070023001108500702140610640064014061064004306406101030
7040130603016229911010030012001231050307031040306104004301621200262298
1108400404140512073016513090301210501906164005020140501011202001240105
0307036229711025010503070362140020301105014001530301427010501301100229
6110290454030110805012050404030205080102016301100510301400200130018022
9511010002204014005012014066601200401206215012014050620015400600111022
9411020080110103004001034100304010200401101630110053040840015406100524
0040018022931106050140610301403020150308014069050408200303040020070050
1050110306100801481200300230150405010200400140180150107010200100610220
0300161030208022921105031292002010307091001604005306005030170700322010
3011075622911102006020400840020220030703410010507840013011540084005040
1514150802290110605040110605040050206170053021004004010504001030110400
3011005306005030170700310301800160040301151318022891109010015012040524
0070024005018054003040880228811080010040120040150120615040540820066015
0303051015307035030650105103070652022003011002030700203011002287110100
0220140306200300210506060401040306401301000103050620101050140030110022
8611020714013010002030251302022003066020015011405013011002285110100400
4005020501205040504082003012700670110501400301100228411066012003002153
0305004040080150862001510301150306020018012138405506450404007006004001
8022831101002003001501204015305150404007002400501700140102004021400203
0110802002070016228211085007021040610640064010406106430640610510307040
1306062281110907012001235020104030651043016212002622801101004005012065
1207615043050401501508622791102904020830151501040016561002214002030170
0600101081011022781103007065200202168260501405103011086180212008403015
0405406100103070320060080227711066030110305001305006015030140302040013
0120400101301100510110303070312200301100227611010300204004030630210050
4020400100306004100650105103070652022003011002030700203011002275110400
7020022030150404001000302410061200100170104001200401400501206401301000

1030506201010501220030110022741104060302100504053030703504030101081054
0601401301000220200300250150111020020711022731108002002200530703162610
0701030150405002001061050500200102272110306205043050401030258012001001
7010400120040140050120610101200650401030164030140080600105016227111010
0300220020101704250201403061210300601200301307040030016105040409007030
1505610501220030110022701108060014505220010415070012269110200207542702
0220040040820020020700226890701052022674010820030150408200301530301406
0222661481522005412702202003001013061830190130407030407010308052200110
0306320010501205040804816530140205301140501103011086104020305004020030
0215011405013010022651444053050040215010363061022004001403020480504005
0130210020082301480503010220040014030203014144020082301501206303010022
6413068155070506100021013015108050104301600226313075060642008030140015
0340530400501204001830190301163040706165040150107003015012262167510306
0200610400110116700600400161620080201402405053405617320307002261150765
4011010030140610405304010100501308040530140701400928805101100306405220
0400110121620080205010700301201030612260170509050650608104055015062608
1040561105043015110830110804051070603080050107003012259130140701501020
0606001301240201025050305301002258130750501020080120303040505315044007
0115011103061105064504010412701670060040010501162008020501070030126088
0122571704060506701094006010130165012061020020700507019100010804055010
7014005012050107003012256180020070501020080120303070010406104050531508
0020070622551704034051507040380200690301108060080506800702108036401070
0104061040580070215020200400622541100810220047065012061204530703102200
4706131700180102200504054082001700530110022531210050530167019400601140
6562005900105011670196011408022521200910051030701000200801105064001301
1001200150530703170011040081660080501301100501080490301501021061601700
1104008410483012002710506400122511404200405501026402050102307031561002
1050650107018020010600102200510801050204014030110022501460405501026150
5010230703400501103070132006002030307035030580800200130110805064608040
3631406363110501501050200100301170011016301100224913061005065100801050
6412010130140610014055064504043650104603015010210003021700110400822481
2260702400140500224712002600510430140215098141006203070020224612004006
0155064504040530307035040304061001030707030940015436604030030170309401
0003021700110400822451226070240014050022441200601015020040150405303061
0050606105060830117353080183019030407065040150401401622431200205012170
0705270070108052200103014200104050052700705080660804030900504014013011
0022421506084051080700600400400501140162700704005011401501050200100301
1700110150301001406100154507043665104085010701080220010004001543660403
0030122001000401000302170011040082241122607024001802240122601030030205
0405150104001680020013011080530150204015012239120020700550404020103070

630400160301005010502001003011070050702050630160106223812002905103070709604004030140301061400203070010200401507054003070801406202200504054082001405750201320060040060106140543001110003021050120220041200180183019014056215012061405307502054008400501206550104403011080501040104001050104013010003050120802001433011401622371408200220010016512075504012001060014052200140530421050115042001802236120080206150110100091405100520010501150103006008050105040640516215012080401301000301140162235129010005501080603020700600110203040405120065012061521070150140042001802008230110805063040701050102016040304005012080550108060301140122341200290510307070940060400403014030106140022010250160205010261050102100120080170053011002233120031510307040070060040013040010300630301100540110018080010050105014102001012001431510801436801405680108001050116218015305114070940060151020010030511104001170011040081100309501802232120070070105043050404001000302410010502819040013080154702103005070204003016050130110022311200290107040701094006040050302050120303010014030130110022301200205011010300400103410030601805020010100025102071608050400304001001301100530401008014013010001101003017001104008110030950180222912006070102004015040105010052004001306400106050140210507006001640013030110022281200290107040701094006040050302050130100140301301100222712004011101030040010341003015301511002001000400301540010020060013011001510020060055010806030110801220200170011040081100309501802226120020700550402030500481104008103005070105030160400130801050400702400150180301100222512004012030109070113061200219053030113005011050434006030110022241200260052984004030140103070200290400801020622231200290107040701094006040050302050130110022221430020040040307014040504030704005011030702070240013051060640530301100222114030701504305040515040307061504507050405408200515010400115041270504014270143680222019090100140520015001103070144002001801000250150201402030700301100221912370200823011080530102607006004001652002070015015019103003011301510501605011406400683014001060501050180520060090301103011501061700140010120013011002218129050170051502008060504015010100304100301501410001504001514008030301100176131403080221712200602008230110805301026070060040016520020700150150191030030113015105016050114064006830140010605010501805200600903011030115010617001400101200130110022181290501700515020080605040150101003041003015014100015040015140080303011001761314030802217122006020082301108053010207

0121620080205010700301304131065010200700504065010200300240130150103060
2004030130602005014062211130210021700703014051040011061501030613015506
0405104001400501130140522001620080100040060106104530140513700116504061
0501601503017050401406221013043103002005002015016050130150120630500403
0205040601503030501200100301170051080150802009041003062209180200904015
5070164310403061567010016404055011650900802001503015064020034030110120
0622081100264040550102150307036405301621034006010403080405670480404004
0707501070030110101202003001641503061001040610622071480070501030800403
0170060040040400502014064056080501100306001306800200130164001614060301
1003060040540045300114022061304250104030190030306010264704020304056105
0645040110306154001020070065506700600400400801522002004015070100608080
5033015040501206010302113011643608040413016436015201013040303015030100
7001622051481202200403090010130612008001816304070140164366151908113015
2001022013065200101000902004110001013021400203011700530140150400301061
1050630610010651080140405010100803004050104020034030110200400802140020
3017080066220414706404020303070350503014040040707302520040306140201501
0030600140201506404001034100301809020220010307016800200706220314814055
0402004110005040308040515020030086572001280020013011020040063012330120
0106050406106220213040120010600612165002022004507020010600400183019030
1400110100123016110504301511083015501075065023016301403012201120044001
0040103003020103070530301501206811020030156200700400140103005829018080
0200130140012505293040060018014060301504051503075011402011050430151108
3013050040405302200800162200121007020010600612165002001060065100830153
0305101306301203015052199120090400504050120140653030150645040550620090
5010510805305020400403062198148110220022020030014030105040010301103061
0010615300620070103070510616001056151080100805011401030705108020230100
1082901805200405002910816219712309530701094006040050308012006100015614
0829010612196110030714107090829040080140603015040150126081510307030602
0010620400503504012001060050104006105011022001060708021951430661301402
0504030100115015020040050153030121301561001305303011300140400301002040
0503400306004700113063062194148110220022020030011306102200530301651502
0302193130320020166040500580950504040500212004005040201003060010700301
2400200802015200618106565281905303011002192123010050401550401200106005
0431301022001030140044200501030654010110057016030150900114062191142157
0054102400501509001140301100560805030403019006565400503306004621901200
8050770161301402050402005002011501520061810656528190303011008020040500
5305012062189120055014053013060015020038061101030055040403090040040306
1530201400400150104005033011400302021881702007140550102150307036306005
0214051508080862150701504050104005031405481301503070350103032001305004
0405302200800162187110080400200404005060862165003014070502010120013011

0307015108050101020400401002002400601660450605040120080060012110500506
6023010625700504020061601504015108050630810200155013014054008400504010
2003400504704001503405302010306121861304070506081504020031701080050130
1501400183019030116304070616504015010700301501218511008040020040400160
6212003003016010256363011063001030540301201402165001100010165001010004
0060105016151004120060405291811200150501040301900303015044007011501200
8020103080130050406504061030801300504080402022005040100830130100621841
9200805200401501206516570240016150200207005070523010015030801000150407
0940013061105043015110830155010741020040040550702015010704704001306553
6506410200101030070301651410003012405220050670410501070030170402060805
0200290162183148400304055064504043400503065400140302030304240130202200
2140020504020103011086114030400162182148154020810802020030010130610306
5040550645040405301407040601652200902180020013016400161406030121010005
3016500230140240307015303013010021811706040016414716501050605101405001
3050040580520108016500230621801430020017005504022001001301022005010451
0501106070301006400106050170012022002002070016530301130010501130121791
4100020307003070180105011030030503061004001306217814814055040405108040
0804006040013061200519001200401301405108020014040013080301030100130140
5403070101404054004702403070110220030100405230204055040150065702605063
0610010621010003012140320040523020405604160560406005063061001064052302
0405702120055001305005063061001060217714360404051030705070060040050304
0520040110307016230100050107003013011004052403070140522001501105024051
0307016502116301100804052004014055010250670715040010700115108021020013
0570160301501610085303014706501164030701030405103070150200500701203070
0206217614211700116830804005030640540030401080402064107010614020640320
0104020103070162005900105014055012175148140202502007030010130680930400
1030655040100720024020400110308014017091020711510120090050103080550104
4030110301570054020100200624020481165007021804040050023014024030701402
0220016301100406108007026114061015050023016301100404005002304020405504
0301011003011004055010216301604001030405150500702203070020621741270200
4055040400103040306120012008040550404001030630405103070400703091630410
9063012510701200700960124052302063014030030140017006501040103014001700
4052301005064610020040561900110010140526084006217314300200401103065304
3400503080303080010504064400540301658053030145105040530301400110150402
0307005504056380108040563014030030140017004058002001004004002200100017
0016501040103014001700405805205070200617400400703091700160403003011020
0400621721100802004040202004015040402030101051065400408200504040202200
4020302003005010805203011030116618053030113015064270101406405640400307
4007017001621711270020530301103070102004008015040404030900150408050102
5019306024051030705064001101306305530155064504016700600400115040610013

0652170199300170011503010041003015301550645040670450503080020013016400
1614060301220015022001630110080164011007001405263010010307015092200621
6910454051504764052200216504015104008040550110083012405125020103070901
0050508502168144011650023014030109081501027830110140307050304051505007
0240500216714470501050608052030110804055017001103070150220080080216614
3002001502004015040150301010565408200205043050401504001150220016301100
8080520301103015104008030110617001216512370150400110150401650120401010
0200301680520301218901501400260840121641720031410709015103070140506307
0133015016216313040705060814051014056302503015305501078002001301103070
1401503070315012162180601500104830117005216504061040305014052001500110
3070206080507060012203070308021611270020130150630610010501405516801504
0320060040054030204002002204051012130130640307050405240530140216014306
5303017006004001163011005010700301200700501062159142151080501050020140
2158150608120031405305014001830190301506304070105010700301501050406403
0120030021065504305040141043001601220070050103014010100215713670530307
0310403062140020301542701030703075011070030153030440830121564010820030
1504082003015303014060221551200102204005200220630700301504010306530502
0104030620304030110802010200300530502010403061430670060040010403010700
3015303044083013010062154130102602030700501021000400216152400801600400
1306204001309022005340013061050608301140601301530801670440014011015040
8200301167041615303011670413010021531706300600405410710650620210501100
7001303050620060010621521306708040301502200470650120501150220050182605
0630610010621511436050110070013030506200600104051030701030400101700153
0210050404030703011640061501070030150116504064001306152165040130100215
0130107504005150307506500204010307060150301103070512001004003051501002
0080150120010062149120010700506120030024013012015030602001140630750100
8301265150307501100830126214818010803040202150103520060013014706131700
1808002001301165020601301010120060110502305470250401503010062147170104
0357040504065150100200100018080020013015040405780400601050141200180214
6120062500405067020080110205090013010501620010190280020013016400161406
0301220013011306530750114040040307041003030110021451200686040106064011
0205090013010501506702008053030110080405137001301010120060110502301601
8040015010240011017060400106064015010400141003062144120064001005016050
1301501206100180501301510300600404002060401301700110220054082005010176
0050620304040040400501630301002143120068020130150640301900301102180510
8021020013013031405303070364053050040100306001050110307020041100800200
1301640016140603011003060010700301530301501162001040306121421410431100
3060050650067024030150111400180200614019007015020170011163011006150400
1101216200802040550124056173203070021411200107060405150474002600140302
0405053405161401409061402026110407040556361030705401101003014061040520

0300850655064504011030614053043400503080303080010504064400540301658053
0301451050406214012001090212001026005412702501205501402050102610501021
4105300530301210802030100213913066020012030401406030150404051030701503
0750305010501040940506300401052010130408002001301108050120630301002138
1306602001200300253030150070211630110050113011045301405137001165040610
5016015030170504014062137130660200120030021301400502030510220050182603
0100562001005012140020150103070307504001040082010100200305040650503061
4060301108010100200400618020060075040400102203050620106121361301021005
2010130403016530301210400140061180602015010307040040707140201406030191
0060400612135120010380400153013060020015501301200380400802507063010600
5050405503203050620400612134170625010800200130150401503020038040010400
8203050406505030163011006213312006802013016015030120050020110218030500
4030205040501200100301170051080601503030150802009041003062132120010590
0800702304058007025012063065305004025064001101305012001003011700530500
4021640011050110307050330166050130140070404003150103030100213112001022
0201030705012053080080501202200504054082001301213013010206150103070522
0304340013040500201030115010861107003012502570050301501030050103062129
1301030100130140307030150404040010400611406102200200401504086200301301
0086200301507020506301601062128130102601045165504024030701402022008054
0030201300103070304070103020301002127160610105012020030030156040170016
5250132101506800200701501605013011030701504070501170016212612001606001
3015010403019003014107101306501050406403030540820061803006514050120010
0301504030750506212511006575012030912301501309123011005761008301133010
0621241200109050150193060205043050401030307031610049032006004010503200
6001610049030600440105030600412200301006212314640840140110040202200205
0070210501106070203053080150524354008030103030150406212214653004050120
2003803015012001005012003803015012001006301030301100601000103016040300
3012063043051309030140100121211301068400150400506030434001306150306020
0504020302100150306020014100504055060212013010301001301208013060050650
0230101301700161550402063200600103080020013015040205067804006010301641
2050162119120010905015010307020304340013040500400140403018070800651108
3018070800201501007001301700121181301030100110103004051030150202004004
0042041003020150400250050113063062117130103060020670060040013017001652
0010100015010307010200400804003020103011501086110700301507020506504008
0103016412050162116130102603080016104070152006001301108065801040701570
0510805012050406211513010400805064030900101306405214002050620010010201
0306180550104010252140020104006150408040540140126015013020670450406102
1141301080080400150100306005040402001050020103070405150308008064001210
9301504040515010072006200823016200230110804051503040864041105021504020
0204100306211317010240052150103070402030164340013040500404002008020140

2402010020010001080810200301504018090110040201030703060200108010200600
1520014005108040204107010501404005040140121121301020640203016434001304
0500129018402010307030602001061200230125013402028060600105014040050401
8012111120068020501605013015012064040080020070120023011030140201350140
3080511011301506704400504030800200823011080200800301402060401700162110
1401082004020250120550153080080504016100040024003020082301108020308030
1402030103710107003014020220021091301020620220021080206501930604051030
7020306010301041270501210812006200100013015019103003014054701014064054
7064130613016301640130110804052020013006203032006203010600240510307023
0316204006902405504040070940060150407780400601621071200680640173402061
7340505350180405504020702400504080257001301100210613010301001301540010
2007005020504008130540110100301406101030150400200600150103010307040040
2002010700301170052040010120013011002105150109400100306005040304360113
0110060103021130116436080404130164360152010130403030150301007001621041
2001022015011010009130140541071014080405806600506501200100301108055067
0304030152003300301660150303055040080130120150102001104003011106200301
1503070314066015030129181202200501203015030100700162103180106600400130
1400110130123060200501406152164030900805200902405100150301464050015010
4001650630613011522700205011301400110130123060200505011507050401406210
2120069604021400203011080203070050120141043001217007015627007040615401
1010030140610302100156203054050850130151020010050405016210112006700840
5012020220021700705015217007050680160010654004082005063200106220010014
0510153010606301405220010301506100040021050670410501070030120103061210
0130106840013064020507020080030180300205062030401013080550645040404004
0707501070030116704130100209912006274661415010400168007021030705010102
5030180070215030800804100306800200130164001614060301108050402403070120
2200620981301020640510307020150306020011406402027007010130010501614020
4082001013001050140202403070140202200209715010240164705016050130305012
0501910300301501405501021000750105019103003015015060811051040030116306
1001010412703030100620961301030100130140400500230501506509004006544082
5062103400604008040206704104061020951210200100506201050110607030100651
0400405063061001064056062002010301506800100050106080520040306140202009
8010700301301001504107010504050630610010608040202006490108020022010140
4011003060061209414104861520013816506203010020931410431100306005065006
7024030150111400180200614019007015020170011163011006209213010260506701
0940060101308016308008030150040130120301622008008010202009005012091120
0686040130320013015067024004005015064030190030130610010700110635040570
0162010301506704040060107001525067040400601014024030701508502090120068
0504052001241103070163065486501200100301108020220040020020700170016120
0100640550170011080656510080105015502014052630100103070150307036208912

0064006040121385200600130125065040610130501070030150102620501021503070
3501200100301400120010017001620881200680100014010308501205501405810260
4005065100804001305020306544082826010130110300504050165051080504068002
0013016702603014001614060301530826040020871200102201630705063061001014
0701030170400655018260208613010260300200703011070010301161000400213017
0015063061001014020553015704050120630301002085120068050130140541071014
0616200207001030501200100301170051080150802009041003062084140109007013
0610050630610040030402050115001501520101304030150407006004001650105023
0124020220040201809018012083120068440140630404050531080101003040080200
6001153015303017040307034001306540208301504020220020103011086114040203
0700208215620020402022004507051010605012020307003020208113069301233011
0003024005030680020013011002006004005030205011820040800200130110803004
0400130620801306106040550705012020103061302041680301620090230167040603
0150140307052203060103014080100400130620791301061400506081620010600203
0700401010040060403016019601003012165076404003020170013010203011680616
2078130610604050120457030150145703012168061654300110003021010400850608
1105104003012130140104001030130140162200100400130620771200690504050120
5501304001003011080802006010130801501930605103063015030703410080140630
9004030400100504061008301213015303014020081040030160805030116304001004
0013062076130102601606530081805012055011507301162200100400130620751200
1022011096005012040530400100501402011016405100720050508501001304015103
0060040204130611630400100400130620741200109021200102600541270250120550
1200410010613001050403010072003019602102022005012073120066084014063040
4701004008096023013020159602400130620100507010301530630100040204103070
3400130620721200660104013061004053030100801563200400202200504054082001
1000400214055070508002007040014016207112006802052200305019103003015012
0650109110300301501660011650120501020070024030150120701200107002400200
7002400130630102603015021650102060403016510081022001003011700400162069
1200680100050102161303050120550180501083019016506204005014020606805010
8014024030701402022002068120010100090105011022001402014054082001220030
1006540820030150403070030181503140530800806001620671401020020130610014
0530301006140520055040013068011405303010040013080140513020611405481200
2203012045070501000302101401150160815010430163012651101130116427040013
0120220010800100620661306700600401406407004047010040080200600115301530
3017040307034001302065130108008040020022016400132004200220152006001303
0680070210307040580070215030800808010202009005012064120069008402022001
9705012014062022001970504013065613065440501302020631200620300404051070
6050120201030618050406406561510706015301070606520060013014120015040620
6212006844014064070040151309010405053530150307034050041020050504030130
0501401510805301503037053031703014102001050120504020611200109021200102

6005412702650700220220021080206865047025040506200100301504015020305140
2062060120010404400151502004048030610030115103070100880151080161006080
8015108020040040150200401510200100203055050115042001170016205913066020
0500702501040085010270070401502014061020060012007652007162007400130615
1030703080010140501803080050406560805030104400510140501801044005150402
0581210608201030704061030120608050210802020214002012001001205712006300
5040511003010121400205401101003014061053032006005065100507010805200101
9515040730150160501302062056130109080400515030908010300302062160830165
0105060301447016403070400306402022005040130800801610004002400305200902
4020015503015101150307036301030301510115068408050104001012001550301630
1030301150307036205513063705016050130150120620010600301251704200300301
2501605013017041062054140103011217007040530150440070152006001301250650
4061013050107003015016205312001022012003140530501400183019030150630407
0105010700301501050406403012003002106406100110510400303010451050120010
0301170055012052120010908501020080120303040505315030703615047040400470
5016402040820010501402022001060702051120010240040016307014016200240010
3065200403061563060041402043604030116306004103064020563616660103052006
0013014706131700180153080404001601501640206080501304040050608140400506
0815012050120010805020050020140201503070365010502630164012402015044401
6405103070520020301402030150442004050020491306708040147065012062001104
3013013060016601380410430060121030611503014127040201030701505007021405
1306147061317001802048120010220163070503070400306501040020040800200130
1108050460804003021400203011080301010120060110502103011501080010062047
1200620300142705012055018650704015030408504051020070020461301020610506
4504016700600400400130130101012006011050230104551503070362140020301106
0640150104001620452001090230170104060301655501150400110150405102005030
5306815020200121070030110901001301436040301103014012008301436040301504
0130103054270210200601107003015018260204440108200301504082003015303014
0602204350650608404055010700301616100400150107003017040530301501204250
6200204010140401001080010802040013064051030705078400130653030121301202
0029014062002901620415010200219030302001060065304040020029050103065240
4002100670140305004021621001708040400210017050162040501044005403012403
0701656530102605070308005040240307016520220050150608110510400301240530
4136550608301590070640301654020830122022003010260103017041203950680304
0060010510801650120140108054011010030140610405501024020810302022005016
5108016803040060015010700301103070400260301307031405012038501020200300
4030150405012014061801050840105120021530407024001501201030115010861405
0020375010830190301504030520060013011080550165506081105043011080515010
4001620364010100400604091200901030151456512400315407050130120020130020
3550102020030040301504020104030618010508530301400501100540150120401051

2002150120344010820020068010003015470250402022005011683090162030700470
2504016214004050053015326603011630407050107003030202200501405002033506
4030900104056080501165012050203064051504030900140630210050402010307015
0909010014015040200816415501070030110307062032401030121700704053063010
3010070140040203150683080101302700203015303011030705062004008010501070
0301501270020301530301103070162004008040030401200817005630130817005270
0203014020400506030180904001403016306100400130620304010820020068010005
3030150180417013061000122001010002009800150408052530301200101000303051
1406200107506003014083064043016540010403014020103070402008140501202950
6427040051101404005020501530301400407050162002030016121091301308530301
4020100720014040163020802028506403019004056217007030140570060018056270
0208040550403066020040513410030620275067050901016501201402806600301670
6330160123053030115100170018053030140705012400200802080501204030205040
1410002001510072001510400110550104094055040140050120510200100130500405
3030122008006202650640309001013040564003040701406080503020108064006156
0805050703041340060805030201040014004061020254010820020068010003015470
2504020220050116200290616451340500165040080140470250401620031550107003
0302022005014050020245062006016003014055200600130110804055014020031302
0235063080110003014052010306164052001902164057040606405263010010307053
0301702950107003012010306120225010200801203014061003011045101305303015
0165200600130110307011050430151108301162840060140550122030700202140109
0070217007040530653030150402800100040510307080120049020080203012820030
0504050203065014010130125010409405230100652002015040130155014010147025
0405303012200802050402020506270012030140520103061653030140011012506504
0610130501070030127002030110200400801014050120194010301217007040530653
0301405104510130530301400110125065040610130501070030150120185010240102
2007050160301700561040370151030150648301010700301501603020030025403070
1014050150630610010405501403070504100306201750104030604030301020030026
1045616504015010700301400250010301008301220220050406041003018620053075
0301002016506403070101304052005002013022004008040400501140501163011003
0750101402403070153030165101501204051011503042170016201550620200300405
2405501070030165506306400105010700301103070550193060140501201450630206
4001040522001030706165040150107003011030705019306053060103055012013401
0320030150191030030150405303012700704006018050120010030140012001001700
1802012506304070101650120140506081240520031405501073503065210951108550
1010850308050406406561050050161200207005040183019030407050402011506304
0701016501201405060812405200311620029050107003015010735030610012530301
4507014064805010402045070140201050640307040040400502050140203020010600
6553030145070140501130103010015040500530301457021620040030040013062009
4010900702170070402030653030130102605070404004490140266030116100670040

0615400625004702404100307400804020501021306004402050140101167006004004
0013062008506304070400404005020140705030160400306130010504010451061300
1050403080010502030654816540140203070330530301130063062007506803040060
0400510804040050201405401101003014061040203050501021030652530301402063
0210140501540150401022001105540150620400501402050102130600440205014010
1506700600400400150012050156100470250401530710004008001005010400301201
6506204001306200650630708040014040307010530301501130108020402010307053
0301404003070341006154102064004702501401013011680010050400130640400451
7017001530301457021680616200550620020700400402030703040209007010101000
2301620020504030161300880301507010550106102200100301107001400101650160
8130163047030122004011053030150120045010403060403030102003002654082006
1045610300302030150110240021400203012010307015030750613065103070141053
0020215010364056080501504040510307014105300540130201080500702504061062
0035064608010165012014022170070301100680121700704051504753030130102605
0701649061620080205010700301200250620040080101650120140405507030800640
3060301700104061053030110301161003016200150627001203040205013061003014
0510301161003018020506450406704501502050107003011506120200300130651502
2001630110040512020030016202003001501070030110120017001620005062009005
0104051306405507080806001013080217007030116403090050107003011012001700
1619995062400704006010405130616200802050107003030507006101304050014105
3005401302050405007025040610619985062008012030140520050020161550620020
5010405005303014004070505068020070101997501024030110001302301201030701
4050180163064005018019965064030604004020307030402010307054004070504040
0102030700204020601240201010040030102120060620083014020101004003010212
0060402030307036150150201301233015040402030307036130130900100306001404
0402030307035303016199550108103011701400406150015001152001703001615200
1261615801690150406402040040110014061064020507090040610155068060040060
4001400610240170501301463035040402030307036150206040204006102504040203
0307035303016199450650406104061003040011013020307001080501530301130150
5206040101401406030163108040012006006040200109301103011620010403011993
5062002030040040203070305410801301620019021301670406030140203030703611
0103005064030704001304020400154015069250404020320060015303016199220010
4100103003020103070530301501220010016561200902301840302013015701603012
0040114068002001301640016140603012101000530306199140101004006040912009
0103070656304703012200401105040665106400601030520010600240011013055361
0140501015130640103070302065610300103070200410010130402021140548150103
0320013050040530301220080061990506403070101304052005002013025303044083
0150664006010305120053612006055040100805010658015060811007200150405150
1007200504061030010307020041001013012063040401427013050040530301220080
0198950640307040013040400501640307010530301501301500401301530301622008

0040013080198850670109400601013061101030080020013016400161406030150401
1007200405302030401013014053030150645040506427010619875062008020104055
3030140040705026506504061030912301280140012109301504040201007200654808
6501050240203167150404020303070361316714020608050150404020303070353030
1619865064831053030154070502801166051080405804055014010140020304014010
3070405100720010412002163080080501070030114080100720030110808007021030
7040208007023080080530301619852001041004010307053030150111010300403070
4702403070101301020302004070301307002001103014200105040402050406402018
0640010405004020100306005303016198450620020804001040610030510130203070
0108050160150303018030051080550163018030400600402120030015506925040320
0600101303070020220030260102030601804001200405003013020504010302040500
1983506300200701014040620033003015040614006102301233015040107006004001
5013085030110301202200108616198250630100701040610030510130203070010805
0115060811007200612002060550405067006004004002150701301630106005030140
0120040500504061981501022001300303011000101601903016001502304046500200
8050102504055069210801404040201010060505200270304017050130110804020305
0161980506704060104061003051013020307001080501154006404702800200130152
1108180140140603015040307501530301619795065040610406100305408200610456
5108016803040060011070030140530501024003013012140020301201030701503075
0114061978401030121700704053064061030140510306658040530140701501910300
3014053050107802030210050404040110301150306020014100305303014001977506
9200804040550162001503014053050140200313010506083014053050127002030140
5400506030180904006506520020101405303050630703106197650640410040060101
3065701605062006001400601013040530311317001801040604030311030140520060
0610502030652145040151030702020040014040540309002601503015303017006001
6106306197540102083017107703016561030701301305004030153030666030130500
4052006001301250650406101305010700303019745064020810140160130121200400
3011080560410401506510307052060401015220030021406605040406100301504010
2001640010197340109002065614660405536309001050050130124054812003002170
0161972506540030010140405306550182604001502301530305063070310619715062
0040080400404005020140705030160400305303014004051501007200140401210905
0506403070101301403050630703106197050640307040080660801670400404008040
5150104001140216200802010301969506202003001040522002402050401001020080
1700140205070200800301803002017001405001968506200134005103018020080030
1402060401700140500530301504080540705050404020214061967506100400400530
3012001010008011290165010430153068002001301640016140603011080140530619
6650625200180101101804816530165140501501050500150105301167006004004001
3053030130110061965506200406101405063070801064051006805040405220050680
1600101964506200220400601013040565201013040301652145040800200130110801
4064001614060301108014043601053030619635062006001440565303014360301014

0300301650104010301507053013090011080400101030050405303011003060014010
3011620010403061196240108200806200304020220050180806600400103070405700
6001106119615010737040240514080405230100400108040570060011061196050620
0703001013050010850402170070301405104001106180020013014052530301806060
0105014001101060301162002040501070030150401801195950620020804001040530
7030640510301307501406015030305010240030200207003012010301150307501620
0273016400150102301219585064030704001304040050205012002070030130511630
1601804051030110865013013200130120302100504015030602001140619575063020
6400104052200103070616200290501070030119565064030701016501206302002201
5200600130120031306550608110504301108040550106250301640309001404702504
0530301108016200315501070030161955506201080502053030610050501515042001
1700110300301503061001405011954501027001201650120405501162008020501070
0301403070103065108050680304006001010700301405305010210301953506403070
1013060150301200500201502030611008510307014706103024006401050405303015
0070210130405501401014535303012164060100161952501020090150504040530140
6308001050401045101305303015018040514510307090200840050119515010270020
4030152100170501208010201620090050180800200130110801620010608053013080
0301510307040010085040405504065303011045504040550408040061000193011625
0400316530301164270150113066020054013020108015050070241003061950501024
0301100013023011301306020030110307030580405302100504050107003013070802
0307002010300504055064504015040200813061506121130650850103005040550645
0401504270140530301130063016202003001501070030130110061949506107540060
1052165012014040521001861630407014040011010604052190180194850640309001
0405608050116501205020306530301405403090014064053021005040501070030130
7080203070020202200200401104001106152010130403014051040014005011301506
2009005010305194750630407040040400502014025503301163060041402010307040
1306050630610010501021095201013040301405180640040050107003011946501010
0400403015303011073102030700205061300101401510804053020015501301154008
4005040102003400155063060041050470400150319455010100400403012001440705
0306200106005200600130120014306550608110504301570051080165060815010700
3030120010600163011004020220030750117001401610040015010700303030101006
1944501020022040040301106500406010230801510805010430160040505321621163
0600418019435063040704004040050201402401030705303015011030266050403040
7050150201404030603011610030180405608050110403019005201013040301405180
6400400501070030119425010200801203011030706603016406103011076003015014
0307030116400615010700301301100405108050610013004004040050205010700301
1010120200300501013061001064051076001054011010030140610405001941506200
7030010130500108504021700703014051400164051006805040801006030140510307
0200600804701610030150404055011050253030110400180405302100504050107003
0120020404100194050620071014016013014030702001010002405506308001050107

0030120017615040654011010030140610530401204052001761163040810301939501
0306130120010916011630110040202200307501170014040530301010017001619385
0102002204006040301281013055015065030701014065062006010140403070105303
0150140200313019375062002204006040405652002050404052630100520060013012
5065040610130501070030180481653014020530119365065007021050110150620070
3001014061108120010100040016401193550610030600104056110103005061003060
0101305303015064504050670410501070030161934506503070400140650620060400
1404030701053030161933401082002006801000305303015011569084001305303015
4070501647040050161932506200207004001308011003060010130504020100306001
0504080119315064400510405403503012640014013070619305064400540040203070
3013026061200155016402024104040050110601620080020013011080101003016192
9506200203004004020307030653080080504016100040024003065108020060016402
0308030110200400615506602304005103085504016320060040060400611020091408
3055040163020140030200823012006006010700301656192850620020700104061003
0510130203070010805015501630118030400600408002001301108040203012007001
4061927506301007010406100304001101302030700108050152004012400120060060
4040635030162004010030166040300301620015503016301030301402030200600606
1926506200208040010406100305101302030700108050140012004050030130205040
6215070130163010600503016506400107301670200730152402030400250101925506
4010604005108020033005504062120030055040402030140140603015040307501107
0030165192450107040314020145301300630620010131550406301026030149010053
0301103070619235064030704001301401003060010655010761562202004003020010
4083016301100023016301060030161922401082008062003040202200501608050130
1100300213015101000301216506204004030430210301402030110050013040840061
9215068200604005010865068102004005010830140315108040203061920506302014
0015504067080150406804151080402030151003060040170501301619195010240401
0906006517001805809505040501605013011003060019185062020030010140701030
1704001008301280020013016400161406030110030600191750610040018015011301
5301130550116200700501501541270504013001050401030705200401504086200301
2520101304030130750101916506202003001014070103017040065501826056303704
0060400130805303012004011040011915401082003015040820030153030140602191
4501010010301201040011010400820220042701619135010431603015040502062022
0044082826080191250630610010140220200490100108001020501403070504100306
1911506403070108066080200600115301530301704050630703105010700301191050
1010754006040301201501080201501190950102020030040301507080020070162004
0640014027049018019085063040701016501201407019075010704031405503016050
3020220068019065010800705012001003011630703501070030119055010406040010
0403011030701503075011402019045010240301200107005030115011050130100619
0350105040640303020815038008060016405103070507840013064055040131671521
5070400401401030120105010705044040013019024010900703015012001003016105

015004030150401702602015010400141003061901401030703011001306003016520 2
200501190030104033018809030188090180510400130570160301501610083012130 1
140550102140680020013016400161406030115010030600140618995062602010165 0
120140405507010501000114080189850108290405810903014054007006001801897 5
010504011400610230123301504050640085010165012061896501080020070401550 7
016501208015040011014051501040016189550103060200403012003830121890127 0
020410030618945010240401401230140550164055040150401004005018018935010 4
030190030520101301218901501205016189250105040640303051013020307001080 5
011891401010040301026023015501618905010406064004030304001101302030700 1
080501188930103605040520013840510307015020094016153080160151030170150 3
070380188850101002003004058109030140540070060018018875065407010405400 2
002060108030405501202004070301886501030701804040050205011040015021306 5
301100188550104030170301507020550504030611630110018845067600400130653 0
301161004001618835068800804001308010801080010306550130110018825062003 00
240060105501044030130511361881501082904070691004013065200214501200401 3
012030700510301150108001006188050620040640050010816800401648140205040 4
008040030101306405200124170240016301030301504070910022030512200601801 8
795061004190301501610083012201501040016187850620040040105108016501201 4
022015010330216301100187750620020504040610040205013011001876506306020 0
403019630301131403080187550102002110003015040301550115020041005400120 0
401130118745010704031405635040301501963030113011873501040200340406100 1
030115030602001150116301100187250630602004030115101402029600140803011 0
018715063018003011301522005408200504095010010504063011001870501095011 0
030150405020400130801008301220150200300216301100186950620030024004028 0
200220301105060405011030701050640400200300213011001868401030704013010 0
022020030025015013036400130163011001867506303640205040150130110014013 0
601630110080510307016306004700118664010512002180108005070405102506186 5
401030130121700703016510217007050161864401082003012006801000301150110 5
011041270102501863501032006004021550404051406290501510804056040101301 8
625010302110040040200200601030701501660013010005040405200649010801401 5
070750618615010504014013060215630600411860506107064001503108050101004 0
040301501185940660100407340550402123020302162157026015301858501070403 1
405470640304050535016185750106110003015040207024001504013015019306040 5
103070203060103010412705011856401010040060401030709120090170053011001 8
555010903060040301405504020412701301185450107040314055010610001306800 2
001301108040530505010713010504001061000114022200301100185340630704030 1
400100630140610103011852501020090050403015040205018030110018515065007 0
210406101030110502009005018022003011001850501043014061010301550703030 1
201030705016184940103200205018015504032006001803011001848506506040140 8
504030190309050405400100306002003002304360130502014030301100184750104 3

160301704050620400130120301406010302111030110018465010431603017040506 2
010501102160103021130118455067040314053020520101304030143608018445010 4
316053016701008010862005040510804006008050654001066017001801843506506 0
401408504030190309050401200300210030160010501520101304030302022003011 0
070016184240640603012001505040302100504051501003060050133016184150650 6
040140850403019030905040501605013011501003060041003061840401030704010 2
085501405200300810652022005016183950102006001400604030115040307041003 0
640205040501040410040060403011504030704100306183850650020016301508506 4
001040506101085050850301501618375010507160025304040050114065640201501 0
100601801401406030150401503075018081001630811020030115030602001618364 0
630704020041002130153075050140655010176001504507013011030050405016183 5
501010071200253040400603050406300101704015108040203015030703618345067 6
401030030205040151080150400250161060162001510801501010030161515044408 0
020013016183350102402153005702400180704060301100200400601504013011832 4
010320050191030030205040151509008086183150102009001503030151501076136 2
002140603011080150307034100306183050620068604040610050850302150200190 2
140020020601405011630110030182950632007010510801630900801406030150401 2
124051030701508400806306182850103061301550604003060041006525065040610 1
301827501040200340301263010010805203060502030700201826506107540060105 2
165012013013066020050404051040011014061825501030613017010300108020302 1
005040150306020014100306182450690080183053015016200207003011503075050 8
501501182350102009005040170011650120140610083012130152010130403013075 0
501401822501010041903015040400502050152010130403012150104001400140630 1
821506503403020501200207003015103070307501070030115101110163011006182 0
506200600140060101406153031540150401002604001401819406307040214002015 3
061301510200100504015020305114061818506403070108066080304013014055301 0
616704004040010616302011040520070018175010403060401650120630162008020 5
010700301461014022001816501024050120010062140020301400110120304002003 0
118154010820030150408200301530301406021814212301301630612002070010306 4
816530165140501164030701030652162007005010306601503030100013021700518 1
321608301701020060530301501400260201406080503020530301107310301812200 1
503014055636103001000400650120091005040405301021200601811418090130110 8
050105020010040700104061050104020034030110200400618102001510030148163 0
153030167200264001614060301680020013012001010008002001301304240040610 1
809401100400501670071077053030150153060200547068030600405303015026084 0
013080180830123301550403067400304052002040501205016405200204053030145 0
706405200204016200204041006180730150040130140203015022008006405215030 7
080801020402030501024006405608050116403090050107003015020160401080404 0
050206061806301675040402030140302100504040400406010011650620400403061 3
060200301702400506204006704235021020010030311030115020060011502200164 0

3090050107003013061001080217007030140510400110406106015030120070050161
8051654054004108016405802009405103014400200101304056062001070501004050
1070954018042001902130151080906003004004061030405200600610140501506403
0190030130407010140701308011000530301502608400130618032160830140610010
4061050105040640303061043016306103020080100011502200180217043021004006
1502200104001020070050406513090301401010040105030703122001801170430170
1040603010220050110018601630107014060120022030110307010302561070030153
0304408301180014060301108013068002001301108010300504053030110307010806
0010140650307050140610806005014040307040020501150220017995062002030010
4053070304001200405003015040405100720016405103011065400601503015040541
0801307031805130903011640101001030150220040200840301204001024507070200
7107002001010004162104001020070050404005020601105011502200179840108200
2006801000205018010501907050406105040550180105070240050408060150301504
0120010500205030308001505501220017974015090130142705050110502610502503
1615040143023011700530703122004010512002130110070016179620018020406309
0030501605013015011569084001305303014004070501647040050165640400301601
4030205040402014001617952001550301630103030140203020060060650102101420
0401003016604030030140203020060060617942001550130140203020060060652004
0122008230110801020034003020308030140203020060060640203011007200400120
0405003015040523200600180140140603015040307501680020013016400161406030
1100306001070030153030117933013060013065108070102130406101040011050130
2100504051050130706120060405150100720014040161008050106513090301164010
1001016504015010700301104127030301001792200150301103014020200109040501
8016704004040030100530102605070163080010301414501530301630703617912001
2001003016010261550630901040505317902001623012001440540610016308161200
8020530301400407050163042501070030110301200400403011789130010140530301
3070801065010403019003015303013080010652006001301108061105043015110830
1108040021500301306100301216504015010700301530301400250010178820012001
0050401530140800200130110068050404005004003155001026005200330020550010
2600540302030500406178750620020700400104053070306015030303015004013015
3030122008001061522005070012501083020153020110400640017861406030110801
5702008064002150015309015210952003300205210954030201305004053030122008
0080102020040040301178540130601510804054001084004052200507001215108050
1043016002001550130115400840050401020034004001503400183019030116304070
6165040150107003013060041617844010301217007040530501040301900301501302
1005040506404002020030011402400200802010501106002009040240400501140640
2060020090402150114040206080501164063061050640630400130801030404002340
0601804020400670450113015019306050404020103070103050120140640204008030
6001804020400470661008301470640204706530301501200401301108001001403050
1910300301301100617839010840504015030140150200290401150707311501030701

660402015010453053030115014563016301100103005040530301217007050401507 0
506501000404040050130580170240040203015020150116200220400601501070030 3
018070800301301100801701040353030167200261782710770253030110307020307 0
014061781410431003060024001106402025700101300105011008301280020013016 4
001614060301100306005303015012004004030117804107023013013080030165203 0
700103001030701626020140405062004100101308090170406101080810200301524 0
044003001414020020405301407014052200216200802050107003013050040177990 0
103010002170070510120065040640010402651406501204030205040400640301510 4
001106510001060104120101306570200340010177841049014050401010060106405 0
535101200650401777410507020012330202160061684008040060161776410706801 6
006104011004080160050403020307004054702504080020013014020505020605030 6
177550104030190030150203055030405220040510301108618015040030401080504 6
704003061150800200150404020503200600503040530602003016200802050107003 0
130110061774506302064004030130206400103080530301103070615064040010700 1
140103070502002905030615030260150145410065303011030703020640050130115 0
301406177350650406403013020640010308053030110307065303015070012130150 1
930602402010400150501150305012014065412705040130010504010307050401053 0
301502030640203050040200300213015085050140530602004053040030110017725 0
102405019306021506400180150612142701050120140701506490400501506410200 4
001503050040200300213014040050150116301100104060403031103014020200600 6
106402026507005040402030200801000103040206704108002001301640016140603 0
120091802030053030110801405306020040030110017712102004051030115050670 4
400140402030010803015016524040030602001140215020080201501163011006405 5
168011080405104101164200804001501023012405306020040540013530301130140 5
403070101304054702504050107003016464050064170686504061004020302100504 0
501070030112504020400110403011770410408105010003053030150180170104038 0
020013011080504064040050116200802040050110606403011006176941043003010 2
170070501404002008020501030640205041071304040020020300501030402022005 0
700140070016176840109007040202200504013024020307001080640201605050610 8
400601064020150215068270010621700703016604020506406601050670200803015 0
404020135017001402010307053030154070501620020700154061003010606403011 0
070016176720062030020012903020304001101302030700108050153030140110124 0
520020700620065030110301400140309003015040204061003200600150115040011 0
121060640150306020014100306176640102083017107703016561300105040104510 6
130010504053030130800108040530501021030540610050160302130130660200504 0
150306020011406176541070230130800108020103061136701550610002106530301 3
010260507050649010652006001301103070110504301511083015062840060105010 7
003011764410430021700705040501020080120303030106680020013011080140640 0
161406030110801405301070030153030117634104083017107703019120090103014 0
522005070012200650301103014001403090030150406015030132006004003020103 0

1515030750121400202003011762401082003015040820030153030140602176121400
2030140307054507050406402050102610501021410530053030121080203010013060
2004040060301620080205010700301306100106176020014301102100705040302001
8020301403070106066080503020260204001404030701017010403200204030153030
8040530210050405010700301200204041006175921608301701020060656540208302
1007040130402081053030161580120091504015901005050800200130110400150150
1162001040306117582160830115010307061000130230120103070140501802050108
0640050614054705010700301800702205010200501405016175721400203014015450
7064002500106130010140530301684010175621400203031302030530301507001213
0151012104001105013066020030501201406510200700613167140530150307036203
0210050401306020015030602001410030617551001613061030650405303015040203
0140403070301504020131404702405165140070240015010306110220070140208515
0307501203070020617542140510301667041510301522020030011306530301427015
0140020040114050130100580070220020501050402178130150406201030130750114
0250682008010214002030140515010400150107003016175320015030150102008012
0301102100706161004001501070030110210070203040015309006401014153020120
0155013011540084005040102003400506100400403014706104003015503301305004
0175210016504053030150404053014061003001520060013012170070306110504301
5110830110802170070405301751415504053014080530301303080010504063010260
3015070164906405200204016200802050107003030501073023061003015040200519
0024018002001301108040307010130140255061025040040140564060301001202003
0053030163070364002602014026080503020103070401011006550408011750211007
0501208010208040540070060014050016200802050107003030400103040180203021
0050403060200210754006014100306174941701040301803060010130530301501530
3014706104001101040084052001450401210200100308400615702001100167050901
4024052109040016200802050107003013017101306170104036015030110453053030
1130010630501165040150107003016011010403080117010403200401301530303021
0400640301524030206180020013015240070910061301233015240020010601501200
1005016306174821400405103016400302064005103070651301530113010220065301
0050408200301250620080201040562010301150108611070030140510307063040040
0304040115302100504040030600410054011080201503060200120307002017472140
5060864053010269400183019030116304070616504015010700301174626301003015
0104094005303012002070021301530301200207002405263010050104094006165040
1501070030117452150150405103011045106130010504030800105303015013010052
2005040510151030703075011306301620080205010700301306100106174470140040
1301520060013011080110504301511083011406110504301511083012168200806200
4100106130010504030100720030196021053030117432001430166040530655070303
0140530201030618002001301108050646080106309061050152530301200401140506
7091001065100150010404702504053030145705068001005010501070030161742200
1430110210070407050804040020029014024020103070401306017412123020504040

5103070506306004105201013040301640540011020070064053167164051012150408
3090504061550630600410504704001503174020014301102100704053020103061510
1060301550608301250620041065105013070612006040515010072001404016100805
0165130903011640110016405220053611000400211620029050107003016173921608
3016605068016001064052200506300600106309061050152530301200401140506309
0105010700301617381001500104030150680010050101306530301457025068061050
1070030117372123013016306120020700400101405011040701655040201008301202
2005040201030130750114050140307010504080117364154030160102640505340516
1406216083016604053020103061521644008013057040530500406170104038002001
3011080140405305016305301621034006010403050107003016105060830140522003
0162134006015010700303017353015004013015303012200800102030700208002001
3011080500204010806015030170805010140140161803257001080427301140180309
1230161008301530301220080010203070020530500404277014004061510308110004
0021200150301108051030705064100610140406110212001427301060301304040081
8015200410025104614003016080140140603015040307501173420015100301481630
1656103003020100301600530301301004051030701003060030152130040080510030
6002016100306001202003005303016307034012006503016400140309003011064006
0400305401200109023016104070130110640060103053010012008001306170805040
5608050130506203040101301103061550645040404007006004001801301005303013
0100800200130164001614060301220050403010017333019013016641000301240530
1309006152002061706980020013016400161406030110805040436010530306173230
1308001080130150102008012030117041406510003012265140651801000302103014
0301103015108020960122013011030024053050621034006010130550645040506704
1050107003016100830156704530173130184030141043006565303011080506304131
0405613001050401522109010801007016903013060200106540080106005040520101
3040301654408247020030182601061730301100500301218603011030050106170409
6180660010020023014020102001010700301651729301650405506450404053014065
3042004013080166040610025303014120011700164056080501214016200101000101
0400840610021402001010001013053030150153030120040150405506900808105803
0600504065104105010250404001210070405301728200155030122200160630103030
1280600400604065504065220053504063061003012006015040402050401660172730
1704004030120010220301541530030162101000301403017017262001410040254507
0103003020641474001406401820013018001010004001406105005013020304084001
4040307010530301172541540610030203062007005040400501140501522005040510
1510307030750113063016200802050107003013061001061724211007030141043003
0202200501640540309001030706015030305200801000406700302022005016400130
5004030140530210050404003060041006550608301302100510106030122050630370
4006010617235064301600151080405200150301218901201030616405100150701108
0301301000130120103061640522002162008020501070030120103061410431003060
0108030150111212004001502017001140530610023708023704005016172250630100

7010406100304001101302030700108050130201301108080070210307015800702308
0080506481614021010060105016509020010100065016509030106005067020076215
0701504040015036400120061340040709100800200130110806172150620020804001
0406100304001101302030700108050120015503013010303011030010001050105050
0150103671510803070340012004050030130205040612001550161060162001510803
0703680020013014401070030165617205065010064004020220011003024020307030
4001101301309080102004013012002410104060403031301020031030202004010030
1660403003012006006063002007030110307010640060140500155062004004407020
0101000240016140603017080200107003015303011719506504061013060150301200
5002015020306100830120220050402010301307501107003016214002030140011012
0304002004030117184010820030150408200301530301406021717506504061040610
0305408200610456103003020301090804006510410501021070030110010490400502
0306102004008010150010485012014021230130110306130520027040590901001080
5012041003017165010402003403014061003015070150601242001013061300505040
1035080150200905040513162700204100405501165090063060200301601104006011
7001104008171550630100704001308011610040015010700303020010600520060013
0120014306405302100504050107003015210017050120801020162009005010808002
0013011080162001060104030801102001003013051504040510301108650130132001
3012030210050401503060200114061714501020200300403015040150114065303015
0182606105070240015040615015200109021030705303011030167041103010260570
0530100171350620070300101304056540010002570160301405104001400615303012
1700705040510300110004051040014005011650401801171250620200300404056130
1530301240520050020150406101406171150680020070401550704056151030705062
0040108002001301640016140603011080510150405010120617105010403017030302
0020700130165501200315040510307040530160400140617095010504064024009020
0863066015030120050020114061708506200204010405640520040116704031700140
5104304005020140620103015108650210100030112501504020307001707501083019
0301210501008301614030604010508064005200600130161105043011080101030640
0501800200130164001614060301200918050010418130130106140050401050400403
0706203040301504010504001040014100220017064010208301401030703016555011
3001014030801093010220050110400660015010261050102501910300301100075050
1470250406423015040402021365036030150401050320060017001102506081410061
1008102200153070341003021005040101106200301061400170054002111030110061
4360530162006006300200703011030705106217080200617055010504015303011300
5012009040163060041301100651062151030110618060610103070163060041403080
1704401082003012006801000301655501102200402030200801000400601806603011
0017035010109160015020150115026507001503020080100040060115012111016301
1001702506403070400130140530301504040307011050140203030100140301301100
1200109024400200180553610307051100301200103002301135011403080170140104
1003012030130800108030205015303014001630110017005064508040050113063080

606108102004313010501405621301100200107030140030908014030616995010704 0
314020305121050640016120010902400110102153610307056100301801700510901 0
401002162570011698501040812003014082001656402030530301200801000104061 0
301402010307021020050040013030110016975010109160030150205016150103070 5
303012020050014100305303014001630110016965010506084030120031701080010 1
305303015018020029010610040010504055011501030705303015040410010600117 0
056806061015013011008060610400501302050111630110016955063051340400501 7
001510600168060610240400307080140404004030703053011001694501010049040 0
403011073105303015011501030701004904006301020301150308061805137405701 8
002215010362008003011503051615060407107703011510111016301100510307016 3
060041403080169350620080120301406100301130153030186200504060110101305 5
015303018620050401660110400130651060016806061050401660608400801625700 1
105021101692506403070400130140530301504040307016530301103011050786105 0
026203001140501301100169150102030153015040506204006118002008506204001 0
400880606102002070040014008040053030140016301100169040109002065805078 3
015040515010704008001021680606101030701080601110301100640550701030640 0
616894010208301401030703016555011701040340521050104001105015303011060 7
030104032002908012004014020608050140203040030660302301100168850610041 9
030150161510801503021001104003012001070301615108015020104003015102001 0
030130160161687501090080182101000303015020140615040307014021301150453 0
014061002006020502150115012111016306100804020102110301167032001168650 1
040201830120010600656103053030140208106110211030507001101040088002001 3
018200215030808060610108040400920080140302100504065303015040110050064 0
402010307070060014100402012150116403070400403014052001022030110011035 0
169030600550401660110400601140308016855064030190030170011501545070150 7
014004015043650401301700600150501530301700170403011001684501050608403 0
150402012005015015501204015048170060080120010220160010300121530501710 7
703011510111016301100168350680904001402403070153030161501204020030040 4
005013011004053015421040306560805010808060610152006018030210050405306 0
011002006041008010020060105011630110016824010307040307010700302010068 0
613005050404001320047080200505303011300105011301203040301501041080516 0
017006001103050120140806061030150420203070020510600117065040153200600 4
006014050051060011706302100405400107061214280168150104030190030110735 0
203070020561736580530820010804365040561731630110016805010270012040400 5
020501561731408016301100167950101002001601502014068002001301108046080 5
030150103140404004030704100305303014001630110016784010707521501620010 7
023040852135040306203040301701690410080501630110016775064100804001700 1
404051030701630210016163011001676506100200160304020501200107030115400 1
015070064050700140500510600130820010805101100603013070340571532405753 1
403080167550630407010165012014026010400240013080206600115011050130110 0

5160015103011061806061010307016306004140306167450640307010130601503012
0050020150203065150403070140304030706700305501615180010026100701060805
0108053181301103005040530301504040550701050100010501201404056214052004
0150010850401630600414030616735063020640040301302064001030805103070640
0302064005103070530301301402083015011030050405303015040402050701050100
0114065100200804004021621504016306004164816212504016306004400130105021
1030110061672301020630610050140103070530301301100405100500640564001140
3080402029181050113015210505040014003053030150401100500640506400640010
4008402070405306020015030301100167120010601030102020307002001070230102
0414750615016001900808506150305120010405061501030140042001504007018002
5700510100025014015012111016301100405103014004200405400701800216436405
7014004016840080140306167050104081200301408200165619008018200106005303
0180302100504051060011030704020400504011402013015103070402050401305301
1001669506900801830530150163040020501501600115070403060200180301020301
1504070504015012111016301100405102110301167032001403080166850670320010
4053070304053051103011623010050117001155068020070104053070304053018200
1080405400701800216307031550110400803030110061667506307018030150165121
5507046120050601630110016665062200100400130610450704020303010201308052
1050640014004030501801665501030750403012001060015016301020301108061105
0150620040013014020102150404020306001210506400101301100405715324057531
4030616645062002050405304056405802007080510307016306004808060610566001
1361663506100400101650120616504015010700303020010600520060013012003130
6166250105060840301200317010800501306130050504015040040820022109050130
0105001081550401624001080020013011080806061030150204020307002061661401
0307090010808105018002001301501017600103070105030703130110016605010401
5010204015010430406103012050130110054030201403080106080503059030600400
6015210506400101203040301301100616594010820020068010001022005011022004
0820014013016603012520014013060805030150110608050102002114061658501050
1016003014102010451013053030150162101000301255060014030105014030701030
2030700165750101004190301504030550165608050507054004612001501100830190
8908501301710770301400120040140030110066050405103070150403070140530303
0018503010056080505070806061050400461200700150202960014030110016564010
3070505410202102200501505104101507091001040013030156605030130121405301
6018020220010301703200130110030660200301513140308052105064001012030403
0130110061655506200907010510806601503015001100010510804017020307004702
5040104001104050016545065090840014040130103010013015053040400404100140
5030201104143007026020307004702504010400110405001653506302014001404013
0103010013015302506010805620070080404004908140801214501050607026050670
2007400301100165250640307010405307030601503011030170320011030703040016
0211020060016200800600400130250607026068013707026050530201105014060400

1200100270260108015040080110010490301151018060610165150630602001805301
0614002402010250115015401470220020416140550401350107003013011006165050
1040301702401308130130106140025085014064013081500110008001163011001649
5062002704001106200303040400502050110110620010801050640080113040301151
0111040016021102006001620080060040013025060702606801370702605053020110
5014060400120010027026010200110501203040301301100616485010506070800250
3603011080500230805220020020700501910300301516050180202200450701050200
2070011405504031505501509001070030303011006164750110400804006040051080
1070030120040130110800100560120050402001093013020140080230901080200600
1301140161200406005220010100601080140204811401503603011028190110164650
6403070101306015030120050020150203064010100301501043012030700511011301
1642704001301200401530301301402083015015019306050401525303013075011404
0206121640400501156404001040601406011301550645040506427040014016452001
5100301481630153030140120010600506100200804004021220011503603011028190
1101644506200203001013060150301200500201502030660150301103070615010307
0530301308008050402030700103005040530301220200300505011503050120140261
0070106100186016401051200211010121530404007024001616435062008012040552
0060013012405653030125065040610130406100530404002020040010501102200105
0403070140401402030700140201040011050130210053010614002140204001250130
1550110072004004017091402010400110130301100164250105060840301504020120
0501501530106140021501025055040200109301302014001726001060120010068030
4081105012001105012006001301301100612004060020090701105012001105011405
4813011005011040080503603015704030600461641501081040085505036010304001
1013011612001404702504040530142405001640401030703017010406030165550150
5410205507080200908052200530213400601801639501030513301504050201650510
3012901505410201050708020090400130165103011050506704101404010301281503
6030122003011001638501020010001903015040150620103065050360103052004011
4030708010403050103064090704006018056080505070540046120041003065108010
5050400403010700301502030700804003011001637401020020203040130117005501
1200300217005140530303001850301006505104101507091006550200220155010120
0140308050510307032006001400301100615010206050550405481630204004001612
0400405053040044007016505103014003060200150520020402400704060140308016
3650102403013080010801512005030150112815801000300410056080505070151400
8046120040071077030140012004015501044030110805660503011006163550101091
6003015040400502020501202507003010200801000400601617005507080020070180
6061016344010900705020410205015020410205040550130110020024504041005901
0401001012001403080163350101004190301504065640027002080200245040410059
0104010050120501616325010270012030150406564001004908030210050404100590
1040100501205011530515040451300453006106080505070105040046120010530110
0163140103012170070615036010501130116602030512412001504017314040030110

0212301104301541060110803016200245040590104010040041006212301110024006
0161630501090306004030115041270504055011300880301666030155070802009050
3020307002052200501520021012005011306301524056524004054100306162950640
3019003018308010130550110165004050608110220055015303017001704030110020
3040010540030110062162130140010030100065608050507015400102108065104003
0154004612006162850105060840301107350203070020614030706140208515010400
1543001100030214030616275064030701013060150301200500201502030652004011
0307023011000530301650010418130130106140050405403070503068002001301108
0806061030150204020307002061430657006004005061150708050105011060705165
0040104020020154001200401302009040504051200400300110700301301100616265
0104517301504051080165012065464704040512004606002504050025620030061625
5063040701014024010307053030165701800256200601640130100017005102003002
1103011005630410304180405420016163060200180520011060400136162450680904
0014010307050170400604030153030163010403200290801200401402060805014020
3040030660302301100270020404259010401001030701613616235010100419015020
6306150305040640240050114062107003015302018015070140040450708060610150
2020040061002400605015025700150115012111016301100162250620210130070405
1211613616215062007030010130405617005405200401240550102504003051030115
0108616233014002110100010805630703105011670403165216257001403080162050
6200601600301700115015290705085062107003015302015010301630110016195063
0801100055070404005016210700301530201105018016001652162570040050110505
0781030105013011001618506900801830530150162703010670400200101410001507
0405306020011617506890150305301501680606101030701504014001302030140150
1211101630110016165010307018040400502050152001106030180070259100400301
0233014002110100010805610030168060610163040010040013040550403010110030
1100161550108301901406100547025040165062040064020102153640203030600101
8002001568200916180606101630400100116145010240301308001080301501215015
2907050850615040150102110301281566001680606103016301100700116135010301
0160303040011015400660016806061010805012041003016124010208401030702022
0050110018601640105120021302100504020106211030701540400114020261007010
3011030706201030705400407050404001065001041813013010614005040204030701
0620220020102400310203070020616115010240647050160501303050191030030150
1141020203016410201080204006600110307020110620090901004001301050211030
1100161050104316010304054001012002004010030166040300301612206202003007
0481400101200105014002111051021308060610301100700116095010308011000301
5040305302100504040050205016501200100301170052010301150108611402909010
0301506081201030709010050508501608506301007040040203070301102200701501
2001005150307501150116075010240301214002030140011012030400200301160640
1082003015040820030153030140602160550630407040014070308011000220220014
0651030703020640065427018053020200401301703200105103016800200130164001

6140603012101000530306160450620090040050401501162009004005016160350630
4017015014020400501204010307016304070150650406101305010700303030100616
0250105040640303010200207006590070640610083015700510802013620416805240
0250050140306020030112501504020103070901005013020616015010704031601503
0165503301504040505350130401302022005403020400404006405100306002030700
3062022004082005040130116005010803040060040506301710130654816540160150
3013070330202200130063061599506830904015305164030900210200100301203051
0302022005012014061598501040200340165012065108016802004001140164030900
5010700301702400164055040150103501504040130103010013018002001301108041
6080301507050655010510100263061402030210050405062001003015040501201306
3080159750105060840301200317010800101305303015018020029016159650102002
0170030301020020700203070040011010603015025700104001506083015013010303
0150401803076200155030110802009513090301401001615955062009050400130405
0011030615040530301506450404020301406200150301402060404008016403090050
1070030110301165020200400130615942001090250630407040014025501161000940
0130620704021400504064002004011402040100400601801593200102600506304070
1014025501405301407012022004055010806103014030130205016159221020040550
4020300108030405501640550102108001003020220050404001002605403020130630
6510808030400600180214002030110606401501040014100306159190610050402001
0100040521090504056806403015016302100504040561214270101402013015064270
1014013065427010140405102004010802040013080159070067003402001010001970
2022001300140130180020013016400161406030140040141401510805010430160055
0330110808016470605010700301140161589410200101403030170802022005012022
0013001401301800200130164001614060301400401414015108050104301600158810
0105300620010807151080405302001503011080801610030050107003011401801587
4107060610100300405504080550700121301608050403020400130400110406101586
4647040303130130152006006501406158546530040406102030700660150301530706
4034040610203070052006001301217007080160050403051013020307001080501158
4410430040103015700600150154030190010561020010030170060011700120220070
0600120307002061583210240040020010100040564171406202200200401131403010
3005040530301506450405067041010400301405400530140550704005010001140804
0560805011640309005020306405150403090014061582410908640101100155040201
0307059010050102001003011250150402030700158146802004030148020030160102
5401101003014061065507030570051080167024001615804620064030142006301601
0262001503014054200618054011010030140610540610040410010157941030020025
0670200802004011406506702008020040116702400180510304065067020080103011
5785010240501930606150400110121060640150306020014100306157746405004004
7021402050104403014702130115108016501000104030501201576501040500134052
0011041080168290180581090301164030900501070030140070060016150405408200
2570401650401501070030161210703001501035015020040113140306157521010020

0402070401050116210040020016270012065504065107600102170070510400110504
0506403070400806603040170105014020400501204010307016304070140610011061
5749108405063040704001402102200501110200590040201200656404007006004001
6530301504040201030707701109520014061001103011001573710770215010307040
0501140620150403200302095200130630618010708001501080201200503015016306
1004001404012001050020510080501402107030011016301100157246464010820010
2200501510301162640040500402022001620080100040060161571410702240205040
9630406100140683019040610061465406100618650406100219011403050040402021
0901050110100110030040205040200310130406100110615702105015103016400302
0640051030705303012130110100108064001406400709400601140813090130113014
1020015015507040201550114010301402080301600150141020011406150608110072
0055040105010072006102200504055010210307040050205014040010120014061001
1030110015694103002003014010308301400501302050113005014015030164011080
3070805050161150612142701014020200400505012020040140020400130901210703
0011016301100156890010808240201030701501140650105040640404005020501402
0302001060053030140010100215675010460804080020013011080165007040013064
0511030016015030116606002400130696010030125017104030163011020403011680
6140610011061566910840406102170070402010307080160011050162001060024020
1200110501501710403016301102040301169010050400130652001010005301504040
2030140530301164270140610011030110012107030040516001501044010301615654
1070225010403019003015040105140620220045070540660401564468005040301036
0504052001381510307015020094016153080160151030170150307031502004011314
0308015632102001002829030160103018290301405470640501405219011401521090
4055012040012004011301481402050404008040030101306301030301504070910022
0305122006018020103011630901050302022003060200150196301101630110015624
1043005020200103011061615610040202103050163030110015614102005014040307
0400302050161008504020400150210801503014040040307041003016301100156041
0300200303200402050406010301108010800108050676004001306530301161004001
8040203020059150510400150213065406100110301100400110106030150630407010
1650120302100504065103015067020051054061005136155921090704061017005301
1006170200700405210018006405210601963015030602004001314030615584642004
0200101000217007040510400140550162022002004011341005501170055070800200
7014010512002111015572105040516140103083040105120021501155696304061001
0801503041310102003002301540013670620030140105120021507025700140308015
5541034041040855014001023013051402010307054001202002653030140040820053
0301200401504050102370400116301100155421037010300301700550116001030010
3070217005676370150164301110400301061104003011001553261007010100186011
2006504061001860121515020030028040020880080540101100540012004016155296
3040610010301150306020011501806004001301630110058010600405504060361640
5200205051030130904001304051041011012001403080155170010508303702135015

0023014080401306030110014013060163011001020030023012401051200211503060
2004001341003061550464050030147021301405220016200802046405005011301151
0801650100010403050120154950104050013405200110410801682901805810903011
6403090050107003017006001615487107703011061003016520220050170010406101
0760050406150405408200257040165040150107003016183019015010350150200401
1314030801547267002040200101000470620307004011015500130500402020014108
0167040040400301100801562001007080154621020010021700704020700600110806
6021566040400130653030180020011080302014001562007008051014020305303015
1001505700540610011061545200106060040020010100010505064107400140805400
1090705015303015040105020090501050408054082005504010501400161022005040
5501021030704005020501404001012001406100110301100154421020040510301150
6704400140402030010803015050161506121427010140427050501150155040011700
5302100163200401501080400502041008301901101630110015432103402102001001
0220050151030116264004050056200801000400601801510804020200407040060168
0020013015040402013005016552001010005301504040203014053030116427014061
0011030110018301904051600146405001030161542465406100417030147021301405
2200162008020141705011301540110100301406106550703011050430157005108016
7024001615414105070200123302020040116702400165306020016907064052200400
1101216483417020304006154090010301000217007050404051501035061504054082
0025704016504015010700301614651501035015020040113140306153990010808103
0030201030701022005011101030055062008004001306402020010100014061001022
0080306004006010640201030152400306020011404020400100030214100801630640
0501801538401010040060409120090103070102200501154001090150270060016513
0152145040140402022006102200530301103070400302064001050115375062009005
0400130405001701040310506410208055064504015365062020030040014040102002
1050116453001653030145300110501301100660215040053018007022012004007011
3013061005050115355010504064022030508501406203061005070150400530110202
0014002508501406550102215040010314046511016301100153450104020034016306
4004001306402040061001030156100402047106120012004404020103070140603013
0602001051030116264004050040202200162008010004006014061001106153350630
1007040013080110502009801070030110307013011020031501120031510307040203
0160113040610011015325062004008040130140400501501520010100053015040402
0301405303011642701406100110301100146540516001417010301615315010100400
4030305210017030150120029018017005302100504020406100130640050115403070
4004005020140201030115108650210100030112501504020304001530401030121700
7015040405604010405004057040040506040401620704050404040401103070620103
0704001202002615040401306029251865011030101001529501020060160030150405
0201105040820040061030200801000400130164030705210306010301402030160150
1202700670110501220030110015285010305133015040506204005012090070110501
4030705220306010301405030160400130808301902001010003040705501203051504

0601030550186501103011001527501040201830140208140050161008301204706501
6103051504010502150122003011008052200865010415061526501040301900301406
1003030147023010100610463301103070400640060162004013011080010061403018
0010100061070301001140601106201401070302180020011103010100615255010100
2001000403015040501208036403011405501023018640820050401301530301200401
5040406103014090170130301100140301504010504090701030231030110616030110
0152450102008012030170405020400130615070402202001105021103077040108050
1206550218650104150630123301203640108040521020034001056152340108200200
6801000301022005011516020040615120034053030140602151080162202001301100
6152230103010013015704050401140650401504063061003015103070100260504013
0120305165010505001501036730205040151080304081150301002006504003012001
8061502004011317001104008152140101004021700705103070308106510760010217
0070510400110504050640307040080660801520506200600604001402040205040200
6006050150180150401620060060400501301100550401620060060540610050401304
0510307020040140302062030803017050901061519506100200100040405501164030
9005010700301108010502916004001306150108661505010701220308030170509016
1518506307080101650120140260104002400130805040141005040130120406100504
0504061050305501865010301108616151750640200340014040102002150161040120
0311030708054001020040080150130100512004008015063061001040115165067032
0040051030164020220065402010610001050141020010530301501205014020308905
0150140042001501108905040207080501013061515501073704024040050114061300
5015303015240201040011014050130110015145010100419030150404005020501150
4704001402150400180150301434002005002018015040030413410086501101630110
0151350104030190030150403017001105014056080501108014024030701530301120
0106005303014051040061050304020501070110200474005010700303030610011306
2030401050130610011306210100030140307011306530301501017600104507040203
0306100113061512506200207004001308014054004200950153030150401050200905
0105040406100110615115063053400140610040201200110502030640522006100130
4040550116504015010700301420019215011406530301103070130110200315011301
4051030704020301601130406100110615105065200120153040400501615640204073
0501402010307040010407080545070504054082001050140016102200504055010210
3070400502050140400101200140610011030110015095010270012040205090050302
3080080504015010307040203010200501406101200301104121503070012001405501
0700301130120702400120120050140615030500401200300213012012005014054061
0050401620080205010700301130403013011008015084010301406102170070402010
3070801600110501530301130116427040013050115075010240200107005040203010
5015406100103011865015030602001410030615065062002070040013080113050040
5011064006010305701040603016200109023016409013016104070130120501010010
2008030130500401505506430160015108040555033012189012010306140522001030
1164002600164001830190301163040706165040150107003015011504506200606001

3014055200600130110804055014020031301503506200400801016501201404055070
3080064056080501162006060050107003012010306115025062009021016501201406
7040603015067010940060101650120140217007030140530807018001011030615040
5303015064504040530501201406800200130110805010737040165062010403020103
0611501506200801204055200600130124056136701550610002106530301301026050
7050649010501070030115005010403019003011030705303015507030130140522001
0307016270020501070030113065415300130130610010640522001030705068002007
0102010306112700205303011030701020040080150404040309001504061499506504
0610130601503012005002015020306202200504010083015501550405102004010802
0400130805470640200150301802178130150405220080201050406525065040610201
0306154082006140140110606402140020530210050406550404513005630400106522
0050405501021030705012050408011498506304070101650120140309126151080167
0509014092862001503011301520060013011080405306010305010700301201030611
4975066060021013015108040561510804053014070140510301806501540050107611
0504301511083014102001050120504014965064030604040400501305806513015301
1305016530301403070230750114050116403070180402030162103400601040301801
4955010100419040400502050153030150645040404007094006015040167041640011
0200400804053050040200660200300702164001803010051200400801506306100104
0114943010206103003020103070530301620010700504005011405012030405704013
6175020510307030750113063016306100105012020049052100101800620103011086
1014080070220200140020307030801493200102202003165200801000404053020103
0614001830190301163040706162002905010700301130114922006600808200803055
0110507040011010603012570050306100103054006040120080047021407050515010
0700150103061491200680206061010305501550401515070750405005408200150405
0160501301150100700150103061490506107540060105216501201404052100186405
5070180620090406010304051040011040610130156028101405030610010305464704
0540110301217007030140550701502006001501030614895010240200860130117005
5011620080205010700301503061001030400640301470250405065006702404020501
4003010050103061304070506081402010140206302103014030110307053002007050
1206401101540060108080020013016400161406030110030600107003016561488501
0240214002010803020157046400604061520010040060404030701061510072005303
0110307013018002001301108052145040140614872006490301400170024010307055
0150650307010140650620060101404030701040521105005063001000400601050108
1301550401680600400601030405200649050650500104055011301148620010410010
3003020103070656402070320040530301103011485200102204061021700704020103
0708016001105018016306400501653080080308008010700302040061061040604030
3110301150608170140040402070400401051030116264004050040202200162008010
0040060150161484200103002620010700505504040203010505015303011301164270
4001301148320010260040102085043050404003090804050054001101400402081214
0020200301148240108200301504082003015303014060214815010402018301200106

0065653030140208101040082002901620103011086101407024001614803010206240
2010307015011406151030703080010140501803080050406560805030104400510140
5018010440051504080402022005040100830140201341006015030115101110301001
4794010820030120068010003016565412705040130010504052210901053080080304
1200130802001060022042001050166513015308030012013080200800253030120606
0401050161478501040301900301504017001205018040030708050180202008001013
0620708050101301405303015064504070440013061477501020200300403015040505
0620400130618010508501043030205364010015016147650105040640301504050620
1501400200401640201806400101070030153030142701502030653030150645040506
4270400501070030142701130801050104504020300108040400502050160150301151
0111030100147550105040640301350501501030701100820307002016504015010700
3016150306020010350504050014745010200900400504030150404020704010501162
0090040050180301004053021005040163060050107003014011013050040130150620
0900400501030580147350650406101304061005070200700503016400110130110501
0004001406800200130164001614060301108017001401620090050130100147250630
1007010130501070030110307060320030130703106530301507001213015040640050
1608050305012014061471501050406401650620101040086015030152002040040050
1801170104034053020800200130110805040504013020220013006306147050108103
0140515070400406110504301511083011080107600301217007040550701508030020
1650401140306050610406100130115501401011570805080400504015102001004005
0120130630801469401030130121700703011620010104008510130204054001363061
4685065040610130202200400403020405103070400100850107003015011467501020
0601600301504050620400805303014001101216270020501070030150405050620400
1306146650102004004040301504050506204001308020220050401008301201341003
0203021005040214002030150620010010501070030130160180201030115030750114
0402030010804005020501801465506803040060010510801650120140108054011010
0301406104055010210800100102022005014030703014051310400816803040060011
4080400121093015040405150100720061004901624030101012006011050215016241
0030614645063080110003015040011015070601503015040120010500205016510120
8030600504030506204003020504222010350504061030180146350104608040301504
0400502063021004001090704100650130114625010403060403015040150163010101
2006016502524005040110700301130153011305501400504013011001002001000301
5202004117001104008164706110100025465036506702008040570240018020082301
3010101200601105022150761361461506403070101305010700301301026050170240
0400130614010100400601801402040067044002103141003011001460401030130121
7007030116200101040081650406101308040526301001030704430016405301640110
3070604091150220020301026050701630800103015022001105043015110830110801
3016401655010751304065067020080400104001205011502200106064030110061459
5010504064030120030026513090301164010100165302100402040061021630703161
4006102200904021402040610030162400501510600161060640103011501086161458

5010200801203014061003015040204004082002150350614575010403019003014061
0030305504008015030703400130150220015030206400530301103070163011008014
5650104030604040400502050116302064005103070805303012404005040140400502
0501406100110106064030110061455501080200604030150403055016800200130110
8030170305067020080501640550400801050140510304065067020080504080660010
3070540610050405102007001301106064030504011408014545064020034030152002
0630654001403020210083015303011008106145350104608040301304070830901013
0530301501530921060530301501200860301524040010314010606403011001610030
1140308014525061003040404005011401610030110606404053030110052008603011
3140308014514010307020081603020210506400101506702008030110061450501050
4064021402030508501406800200130110801102002203011402030506204006150121
5103070150436140701504008030400301504001031163011001449506200816030183
0801013061700520086014020131403010083030506306100400110606403011001448
5010240200860301700550116301100150450705040100830140513140308014475010
4020034014061001650120616200220400601801504001101251030406506702008010
3015062001561060640405470250401505007024050014465010440070403012630100
1030707029502030700203021005040521627002014021650406103016501201408040
0150102301240561380405406100103011306020054702504015050070240500144550
1020070050403015210017050120801020200900501801504001101216270020501070
0301150100200100016801013060040515030703620308030110805704050406515010
3508056270020801444501040306040301504050620150140020040165303011030701
3011020031501200315040402040030160140804040010306400501801443506200900
5040013061030116800100140500540100040201030704020200401502010130405004
0201202003006402020040116704031804003020640053030110307080530301400110
1210200102070040061040110040402010307020022050120501406100110540610030
3011007001865012504051030703040016144250620080201016501201402410430030
1217007030140510010700504050040570320040150103014050011050430110807014
0040144150683080101302700203015303011030705062004008010501070030150130
1001440506403070400130140530301103070506306100400117005250193060504040
2045070501800200130110801406400161406030110801405301050100030165550182
6014306530301700600400116301100143950670406010406100304001101302030700
1080501120090240200155030165108016502060400303010303014020303070310700
3016514385069020060010130140550165090030113015067024001050112020030053
0301506450405067041050107003017024001014068002001301108050406400161406
0301108050405303050113011437401030703017010406030165170104035303057703
0150140530610020507810130614364010900703017680301652030700530301400140
3020303010424001305200600130110806110504301511083011080102003002301405
3014355061004001016501206165040150107003011434506507810405130640510307
0806600130530301110306150113011433501024021400201080130120022011306203
0700504020010009011306140603011080130680020013011080520070030110050040

5040202200507027701014065108050680010804007001146530040201030701502013
0130407050405063040704001306501200100504055040630400400140650130010805
0620400140614325062002030010130405200500201502030660150301103070308008
0670030530301501540110100301406102700203015303011030705062004008010501
0700301509001406143150620040080400530301103070401402030507001530301301
0013013086140120085504040400307038010072005040402030530301307501140404
0010120013010014305067040310140402001060065168200801030802030700280540
0408200265303013080080230100142950105040640303054082006104562006490301
1080140301803006402022005040590070640402040013410060150301151011101428
5067032004005103016400104010610108106514275064030701013040520050020150
2030610085303014706501130180020013016400161406030110801405303050113011
4265064030900101304056960100301240550102108001006217007030116120014030
5401450301162006016524004400801308002001301108014040040309006080503020
3050163061425501073704024040050114061008305501102200610130100651008120
5061025040060106142450626020400404005020140213015067340030543060030121
7007016100670016403090050107003030301010040500142350630370400604005240
4005020410065013015240400504017010061401700140500114225064020034030155
0403037040060101700140120015506114001102521700704020140015014040010120
0130100142150640410040060101306570160506200600140060101308040530311317
0013031540130203053030113001401301170805013061200800106080503020304011
3030100142050101004190404005020501470630117005104004050630610010614195
0640309001013040569601003012405501021080010040530660200131700180306602
0054013020306141850630708010140103070410530053030140500405703200401501
0301802050108064005061405470501070030180070220501020050140161417501044
0054016501201406530301110030216270020501070030120060600410040550102506
8020017040010200155030150405701601301165002301040305012040520030081040
6106141650640309001040560805016015030150203061101030060150301403090010
1305303015011415506200902101301650120630610407030110454004005018012010
3012009005010504040550406141450630100701013016501206306409030170406040
0400501801201030150670404006010504040550406141350630407040014040102002
1501630407011404050610102002404005014020304070402030610304070103030100
8020627002050161412501046080403012403070120220065250406101305040405504
0652504061050404055040614115010403019003015210017050120801020200900501
8040530210050405010700301270020203070020530106140040540011014030654030
7021691081040301402162700203021410501010041904040050205015303015064504
0404007094006015040167041653050040520066021640018030100512004008015063
0610010401140950104030170301220050405108021020013021400203013010908040
0651041050102107003011001049040050203065303015064504010200400801050150
1200100301170055012014061408506307080101402401030705303015011101030010
0830150401050100010130509003015011509001301405200500201702400101406140

7506402084008010204020301408010451050113011045101305040170240010501100
8110083011030110451050408011008303010451053030130100100830110301104510
5040402010120200300504030530100140650620806400105018054107010405001003
0600301142105303013010054107010405001003060030114210504040201012020030
0504030530100140550650406101304055011610060805010700301103070202200400
4030204001008203070020140450680200904001050180301308003011301100830147
0217001408010083014020220053030140203070080140350610040040013080130100
8053030150630610010608020040130120024105040610830150404001040301320060
0106400104030150401083013200600105040620019021301670406030120304010504
0180020013016140603015040402010072001050403010014025062004008010165012
0140405507030800610083014051306405303011030116420064008030601140608050
3020630240020301505140150103080110003040204004127050701502050140205010
2615050102141053005303012108020801400506427040015011014040050201404056
1202003003011006405501021503010780402061202003006404005014020501204016
2020030015010700303030610050405001701040340520030085040610613995064301
6001510804052001503012189012010306114030900403010303015040170910040556
3640010300100011405012040901705040530301504040530140530700405100520040
0615305004025101060173400110106030116260205010700301613985064301600151
0804055503301218901201030615307001306200400100405563610052001013065411
0761050608301165060815010700303013974010100400604091200901030113001050
4010451064013060301200141030167041053030161396506200208040010406100304
0011013013090805020307002060401301250100040040305012014109081515030703
8012001550611301030150200401151400115103070506200411004055011530515090
0640050107161580200600780020013014007006001170011040084017050130166015
0301302011014040800200130140012505293040060018014060301504051503075011
4020110504301511083013050040140501139550630407040040400502014024020102
5050804020703200401501030140500110504301511083017014004040206080501103
0704020101000214050160150301151011101008301200101000280020013011080506
1000210405170014051350114030801394501020020130030150405050620503057005
5040150400103501501030501043015305010903060040530301167044052910814055
0116509006501204030205040364030140513680901708102001540013152168200806
5210981020024052501020036203080301108040400502017001104008200823016200
2301108040202001060101070030165139350620020404001405062400201015030602
0050112002040702006015303013010015040011011080200204040530170014054006
0401200800470250405408200601503011501007001170016139250102009004005040
3015040402070401050116200900400501805303021010003011405013010080522005
0405101510307030750113063050630610010613915068030400600105108014010804
0550102108001003020220050404001002605403020130630616803040060018054816
5401130160150301501201406139050620200300101407010301704006550182608002
0013011080130640016140603011080403070101301402530301506102504001301005

3030145070150617080300130655063061001064057080501013064052008001013014
0530301506450405064270106138950640200340301830801013055015400110122700
2061127002053030110307010200400801504040403090015040801388506301007040
0130801530210050401200407040201080400500230410080524020120041130640201
0307054006304001405303011300630301001387401090070406102170070102200400
1090705018016001105011030110861014013017024001501106080501100304005040
5304215011030506201014030100530426117005200101000501200100240010115011
0030506320010130501070030130110040015010215040011014051030701030400400
1700161386506304070400801020200900505030405470250408002001301108080101
3060040201503070340500138550104020034030140610030110735020307002016504
0610301650120140640015010230124053060200405400136164030900140304020302
1005040506200100301150203051410030613845063040701016501201405010802006
0403030501072030700205604020080010301150704104030501202004052008005507
0150803002014030801401011006114701100615250330150170420080030150160501
3016040170016138350654070104055011010009108015011003050632001013050107
0030120070050804053031405103011080010030200106003012405301370400601200
3003016015030305303013037010630613825010403017030122005303044083015014
0516704200600164013060151080405400108400640530301205018260151080405167
0413814010705030140015031080200155013014054008400504010200340040550140
1012405220040510451040018301903011630407061650401501070030150113805062
6020101650120140220015030140516140201030611379506308011000150400110150
7040550107003016152165014091611050430151108301216800200615011003050632
0010130501070030150113785061004001040610030400110130800200130164001614
0603011080530301100306001406200155030163010303018013040060011080501137
7506403070104061003040011013013090801010083012130120307005303011003060
0140216083016501050603014470164030704003030715040520041006120065020040
1003016110800604030030130703107003016513765062008020101650120140240103
0121700706401040850402120030040530162008020501070030169601003012400183
0190301163040706165040150107003011073103054107010405001003060030114210
5501110085303014706170104034020703200405103011375506200207004001308015
6427018040202200530301402030700550700147025040130170108030050401402004
0130120024103002007030110307010640060140500401101540060108080020013016
4001614060301100306001070030153030140202200501137450102402008160301700
5501506200801203013011004052200450701004904041004053050116504015010700
3012003002660150301200700501501405504030320010301150108615011237060150
3030501201137340102083012140020301400110120304002003011372401082003015
0408200301530301406021371401090070301300200703012200656400302064005103
0706513015301130530301102608301008016306400501801370401082008062005010
5040640301240201030709010200840400507014051030707107704020608050150403
0660200402013410030136950651008010130406100405501240526301005303018020

0901680200905014050048150404020120010305800702103014058007022009005052
0066040030750114017001613685062002070010405130650626400101304050050104
0020040615200404017030201080506504008010405501506200101306113675062008
0120405616400140640560320010301160320040540041780800200404052630100108
0501070030114016136650620030024006010405615014010140540041780165040150
1070030114018015014010157005540041740201013061001050404055040805200660
4003075011401700161365501010040040301704053030150116403070165900301000
4020108016431030620018020301504040205063010501070030116304001100165040
1501070030115101110136450620070081040530703040510301167032001700140540
6100162007005010306501043011080165100804001030580101940550405100200803
0205040200805013063080580120162008050103050650406403015012014061363506
3040701016501201405060815303014051073103040530240020130111041650670910
0101306520010220130652001010009051008050506100805010130613625010506084
0301200317010800101305303015018301903040705240530240020130113010506470
5040506301501013062001802030190010100010110964050610910130653030130102
6010805904060040130629050130614090040521090101304055012203070056080505
0704056080501216210002001013065303013066020050701680306004001050121200
7013015040405306850406550104403013051305012014013615010100419030170401
6506206530301161004001165040150107003011510111013604010820030121640030
1655303015011626400103040510307021400405005103011301530301504013304013
0501165090064056080501405103070400100180064002820014028002001301405103
0704001001800170011040081680306005010700301550013050030110307061359401
0820080620040525501405103070214004050040550401001020080263010010001071
0412014047025040520060703015701601080567024001501070030120019050130165
0102003154030161025030110307053030121400410030135820010905013061030650
4053030150645040402030140640010401061010810800200130164001614060301203
0405305303015011357401030701030030202530301501506100400101404053050102
1010400840514570014702140610030800103053030150120140613564010308516130
4010512002150155040120024005303064705501530501024001403080511011547065
4706405070130151021304010512002120018010004006015012014061355401083301
2189014055014053050102400140470250401022001001030611650120630650102020
0300403030162008010004006010501165040150107003016102503030501201401354
5010504064030120030026530301464830506900801830162002050403015070506515
0301680620070403012506200401301506431603015067020120030150681016030150
6440183015064217030150621014003011353401090070301768030165203070065240
4007010121070030140207010221620030024006018053030150405457021080615040
6501200100301630103501301651200640030110801100851030701470650630400100
1065063040010010805303013010260108050630400110010550330140530501240530
1640164056080501501050406403015040102004003001530301501135240102084010
3070530301640526301007091004005011301405263010010805210200165021070030

1405501105023017101301351501040301900301406100301104510130530301640505
3200150108052200155018020015802003180300103070550110502606015040401200
1060050168002006530301504010610040010307055011050260601504080113505010
2005940301281053030161620059400105015062810301320051080510804061004005
0110081406103061504010610040030110307060601436040301421510804010040013
0134950627001203040550145300105303016105060830113011504200150150803081
0306302100504053066020065303012200185040301419020016501050406403015010
2110010200804006120080206120012008001436040167006004001501070030161348
4010208401030705303016405103070264001014016405270070101401530301200401
3050632004050620060016134750630407040040400502014024020102501080541530
0301621010003014030170103015064200400606506504064030165306602006402030
4070530301102001060801630407013010061346401082003012164003016553030150
1640011004903017006001106541270507052640030130210010655303015011640307
0104030113454010307070104060530301640530502060204001309050140510307030
9061524051020740064052005940051004904053016401504070060013444010820020
0680100053030150140510307026400105015303011060701101060200600161830190
1304070169306004052650700216802004007015062006001613434010900702170070
1030150642001040500501040020040405270070506040540307050508504054030704
0013010018050301103070164200405501044030130515040650610080150402120070
1301504040203068504040613424010900703017680301203070014211510805010430
1600200155013011540084001020034004001503405304701655070168002006405507
0530301108002005016081240567024001501070030162001905013016501020031540
3015040506306130150610021603016134140108200200680100053030150154004082
0010805303014053060041060405305220010015501130130660200301400163090653
0301450704001220010010080501014070060040010620060013014061030165303012
5040610504021200701301504061340401030707010406053030166603015200101440
5103070200101643014020290220040010614020010004010080501014070060040010
5040212007013015040613394010208401030705303016530660200103070530301307
5011404648164030701013012004316110018050612008020430012120070130113385
0101006018030140610030150701080020010130530301501804055070168002004005
0180405507016800200400304020305068030810133750626020101650120140217340
5053405161406603200405501405507016800200701804055070168002007040030405
1030140400230100501170014020305303012506803081060133650630407040040400
5020140240201025010805415300301621010003014030170103015064200400405005
3066020064020304070530301102001060640202001260015040530301150125041004
0203050406505030162007004007040013030100405103014040070320017001402010
3015062007004007010133550640307010130405804052630100103070530301702968
0301660030170401650620105012168002001105010001405620506507001400601050
1070030110307030102603011405011334506100805010140164310130115078704043
0150408001080400405501070161630640051030704020304081140431130400301004

0530408400302064001140170015010700301103070130613334010820020068010005
3030163010260504050105060840301103070140530660200653030168905017001320
0850610080501014050643101305010700301103070130610800200403011030701306
1807080030110307060103013324010301217007040550401620080205010700301210
9010605306602006530301162700205010700301470100640530507006103021200701
3015040506200700704030113613314010900703017680301203070015108050104301
6002001550130115400840050401020034004001503405305303014701133050683080
4030140520103061640012001060030140530201030616405608050164053016401216
4513570401650401501070030163066020030150203013295065100801013040580405
2630100103070702968030166003017040165062010501216800200132850104701100
3017040502050150200700163011006405504030693016306120507001400601530660
2007040164513653030121650401501520066040030750117001613275062008012040
5640560805011005740061105043011080152405270070105015303014102001014050
1405413061640530164012023704001306132650610060180405616400140653066020
0653030121620080204055015200210010307040100400130614214001404055040481
1030703090400130613255010803016003017040164701001805200403061467010030
1240400108002004020501164701070401630400110040050306142110704016320060
0400503030100803620060030302065070014006018040550405801019103015303012
0703200501801324506260201016501201402173120010500201620210306130103010
0162088001030801323506510080101650120630120084300140505320015030100200
8301108016200805040013016301100653030130102601080405608050164053016401
2164513105011652002065303013066020080130600405470100402506803060040301
8200801322501010060180301406100301104510130530301653066020065303012162
0080204055012203070040530530301200801000105030805200405010702604053020
0801000400604005014053020080100040060400130614053020080100040060113214
0103012170070405306405504053030120060060405504050620060060108040545313
0150643101305010700301640011004903011080501050406403015040501070694030
1506740301050107003011320261010003014013070530301501640516350640520060
4030701053030150116403070104030113195062700201016501201402656470614053
0301168030600114025506100301040610103014052630100108011001805040521007
0180131850680020070404056163064006521630600253080080504040514001140308
0131750108301903015040505062050306501004905030530800805040150140015010
3053030145170504040550406131620010905013061030650408002001301108040530
1406520060013016110504301108014010301121700705303014052700701016306400
1050164053012001060020101626400105018053080080504053066020065303014051
5010001501130116401005014061630150104030140216405640540130601470216200
8020620080203015403020163011004100306163011001405303012506803081013152
0010904030160102640505340516140640510307090030100016501010080150403016
2001802030145131025030115101110131440109007030176803016520307002002201
5303015040501680020065047040015031080521095020160406151080501043016002

0015501301154008400504010200340040015034001504064030165010504064030153
0301470613134010208710770530301501530301405408200106020103061530660200
6530301506701091065120730150640061065130903015064010100106200205040301
5070506550106806200704030125062004011080070211030614058007024001504064
0301650650406403016131250640309001040560805011650120502030640540309001
0305303015012014080400150102301240530602004054004001400120804006403016
5010440218901640105120021406100646405006417068650406100405302100504050
1070030112504054001104030113115062006016003014052010306165200600130161
1050430110804053014070140092820103061168001600107003012040400800600640
5100130600240203021005040501070030170400404006011402040201001306002404
0070400404006018040510013060021670400404006018014130616130164012005002
0165610040205040430011650120402030210050405010700301201310401010040217
0070405306530301405507030640526081051510805010430160040505320015020018
0203016400110080150403016501010080150403015303014706130950610060180301
4055010100801504030150140510605080530301166050405104101506800210010680
6200704030150705065501062002050403012506200401108007025040405800702400
1100801504030165061008015040301130850104020034016501204055012580101927
0070504020504058010195070807050501402050140101470240400200802041001620
0700400704001301307506107540060400404005020530660200654001101653030121
3010027030506800660050150201405015030610010304054003016050103061306506
2007008400140320060040530301501161075400601301004052630100108014024051
0250400520066040510307030750400501506100801504030120070081013054010900
7030110760030120307001510801430160040505320015053050180530660200653030
1441810504055011640307010403011304501050406401650120501568002001050110
0815306602006530301640206800200103040203053030125068030810130340103012
1700704053053030130660200506700610501070030164020504016504015010700303
0540820065010504064030305040610653030125040610402030200106005070013010
0507001655063061001061025030150670061050107003014055040613024010208401
0307053030165303015040580010200803010260301502165303013010260108065010
4020011000301621100200301108064052630100580306403016151030705010304017
0301650102016040301612001008030304001100490301140501130150621000120053
0301103011501530660200653080080504053030115010400610605303011502608163
0110065306602006530301405140011401680020040550163061300506960060104051
7001155040169701040305016168002001550401697015018040011004903011080207
4030105040405504061299506840310405651030116306301306004406140012001100
0406113304050643106301298506100200801040610040550203064020504040514064
0205040304055015303012506803081061297506200801204056405608050110057400
6110504301511083011080152405270070103053030141020010140501405413061130
6405301640120237040013080129650652001204056130150610080501013061030160
2040561301513090301506400110130653066020026530301216200802040550113014

0540011008050405504030210040050140570504014061295501010060180140610040
4005020402050140205040302100400105030152002061170691610080501301001294
5069022004004040207040150116902200400801501041012615450705040217007025
3030140202109010501402029022004005050850650101050608301104811301150250
6902200400305301001293506504064030130206400103080530301103070615013064
0651503053030124002014013011502109010503030100129250682008040561630640
0106302100504015020040115070060014100163061001052109040202904005016405
6604005506082029040050112915010200801203012591084030405053501616910060
5504008030110801301105040080400130610305070010130610010504040550406129
0506520012040565303012004012005900610083011310400820064013012030162301
0063021005040550400803011610004002141003012895010403019003012401030705
3030164053050670140604020108065504008030140205061000210402030130600167
0800613061301260013014020641714040201080163200600630128850104701100301
7040164701001301010064059250080405500170250153030152002050203065470530
1647013036200600301164120016306128750644200400104052102001080405804052
6301004002140020016200600130140610301653030125065040610130501070030120
5070014006010140501128650101004004030124010307053030164056080501640530
1640121645131050120060013014061030165303012506504061050107003012050700
1400601013012855010270012030140307040061610049050107003012030501024001
0104008405304005070014030205070530301180701284506270012030405501403070
1053030164056080501506203051040207040150320060030150709400601630530301
2506803081060651003003014051030704004702502030620670240013014901100120
0806061210200100180020070501206301283506403070400404005020501402030200
1060040203070053030130102601080402060805016402030164012164513613011005
0061801806001620080501128240102087107705303016110307030110553030154030
2061030806030116200802050107003015403020307036156200400403046503254101
6510307054005010206053030130750180150704053030150150784001305281903030
6100107001200110003011080140570015010505001105015001620080205010700301
5320060017001530301520090504100805620090504001301128120010410010300302
0103070530301611010300562008004001306402020010100014061003042400601061
4010301121700704020270070101620080504001301128030103010013015200600130
1108011050430151108301701400401408052006001301504011050430151108301240
4001080020018002001301103014040030100150015303013010260108016200805014
0203030101001700140203014016504015010700301151011110127950102008012030 1
4061003011045101305303016405301407016604053050107530301402008140163081
0805303014020081405470161091610301401705506402008106140170550630810162
0080205010700301523080010200802030110805411071060503011405011278501010
0400403017040530301501164030701658012040205063040011001014020580120501
0202003004030116304001100640206080501505108016403090040013080401010030
1501043012030700402008570220011550408002001301640016140603011003060040

610530301214002010801200530020030070150500153030145070200653003015470 5
011277506750204004040050201401610067008040206080501304040075020140170 0
540520065900640526503640551231521062040080405053200150108015103070104 0
810406101276401030121700702405200300280530301301026010801550610080501 0
130658008030162570030150675020105010700301653030130102605070506490106 3
091230126015030130164015063020110305012520030162001281301504012001050 0
205011650401501070030115101110127550620200300403015200206306530205010 4
301103070520059001030100830150104610453012530660200306020011070030165 1
274506200801203015200206306520065040400105011301530301102110640551680 1
253030120065016108091050150641020010127350620200300101407055018260651 3
015301130148161530116427010301301162004011406401020040502181060403016 5
303015064504012122001405501252006405200128116700600400112725062080610 1
050153030140530400110030210050401620080205010700301306100506105180010 4
055168012405306100203070053030150218106040301102001905030140030110065 3
030150212001077046510301400301100612715062001000190405641050705107330 1
169701010400821400203011640061501070030150401008301501045065010410130 6
530660200653030140200814050640200810130620060013014061030121306530301 2
506504061013050107003011630400110012704010208401030705303015011300501 5
308008050405303014020105010001080660805301070404008060050161700540540 1
704702401200830143604030116220010010130806035050620200300403011405011 6
504015010700301151011101269401082002006801000530301613001050401030702 0
307004702504053030126400104050012685010200801203011732030700616200802 0
501070030127007061562004004030146503307501650105040640301103070653066 0
200103070540050102060530301307501405001267501020024404040010306405004 0
028200140280020013014020103070400100180061101030040205070501000400403 0
804020400200500204020400237017001501050840610652001050020509164010805 3
030140202009050410030126650101006018030140610030110451013053030165200 4
012530301104001101040081690220040080530102601080415365306602006530301 5
040402010301281155068002004005020160406154160205063006004005200134006 1
564040080200400100130164016402040020010300706402031671640205016600164 0
206150216402061215012050130100126550640301900301405201030618040205040 4
053064001050406501401013011030702008020301162840060150111030614020501 6
600164020121167006004004001301650401501070030115101110126440109007020 0
315450705303015011421151080501043016001263401010040401070501510804053 0
400150365016800200655040540820024052200405200300210126250671018030140 5
201030616530301450705320044090070140560805016405301640125303013010260 1
080164513616200315616504015010700301126150104030190030140610030110451 0
130530301653030145070506640060101305303013010260108045136200600130140 6
103016530301250401504020401200830143604030152001407063183015101100604 0
400307031126050104400540301504016506201050120103061106070805303011301 3

0060010403065120730110400165130903014011001620060013014061030165303012
5040150405303014316040200407010140501125950643016004052001503011080640
5301407014009282010306120080203012405608050110307050104513005303014316
0401620040701050150102020030040303050120140125850630407040014022001026
0053030165310306501050406403011306530660200130653030150645040167006004
0010403064020504016451350107003015303014030701014030616202004004005014
0400260840112574010208401030705303016130010504010307053030126400106405
2630100900101000257001061256501050406404061002006490803001064051030704
0202009050106405760010640201041012530301405270070104056304001100125550
1050406404040050205015630060040050110081530301804055063006004001520040
3061402064240563066020030131200600121640564055014010116500205014061005
0630400110040013011254506540050104053070304053050140101130405501200802
0301540101163040011008040205010410801650709640545704702504040550140101
1650020505016125350640307010406100304001101301309080506501043011080402
0501660018051207301164001651309030116401100161621400501801252506440070
4030140520103061654070013061301504064010805062100200101301251506304070
1016501201401604055015301026050701649080130103010015040500530301400110
1216200400300112505061006018040520050020164052630100102140064055168012
4020506800200105407001306130140201080162100200101304020103070162005900
1050168010201249501010040040301281053030150140530164010100400601804020
3016401100400601140804012008301436040301450704040045170501070030113015
3066020045070653030145070457050102020030040303050620108010201248506403
0701013040610040550122030700550401405100030214050053030140130207040601
0104008520031802020013400601501020200300403015040481501612474010820020
0680100053030150140530102601630600805120730116400165130903011640110016
1621400501804902004030204053016470100164056200908164056700600640564040
0436500108501020200300403011630400100180402008301200530013016003060501
1700180124650101004004030128105303015014054004401030140545704051030116
4040018014814020103070162005190010403061101030040206901005010403040500
5010202003004030150404040045170501070030113011245401030121700702162008
0205010700301200300265303011073704020010100040205011640307018040400103
0640050164020302001060065804040024005018053066020065010202003004030150
4010200253030150120022013013830140610601503011030153066020065303015040
5017001612445010200801203011076004053030150165303011073704020010100040
2050116403070162005300157022001800200130110801681060801243501020200300
4030150404040045170501070030110301530660200653030150405120021242401030
7010300302025303015015303012140020108080070221030614058007024018200130
1630616402050402010306180402070401645136162003156470250401650401501070
0301612414010200201007200652008010004040530110085065040640301405201030
6116200905061661501070030165303013010260108016451361620031561650401501

070030161240200102204160806800200130110805504008050204005630708040013 0
180070211030614058007021620080205010700301612392001090250630407040014 0
253030161001500104040550102640205010240610010307013012009050301402010 3
070805010430110804020620090504006015016162003151010400810300504040540 0
101306504040203014016200315104030616504015010700301680070211030614058 0
070220103061162009050616615010700301653030130102601080405608050164053 0
164012164513616200315616504015010700301501123840102084010307053030164 0
550405020401803021005040530301165016004100802040050110600164102001050 1
612374010820020068010005303016402030200801000106402050407006001140401 2
001060040204006101200106004020263010010805303014030701050110200601301 5
040402010410110805040303010010250301151011101236401082002006801000530 3
015015303011610040016121091301308404004050100014040163020801235401090 0
702170070404007006001140108040206040301002605303015040214002013063012 3
440102087107705303016520060013014102001053030161105043018002007050641 0
200400800200130110805060050010104008102006015305062010501102503050120 1
401233501020021903017040530301653030150700125010803011623010001080301 4
020504050201050165010400101401623010001052002190510140402050405020105 0
180180708004020108050140307064020507053030180806005013011232506510080 1
013040610040550121620080205010700301504018030116230100010510140402050 4
050201050165010400101401623010001050620021905062003007040205040502010 5
013014001003011030705010504064030180020081025030115101110123150105040 6
403015040207024001504065303012026081025030115101110123040102087107705 5
014055010280301530301502030640526301005010240080301140170104038002001 3
011080140400100805016304052630100501028030161229501050406403012652009 0
502204101107003016553030120260850180206704600105011641020010501612284 0
103070301701040603016555015303011030703020640061530850318040306030301 6
850350161227506403090040013040400501640201030180610530301301026010801 0
300504016100805040014064054030701053030140550640307040013040550645040 5
010200600164020647065303016470525062520040030106003019122005040656100 5
040404007094006011404053016470161226506737010130405501161002601620080 2
050107003015026081013061225501050101600301281013053030150116601030704 0
510301700250180550110600406100504050801600400140161224506200207001040 5
307030405803060050404052420030080220083011080405508010050040014018012 2
350610040010130405652004030201080405457050680010050104050040550404004 5
170501070030112225065040610130405801620080205010700301530301450702164 3
012003005011221501040301900165012030206506702008030115010020010001640 5
265070024051502030518040522004001101216270020405302100504050107003016 5
067020080301214201220401030707010406053030150164056080501214016200101 0
001010400840610010307015407050154070501200101000402010403053030150122 0
307001219211007030141043001061005303015014052650700253030140570060018 0

5303014001101216200802040530210050405010700301650670200803012142012184
1027030304013090026010305303015016402010410140040410014022030700121710
0102008301217007016100670064052001241640556365062200800105201013040301
1620080205010700301108064001070011020040063061216401020871077053030150
1805303011030703020640010504064055010413065200100080020040405263010010
8050107003016506100801504030130610010700112152110070301410430053030165
3030180160011050150620040013014010200110501402050401020021050130110065
1021007010307090205050140010803014001200400140308040203020013105016601
5030150404061030140203023011000130301100640530140701501910300301405305
0107700161214910840506304070101402530301653030130102605070506490106601
5030111020061200924052001104504016320060050107003012016506204001306121
3501020021903017040530301501162002901640208102002570040061630300804008
0167071504001306530660200653030116701091612125068308040040203070301200
1050020530301162002070016164002500180510804040010100301700116504015010
7003011510111012112006401301703200400530301103016130670804050120120040
1530301108001001030405501070110804020303010010613010301004020501070110
8040400101004003017001405640201020010700161210200649030140017002401030
7055014030605303015020306200401301108040400707150400306404003030080301
2001050020405201200163061301030100204015040108053030140520102001070011
2094010307070104060305303015016550102507010850401010810655010250702030
5504020305103013067080405012012004015303011080010010305020306417010403
0110804040080304006001304040047016400630640205040308060122020030161069
0100301564703012405611050430156470301240400501700112082001041001030030
2010307053030165017040330110100400301406105011002008030140610150427010
3070150307501140653030124040050401404005020501301026030150216501020160
4030161040140010301610220010030110700306306602003030656040600530305018
0103005040404004050100014050116403070161207200109050301407050610306403
0140705040201306405303015011640307018016306400501612062001090250630407
0101402530301501801654005015018053030530205010430150620106550400805062
0400130104008405630400110061205501030613014005060400800404100801646701
0501680306041001404053020080100010165400501050116200802050107003030301
0012045062006016003014052010306140505310805307031080170104035402020010
8080070210307058007025001026003013070310621093015040500102600301530301
7104010301203506200300810405053103011620080205010700301650623010001040
5005200608405103070506204004050015506100805010608053030130102605070164
9010304053016401506100805010162008020501070030150112025062008020400404
0050201402217007030116100670080510490400612040130140010230145070405400
1309050120140612015064030701013040520050020150203065061004004030113015
6110306150151103061165012014064012008301436040301507050649010405653030
1405270070101301405301406120050620080100040060104056405270070405303015

0120140640510804005016405270070103053030150120140611994010301217007021
5040010161140603015040520013815010307020094018020450705040100830165170
0550120501405303011630110070016119850103061301200109160113011700550117
0053050040150301003013005063015070406041001630110015040011014051030701
0304004001700161197501020020140301200106005303016530301200204010650620
0204010620632006001061206304001001061206400250010301620080205010700301
2022002040107001611964010900703013080080301670053030164020302008010001
0640204001101060402050702008020106150110020080402030307031053030116100
4004005011650401501070030115101110119540109007020031545070530301501655
0400804020413061640203016401140501164030701611945064030704004040050164
0204001501401165066004006306602003016530301165066004001301650401501070
0301151011101193506200203004004020307030400121093015040402010072006520
0905024020410164020161806015030140208096004001050150680160040080020013
0110805068070800400604030103010040400501700116200207001611922110070301
4104300530301501164030701659016004020504016403090050107003015021090400
1305504008016100400161191506200300840051030155016523010062004030150102
3068105303015011640307016402010108101403040201704170013066020030306530
3016210340060116504015010700301151011101190506800200704040561630640030
4057040601630640570406013012001060040510805303014030706306118950630100
7010130501070030140202301409030153030145070216430120030050111885067040
6010130405615070406016301100501070030120165062040013061187506704060400
4040050165507016306400130653066020065303011670109116504015010700301151
0111011865010504064030170405303015016400200500206306110103004020400108
0402050701050100040050306470501646704005016402030200106006580165400504
0050168400803014020134100801684008040060400501118550102008012030141020
5056405303015016402030700118440103070701040605303015011506081302550405
0105040640301103021030610402005303015020306400104020070014001040200140
6405304001005303015020306405630400100400403080118320010904030160102640
5053516140653030150402800100021241008051080103011710840040613014001003
0180200840040130152002470010406104053061050406118220012413014056306400
1308018087162008020501070030140400101003017001165040150107003011510111
0118120015030121700705010200801203030501656100670080402030700118021100
7030141043005303015018053066020065303011001001300105040653066020065303
0116100130040550122030700117950150230204055040162200800161001507013011
0068016220080018027020030116200802050107003012630100108010100301601650
4015010700301164002500804020704010501520101304030110301202200108610700
1117840141001301524002500106402026301001030709220010306501910300301732
0040205070257001065240202005910301401406030150404020103070307501065504
0550401601705030140201030010001070011177401020871077053030150153030145
0705040130120090503011406402026301005250104094003061020030021301530301

5307031406117650108042004052010130403015040803012402044040105014020302
1340060180402022005065001010004006040070011175506402003403015200206306
3091230130921061008301100810301174501020080120301200214709100106540014
0302021008301100810501530301410200106402030506204005206300301400170020
0101000501506464006402030155015010400801019301104815303014020470107001
6117350620090050104056400640301103015061001601014050120501024001404702
1008301108020506304131011725065200120305010504064030150401100102008050
1610083012204001025040202200203200600114020117140102002010072006520080
1000406405220045070400132004405301100850650406403014052010306111705061
0080501040515010072001404065130903015064010100105010700301116950630206
4001040522001030706150140101405400417540011014051030704001030400170016
4052630100400303653030120020700170015010700301506504064030114050111685
0105040640404005020501530660200653030116701091640205010240017001683090
1653030116100400180306602003016530303018050130130100301805013015070205
0630160101167401082003015040820030153030140602116650643601053065506826
0106540041270507050620022040060101302022004507050107003015011165501030
8011000301504050204001306301901301664100030123061003015040200533015064
6580106006170200800400206080501080202200200207001611645064082004004020
3070301640090501653016704040060180501200100301102001001700161163506504
0610406100305408200610456402022005040200101902170051022005040103011086
1014070240011405013010015400102400311306301630110051012405400140040301
7001611625062009010010130405001010003011080405506440104055016600161161
5062009024040517001801620020700400501910300301504080101940560401700116
1004001501070030150111604010307070104060550153030127007040060180100075
0501910300301504020501000750101401611595010305133015070800200701680200
7030122004016680703017006001158506200902101304056201030150620090050104
0512004006167040601013010453011030140567044005016115750620090501040560
8050113064020200905050670109400601013055064504050670440050107003016115
6501083019030110306400106562140020301307501070030153030110103065011155
5062009005040013080506410204050040201202003001670413010015250670406010
5017001405304011525062009021050107014053040115250630092104101405304011
5250630040103032001405301115450101004190404005020501402030162103400601
0308040567041804020301500401412705303015064504050670440050107003015011
1535064004019040400501401405640400670414020103070166040206702400101301
0453011030140567044005016115250620090501040560805011306120090504053050
6701094006010130611515061003060010405611010300100306001013014050620200
3001011150506202003001014070530301103017040080140514001140108012020030
0530130703183019014051400114030801149501020020130030150405050620503018
3019015040010400150103014052200530301167044003010050011403080524002004
0801801080600130408400304081513001000400140308015103015020601030153671

5504030703654816608050504040201003060010700301651148506504061040610030
2001030026200107005013011501501660301105060401406200106003015040400200
5002040060130210100030140307014005020630653030113001401301120080013061
7080501060805030203040113030100114750640307010130601503012005002015020
3065303014507015403070140501301001550701080820501202050630160105400100
0213014020104001400130800200130164001614060301108040030100500651301154
0010063015103031013010220045070154030701405013010015160200405011015701
6030150702050630160101146506540701040550110100091080405200700106530104
1513080530301303080010504011455065040610547025001048101280405303122004
0010014100506201050110607050161030050405303011003060014068002001301640
0161406030140062030401080162009005010403061114450102402001070050130165
5015503504040528190214016200208040010403061114350104004010410205014053
0103040161142506403070101305001085040405320044006050601504001101216270
0205010700301611415063047010526100830125064510540115010030600504040611
4050630407010165012014050673106051014060110805064830105010700301162007
0061525670418010506083011406013015303061139506308011000301405201030613
0800140530240170501301202010306115250670406010130501700140530615250620
0902101305010701405306152506510080101302630100405306050130165033015040
1200105002040505330150120070041003061138506200601600301405201030618030
3080010504061044005403016580530301451050401137506403090010165012040560
8050161504001101216270020501070030140610030113050040160113650620020804
0010405307030909010030190901001801504001101216270020501070030140610030
1305004020307005005301052020040040061500530105103070304084005012302030
1305004020530500408051657024001680020013011030143060015502030615251507
0802003015010300630611355010611000301504050120805019103003015702400180
1550406003060501801504001101515010400110700301125040510307030400161134
5067032001040530703064001101301309080502030700206113350630924030130708
0140215020305400801405470250405102007001502063021005040150612120200300
1140501163061004006111325010308011000170055070150201501540110100301406
1016306100400501150453001030216301100402022002400603014056080501103070
4054530016405400102007004052006590050404041105025040202200700600170016
1131506100400400402030703051080140162002070016561002402015010400114016
7006004052701001655011650900653090055012040510068030233011501004005070
0161130501083090403012003170108005013015015130903011640110016214002030
1250620604010501070030161129506301007040013080150610040010501070030302
0010600520060013012001430165108014016602004610083011301530301103070163
0610010130501214002030110015001040405103070700600610403015670060011053
0500408002007040540011050161503020080100010605063061001061050413011700
5800200705067006001102140020301165002006803060040547025040803060080112
8506703200104053070304001101060301640015060830124051506302620307005064

4055040650683019030140550401404018002001301108040515070910061127401082
0020068010003055016211007030170102006030202200501217007030166040540660
1050405401101003014061010301405103070505007021030202200507001400700161
1265010106016005420010016506204053015030100550701655014050701640070140
3080112550610060801016501201402601010221700702164030900501070030115070
0600166603015070506550105010700301150103501521620020700140166050140308
0112450610040010405307030640202200103015200700704016301100141043001217
0070405270070406140520305405303011406100506900704004030405504054014003
0110070016112350610060801016501201402405630250203070020405104001400130
5064002601013040610617020030040540026040610405501400108405104001400700
1400260301108050647010700120082301520080018400501201040030151020010030
1507040530160161122506403090010165012014021406030150401732004051030701
5030602001804053030101001070030120010100013061004055040164030900501070
0301304280112150105060840301410750604020400110109600402030200801000501
4360212301163060041659816306100640400103005001081550401630206510200100
3015700516502060140530301010070016112050640309001040560805011650120502
0306150640309001406402015010072001404001210950401630201063060301650403
0140510307015030750164014010003014051030701503030900640522003004060150
1302040307041001501070520030070140050500155040400603250180200383012019
0702220080015015406100511006040060170011060640103011501086161404011912
6015200300701040050500140515070910061119506304701052610083012506451054
0110606404061005040611185064400540040203070305670240016540014030206530
3012504061010700301104013011025030153066020065303012165040180400104010
6101081065130153011308002001301640016140603012030405301070030117010403
4020103015303013066020010501601503011510111030100111750683080403014052
0103061570403075011070030120065030116702400165620090506562007706521650
4015010700301804051030704005012010400301301301000130164052009014055070
7080010650010126003014051030704020081064001210930140530308106200205040
3015070405155010680620070403012405200401103010350130165120064003011080
4054507012640020405506431010700301104013011025030130660200301506702400
1050107003011116506504061015040011012405501070030165120730150640061065
0610040010501070030301524002016080103003020400706061040040820061300150
4052210901102170070301100201030115045150152006001301108065506081105043
0157005108015030240020161115501020080110003012001060040050161504082001
6150302008010001801501030640050113004005040104540061300400504015230800
4002040050400801301105501150401580603013070801402150203054001101101630
2100504040540020305140010300630220030110058032003014054007006001140308
0150400110010403013032005010702605406100106064020014006001611145062520
0104052200304055010700303054082006104515400600605010806816301301700600
1280010003011060640507040020601403061113401082002006801000301547025040

2022005011650401615470250401621400405004001101060301163040705010700301
6111250102004008040301107350203070020611050430151108301108053070064052
2005040280010004053015010603037030116700600400150107003015011111501040
8120030140820014005016204004082001080150306004161060013061030200801000
1220030110011105010403019003014061003017040105030703400130614701301102
4004030040013080105050630400100101641206105068070800400601406100301501
4015021301100510301520031051060016012002700600168163013011010030164020
2200200401404003037011047025040105064040080306001406010230110018060150
1280010005406100103011060640703200140306110950102006016003015040505062
0503015030200801000106150220015040820010403050103016301100163080041004
0550116120064051041011080910060140306110850104030190016501206567006004
0011301026040510451013064054030201013055011620010403012001660053014603
1303704051030850405470250401060640406100700600400161107506304070101650
1201401301506731030540530140701400928520060013011100306150400110121627
0020501070030161106501030801100015507016501206150400110121627002040550
1220307001301026056700600400101010003013010260162001050161301026056700
6004001013043002003013010260162001050161521650406101305101302016200105
0161008301200101000280020013011080506200220400105010700301104001101507
0802009016011055010100601803012001440201020016015506081216700600110204
0610020040165610021570060080103003020301301090804006590070640103003020
5040816301301108053015024002061104501020020130030150405020620400104001
1407006008010401302026104001301602002601503011030702040010809901105011
0606401103011001103501050406403013061150162010301400240020501826030110
0100180114030801100709010606402006006120453070330233030522001030340014
0308010501200400806608055012040200100400601501803023301103012009005015
0203061050120040050303011002010301200900501105020012200301100522005403
0206150400110010403010606401314030611025010460804030130102607024004001
3068309016104061001080105080306001506200155106001301060640301100653010
3050107022001522004001100104040400802003007021515040404001653010305010
5001305001060640150470166110140109007040202200504013024020307001080640
2016050506108400601064020150215063040010010217007030166040205064066010
5067020080301504040201501035017001611005010403017030110307040203080080
6561530140201010002153030120010100013011001099506304070101650120140309
1265108040514020024004013065501109850630534004061004020501301100553014
0530140201530115030307031106064011016301100405304015090110307050680207
0104061001030701640018020082301301010120060110502215076136109750630020
0701016501201406540610065067020080705090105012014015020040461620029014
0230101012006011050210307010506083012022004004030204004040061510801502
0200121040030115220011000406800200130110020013004050680708004006010165
0120501070030140610030115050020061610965010308011000155070165012061504

0011012162700204055012401030110804051501002001000180405504015040100400
5018010955065002050104051700156100030124053031103017320030140550701508
0300201403080109430101012006011050220704050306020050306203050504065030
7320030115070400803002050103020450704570140220220015030704110606401101
6301100732003014051030707010061403061093501040200340140610016501206162
0022040060180400130908040400110140430167041808003016304010030164120033
0165018069301405103070150306020018010925010504064022030508501408015215
0200860400305101504052150400140014054016301100610915064030701013040520
0500201502030653030145070405200101914050113015704050406106064021620010
9105101060405290400501657005150301630110055060830140540013170018010905
0620020700104053070304001200405003015040901005065010506030125067020080
3011507006001410030610895063040704008010202009005010808002001301108040
2080306004006010640206470203051050140202200106070301100150400103140470
2504061501040014005013021005040150107006116301100108850101004004030305
2100170301654127050401300105040155002006105303080020013015011620029016
5303012165010704006015406100301060640301100108750620051100405100680150
1640516050101084006050640515021304001005060301100204005301620200700106
8002001301108016460801030540610061060640200700400150670200804061005040
1304030130110061086501040306040150806400612002901501030701000200801150
2200150400131403015022004001101215040150113011504040100504001406108550
6230100504015022001030115011630110010845010704031402050230901304050080
1306005040402030320016402010410150709100130108350640307040080660801530
5115504016320060040030550104403011080564040020020402002040301700550140
2030507001501302100524040050401506702008030110010825062001561060640220
0108150104030170301220021504011630110010805010431605200860301101003016
1079501020010001901623010050162030150516230100080107850630407010165012
0140309261008301701006801077506208011014080100304001051700180201907010
0301501106064010301150108616107640109007020086021613640562520040060166
0150301501070116200860161003011403080161003013011001075501010030403015
0850506205050114016101003040050114011060640110163011001074501022001004
0301504030402050164070503011001073501023011000301508501502050112003130
1503050116301100506702008052008603011361072401030702008160302022064001
1010715010200300185010144030110803060200165160016532001163011001070506
2004014001700140804020800200150404020320060010501410200101069401030702
0081603017005501506702008040610050401304030130110010685010200900150303
0180010210517001805410707506106750102405012705001051700180519070101003
0180106650101004190301504040050205011524001805101240010340050205013011
0010653010101200601105021070403060200180402022005040550102240204001034
1001008301130153030110307030610011305011030701001010081064501040301703
0122005040306602001050150670200801101060640301100610635010460804030152

1001705012080102020090050180152164030900805103040650670200801030115040
0110121060640405470250401505007024050010625010100601803040520050020115
0436501645705040405200500201301504361406106150102008012030126301001030
7053030170291020307002030210050401627002014021650406103016501201408040
0150102301240530602004054001341003061510125015040201030709010050102001
0030120304001060506704060101304058040526301001030707029506405265070024
0515029011300506305011530514702504080020013015065002001050107003030451
0403061105950620060160030140610030113015303012002040504011013080530301
2002040165040180110585062703010405610880015060124051040011050110200100
3013051504016110575064010150405614001102150601240510400110501102001003
0130515040180110565062602010165012014024051507006001801627002050203068
0020013016140603015040400120200240510307015084008030161004001616504011
0200100301305150163061055506200703001013040565400100024051507006001801
2006030161200800301150121604041001630110061680701040085506083015101060
3015012040150304240500105450670200800104053070301200800301616012301215
3051150700600113011025050405102001001080150306020011406105350102008012
0406100103070106018010208040203040089050610220040013016020040204001000
3021410030406100110301100640550701030640080105250102006016003014051650
1201210703001627002050107003011510801650100010403050120121070300162700
2050107003011051501040500134052001410801682901805803200301405400700600
1801050506200601600301700140205011210703004040070240015010305406100504
0162008020501070030113040301301100610495010840018030120010600400501610
0830121504061005010261505010284008011502200150302064005303011030701403
0701030030201502200706061502200530301130010501130115108046705050115030
5062010140615504053030115013507001470240204003040108015047050112700205
3030110307015010200400801410010485010520012015020630613011001504003040
1080504670400306115040010200100504020704016504015010700301621070300110
2050320060050305406100504016200220400601501070030113040301301100104750
1040201830120010600656150501025303014020810104008162002901801650406104
0305801019652400306020011070030121650401402050405801019501205016104650
1046080403015210017050120801020162009005016402020050020801301030100404
0050207001162002070016136701550610002400652504015040530301301026050705
0649040065064706400912009030202164701004001306104550105040640404005020
5014020302001060040203070015813090147028002001301108016460804001306405
1103001601503011660600240013065017104030163010203011680618040202200504
0550102402040013410052001010005301504040203014053030116427014061001103
0110012107030040516001501044010301610445010402003403015210017050120801
0202009005018012009404051030701502009401610435010200211000301504040050
1205400120040113015305165150103501801042506200594001060150140550140204
0010200100504040563200600116301100501130154061002163501201406104150680

2006040406100404005013021605030150645040565300301320030150640014003040
2050110405010403017030150404815040152402010026014053008180301506400140
0154061003030110070011963061039501089015030150628400130502030640203040
0890506102200530160200402040010003021410030406100110301100640550701030
6400801038501040500134052001410801682901805803200301405400700600180103
7501030602004030150404005020501150470400140215040010183019011016301100
6405220020040150701640070651001503011620010070801036506200801205240400
5040110700301215011620022040060150107003013011001035506504064052306020
0114021501163011005220050403060200401830190501506403070400140550405040
1504030168070800400601501070030305406100504016200220400601501070030113
0403013011001034501046080408002001301108016500704001306530301130116200
2070018014006102301233015064008504006120069010015306560504050670060040
0400800200130110804020162641704702504018030600402030703700116200207001
6103340103012170070402070060011080660215660404001306530301800200110803
0201400156200700805101402030530301510015057005402022005040550102402040
0134100520010100053015040402030140530301164270140610011030110018301904
0516001464050010301610325010504064016501201406150400110121627002050107
0030120021415070910061504054082002570405010700301651501035018010315010
2009004005040301504040207040105011620090040050180501930605040152530301
3075014040206121640400501156404001040601406011080105050630413400128001
0006603200402022005040402010307070100641003011001030501010041903015040
4005020501150470400140215040018015061214270105012014020070050654865303
0142705030150400103116301100102950683080400402030703053030113011620020
7001805960210030600301108040204176865040610047025040180306004020307037
0011620020700164020200700501030402050403032001030704020220050402002070
0402013501404002370611028501040189015040203015016102200400130160200402
0100030211027501040301703012200504030660200105020306551806010260103040
6100110301100102650102700120301504020509005030150165518060108020120050
3015015406100504016200802050107003011304030130110010255061004004001308
0152001010005301504040203014053030116427014061001103011001465405160014
1701030161024501040701406100165012040550115040011012162700205010700301
1501002001000162030803011080570405010700301651501035018056270020801023
5064082004004020307030616100400400306402020070050103040205040303200103
0704020220050402002070040201350140400237061102250640307040013014053030
1504040307016402030890501610220040013016020040201000302110215010403017
0301220050403066020010502030653013080010260103040610011030110010205010
2403013080010802012005030150154061005040130403013011001019401090070406
1021700704020103070801600110501520010100053015040402030140530301164270
1406100110301100805406100103011865015030602001410030101850620020300104
0610030400110130180200905020307002014205013013200600101305002600107003

0165220050700125400125032006001021093014302301610175062002070040040203
0703010400640301320060050203070020400120040500301302050405215032006001
8014030152150307501804001040430230515010060130110050012186040030100117
0011040085400408200104105010212003002811020030130602001010700301656101
6501050608403015040210200100530301400408200501170409618066005670416158
1309014702800200130110801646080400130610155010440070403012810130550151
0806006170200800400402022001670411014501040301703012200530301202001240
0200401301610030600301530130152004012400120060060404063503016200401003
0166040300301615001050085230910200155030130103030110300100010300200703
0110307010640060140500401101540060108080020013016400161406030110030600
1070030153030140202200501101350620040080101650120140405507030800640560
8050116200606004100304070501502010700301200101000304070508042005061150
3016708030010801708030050401503030580100830121502200306020040013410030
2100504056605050107003013061001053010614001040011040610530106140013015
0620090050103051012506504061040610030540820061045403070103070515030908
0214002024051501034100306101150648310150400110121650120140617005405406
1011003016605014020405160505040610301801105043015110830140540020010006
1270306165304055010416700600400150107003011010501020080120301103070140
5402008530301501163011005303014020100720014040611403015040150103070168
0010801501555033012189012001503012189011041506100950650784004040050113 0
6402010307080660013055033011630600415408200253030140530150101304040040
6010015010700301130651100850620022040060400404005020140640207040340205
0701050100011401630110040514010602405506802007010130132008012007013012
1890110415061007501040301900301406100301704015030703400130150220016301
1002001503012189011100304004052001902140080200901700161006506704091040
5615630600410403040201030704013060501550330121890116415064051401060213
0205068020070103013200801200701301103070621381405501026100550620080120
5200600130124056136701550610002106530301301026050705064901050107003011
0045010403019003011030705303015507030501405501025070064050700180407050
1630110011008402022004706140404004363058011008150220015047061401504364
1005012001503012189015503301218901104150610035063040704004040050201402
1564040050020061550330140203040050116465061008301215022003060200400134
1003053030115014550113063010440055030150201406170053015014510700301530
3044083011630110062001550130140540084005040102003400301000504040520064
9010801401507075061002506430160015108040555033012189012010306115706061
3011608050803020501304001830190301163040706165040150107003016100150104
0301900301107350203070020630016100040510068050406415404050535040405301
0005010402003403011073502030700206911060030140601080304033013301010400
8550330150630600410130614060301216214053084008040013015507016200220400
6016150400110121627002050107003015019995062602040040050201402217007 0

3011610067008030800805040150103070402030501201408040512006001304051306
1400301100699850640307040013050203068070800302030301100200150301504018
0708001217007040540018015063080011306515022004051306130405120060014003
0110017010403151080162020014117001104008154006001400507030540140030600
4140302020015030110806050130165033015040402030210050404003060041004040
1108016306004130110099750102008012016501204055014056080501103070164530
0615070163080016301100530301506450405067044004040050201405010116301100
4055068064001015030602004054001317001104008214002030150404052109050405
3015010201030615400110122700206112700205303011030701020040080150404040
3090015040809965064301600151080405200150301218901201030611550701620022
0400601615040011012162700205010700301699550650781040513064051030708066
0013080830901610100400150408010400110140201030705069010010402050403060
2004020501040011014014041105021109945064041004006010130657016050620060
0140060101304053031131700180303154013020306993506403070400130140530301
1030701630610040050161501930605230750104030140530301216202003004005016
1008301200101000210100023016405001301650921406155040200590014030081680
3011022004020081405013010099250640307010406100304001101301309080502030
7002054011010030140610590301600110504301511083011080165040150107003030
1053010010072003015040400121093016541270303200600110400301530301550107
4020085040301009915010802006040301281013055011680200604001306162200300
1616302064360403020450704020400501071670060040411050211099050644005404
0550150626081065303015064504011030615010911030030116700600400140550153
0130800301405103070100811001020080610451100102008098950646704004020142
1402050104301530501090306004056704164360403020450704020563616401010016
9601003012102200200401301009885064030704001301405303011030705063061004
0011300880301220040110130530301501301001521502004015303016150121151030
7015043616301100530081801630708017001698750650406101305010700303011030
6150109110300301150307031501405506200400130500108504053010210066540201
2001055011405400166014051020010301405601230140550707075010550330150404
0201062132006001140205019103003014020505040080101304041105021109865062
0020700104053070305303014001101504020307002001060020307001061004003016
0123061300102006402040016601020016101601230402010307015030750141004041
1050211098550632006004001550406506400640400151080650610840015108030110
0984501081030170140040620010040060408002001301108040203066470800702304
0208007021692513011009835010200601600301504050506205030150408200400615
0302008010004004030501615060805011504030900150220013011009825010240647
0140203050191030030150114020303010016520033003011402030400507014020550
1403011405220014051415065503301100200650401405103070501809060010110080
9614054001660140530400425200330030111001700140308020062001000214051304
8098150108901503015040301402030105011405406011006980501043016003015040

150620400615010203040150620400501130152003300301570055070140202200140 2
015501403011006140540016605040140550701020066140140530104210305019103 0
030114053060660680979501040301900301504015062040080520033003015700512 2
001004001306140400103005001085040130208055033012036764005015020601404 1
110697850107040314020504040505350130401304055040207024005040301200684 4
014067004015504032006001301100977501020020130040520050020143400130640 5
301014030050706405501401015070640580306005040640510410150102504040550 1
040013040500976401010040060403012091200904053050470100130105040010610 0
011402803011009755010200900504030150402050130110097450650070210406101 0
301105020090050130110097350102001000190301504020501320060018015108020 0
220400400501203050620101408015504092518030110097250109504054001003060 0
620015050401050400100306005504020010600150130110020400200401700143604 0
013012070504014030110097150104316030150405020104030601030211301164360 8
040413016436015201013040303015030100405004020150200690405004020150100 3
060041003069705062002030040014013010301003001017040151080402030150307 0
368002001301108040201502040410030696950640309001015040011012165012014 0
240560805011620060600501070030120103061805501071640400806005040696850 6
830804030140520103061805501071640400301005005040801008301700104061050 7
630169675010210110001502014064030702405103070509010050308096650103060 2
004030150301605030640510301306020015010700301503016050308096550104030 1
900150201501163011005011301150601240513700140516704501201408096450630 1
011004056114001102150601215138015150203051510200100504040206963506200 2
070040014013010301001103061550645040167024004001306402022005040402010 3
013075011401670240019625010504064030301020020700652200700504003055040 3
200820200490108050201013080201030130750121400209619040301960401082003 0
150408200301530301406029594010820020068010003055016211007030170102006 0
202200501402014001140108040206302103040013200480070210068040208007027 0
802006800200130180101306004020307031070030165695850680304006004005108 0
404005020140240201025010804020703200404020220010301405001020060012007 6
520071620074001306151030701301608050302026020400130610300302022006561 2
200101000215303012001010001301009575010403060403013061150164002004012 0
307002653020102003001309565010403017030122005303010400140406101108406 1
020605061040013090501301009555010202003004030150405012014061801050840 1
051200215304014010100150104401010040060409120090103011022001050145105 0
501301009545064030900101304056153050040130110731013080510106030121350 4
061530150040120030070530805506083012135040953506307080101650120140240 5
102501040500530301103014052004011405011030010804055040400603017010300 1
650120640550104161002008050107003015019525062009004005040150116200900 4
005013010012001060015501401011080400260206130210050404005040150204004 0
301550140101160805070805010130202200400110180070210400110406102022004 0

0110180070210400110612022001040011061520101304030140510400140050113015
0620090050103059515068049010165012014022170070301660150400110150705068
0490105010700301107350601550708049065303014001101227002050404040309001
5040805408200610456402022005040550102402013410080405540104511502030 21
4002030115010307030750115016301630610040061950501030801100030405400601
2004507015020501615030210050405010400801019103070214002030130750114050
1163061004005019495064082004004020307030161004001656702400180202001240
5150307501214002017005694850650406104052200110030240530703054082006104
5610300302030130109080400650608110700301103070140140400214002030110606
4015010400140500947506100400400402030703052402019064020307005301026050
7040202100200804008030260301167024004001306567024001801401010040060401
0912009017005501694650620020700400402030703052402019064020307001680615
3030145702610220010017005012063061630470180404003010017001615706061301
1608050803020501309601003012501710403016301020301168061654300110003021
0104008506081105104003012130140104001030130140162200100400130694550630
1007040040203070305240201906402030700100830121301530301402008104003016
0805030116304001004001306509214061550402005900140300816803011622001004
0013064051101640201007200505085010013040150404020413061163040010040013
0615016081501043016301261101030052162020030040013014020103070402022004
0200814030400116301704003010094450630470104052200240565200600130125065
0406101305010700301615040011012162700205010700301165170240040013064057
0404530040013080164530050180170054020085303015015064530010501070030140
2014530040305301009435010704031402014530130063080510003012301538301530
3080301009425069020060040013014040050150165090030113015067024004005011
5030563200600400804030705040402045070305301001506012161001700104008405
3021005040501070030127002020307002010300504015040200813061506121130615
0202003001140530301130063016202003001501070030130610010609415010402003
4030140610030150705601242001013065706016540820067004020220030100802062
7002050180940506100419030150164051010002240515010732030700409007029304
0060011406111016830161140520065900400304081401301140540683004051030701
5040200840501000301620010023015040620080900107003020150402008164155010
7003011030706939401082002006801000202200501804170130610001220010100020
0980015040805253030120010100030305111006080616032005501802001075060040
8306118680604014046154001040506201050113015407091040701910307014020084
0103011086114010804311303010093850104030190030140610030110451013053030
1501403070200101000260150301308001030127002053030110307010200400801504
0404030900150408017005253030140201906700114530040400502040150101050050
1301401820015103070400304040030011401501010500501301401402008501020020
7003013010050105050012001002301504065010505001302130150406937501010041
9040400502050140307021050610250501010500501301401820015103070400304040

0300114015010105005013014014020085010200207003013010050105050017704030
1504065010505001501800301504031671510501405009365010240647040203055015
0191030030140016960016702400400130653030140201007200140401630201300200
8065306408401705013015040693550108020060403012810130550116802006040013
0654190840610510081640016200405001170015200405005040163020521300400402
0010100061521300400405014020030165064001073016530201180304006004070200
7301630600503016400130062007040200101000640013006200704040015031300501
1070030165693450104400540165012014061630800410053030110307012004008015
3030140510072001401640200864030702001010002158060405413061163040010050
1070030120060600410093340103070401020855014058090640510731060120200300
5108040580540010405020105016150316711030704020084061502006207003059030
1600401705013015700550692108014016301100693250620040080101650120140240
5107310605103070120040080115103070530301406015062002070010130401705016
1520065900400402008401705016405407072130050504013011540709101302003850
0200864017050157005163011006931506200400801014064052007008056307080140
5303011300630640550104405103070166023010306405642001030405612020030040
5413061304001005010202003004030150402001050020305010720307002069305064
0208101401604051012020030010301309010658053030501201406530301103013090
1013080405101202003003050120140801501012020030030170056405407072530301
7005163011008012109050401705013016500200830150401200700140405303016307
0369295064030190030183080101305501200143015210017053050620400504050640
3070400806608030401701050140204005012040103070163040701406100110301009
2850107370402404005011406400130506470640014050192750102006001406100510
2007005040402013005011402013001014040204702504080306004006010640202570
0101300105015408200301670010501000301202200692650630407010140703080110
0022022001406163040701404040013200430203069255063080110001530516403090
0210200100301203054020220050201040305012030700924501020080120165012040
5501405608050110307016453006110504301511083014054002001000615060805011
0307015045300163011001700540204061011003040205062007005010610400110140
2010307050690100104020504030602004020400110403016050130165033012003007
0401109235062602010165012014021800702501040301900301800702103065020307
0020692240103070401020820220050153030113001401301151080501043016004020
1650040200150301301100150304003031107003011503031150100030268007022150
8007027040040400601150220060501301504040561103061301100660501301504040
4002005002040060141005033012003007040110170104034052003008104061069215
0630407010165012014024051030665640522004507040130603012001440530920506
2002070010406100304001101301150309080410014010100400604020220091200901
7005691950650406101305010700301103070603200301530301307031020307002014
0603011080470901014050120132008110010800520049030703105308001050142001
0504064013060130305200490820030010510451050153030142001050408091850620

020401016501201402410430021700706530301450702001100090164020031501070030121090106054003016020030703105001084030701530301530301306020010400611403050040104006501040085040650503016301100510140540013170016917506200703001014064056080501213015062002040101406151080162002040103015104020034020021201510200100302010801503070320307002069165063040701016501201401501020080120303050107203070020155040320016002601030400140309003011080530500405040206015030110805210300401012006505301503070365150101081801400104050120504061915506202003004030402050140564040070915016402063041310304051011030611030150686103050109110300301501610060803055016510307053030140601200207001404016302014001306914506802004001001016501201401250673106040500130150626020105010700301501550912640500130120051900162007006913501044007040301240307016520220050140307020010100024051016512506308001030120010500205016510301404002002009800114013014020103070402008140402030309080410065103070530301406012002070014040163020140013014020301406912501050406405400110124040050205015

0190213012020041065620019021301520200440013089630102061030030201030706
5656427018010300302010030160065130153011304020220053030140203070089540
1030701030030202656103003020100306006528190530502040040306430653050620
1010501800200130164001614060301701042894506809010140701030170400655018
2604030702001010002400150265010502530161002006006405100306006503301120
2003005303016307036893506504061040610030400110130402030700108050157050
1062004050011700152004050010301162009005015213004004020010100061524003
0040501402003016506400107301621507015040400150365105014501650100157030
9504030600503015040612201200400401285504032006005012008006005504015032
0060018010300302040012505215032006001801401406030150403075011070030165
6892506510080104061003040011013011503090804100704640060406200100400604
0805481660805050404020130050110700301656891506403070104061003040011013
0115030908041002008230162002301400140309001080152164400540030406350301
4020303070310700301656890401030703017107703012001041004002030700150126
0820040100301660403003016150206030103030130703681290130110030180889506
2080640010501805303014020307001083015040400104030132006004064001040301
5040108301320060010106503016283011003018053030150188850640707400404005
0201404020507030800640205010270910040041003012020030040201080405501404
0040707501070030140201708030040207040102005014064020200659001200640201
5030660014040400202004006520040306140201501003060014020104120080150640
4001034100306887506200220400604005400110150704040050206100830120010100
0530301103070506306100400404005020140250653012170070506734004061030140
2060805011632006001405104101696012520101304030164006403014001200401000
1080506403019003017001102004006306530301307501140305004030750160301100
5040610300510301861040306103011086130110061127002053030110307010200400
8015040404030900150406886506900801810405400130901030704056525065040610
5200600130125065040610501070030161530685040610200100301401200700504003
0651041050102107003011004904020200124051503075012140020170056885506270
3010405800660010804052007004050053030130100402061211306404005011640307
0400403014040400403070612001050020506806004006155064240060109120010055
0630703400601503030104561200650106064052131070030121400203013075015040
3010010300504020030021030705303013075011401630110070015200410010085303
0116200410014068845010403017030301020020700130165501120031510307040203
0160113030100544001001405145280530301104550107003012010306188350102008
0120215216601030140610015215030206410080130651522008020105018056250301
6402083016214002030140515010400150107003012010306188250630407010165012
0140405507092830162020030016306541270504013001050405210451053030110452
0307008814010100400604091200901030140515010456405150102400316405501660
0164054001102007006405101215040688050104030170301103070150308008013020
6196306605061067060103016301070140601687950108301903015040302060110301

6106010706101081061102002076878501050608403011073502030700206506200156
1060640680606106261016501401030606466145400102007005040630210050401501
0451865061501045130202610070106100186015301502566877401030704010208202
2005011300505040400132004708020050540610010307040105120021151501040011
5040038203040068765064400540405650401301405302010306140309002405501401
0116602301040306165040150107003018755064030704004040050205015040130121
0081501010010200803011018015019306040201030705230750104030140530301240
4002020030014020501506801600400130640400202003001140801600180102068745
0620020700400400130801140307010300302010220070606110103001022001300105
0113015250620200300400140801600113065014541006530301108010506318400130
1100540610053186873501020200300403015040150114061801050880020013016400
1614060301200980107003030105364005361050187250620200300400140401020021
0501406100110301100400308011403080200220117005102200170053011005100071
2604030030110120014030808715010301800301406100301504050506201301022001
0504510403050103030110030801140308010220017005301100110007122004010030
1101200140308087050103080130128113030110030801140308010220017005301100
1220620101200301030301510307050314030808695010501006403015040506201030
6800200130164001614060301400620304040105120021102005020307002068685010
2403013080010802040610062012001105015530114015090170060040040012007151
0213040105120021301100700168672001026003014010208301656541530030162101
0003014030170200690301108060080501040610203040301530610083015306100506
2010805020306100104061061008301280020013016400161406030110030600107003
0165686650620030084005103011070030165656100400165130903011640101001501
6865501040301703012200304030605030150200401610453016553030110455013010
0150400101104530110301550670410218901530501200108800200130110805010911
0300301540065400601107003012053030115014570014702150211007011030704200
5061502008001013061507080501013014053030150645040670450130100864506200
8020101650120140240103012170070640104085040212003004053016260201402163
0602150107003012010306115504070060061013030470302030470400501670108030
0130610306530301506450401530601030400260201402608050306024005015220020
7006110504301511083014054002001000616530612703040550104167006004001501
0700301200700686350610040010405307030102002070050203061030050404052160
8504050610040010501070030110307014068625010403019003014061003017040102
0020700301470247010040013080501910300301205010605010140165200101000500
1048108016800660010104008405507080020070180150400110110805068006600105
0107003014001012001700168615064030704008066062001004006040125030203086
0301020624020103070400603030100100830165620406100522700206859506510080
1040530703040011013018020090508010202009005018007026012402080070210010
7001061701030040206023010614020303200140084005040614020100680504012170
0704020103070500702105011030702004110030165301008585062020030040040400

5014050022002030205040615504040201035010530301301008575010200201300301
5040505062050305700550401501350150103051080600617020080040055067044002
0082301620023014001403090050404020103501050403010085650102601830170200
6016564020830153013011008301405130640530301103011642004050085550692008
0101304056150306020054008064004006403014020481131700110400859008084020
1030703060200106541270100680200511003016568545063040704004040050201402
4020102501040500402070320040510301405001040604030311080010010305108040
2050070210405002001550301240400820031404030701063010303012402018064001
0107003016568535010240214002010801301602110130629200130680020013014001
4030900108052813061540307010130151002006504091006040014062008230162002
3011080140403070106651301154030701013021010003018400180405450706852501
0403019003012403070153030164020501026105010220040130110800100305250630
3704006040014010450705016303010085150103090180301200106006561008301901
0010530301301402083015015250630370400604001401045070140524040027002061
0220050405501021030701050130100850501044005403015040150114061700140030
3080041004020165170240011303010053030150645040506704400501070030142701
5014001055010501301008495010402003403013010260501024006040030640011013
0130908050203070020684840108200200680100055018083090165470250402140040
5005301532166040205040304070504055015408200301560805010307040202200240
0204020103070401306030100801504001101250650406105010700301201317001684
7501020020130030124030701253030160103011505010250404051030705303015040
1306511630610010308007022405800702150400802030700206846501040301900301
5040506204008040542009400801030050404051030702021608504014061030050404
0521608504020103070140553650641020010103007030165141000301240522005067
0410501070030142009400130684550610040010405307030701080300130610306550
6450404053060103040522001030116200300810501506801600105010700301522007
0050168445062002080400400130801200109023016104070130110640060103053010
0103011086101401301702400150120304010501402030306100113062101000301403
0701130653030150101760010450704020303061001130301008435061006080101650
1201402217007030140560401015040011012162700205010700301684250650781040
5130640510307080660013080830901650401504080501020070050406501020030024
0130150103060200403013060200501406841506403019003014061003011301203051
0305520053615400100025303012170070402014001501402040010120013010084050
6804901040540500400110130180200905080102020090050152402010400110530301
2001010005301504040202630100103070404006006402020019021640207040605303
0170060015014040010120013010083950104030170301220053030440830161640309
0050107003014061003012002147091008083850660302404051700180540010002405
1507006001164006114021682008017001104008103003020216214051030701508400
8052162002070014016605014030808375063040701016501201405019103003014053
0501076405263010040060100502030616702008004001506012405137001130630808

3650670200800400104053070301200800301616012301240515070060018020302100
5040404011030115030602001410030683550620200300400140506605040061300501
5103015067044001408030020108050670440051101302834501010041904040050205
0150670440053030120010100015701603014020400400161530301217007040201400
1501402040010120013010083340101004006040912009010307053070310130010504
0653030800105303011300105040400140309003011080402026409015040011012162
7002050107003016832506200300810405220010301405001030050402140020301108
0150920080140402030150040140401130151081503220010910200101913068002001
3011080521450401406831506403070101304052005002015020306510130750105011
0307020041100530301501301005220050405101510307030750130630163011006830
5067032001051030140500530301405500702101040064030165067040601050107003
0121034006010140501829501030513301504050506204001308010453011030704057
0403305303011300630651012405104001400801406030110801403060618002001301
1080110080501010004002400501400709400601501804058001200701201030702002
2050120501682850103060200403011250504020134100306530301400140302030304
2401306150200905040514001104008167006161627002014010307016200290802030
2100504030602004002700204100306827506483105303014001101250104030190030
1502030620506270020101304055018050630610010107003012050781030550140307
0504100826506301007040013080150610040010501070030302001060052006001301
2001430306653062703013011105043015110830114068255062007101401601301405
2006590010307040520017615063040810405615108015092008014010307015040020
0608110163011005400100025701603014054001317001104008530301110030216270
0205010700301200606004100824506200802040040400502014022170070301161006
7008030110015022006103021630110010083012170056010301301100405220010307
0168010067001102004006306823501050067024025085014061105043011504001108
1301105501163011006822506270012030405501655070165501403016417030164200
6306302100504050680600101650120140405301423028215010504064030150405062
0506150220040011012270020501306420050150400103011016301100802001503011
0307016801006700110200400630682050620070300101406405608050113015062030
5105016550705061501065507050655010405681950103061301200109160113011700
5501162008020501070030130610010205063041310206131700110400815216504061
0130510130201620010501612001006405501700110806565100801050155020140526
3010010307015030703620103017040400601050404055040681850620040080101650
1201404055070308006405608050110307016270020801020200900501817501020200
3004015020140150220053030161630110050113014054005040080502040040304050
0816506407074004040050205010700301402061202003005010116202003001501070
0303030610050405001701040340520030085040610681550640301900301830801013
0550154001101227002061127002053030110307010200400801504040403090015040
6814506504061013040580405608050116200606005010700301405150215068020070
1014020550680200701021400203014051501040015010700301813506202003004001

4040102002105050164816530165140501301004530011303010010200600155301530
3017040501506453004003040205010110003025040652402020070050130501200100
3011700510301108616402050102610501024105300530301301005415300200220110
3001013010081220010260030140102083016565412701006802005110030165681120
0104100103003020103070658020010600220606040105016651301530803001201308
0200800253030120606040105016810501024030176803012030700654082004100807
0010406105507080200901050408094010900704061021700701022004001090705018
0160011050130100808501020200300403015040505062040013064030601504030615
0620150140020040110501301004070910130640709106568002001301640016140603
0120091801103067006004001530301200101000130100807401030703017010406030
1656200155030163010303011080502060140530680650650406101304058040560805
0116200606005010700301510802102001305401101003014061010301402050704031
0305408200301560805010307024002053030301008002001301640016140603011080
1405040303010080550102700204030152100170501208010201620090050140500800
2001301108016200106030100804506107540060105216501201404055040162006006
0501070030121001880203021005040306020021075400601410030680350660230101
4040510307015060230306130320051503070330120304051503070363068025062009
0050101304050020040130110800100301203040150307501630620304051030703075
0113063016301100680150102402008601301170055011620080205010700301301100
3040510410125660403080601920010010801214002020103070150307506306800501
0200600115020010040547025040150130050164052650700240515020305180405400
8400504010200340020015501301150307036120012004404051030701406030115030
6020016402030502040504030140800200130110804051502040502001005040405302
1005040150203051402016200104030179950610754006010521650120140125014051
0400110806608040513140301008301216270020410080798501080020070401550701
6501201301405220040011015040510150404051040014001406797506260204001404
0307010640202005364020200604030701080020013011080640016140603011080530
3016567965062004004040040400501405005450701040604030316130311080010040
5005010950404020100306001070030165795506304701040522002162008020501070
0301405002006503016400140309003013070368002001301640016140603011003060
0107003015303044083017944010820030150408200301530301406027932001041001
0300302010307065650510801406800200130164001614060301203040530307924010
9007030176803012030700550701680020064055070530301108002001421151080501
0430160020015501301154008400504010200340040015034053040510049050101004
1903017080501040610170055303013011007914010208301710770301400501205018
0405302008010004005016204127040550180405270070400501790410530010300302
0103070400501640510307021010020030140050140050201050400108064001403080
4051080400404140141053004051030704005020640202200610220053030116427015
0152105040020040114013014053040030100140789261010003014013070400501205
0120608050108014040307011306106080501080140403070400540040307041008054

0030100400502050110082103060103014030610015011030506201014020501826030
1100530301506450405010530110401610506700600400160150303040030100400501
1401020040502110601070110530301301100700167885010403017030150401481527
0070113012170070527007011050180402050404702200802010504080402010307015
3075040105015303013011007875010100712003012001060040050161501007200162
0504051016150200600161503061301410701503050620400140603015040541014015
0103070307501150220040530301401020040502110601070301100786501045130030
1504015103070506205061504001004904100501403070506150263010050104094006
1550403020150501410200501630110078550105040640404005020501530301161004
0013011001406030150405410140150103070307501050120220070109400601030540
1020040502110601070110506102001683013011007001784506403060401505012453
0016150401163011001030660200261021650401501501010200168301103014001086
1700167835010240200860130117005501405504016200802050107003013011008040
0150102301240540010370012050703010101200601105024008080207001610507001
2104006403013200600400700161050700129020021301654020130110200240061050
7001212001095062040080151080600805040080105070012200109301510105205010
9301504010030600400700163010350130165120064003016540208301621400203012
0400403070700161305206454030110806015030140302040060410030186200220400
4101700120400430161030706201030701040040705020020700140102004050211060
1070110530301301100700178226101000301401307040050120501150304030701301
6301100404002311700140306100108030602003015303017040310406107815010100
6018030140610030110451013053030161670406016530301161004001640550140101
4702501401014200400501168016001061155361030705415300301216400110501105
0412030700780501040301900301504030170011501150104400701140614054004153
0050401008115040041530030530301250140601001080501103061301405103070100
8400601501070030150401405401100405014061001050120060018014050011100840
0601140550110307020050070501807795010405001301504030170011501530301541
5300404002050130610220010017005012063061504050052102004003005013040400
2400200150153030125014060100108051309030147025040140550660284004006403
0152109040402040021901808002001301108040400220080040400501501402020010
1000504050120060016140205040304701670050150500151090630150108400640301
4020481200800817001402050102541530016504015010700301151011107785063040
7040040400502014024020102501080170104034020703200405303011030140400104
4005117001308005040402020080010130402060805014020103070165040150107003
0115101110777506440051013061101030050640307010130405612150120630611501
2151030701504361401502608163011003066020030110301653030130750114010301
1630170400405303010100170016776506301007010130405200500201627002030153
0301103070506200400801016200802050107003015020306401813065301090613065
2101601306520010825040530301307031407755010200801201521682901405004020
3021005040406100153016041007744010308200680100053030161550705303011807

0402030424005012001003013075010501081550701630160400501640206604004020
3042400501110300150701630160400130165040150107003011510111077350683080
4004020307030212301301103061110530301161004001805001026003015200500202
0237016306210930165001026003011064006010130301007725064040020400140650
6424001404030701053030161000130230113013066020030110307014077140108200
2006801000530301501621100703014104300530301501164030701770401030701030
0302025303015016800200130110801406400161406030110801404030701053030150
1164030704003020307004101301003016104530164012008301200530030166015030
3014011010040120083014001023015270203015303013070376950620030084005103
0110700301530301161004001614020084040040414020023014109040201030704020
0865200110603030640203017014004054017096200823014109040203030817684011
0040050167007107705303016550405303014010040050108041705040680306014070
5303011807052004013012610067001030140110902030700304706150102016040401
7095200180206152702030110003012110454020504030470167005240208104070503
0150403040010014030500401738014407040040402050405304001005040640200840
4005016410903011630400100400130165040150107003011510111076740103012170
0705308020307004702104400701504080210100030125801600105040530301403070
1030402081402006402010410153015040041090301504010300253030140205063021
0301650401501070030115101110766501050608403012810530301616506081616100
4001405001650401616100400140500400183019030116304070616504016161004001
1401700116407091401080815034001830190301163040706165040150107003011030
7060103076550102403011000130230115030660200103070140501164030701804040
0103064005018016200700816306602003011670109165303011670109167645065400
5040404005013058051309030150706530301200207005070402049010620060104030
1620040600301108018001000230165614703014020501027010061050150191030030
1410200101405017635068308040040203070305625040031805019103003013040705
0406032004013071301621905013016200601040301620040600301140501165040150
1070030115101110762506200203004004020307030540011014020305303015010210
2030700204020501401011690080816404008030817001402050140101520018020203
0700401101550013050040110908043104030504080521002002001020084006140540
0660206140201030515064070940014096061504050102016040520030070401709154
0020018020805014010130140400410070140240207006001610502030640205014010
1108061000303012530301402070060016101307615065040640524040050110700301
5303011610040016121091301308530301402010072001404016302067605010440070
4030128101305303015011644007040013064020305303013081140400121091640200
8400130165040150107003011510111075940108330121890120103061150400110121
6270020616200802050107003016758501050608403011732030700615108050104301
6002001550130115400840050401020034004001503163011001402530301405215001
8075750108301903014061003017040150220015030600410501704095061008301504
0150131406530301250406501301503014067565010451300301704015024002018015

0401150220050630610010100830150401680200701404070404301504080010804004
0550107011020040030660200301103013075011401670406017001675550620022040
0601013040550161501252006501060106010040550405012203070010200190501501
1630110050107003011650401501070030305464040522001001504340030616202003
0015010700301646510301165040150107003030561470601503014300150434003075
4506100601804055040120010500205020306110306140567006004001140510301307
5011406102503016530301250650406101650120630675350643016004052170070301
1080640510307053030196006050140560805014053040040410014060102301620080
2050107003015063064001040550401200105002010200400752506307080101650120
1406010230563070802002050405070506515040010130165012075150644007010165
0120616907014022030700401020040502110601070646614501603010307030101012
0060110502504016200802050107003015070307503010260301166050701630800612
0010500201630800163021005040163080041004061001651167024004001306100830
1200101000402050104108016301000400130214002030130511103010074940103070
3017010406030165530301617080501306120080040203020304010130140530301506
4504050642704001301007485062080610105012009005014050040011013014053050
1025080102020090050140170930150130201101501205100104905401630602003015
3021005040400306004100306602001301401020040502181060403011407474010820
0200680100053030165506200801000400601065303011030150626400101308017464
0103012170070405504016200802050107003015060401030506306100101407016540
0501040305016481653011301530150401406550013050050030150053030150116301
1005010700301200802041003074520019050150405010403019003030140620015030
1516140655033015103070530301402008410080530301220200300105040550140202
2006102200530301164270130101012006011050211081060403013011006401020040
5021810604030165530301501163011005010700301200802041003074450630407010
1402200109025303016405504020010500201640906164070405004051030705303012
1400405001640906164070805504008050620400130116260867435063040010010110
0102008061627002011001020080405608050110654001301402306602004051314030
2013060200405103011503060200163010101200601105021001500104015070060014
1003074250650781040513064051030708066001308018301903040706200600130140
6103016530301250401504010200190503016506102190301616415501070030161650
4015010700301501741501020080120301406100301103070601400130801200802061
5011010009202200504020103013075011404055040120010500205041071030640202
2005040402010301307501140630103501301651200640030116401010040010400810
3001030704040060302140020301305111030100740501020080120301406100301104
5101305303015016015030150402040907010530301654003016020040010003021408
0307080400403050162022005040201030130750114010003023066020030115101110
7395063040701014016040550402001050020654904001004054014055040405303200
1400840050406405100680504016302013040522005040405103013075011406301035
0130165120064003011640110014055016306738401070503014001503405150306004

1306405400110106040550701502008020301610040016165040121400203013051501
6306737501046080403012810130530301614160808002001301108050670601065303
0115180912200830301200150164100611403020540110100301406101030118001000
2301656147030140550102150101003016120080206150110100092022005040201030
1307501140405504012001050020504107103061300108010201008050105014009660
2405141030216301100140216507030640510410140030100053063010004053030141
0465103014003011006736506705090101650120140601023040086030140530201640
5001301405306100507020012813016506105012200301405155010130630735506304
0701016501201406010230400860301405302016501647030164050013011080506702
0016010405504012001050020102004006734506404002010165012014024030701530
3016521632006004100405620080203012163060044100615040116301100402061317
0016733301026030116605070308001615012040200300201030614006100019301427
0620010715060030165420010030140550403070365103070280010006530301550703
0504053030145070526500402030700504020030024020102501305301007325061006
0180402020050020150163021005040307501140615010301307501140653030121504
0150113011504050640100504003052140020301305111030100731506301007010130
4061004055012203070012703061675156700600400151309030110301404001041501
7001673050105040640404005020501530301161004001611030612001802030164020
3021005040214002030116400615010700301504012703061675402050104167006004
0015010700301167006004004001301650401501070030115101110729506230110003
0140553030127850180165040150107003016530660200653030130640010504067285
0670201200405651207301506400610651309030150640101001050107003011650401
5010700301653066020065303014020103061405017274010307070601653030161300
1050405104006105303013080080203070040101305406305068016001013065303013
0102601080506451310501020080120301103070577015010504064030110307053070
0155062810640528104061002530301104001108066080550104507040205040440020
0105040165040150107003011510111072650102006016001682901804053014070140
0928402070403040550140550140101453530301216406010015010700301130651165
0401501070030130610010672550104041504056080501108016200601140103070168
2901080545070504020040161840080301210400110501530301106070805200101415
0210904005011030060050506306100104051080506702001601080020040405263010
0108050107003011020040080724501040301900301406100301104510130530301501
4055040550180402050404053064001050406800702110306140580070211030611020
0190503016465103011670060040040013016504015010700301151011107235065010
0610406100301402085303015040506081504065061000210510305133014020880172
2506100601803060150301504012001050020501640526507008007022405210901050
1530301410200101405014030701801630640050180201030153030130750114080070
2507020650400801050140520070081640516517024004001306530301307501140240
5501024020815016721506803040060040051080404005020140240201025010801701
0403402070320040530301103014001200106003011610024006018040201400114010

8040206302103050203065481654014020307033053030113006306131550406570200
3004020504015030703302030100830150402013140704051651702400400130653030
1307501140240550102402081805103070150401054062140020301504051041050102
1403011004904010083012214002030120103011503075016720506100601803014052
0103061805303013075011402402081040305040651080530301307501140230103501
3013051402081030671950101004004030305900706406104565120064003015040510
4105010214030110049040620065061045510803010350130151501040016512006400
3015040510410501021403011004904040102004050211060107024052001500110307
0150108010067185064030190030140520103061805303013075011402402081040305
0406530520018020658052100490400504080901901008620033016506030125060301
6507001301250700130168050130128050130165010703012501070301660805030126
0805030150115108040510307015024002067175062008012030140520103061805303
0130750114024020810403050406130103010015040500104001101216200400300400
1306506300600166015030116300600400130801453005103070165012065303012140
0205040169008084006011402200128130165061050122003016164155010700303016
4030601501070030150610250301152402081020065061045151080512006400301150
3075011501716501050406403012201030611406203070047025040506306400104050
0530301402081510805120064003014054507062050640208108010206715501096010
0403012810530301501960100301240550102402081804004020850161101030020620
0800105030804055070800200704005016405507080020070161405501024020818020
6135018040086030305063012012700203030506701406071440109007021700705200
6001301108040530610760011050430110804053040526301002005910501530301420
0104030501070030120103061110103005303015040530203040400503080540050400
8053030142001050406162007008180564006400403050165670060080170054040010
4006150150630610010570800164047025040403020301506802008102064001104030
5010200600140610030506701406027002030305067014060164155010700301504064
0526301005040640040306405516801215040116301100501070030150402008020301
1080506702001601050107003012050781013030660200301151011107132001041001
0300302010307053030161300105040302008010001061300105040270070108002001
3016400161406030120304053053030150140307040040301712401082002006801000
5303015015103070264001053030150180830901654030900470250402140050408071
1401020871077053030165303015040130120501260201402173140510410116709100
1805100200160301610020016030167104010100402170070405306155040501032001
6002405140620015030150401632006001050150641020010709401030121700704053
0640550403021004001405401101003014061021700705040521644008010305704053
0500406170104038002001301108014040530501630162008020501070030150170850
6830804004020307030530102601080164513653010606301510301161000400216530
3011610040011650401501070030115101110707401082002006801000530301501164
0307018040510307016200410040050130210050401621400501070030113017064010
9007021700705200600130110804053061105043011080107600405302030700800200

1301504016805010618013060050404053032001640510410170910040061162309010
6116304001001050114160808002001301108050670601065306602006530301506220
0181050107003011731405017055068020060403080020013011080203070047024055
0401200105002050140500400150102301215030602004054001341003061701040360
1503011108114050120801511081504061701040360150301304001001405012080800
2001301108041608061608050200101000216080503040010050405501301010120060
1105021030701502400202030700303150407045010404150301504082901801060015
6601020016180212001000301170053050040506201501400737011400301061103011
0051060015660102001610801020510200103080020013011080500821012120010005
3030150070280703501020060160030150408290180530400100805106001304001005
6080505304007069807025010403019003011732030700620015030121890150405062
0400802040500161040500126240050141020011050170150104030170301220053030
1801600110501203040010013020103011041096012215011401050304001004003020
4101030140096025010307005010100400403015040530301302100400101405013011
0020503040010013030110020060013015040302100400104030614054815040302100
4008015012200100122001007001100830124041105021125040510307030400166995
0101006018030140610030110307060140013080800200130110805065104001055060
5010702200140510307054020084015501803011006985010100601803014061003015
0102615050102100200801801060016106080501301203040113010501220030110069
7506470110015051515011304001100802022006400501257001801510801640141401
4211530600450503015011060640110163011006965010504064040400502050116302
0640080530301103070650623011000402050180564040030600417001802123014051
0307016306004114051030705303014070501506801600105010700301504050130320
0301100695506306001415018015504016320060010501801550401632006001010400
8153060045050301501650102001231406100151080501106064011016301100694501
0200601600162301005040080402020012411030701644002004001306402030530301
2400201040030156041004030180020013011630600414061001106935010403017030
1504014814006104030140402014001612063040402030703611025014020108030703
7001402010307053030154070501620020700140610011054061003010606403011007
0016692200104100103003020103070530301620010700506200103002402013410080
2001070050130620010300250401501314016306100400501306020030150405200400
8010307040203050102101503066020040201341002140020301305111069120010904
0301510301614055010214068002001301640016140603012030405303061300105040
2700701061300105040302008010001010030600504040200300240400501302402026
5070024020270070104030803010056128165303011502150850102001905030164651
0301400301100669020010410010300302010307053030161300101401003060010140
5501021406800200130164001614060301203040530306170104038002001301108050
4065401640102004050218106040301203051050141200150111010300530301504020
3040105040803010040102004050218106040301655303015011630110050107003012
0080204100306894010100400604091200901030140510451065507001220065030110

3014001403090030150404053200600106401306030130260550168002007024001504
0530301521045106885010240214002062006505303015040402013410020010500205
0706807010621400203015040506806004004040050201404012001050020402030501
0210150306602004020134100214002030130511106875067050901016501201402530
3014051025010806606540110100301406101030118001000230165614703014055010
2150102001000180521620020700140401900816605080405100150010401507006001
1020019050150116301100501070030150406686501050608403012810530301501880
9016405507080701804055040130103010013014055040550101600103070703094003
0174001306521620020700140401900816605065708001640507040302030150680200
8105106011004052630100150307036405150703040510015001040405800100501402
8068530102603011660308004100804020504020307004702200802050408020015501
3011540084005040102003400400150340205030600413064020400110106040205070
5020080201301506081800200100530301404008002001001640564040020077061030
6020024040050401651207301404001040016513090301404004010015010304020704
0105015303013011006121010050200300701050500140550401505007026301010120
0601105021001500104053030170060014100306684506504064030130206400103080
5303011030706530301161004001640205070405104101802080405104101402010301
1696021050140610040570014020103070530301400407050162002070011650401501
0700301151011106834010833012189012010306115040011012162700206162008020
5010700301668240109007020031652008010004040530400183019030116304070616
5040150107003015303014706681506304070400140220010260053030150153030116
1004001610610040030302200100165163047011630470400130110307040610050150
3004020504020031013069601003012145300530305010401610016506201650401501
0700301151011106802006490301400170024010307053030150153030116100400161
5070916150704060404003010070015240201005001610700301510015001040640201
0307053030154070501620020700166795062002030040040203070304020103070540
0407050404001030640202005910304102001050203063200850404020103070307031
0305303014102001014055040402010410164020563621686040180121091410709016
4040104008014016434004030801605030140400604013061910110003015040402050
4048113612008060103070611080020040404005020501616200591801250340400502
0501650102702030110301402030320016402060620021686040161008012004030110
3014020104101640205636163060100018051309030110301404004010017001165040
1501070030115101110678501020060160030150405200600130110806565304070928
4100805014010130122008020105040650146001107006004004013065010880160402
0010100050105090840505200631505640400104001170014020302100504021400203
0116400615010700301504040015090840301640015040640301504040015090840301
6405303084020401709640203030821400203011640061501070030140170964001210
9301402030308140610301677216083017010200605303015015303011610040016510
3070530301406011620020700164020103070502060401140401630208053030140204
0307014040505506403070400501023020408200163301504040400403070140640012

1093014020303081301004053030811700140205063016010676401082002006801000
5303015018040500130805013400402001010005904060040108020098001504080150
1044013060130140203040010800200610400407050402010307040040404001640205
0104402030400304020140610301506300600164056300600400130804020501045040
1620080205010700301601010406103011006080402030700401307130121640601004
0060400501629050301103070827001406404001020700140130170260301302011406
5810950301651042004004030165700610064030165100506005040301652530301200
1010003030511406200107506003014083064043016540010403014020103070400402
0086752110070301410430053030150153030116100400165016470301640500130110
3070165061704001306106100400301620023011030701650617040061644007040050
1401200830143604030150704020649050140610050150300402050402003101306164
1990180404003030817001615016800200640522005040130800805061000400210401
2008301400102301501040113064101301003011306104530113064012008301200530
0301130653030120010170300163084001301650401501070030115101110674410200
1014040208105303015014020084040050164109030110308402001010004020103070
1030400101401301401705013015401052402030400308146100703012168061165040
1501070030115101110673401082003015040820030153030140602672401030701030
0302025303016163080040050140203053030150102105010105005013019008305004
0200207003030801605061301320056600116501205016202004001404050150030500
3011405308050104005050011400501205018043061530502010403050115500200106
5620200400140809050153080400600153064306530601030203056200401501530130
2030110804020104008010530301301002050640080400601067114010100400604019
1200905103014051045106308008065504054082001080405306004106080521640904
0070165303012165040150107003011401806701501024012006504020103011503075
0164020220050405015200240201341006015030115101110669120010905013061103
0653030150645040405305064310130614010301121700704052700701080162002204
0060161680205040060150107003011401653080080504040541071064052006314051
0806108040018301903011630407061650401501070030114018066817010403510301
4052003008106080200220400601065400412705070802050400601050406506220010
0403015201013040301130653030142705062010501810604030180205040060105030
6671301020653030121080206800200130110801406400161406030110801405304306
5305062010501550182604816530153030114050140203012001060016540050155001
3050016306100400130653060200653030121650401805504086200640102004010301
1511003015400403020653030130660200401020040502110601070810604030114050
1100830113015303011030701630610040013064020501041080163010004001302140
0203013051110666140102081401030705303015012068002001301640016140603011
0801405303050180162008020400501640203012001060016504018040202200504010
0830123066020030140201341006015030115101110665120010601053030110307020
3070050120614211510805010430160040505310010200913016641100102009405104
5103013064053020080100010305303015020104030164030900616200802050107003

0150166314107021301308001630800410053030130102605070164906162008020501
0700301501662141053005303012108020650645300105201013040301654030702530
7501201030130750114024530010530301502030661140102081710770530301501206
3060200301470253853030110307060150303050620101301030501020070050406501
0200300240130602006601401030204001060640530301403020620103070405909010
0504030130602006302100504020103070405150909010041001306020066591200627
4661415010400165014010306065062001566050610626101610601070691260130162
6100701061001860163010701406016401051200211030115010861654702504050101
0250301686501030115010861140202010301150108611501658140109007012003140
5104006506020103061200600130140610301653030125065040640301651207301506
4006403016513090301501040101004030162030210050403075011406201030130750
1140250650406105065040640301640550404030703011080506600601200301502030
6571401030112170070405504050102008012030301504400701630912301260150301
3016401405302016550701655041006122003014057006001665612001050020530301
3010260507040549026405304003081400121094051030701504020081641550107003
0150404030900280655141053004051030705062010540110100301406106540064030
2100525050406103013012140020301305150405016654140102081710770530301501
2065103015303015708020030265315010100105630400100140650900301701240011
3014030705040524053014055040203001080305108016803040060015010700301501
6405305230050203065623090140656304001001406530301306602004010200405021
1060107081060403011503040010015014053061006652140109007015014005240102
0040103070405306100640520080202665113010301001301506504061013080405200
8020215103070530301702930280301000150263010040530610061008200101000211
0250130140530400100653030140011012405200802064051001500104040580010050
1402806501900103010001100150010404055040150700600164002603011080164704
0013040530150301006143602123011630600414053015030100640510015001040220
0693014051006801507080200664915010240150193060106064015010400162030700
5070150680708040015010230140540013140470250403037030116700600400140500
4054030900251007019030140540070060018052005353030115020011630110080203
0700504020022011060640163016041008014060301504012140020405103070307504
0050121400203013051203016010648140108200120068010005303015012064052006
3140510400610806602010306140550404815010216100200801040306530602006530
3012165040150107003016647150105401217007050102008012030301504400701611
0085062008012030140520103061646130102602030700501021670060040010501506
4102001068007022200802050680070225040650506306100106530602006530301501
0216100200801050150641020010653060200653030125062008020105010700301501
6451200104100168070501205303015018066050701680704006156806004006112001
0600164240050164414010307017010406053030150120640309005040130130610030
1504066030122005330153030128101306431401030701200201300530301501206404
0050401640400200203005014020217007025303013070801014064214010900701200

3150105040640301530301400610806606501050406403017040201030618053030405
5010416903060016530301216409040070161683090161621400501070030113016411
2001090504053043400503062001503015040308060130120200430110805010100801
5040301501640150102401501930604020103070530301630703400501506410200400
1501050406403015064504011030615010200801203011670060040040013016504015
0107003011510111063913010260530434005030805303013030800105040613065103
0113061306510301130203070050102501027002700406381301030100130153030150
6200207001013066015030150612001010301602016401100513090301103011640110
0170016405704160065653030150670416001050101008015040301501637130102605
0105040640301103070501020080120303053030130703105030654011010030140610
4020501024020810530301805010504064030150404020705040506402010307070068
4006050403011630110021090505010200801203030501205016402070405020504030
1163011005303015040840080402030501205018040202506902200400105010700301
6361701040340505310805010200801203016501010080150403017040135303015014
0530500401700140205015200101000500104810801680066001010400840570401647
0100400130801521754006010615220080201053030140011014040070406017001501
2140020301108040201030703075041006635170104035303057703015018057703014
0545070506100040021015010504064030150645040110306150102008012030150670
0600400105010700301634140103011217007040530501250101008015040301200300
2633130102604051045103013064053020080100010305303015020104030120080201
6414714050016200802040500165040140500162008020405001650401501070030150
1632141070213013080030800410080200600130140610301653060200652400206540
0201013040653030122008020105040630210050403075011070030121400203016530
6602001030703075010700301214002030165306602006530301216504011650401501
0700301151011106311200102600506304070400140250120530301501801680020070
4006116630400501616304704005011065301167024004001308014052103061530301
8012001010080611105010005020105015010220010013016501043016301614020608
0501103070630653030145300960100301250104016100165062016504015010700301
1510111063012001090217010406053030150120652006001301611050430121650053
0301450708011050430121650041020010501205040629120010410020307001030705
3030150120650102006001240011066015030115101402025700101300105016281301
0206530301210802068002001301108014064001614060301108014053030662714104
0811050100053030150120680020013011080140640016140603011080140530305018
0162008020400501653030116100400150140201101640203021005040214002030116
4006150107003011501090641003068002001301108014064001614060301108014053
0306626140102081706016530301501206540070605040130205303015010001011002
0080400105016625140108200120068010005012053030150180161004004006168309
0400501651003070403012015620070040080301040301302016301040400130804040
0902008630616050301501021630470400501167010940060400503066241200102600
5063040704001402501205303015018016100400400616506084005016830030160805

0130140020080081620010600830903016183090140550102183090105011405103070
8150313080180012007016117630050153070250404008016005120040150166231401
0307052501205303015018020010600504016307080400140696010030121040140010
3030164061004005016501430630150405010807080040060403016505682050400501
5062100020040065053024002014050550640064001301040013030116050301104014
0010108021400203011080402010307010304001014065051080402010400801053030
1301001605030110802050640080400601066221910840103003020253030150120680
0200130110801406400161406030110801405303066211301030600401051200215303
0170060040016180105084010512002153040702400165060840656530305536403060
1504040150104506081504066201200101005050640309001013065503301506306004
1020103061805040640656105005016120020700504040018301903015040304070105
0406619120010905013061103065303015064504053043101306527310166030407010
5040214002030130511050140113064020105014012601030618130101005303015040
1004901504061100853030147061421151080501043016002001550130115400840050
4010200340040015034053060045060400183019030116304070616504015010700301
6617190108401550705064310130640505340516140201030616161200620010001301
5019103003014054701014064051050401064054701061515010240150120060600200
6060041008053030150645040110306501910300301700600400105040653030110030
6005020010100010308040550200401306401705013015017001502040021030804055
0200401306405501050401306405503080013066141800620080401210905020412705
0405070060040013030110065303015507030613141020040150191030013015067041
0501615001501130155064504050670410501612141070213013080030800410080530
3012202003001050406130010504030203070050641402008010001065220200300105
0120080100010130530301501611120010904040016064050535309050610306400140
5306505010504064030130102602001010007024001061045301530501024001404702
5040306602003011001001300105040661014010900701200315104006508066080530
3014001800200401100040021203070030708010504066015030150102813090161806
2007040615100490220040150401301405163505040200105002010802001060013060
9140109007020103070530301308008050120640307040050204004030140204030706
5402083016214002030120103070530301307501610300504020506200800101406405
6080501130150630800101406206308001050140550405801019400405305400408200
6201030705303013080080130630660815010240140500161501400523040400814100
8011010200252402001040500140500161510109600260201050406607140102081401
0307053030150120656080501030705260201014050180140500126020105040660614
0108200120068010005303014310530301200801000400601040500560805040309001
0611660304070105040660513010206405103070506201050404015401101003014061
0405507053030130413105040801105043015110830110804055070404003041313065
4040050115604191084050630407010140253030150120630610030150401080020010
1301405064001021070014057040656530301504050680600400601013066015030150
4050680600400601060314010500115016600501205040281013053030150140560805

0150650140060010501070030150703041340013066021401082001200680100050120
5303015015303012008010004006016601140109060050105010160030305020400130
6530301201200114026015030150102402084003010083012214002030120103011503
0750115016001401020814010307053030150120650632001013014053030150405063
2004006506403014001402050640301104055018050640301400165062040050140610
0301110004002110801650540013065991400610064012140020501050406403011030
7040050120513090301501513090301164010100180404005050140911700180402026
5031030706146701006140110100530301162002070018051309030140400108001001
7001805981501054012170070501020080120303047015303015014020200700816700
6006402040083060116708004005011080020040404005020612009405040107001402
0250120501402010307081503130654816530104040201030705063010401080402040
0704004016402040083060150705063080100040063016200802050107003014640540
0830601640520070081670060011030620704016309010308016309010403010200600
1580101940014003064020101200650401650620103080164360170018040540083060
1167006001103062070404055040580101940100400308051309030140530400401001
8040510804005020170016597150102401647040203016501205010200801203015011
6200802050107003014020504008010501404008060050151309030150401620090100
4005018150340201030706010308080020013011080404002200800170016596140108
2001200680100053030150120653030110307052003170100641008040064030152020
0410405005306602006530301103011200315405400102504032006001050406570606
1200105002014010001200408002001301108043105303013010260108020031510504
0659512006801000168070530301501206405507068070105015303011060702010306
1805941301026050644005101306530108506701094006010130501430630161605030
1630132003015040501080708004006040301130159312001090404001606405053405
1614020103061801510801620031540080570601653030180020015020400403011630
1100800200130110805010807080040060401502016301100404005020401080163011
0040560805011040301900520101304030140518064005010700301501592140108200
1200680100053030150120654082006520080100040655040400132004591140109007
0120031501047011003011030705010451340301530301308008061050608301530301
4706130206532004501047011003011030704056080501640530164012501045134030
1530301308008040560805016405301640125303013010260108050645134030162002
0080030110306120010100050105040640301504050647011003011064006010130590
1200102600506304070400140250120530301501165010240080402010307053030150
4080302100504040400502020307002052001050020405011000405303014507080110
5043015110830180020070506100040024001504064040060304013060301402010301
1010030150403016306100400130616501024008053030130102601080404002200800
1700116504015010700301151011105891401090070121700705304701655070306510
3070530301280010006151080143016004050535617380144070400401504064030400
1001050406588140102081401030705303015012065303015040526400501070214004
0040501020053004011090804310403050408055040640521002002001020084006530

5110301540306040510480100150010404055010264020501024061005040501205016
5504064052100200200102008400805040640656402030647040610050405012050180
1610049010501130153051103015403060405104655040640521002002001020084008
0196001504064030400100504061960013011504064030400100105015040640305012
0140658715010240150193060405103070402030150307034020103061640564040080
1005005001084056304001001640567006008040510410116802010640306030140201
0301161003010640206307400701040305018015108016602020015504008030110301
1642001403020405406100165040110640206504011050150641020010501020060015
0643400605861301026040510307040203053030130703140804030603014020103011
6100301640206304001100104030804020630740070150180402063040011003080402
0103070405930603053030113006306405406100163040011001061402063040011001
0501405200649040020090840206136110015001040405501026402050102406100103
0150630901050107003011301585120010905013061103064055040167006004004001
3064056404004365001084056304001001640567006008016306400501805303013010
2601080162003151010400811030614055040167006004004001308016605065062040
0801620080201402050620080204006301646584130102605304340050308053030130
3080010504065303013080015040164540050150641020040011626020140240560202
0015303016501040010805010100801504030110804020301408058315001048530301
5040100490150406510802102001305401101003014061010301402050704031030651
3015301130530301582121060810300302010307050120530301501156420061155040
5060812161088051084002404001010817001658114001010040103003020103070530
3015012061550403080205305020105101060570180300708030010504061550402109
0505305020105550608570180300708030010504058013010205040043001616012430 0
1530301616200802050107003016012802010501530301106070501050406403018002
0086206080501301803020400130530301301026010803040011008057913010301001
3015019103003014040070240013054004082006402010307053030130800801306306
4055040550692504006010501070030154030703040550402004013011030611030163
0660200301103015642006306521670170018066003016150401301504020040140513
1700165781200105002018013040060015108016436305303012001010004507050405
0120630650120010030150620024400101308015771301020653030121080206530301
1030703020640064055070800200701805064001021014024002010530301630610040
0107003012001010004055040580101940010220450705040167200217001805701950
6306100106576190010808405103070201503060200114080103064005040653030170
1914100803066020030170910504057514105300530301210802061306602006015030
3020150306020016206080505040805101060504020219011406530301504080550608
5040202190114057415001048506510080105064120101304061003011306530140805
3030145070504030203010020450705040570051630610010510106040529040050165
3030145070504057005163061001055060840529040050165410300403620021080404
0050206306400640301402020200410165062040014050101573130104008050640309
0040013061010040015040302001060052006001301630103010011050430170140040

3010021020010030311030115040020060011306303014001003011501030704002400
2040301502200163011006510300600430016153030151030060020601503015063006
0010405504010010200801700130140010030140510307024002014030805120730116
4001651309030116401010016402010410116802040530301010050107003011030120
0400403015721801070800501205019103003014102050150191030030111030611630
4001100804006100019301301026010805063040011001016200802050107003016530
3013010260108050630400110010165040150107003015711200109050205043050401
5030307031611030620504305040150303070316153051403019003015102001003015
7005504015032006001150220050630610010501070030150143063016160503016301
3200301504050108070800400604030165303013010260108050630400110040013040
2030140657014010900701200315104006508066080230100010613040010010805303
0130102601080304001100105040652006001301211050430151108301506200300105
0107003015303013010260108030400110010308056914010900701768076801804057
0404005020105040010301105464055010264020501025020400403050120503061001
0305303015040308008040202190150103065681410530040570405020140307001103
0705303014070501410030110052109040402040021901501805010921030504030402
0504050165671701040316200805016140012500162008050180402020070081670060
0165040150107003011510111056614010307053030121080206530301504030800803
0120307005651100108020020103061506086501083019030161453003016501010010
4903016501010250301504040510307053030140705015010700301704020103061803
0660200301653030170910504065641401010040060401912009040515010453065631
4010900701200311504305040405150104001301700165621400102500400430016405
3012001060050120305250690070610140163070804055016306405504030103010013
0156307080140402020011045040163200600161402060805011630400100150140510
3070150240020150163065611401030604001640306010640010800100140401320084
0560805011080164310130405004055010220033001401080206402081010400850650
4061013020220061308056014010820012164005303011643630306602003014053020
0801000400601653030116200801000400601802061340560805011640309007001405
5016306530301507001270191030130130660200504015030602001140655911000103
0213061004056080501108040530301006405900706405507080020070180405263010
0108014053030140307010501070030120103061558110010806400615016081130115
0420015015303012506803081020613405004051041014004041001402521090404054
0021901170018010208055714649020507050649010501010080150403014001012003
0660200301103016530301307501140103011630170400405303010100170016556141
0702130130800405308001050150191030030141020010652162008020105011620040
1410064006100019301103011640201840010501506410200102030210050403075011
4062010301307501140216504014055015064070710501070030110301200400403015
5513010614005060816200106002030700200600130140610301653030125065040640
0404005020501306602003016530301103015642008010300108040400707150400501
8040205040200401301103061630660200301167010916530301167010911650401501

070030115101110554120010902170104060501205303015015240209007010140705053030150130470301216402084005016015030150102404004020817001615305110301400150140130116464005014020200401105303015015531301030900130900405306004506520059403167115108040530142115108050104301600200155013011540084005040102003400400150340530600450604001830190301163040706165040150107003016552140102081710770501205303015012170070301161006700103015200101000146303405150304240546303400380050140302012001504051030905080660150400110121620080205010700301501551120010706040505321080206550704905040405504065250401504040550408055014010900701203040405150104001654020830162140020301401051200213011501040014100805308008050405303014051400114010307060150301506460810401549120010100506015030150640061013017001802030403015040210905040530401548120010905053043400503080530301507030105040653030140550703050107003012010306154713010260165040150107003015040104511306516200802050107003030506306100106400610001930164002330125065040610214002030150401210905016400615010700301103012004004030154615010240140500152108020627002030153030110307050620040080108010202009005015451301040080506403090010130613001050401020710530301302405608050150620710501070030110301200400403015441401090070140500110200400801410080530301220200300105040613001050403020307005064140200801000106522020030010501200801000101305303015015431306708040530301200401501206400260301218901150703014020405507030506115200124110307015420050801563660409505013021005040402070401403011004904015030750140216504012140020301164006150107003011510111054213010301001301506504061013080405200802025303014055070305020306406100164053012001060050120301502009005016704060161507091615070406016301100405501630650104301108015070964054005060301211030150701200670406040200101000704060161501090706150704060506306100106570800164050704030203015068020081016415501070030150405411200109050530301210802061103065303012108020640201014701240307015303016540301026030116308004005015064102001065301308003015062004003001021400203015040121090501640061501070030110301200400403015461501024014050015210802062700203015303011030705062004008010801020200900501545130104008050640309001013061300105040102071053030130240560805015062071050107003011030120040040301544140109007014050011020040080141008053030122020030010504061300105040302030700506414020080100010652202003001050120080100010130530301501543130670804053030120040150120640026030121890115070301402040550703050611520012411030701542005080156366040950501302100504040207040140301100490401503075014021650401214002030116400615010700301151011105421301030100130150650406101308040520080202530301405507030502030640610016405301200106005012030150200900501670406016150709161507040601630110040550163065010430110801507096405400506030121103015070120067040604020010100070406016150109070615070406050630610010657080016405070403020301506802008101641550107003015040541120010905053030121080206110306530301210802064020101470124030701530301654030102603011630800400501506410200106530130800301506200400300102140020301504012109050164006150107003011030120040040301539120068010001680705012053030150140201041016402056362168604018012109141070901640401040080140164340040308016050301404006040130619101100030150404020504048113612008060103070611080020040404005020501616306040010004001040083010260102002170130112503130650630610040014016403070400104008102001206040400501651309030116220010040013016504015010700301151011105381500104853030150640400201013068002001301405210660400630306602003011690706162008020501070030146107001040610537141053001306510307020215010364105300254013020504015010317001801020805361401090070120031550430504040061061580701800105506082040050165200700301100500404030900101305303015015351401030704052530301501206530301405100720014040161008050162006001301406103016530301216504016304051030701700140653415010200100160801501

1020010053050191030030150201050406200600130140610301213065303012506504
0610130660150301110200405301640150610080501050107003016533150105401217
0070501020080120303015044007016530800805040530301405140011405064040020
1063060023012601503015062004011065063060021050107003015321200660080130
1400600405012050402810130530301501402050140101400203040140630102603015
0216250330122819030162503301200133016102200100301107002001330165010201
6040301610401400103016102200100301107002615016081501043016301261101030
0521620200300400130653030116427016531120010260014010307050120530301501
1405501025303011008061018130901141020010501153051504014020865305150401
4020816500702180140550102100110030040400806005016530120010220110307050
1205303015011301026050510307016100024001308040205070915018050562200800
1670318004030110805056200351650569007080505763005050680160040010400130
3016530301900808140221010003030400190080184001400501100400183019030180
4053016401504016100805011402680070210307040580070253030130800801402160
5030110307050640161003013200301529141053001030030201030705012053030150
1405210905040564001804020501401014004100705010700301650622001001301650
1430163012020040014040103016401503070330203065281401030701030030202501
2053030150153080080504053030116301601650260400201140402109050160503030
6162604002011404021090503013200303080070210307040208007025253030130800
8014016504040040013065271401020020130600440402030600450640204001101060
4020507020080205055070506550400140200101220162504003400501526120010601
0530301103070203070050120612001505103090508066080140309006150164702030
7003070801050406525140108200402025012053030150140206080501163040010040
0130640205040800120040050705200134005062040050113013091230124020501024
0203016401163020140013016504015010700301151011105241801070800501605013
0110030600640205070808060010501530301410200105231401090070130104016301
0404005014001653003015067024001050107003014102001064020103070264001050
1410200105303016522401020840103070530301640201030702640010640203021005
0405010700301505060402010451064020305010210305303014102001052140108200
2006801000530301640203020010600162002904005016402050404005070301103006
0050403020307002170070301504040015090840301103070140809050505103070805
3008180250104001501805090811700180501460014001700600400401306400188016
0402001010004001509084080620070403012505200631505640016505305150700125
0568205018080070250404020800702402050140101240307015303016400150406403
0140204001104008050404020501401014002030401405040804001504064030140015
0908403018205010501130694020504070940060104030504065201401020814010307
0501205303015015800102008030147025040524040010800120040014010804020103
0708150313065800102008050520063150564001805055040524040070400404006011
4080501088016040200101000501050908404020301640121610004002400501402030
7001200614040203030816402010307053030121400204020501401014002030401401

3011605030150404001509084030165191401082001200680100050120530301501803
0604100140130150104006001301501021670403400501640202130901504050107003
0140201015021301013086402010307081503130805052404003060041650620400403
0501805052404003060041040013030140201016050504040202006381080104001303
0140202101220064020101605040015401657018002003015040402040016600164020
5070800200110400130301402040015401640060013014001502660013014001502640
2040013016006402040014070640204001660016402040015026402040015401402010
3070400402008518130102601606140010040653008180501205501803060410014013
0116050301504040206121820501401682050400130651719001030100011001500104
0402050405070060016800702103014020800702108008014100655067006001400801
0206516150102401405001615014005255067006001400111010300550401670060014
0013080120019501005051481404001040016367501204036730142400601404004200
1501651512001050020120010600510805303013070310611010300165200204005011
0607080505640400520020501808062007040301250562003001706550102405300818
0250104001105011301505640400104001140800702216257004003050563080070400
1306152002016050301165002004005014020303081013016504015010700301151011
1051414010301121700704053015044007012010306120018020405650640064010501
0700301130650130140024001050130110040064030140548120080081700110400840
0110106030150630407010501070030305264003014006010306513140102081401030
7053030150120640510307053030126400102010306180210200100504050626400104
0500530153266030150630407010501070030305303011030705264003011405015121
4010820012164005012053030150114055070168002007018018309016121400501801
4056700180402050401550110400110501700303016511130102605053053030130703
1061400640301505180640010104008400610230110805056206040180164530050180
4020504057022001505103070164530040060180402010160505040530081803015010
4001101040013030165105010540217007053061510801430160012001505306004105
4648470400106530660200653030190701050406509401090070301768030120307006
1510805010430160020015501301154008400504010200340040015035306004105306
6020065303017091050406530301464820304005084010308401030705303016530301
5040510906200180040200101000501046115210906105109064702504050030500301
1080120200300405802030700504020050020116501205018060460301140550404816
3020308040060016160015306512004016153013020500200610303200501205016501
0461152506906400510906470250404040020200400140405040500301505308043064
0203050120501804306402030502010403050140400202004001404070220030150530
6501046115250109061051090647025040502020040014040702200301402030804306
5053050120501804306505305020104030501402031671202004001408090504020306
5071401020814010307050120530301501530301504058001020080170805040203022
0010014051015062004400130402061502164020612150104611521090610510906470
2504060460301540130805660015305012050180500305003015401308051621550020
0664306530502010403050180430653050120501202004001404060460301140550404

8163020305106213068090503011530805481640050120501620200400140150030500
5053080501040050500110068016050502050180501010500501301900830500402002
0700303040204130611080530301402010906105061200107060506309010606120015
0405506921080506302011014050114030900104014001030130164015063020110501
0700301501505141046013061001630610010306530301161004001030804051030701
6801600180170800510200700405803060050401620200400630501070030130060010
3065041806200704013061004053016306100655040405610072001805010201604030
1610401400103016102200100301630615406010030120080081700165031800620080
4012109050200500206155040301001404050622001001301650143016301202004001
4040210905016050303065062200100130165014301630120200400140402109050301
3200303050212106085303012108020640510307016453001804053016401405103014
0400708041700180806200704030123020110308012001010080501205040680807040
0601030801105010005012050406162002201050112001426180120060115630201400
1306405301640140510301167080418014300200405504040400605015018081205030
1161000302170011040081040140010301163040021650118062007040130610040530
1630610064056602016151080405610072001614011010040203053030130703104003
0140203016401158060301164006400130650011010200401101050556302080160805
0550401030050704020305029501805308505054001100490160503011640016499163
0670400130110504120307004020501401014002030401406154816801630470400130
1404008060050180701220065001305006105050040160503015040402030219140168
2050180104014001030110801696010040013014040080600501649812001022012685
0120550140203016401103014053016401163020140013062109301250010260030116
3042400400130640530164011040140010301164001649712101002004020103070501
2053030150140182001301652506301604001070030153030116100400161605061200
1050020130132001405504050026153671550401003060065481660805050404020100
3060010700301402022001610040016015030115101110496401082003015040820030
1530301406024955068308040040203070305303011610040016169212006162002190
6162002901165040150107003011510111049421608301701020060530301501405220
0450704052003140530201030611301030100150405005303014001101250620040030
0101305303050107030016004051030130750114064020103013075011406530301250
4061050403021400203013051504050164932001200213030200106005303014507014
0653030145070504013075015108050104301600200155013011540084005040102003
4004001503405304052200161004001501070030150203049241540301601026405053
4051614040500301030100701400404914130230110801620080205010700301230100
4002050200100010130490216500301506085450705303016530301450705040121650
0200155013011540084005040102003400400150340550306004130640540011010604
0550705020080201301630400100616304001100610301026010801670061640520011
0450401632006001616200315501070030180800702504040208007021050050161200
2070050404020504030401703040707010800113010501405220040530213400601804
8941701040301803060040013020501540110100301406101507600400130620306020

0103070150400470614015040016150220048820012002130170401508064006150400
1101060150702008020615026507001503020080100018015022001504018040202200
2165040150150140101303010415010110415040150704060150501150220048720019
0501504050104030190030301406540010760014100802001503013060044005040205
0115022004862001503012170070150100802050182601309121700540010030600140
1502200800200130164001614060301100306001080506200208040010640526503103
0706146701006140110100530301506200207001050107003014852123013011030613
0400110130200155030163010303018013040060016800200130164001614060301100
3060010805014842001041001030030201030705303016800200130164001614060301
2030405303064834010301217007040530621700703015040571804024055026084001
3080163070801040301402164408105015062810616400114025068200801050107003
0150260840013048250620040030010140601028013010301001504050052162004003
0016405200659001200656700250805506404002040013066015030305505010240030
2140020301164006150107003011001500104053030170060017001648120064013014
0770504020307005018016100400400616200290400501612001050020107001162020
0300150107003015040640203021005040214002030116400615010700301504050704
0604003064020608050164020301640110805063024003048020062001000301701400
4013011105043015110830114067180410080550330130600416200150301507087875
0408054011010030140610402020063150680640014050164006403015100101700608
0503020479200105040301214002030162002730164001501023012161320302100504
0306020027002041008020627002050180478501010041904040050205014056404003
0400100403080404003010010700301264001501023012103021005040306020040201
3410030100200150301530201400501220010021501040011010400830660200305040
6501301150103014570530301501163011005010700301477410270303040130900260
1030530301501640201041014004041001402203070047610010200830121700701610
0670030610050610082001010002110250130140530400100616301100140240020506
0110501000150850620010100805303015011630110050107003013061005303017040
6041003047520010260050630407040014025303016800200130164001614060301500
1200104053030654011010030140610521630600214050610069106040530200300653
0240530120010600655308008050405303014051400114025063060021050107003015
0260810130647440109007020031402030801610040040061650406400501653060200
6530301216504018013001050405306020050401024003105303015020306210100030
1103070402070309103053030150120140621093015040500102600301710401010400
8510307040400501140103070501050406403012007001030530301501201404735010
5402170070405306140500116414710304053010304050140501405608050130200106
0040530103040501405011620080205010700301502608101306472401030121700704
0530611010300530301162008001050305014010130122008020301162004003001501
0700301501471401090070217007040530652006001301108019008405303070310130
1530301410200101101030053030116200800105030405501200802030110805067020
0160105010700301205078101306470501050406404040050205015068016006405680

1600400130805110306180660010501910300301402030700140501469401090070308
0080670053030165303015016800200167024001666040560604010403030800806530
3015040540705021623010050180468301020630140705065303011502608163011006
1501401014054178040563006001804020301670403410060150301501601503014053
0301100501070030146740109007020031161004001640550401650608150107003030
8200100301405219011404702504030660200301653030162134006015010700301466
5010504064030120031701080010130530301501630800806530301504054070502506
2003002400601046550650781040513064051030708066001301405803060050404052
1610083010403050107003012506200300240060106530800805040530301405140011
4025010820080464506100720010405220045070110813021400164015303013010260
1080163040010050107003015026084001306463501010041904040050205014006403
0140206080501507016200418030100163040010014015067019163016470100640550
1660013016301100501070030146250640400201014024030701530301640526301001
0806010301404055168012506306100105014010130304055040220010017001040610
2008020303040540201507024001301301400100403070506301630110016708041615
3030130102601080163040011001630170400405303010100616100801505010700301
4030701030646150105040640301403070103065303015070012805017040330110100
4003014061040202190114064602001041001030030201030705303015014020608050
1450705040653010017005105014040030100151030500404040029014100521090404
0204002190114030614595010240301308001080303021005040165012050165402083
0162140020301405403070106405102071065400110140510307063040010405608050
1504013066020040510805007027001501050406403011030705303015040410030458
5063040701014022001090253030165303014507040013200440545720010904030160
1026405053516140653030150409600602125040205303015016800200702400150408
0145650640309001013040564002602014060805030201080640040500540110100301
4061030100014024001103030100010504063010001050110250305012014064555065
0406403013020640010308053030110307065470250404020200905010107003011700
5040804020307006001050164020302301100013080530301402020090501050145450
1030206400403012810530301501530301103070302064008040040770170018020040
1301108040520061300640530200801000400601640550708070180203068504016800
8050130230100301900103010001900804005020630640530400503053030150405408
2001402804535062003008400530301103013040400304001006140400405010306452
5067040310140402001060054082006530301504052008010004030404004061530301
3010260108040400304001005010306451200109025063040704001402530301640010
4010610108105303016405263010010805200608203070053030130703103016304001
0014061640014014015045070165012063010710001650120618002001301108016220
0800170014055016600130163011006162008020501070030120165062040013016504
0150107003011510111045040103082006801000530301501405507053030118070410
0306162602014080070225019103003014053074006011405015017040330110100400
3014061040205040163064005010700301501449200649030140017002401030705303

0164020263010010801409084010306402020064901080140530301103040021030640
5703180040103013040010030140510307024002050107003017200230402040061021
0804040050206303010015051515030400100140103002004013015040150305012063
0506306100102030506421013014040560805011080506806001053030530202004013
0150130100103005040200401301504015030305506306100105103051330150900100
8301200101000530301250650900104056080501405400405141005801019640205040
5801019103001000101601705055040140100030147025040402010307030750140500
4485063040704001402200102600530301640202190114013064020400180140103070
1650784001301020304010002140100040202150018040201200600110804020670410
3066020030164811030705066304001306506470904007001447501050406403011030
7030800806700530301640205070180704100306402010304002103040550704020802
0090405005200600130141020010504040205040611050430141020010504040205040
5062840014040201200114047025040404001090706200401301108040400707150400
6404003030080170011040085507001240550660840070015470653030140201004904
1003064465010403019003011065004060102620015030140516140615019306052307
5010403014053030121620200300114022702003011620080205010700301263010010
8010100305060445501020090150301200106006564020130640530301302444501020
0601600162301005040080402021100701103070402064200101620080205010700301
1670109400501165040150107003011510111044350105060840301281053030165200
6001301216500506086110504301216500530301405140018044250102008012030140
6100301103070150200905016150401410014002500615020040110801508012006016
1502650700150302008010001150220016301100501130140530610050120140644150
1020021903012810530301616501204006011406168070800140653030130102601080
4052190114030165056140802001050020506102200570403040011001025050405010
1206440501020020130030110735060615504054006505200600130121650042001050
4061550405400650110504301216500420010504061303640121400205303015070012
1301400640400501608050305012014064395010200201300301530301107310606110
1030053030120080010503080510210070103070230100501050406402021100701103
0704040023010050130400100614001405018013060200301530210050404003060041
0030660200130144084014064385062009005040040400501656404001012004100805
6100304005013021005040400640301506504040040400502041003064375010200219
0301403070106402050401645135010700301530301403070101403065503301163060
0440050140400260840143650102008012030110084010616504015010700301530301
9084010306435501040301900301281013053030161453004020504070060040010616
5040150107003015303014030701030660150301501021530614504011013012030400
6530500408200100406100301604041008082001004020606040105014345010504064
0404005020501506307013014040050161650784001306165054001306433501010040
0403030590070640610456601503030501102170054325010270020403015210017050
1208010201620090050180800200130110801620010608050506040203021005040400
3060041004315010304017030120031407050615108050104301600200155013011540

0840050401020034004001503640522005040520080100040405617320103061430506
4030701040561630708014010307016200901040306530301130126507003012008010
0010504064052650700301620080100040060180530301162002070040560805011640
3090061530081801630708017001501070030164295010506084030128105303016601
5030150705010801703016900101000301501040900120301612008003016120060301
1080506100805010501070030142850101004004030304004701800200130164001614
0603011580020070550364020220050405200801000401030116702001606427506408
2004004020307030306602003016530301167010916426501020080120303040047011
0400301200150301161004001642550683080400402030703053030116100400165807
0180040180170800112200301163020140013016504015010700301151011104244010
8200200680100053030161300105040270070106130010504030200801000108002001
3011080140640016140603011080140530306423506403019004055018040527007010
6140510307026400106110300200401301504020306010304225010210160016230100
5010804054002201061162008020501070030150401802009709100103042140102083
0171077030153030145070504013012009050301140652402026301005010409400306
4020301020030021301530301530703140642050104066040520101304030150408013
0156040600240202200402044401017005405200680504040206400110616100400400
6162002904005011030241950103075040520101304030150408013015500130500240
2022004020440105014020108020105030150105040640303030610040070014185062
0020300400402030703053030116100400180530700140400501620042253030140202
0090504100306417506504064030130206400103080530301103070614051030653030
1613030080400501402050405014008010194004057001416401030707010406053030
1630140010030304701100405010504064030110624002030515040400641000700164
1591084050630407010140253030150111010300405410204020200800101301610040
0400616200290400501615216820080105101060402029040050164056604005506084
0206060404005014142006490301400170024010307053030150140209001010002164
0064030100900101000301504030401501301402010307016800701630600170016150
4011630110040206100301700165302021400203012506504064006402050628101306
4055062840013061404005011541350630100704004040050205014001101301402030
1501024100200220140520064901080600400140640551680150401800100023014004
2410040400507014016461301260040205063011013040205064504055019216700600
4004001301650401501070030115101110412506403090010405608050150203065303
0140540309001406540020305180405608050116403090040610050020084002190120
0901510808102003050040201105043015110830157005108050610080501014030500
4041150643016001510804052001503012189012010306161101030053030150404054
1306113064053016401405507010501000400503016200802050107003015014105010
1004004030124010307053030165620080201050308020010600504016307080101406
4095010830190301504020103061640012001060030110805067020016010620020504
0301507050655010680620070403012506200401106200600130140610301653030125
0650406104085064360104056301030301150153030140011015063040010540101100

5401214002030130515040166016601030407506440070101650120616907014022030
7001008200101000211025013015063040010010653030140011012506200802010165
0120405501220307005502060403014051030704002200800653030150402800100021
6126601503015040302865303015040302821301168010050014050101530700301405
1030704002200800406506200905010130405002001241301402063061040206304001
1001050161070011301402062008001050304055061006018030140520050020165065
0406403014055040405301200106005012030214002030130515040163065303012506
5040640062002050403015070506550400680620070403012506200401400601503030
4003200600154012001060040400502040420064013017032004005303011030168002
0013011080140640016140603011080140530306403501040301703030140309004102
0010530301140610083012201030701563040050530301400110120304004025064301
6001510804055303015408200108080405563640080010215010700301140164015062
0080204004040050201402217007030116100670080402050140101470240400200802
0140556364004660150107003011401805636466040065636800102400406104004010
9007021700704053020103061640015010230140513140470250401680304006001616
1002008040050107003012016506204001306399506830804030140520103061620020
5040301507050655010680620070403012506200401106200106003011030150670410
5401402050405020400306398506440054004020307030540011014020305303015010
2102030700201550404020700100501802001503015040520080818030010307040400
5020615016600154004070502404008290180402026301005010280301801470140400
5020700140201030705303014004070501620020700161610020080400130617010403
5303013028216409040070163975064030604040400501613015040064040013065400
1100400100853030116100400116504015010700301151011103964010100400604091
2009010301104541008053030124090400701050406530660200402010806530301400
1101402010307010304004004040050165062008020400801020639550102008012040
2050140101470240206420010214002030116400615010700301504011001020080167
0109400501165040150107003011510111039450630407040014070308011000253030
1140614530040400501613670155061000240050401504053030130102605070506490
4004030214002030130511103010039350630407040014010307041053005303016530
3014001101250620080204004030214002030130511103010039250104030170301507
0105010005303015018020080205040613010260510301701940060150404001023013
8601503011030705303061504015012053060045040640105120021401100404001501
0240011015108039150104030170303010456120200124052022107003030601503030
7080064001023061501390501020200300403015040501201406180105084010512002
1530401670240018053030110049030100389506403019003014052010306180203070
0470250402700203015303011030701020040080150408038850101004190404005020
5011563040018051200640030121640018030100512006400301307504005013021005
0405608050103070301010120060140200814013013010101200601105023013085012
0401709301302038740103070525303015018010300504016100805040014065062840
0140401610080504001040082002301163015040050303865010200901505040405301

4064010301217007040530201030615210440080163061257008002001301304040548
1504030210010503080200180204056164001406162008020501070030150138550630
1800301405201030616405400264003021004005030120080201641471405004055014
0101470216200802050107003015013844010820020068010005303015018016830901
6203070047025040162140050107003011301383506200900501040513062170070301
4055070808060010130151080501043016003825010704031601503016520101304030
1653030155070304051030705014056173201030613815010403019003014061003011
0451013053030164001501023014051361008306602003015011645300640550140101
4702162008020140610053030110451080102038050102006016003015040520060013
0110806565504030210010503080150104401306013012001010001000400210504063
7950640306040530508506405504048150102100200805013040522005040506102503
0161060107061060640104006114069126013016261007010610018601630107014060
1640105120021103070307501140615010307030750114065303012150401301003785
0670320010510301615200206170698002001301640016140603011080504040306015
3065061000210530301501042001010008013775061006018030140520103061802030
7004702103064005040803765010451300301504040207040150161645300180301100
1502002001001163011001020090140203070010307040400700600164040020020010
0113011005502009050400306525050406400304020704014030100490403066020040
2013405005402086214002050404020400104001140305010102503011001500104053
0301700600170016375506403060404040050170014702200802030124020200401101
1212200150101025030165201013040301167006004004005014020200401101306374
5066020044004040050201402621400203015064030704004040050201402501010501
2200165062050203065303015064504010301412701650620601503030306100104050
0562503016402083016214002030153030151040061050120030023050120140373506
4030701040562700203015303011030705063061001065303014507050406514065303
0145070504065506306100106214002030150406514062140020301504056260840030
2140020301240540050603015066301011001020080304055040501637240103012170
0704053064051020710130654011010030140610405103012009005010130653030140
5403020101306520060013011080405301001306001302010306113010301001504050
0405501401016530301457025062004003001050107003015013715010100400403012
8105303015018010100400165457021080615040103023705064030701040562700203
0153030110307050630610010630102605010104013011080150103070601030163011
0040550122030700140101100510307040040414013012010301546101302001501042
5504014005015040405504062010301546102001950100255040140050150402140020
3013051504063694010900703013080080301670053030161300105040540040820029
0400600103684010307070601653030161300105040510400610530301410230800803
0150130100402022004507040206318106140400104006114030500404811040061050
1530301104510453015013010040205010470240050403013011650406400130636750
6703200104053070305200600116200802016200155030153616504015010700301103
0703075011070030121650401214002030130515040580101940030110063665064030

704004040050161008301506404002040063091230121008301506602304004030214
020301305111036550645300400404005016530301400110125062008020400403021 4
002030130511103645062007030010140640560805011301506308001014064020506 3
080010630214002030130515040580101940046363501050406403011030653030161 6
504015010700301610250301170056567024001501070030304010512002126015030 1
103061501362501020200300403015040501201406140306040180105085012050203 0
611050120090501306110465104010512002150120140361506403070400130404005 0
164030701053030164030705240203060103014010805063184004030804030705240 2
030140108040400331813065404005011536050630100704001308015470250401301 3
010350130165120064003014003075011406401051200211080506318400403021400 2
030130511103595064030604015012164530011630610080163064005018053030150 6
450401212200118007021508007027006004001013061101030052202003005013065 3
030113014270501301402050102615050102166054030201030116301704002140020 3
013051110301003585010460804030124010307053030150180163064005018035740 1
020830171077030165305303015016530301130153015040140610083019090100301 6
530170055013565010270012030110307053030140050703030703508030540025040 5
004020608050161506080501640201605061501605064020150216150150217045016 3
017040030100804030703015040201314047025040510802031850408035550102004 0
040403015040502040013080202200504010083013545062010805020530301100405 0
021200400504051003060040413050040205303014507010601070305004050135340 1
020830120020700301640011013015040201030705630400502030700352501040301 9
003012810130530301640520063140510806108040018301903011630407061650401 5
010700301140163515010200901505040405301406520060013016110504301108014 1
043001217007040527007018016200802050107003011401803505068030400600400 5
108040400502014010804020501024020818040207032004010301405005401101003 0
140610103011620080205010700301100680206702400150107003013070136162008 0
205010700301504020200594061030120708012006201080640040105011060107011 0
530301301100700134950102002014030120010600530301653030120020406162002 0
406348501045130030170401502400201803066020030115070240016400307501140 2
150401150220034750640306040150124530016530301215040153030120019050150 8
505061020016830130110053030110301102001905015040301100200802030140550 4
010601070608114030803464010100400604091200901700556427018040202200610 2
200530301501345506701091653030116100400180402022005040510124020400103 6
402010307040200810700301800702402030308130651200640030150401041050102 1
403011004904063445010504064040400502050140203051013020307001080501402 0
400610210805062006004400140650630201400140240201025016530301507001210 4
006403011010816902002130165402013011020021653030150700121200109506201 0
805108060080501802001093015101052050109301504040203010030600110501402 0
220050405101240204001034100105013010101200601105021030113066020063433 0
103501301651200640030165402083016214002030154030701063425062010805020 5

3030610010140501801200401108001001700113001014010030600105303012030700
2030110020030021050606040104030643061030506201010501220040030110034150
1083019030150406130520645403011080601503014030201063405010220010040301
5040652006001301611050430110801510364010200405021106010708106040301540
6015504054030202202003002105303015014010200401105201013040301400301100
7001339506409040060010700140510430400502014064010200403080201040510140
5401301001506100301070014051043040050201406201030151086502101000301125
0150402030700338501070201200301704010702020016104360162022003010400501
0014010200401103375010403017030116050103070201809901620200596201809901
5303015014010200401105201013040301400301100700163362001202130161030070
3012826061200105002020220020020700161740200130140110155001305006015030
1403020400130120400101301100510110303070312200301100335130010140307080
1053030120307002030110020010017010400120040162002203011050100030241006
4013010001030506201010501220030110033450108301903015040110250612006908
6141060653030150405403020211004904010108102202003002105303015012120084
0301108010309010401011006565201013040301540041508033317043017010406020
5015210951020070020504305040103025220030110052200110200207170420301505
3322160820010100021300105040100720010530301501530301450705040654003011
0017005203010501401020040110301100110072001545070436212008403011102002
0715103070306004140302011020020715308020615060814001250154002501650608
3062100215220015302100400803314010320030150191030030150401540010200700
6202157001070110501640102004015400104060105016105005013012020020700301
6010306400708006140240307015303016105005011540070800610501220040030110
0154007080061403080330401030703017010406030140050120501105040302100400
8012002008401050921080140203040020070050105012200501200407040012004014
0030110070013294010307070104060530301680070250401580070251020070032850
1040301703011030705012004070301640105120021301618650640411080990153030
1501327501020080120301281013053030150180163064005018030660200301653030
1167010913010032640108200200680100053030164020265070040203020080100010
6530301402022810105067024001805303015062840040400502050130100325412703
0128062005303016560805053030140202007008106141070214401550102615501025
0163046400660504040030407014061200800840200106005040400304070140608050
3020434004061032420010410010300302010307053030168002001301108014064001
6140603011080140403070106530301540307010564240061402020064901080140168
0600400501301003232001090403015303011030165608050530301402020070081065
1100400405504016100400400501130110300108053030150406010308020307003070
8010504065010504064030150645040110306150102008012030150650406403017006
0040010130322216082001010002130040050401007200400610830150404001040301
3200600400640010403015040108301320060040063010303011080200155030133064
0062001550301108030103030133064003212001041001030030201030702050120010

6003012041021300400504030700400613004005040770400613004005040402030403
0170750400613004005040203040301104006400203040301203014040530301301003
2050640309001013040564002602014060805030204001080665108021020013040610
3040515070403170018010208031950620040080101650120140405501041080405200
1000640014647040140110113012001503011506040400503016301100405501220307
0031850680020070404056405504010010200801030640010405004055010240208103
0530301214002010301506704102140020301504012109050164006150107003011030
1200400403013175010200901505040405301406520060013016110504301108040530
1407014009285010700301201030613164010301217007024052003002806015030150
4096010030125062004011050107003015063040010010610082001010002501010250
3015063040010010653030140011012506200802010501070030150131541270301220
0109025303016100013023012010307014050180163064005016164400514100801640
3060150180404004030601150101040130162140020301164006150107003030301006
5070240015040653030105364004030601301008020631850180314216083017010200
6053030150180530301400110122008020105040640550102110100024030703014051
3140470250401301214002030116400615010700301803040060011406401306013015
3030145070501043015013134010208301710770301651301530113096010030121401
0110040307030163061652010130403016651301530113055015303014530031220018
6013012501020080100040060403016501010080504030165010400501100301650101
0041903016501020021903013112001503012170070150100615026507001503020080
1000180150401150501150220050630610010501070030131041270301220010902530
3016530301504050168002006520059403167161510805010430160020015501301154
0084005040102003400400150340522004507016100400150107003030402030700504
0200106002402010250613010030921403015060854507053030161105043015110830
1701400402030700500200830164017050130165406604030130106003016580080301
6257003015040520095010040301200109150100301650105023016160503015040400
1653003012860150303050107308200190213011030613052002703020307001080501
1300105040520090502410610530301650107030110120040510305004040550620010
5200801201020060016530301301026010803040011004005108014001004003015010
4001080108051014020305012041003074154030160102640505310301506200300840
0650623010004006016200802050107003030301003062110070301410430053030164
0526507002530301405700600180150400110121627002040530210050405010700301
6506702008030121420305200150301461006405201030616110103005303015040405
4130611306405301640140550701050100040050301620080205010700301501304417
0104030180306001013053030150151080210200130406103060150301704013205011
5022003032156301400501205015408200205043050401503025615040010457001470
2150263010010007400130150220030221230130163061130120020700101406150220
0450705040302052150401506306100104030703011080506600601200301653030113
0153010614004030701014065301061400110004002165504008030111000400215504
0521300400140506702400108010001074052630100108050107003011401804001521

3004004020060016214002030140150540014020840400110155040214002030120103
0703075011070030165301401020830171077030165130153011301300108010204018
2001301108040202006901010700301653001406030110801306800200130110801030
0510307010806001013053030150129940110040050167007107705303016410430021
7007040530530301400110121620080205010700301501501100200803013075016601
5030301045302100504029830103501301651200640030130750165104105010214030
1100490401008301221400203012010307030750297406101003011083016513015301
1305303012964030129540108200301504082003015303014060229450102008012030
1406100301103070150200905018015013064040050115040820016150302008010001
6150708070165215030510019130140150304084001306150220015030210050405010
7003011030705400304081402012009011501030703040840013061502200150196001
6115010605050115070060016400130150220040026040020114015103070640026020
1401530157060613011608050530301803020101302932001090403012010301615022
0020501200801000150709161507040601630110065306020050404815010210020080
5013053060200652400206540020101304065303012504013020506504064030165220
0504051030130750114023066020030150401292200104100103003020103070530301
6130010504027007010613001050403020080100010805303015240202601810568060
0400614020608050110801401642400501680020013011080140640016140603011080
1405303029140103070506304070400140253030165230100405001550180154040020
1050406541530030116404002040013065220053030110040010306540050140150404
0061107003014610308018007024020800702504015018058006210040501520080124
0012016434004030620080601030704040050205016290401030701030030202530301
6530301402040307010653030116100400164020210066080550180163070804005016
4105300130624001202001800101306404007010124001700116453001615624002040
0130181503402010307060103080402050102155062001044005200800185200134005
0620400501130116214002004001301105041654153003030406100165303014507096
0100140203070053031103011200102206112001010009056240020400501164016040
0130616704140170011453003012110130610200600130114051481200207004008014
0514813080040050114530030150405068002004005040405014001200401630320080
5010303200150620104030501804020301320050405010410530016453004006016304
7030125103063030401030806530401050170109400601013061180107080061151080
6010083015103070107003015012050180110103005504060600210130652200530301
1004001030610083015103070107003013030401030624002010308053030154030701
4020240020105012400120211013063047030122400120402050102240020103065624
0020180104060403031103015010424040050101440017001165040150107003011510
1110289506403090010130405640026020140608050302010806400405005303011030
1510805067032004001406101610040016288506403070400404005020501402030200
1060016100490400501652006010401030152009005080520060706700501205016287
5064030900400130650640309004001304020301640160620040203080404002400501
6530660200653030150402200821650700180163070804004030501802865010504064

0404005020501122003015040101002140162007006530301161004001165040150107
0030115101110285506507810405130640510307080660013064052200450704052003
1405305120730116400165130903011640110016400183019030116304070616504015
0107003015012844010500120018020302028101305303016400110049030110220010
6122003015303011008401028350643016001510804052001503012189012010306180
4170504065303011030152004016803060140530801054005018052200504059007064
0513504080122003014020086701023015303013081612200301305004070102301140
5011630110040550122030700604030150405019103003015926004001010700301406
1001014020130150640610010130122003015063020110501070030128250650781040
5130640510307080660013064052200450704052003140530805105013070612006020
0155030163010303012405301640150610080501050107003012814010307052530301
5018020010600504016100805040014061801830160150301506301601013040514010
6024058020070400808070400301504011050100013051330140526081080020013011
0801220080050670109400601013053030130102601080162009081501070030112001
0080303028050640309004001304040050164020103018061020010600504016100805
0400140653030153611000400211301506100805040014064020608050130802001060
0504016100805040014061300105040104510530301502030640514520103070601030
2792001026005063040704001402530301640204001101060504040205070200802010
6402030200106006580120010080301156400640061568060040050161051407050804
0011004903011642400501278200190501504050104030190030301406540307010530
3015018020070050504040400200700506151008050504040400100805011406277212
3013016306113012002070010140612001050020120010600104006141008054020830
1400610504061300105040540208301104006102764010307070601653030161308008
0655040520080100040402047010530301613008803012402020040110620010080301
4020470105019103003012754104081050100053030150116403070165108016800401
0004005011301510700600124040060306506100805040055040500102600301164040
1040013068002001301504040203015032006001140406404002602014040012109504
0161008050116504015010700301151011102745062002080400400402030703040011
0130140203053030150102102030700204001002004008180200150510802001907011
5219018018070800510200700530620022030152190164001200405003013020504015
1080530200155013011540084005040102003400215070163010600505040550353050
6204005014020481461012732001090250630407040014025303016309803021615290
1040305018050108070800153020140040018030216152190156220025503305004020
4056080501504014001025004006530301400180020040110004002140530164015061
0080501050107003013050040627250102008012030140610030110451013053030161
6260201404010300103070506200410010130143090520200400803021652190180212
0040051030705016809030500402053050040802006001301406103016530301250406
1013066015030111020053014010080501010700301201070013016504030124020400
1100490163092400130165040150107003011510111027140103081050100053030161
0700115702400105100490504020010600520080100040680620070403061002705065

0781040513064051030708066001306405220045070405200314053010700113061504
0161008050114050670240010130405005303013010260108040530164015061008050
1050107003012694010307070601653030161300105040308070180010530301652851
0140530250603020108030215060702604004002501528305004020530301301026010
8040530164015061008050105010700301305004026840102087107705303015014030
7016110706020501040011050570414050017350550403023302010307030703140500
2010301505200908020010930150405702200170060080301100102301005010409103
0502030610302301100504064004030613011001040064030110108400801020105020
0122004010512002130110070016267200104100103003020103070530301501403070
1301100530501024001403080140830156602050405001573005050801020401900703
0110301200900501660150303051012030703503062020014081030120090050165506
0400104030202120030062040170910301200900501804017051014040050023030230
1100406108007026114061040050023030110040050023040203011005500702405004
0170510140530301540014018015400640470253030157005101081010501301100153
0062007010307051061600105651020010010307020040107003012061266501040301
9003014061003011045101305303016200802010700301400528022001000403015040
1524001801002003004030150406040300301210400110530301501804010512002130
1100400104016101081150130110040010401061010810107003011022004010512002
1301100700120304030153030151400150152200108040105120021318107003011030
1200400403012655064301600151080405200150301218901201030614001403090030
1103012006503015040405506320060010400610001930140561103061162008020501
0700301620065030110301400140309003015040405320060010165040150107003011
0306530301264401030707010406053030161530401908050113010100500630156200
7030122060404006014100805303012504061064006100019301220080201050408010
1000301504043002003015010240041005010430110805120020113026340109007030
1103070301656140590080854610101306800200130164001614060301510602002070
6061300140213015403070504010300250691081013064058030600140640510410150
1021404030701055070012130154507070803001010700301170050408002001301108
0140640016140603011080140530406501306550605700600140013040610100301108
3016513015301130530301262506403019003014055062008012030165701803001306
5306001306510807010213040610104001105013021005040402015010072001404016
1008050116504015010700301151011102614102001014030708010530301502030616
3040040010011405303011300630620080205040405504065040150404055040801680
3040060015020306400150102301405400131404702504040547025040501070030130
4004001001140530301130063066041003018620025150410164001501023014010200
4050211060107015010400164001320044058007027080200653030140302050404055
0408007021030704058007021503080080306020030120304002605010306020040301
5040302050161008301220103070156304005053030140011012030400259501040301
7030110307030800806700530301502030680020013014004608030800702240580070
2601503015303017080413063061300101404054030706540208301620304030153030

1514001640063013466143040010065303015070012405640758025850102008012030
1406100301103070150200905016150401410014002500612002901501030701000200
8011502200163011005465036400630133016720021403062575010200219030170405
3030165303015070012520010500205108040023010005301030100510805040402053
0301610013040455015065090010501070030130110054650364006301324061030 11
5030510019130163011005704016504015010700301665576131403080405504013010
3010013015504016220030080541025802001000802004001000150401301105040550
1805407091040305040610504060103080550402200300504080200550240201030400
2405303015013011004650330124006301930908014030802565010504064040400502
0501402030510130203070010805015201013040301530408400506200153016106064
0301202004001404051010026402022005040550102060510804006214003014020104
0011050152030405101501405102504053030110062554010307070601653030161300
1050405203040104006105303016406033016403070301108059602541764020103070
5180990153030150130110030140301504057060400610403065504020304030121008
1508506150103070203040301530506201010501163011001203040400630194020305
0070241005303015014051025040530301100625450104030190030124010307053030
1640550401301030100130116306400301400100301405103070240020140308015010
1502161502001104504015032006001410065303013010260108030400110050130115
0301406163011001630400110040013013014001003014020103070240020501404001
0607030530110053030130102601080304001100501203040150305007021405301025
0301630110070011060640470250403010101200601105025040130403011030120040
0403012535067032004005103016960210680021001053030165200105002018017080
0153058070180010801506081800200100530301800200100101070030117005040252
4010307070104060530301501164030701653030130102601080163040011006251506
2002030010130601503012005002015020306601503011030703080080670030530301
5014051108140500164006405303014053030110080400640301200700880630140564
0520011045040163200600501070030110301200400403012505063010070400402030
7030540011014020305303015010210203070020249501010040040301103070110088
0620070403012701400404001100309403030624840102087107705303016806200704
0504050560805011080503070801401080402010307081503130805032006005018031
2006001200101000306830110301170140040405316713051090613167150620070010
6402050405068064001050107003016247506403070400165062040040301404020403
0701402053030116200207001804040050401170018015012202006113013200804040
0806005018024650104005011005303016406100610960630151309030164001630903
0110307016900801824520010902506304070400140253030150140205010230800803
0116605040013061061004003030220010011680704005016812050301541007054102
1070030168070106150680701050113014040080020080140809050805800102008050
5304040080020080410065056604040050130210050405056404001003095016244501
0506084030110307011008806200704030121701400405200410020040010040301103
0706520041007060640301103070505670400406580010200805053016800200804006

1505660404004030140160503014040010030950140201030708150313024340103082
0068010005303015011640307016562007008180402060805011080140403070105303
0150116403070165303121400203011000302101040088120503015410070164077040
0130618062007040130610016306100400501130112006050564701640013050203065
0550620020700400604020501530301403070402060805011080404005050201611605
0301529600504052404008002007014010804020103070815031306242200102600506
3040704001402530301680620070403012505608050110805030708014010804020103
0708150313080505303150100030217001801200300706200530015702200150560805
0125090220040010131671506200700106402050405068064001050107003016241200
1090250630407040014025303015011640307016530301161004001680620070403012
4040010400114040400403060170014020103070815031308040204130611670800200
4006040050140400420015016140510307081503130802006130040061405504080012
0040050701301908014120015018020307003050040500200163011030706543062530
4630640130615430625430162001800400130157060613016080508030204001308062
0070403012505400660206505100720053046306403011030706570180020030140400
1050141200150403050103040120501030685054130615070800200104001430163016
2405064030704001304040050164030701053030162005916402030102071402030700
2006001301406103016530301250406104020504050120504052900706102030700806
2007040301240550102168001200400170015053167150820501050150563080070400
1308050530315010003028016050301404001003091700162394010307010300302025
3030150116403070165303011610040016524020900701054020830162140020301504
0402010307030750114064020103070530301400407050162002070016167553030140
0110116700600400400130656080504030900410080203070030708010504061644007
0400301200120080050562060404001306806200704025056820060618062007040250
5620604018050530315010003028016050301404001003091700162385064030701040
6100301550102105303014648203040065303014648140101001050115090050117031
2004001050114051030708150313080151003095018052001010001367820504001040
0847025040530308400130801510030950180237506403019003014052010306180530
3014648470400105040615644007040013080530301464820304005240044008011401
0801405103070815031308053030146481401010010130140400806005018053030146
4814010100101301180160010501130111010300505640400104001140401670060014
0050140203030810130650160812810200604006180620070402201604018050140020
0401001309301236401020871077053030165320045051030703013200303068062007
0403012505103070107003013050040505306181309011641200150120307001080505
4200210081505400306702620060013014061030165303012504061050205015054018
2001108053030110030600140504040020105015053030810130662001005500130500
5056080501250902200400104001100309403016235401030707010406053030150180
1001309301164077050162344010820020068010005303015018016180501802005300
1570220019022004004051016050504050630610501070030302334010308200680100
0530301640202630100400260201402402070060016105020306402050140101108061

0003030125303014020700600161013023240103070701040605303016601503015010
2168309040061610040040061620024005014020501401013058002007053030116307
0340013062315010504064030120030026561001304040205011640307016530301161
0040016402060805013016404100640400103001050140205002008164001804020305
0020084020616050230501020059400403012810650102164003012810530301501530
3014020200401500108504050564001805020059400170018050200591010400850562
2001004001306800108403011080160503011630740070180107001653010080010840
3015070205063016010622950620020700400104053070306015030305400110150102
1065507001252008010004030165503301103016704105303016200150301103015067
0410201030614020237016306202003004050402001060050406404270306165040610
1040085010202003004030116820504001306402040023701630652020030040504020
0106005504064054013065040610104008400120200300403011682050400130622840
1020871077053030150140204005070130530301130063068309040301504046080403
0140307010530301640205016600180405693016004005016200106004053081309013
0100104014001030150702050630160106520060013016110504301108022750620020
8040040040203070304001101301402030530301501021020307002068070301301005
0610080501017001402050630160106140570805050402002201140540500166015030
3070801504062001022040500114051080301002006010403016200406003015070205
0630160102264010820020068010005303016530301400408200506320010201030615
3030130102601080164513616200315501070030161650401501070030150122550643
0160015108040520015030121890120103061652006001301611050430110804053014
0701400928201030618020080120656400401080550104507040205040444002001050
4061670194006015014020501045070402064200101040084020506304001100105063
0171013063040010030150402002201550400803016530301450702002201550405305
1312006001640120083014360403016522008020653030130102605070490620010220
5108030140010030100510803014001004012008301200530030150702050630160102
2450640307040013040400501640307010530301640203020030065611010300162840
0501106070640203020010600656110103001652002040050110607064020305200206
5630140010030140201030702400202234010307052530301501802001060050401630
7080400140630102603015021650102016040301610401400103016501022001001301
6501043016303080200106005040404001008050114030100506100805010170014020
5063016010222210200100530301200905050113015303012009050104004057040165
0401501070030163066020030130610010104008163073076120080030161601230140
5400604040203021005040163060050107003013050040402040011014030655033011
6306004400501404002608401221401010040060409120090103011300105040104510
5303016550700121008301504051080168030400600114030165040150107003015303
0110458040550102110100024001501023014054001314047025040564006150107003
0113015108080304006001140651080168030400600114010806015030150102402081
0301008301221400203014057040307501650102007005040650102003002405010102
5030153030150070280548165401601503015012022021608200101000213001050401

0072001053030165401101003014061040510068016100400150107003016165040150
1070030150405062006006010611050430151108301162008020501070030305010721
9211007030141043005303015018054001314047025040530301540705030421050406
5501025101504040515010400140203010101200601105023060218200640130170320
0400530301103016200401301108001006520101304030164014010003015040303090
0108053030140510400110501130150620090050103052174010208710770530301501
1640307018040015010230140204001314047025040404003030750180216501024064
7040203055015019103003014001696001670240040013065801204030603011080163
0600411650401501070030115101110215412703012806200530301653030140018002
0040110004002156080501020030010504060150301504062144154030160102306405
0535260880405001301257703015400700600153030110040015303010100170016213
4160803012810130530301630605030165002008301203051061510804608010308002
0013011080107060103064001700162124019060030143016565230100108014010307
0530301453001061105043015110830110805306100202370105040601503015040621
1506200300840051030140205011640307016530301161004001610100400150403051
0307040500113080200600140050406510307040500113080501040610108030370400
5040804001464704040110110805303011620020700162102160830170102006053030
1616260201404021090504053020103061209200150301217007015010065506085200
6001301108065506081105043011080150400115022003061001050404055040620810
0130600504052006001301108053014061105043011080150400115022003061001050
4060150301504080120020700430016140201214020200207002053030116200207001
8040202060150404040010800100170018020740108200200680100053030150153030
1162008010004006016601503018001801500108504016800108014050020650103018
0030150403053021005040404005020501640201451402056200207001640120083012
0070300403014507053030116200207001804001802007050404040080080117001804
0202200504013080080161000400240050181503402010307060103020521230130110
3061110506100400161061004003014173012001060050180164674006530301540307
0102001060050401630708040014063830110803014313061006608013065008020013
0803830150510808002008050408040014063070402005300138301204211007030141
0430053030150116403070165303011610040016401200830143604030110200800185
3051502010403050403020307005304012052003007020304004040070320017001570
2606383011080401101550013050040110908043104030504080104530150402006010
4006011408038301103015200407030127040040400504080404005040117001802060
5061510049061401109050405104808056012005040107001526118001020040402050
4050120504080530840104530110003021010400840206062001610030840013061045
3015040200601040060114080404002009081501805303052004070301638301164040
0162035010506084030128105303015011650608165203054003011030140201041012
1610030400130653030130102601080161008050162025010100400403017040530301
5011640307016530301161004001640201030701044007011403050040251030701644
0070180402010307010440070150408090190100400140200830164012008301200530

0301240120083012005300301201501040301900301103070130150164701308016540
0501501805303050104301506201065504008050620400130104008405630400110062
0040108200200680100053030150180165400501501801995010200801203011732030
7002040563040010018040206304001100501805108040206304001100101040084012
0083014360403014507040563040011004001306304001003015040430015504008030
1640206320060015001085040405632006001640564040080100500500108405630400
1001619850104400704030128101305303015011644007040013064020506304001100
1050107003015303013010260108016304001100619750683080400402030703053030
1161004001615216215040400610230116400161010040015040200230150203061520
0659005040400610230116400140050122002301601030638301660150303040010100
1640105301005305130150702050630160101965064030704004040050164050013012
6015030130164015040110010200801630201400304012083011030115216304400630
9123012402050102402030164011630201400130619550610040010405307030601503
0305400110153030150102102030700201562200100400130805303014648203040043
1604030110805068020170404005016505620030012400130630103030110301401109
0301164040014050020038030150404660130191060030150408001021301910600301
4020305010240010104008162200300161630206402030530301240020140161000400
2165056200300125013018040205070180706402010307021400804020608050150650
1400600400404005020402050153030140307050530601230404005016402030601230
5054020101605010301500802003014011090301530103040203030811945064300200
1040530703010216504061030610301621034006010308050170417001701430156704
2103121020010010501801050701041270203016017001619350620020300400402030
7030640201451401030705303011620022040030654703011630402040030620060703
0140202410200101306200601030140202530301410200102006001401101504054708
0200806010307061180010200405012050406540901030802005300301402050404530
0504080501100200803016104530150404001501026601503030104550120010030151
0803075011070030150180040200200530019250640307040040400502050140203020
0106001640690400501653020010600658012001060070694005040805010206040401
7095104805506100109105010700301103070620060014011015040547080200806010
3070611800102004040205040501205040804001464704014011011915061004004004
0203070304020302100504050107003011030702400201402040110903014020103070
2400201650401501070030115101110190401082002006801000530301501510307040
5001130804055010283090180140500161180503906405040801600504080189401030
7070104060530301501550630421050107003011030705405001140501805704060140
4702530425040801885010100400403011030701100880620070403012501022001001
3016501043016303051090630112001060020200400501400640301402048120080081
7001402010307024002018750610040040040203070302123013011030611105110890
1901003011080402030618640103012170070530802030700470210440070150408054
0820064020220050408010806004002030700501608125103011416806200704030127
0124001801030051060015040530108070504080105005013012105005013016427030

1242703016200830122008301103040010030110809019010030140201030702400201
6504015010700301151011101855061004004030140520103061616100490501070030
1201030616012301501086120080030161601230110805010200219030161645170170
0140545702506806403016512073011040016513090301401100162110020030110806
5010301016030163010260301502165010201604030161040140010301610220010030
1106700528103070301403011040016501010250301621400203016520101304030162
0060013014061030165303012504015040200230150203062200100040301610020030
0403013021004020563616306400501200230160103018441070210011003001080302
1400203011080168030400600150107003015016100830122140020301307505303015
0122030700183200150301103070405200290114080520080100040301221700703016
1045301253013080030116200400300150107003012010306118240103012170070405
3064051020710130654011010030140610530301405403020101306200150301130140
5506921080506302011014020103061130103010015040500525062004003001062140
0203015040530301307501140506404002010501070030150118140108200200680100
0530301501510307040500113080417013061000122001010002009800150408053030
1200101000305230511406200107506003014083064043016540010403014020103070
4020081405011805064270400511014040050205015303016200203001640201501007
2001404001210950401630201650401501070030115101110179506301007010130405
8010407040202409014506170413017040601013014021007050101070030130500402
0162008020501070030130500406178506440051013061101030050630100701013040
5612150120630611501215103070150108030114070240050302163011005303013075
0114016702400140530301010017001617750640307040013014053030110307016306
1004005016130088030166603012402020040110140501176501024064704020305501
5019103003014001696001670240040013061210913013088002001301108014040163
0206015030115101110175200150301504050103200160024051406405103070400120
0608405301407015303014051020010203070020150401620024001402040550401200
2400508052002015030501630167024001501070030130110061742126013014052400
7091004006217007030116120061670240015010700301501401670240015010700301 1
2002400700117321700703014104300530301501617010403530305610030150121700
7030150620010700116403090050107003011020010630653030128430011650401501
0700301653030128204055062810141450153030150645040700600400105040601503
0150406172506301007010406100304001101308002001301614060301501022006006
0403012186030168110200301801020090400652143020504015108050026154006404
7028002001301521108180140504014060301504053030130750114066015030170805
0101402200823011080102003400104003012030803016200155030163010303018013
0400600168002001301640016140603011003060010805011714010820030150408200
3016513015301130481653014020530161705062009005010405130621700703014055
0708080600101301510805010430160016950107040316015030165201013040301653
0301550703040510307020103061200180204056164001406162008020501070030150
1168401082003012164003011501640510307026400120103061801650102616830901

6162140050107003011301167506507013030140550703010653030140550703010201
0306121400203011080601503030515010214047025040104530164001501023015040
1503075011405064040020105010700301501166401030702002013005303015018012
0010600706940050406140528069105015103070815031308020040400701614001023
0138504080530301200101703005040562004030161809030150116550644005403014
0520103061654082006405220050404001630904051030702010306116450670312005
1030115016530301501163011005210904040540021901170015010700301163501020
0219030120030026400120040500301660805013016301640130150409010050670633
0168066003015040103002402050630250306162506200703004001305020306110813
0240016401530301301026010803040010010504030163061004001306161501020021
9030170405303015015130903016200290301216501070400601165040150107003011
5101110160506200802040013061030162002030016402020020700110506200207001
8015950640307040016506204004030140402040307010654020830162140020301402
0403070106402010207106150400110140201030706304001040205040130660200402
0108015030602001140201585064400540040203070306402010307010400407050404
0013061050630060016405630060040013080405504016403090050107003011301538
4020103070601503030506201013010305200930040205636163068040400502014050
0108640120083014360403012009300205363068040032006005001085040615750630
4070400140703080110002530301140620220050401008303055016401200830143604
0301200930020536306804003200600500108504061562001041001030030201030705
3030150117010403530301402024001101650620400140501014001200106003011610
0240060180151030640655536302030615550102004004040301504050506204001308
0202200504010083011545064030701040561008301506404002010304055040110010
2008050164051502150680200701014020550680200701021400203014051501040015
0107003011535010403019003015040301700120501403070301504020131404702504
0405165140070240015010306800702530210070214002405800702140640540030210
0702140024005011406204003021001670240014051013020221400203011640061501
0700301400104001501030615250630407010140703080110002530301140640522005
0401008301550150640307010302140020301164006150107003015016520093004020
5636163068040400502014050010864012008301436040301200930020536306801518
0020040053021002050103065030801406030110802053623010040010200504100151
4010820080620030601503012530301501402050140101701080010305303015012014
0653030110455010700301103070130152001022030400501205016510210070103070
2301005010504040306602003017024001050404030705030130115103070400502010
4003015302100301150307031406141053004020103070306602003015062010660150
3011030701453001650620400301960654014020150307032030700206150401010040
0604091200901030113001050401045102200100040301610020030040301530303010
0151030701650120104003014054003021005070405130614060150301504015806030
1306100106014950630407010165012014070506301604001306404002602014040203
0640026020140153040030600410054012030400148506304070400140703080110002

5303011406530301504054507054153004040020504040403090015040653030140140
3070140400501130100102001905061146516501209126013016261007010610018601
6301070140601640105120021501506306100400401147506903060040530508506402
0301407014020306150301407011503064020220061502200656530301108015050631
8400130100146506421705305085065100029053030150405060815040653030151000
2901454010307030170104060301656530301405201080201060801001100300108040
5140501801630640050161644005141008052404005040114030500402165040150180
1445064030604053050850640550404815010210020080501304052200504050610250
3011040061140610601070610606401040061140691260130162610070106100186016
3010701406016401051200211030130750114061501030130750114065303012150401
1630610014350102020030040301504050120140618010508401051200215304030230
1001644005400102001905061146516506201630110061425063040701016501201407
0506301604001306404002602014040203064002602014015304003060041005401203
0400141506403060405305085061481615301100186016301070140601640105120021
2010121530162053014270501630110010470250405064270400140510502303011007
0014006403012610070102008008700114530040400502040114050640306040404005
0161301504006404001308050104301402030108099015303015011050211026100701
0651050240105120021152109066139501040301703012200304004030601301100403
0601522005303011007001138501083019030150403052006001301108055016110504
3011080515010809901410030656080505806050401301401051200215304050702100
0200105040613740102083017107703014005012050140510207106540208301621400
2030140540307010620400110140510307063040010405504013066020040510805007
0216150220013640108200301216400301400501205011501030702400615020601504
0150200162030540306040540115040010200700504062030501040306040150307031
6150220013540103070301701040603014005012050115040302100400150220030107
0140601640010230150404701610030140105120021708020010700161342001090403
0160102620015030121700701030152009800140500130103010057040040180200802
0504063011002006001301406103016530301240550405040150404001200405003015
0405305110072001615040114302170053070312200401051200213011007001613346
3603017020200301650108020170301650108010193030104001021200595013010701
4060164010512002110301150457061030904040105120021401100405040167006004
0016150401660150303052150040400102301150307037001613250104030190030110
4570301501013030110010400102007005040630110014014016015030302030701310
5013011005054040018040014030202522004010512002110304002170016131506200
9050104051306570180300157080504001306304701550403021001013061101030060
8050507060805010734001301406101610040016130501040301703011030704020400
3080080105016402010307040040705011040030110400407050162002070013010101
2006011050211012950620060160030140520103061805220080201050406525065040
6102010306154006130400100855063040010214002030140515010400150107003011
2820010905013061030650405303015040203014040307030150402013107003014702

4051651400702400150103061045301655303011045501301004054003040702400400
1040081020019050301130646510301205070108002004005030612740108330121890
1507030160400130612001070050612001030021008301220150306020011501126506
5010061040610030400110130115010241004052630100400521300400405306100305
0040405302100504050107003013011002030700205101150104001400615303011504
0302010130630506403070101305010700301301100612550620108050205303061001
0140501801200401108001001700168002001301640016140603017010421245064005
0110053030208002001301640016140603011080140530302550182601430653030170
0600400116301100612340103070706016530301501530301536405008016306400140
5010180220010004030161002003004030153030612240109007021700705200600130
1108040530610760011050430110804053050108010160013011563060041050140530
5012014020103061152120060010801070606540601151080200207001050153030143
1604070504050404040309001504061215068030400600105108016501201401080540
1101003014061040550102402081053030180405306100305004050640307010130501
0700301301100203070020214002030150630400104056103001030704651030140060
1030102001905030140030110061030010307010200190503014006010304651030140
0301100612050650781040513064051030708066001306522004507052003153080506
0840656530305536403060150401030211950101004190404005020501402050152002
1640015301004051050140120304001020019050611465501205040130155033013060
0410503016301100611820010902506304070400140253030150153030145070564340
0200106005040402060805013016404100400140651207301164001651309030116401
0100161172001041001030030201030705303015015200401253030110400110104008
1688090161680701801008301405305010240014047025040405608050145070504014
6081200180204020501401014702504040205064200106302140020301305150402001
0500204611630102603011660308004100805014010130122008020301304240010504
0630210050401060640301060140204020306602001630160400501506410200400401
1152001090501306103065040530301506450404020301406800200130164001614060
3012030405305303015014030704004030111420010410010300302010307053030150
1403070400403011530500406115504020010600240015015605050615101504060060
5050140113401090070301308008030167005303016130010504054004082002904006
0010530301640202200504020010600504040201030703075010501501020200300403
0113062140020301305150401620080205010700301461014011240103012170070501
0200801203030616704060161502009005011630610061507012001630610040013016
5040150107003011510111011150640307010165012063020010600530301450705040
5265004030161004001616504014055016306110506403070101650120630405608050
1521620030014060102306100130600504052006001301108053014051200400300150
4030164030704100306405708050101306405200800101405064030704001065303015
0700121301481504052501020018002405140653676200403015010252506100200801
0140140550405064030704001080200802040013080550400805085014050113061001
0104008481504050140307010140640062001406400620015302122501020304030110

3070307501140620086030160150301506403070101620080205010911030030150203
0650140103060200802014065014010306020304010307050109110300301630400400
1401670240016109506403070101304055012040520065900120065303012140020214
0020301164006150107003015040100102008070025040570401403010049040530301
4507050403066020040513140306108506504061013040520050020130240550401001
0200805700250145701645170140302061107506100601803011301152200802010140
6400150102400110120103011503075014100306106501020080120303064705303015
0180301201040630102002365306020065400201013040653030164705012050401055
0105040640303010200300261045651041050102140301100490405303015070012202
3010010307053075055018030102002330164705012050403010010450630407010140
2200109025303016200407010501217007030150405878740265140655060803012004
0701063040548146101620200300150107003015040651108103070601503019020081
4055043400306103501040301900301240103070530301640510410140040410014021
4215650404001050306102501010041904040050205014006403011650404008060150
3015064504059030160053030145070520060013012001430140203040050120501301
0010150105040640404005020501402050140101524020200401101406010230100405
2008020230370301405263010010801622003001615010907061507040601630110016
7040601656100240201501040011401670060020069301402010068015070802006402
0100150010401507006001700161005064030190040400501654702504030370301404
0070060040014050040015010230121060640402013410030699501050406404040050
2050130210050405303011102501506304001004004030803010040570401403011004
9040100830165651200614025062008020106150103070307501140250406501630110
0530301307501140216504014053030101001700169850105402170070501020080120
3030628001000103070280010002161280541270504013001050401030705308008050
4053030130750105011101000253030130750114021620080201050140560805015216
2004003001140601029750102008012030110307053030155070308052162008020168
0200701404051314030801620080205010700301103070506840080400601030210050
4016501206405704014030100490405303014507050402140020405131403069650650
4061014013010301008040520080202530301405507030302803010001502630100163
0110069550630400100400110010200806404002700201100102008080404002002204
0060140206080501106540013014023066020040201314030208016041003018620025
1504101640015010230140102004050211060107015010400163060200301254702504
0150108010062140020301106064015010400141003069450620090501040513062170
0703014055070808060010130805200600130121105043015110830116200400300150
1070030120103061935063040704001407030801100025303011406217007030143001
1030150642001054011010030140610611050430151108301108010760013014020504
0203070030708010504017314080800702250620080204006214002030180070225065
0406400801405312006001402010307040200840656405641804001020016014020640
0110501650164703016405001301240510307050620051900400405200110450404020
5040110010200805063200600400640206080501506304001004001306540400501405

0092506453004004040050164040020020010014050040202001104504040206080501
5063200600400130640201404506208060400130402010015001040150700600170016
9150680020070404040050164020504013010301001301404001030640040500512073
0116400165130903011640101001615060860150303016306100650102016040301610
4014001030161022001003011070061501608150104301630126530301130150642704
0013030101012006011050210015001040150700600170016905064301600151080405
5503301218901201030614001830190301163040706165040150107003016895064301
6001510804052001503012189012010306180540010109600524009181651010602602
0504010302885064030704001301405303011030705063061004004015457053030180
3060010503080145705303014507040400700600400130100546470401401101130120
0150301150604040050301630110068750626020101404040530301066405104101400
2400201404040530301068013010301001504050052162004003001030530301450705
0401700550630610010405004051041012214002030150624002010501070030303010
6808650650900101301405501610501401130121400203015064030701013050610401
4055040685506503070101406506200601014040307010530301501506403070101306
1845063010070400130801402022004507052402063181030402010307053030184008
0140240550650048400116301100800702103014058007021306001700161504011630
1100165040150107003011610030170016835064030701040565630100701404702504
0550680200810405005303014013020506704060104055040100102008050120410064
0203016504061050150670409400801825063040704001407030801100025303011406
5303015103006005040925101403015504050161403015504032006001080100100300
1014030155040501620015501301550402003804001014030520013830150405016566
0100430016152001383012010580203070047025040402026301004006010040500815
0630100704004020307030540011014020102001061040064030153030110108102030
7002015800702256220080011503010080805064040020400404005020140320060040
5303016151080404001200141801608050404003040010070016795063070801016412
0140615682700801008301240010350130116301100151080510300130540306040500
2008301101006040013068002001301200105004003063070013052001002155013061
0010550130110078506440054030530301130050115016150103070521300400200100
2301501105140150305010210202200150307041163011007750102009001503012006
0400155063070100180120080905200100215501306100105501301100155063014015
0305010210202200150307041163011007650620040640014016307080180203070050
1025016702002021306800200180130520010021550130610010550130110010514015
0305010210202200150307041163011007550103051330150405062015015303012700
6701301100167515070060040040011630110052001002168270040050140202004011
0530301501540610030106064030110070016745010100400403030590070640615803
0600140615104105010214030130120501515030703807350101060160054200100165
0620405301503010080400260301108040205040164400701501070030140400403070
4100306725010200601600301504040400502030540040820064020103070530301308
0080130630802030700470250404040010306400405007150610040040040203070305

1080140162002070016561002402015010400114016700600200693014020100680150
7080200640201001500104015070060017001670506507810405130640510307080660
0130640522004507040520031405308018301903040706200600130140610301653030
1250401504050101021903016102001905030161641550107003016165040150107003
0150169506440070101650120616907014022030700100830120010100025010102503
0150630400100106530301400110125062008020101650120405501220307005303015
0402800100021612655020604030165307003014051030704002200800640400301601
4040203050180120090401692512001060065107003012105041651070030150630424
0060400130110015309026156047061540680615101500100615301002504080020013
0140025040014040150303200600102022001503070418048164017091030702002905
0503010606401104040030100700166850104608040800200130110801650070400130
6530301100720050401622003001616302040522003004060150130204030704100150
1070520030070140050500155040400200380501802003830120190702220080011503
0100805406100301060640101006040060170016675061006080101650120140214060
3015040173200164030900501070030110307015030750180405303010100107003012
0010100013061001640309005010700301304280665010506084030141075060640201
1019600402030200801000505981630610061436021230116306004161410002004040
0103005001081550401630208051020010030157005163060041150301007001665506
4030900104056080501165012050203061506403090014064020150100720014040012
1095040163020106306030165040301402010307015030750164014010003014020103
0701503030900664506200203004004020307030402040064047025040402015050070
2405006350620090050400404005016510070190301402040070060018052005353030
1102005010400820305040650503010606401104040030100700166240108200301216
4003016555014020103070214008040201020012450704020302001060040203070040
2060805011630400100180402010200121030116264008030370301402070016004001
2402060805014040040309004020501406100110540610030106064030110070016615
0644005400402030703050110020080301621400203011060640150104001700166050
6200203004004020307030203070047025040402050701506807040500595064030190
0404005016547025040303703014040070060040014050053010305010702200110606
4015047016700165850620090050400404005016506702008030115010020010001640
2015010350180200823014020215010020080700165740109007040202200504013024
0203070010806402016050506108400601064020150215068270010217007030166040
2050640660105067020080301504040201501035070016565062009050104051306304
7015504070060061013065701803001550403021001013061101030060805050706080
5010734001301406101610040016555010403017030110307040204003080080105016
4020103070400407050110400301104004070501620020700130101012006011050211
0545067031200510301405501640522006100130404055015065090010501070030153
5010703001600301103070130152001022030155016513090301620029030121650107
0400601652506301007040013080121400203015063040040040040050164020608050 1
5066050400620023012601503015062004014001515010702012003017040167020200

1651207301164001651309030116401010016505064030704004040050161008301164
0400204006309123012100830116602304001306495061004001801011016130103010
0150405001040011012162004003004001306522008012030611650620400130640207
0401403011004904040030750114021650401648506252001801011016402045702806
1104570216806164020103070400407050110400301104004070501620020700130101
0120060110502110475064301600151080405200150301218901201030611504001101
2162700206162008020501070030164650650781040513064051030708066001308010
1457024005040801045105040402050104001101401801701040315504016925115030
1004540108200301216400301655501510307021400804001403020522005040404110
1003040080445010810301701400406200100400604080020013011080402030664708
0070230402080070216925115030100651080150120140401405320060018015507050
1910300301140530718043501040301900301504015062040080520033003015700512
2001004001306140400103005001081410002001550401302065503301203676400501
5020601404111015030100642501020080120301504050120620022040060161021601
0302113011643608040413016436015201013040303015030100700164150640400204
0040400502014065064240014040307016800200130164001614060301210100040307
0110501402030301001403013011004051014060124051250114030804051014060124
0510250140411103011004040102083014010307030140050120501150400403070140
1301150304030701302050182601630110039501010041904040050205011306514060
1210506102501301100805201013040301103070405800200704050015302014060130
1404140307063850640307040013014040307011050130110020306041005062044082
8260505085061404301208060106151080460801050401510803070340011630110058
0103060080020013011080307013105015201013040303020220030110070016374010
3070103003020265640016140607026050516608014060301103011064006014050017
0104038002001301108014040203010030600107003016536506703200400510301405
0040201010810405004020400104010405004020110818014001640140400502065303
0125062008020400801020355062006016003014052010306180020013011080506460
8010630906105015253030120040114050670910010651001500104047025040530301
4570506800100501050107003013450101006018030113015230800101406120010500
2052104510612001050020523080010130500401700525303014120011700140506306
1001080162008020501070030114016405220050401008301550150640307010801650
4015010700301140180151006801408058006702140130500402200800105011010840
0601013053030150133506430160015108040565200594031671151080405306152130
0400405216400163021005040150100720010700301170051630110011007200520040
5005040155040161007200140302020015501301154008400504010200340040015034
0530501400183019030116304070616504015010700301200300263250102008012030
3040047015200138301660150301154610061040030120015030116100400180163070
8040050306163070804004030501803150101004190404005020501530301506450404
0201453001670416530500405040520066021640018015042701030701503075014040
2102001080404005020501630506403070400404005016141450153030163070340013

0804020301100720040012004050030150405232006001801401406030150403075016
1502140603016130012008080020013014020303070310700301295061004004004020
3070304020302100504050107003016402010030600107003014020220016427016015
0301151011102820010410010300302010307053030150140520019021640570406022
5700305303011300630616401100405103070403090011700165108016300404053018
0011403020405200190218096001010020023014120102750102008012030129108405
3030164006403012007008100701690301504040550170011080405702190150630703
1010020026470200640014030900510801406030150402109020612650670320010130
4058010407040202409025506200902101304001403090010804052020040064052006
5025303012570053068140400180011403080120015041006400601107003013050040
2040530500402450104400540165012014064054002001340040082200140801045301
2530130800301162004003001501070030120103061235065407010405501101000910
8040544010640521075400601053030122506107540060405085014050140207040150
1163011004055010911030010301163060017001615040116301100165040150107003
0116100301700162150640307010130502030615806030140540550113011580603015
0401140205040650116301100601503015040114020165040140530301010017001620
5062007030010130502030650646080403014054055011301195068309040508501405
0116301100800200130110801646080400130405303010100170016185062700201016
5012014024010301217007040530618002004053030140541780800200404052630100
1080175062007030010140640560805011301506704600101406165040150107003016
5303015067041600101650105040640240514062006001301406103012653030121504
0130610010504060150301504061540109007021700704053065613001000405200190
2110307064057040601030706405263010010307053030140400600145065040610130
4052007005040040304014054002007005011405103070166016200802050107003015
0113506830804030140520103061640522005040104510307020103061125065010061
0405520060013012620302100504030750114062010301307501140250650406105010
7003016115061008050104051501007200140406513090301506401010010621010003
0125065040610501070030110501010040040303010455108021020013021400203012
0307009403018401082003015040820030153030140602750103018003011306405103
0702680010004030120010100040510307040040705015010700301912009064010100
4006040301912009030115045155010704006050201101642705020110145010430140
6102030140340108200301504082003012501040301703012200530304408301140108
200301504082003015303014060 2”

You might use this big number calculator to test it yourself: goodcalculators.com/big-number-calculator/

6.1.6.3 Code 3 big number

The “230585” digits length coding number of the Code 3 of the Evidence 6.1.6 is printed here:

“6236148899062351423009014274162347421645009062331423662321429062311422047771306230727027350096622920590106350096622810870211615009662277304150090622624120477713062251310735807662245076447062231656662221366111306221104904023906220508465362193711012522006218824776125106141621740837131580262164107156175222254150621592666490700142617621452566340470262136446124906212774113349137621151641775237621077411334913762095324177316208388171113062076341138151620626525220062057571615262041982326203267457916202122566120457916201280126620021112011081837619949184741830619897732741612619768690142799016574161964437062022036195217732243167619461015261939726022861921039021969561914622015529761901270907911371618915110422218011060071618893114906187145155576186131110509441618518666251618493412264761839390842516182640765180618189721137416180825780466179325510141510561153987913261788601201935161773976176201120766571540617521130692540617492686617320114059636516172596146515406171596146516170374647418616911529761686425161672041226476166271266165119108090486164101638590916163119103090122616250717667482616110796321428656616040741226476159407416158407615784276647247516156331904113461553399041772702150112615434884140626153349750110626152110237193516151114720561502217831614910117626148113768614781152361462155019056711509661452158119056711501706144187247110314230476661433625222536142810912766614136411931376140638103212106139811032474702613820791012075012510131656610108966952888149061312445424712462613724881045675611539879151613624850045679669598251906574543690307791516135186647566442915717313995358206612332248476134984494176903245441479178047613315542296613225917944666902966131988564182506574543690307791807061303141494181513161292415090247753962511374876128505111908103357561273357541226476126335759014452612570974484315161241061846123701946122625728156612118929146570905161202206653150716119452722516126118549241761175011071516126116130702776115757416126114314222415161131521206516112105919351516111150704119314061102031407416109292228302610820090193730610773074122210330261061607166101610597767521216104186121020415556115398791326103231171264540610255611990193781134610113267712610018022160995104976098128322247609722316807826096271361110516095271361110131609494050407609311259517416092233140933609131450558716090592222167486089655111132486088705111491122608711411123960869983239608597461377160841490222119182608378905081087260821404722210041608173702107608085560791020182607814220714140432607742016590129434760764477642674160755421376074452722741607344232137316072134025214916071848668157607079161516069614702761251070476068400465606716172860661527632904860653404656064161200606351790901226062740200516061598951730476060443702293605913207021076058179691376057153799247155168462813605618366156662967521 1

605540862370160541024550112260537190603110605234901191046051519295162 6
050734719660492447103860485947138604713177021076046407022936045437702 3
776044821437604314525115560424171024546530779760411761026760403265103 2
551098791907154060396477011817603834770146160371107710569012176036307 1
006035208412264760342085491116033148816032846148603119035153716030132 1
570518160293772456146602813115314805181602726901937811346026404747602 5
677083845760246770820131602346365160228790725602110551016222412846020 1
852214171160191361261637601813778782318466017459544500111466016961356 7
193133076610076619601517117112722210601425251032424702516013441110247 2
601271521132513601121112011012653760104917163132516009107212226312115 3
844394170248600831121222617134620743941702193122600739822251600677375 2
221551726005176968086004689010167916003443710412600244921137915566001 6
890576740704416000146110124159997722218011060071599821174020075090355 9
972707021075996643487599557077599432059931161615154059925992515991254 8
046686759903064469032598935115549059889604519210005987477110103247598 6
542110674759857501101324759841130110644112161125983105322659823013975 9
819273659804014609659792191309659781046965703159771165890597610161765 9
751667662059747990107037160315973108090321207510059726613090570597164 2
525305970148146596997676620596813475224223559671222591785966782091207 0
651596511981084359649655116232596321020710192659624379011910459613837 9
645631540596026328214074159594424775958920909905957961600511000595634 0
346595570047239150566630141325954520111440595325150118859523518047475 9
519930474759501567307415949142222101705948221121392155594735415946351 0
096594575114759442001665659431951101103859423041101138594134137111903 5
121594050244256593933527811056593865015362908135937185419073059367308 0
193127059359891167119050515934634124593334141226475932347138593110344 4
905930573511132592967262907259281132903077913259275564065926945224223 5
592522471181592488601706592351131717592210026115659213482223115159202 6
312475028881490613454755611539879151591934977381987731554257054057422 7
537791515918319310501107210385399035741591793125681135132135197475916 3
152292464111051591518011645701591414711012825913646102530591236131659 1
115793591024211011385909186121020475561153987913259088177562759071424 3
141725906788307791325905133313821553107085904162317512159031111201127 0
259025617023775901166471075900513201111589930377120751425898224805195 0
565897507419071565896341146589570990226589411102074284179048589350741 4
119858922817281226589111742841790122589026633222413371193171158895142 3
811575888143696415375887444103270858865142381157588585113270258842467 8
413325083558831216263110588289433290987911675881104915529847588091742 5
113825270858791651908141190708587815144724770858778949879190782517915 1
587642985121315875560906258747187117509612010465873108631890226587220 1

1055659075058711216263110587017012043551586942932458683864235867166412
2647586617012043542351515865117875107417061415405864921579654058631457
6624712096515862148784118311025132515861128281131463115840702586055151
4503277324758599558788791585888276646585738642358561234122647585512312
0315423515158542322321421565658531020865852674966796032585192611471027
0858506121421104597027915849329465848657662783212201904903156584795564
1226415405846955641226475845107512645475844955619258436112031557584217
0120435515841636412065840483262583910791705758389711783251583724230141
3011190583620416775074158353012241220411931711583412075444119054058331
1723397085832683242708583115518070858307401327025829232202663115132757
4758286205115030112058272619203211515826116314158252533701381147582491
2104311011475823133214206140582215116147582110154012058201206017101241
1171058192702961665658185907021375817260702107581616124158157432011115
8141409411905405813518897085812730927085811729132708581095020970858099
3075213580850092708580741622770858066632427085805908351708580450960270
8580367067708580267513070858016264317025800319336456757997057115798120
7116766265797100783457963857662057951075351766135251805794735125793245
2579261690271290565791727404782579025890512578910117578810331295787687
4805786909129578511965845784401103255154057839372145525782125411931270
5781246419107151578055630170254057793884475405778275133540577738973514
4905776735310119057753064119353057744072615773345275772259401577130517
8905770925301170576913255751576844512553157679201757661502490485765473
2130475764504355315763152190425762961685930757614713524447576015295157
5945213257588157385325497027256116575791790990451925756502222415755927
9045113057543076216712017757538815891315752521202217120718168190485751
8815921315750965570757491019901225748220120926155747140411931330565746
2638640478257452589051257442687357433234796804574219750761038574181581
0761316574015312635057395913241731305492573892012030775090515737848371
0166138657361422625221157351455885734150207540573317680257322634728757
3113902224146573043751415035210572910195640641708572825235442076170157
2711652242235572630445782572524215151725724866225702450138572385510127
1703572232590340532025721976300572095766138571932187857183206835657172
4275857161636755715715095714360798571313015665712604470500113321522054
4412711160563137741062525711442074117013011701398775057101001373293575
1903255631171143245156565709613951563132910847103853920257087280222901
1570772437103796236315706111885705605105570413112357031296605157027743
2131160893570142416531056570072446573556997226931789656981881156971168
9932569650437207968723156951139659356944411305693336471985156922645516
7676569113551132894569092937327907405656895527123156515688193460568746
0117883568650841832901455685162651605684310133246119568341228716056829

4101160568146415616056801984756794137356785110321537156772665154056762
6651567512069545741567410518412056735571105672162815229356718827664656
7035631298751407085669882766465668339111171923575667882766465666249707
7052566559651043765165756647718111856631429619063151566288276646566117
0349071131566013422423156706565988276646565815167576637565722531567065
6568827664656553704747656544417026505756536890107037970315652372103171
0930411975651117875104141197565088276646564968241288134227796160564845
5205647502103215371564688276646564539224043556441863044156431205019023
9564210541908407156418827664656403762307705639892567540563812810571563
7882766465636231564122647563523186563443456415633901321708563259067708
5631683132708563050913078256292075369256289517971562792169256263818935
6255519895624241753562335176856228277475751068653903119064456217915171
6651663115132757475620103207411701301170132571051561944761787361708306
3658261085618641572529721407642515617567181351481019656161382272221019
2756153077542135479372229837356144983821301381085256135672007711907170
6515612221504247212885902685176916001745131565611233971716115406117085
6107977351565670273091155111560919351096131560810357718296232560771531
6885905175606518471368859068155106560511712011166967155765604463374019
6266312631109653056034255829943625602473105518287750500662325601560139
5725390731525600527371115026431664422992559927846718115110151191559872
0505715775398315255976943556677851213155963085771819056843551559534710
6918142152652559430748522421337552559330318123949734514490193781525592
9673218070240906819311041135559148738511103077501015590598951107951835
5891568102057154055881101009014430715587746305119381558612750475405585
1275047558446941417075405583452722106558213037194111558123276622241558
0194192917557941256956557830190146557774214327025155763868190511350557
5268766265574115620841557310567662055728371362557114046632515570681615
1540556935655335778255683621181615155677533161762831556610261414255653
0719511019332556480714443766193635563831766222415562213315155613516176
6193146556037743111955593717465558323302782555718756621015556873231932
2432555510812651110365425554101616381193815553113223201375552187582013
1555113564254736116631151329864755509253011705549132556515548837747313
2515547595179426511352515022432554637190680554583524811655441170135612
0751215543542456645121554220145341855419558772775540150211014567755392
1116970765538251907070138553736090170415536374120553555745490553414110
2325533270482431905055321211755451150301120553156296155302535357552934
1702137552820770110755273775155265629303215471132222631504731190353119
0668407705717086620674239410401839079118222945441479161337103987913245
4414791660307820535325191544710632282102154475525570535116552456250552
3130037512315522360412264755213601965520533136327065155197162683270651

2115518689207540551726813254055161150540551530411053054055143041106105
5133103005655121713715511135493715651551022511295405509460354555508316
1185507957235509550629113096960550528012103921105504340567668305503388
9035078255023732585501158054037550028924754992945395498302228549710311
4054967751711549525812866651661754205101781111661244188109028155147119
1101661114644141571649567041388661029059786366910901468103290106886310
5015014651140382906704138817048350980511402931013147213079190111104123
1101104090655467115022251549410320741170130117013257105154932278571737
9132549231312211357740519561905491491302143732740625054902974064134261
1703112971013425254898653367477731032683565488827801095701127548768103
9551548617112619647859966548584209260202411102995484671786113236311279
6712025483843468382221019275482567128790505154811411532630515101366515
4806411371302505254791041382636115117547817195241722554771713210114054
7614817115475793105011589432524769210401045118054742957159629629012013
6296901411903254731410171101115111104314154724621235113415364131321551
1305471791373429519034614641208702418547089669598251351313076617096703
6690103432546948365908861366902838061130546850537100190913161130546714
7521372128192130546637115142329566761417162546514661104811116513957546
4165774125207920120108096956555463110541297355110609365754622012815825
7485461505615147131170257972579158546030637663691111209106170792502217
1585459208135861032906613080511001585458109320717506097216915854575052
4747206411032909221550126431585456295309351782580170230215962247158545
5314319269480150132181585454146658280511440619571025453306143849023684
2142902347162545272366110901425368051100158545131966110206146716254504
1371061701412537511625449142555708671725354129544876352221522188490330
5715641251305447604321062411375742621374226341268740128120254463022853
2513797847134551715445216392901032110130031202641375444343666090752415
0252722130810758154438623210624113773183811054423171921516371383711135
0374961350311445441224261273544086232517626709048622696202641315439889
3965475438731032901037254378068799615454054364541032905137254352654311
0925714537110954341135081326673011060771543321879011054323086565931904
1543125890119454901191188012454304461701323005429128271562621748610542
8463758677555161540542721052561540542668569630455817747979020911075171
0525916754254823295661505424263711564806120213154235965103681631470266
3451150344188281890901290542215251866845154211029609061146111315420817
7346651132901669515115141653425254191467874187750735750339976541895214
2411163325409086956541714674110114841812514231025541627010847135811865
1110541539152128067220420111154142068182652515413170586445113525150130
5412137402126141120541118415230779115154103564549067540910555661104579
7540820775845797540732713056845797540616245147750207141317054051761210

1761474904176311032540410453644579754031371210247773515402576247773904
5797540195582607975400331161539918610812390797539811156611045791539725
1325396167841105708539587531105702539411273019351539316711953924522079
0480539137613353909405751538978540124103290965388427441621538762251253
8669766773905043631420403538599981013753841766748253831261324765653823
1326253818727196538084293373537911511176035071569046251137673537834571
0669053771553510042153761777751019153751051222103150537420113862537339
2110303625372822150512205853716601355625370791251390150121536949795260
5405368143951382536717987216153642536623220290497536513764117176138375
3645524117157113811475363270296166565362748314753617484320111153607073
2663153591150903212037535898628735180535721112011081837535610516810631
7156535520297218897618590540535413192540535311211311535216513055535186
1301061415350947471446115349864120576534843840770500112263784284179048
5347677839061143765165753467020153451165890534410163859091534386171611
4006153424383085222611742841790122534169615010903115267665340606766231
2225709422111012753392776695132857533821357684653372429505731032484533
6247353279073078253359275149213259018953342509018972101971525333218130
6142624729624753326589841379640610533111890756101155330622680821163709
6177690115526127113215586653294865802201437548532810581435501225327409
8155011225326145412264753251454153241455323261920321147532217956208951
1777134125330779135575321220901882074925320826173047822079016563051675
3191006176570144512147037222983735318488125104316941531772612809012520
5536415316500445175875315206315189082255370873296104053141875110441140
7811073575033997653136151111044114616112041056531225578515785285217541
5311127752561355310524719051187564110381611029041530912667195905153087
2095423904153075241109041530639426123453052014542471246605153042067836
2238378098047705303125925341529681197512531405302107071529711138530154
3872110917213530010317152253121138529952667901317112113152983501083252
9791752138213151529636521211010175295180170877003151529415475127752933
9151051768110101251529220054252913915815290157512229010011617052891076
3752882004262087018910289611345252878861102155286128281131463115840702
5285118717017151528410775076500528355151487016152821423415352811051195
0479375280205459361752798534791115278542141171071208309214111222515277
6078352763648325275102073014077527418612102355057527315122216745141527
2335472075052711704348117012071071015165213052701028619011907365071217
9232911130526981773903922231702997120966611651652130526853075107417061
4630779120480122212151526710296052986612417192130526625551051111706450
2085265964521032909617411113052649764117113733120190109412741111305263
6503001107736091201911063360171526234247690403231212151377741706915261
1406903238851329609041090571174170691526030231052563293218541968572231

2504121777525928071190177907917221405258960110736102170300511329090531
4152576461578210326275051132909053252565875231290631199042876710329010
3741115255843160177309015032525433111031505672167196274525323221013257
5104524796679151525237113224979983852513711029071412507220713614452502
3286190324915131090668741187853960551044213852499604717110631368996141
9119419045742552486862141636177961387025247371789877324930782652463717
7375532440250166153961326814052452781767232361192680323274540524429590
6103532335488790329730906104111350813273074152431317125171411197113861
4777307415242314310501101712121741623524164290477433208493600265909586
1289549441361453296524010621779011915140690119899041314440532025317014
0664298820571661008523972611028263614632166901661071150117818912890136
8084724564864642307820571661002523837178989915519373683321393171152373
1431050110718112873078148125320215570621503011159879793666273156288814
9061345471054118031051262140155413664141598791171152365965104146692871
7773130779117115235312412522864166226313091931106116254142122252112251
1079879117115234231913480478814952537571160811195151209512071405233111
5750761432271352518211661311151507571991490184664180951523284318111313
1706749053175915187212010778773501156611177453151523238724193261707523
1109181171377216244390661080104523025812867238144118125066394164870931
7115229141310521910466573143105011066515771172724976251032965081327307
4166522830835661191048966952888149061345464913015668106962874114029056
1153987918435036641217044629752279211016688104987916747116658831977475
6675522686124717877247391281522527177483531972208301208241120870315908
7522427133076661734084132191661403166407813503121153049653590135706270
5223811351610117157398122654265542901121131133930418165318784387057165
1347146237739057051890192522220535102648612531066510961019366241750522
1271246903511366510961339305189111444868708850610366091043511819088990
1308852203053108066103104246103366517591661104669648031518903285219844
3511366510968329368106719079867906534616415010471632339844273982628910
8278252182427507652266130614311959701846622484966622456107396471513286
3374739012643126266514110112559280142579702931711521710912535210431415
2168852672901296909661191101661507515215245451471953081169628181124410
3184980416658852141020204129725351081389252132581286661311693591557571
0409081108789051987911711521222357666116113236316652111331064347110172
8861313271036610352101503105272137196810696667533214790944152093717896
6952821026746573530779752081051124750896695288814906134546554861253101
3015668106961484567501448618356520781259643721397412933076817852062806
6110756580435385401052218421305898051307791117520562106072661527449387
1265032184963358564715875052048177381286398881329030779153471715203331
1103150726064771641156103853990411505202371523561993621411038539730520

1302596437213615630123079074111520031431050110178341121351032904753990
4165805199596438127240470219166816865198220907727531234411261672022264
7773421511329041841902445197948451477501909666920120102371384953198791
1711519620631362106262337113717629610989314041324902025195251313621061
0385396687194741866296124901106373120279145519433217729316651756612908
0752140704175214115567519377851160662311436629690175050875140708519217
2616657610341114515511350136159902116211570153571504956567085191251311
2518311016130754098987505190206784161966610212018158147170851898093625
1319723317115072663267135913835824702518839981072640967290810661244113
0152652479384276092087085187574190731669346691090141610329010381571310
7825186596510519081079011391366920412181495690186707029879117115185596
5104321235210431414166054024113695736741477511305184106415072705444385
6137518325551051477577142609065481115575117791171113051821062177293172
6641472979117757072343882805901007054064385791570518110519417067231190
4316691075051801091251747155711358675179102861120132907857110454201984
1715544613529714290572741115178109125201121103290475399041658051771166
1881251109879114610570631262901055716634210831213166413529034529053150
1316166342839879117115176227508312494669034047281751751051124750124454
9026177288814906134547108189012905174596510519081079025714066102904753
0768552517381773905236091109535987911711517264722542559511011501397052
3012917411151713882254226148072140662561462805170106217729317216341941
7753661106911309719651691022687061384964915153106869042129854964390246
2712351016629661312621129053150131707516833217729317218366100910151511
0166296615961101222701461118111613170751674261131161711079059779120665
1516663631415435166124541222516563631415927098791171151641091251710329
0475399041657051633391029033280618379087104155661802147843319879117115
1622581286665166851747218396902503729580627554604713797590371273742037
3216858031511101635682470293171151611927491741665142384157063110779148
8693332417890310541575160781507212278666879023841144671411053382025273
7265912702539511706237238414588510445377538553133241734111537641131159
1416664065056864702987911711515910584514749196487518651101119275908769
5905977911206612692515830020665186582653512759087976959060770791120661
2631515725812867231472551355257916812211351661405156931091116613144696
8329366219711201237213590711345155109125451712538112873078205355543125
3515437167104675071302533109066905091475018214825913632236850341881840
1171281131362351666090532871502035222113870111579725990123729047110451
5330259643721222101875610237310660805152756362399592701019476909375651
5151133678301841501959659147113143141588886716145114101129014124351051
2626850351783278691399064433071108886586481469021073198791171151501091
2517103853990413580159133353672447626611514958611166121693237125176167

1622011211132363174166115148289329113521043141113236317416611514776617
5171105860345666915906059726463511038270613936514618545891028910828210
2486315145328456723623766117811483375144596438126651665141034544411901
5866650898791171151431062117569669528290976191515142232202666826111021
2611313001513012221317014015905141817738128639808313177907915905140266
3114698750710189124515318107108207207907193310903212465731513925131146
9875066903459021230552151384063154023912639196451315439615586931811905
1378099631972530976578141501393717093312449045436903077917332022387914
1600715136258286712539882010311899050337135219791745811281253202121901
1797513524545147195308116967864771422361107784148117345907337862099076
1779013923641579751342824567307664121064669091114681292609081179134044
1513320431866516651454312511647139132746247150109362458631301335921849
8343746362145341369030111066824151323143105011072311901102951096610622
3376409011553012113530111066824751313326636683313311015610727959061941
5130204318661316641196307664089875051292827738379081969084765155664225
1735128325471176022731724638683031839088648770518906652766901996069696
3820511440415396726090454369030779180474111512710912517103290475399041
6570512624545661751326617671251013165661010966952888149061345469595216
6613318390422671025770379974978423076613907783293681621474073151259411
6665130652111366422512482290673076679791515123948454011751324011767669
2023740115511755122810459632310110961429018461352641246662756512169196
4528210267321669087371231651460805120105773155661021201815814717085119
2067841619631977475667551182065175311019013537150454115566180214744379
1416007151175964381272307661036441415723817066409587707815951202462551
5192251162581286661314147013122190810750199120246223132750470298791171
1511581259643726081714147971509879166360445365140708906615823616590555
9014070298791171151142235766611666753323211048106987911054019010092511
3964467416651455323546732761616857486111190470298791171151123711521929
8115186436683367236902086674870434430708327616168574526125627114654010
0120627914160071511115031052665118756147431175407841611551132721377509
0653717011327053731811321036699086411032904753990411506651600715110319
3105011072127661051474319712466627565109105773427463412139110177907914
2261429307667979151510881773427662245630768533750181520201549701705125
1132909735652211770170510781259643727143279051251132903078981387114654
0166901172797510612861866657220167903112321021358232492514925541166901
5011727915105302180665167618072664111362290458441136661701045104105194
1706723119043166169415766910903101103703245436150715103258128672901296
7796257901196539019047630310466508987911711510229713573624913598791542
6871082821216610571404321554794148927925928648479113890160125473290531
5224734374711024154051012971357364492154609413569016026565342140510094

116665110453013559066186171247318639557145202142186145454155145496341 3
421345099931091116613144696665142313698791509888610715020317246243695 3
754141110468915097280661107505125951132904239032251903710329014790944 1
509610519417067231190431669107503016898820475103813210901076642629013 2
541170509514375113296554710636690133131877383796598654041168628540458 3
327615105907910990112712212877847102965592148509492102674657353077973 0
724975247124347291456730168987975093270204817596111911016611146723255 1
509265619044390631044527610323866511485091297135736183640761551201329 0
454414811933713990874766950183137051988206171509037178137152821083077 9
190379915013163116750891437681266662414418133166610491138251970166421 3
817012071166508880413790111728495675352681071082257618267281140316906 1
212089882070935814656508710511241175096695288814906134548756315570623 0
115057422761056508627020441351046119110166111074170190508581259643721 5
966805754476902387919021210116753751913290231901504863110385397517166 1
029063732904750842583166266572874114029090346341281110977411150831965 1
051711130111026453315033368552319047508223220475244150988719512701638 1
244307689850813311103150171019028755287901014950802786736647103853990 3
550793025964372510416117017962834713290974796813471032904341150601110 4
775405246590103853973074111507815031052179911438386811507731431050110 1
746638103853990355076109125171038539904165705075105122210315050742011 0
841706515073615415072989016750719228539071514850701411029050211506914 1
102907151485068170459275294506743390715112250662555105173550651641210 5
105114750647483110615046303114506316067784975062215143270214750611178 1
113675655060155491553789505923220290497505834132115315057166423905056 2
703815650551020596362306250541302192011115053105122210315050522665181 3
251601085051487108419097924925050662441282732504997614791593513650482 1
410841128905394925047958741727325046350108325045136652504456114505918 9
351365043365108417384925042116441732504113761477838758014050405963141 9
047663286511105039270108474771223551085038818108411191492503754641732 5
036650147841108503595561327065034865026395033129901156395032989621750 3
115390503901375030849918171115405029186565514124550288981285113050271 2
468502670453101860477491712202845025105158911035684502478075013278965 0
232703720731502210490936502110414690502040210241402108501989290541501 8
128905355017141132501660527350152252895014352458525013401586501221137 2
303150117351175010128475009949365008900535007145026490500614110241141 1
085005132132141325004952371037962363150032067843115002197103592500113 0
220500077181219844999127681117499820337126230314997170908732032499673 0
911551054995633116530499490746011049938929017649921289053549912014549 0
499042967498925025649884171024141710849871761024117618249861036195164 9
855938551498463674684983204103260370249823561486498172861210049802135 7

670249792999571022210162349781173263329349771193881600560110530497611 7
3263329349755437177111614704974117326332934973682908372144972117326332
9349711191211145497011732633293496929768611113649681173263329349671902
1811364966117326332934965541496411732633293496350410696496211732633293
4961151321511135496011732633293495933154812649581173263329349575437177
1116147032079214549561173263329349555554469763907858011053049541173263
3293495367111509013649521173263329349516641811364950117326332934949182
1108494811732633293494750420718168112649461173263329349455198686816149
4437087324419871049431173263329349421831901396158370360494111732633293
4940543711175712010131846493911732633293493811121555113285178249371173
2633293493611911111252519012071713004935117326332934934152321286319181
0385393119012375198051148846101149331173263329349327121690139049311173
2633293493035190115650103853990901064929117326332934928299957062221412
8492713111690504926117326332934925193241908222414149241173263329349233
3110313681349221173263329349211073318091084920601301243491911732633293
4918133320873120249171173263329349162519024490857364915932241901937304
9141173263329349133062717064749121331101717111964911152882103849101391
2673720294164490913990141632490813988235613849071285401304906123377431
4905941454904193730490338214049023294901744100124194214904900261454906
3151489970923813005648982409019131056489726490115442107140489632598243
2292474895306786310505248943601008136511028290136564893336861903745148
9224720173165167324891237108144122489078012310820241488924090208904110
7908103624888744941301147756465729488798140631414048862649011598038232
1140488595678389348848007732271451404883956783893176240895120222140488
2983728762996140488152090707701759016548802701594531321021553425248799
8345146112248782649011598038232114048771579375158241131553425248769567
8371190487545057014614248741448502501072057251113487330882875535187336
5248725327549010052664871501723113211390115951142487033686112070252527
2091504218486998355011224868264901159803823211404867956783711904866460
6808211614252748657401185690581219155342524864956783711907511224863264
9011598038232114048629567837119048612649011516677140486030071120111846
1348592704611011101404858304104241110726211371032340485733543132126194
8568211078612071554855221149144127809641461771122485433056706388146106
4118448539902081165409086933997148522703104110684561655164851981145012
1103873485025495418590491404849800241565848673548487402681591087162175
7484737145716711034846906515548451614974844478371290484353155370617148
4240666609036100484112448848407898190960706483910512223293483813104113
8748372258848361026971457896132906415248351131215564834787656624833611
2021162483216710611162483184238711557483050070214490482959895110773062
4828264421162482739829116248265362224157482512842265404824220146145574

8231404132222100574822811213219607324821967412654820116178904363704148
1922091104314013048184117196481744674169248165119214111251434111507679
0594917071032904127016214111135613722251141324325722335217914815161126
7913614743697916010329047539904171481442092141171071208309214111222511
7190111775048139655322147697112044690120115148123211399010703198157981
3253851140907754748115925151371968391623179151481010263111206676151769
0323218961460315399090906648098483714548085004122241480750247904914022
2421479813253851150908668841764915621023215514806827205702450480559241
9519148048421067102480312446273248022632074129021113448011019473231008
4148001320413001320701479988581304798536269124479781192206140479622041
1107834795211411227224147942541814110547936572261031514792524555404791
1422141747905572457064789147318145478834243211514787521201694747861016
4716183041478521702130478413021415510196478354668222547618415122298299
4782206317661067506077497782057478140645373217916510703156478032695741
1011484181025477930671153171132901612175747785861116612166121036754147
7716145307871352804147764881251043169414775726128090125205536414774139
9648435414773102152655521956361307541477243645412226681694147712223132
1038539737414770818454131012109073741476925578515755245284768162313254
1202414767106614645417081256864147668239017014169913047651772127742571
2024147641493778222562451121100047632892331156135132907152476217777316
4161661704761580879013271521384760557872110917139475916672116751121155
1114758951379610363182965944757771818411315147562658243251503109018590
5274713554719010413559249879747551302161183014601105304754596510437651
6574753927732471582474474316647521764549063151475159651041466921706769
9317380133475074831491417063494749117885104412827104748759825141140564
7471681406904579147468827661264745271676764744247132646564743155903541
4742207222773514741340247474042727747393874494738596300904737315429473
6252473514674110190307820126473462911114775857075997782013147335311427
0633911665147321855121547307901352154147311723214884113047473022760096
1131926472911845112116551647281066146453275054727149726913832296901779
0791411417704726102960959061801376611051037472510296095906166413674724
1376190767813105096472313724063710384722262581711913847213011477896132
9064152472084078471519054812147191216512971826247241120557471868418917
7514070155096471734150832115801310901300414716251249155342701759647151
2017819092874143747141497269137277526471310215240641347701116964712112
8047478201696677471126190412121096641214710227909671909354709500222124
1514708699021715537047073431464134252138470641717671121131470518110911
5622213177013847042208653720590295906476134703150107351910803113869513
5150470250732131863874701160105844141128147003661461311311322181156417
0146993912598905224223546986151114157013856103813228846975364736713296

4696748112251964695316412103296469433116110812396469318064530946921444
1101901717846912187501327896247447411361469014245490631514689101975107
4170699081346885962821104556468795566215746861221245904579146859785304
6841019012511646831150136120111468261110113846812079557468022553692467
9242752467827172646773075914676907134946759069190384100020815545147202
4314110846742801615087503321651032900564673371985067810852467284056750
1411442365646713121119012665565774670104214155101964669123913843111513
2222547620241110373466810389015147524659010847103853978114046673191720
1141713235711209607509051466614890356890239312135305453509017710766466
5611019636741754664671567501336474663102134101045329910904662998108053
6417064661861210660895244660619035542872351281865646591469735247441674
6414658123101544110441537311314657868619071106142541253365131465634980
4902278013766110103741465525251487016146541343015098901424653484444170
6365137465226873921030140531706901115904701344651325171116190504104650
1215675032790736464942295470417501414772854104648484312493213690102041
4647184402126141120662550701464625140904630311419575324119619378114046
4521730909290453268763222464490188321722504721526710846434566441281464
2556291108641461771122464184077045141786137308464086410936564717463914
3164547584264411329014446381027680936697463720165090965102779619810510
3846362899036478011911023113241116715146352532419012549711417293246349
9842318113510326404119110446338627375060477491703463285310706388211135
9904951823246318838810046305964330272103853910121506651462925551051162
7051170100663219211049731130138511301564628150310527210329047539904115
0721266659713046272824567661029024212526620705403076898791223924626258
1286665132120290500313076649657198901336447718214310650370130923055314
6258121506651562661243215178814937922056792090841521421711462425840966
5166514756451616786151732187393214123753037541981872519819073146398791
1711462310584514741270961337627713272167467372514843714581180511401119
0111371358119351140146901468703198791171146227041906651467762216612223
9246213002066511831371082164811316624141490418141244161884211060140213
1108216938227905515746207815072171669091146195924567258283331101231198
9078133101126610659027290730901593666296150511544618155620411105874614
7509515495524164519879117114617258128672758111018612034182999642461626
6317666432079014179151461510202101325755761836649979167662961245431866
7915146141026314972024195190293222816935615379349618655875731987911711
4613150180665166514307662462551319879117114612102121113251355611539879
1668033247195030985171110557247129331580429712590621643906157501047019
0659015610646690911146868291646107249332110306115797662969246113206811
6559511011501397052301291741114610313489750609018354770412201137314963
2623815166301512801381114141248301661941344609151310526677488109845479

5129227116301110545661688563941839030779110370146088277413530779185345
4363119065390666741401212315135642470515917053711719223473831042512175
6280138120166307791454607303596436677155124151769065631659118070100741
1746064476614540786132901030104441661154605351374773315402397330779159
1424604315310501106677866191041167117081746036513019525616512180142251
0671090183176373511316614046027995667713737351137460131348955515517616
8183904122053980816970122712066101013446008277478744696288814906134546
4930766899621110811103721130511037211152110100459982774842132908866184
3571192056647649613119671032318634714641590305908701304598171322513178
3257932342132906613181092980130669153512805829571743113141630702837206
4597259128766773119078831112012901038539907145963414215261323076810670
9645952091475169795014461989075073891412293271928051144032459481359643
6671322016220671001622065132166909010017013018390100415882028118219912
9178130590837502064593102120557166115804397961951105801725701707018666
1466149921697915145921382274877236943076853345919675493113625245907995
6677103853963714589341467987581201155661808972201559795068104299865770
9362788458810219466124750775261653169669528881490613454574227674458779
1516677103853963711471101036322713890176887411145869534166376458565130
1551305654561201477729054441665013204584103489505395245836329331540127
0147506843574124971091721951206421726429664290230661029066753042491645
8219128191039238173514581138161372704769135035747102965592458020267086
1707218849716141487462111457975661290160301514485406610212010730779151
4578202448373271036697987911711457718795321661017805075462417690327414
6610212010730779151457686494390150144190418234457520215072167889088115
8905357351424574189766813805110401839079170414573187100106223866670414
8098750457225965106813793170219045715071507227287290259668741232820138
9875045707587759640150754624176902531106127915145692181381104138267211
2456833912725666195791674567310592103290551518865158011545667581110166
2011162721177823961428545657512747790115138111506112161040183907916115
6296926113271488782271487679879115245646136321507257426280217476632363
1562214563966449702751415174184140785651167321216115456255245319574177
9745615848618311066817916713213174217141482013814490810702418615809014
1456015725999411732829063511110247901331117250909681220160902636237358
4090263124162070829026311112104190257966278044189570455958486145663567
1102079067110711714558753411111521224441730901113051531590874557755562
8819345161123976307797288814906134545611539879164466514556758631392579
8791866653750455557842715566244177907911787111012471032902871514554187
1006688412329875045531878377561130779745522069184106674751987911711455
1753568969545507814413445491878401606610290537797874932781061357716631
1427502212411270418854876911226383911642702418334108230779158078245486

1717166101277024790139480987915773480307791537504547781355261653002479
0139179211087431045611539879745461878316610212010730779145453281773265
1151033256901363254970146412665611675963373219014843292613734544756510
4380489313125942138141706101282110307791108062454331431050110564248738
5111030778790761038539730741665121777454210286190674865903510610329012
2180668515319645418177390279818909012907104668523197114540650319471394
1292962712351167690884242215219711138453910501914143910151548138101915
1382636849033161421707453874678471467561658373241354666090170879138514
7453733917544342734190104411071404536548778414711566414817870131090540
3733937215165106112110630117175160951715113115614045353741777077021632
2203118820824331050644453481773962187100441113234010717061384666321072
2121514533494147262116769141109966124171921314532286904705152543532487
1205824651384531102056773170682616632483327159629629098110301102231519
5170175602927453069651049139121210329011385104392773466167814179647990
4821148282110307791108062452910363151187187147816088645289217896148849
0177901030104819016715510879167452712828132706412261086680519166662031
5214290387103011080451586918186131747452614678741225808910290526120473
1474111916558279167452526190676180261132090401351406130141575111611056
1441580521511442021311153331038310103270241850610872128922612872264648
3121581931634524206784311966958910267452313145371556861116095406625313
8791514522278518977791990283142234423712259831164231379645211541017063
4274267070746219418117136988203077911374520106217729316651112917157511
0312629031031577466612490715165213045191029603252474134413247351623712
1904121547321907747041130451828913171712872320711095134643141113216690
4054611110965113068720241451710226870649711683077911314634631558407084
5163615248476757814250870845151167130120511875641354853190666090901308
3196451425551051140907077706132904254775399052075411032907377422676660
9053041652130451311669581113077971504014132108471038539781414512109125
6690454497451148451010912517103853990264414509232202103220853920283145
4508998453796869311679655166619664122141113790450740190904728211470611
6131560612218714645065487784147115147414817513450572210847951321000511
6741264415709621231173108668051140708450434314751612031708404224701513
0779148450313312411750653902477695611539879112245025965104112207152141
1701694747064501596510414668742941484465051946506164500168870766167546
6210385399071449920631142721106952123118756411835405205409866130449825
5510516741813851324567141463463155840708449710163245511409075275472403
2116477549696470321541144449613761126676903417013122971101091431751101
0461401106684217411701906924495103631514824319050456141103853966736449
4134416153210467561153988111985151261979170414493222176259251713037064
4926314672872489171062573216690140106780964491206317911387237559272905

851101745404490117695781311875610792022251107101317149417690321118121 2
729046351344892321101012453904091001054543126246214044887292624154019 6
629630513014090448714878431476066522693182012979882013044867661764427 5
090519512410329047539904190866448597619691590184524895161643241908607 4
166448481210907737524741430779719706448310207738148666090170841373218 9
411651070379826290448210577375671917073214639014070844818177558718670 7
172330054011584066412180448055110280464479162423667652293141130492664 1
245044782661764122507864527610327100307901329066884729310111184477222 1
764121290512477909644762564421038539905144751091256690454497447448447 3
798967834472138617516332617244711051124117502229091144709277315878482 3
247796872314469151111529614044681302161187704467633769174901584466142 4
549044651011819063151446410967510417065144633011254517180044621297739 0
266186995404461926741592131144601291060445998901050126445858212044571 8
490351445628912511566624890324455406453732186120861070315644541745962 3
156514453206317661061413282741445216310847103853978147445134378961521 7
790797472146418104644502555105167488444965210847788973215514448232425 1
444710233954144390513444623211014011012971404445471901127156406904444 1
368049031262114140444312507847103813215542212144428611477707704441166 9
678171444027018728944391424549062760443813965796212241627443756811171 8
934144363391464251207155443564440503705744346995126821411706744331021 5
247161661105073157443210129690616677411251443127029655406146177531140 4
430686522633473615644291411111718044075244281491801441254435404427102 2
964911096175614426192528041214012534425817737061421320442410265713281 1
567834423168320904532442212874208262466381132363144212565105110847103 8
539202442018121111562229025344193907152175902424418782415039096441710 5
071522687590144524416133460441548441420622613113616525944131623114642 5
120211151441217214166226775905369644112065114130990324876590140791100 3
744107295216714013510847103853990357416294409181109173610329636132907 4
117440814674110114841812514231025440723611160120210385392021214406168 3
713240358715113044054888934742111305220315213641440433813224225041440 3
282168781106141124134440261711113122216194091116844011062457810610664 7
440018895511656903143996919877390374514398507967351119690439759651043 1
159441894564396691964971621136222112041102367079018115510043956668449 1
896424394230844659879143935214913787170686317711439263132809029177666 6
343916363151140785651167321216354390815677390977820126107905011914389 6
503007061682682121166514388152665889515667418729099106473104131496150 4
774387102809056401214374386650300706535810901111961706243857761032901 0
615018435142438431292571165115212763211514383786146453238325010134111 4
181048814443821609516670257129053100277438192157717127943801741477135 6
421981514379301147789617215112214378850137115477079027211514114743777 2

3537105117417069081052414376748112818906132887163309040101146111311519
0406714375636457028041654511514374535102144794322281753001611144437333
9175806140310079022315321690305474372894964570246549151437123220229661
2119140641465116342140437014241329609015534190152903429098436954715220
2509506243686503001107161257436614367800155132176741330743666861351322
2807122436510286190719615141971615705324364101680490111141070187270864
3633911527317688724401113155702418436250596142133120235102436136035913
7135960329920120380964360660222124843965551171750505789443594961164671
3499435811711163208859024149333131012018424461428651734357179818102226
5487187391717406088721869174079655908651072511082226482664643561020801
9023311038270687671444355357758268706138139497743541023021394941855429
1032435333917517790118951154352139136349741324351532812031111574825913
1707435085317871110123113572243493577731435213864115453812247343131434
8600747110584611055645273213132960903159015290342417764347505747110584
6110556452138324346676712513790424507414345956324551140907527541172413
2930136144434416375588277531755332977457911371164343102121076290178490
3619743429701711119930571358100243585027084341145238453740811701414340
1023361935111829035116433930825341584338450357147706818607411215491159
1770226216513275401116110903433767841199161909010956497307474336125977
0451417682306411329087747433586519093969010950103290103741433418112578
5226103853973090536964333128570856312135305187433254877832629046647433
1128906290342664330440147510511799511801133432978140954544190624328656
1902833521595243271334604326484325278700664132103290475399041357416630
0432465030041449771289035190769257159106133374544161447041292902156176
7764323781105631141758114297300714207907253266105515327147432231415056
2213119011955997271743219573111202355331112017311417401038539906543203
0619313170544438553757828825391193852702581064321305199915536212110781
3143192809090477667490904166903524431564215113290292483431810290351216
6870966660904514890757147431719077390106251321875697236867791952519879
1137690289901216761901031116113665243161029024441352028042087110626168
1904690351216687096431527811712075051128629212643148177375671391212103
2901074142103679111013392431310290155411479757674112643121062203156661
1028913515117057685851743118064510431397027974310296403871075162921571
5527747479743091346451809417084325722335217974308522247116988201198106
6124479655591310908571214307148907541463901047911564306730120166894317
3743055262938044275090511110110231110024914031151430419324190241417964
3033503746906660909047103290182491474302730120172854821231479015447430
1314311702158110171290136502471038539730417964300937717653566166417690
1541977411742993028128456311413069710610329010391123386671424298318773
7539491590825611539879149142976364115651212017282120444142741174296331

1103150564981391247366641521101050663111317236611069120241429552612866
6511199635611237909634390863220511515231130561153987918266512741750429
4263941117502471243674175485140790561153987974717717898158010626104293
8177375106257107940231957366776170419590755775217541429215290837903547
9646196708224719671390356183770822471904291125147173119031784129664290
8686112016790307791513213957212965769879781623179185734289312167130244
4714514145488741664288318773811802161247124818456354764176906690787974
2873715211312366128113163120296193812682536612213564742390668843491136
5887237641616071558604286252953201201219045471479157107940150344122290
5629573107101317149417690327874742857290463531190464256646525416511102
2295118737951585115612225971574761767476571064195909057042841503105256
3203111203388110385391853542833332111731059510095976191939619251909010
3103853929042826352856115212667906641153310909515514742813143105011017
4873817771114648659017084142803503746907541106465390311906441062446178
6630142427937190396899039095212311445613565096341411380283352617677642
7868155451471559986648659017087974277289131711665132103290120181224754
1361432419074953942542761051141171032904753990413542751091256615290791
4761347704274230427348427267310525632247131902559096324271319310501105
6224110771395675472418236962139046336542708650190111308319077405406612
4907151652130426910807578653110570863671071193110212708426819407739099
1147433077912721881294051212416739615616795147407062265051001769091253
8579642671651665311055784175901931113142661489075419631329014078411658
3642653199091417721385416112062147321270375619047847108901141901203471
6714021446426414697322247196629630513014090426325295320120102107940222
9056295739511914541164621404262861119012167120155173067979016231797387
1998820111302881254176006716812535215942426181173712132573622251152903
5014010441325014141426062789049771590372962907342631425994453624971953
3077915142583025964356750411481875692421904181028290150171161746314639
0108791514257314310501105648798267415160881372116139782976103261071417
9642561673151293103351362221248716901314255532175105178574165814003746
0474313774372931014179642541812111156681311105740190113748425310209087
0632147472997913214747425298467686738274178211915443155116371548763742
5126190111137130146664175130137119964250258128690884249530419696251111
5419696837969655901141084248536510441915164723710883213715588760954066
2531387915142472629011719780819914884908838212522533077911374246814657
8431166520596752826676117504245206787416820131977430779110204244148819
0951044382736577313077911374243921789614884901779010301048190167155114
7554770624175154351759674242603904512194957755563623091314241952906212
6626414407411010796424059681731150316651144010610337354372301703195115
1651047423972952245377901731050160741662111381617497011814442382067843

9434521515530916417024184237149125282416676518624236566849879112042351
4878439280426618265011015155819555048423440631516188378099655906487739
3551952905812191554224233814658411113530511775741665121777111913059014
4139121210329077075122423235777314313210611825330136138663248332755967
0629032144970142315567526657026614112101078131423018112571475099515396
1327424710150903111690508132103642291504625322267864221067362116552113
2414775404228221675227890514963109622919290277961094227232202750613556
5116901032730743786121130422618612102047556115398791514225357458395164
4723179142246805217584669819369692413463050252921304223197102221148811
3963068039646531817690189144422223631125766115196751342212061762833524
1760042342202893299049742194842183881068668290103010444166510114208711
4725530150421762077143357236892138114208151421654877841471151719016943
2954963354491514215148784116510611211032907091113111357217817790791178
7111012471032902871514214726664129141728642135341611161223609017116147
5241969642125071029665919390103741664211168106866141910662414782667533
2184215132671471303307090141130331901351529029134214042103391726167169
7418723301221086680513734209753556152966959812642420870451049139121210
3290744510437904207392668407703211329013012070321218371386660904206976
5104161751405404205329282905401299042041362182679010937014203206226341
7342494567297914202436616641290104791416007142011667035146172242910782
4663874111420065619615035147513290506901569175135403651469540120873540
2059054014490540603907907411141992322321315164721290494647166609053079
1775146561130419823220265839535820166113236314911419723220266703262667
9045390373356199362531385021032901037416641968166414787911167704195562
1411132363131050731262667904194586311427211061421109107366651333293955
6710190103741664193865987604871207487915190466141262137419216231142721
1069621231446167514191177641171141375611539879733915248647419020631142
7211061427309022310385397604189333211115668131110504541222323459051447
1501212664129010479151418826141322254768021747108668051373418767779361
9418645431262764501164621404185236668118681145510622103156418434215662
9655909879734142052418386190323927547162138421384963508714207713841828
0490571217702628298692282907911374181108626810466519650526907911314180
2829015312111464911154739071526908209822262829047870741798043054063164
2167546623871011116113628241788046640633115267414816619241771103026651
6641251893901374115164176282102454715766412955783790379690853510046590
9224331417513121254114158140740100417527683315904174282415969041141404
1146174173711212963738970014713617561792090130140965763230111851409041
7253220515837575119655710921461141715361027052914611917411374170405903
2406344713312010014566436677767249866711636411905396641699710331402994
0539711406137416820666213250110669177098791130661245412224471501212664

1290104791416764338011906684077029781906658280570557024187648132090477
1214961329015664140416610903512166870962019066909041306492564165486561
7068261146174164137971224664712190797556816414675704163505657017068261
1461191741137416253610232804721141322714140613155516663904011701032901
1668712190146114161723380119029316651144741872162196305772719572430572
6290496641106621214651234987107470406319013623313741601025810631662509
0268214117061116137415917610329011155171244651682612071201165319664061
3741588619032392344715649211598791545381381759014149151415772326921836
3103406414156102156465116342140415520431811656661426387496335856471987
5041541079066907571478056614261032907091111353054578177907879117871110
1247103290287774153333211116651312966316590140797141920724152331109047
1626661504151904603798901091411021293441697011245610024150102340665187
9703148243190504208741493375065871211203101356611070031266455641485625
6990829031190110246902451506017066393604147388225429535820661624146729
0321330473081329090103417280741114145263141651795037530577402366847025
8790414410290809411158118821011486101149225313841438361334153070125160
0902236657012130779151414210511241175665318476651250096512151414110912
5451711362695990128965254411244546862534140927731511224864108201361147
2533105053625398820181271682475413649966011447914139282102963077911102
2249050877641381737119018261397859755113523434650451121905664146177112
2413768905771430111307791326641290484141363714611323631767102043184391
3978312814135181125669045449741344841332322026583146141107916247541366
0144901491376164132232204240351518899045910327648524574165831444131695
7274511701311063751371889416702418248894124750879117641307535561529669
5981264214041293921108049550810642138706116131108226241217049615029047
1711063751371888816702418248984130779117641282464314117540411905050241
2710363151141107916347155194548822082581032100741261216151457828119573
0540663019032103290965399090340327907364125586111517126117466545187561
3071241038309108663114741246129076157663241239529056216010992190152907
9147612514041221261777707661291130412194845676641430779710385391853541
2066310501101731050731664119131453797155315755087916679411878255698901
0111565661107297916101876241173929047610898120242242410442411624990157
2254051368046106853674115631905007066513653674114952120470576655906894
1110669111905365141131026314971407804481511329026290101884111948641127
9631540804481511329035144262417641112891317115612478912906651662539056
6312361103487918711130411016217644275090513203111203388166511577741091
8245478941481217429097779789414812194108148784116510611211779079113710
4410720631766106535153214011082292131911656927025401261000193100782410
6548778414711589414817513410553693704166907513187568046690752211558112
4103290419778205142410411769578419097624684513521043141103853929010613

0410310284570265907919207088391623179113874923669207084102729465401038
5399035124487651304101266373211563178431304516660901708414100766176442
7509051150344184230647711691044121013790840704474526822250666409968155
4514711684017283096305420170141171454130139524098190773115546327734269
0409759622614161571110148146111304096583466115668013065356155352552667
1005802553510026626651666090530417321306622610385397309053696409559271
0966610187090351216619964094109035121668709665907937788110366101409320
6787411212498114774168165663404092249117502471243674175409162745677200
2274747409042155698901019701227728661107221309711704089158626212418756
1115404088506102450714087206317663265835715373526313124087752195234571
6610024086566175797101210283352408513861755705090382706901711053140408
4206783622383780996559064866927408363631518908045271779079172240825385
1041813109114618756804662152017140811090351216687096311907296619750669
2041189884905402479667914395107060174942455311987664080102861906766920
9018323612620790256110911922996650817140796777960750905159118540411686
2854093115127878135401032901431954113290886651600714078156667203166802
8881490613107128019290128075247508791100407728290901250532804951151081
7140766743457366557916712461816763679140757758254375664167985114474637
9740746377711827666967509608539628290960231907540731339421175032187569
7236867791952511306590750411644072743576177661304071102056773212570516
8261130407026137778164740699535761667751641611304068711212249380106921
4266100712396710901268202625089879177111304067674313309220631797206791
4863513020725322583791815869101525511191406628210290711713229101301071
2087061651091329046907141120951656417025404610320775100019310070840653
3111031505659651043212373262415408112132196073790101592757331112102037
1801060661317075140648261411132363112135262667901031137190730769073150
7679080018606193909094229610354024190907904063131212511321506422350377
4318661011102872422871101012361411038539730406233750661112631141740812
2041171051662063640613017231190293166511176954541901077866511276641399
3217141486590170879775295653240609535761661571414546113952405910912566
9045449740586876586264057261920321151405666190524720490115152411304055
1741354921361109815240541371452191314053851135973240521741142579131405
1217537564140501281901511314049638564112912021314048955641560130574047
2531519688413140466990114125190119095810521314045192904704110832611307
1467511804110311131404439290776831033240431709513714740421283525722490
9511364817824041699050373161166222131701404010296052923241345140391196
7011421041409040714140381166125491403710205311130403613121251084710385
3920240353375066323690479905292130403428236113113875051403332516514084
1871179740327339016971235260318141144403128290951774967068114490253138
4030532152815954916225131491321384029282127964725131170588897064028183

5590807402711679893770640268115219298402543530113057706402413590354138
8706514023102865364170640226043207921754021509735113961409653040204375
5331244544019431486605792070640188439056161707177212927401784331012017
5102401623693072881752401533156471941762591289274014105610716029469529
5837710832301361306401367779369125315562141357040125092071530706255102
1401177914440116061207657011912792740104312415717535574009711212121722
1137706400820790450867400711035350417400694518801248613249359914005454
5171869043107231914013401281202131400454540682951101981915311404003259
1991092691102164002471007418212920120841104136121140014965341311510707
0140001056107160191517039996743136641725326361144423399833563115341103
2902955611539879115341399728290307820126307791950750431084710381327814
7399610256117433187737566102120896791516610212094052872371411426214910
3290725174522111399543124157175355775035141139946029280620718215369221
9564541176561153987913287211091710526719073157129415439999013413139936
4390143197211241284612859253035611706513992331674167718371411131498721
1092310127811080311381352372111064170139912826737017615342241399064320
6104473953653989103550559256398863941313011567911523987105646701211279
2720241110293398610256132160811032531443985187903641241133242116047398
4173188321722325051398350676710845152556398244370641281641461771122398
1509098106415739809790827108471038539907541397945125222253668169413978
7738237132930903209045321139095111589397711323270651837106907082214139
7621534070651496110306348511351021963975763407065120377210439747232697
0638813713599049518839731816843714235090177901076039725078290307791323
9719517103889039702322026589396942111013739682361111132022221213967358
2262993966684181654423965108110114151687782396462990739633582263443962
6841816551639611120751085739604737596395942115854156214039582062267387
3957851667710139561289092117551363955232785739541971385839532581385839
5218618135329147395192121119032395059311549141394953247191394885166773
2394723611166121394611349689540140113896867116394525551051485488394410
2150904139431376112394252411090413941143110484190394080910266403939232
1469096323938366515531377814139371398148425310663936684168617839358771
1156413533934179905081155103933210173048883932638564166905623931201907
1561473930120174456563929943901511863928435161411037013927421120126573
9266561121093925200155726117392489229554039231294908732392217447119701
3921421120465739202271289056391924970770523918131311013139178929011 56
7739168516677323915113417681339141287420826266391382211913621035313912
9563218113170139114211201025739102271289097390924970770523908268116110
1313907892901566773906681331122390559345451439041124451584423903105125
3901981663902268116110141140390110222597715813569617011611528039002209
0631725643899227128905638982497077038972591101313896892901156773895102

0712156389413364417065138932497077052248594104389225911511273891125441
1321513890384906630151527646411814031113161074212317316116290211616211
1311711151032151388988107363838882209040720238871392124170861137388626
2279357293388592902221143560138388459647790723883914415331313882153462
2038811431003155128138806153190413879507322114814112813878306125523387
7210612113876130901155123038752322041010121387467066604111238735327421
5748131701387214013420747013871289785905738708921352540386922712890563
8682497077052386723290641101313866892901156773865194451315160386410512
5390471253863142270641071403862851667732386110811787111012313860105013
5342140385912872117783014038583417471101253857891491189638569271358515
4038559890339116755154038549896217961371763853411266761153852921219012
0350857385110915351605238501845084188810751384922826070660038481051124
4170651384787410847788973238465121081223845113990500212165733844694424
5146613138439267902861903842205491351313841190531018604774917033840325
1207214638393604071611351411313838557872110917213383716681212638361303
2079217538352031264537103696313834623735813383317090831551003832633460
1103831201454903830356511123829186307756738288516677323827596510413246
6473826112804847111382542120014143238241496014876576220838237486632363
1751407027896382237623077052382110168049076617638201067715212083819897
5225313616118838181070147510321509017081714738171964837032138381614112
0908510111138381555787211091713938146868745323813797319041381220296237
3811923004114166609038101427847699777915163809117875107412315670638089
5567069711144380712164578224215151723806861497160130380512468380470453
1018604774917033803102268327065114438021386162087083801986319277083800
9324753237994069908265278190417313054610663798603308558725689903237979
9773812193796565090952142102412363137952453705090995379480749613268523
7936722081084710385392023792499651379192195337902117233789171609378872
9523105049621741201378716670351465132120670224692378618176217426157405
1110307103853973074110737855669549178225216325349090103741378415073052
1724537358741441303783290211042389013173512657181100837821027401178214
4907865219321077378121647326411905218195111378011045775513856153137794
0617541666090171437785861125492419681377711710227317675823377614736125
1637654081757815221777377539211016712419719099037741023579203211513510
7247601196473773266112761901853659637723393785154812155611082635142377
1358141331650176110190351423770148784327971570547138110109087376975651
0438713337685365104419871037676564831517313615083114037666503007061435
7376510280905640148331514562111018071376437017874623763258202901371313
7621404181111967537615262631109619069453760162133090878910251375959651
0413246637321190137031167375811049512345782241133247151375741720032980
4170639590623909711138375620624741540904578232790736375533981413751161

5111375479651174624113321216413753255510511117064502083752102861903249
1511256631136901709882030779113166367812387514070837511170126783224741
2901690856473750704190770478562415087514070837496841518912533237489164
5377590011113953515737472884157590757873746435161901355129527522374513
6130905628716310137371624513610724313137441853807541812836037737431811
2571475036830613437374210664578228795740101752237412063187236961032852
8156497307411213740586112705454774590983739167909634013069090454961603
7381171751196861864861032752237371104951237150573736339318696387901771
0760217713735548778322969046641108110273113734701457822411332471513733
1877147132905790819015111013947373239190169212401280433731206156440111
3189635140373030726449161372910286112070261372891637321896130145031100
2329264514165901702372772952349741773140473726505512051613190480372542
1480146111311502331402019010372443614649132136061170280138372381773912
5643386270906267052138372213310643216147372141610152150253138372011783
2491513109032988476215023249141138371938610152218103321585461186342701
3718417107013461025717510093717102829016531056753151414784877810852371
6270210132758710453299169514739013509237151623113957041139715573371435
8311251487657559665706290160371324412588341951063267901545237121623112
5766110167108134371111671255595141147138037102891254973709650300110370
8421120713707109388370670370530384716613179478215034418611061290111111
0620418943142661317423704315151715610329037539903109012566714711113530
5841779079117871110124710329028777370345566540407864476654040716012851
0321216115433211129112837111266103290685370233732574196049151112239020
1669604990147126821437011287897156819013901675143996444511038539130665
1370014073287391710588451329546211012542450741539905207541103290737742
2676660905307915816521303699862323453923137541322471243453923137305195
3001701032907211637411136983311103150561038539101214166513697350901091
1218939917013209095133041420771907174112101301908552539696551369630650
7077077990165770375431559203198251753077973695103896161371429616131915
9021720590741369452613162535196121708741658314436934189614479707902689
0961047061244543692263941117506675312441631416341412259712151289024179
1454758540369130284284665129627123513911454906176747369052612865691590
8225518136896088060926917226140381244157155664234967915136881286946651
1728290669209277093115019950142963687701221941150254812116796941151114
1793541132908866516007136862807119030779117015403685331462248496335449
1779079172218475857368496096631324690579675131413625236839603245151368
2339909021245147311901806651479375148647368144537961373680287371402373
6793391524864736783716647225447172437961571551045247966791135092312701
7142310958831844167547457811213219607373677966611075047367621732417777
3115136759310911172664141249114217113674812570923758236618762904744117

7421351873152551367335990156416590530797121352626679015064223503774318
6610190287552879010149367297619691590183984795161616554531725220795075
0968787125081071681772706292486473671280661107505142390323159025037350
9032047147321270375619047847191635401449054060390790723670218116726631
8773755123267973651601775212117446124113145113224719036695877704527610
3271604503641296721190250291741723668276431506651669155210110711131190
3531190840661311192861456635671713667232210132575561153987973187737530
7791366637110290123229092811792809040151366514376813203796551710111108
6680511421711366427867366471529029011221847585736635621411132363110381
3290377661210731903517066560928142171136621091251781903533011113047361
6011125390171664984136613143105011066513114176190312791037600674729113
7104103853929065833660252320907896132904291806177141681075436598611190
1045952132907307110365886111907887567792144365731211190131448611116470
1610423656312180562124134123820572001108311721260511303655944773264713
9413036541049141141890212511303653319310501101766110322145190912049055
1411303652318773246290960321151589016341110754030160065553512610319213
0365128071190300809507416111039471779079172836509609015286342473364229
0507473649102268327065149711683077911377301013270641144708671111164512
2423332706411384634631558407083648117885104412827738139778201921001372
0190293210031167364719247766841427832105909745114113836461427872431661
4654012456362364539981017725913109067147353208290311120338812125113036
4411048049067181463901967973643147171290511474398111751471301469190321
2717576244310237138473642206311427211063203111203388121251130364187410
8474979721108144364035777314352732131329609031590342473639206784132763
5307791222901093160804208711312746135159683505174870129310126032690820
1418791137363834351032647017650120209109141882069079113136371961014916
7690820141879114616787241917283247124288105870161042296274337382708146
8030779113736361060371361251717315612590130363525551051111706450208363
4206311427211069675131711063236247363310912566113251521757979126713036
3218152017141113498540253113123130363159611114137295111547311303630102
8619071914072758661301038539903779013036292631411713913826213174213818
3120157702418357511203212948760037362811159013535475209013675471032903
7539909056711563166609055779182130362799831050110228320909611130839106
9022032150901553571473626227903913256495510315519414036255262938044275
0905118750249524279236983393627725321836241515981962773019636111113109
6274441341681071603623337327141307431167503622170264903165376495111175
1351013834110015542211583621128620826413553426230790573771101205041621
5909371134362013680490539411043206783651848628001515564511032123245111
0794147711596115136195578790176521213114867231663140987261903114135206
3618371773908552921201351017962077532962150908496340130351485052275051

0162492273617302596436113015429590310146414151361657358825611519361191
1912146214036151027680467509051132901611552197103247790351511038132907
5547706241412171513614117898804908391623179132587417236611069136132173
0120111187505877021322331101443530779113736129312530041351391122290618
8741171414791226361181210907737567181463901377973610270313132575675611
5398791603609102423903222337750901291371032903753990905671125893110431
4195121842130167862313077911373608131728917962834713290974796813471032
9043411503607843109178379083411032904753990413574165833606259128766775
7422711066424998657709362668123605459777156193909653714451143731038539
1101281121523604102194881843076689968189012962029013836037913714966508
9879117113602256612477138816628811670881148331987911711360123315120280
4901010446253360013496828051613152253144359932813766131491112022829065
5325635983513747733189669535973417581392150665135963134761671302444766
1241469213016712014212135954476614540786132906377919066115359494154313
0868710225635931713296296315404713601409041610401839079735846570903592
2591287667777611141051657501039016512422711747968130931711359110354845
9486184490411212574227772797359010677475818439690661953076677279151358
9541143115127987911711931101865126651358832031050110716651665671574904
1371763710635437713543771337119376990165623135871513105271661311091732
1413513586102166124717905188190234855137662961113519071471992282157901
4207902335125927081399049831721505789372671790515526713710385597827225
2470210657121112101204190766513293418104131987911711358531331050110667
7130490413217396421890574365137769014250483135848915166771989041150721
0586643107675371867005165750130621115071301813967019061428145701906133
5832591287667721113086911474904763901551131411911042276090507265545193
2065112219641351141253130259472105245965145953145913045913066828113049
0472658114723850120529317113582842703356519367990165901215615113290640
5405685187029879117113581676811666110462747803683924793735802339116690
7553227508357930127175866419235789675493113625293171135772712057581131
2015686335762592297728741140290903512170140741113575138227873574731921
6692898791171135731513105266771531047662961062949013492714135728168116
6632149663797766692109879135713513056624177132906377919066115356610801
3121190931107141357022766241772161459077021411890211227110863160932169
6219101511306511097214213166166412109010966650736130121115567115661617
7053670735691038628301843076617096286908467586512423076691070214137166
7147356810212111325756675135973166101814273341086579238107273114091068
7313906332929896485742336082615135678131307166511106641290488904504197
7356662529044336294180747662249230766136644671571977885605655374889035
6356539713718610401379074120916919201119615114290335409311111356427130
8365327002104621305463076516056096356328166110750771010804369611073961

604119093111113562102120516061975661318372423076665452057356184270345 5
816414799655654520516813093171135603153105011066774317010081292661046 7
733559391723986391303183908862469045436901157791943558951176677562227 6
611681198701957307791662103557259128771665115541873015136278824128666 6
035564474347156090141659109021511566874120123422790355554710332574730 7
662003076613141706138502232117735547316692683293662197112012372662969 0
907113435531713253841150784212412015730590639636275041157724705013635 5
228166110750771876610011370678411103141714825671770778247790115132076 1
176610611216656717478217031435511713294467379275733238150307661501043 5
503513747666090757337253622067676220651669027074170190130354917132966 3
170856174779092051512270801303548147667977239102311329066877814035472 8
132893947443566107540317901551034423546482322805128315472814695120293 1
353901227361901813171236111351055317073545140732307661314110401839079 7
358146707354431976872234431063543103868141229316914383251408707150171 9
624690707013542303596436677612707021915542263464701170661659289879117 1
135418277442181239120286131354019416521351358290531561222656496116696 1
539013527073539316454907507139711841587513234622790664239087447917281 4
949229236902294793353825912876677198914411067105113162170106153959079 8
495477013166124170118912635371332917139146721551967901141461034750714 5
156282781034794901929026366103413536676811666110462353581359643716651 2
229061344147935347915171665136839247937665019317113533164696155716511 5
135321216453714730779121031519561303531255510515197064502083530358112 2
422079545127879332411032417221652217773529236112442750905121690406387 9
017790107607519773528117695781311875610721011222513527222465842997129 4
755613516035263129219165146902559047011145411646214035256863749052126 1
071540207414920130971963524339175254804609680490991352311787510741282 7
738137514696929682051213912821732477914835222067843888845415556115398 7
914235215323124271110137711713520206784311131305907569141190540111351 9
296403871266872471409451201068943518748315124754836880789277027914651 0
692351759651043665773819231527061161315604389335161741488990981521001 6
710810616190504923614235152525213019040522734425324712431113737070161 0
423514729262415406256741477905571303513357247133453221730120531032909 1
170314435129764117113733120190109219909573672540351110541901269014510 3
540351069901937301373531050119741350928912535210431417503508530811151 1
135071569046283540103241132902722163507177611246037469065909041601110 4
775405246590108471038539730741663506475175152909609044741147138022290 1
391132687202413505232202909521231454497350471350381215066518461001131 9
061447100548274219061447281904115615411031671401296651350214376813203 7
965517101111086680513214612011118637451204130315791426250814217113501 3
061201503246525476342152334199151953582066811011491355708350052629380 4

4275090514179031066562241906131615160071349926314111665773659014041571
3911665375034988125964366571503441223503774318661019028755287901014966
5160071349730218066512421032632377904134967894665166491534412111378190
5924717250890103290924234959310911166511038539904165349420631766326583
1306622610385397309053696349319407734111045401716053492331110315066511
4743237358923059511130096349127817866476473145811841581766411914096349
0371773411354017143551156441522321386688414807514070834893004233719371
4012126690489014296731111165170106910329047539904190860665160771348828
9526529271515169026073709020134878861071502031665124910329074037171624
7603734862781179075051114411102993411206242924715714162113485812129665
1668411103290753990789590550834901567142051576211348459651043203373415
4041549010247939796901535251111407501004112920511103457348337141107405
2151171902126111062464835819316334821020100055151689203162119851788221
1317073481621060661313009622553017253096655215110422146214034801028619
0105832659079173074234766730706347927016509096584411329014512509096508
6245451277103290147662114121253973034781091251710966809669534772014547
5561153987915134768177558730776690711867071723464631158407083475105773
7567191722140121266102120870553419209014296347424545732479019110673473
2224583951644781572167913472278259193471109454412450347071346922231791
1220371086680513733468206317911381106691770346713732491513077912261845
8965705090382706901711053140346699845371455977791210318463465596315101
6660356786603564166423909721341391714147911373464172787701361210539413
7021016754662346334518117311417403239511117690103540111950769010354095
0907907416634622261254651069032570511306120151124514734613064370210616
1570374875703115134603668190967411292219342963459314310501101748798750
5145276103238110666487024112313458222137901559751132907857345710284570
2829031190794782666908131416901611243111101329016672119025030074166345
6227340161109772517919072249613519141291152903421403455976196915901845
2481616496539091694325030051417963454392203156915905611539879160345311
5346130140963051953009034522307666690352443156421511329018112434221345
1620766711329079117871110123810329027713034503391751477418728951422548
2432472339017611053449586111517126310907909019090591903598540520540367
5407907416634481077451476614670339085147661242181111427890248203908514
7344724545736614280820810750133592171133437014813446162176442750905132
0311120338816651217773445225457027054443855375782952531428527083444586
7784350091151155139413443596226997507433473442586249135390702253958477
0254046162247811000142100708344134489431750381841093877919034406519048
3371571645184616234392063114272110618195750667604463111614228944166689
1491243422134384019075476683190291701401212589777914733234372661764432
5077025111701182679557141841905219016249041909035251905719010023436109

1251710385399014260141115621799540761177411734356073550103853990904134
3412594917021032908513570254024810381325465141796343326617644275090514
5276103271184113290103126687333280417963432236176442750905191590147629
3103191417963431261442750905115460111181038539730417963430766176442750
9051259551221094756719251909073051417963429140650249170254060390790514
1796342812597764527610324449904818194819049813342715617438710385399083
4134265567455668662013425110480490147837137465735307791483424276101190
1255611539879112234238467661675466234223615788445157690758076342137010
2167546623420729465409954076117663419548884664147295110869791178715403
4181036236781061055667112149633545532281721328103271511113530578177907
9117871110124710329028777341738724713314290731571504014132108471038539
6673041236907177734161167458371205196559011072063415206311427211068566
7203166803414289125173119035066342341322329877276961329027265170872903
4121158107776905110326590341127714323410713409249140665714319414120797
3408421556989010197114172277236611069113097196340736666173162156899014
2110592249154522177734062062269635074334734055864570223341991519535820
6681161902297823404206783610645837236571084132965571047340326631766326
5831306622645276901032710041132908790536963402150310526651353208290311
1203388166340117214166226377431866103853973090536963400181211177832366
3134783112908733995222471162997913398232204160966952888149061312818990
1935611539879733977299254047781619050339621310214210115198791871133955
9651041813152279808962319080413565633943941029857806649339363631511407
5528047915034738066553392948456768313759879710385399041150320128726811
0130339116217693628375090511554504541301395215577339010296052986612444
3921302079041211588671443389105832465254717141479130090463412113233881
6863470213210143742390137908364704733873883246525477106904296716245450
7871454611397763386226351141910293101949288743921491359777913211915443
3245436445373385666411507222366956347420120465157511571474549061254143
1338425646750905114110385396673033832283221647171105860345633821091251
7310906590140411506651338120678365794424496257413210157959048666090170
8791570338010362367810610556671471352901411032779190141144170690141102
1153429021575913521313379223784710329077049611649140103412363337885284
1331202191874017573216909046211055682337760425090188319182681333762441
0329097737832872176684146112113836471044733752661766716966711403374306
7843132902113467103611018352337312949047166232621195246537108031144971
4790747704634140451773372129490471647324719896921411081384696511313371
1031784251346710361015213854525934140477337027517711040120213133692869
0470516677546213851321511271121341125908631336412658871213368232901390
8222414258871111811317015233672201208379062969020947346094131590160194
1703570336610912511562124124961137453517133654019090472821148739321668

749323101875654096559012255559666090214192137336416217644275090512829 0
661403197542138513215112711213363817737573658908767152664143077973362 3
503746906660909047132903710329018249147336158852311902643119078233603 1
431050110665183738737066540761711012381032902771303359280661107505199 5
407616626110217773358133106432327110471929081722184112957335772946355 3
494338661241490308901563166609053279151102119255966609053292335659651 0
519081079051866841811317012653355261161662361082003354102751177142611 2
760321151111356121514165342140335374678111187561876771106396771743352 8
099631090666901414547681164153480988203077911373351362236987916623633 5
023230090431436610717071522262229034049666793142535103669071778268921 4
690142963349220908095611539879733485965104320337341525111140750100411 2
950345711958193163334720678741119201526165430561153987973346232120109 0
665122523172139633451812111743166341316613121971903344134416122951512 2
067917041334381423620179166310177907915311403342596315192153516375114 2
713341713340729529935193256310501132363180137661104743733396519052637 2
224181614887017666412120174373338421111652611122290253324546115051609 4
704733371028619011965249014121213011541255382130108074151333620678413 2
512147791301111184969681011515649033356602151463710329010728031820159 8
372364503334388128319253770161669051673208290311120338816687202134116 4
977911073333871907147666090411959035711211032218787133323803214737130 1
469112081066509106171414791137333110209087365635741741570814401196552 8
079113147290151110883333037080312010137114727111953051190387901379056 1
046651150771341401108229213133292752031665110329017614023761661196112 5
969017251037837236664221311409332837920316651688311513513170114247200 4
865345141114904731551092116146907135751332774678411658366513951227318 4
132613204650901843326573510791541612261206233259761969159018459556729 3
101901036539633247481129558672481661210369018756413052871706610351652 1
303323626112813481661210369018756413051011706610351652130332272952994 1
843789083351132363166173321216473454704115022833205861115176612184675 7
141121731141740228331924990865122013014697403901223318557311257668515 5
600331742144674222612062331647578963680421475492150205581821463315142 6
378416165410676111131068791422531671551087911313314573510791541612261 2
062331311399018756115409655511566110146911198113617133126561121198106 6
124474799655591310908574733111027483234110571474631554462974790582418 3
419522271473310798108771713212190530702165308266113159010766330920631 7
661068590308310501141462592249751607710529011391305052251144330854214 1
173119029661064139041931713307130146231170131202961938114412510781067 1
777083306296403871161562762994370024947267330523013790715225390139567 9
213815545070833041627451379045450779133031386175167751771403302106217 7
293166516690191212174731308319658538922215049270131330125551051478136 2

0116612490425488130330035752521441507319138132901164174331777116417415
7041767138175901394915132992279013243260229792691672532337054443147547
5173329813861751529096090447411471380222902531061167012465847047329739
0711074631558361043690518470473411555263574031073296401904704727211641
9617011243584704732951386175259251713037838710741769045411646214032942
4790451876215596710905753293406311876228241140562053292106217871110123
1819092874143732913393192969631391212103290741168932908149098667116364
1110140299401841001109711401911220369090540411021711406137328910581283
1562361783547696129905249214121211613732881286590708221477302683270641
1384634651164915132871120534964924651021861111519115963389441413132867
8851682612642051203761421001791126261732855965176219113593061202131328
4301147789691406412229030985123890826188766121090813120335903411132831
8290711080371331161118276247465477812207151181131573282232202665261116
1151539902992089013242320907040815132815851902829071478049647114025251
1615687113125224656901114326765116910151328066186411107211013111113101
2552887275013132792209066301515271304015121547144170571881131146016645
1110466463239951215611313278132147106590810516704031160531327710621779
0459108031131311115196915181570412048011013515314801107506048932763908
1090414887161202211961414465407625032752329106630230441822031532672411
3111617021059019226142904611513104412107732741336789512121401311045314
1477327310621779011320213171269296883327224090506188459622707102511161
1131150140201902331032712599047651614471032902074765132614511341919306
1990516151161113176801174332151206511513270102104671116351311365134806
7417827126921409018132694031116771601105614320213132682891317115635136
0401361200137061202131326710287080564011409070613111599011611885907411
1078590741204785907127859070699129396934290111568110140640326624970776
1476946748331010327732652063176610610866805157646537136700304641344326
4205355190201412361109535611132901142115305326363631515512077722051036
5373262227905061381102625167744642551128211641911073261636315141175572
6151140941315640130700406642537326068078115103406517281751164063162532
5942190121612165247537109137819022611510807821086511164141823258974784
1135115103406266103290751663257798204562041032901418791110140512703256
2759071561565049972013510514203814210910329010140651325516217614141211
6539013048632541334544124503253109325259611111132224789241734065831363
2511081905292210830962254291724201703824375732502619077516473105041254
7417271020277516419232495965104132466352829065502118496324814776615790
5196810115156490324763643812563105055174166210102240640215347667616324
6865412566630190321032909653990902373279074062324516217644275090513332
9395177101154522177132442253112597743155167182324359651074314184347642
4116313111702418324214912546573213090465090558623241222314657814251535

1032901275855155167176708324022612546510690325705113061201512245147323
9306437021061615703748757031713238133139110716611053632371811251775107
9202225132362562594962323511769545741721312621102003827065132341024239
0321038132901018904732332164734547041180222573232586317661061421109107
3622257323110197418729028486511401303230255510511117064502083229326819
1090470371554653732283741787111012381032902771303227128281327065113290
6710870613113432269296267604717033077911373225166964532963209045328379
0185226323224638626364766321043103853990901503113032232555105131841313
0661103710381329037796995407611791322258611166511661103765324625032503
0096247233137190899132211376411716611037103271117997416807021080259132
2020631766326611037203016210927736109258667109502103210391321917014645
3266110375098595190714115110112375844113290909410385397309132185864281
0661907918211013765831303217108124914125015530732161294903616473247200
3215680112967709045318111385132151127112132144941464913214260903162658
8712132137484974258581811317015232125668498791121321120617646750905197
7436224635303210174197340523051787111012313209636315126131726127332082
8158419536041812665404754768608138320719437103290210214535140907732069
8614649132661242801311309822271138320570419066219667154132118101970146
1113132041196441457826684511306475504134214032032322026519111053720013
7061202531517902842985613117712080638475606151329645361403202361146904
7157666090476471411063201230771389017147411765315907271404041513200475
3179190476418201200576362771313199270106021213130096225530172520963014
1522138212910907061311298012061513096161451132743152454901401297411313
1981011461156720190546511327431528490760131319723047751132578481711021
7111313196134751736969848751323165666862743195744481491324628181066462
1217355113119141513194417283421236268633567319324677673642831161573156
4170212751531319270174212416127831863491114310813831917654182421854704
1251905471021711531319023047311050732318928932966102621919056318827042
3411416110217115313187339742123116543654086216706435708318681490470415
9512601313185105160120211323631663184606471136411561038539906338137416
5843231834753112513312021918740175736660904601331584193182102057042310
5090823535247413613181170556390439741770434182118612106403180102152511
7796731977485831791104907141492113140412112505903178220979067070114061
3014157511161105614415805215114420213714290830582317763631517419117731
2316421511711125531151111104087024183176149125256148849068221514317513
3941417065131050904742501991911421711137211917123174227829073011096174
1658313814119721462140317327517871110123111397123610338283172102268706
1383374634491513171301147789615740641412530906612109081312033590346413
1702581286141667611936540970903231694174469131611080311161118276247465
4778122071511811373168109125665256116113167232202661275096282909022851

7010151316658519016231047178049653125251161711161317013165150788490382
5707731649484583790518046675791673163181125187756883916231791513162222
4583951644781572167913161256518193160102429382412450693159248222119777
9121697741769075473166933561153987913231582463141202102315712111509096
6007131561094527608315577977220119631545511025011048731534114879011012
3353152181211115631511599055831505466823174131492891251104623148596812
1261210186131314722790493120821487314639410009573145903905568013766110
4741113144239201120963143615477510724731424117887473141103171479303140
1046363231590107473139576784116510614131381467841495403137170606516923
1366299073135124610835233313463631511407546313311280421741871623131323
7413890166770313119677841155386313020587211014342312931262141155511675
8077312812820912062312710228214331261081905061521103125132245787312423
2202527623123289125412225731221967667147467509051312110205677371569665
6773142681331205964314121213131192869047051132901611612503118814120102
0576215023245147311739990451921383116128777907415143115244103290977373
5714210693731146812637031139919048337919431122322021103221451204901151
5247311115266588311010129690613109956323827513170131084216710272231072
8912541222573106196766714746750905131051081249141250155307310489229554
0310312949087323102174471993101206815211320231002229023061131309993490
5564511855709013830981311464913278902629073041136230972329010028583096
2322021103221451204901151524730951526658830941012969061309395632456527
5131701309242145146112230912891254122257309019676671474675090518041426
3089155188462308810205677314516851237308718656502965023615671013130862
8690470511848162150232451413085399904519213830841943710329021079130834
7124149637308215266588308134641967909203080855115686289307914245490307
8151624190107730772322021103221451204901151524730761526658830751012969
0613074956321296527513170130734215501122307228912541222573071196766714
7467509051232813307087410847306912873032706513068106890470704113771616
7138306710205677317068261306614246030651181641053064596431057415143063
1526658830622667517517083061109019025121623060102816280525093059232202
1103221451204901151524730581526658830571012969061305695632156527513170
1305542175112230542891254122257305319676671474675090513052194761352540
3051435161901159620030502279012096119489113725693049778156512021313048
3809055664118557090138304710296032525130462272165247304510263621211032
1165130442067843150471313043101849950147138304215266588304123220211032
2145120490115152473040152665883039101296906130389563264652751317013037
4216414611223036289125412225730351967667147467509051303422790206225815
1116303398204373032511908112130313703288247303023220418670130291028611
2071514663028119696511383027170103693026110045961313025806746635666090
3024532510416175146302311279261530226608952430211401346641190323020108

377121031563019638561067373018922907156431287301720158711901703016892 9
019414140110301522220569407202301495561039401290511207473013885405207 4
730124509114407083011236189117473010799179074130092322023240801763008 2
327649130075325104173213130062467705564321383005106673267300453070129 6
351313003231361060183126138300253241157481317013001259531554373000289 1
254122257299919676671474675090512998892135254029971741159611612129968 9
254017529951051703805015134124118310035111641156299413921212051511312 9
933505211610213119561115129927006042991312627707702990270187892989142 4
549098029889651535829871997811022986226127542512985569136904063712984 5
681118926151116418229832273771516722538112905116952298227825341521010 3
113829811742697119030085260596256299200741322569075151132355311312980 2
681162022979232204921382978128304221297716741610157821661162212976112 0
138524068414422186218297522649141138116751312974433120702117160131297 3
112410871512358161436138304415129721124457851304522181297160949135171 1
462970186565813041932969150269524372968569136905796132091382967697822 2
751061908735122429661502997065149131131296512718131578219133296410262 3
157821662212963286904705174811312962102312433431312961250902041220372 1
019013129606565105110847127967120213129591791012917413565113129581287 4
208262131295710263249120131295625651051108471038539202131295523220247 4
061312954312624765111049616545629534219016969212409311407115096029529 2
290587025861312951392904575804416005862950170330901419385114127271131 2
949312621612915129482322022965221740649229476661705246578951131294659 6
517627521108129452624137115119937304926294478851682612021312943566324 0
614629421062177411511162226570729412891254122257294019676671474675090 5
129392701650909650460103241217772938548778415460672918429371170125783 2
552329909209046647293615313626714101613290155137351512935196933221067 3
150293413345441245029331092932798622611621841416721262834113029311888 0
151896695293013842396202299431316766729298366016113130513686990817253 2
027972928178131116817702474149277027972927262247106924770824437531797 2
926444664141813613014640396292525912876677519526664614713014114697403 9
032292497956501875680435961292354314075019096123371413266248441221596 3
780137661101403179729221487506277717763577023870279729211888014615729 2
012427177951987731213712532027972919158682774787972918132138126657708 6
210321104067913298329175272067930512061207152931011037411729163013472 6
596109212132901037416232915337636927111832947138358757514070829148137 1
723296011104775405246590108471038539730741291381382760711659764563174 1
491104622912103207411710513019032204901151524113029119675433236247291 0
111620711033277105537255314166609014829093152227730211318850372907307 4
117290825821881010810987871268177270630124374117290723314764392479111 2
906961315509065336142290530732142721939671074261402904731128163781812 3

1451417108290322141132901456532462503250291741172902557287109464133941
0190103741172901281903929585402900751154311545401321383014296144110222
4160071289910383145322133245512667236766514704128986711547653217411701
9061228971038319080426668206152116343516748712092125512896297665727417
0719321786512277082895557269317832272931519724965044134611040814028941
0136535760335105357289373175062363291108556822892827741091532161712051
3973217297164152289165542046572979117741709261289022426260711516045411
6462140288910383711250067984165110574791288875112514184325724873728871
0416921117982770247838211587673077911372886357212241163749081628015477
6288525538270617081565120211327137288413372224017764701769511208911342
8836711621701705004561128821033271102101500111462911010028806228813413
9211057773581397661212880498137931114132900622879181125801810766891022
8787978239140901474141201287725821220840376651231137266562876233477483
2369069013425326071371618867182269317911372875303222777495359029321601
9990412151147963242190152342472874233774855150980963413737110051215924
3788184287320914784951117418559551064890809017505181107271411411382872
1338374541428713014922266660901424756362287114781222110716953674196752
8703471175471627804416655841810751130286973170988207098748131286870910
6814509111129613870828673042311361778611190646702286634116972212053216
9729322865397501192888149061345475090811501033015174162328641036151119
1760350100911011512863315234329285110581379661583547677746150728629611
1516690468867199903661516132770671144286125912877156103853990291150741
9313028601382271154809582912828114428592209711118485714611513368710132
7065130779113728585573724374471563720137100126615637796513217963141659
0171428577153893105073612190530358076411710761038539903574128569612611
1681110462877416232855150310527214743197463396211549141150104103853990
4165513228548177315775355475124612077779110287381505867916615010487393
2951223277551031285325812866651667517471357101208313969021238782307681
6279167129779151123241872470114241110115787083076898791223922852656190
4439066727702626866124904232511102174191074782110371244585162170100264
7534530417109241876984187571418721241871068418771841875074187744187478
9045851251110372111081110372113051103721115211010028511501807285810750
5774104612105689305162165180802693147214290218285078150724179066727701
7790791121261133810915015210327082849781507244390667277087211093217015
2131621553717010090677103140212676961151905731326743141261329064110311
5010910497079716249079113119879117112848371108282991032901803077915203
1284770419032710364414157164284632845147750763009632112586312029273176
9017775141174110975206177907911171611032901305561153150987916680284513
3106432327110478165005751841176784111517244313132710366971302844596438
1266514018560731130893686901471268214284318545147521669163076689962842

2454573137221153511071083076641817022271367192284110584567323071556610
8517474161141104018391284092046418139758057283911661353907021071083076
6418170828382296747750769013539045654013733568922082837650300413119029
7250341213913428363143105011066513114166740273110360901412931103609014
1661103609021541901250730722835325773077509051293101661422834327717307
1113531190120391311907192206909636901329010366690813141690262118540671
2654072306651600712833371664710385399071283224643150724915261401045057
2256103853990903580665160071283125690351212573566113709621734701980470
2872186878137171191904919190491316432109013917283010234072761721296619
3212270970241841102285187283187307797282971121231190317729159082147411
1966105282833116995932577476441815714866920120823760949031234282715910
4396358010696936750516675141890282615031052721716036610183119029166292
5611025625156570428204233512173761531478268508901202144877501990172141
9638626157010385392566628256601027192906377919057750341210113914028242
5812862827690661312909696551070183954925551103411095163237462741667190
4588111355805155416249081454146879791590661115418807331791736282315013
7729159066110538193511181379022615093922822574190223161246641421522907
5041180291106237142677110112270791150726590239471210564715749041717671
0636277136277137563547119756347697593325227637761108971098961105413252
2763734410543499026605971362821276438126651753875033410113399018172561
3028209164746241150729051196181121041910415162170100281915059643729038
1136128190140579076641810461111496414701312818137619090810790421105439
7841847812104191041319879117112817270313132575202812986748211414145915
7312051232154428161331391166512121391096615176628152067843285765861557
0956281410207738184396901575681543620306791512813258128672906612905146
6322312036610290346218343474235117215094143441372812150180723119047661
0681390150374165917066910733474222511364011016482964011016879319879117
1128112582866657659170669107328105963149715072843969081773759879190425
7805176791512809781507244390667828081965105186054875166104028071020458
7061417085405181864157062170173280610206612417665371407901004115559860
3591701280510207739513214190190843969065917066910732804810456612414734
3418707813102801151167280310210170614481123857422395062170167280210207
7335135227446747572904834113525180908101132905014813115016713411791512
8017840966576591706691073280028690715111666180251743279981412056687112
7370951804126221279881490715111566550517432797286120566871127358395236
3231075807663306797279625812866613114275076904107913227953284573831575
5393742651169310280418705406203067972794227110750254560758329431110565
7733288319927932279010581935583293685525105166649028648176137425613619
5012510510427921376190463412961451143145271279134081045725512812021362
7903881283156207124761727352583180137661108496278930160120211323631139

1216659127887293192117573841925912787596510111361713297251131278616617
2568727575831382785170781032909726013127841854596299438746561278312841
3551693017741887122722782340810457306811361922532028790390715627815463
7966781312780102713212513196855253277989114777857161143225313827781178
8590170840422470712777115965128265518277669198902368677911471191080962
7752454514711910301702774557377661071141113279073078227736385641809262
9614711955751102013113014114027723302021314775847024182771107451202227
8327704114539022777202136276923643141108116119154431552768391169412805
1110582767106217790563111202276614641670422021302765586111591352104314
1276423611166121872110917137730433650737702369011571474090661701412763
8091021415073227627241411306526227615965105111521437223173105049621901
3027609561121306526227591051601208163539202901302758137611213065262275
7596510519696103212013027561282813270651132907066710813113427557045310
1860477491703138275412413141570138322753656112293101111241466387411727
5296452103290961741172751976411711373312019035274117275018895457023187
7370161555397024182749153647277539121806139714027481811115907010009047
4145734442274715933112083916231791572746650300415557727453998101781022
2884804536412744116696512012596750732145961038539574581394734227432821
6877214149325872024127423663512534136770412741128494117041494116722315
1274066430277822739616234110590170840422471104273879631911118761131273
7270457028067751352702418273619736457506090142817069012459018332273510
3631511411694231011423219118037273421936511242903976727333302474196441
8940841472797273258631249457972731162247414457972730576247915904579151
2729636313212429075381272811871907139921372727684181685901025272634489
4317502101072866662725637262582446501710572724150596436113015445390573
2117112723176501110121341120165229053160272247517545411646214027211869
0158854272013381198621592147218271916114784770914064127181021564652626
1311634254027171623117615752420587391760473330246441501010341342540271
6132747404690562412715861357121904035402714106220615715012791411441826
2713155190170111131271277843401202131271119835108477236611069123332115
1271068010847754969647032155127095367142142127088991111018604516480702
1111452707947702111630503520962706958815189550781616305023270641965590
7838371337353077911519010213727059561121215369090416684511352971354222
7048613511219040354027035627157442750905127022188104572641281482021362
7011062177901057416583210161111013096451877782270013969697779190107237 1
3516711516290326261176509096191687287292478281184161211514615626997784
3401202131269868418777958723332115126971286590708221411061186630142170
1320512246305023270641151903077911022112696956112121536909041668414611
2111514165342140269553416111612226945071027352419696739081280307193909
0572693171109892852121215901203514269250710273511296901306909045479048

3269139177081105810329021730641132901452690117176112071473201322467811
4026891028187561115402688536750761115402687822119667038017314085407910
4221710121876861184523686120517578154026861205019014415954026856990126
9019378114026846919645381766791268379445672682105557211045797268132713
0568457972680162451477502071413170267917612101761474904176311032267810
4536445797267723793457972676116610671204579726751027566904579126742231
1910426733811661172401371168614644141572381421103104891703203271167069
6132902611611125973752119095901701034746711181086690262672574190841194
2629081298987911711267127867366477554770624115026703021806651142962911
3790199662669941466651309108663114126681247395095133131321736147573552
1427067478066609053079151356585701002142171126673717830779166862827909
0502204130463155496793135913413077912090750463463155840708266635090109
1471407751004715179770416660901482665280661107505142390750511038132904
1150665154071266415669551013118756122786626635964314166210645726626501
9140712224181272902081111424517115446802661336193519854052054080741172
6602583161446651758321032110570511321362482419061316710329041908606651
6007126599310914166571032904753990413526588121296651164510325804113290
8866516007126572631411166577311659014041571391166537502656302180665710
1902875528790101496653750265512861866651664351151012540717841572173967
5026548818066571071675769265339981041665711930866442448753754066102902
1679726521057737514746573530779726512014549056115398871107786576612126
5022056773466714071678564189525590307791483726496503004198791406657183
3514827193222901395617141479118626488650112010625718321310401839082053
5401150411432647781507241766785404011504166800506904011415007023262372
9690152903424726469210267181463901377972645270313132575561153988712644
1029609052921421711130264337147170754097621364813159087264253081115131
2221245757856672086806655264133190441169520106325520311378236752782661
3875556103290287151264035439615421858211062295976211133159016126392807
1190174654042156111672810410826384515225915226375568164146177112218475
8572636278178713411206842925464414157149103290156517912635941466651355
9066436731661019693011453388207479874917142661547366253153513210812122
6090811791263434438511066579779859782075126333066575020316651987911201
6566512632249508704111066659908667701505479610657379066918026319761909
0917770747252133961376741178217711666101100881096906658190901609326302
9640387157237139411103901834396692070279126291133508138115193617619362
9035241110661019671711544686262861144341845401503441241969026271695169
0137665811020967502626178111902497421725011741329080019268530967620121
0651392625244136469589902945431704504132193904452071243581091666491020
9675026246114451481001139102594754026234211041339613719362903524111058
7529066101943752413562622220835090471104150116235437441429075726211043

2724822042222032112920315144311128960707262081773908559724695214964495
2026717115974128014466102120166307791512619933004122167905241222618418
9614479707902689096104288814906134545611539879164466512617349773819969
2104090968205121391261626902518126158011290417305261412931118690102251
9051375579307871247901138781756261331141190665130090351216665968041151
0873614290736505407313637743710329096539909035776651600712612319310501
1066511875610721066515287971463882001779798791512611224902966574634121
4477626101920413976735127021954013241661688439690663558051960719026092
2441190665128881490613454561153987916446651260861110811710220590303100
5120902607117892117502153147101531416660909026061339421175084396860191
1018353549957710181099131288110668690142962605146973100665735544437502
6043497731875687161796903566102120870164561260330042337193714012126690
4890142962602339909058266579621231416167572601314310501106248738621391
1665375026002016509085960881372116139782551032616321140769015091341931
4121490156506901563651469540120913540150344135141281903569014277512167
7518459054020590540144905406039084113260390212905105114217112599371773
4140845136442905611542225982543705048814012126690489014296259731866773
1062934547291142616847811015012761471111111550113566256259610203101677
9512625081421711259562641110652329259141692021312594684151790535135215
5725939164115616790239150562592536418641313215576711012112104431312591
2264911151936969241349213025902612533236247258913717610647069051258821
6877161032519517690246904731402587241715216181139730375861482124391327
5562586536510741116706137982254188120312585691236110641905114423631258
4172126671599175562791512583236319651297967525826919656222414142713625
8126736491981006660905324711125801031713270690111590711049711307791294
9961578213911170925792061450905159238887024182578339319611331511025525
7747935581753511111361756190150170257633092501072865922575213262582446
5017105125742611665166265909686128954944725731031818421412031971242903
9778962135186383570355972572798810457285136031202207657012442571227113
7761071901253559725701062904706114145132363151140290145115354805110301
8447077011377072569220909669990737256838490501617072812182567197936175
9025315562141473100090741531355972566340249457103116061207657012525651
0497577750601412123511629041196256420131052779627444110324124861324624
9227256357749111512390638909821520225622417725613067211109171476946257
1912622561370143771771090958307017399012970119727256017414776614678964
6572979117790402255910512539047199355971329065701712558220905669990697
2557301661467896114454047144134690125147694675225561378184644181571481
2421808682294755620525551891545716619417035702554261962744411032415212
5255395227935721925522591101382078625111181255124151051496354319138255
0656112666090532779081254910703732127031416660906131312548225424154013

4311110137540254710584911112182364136025462257851223706277185321312545
2591148970658045213825443751751421311107488138254325935141975490221138
2542106212056489706180901382541339461757523332140522825403064435176242
1154722539401907901105834474110385392022623213125381949045141141465138
2537102861907649151013413125361373655641382535227364914411012710411574
8131701253420177713290509259462140253336635572144263920712253257616790
5110452479667912531660927817462268116462140253013153116846283490156717
1573211901370111187862001459262529103171529711226222773901435459625281
0164170210616118037571011921302527112012629790296103246152266112341155
4041855425613225261669145372363406153111190605417541252511662479201204
5323299029310312690130252454877841135867793189152902924831402523121645
3721061511193214078563225224064537115612037282651201663168307791150362
5212555105111170645020825201019111422331103901937302519357453299225149
6930741707193217865130779122170825187299853584753315447781619050251772
2125440132665152905321544725161361309050377437293101730741172515116641
8120511035241132160251447517593889616047454512771032901602513162112183
1050729016075770147210385395130779121077251210627077098758306590366113
5140962511576131590511411120325163775547706241150251020624851169233312
5093567732126413291701144250821352323631564674322969015290342472507116
6125139206317663214290926120909207063184131304165901708412506157511901
1110131250523611160120266201575663241136713625046164510329041170841250
3746312931011362502794374821207483112996103853990904125016268177961131
1782113973110141930322500241715185901787421750512563624991631084710381
3278147249870511319941812645043812124971031715297111382496547190237951
1214141287142731249510869645702114761512494861147824099764713159028166
2493656112980954241011391342492471113351962401112905402491695784715111
7316819947249059631510519513617986742353215234247248916212611331590177
4914124881242916118572571113268732802302138322487181211171038132901671
5021213124867484972999386305023270635977791100274183512485168515823255
2247909209046641248411661115905111617170324834209610733110290736779732
5013024826737805113290432602297926916725316813790775152524224817820990
4167846772079018472671442480576215377108308161311163081595624724791198
1022231395655965521713519756141411604943724781410150287297150101529612
1413843111513222254762024111037324771504079101222905629573247696774427
5090512169040638790177107607519151247511930583780920741410676341907077
6247452087776606463821770131247330347011012196870202131247212118756569
8714253513193012010719624714203784011120473170191005311228090293212496
1813124702511548320741254024691096207451768930690156831196513764869613
2246852319666550811055354511131401462122467121837961341317724666803796
4793250512465890899092411172508070651451126124641310332154757516618170

7246311835577620013290454113014024621417120213629619205113290384503371
3912166591246192175522756617512190954272833521447762460846379716911111
3617561901509624599717890603110187785152624581417933775547706241150245
7137351016329357519032487600317662456106325701113585291376357931116538
7662455442378096610312454341172996245319121220621067120183245257329725
1324616146701202431411082451571329725110715472450308766374564327907405
6244979187567567956952448214187568813612510719024479218590482110162104
4154901302407702446141310501361132363174166969224451918190325540443172
1151330741564111571115801215057161315365155905013178813124442004049677
6123832770190907138273097043692131244331111631121131244214670276312626
2780536511310612733746017013141531113124412516519223224408376567011804
1262111312439116922834182311152608013824382511036193292625779709214611
1329026275131140243720137100175100371378628332266112243620011642967062
1880735681047588424353421418501017177729021612910714314076241138243413
0123126290180217048516454111017012111981262144711461113114218531514111
6353243334288296901665311041321312432144020261509711110384513124311161
1166120124472430420540130146974031201311672429211841812115789618121701
2895141637418414229057242814312117014413224656198140901751043126211242
7194715140683724261355418190143570406598242513103722510813173241903207
5108389261511164176140242443790117569669528881490613124454242314163975
1475611401041374169624223837964563198351312842074119056242111981072299
9011567747672811320255925224209655710131092901451419813407474949055411
1077680138241911977430562626711779902697119030085340299200741322569075
1511323553113124181222622049213868304221241741151830012837269342179221
7416101309041137241614245171108031181241511669519590150241454057313904
6650221867821383213124131419037126514854051421161113824125719087119110
1714185409420124116117817243161061908745127535075651138241010027410728
6615240969190603110775618723661101087311061167513124084115403919340652
6240781814251857103561801312406761124513710876531121881131845752706412
4051161129010529012844651312404198025646326714024038116069131021941028
4196240296774427509051222284572401710453901979354113290949396901165010
3290103741240013037212840314239021212414613123997838733121131239819540
7353105090741253131239711611263170131239645272290110804519225104522395
5047390110168222901884104121737312621613712222975221749723942171711711
1110823113123931029517161299517311022531322392920713301359113735217239
1101956406417092390930904613742463345170823892306462388116113041104135
4010436901701012537557107190214191936465371367003061414241459011095356
1610217507012387140110646100551305473586408013161328125581909768409089
6512386344161417670123858112451301411402384116111168171041312383303534
7071238273199623817311403023802519053223792187309237861126223774690224

4011023761462022375151901797523742514027623733044050920213123721019564
0641708237126346390310237081116661210908131203824134887236978676200108
0371306131236854023157822182367116111371312366811243964611001108312116
4281711513123651161113245047236469417479810631901261741112363540431905
0450697264161675123629601571472175232363166521112361347165116215823602
5235447118078122252612359116117040815123581928211087164964711402525116
1568712112522117012357116522422412356159133351132363166235569729115013
6169608572354741808471084710329047539904135235347760111032923521415451
0327301304982351920120132532235084038213013941234914234822875570713901
3546835350901771076623473514771356631793216332617223461132975173561153
9879151234528518756416101234475125145134234377329411321038539909050512
3424117105135810724723414135881512340106712061032856957495394252339632
1453134233841329170114423378032912417019032487156312336211984137422223
3591329416315585623347575124921555031112333945839211041134252600712332
8051551485244265123317875123416660901714233028547814641761232945804903
5100146415325123288032912417014110431102327477249713746530074169223262
4581651022212481056155119417791663723255895711250011903461674880442146
4120870241845329351688979071901302324227100311945350901771076623236512
5182810481119882030779113146346315584070823225149610629565087911135402
3219514492221107121732150572320131847457931411385402319481329110305563
8550902575402318514984411835404176833082317321307613290786521939303823
1619804176440417031931522315111355403551230816210847103853920223141212
2271477506247761477662413522224433253747231351171901289075644189450231 2
3872279635281132321037962363123114528571561045823298044112445423103211
0363789700147130146974039032230910111962267434861578797101219079023083
9688073294121558407024737013631825991596641101291364591590153901556616
1791672307111112412230663205715627545490927230510512071247770159412517
7230463297771111957156212454909272303632626076999035702302643641322465
6901272301632977776171561164549092723001111941417516069990757022996315
4571941703564666090142475531512298411212777732140212876660905304757422
9799127156212501801130131131229681275344855709025911446120451120413122
9547430556329907731305168261403112294171358714015140147631403112293773
0130613431704117190641046140311229232114010703730237180314147670403114
8131701229163205715625945490927229033998116961032750108522289162315111
1590512729107013045610022288102861908710581005185629947171228710205634
9903078201261079050119122866503007061682682126657228516670351461722429
1070212640901710516571412284706957411391362905315075022831957362447624
4056110168228241120717376453209228119444417015916447041612641692280631
6945446266766113122791038090719014011013846982227810136147147662422971
4126210011122772913214131342901113848315278812276122879116013735813506

1226145339066012213131651914022756421213057071677561282274271828222103
1044753281490142227316112147670613244050011531716773411472912272201112
7163356322719512427791259171161946511011222131770131227010132176502230
7610714086615312269381072503822229652921312268511470511103317776153122
6777503361050265474221510590218122666111124290155370129045490927226519
5826245662405611513722641712078076582092263511773985901162262103994731
1345413003811226138722777518610528290151110883226077711031142490324311
3116401042021312259321420761329011501106511011222131770131225848125390
1432110372652477107140866120213122571111329035153703810610735725223811
2256101120211518831907167702255471049040873726524772279011810806722544
1120210771763132928071001041616120213122536915520765701225223881222648
9202251195225014207845303713014126020713121971170193696924134630502529
2130224949577644221249153451132241164212521502417136130224845126106831
9669522478838145475471561153987915122461930642217143074398627502245641
8756752001111874991522474143077916722442111849613651965590185830791224
3143954172351302242884219852652487090871717513077911512241171615318493
0120101090176471791224010714217669811272239114289327907368729059766917
6772238109212807725108212804782212902537061312237153355484711265114812
1223631011512814671312521087024187381312656277702418572094672235245113
1221041132778102129512041131223465113113503511108045015311510329024059
2351441701111382233137251913114710690131556210327024182232654735402231
8034943691107702230661669075153701461105091943114910327024182229654735
4022282712929035252159111151301469190482222727177486720741214540827226 9
7090421312226119135210051481172514244170111181147130196313090160219431
1242103270241822256555322246531050904731032903511152222392195170497130
4417101201832222293115539704144775025112058547222902531231280351104351
2222861305577767781377140905201161151239482221249309339581124892513362
2203071071361511041196151511102482219109320550131190252778951685241902
0621155123642221829311593970414491438872381706131221720511521317103613
1227960512242099694952519042581315364127024182712216971949014321045611
1182310120511511312215293120949807150131711312214271321413134190121242
1919311316151072141702418271221333125190765375204317673113122122931209
4980711317113122112423214131344217301307131906236902237024182712210921
9550513418310120551111933131131220924250171372946630151527131220880374
1770411106921162207293120949807113122065055408159051110493351163513122
0514185902021759025346712890779422042817481106861052714175013122037624
1901071707926514013217747445520141926416870161213122021437063919019113
4105645251613118151220126324190107178146012110815310331512200111851730
1153103341821131516116131707219912117016097771152341456219887659024801
2075328047513389431362362847061317228219787024261605041519573077979620

6517618311015452205444112612611512074149201309719621961995847422171413
9785975307791541056602324213404721951338044667128115856513224717635049
7011135114216047219438310721193775705090171382706904211402193411126247
6229961037282370217219214910716075492150205557791541621466221918759611
7404704723673037103853973075541219037109172809051709048132122422072411
2032084907110332154757516618170721891422298037101014741261063223737130
5121531454706714971120895815803746904548822188121901538155732245378416
1510134171222110108321871413512551506102151032616673206221867281651022
2124810561551965572145102218574531050110667725013113561811032453711201
3290144619655570751009218417381651081011139658310621837817147666090411
9535470762182142145217050011152582110622219623141110115142181747342181
4235949160120753110721801381755801329012211630647390811476512122202179
4772110131526505168321113166301415304731034701732178142145213721266111
0121772348754014490540603907507437012301710635131217622396811882124160
8961561679514721758710416519514113122597117458640217433184721107215223
0171362117403577217325670734032195137076578015444512172278108160682271
1249051389154293571751009217182152454016026311096530769174901601514164
7079026890961042888539061312445475672170141119902049303152561153987915
1216982146753472513261264315181987573714719252109152652420301962163011
7026290139136216829024677174799711201371162904793796557261416515147437
1928041710432471407911102102992167483659040786526763122242390612541437
2166147390530374690659075411777293103853910123553943141661302165531301
7056103115090545216450570690333212795114013652070222292766311513221631
0057501816134058637216214135135134037110724132135641111170321954152114
1212130976421372081045244971707052089731810362622161108155183028611010
3979113147141247114155602182861075947019621231167571086680511871558227
7621608702525865159016073191701122519621591462630375659530958112138171
2701404171036873660972431412621385687275758313897260135141131107538668
7762158273135516482135476155510361439867210340211071411101233310511013
5212157545473540716087096480916619906641290750959490514021101154516027
0814111011501206145097024316162156421301909041653902629056013641946632
1424799970721557236611069113097117062152155467674165901708197422154319
7021811343765901308010385392022532181487011831102682153191132499849596
1419813024010821524653971109108112206685402151791701369079711011332150
5052929081312531049045225321813641526177012149764639078387136102514704
1214821117511641190582147141119561633672103211041154522146142553708113
7051747110210673230214572332202511389012039562289371409077541214441661
7011387919662143895621214211920575515612067912275188990319649901512141
8035113764548111088741658321406332337619046358076121905303580764117107
0741658313621391037506214098148137543608371591331154814112329827668213

0213897782889128722137257253807151253121208213668912866155450702137901
7141479151503317798130213549814956011014211073643635821349675433236247
8714714414721332016264837804782103213831292819018721321241159614371032
9060251286213174940611100167303103853920232428841540134131213031511611
1001614063521149701312621724634125301164621402129707193772639155917022
1225366854649136130212830732105893952123135751096157405111030510385397
3074166512177721272273170453688101271703144465307986275021263411071002
9198931376912165110187566096590487540716087096480916619962125303813847
1561287232068110130212429791132901551682094061061032907136130212329750
3665731385132504970111351142160472122297503324703521212113036142416148
7418360146861329071078879041250867212114314368811716116151761132569721
2069466728876312869090585047672119139103290816834185014680144211830732
1427219357050903827069017142114021171116902917714257746731382706572418
5111090142914901302116233130719155122290253322115671617504073154061767
4383736196211417132171908574721224190245130245120183211310320119214134
2756110150501302112877153110570863671071193110212708211186232106231372
5625938111413829014321101197173517311813941362109351151104904011019484
3870194674695202136210899182222602511405016674921019621073567131435151
3143571011160414319015714121064555914073734190152342104901152105171327
3159831708968691032906633257210435116150407315405129565595090270221031
7132186670424134973517321026711757708121516111206176741120646325721011
0383712183790911217109071962100521103637468366147117428417170129112501
3056209913217811307301101012453904092472339018045623111402098483716190
4143154074043145024990272170380811606951545153141209767904143154010217
0300723356627505161220963071937715112334111415117325309083024190103116
0708209525962715691590183924190161903074126220946722411615015550100875
1209314073240112947125791099057225966215542518135940905612092333117798
1311354921707081312091171321315559187564112519011066074170663213120907
0113012069131103321547575166181707208923310713276121787382902325451715
3532282441248154471441922251501817072088109732445340478105733718755046
8124872251324453405121147208731645490750713197748247187561321071083231
5905720869557122277351778753653275303561422474114681407916720854553718
0103140015611165905577918213020842162146887211015387296114010385399092
1412282083671553624784231151731831151621412622082103812227140151107106
7401511191544115311713620811713297251141259101115056208031386511401301
1450208311612056245373497411301459034236090232817317207927721783130207
8227317045368810127170314420771036151119176035010091101151207631523432
9285110581467016945707616367017636431411082075337253110432338290222132
0708307797962065176183110160207470715839162317916882154382701708207312
8789715652564131106598032310905714596103816353935470207223310720211151

7126207110360171041144070220261411157136130207033732764796738270690421
1402069102113762211155313790170714526231320682591179890620801376611050
3371049022261258175020672722221248571750502066466714328610321300807124
9103290740372065147125716750128329201511407501004158037206444812581075
0681263704907029110020631477111051112100310104241811915443324917170937
2062387715656190350111151811541841017530961413266248441221937372061103
6739471568970937206023362071575517840210817291510293737205930381384715
6320311120338812225120583151176541025047737240411111345033720573171377
5210615222902531404165152048205630723740177411658781033512055131313023
7133592171133437014072054128713071136189483512569043141262205313012736
1295202136284907616276148720522711377613670137817653011197759253144109
2421211401732483322229162051137782765480137661105033120501321229608223
8728721109179611101151204911552228071472228090484294512048567185711471
3617146361468372069620472598271379835154540264120351419635154140224719
0204630381382760224116647690387901076620456553811671161889632773629231
5105512567082044297622418872714781121321960737116840172830962254291724
2090204381130872121104433022042597146424187563585922590225134162562041
6112563105610820178583262909111839337287161601011618547129310116020401
1019377843805331939020398277475526839162317915720382332057551561206791
2275181471547029382706512037309421981601255145731851262140203610131074
1655245376456113868780113837804782116502572815595595120353417212201188
0166155256902595402034227817724666115131863478178170623848047822033233
1075867001032906244549031262419672032527777156641101299091520316770902
1073231292191654541164682030333211115646390295492747412321384128013890
7183271741121202921445797508791110665120283268191090420371554653768323
1247299202741381041732967618415722606135720265421411710712083092141112
2251119154438915410581062221024175202511769578131187561071082225795111
8791110493103922024651907147149259754735161765402023220120837906212396
9047320226503004121412196522202165190307614965552467125951202025813168
2902225114275076904105404697147820222515402019103623678106106647132901
3033141299177911162018817738117051120171843175366110746791517536611011
1724971269706753601570715433720162581286661317537100312101010170766124
0364789884814861702489220155321751051665605342270663678113720141027518
0414268131352964914020132767843723110936688866163780111509012053134271
5496471315571661008201210363151540411905050219612043819050811562011258
1316829022251305205405374176902168202225154020109484583790962433120091
1984573345221183110668179167200839217729316657837110965547898750200710
2077381669018022352953335089010613514914322690321077690683009020068104
5736641416231791753700922005817738166743166414162317915120041022821417
1212446108741141502155922029619014020032905182598791942141222901952149

2130200220631766327204519213897431417216111168770820016167457975077911
1015592200052224711698791110150351005619992844019068131138270178219982
0678411212492012624243136175617920901301409019972067841121249299791156
1036612447144184411996596510519081011661249217159166811307371995102077
3966610212053843971219914761445171226351622107371994596510111577311903
5311908401062446193663014219931566955104118756901587661089246902131546
4765112263516221565731117690104313504614833719926364115066511411706654
3110446761331357375207026681100199113761901040104934742012081343710418
1571372516651199029051825925310804644541301444211032022702369015532046
5090622621989210784380418677410766102120107307791198874678411658361617
6666411441987809111167862188090130717915784225313856652879121170819861
2164537165770111804977791211708198599845373078207663154032046509062262
1984388772342540665604161983133106413017244313119825861901705654507701
2357030923957030390109123679090109962730819010372198168415181003584222
1849660262108056160241919343909010913147890901037219801621764427509051
6632185411329901301250412177119799761901373312019010932159631507679086
4721978314310501106651303117323983216724147103853910127119776503001101
7137251961148635812411312910282110501731011031431635929357166100819762
0631766326583532352152619524091119308913639631011031431137775716610021
9755963149715066516036514091111974615373211038539903087510031416660901
4819733664566568162156453903731031127890901091925190901037219728166248
6795125147490411103522179177911213389087211093291072197131415066513211
4076150316034193141214901565575407907219707661764675090511713819593115
0503739081376122292201117250906054019696368753496419679017115111941222
3119682661764675090511193142819521561617211141961967623107272283507806
2907290812803071939090571966236176467509051452761032710041132908872196
5162176259259511187417549232454130139471964817738187919118740175147152
9081413421344661963385102282755124331159755175358657629141651751962670
3713613273179478215034418611061290116620411017142661317421961109125171
4260171975708391623182019601344161326349079416111013675024166901779062
7195997017111199305945850270819587714181126484651751957113651011157146
6403811532063171175195659622699750743347195558624915039070218010314007
0254019546601261031160702540661701659062471953956661291100954110385399
0414119523441021936119261196210731661371951312412522319024774719507483
1511431290103290475399041777119498615165684181411209665013109066730414
1217771948258316262131108611013567194718245121577901356719466363151890
8044667103247667505151226779117219457661818687411714929516114524649619
4459631510519513617986742353215290342471943522247116299791194220678362
2383724012396901939774176906690216797194116670351865126170234018792194
0783789630779118695117674175102193920631142721106109115814245690665823

1147126821419384019075478409029316613155110698511937853178711101238103
2903578971155089014166199021514474696684512974650906231401936133106432
3211101151779079118077031090659029937613710831090659012741663013652879
1137193554877841471151474148121919341036236781066610154717790791180770
2222414217137856513212163519335965104389642170131202811379327911932631
6630770367419675288814906137061244541931631205196810837241123967109012
6820811138262887425088201461930753556182966959812722192959651043150665
1426690190714116121823698113793279119283921101038764851171414791131135
8575107915416115267218756540192763631518908044532319027115588021290158
6649117790791260104192627341613214012129417912159618756962601251925128
2811382628874275140708192481320315621647326411506651243311923778513151
8383916231871193696192263862636472012104481921796513217963166609014079
7192060647716411507219192581316665151031661654815719181376112740311107
4017119174754513254819168651909926462454512771032901471915976196915901
8459584716161655453951676220799548824186074117191498617646750905193115
1103290909014719132661764427509051248130113637743729310190866191276617
6467509051117250961617275103087904621911566955031015039590411329088741
1119101741003014221410213319466116190959631417467866429510706771908258
3162625122240232104848370364169248419077247467468749696190650710224784
9690736199190510274011782144901937301904586111511141103853973019036375
2323631569585182903119011024690247137971902586111517126974111662414111
9012014414182228319001599076222541501899202433149207119014018982062268
0137661101697911897613181521896651120107764643245189520678111189417426
6308189393038211079118927311101396118911339915261136189025682148715546
5371351975614141160494311889105138863290133482140188818176211222511887
1142092594461675714132108471038539781471886148784116510611211885200144
1826188415141967905248418831170126158463513188242124210272214018811021
1410313572218801061671027157187925646750905118781901346318776664427509
0511876103902171553071771172341875700144182618741817251209636018732415
1051463421311872232120125771381871106337665141870134411190042511311869
1028140361018682002254220751272750469671867702518854131509203725347910
1901815834118662815814148818657069578438432138186436614611113118634174
5314151186212941205735564732186117417452453132186034314641342521381859
4171767112113118589183220725390169961311857251904701111415731381856958
1222531605111010091311855150107357252439311381854951505213113221811564
1701185325989012011318521128041178357185128913175261876218509059645471
4296155311849633460110659103090345904118418481511336471847142454906315
1184624610135580121373618451741959857184410989049390321501555010087511
8436501103007061311842851135973218411741148103290751481477432021311840
2175375641183912819015113118386385641129120213118379556411861305718362

5315196884131183520649902419011355329871701311834159110476325041103111
3118331591108651131033218321709513714718311283525722490951136481782183
0206499024190503731611662221317071829177251901329078691182820649902419
0193781140182715078565631122257182613921911401507351911401825794114506
7813858182472035491473734113290219145250348182318630632142476731753231
0905718223703553096421969016018211093105090965102779619810510381820102
3085582017619032181925337050901051181812718021213290154140181737014610
8323456809216818163399510171329061555394218151281151030110716231181437
4138901657701813548778322969046647181212838090152903421401811107535589
5113810852181012507027847141321371374118092869047051139862413618081797
1951115877411711144180713274740469056241180618642342323159010747180520
6226102969336894518042307836307791202431803102357454412450231180267439
6619361192193710031711033706180110234066514824119050666018002826517163
6090348179920790450766374616179833750652225451032121010324365617975927
0694665129585750665201111796679547330571573056613030526711017956039010
5947231110904682369777911719057617944490904113290641483773215285005531
2344185225397779122680446656142957179312546334866143131127018417923259
5139086861921058150111111266520371791102156562628740128125317907553825
3132096157190164202178910621021251176212253110401374165831788132903710
3290310906611070047200477404154071253178758617511729035986421142901001
8415719725331943212427771012101313209053161253178625812861512219610013
6532170142907319111062021785213126516812292677061042022591317071784301
1006193515103166560481575424150904681783293101908667737743190866178228
8908662482419064316190866903081172907884411329094103853973074166178166
1379582315642151132901722614038125315716798791117130178028241400131917
1301071208776165116177953278192981778240205191523016656043791416007117
7731141661961062668468379696559093416998791669121776501903641103218690
1304111752811179557617751386175171603661018208753685057816177413290362
9031272652826955716610021106007117731319686324775396695288814906134545
6115398791641177281773751062511329010174370061942491479925241251895421
1140986540513215090170407147125154613980140665127291071401137177114890
8141343411321616716066613613831090667739012111464911154739071526908209
8221112465222177096661107504717692173241777731151141103853973066516007
1176811789211750310110898137031241569024971105265187249307791570176719
4077322296452114711150904774321085353768817661084190186982229017651342
0650609962176490687191681120750121901032326176310621852478610552190560
7105290993365307791137176258357666116120841110428143611106611050632814
7176122357666116667533215252151817147829031190110100661066305023210851
3357553117601021525386186711115515167062150232491511381503441882818909
0132015010385392903206691335531175925246581813201205877314335152144138

9070291496335449663219531121907975568164146192907915347171175862109066
1311241032909649170751116137175734878351740961629609026211517071756102
0262903379096171550114782804662324063190115701170661659281811161317071
7555262938044275090516654971287411402901668045146511634214017541091251
7311903531190669207510215114332296903424717538686190678010806610212016
6837110965553679117523187739042152103290475399041357416617519312530041
2477532874114029014212336114442323117504541401299612872320681101303314
9030779115217492361821203322161905048241150124291145177907912601101748
1023401710321231787229790296103246152217771747102167106413017261671697
4187233041571746454411359183114166641745423348066753321842151326714792
1197516015290291342140174410737469066905041171902411758873962836914477
6174343528146752137667751641921308772809050966188433544545077971742282
3921885087911824509425557288814906136278044189570174110790669075474018
3780996559077375174010903512166870961331201073053078206732167901108411
0329015031435234115113052165116482431905011015111171173917371190174654
0307820561152902924831401738156720316651668042141825090313438737621743
5473077914837124142496631136519879181151124272653248779071032757976776
7035251421737443528561151132363121211130331366516176741155866811389010
3010446903627701736431247527561153987911735169509669223266922183515987
9117345490463531190840665113020790161158867307791152173351132837909655
4796573013203111203388166173223666811867567103290216136517662414125165
6769066791016797173123618224073243170131173055090155700143136269599012
8967061244541729236182756711615627617226140381244157155247141404299797
1728102667532479721365176624141186797172768210163766811527911726674313
3092121111101392229061889215017117258178989910266756775221155811241032
9041755136354927079715927747482017246036610127701032906501422104148847
9744122791396610127705751351175314042829011517687214141315593122657141
1329088172333750173105073166130155761788755737521651104129314028763541
3391524863513010013720126615631486590222213066130103853920290130172215
9104310122328610385399090777117218619032392754710401147861072724111592
3231275541316590140797139853517201103181766901045131190819229830610959
0143593058617196621023761266873332807411117183790659075473524411167148
6620670823841122741814841122031665166241901059715962962906133517172892
6910311801196720896167261901506717165722633521043141171534712931056416
4728122104756150478411506617141014686990451922079016115886730779115217
1320434822257101511017113257362225710021779010301101541321186551712691
9645282102732679010937324930779167217301205360471703181155475571711266
1764427509051829087211087896619431801971216197696283124904601051179103
2961710766176442750905128710113206117696103117250962642779610910324474
1171709612262133190443210272216150642235037743186660111047754066211412

1253935074166170816231142721106139222906188747454412450271170716217625
9253105061629627416041067005237141677727732590711341706374177120114214
3735190143391497291049696332153270241817056561125088208108372411779079
1178711101247103290287151341369086742353215290342471704651905247661275
3396523071106641811127101301703636315114071678567667739013168565117917
0261651326876610647170111661265111630610385399016908717002619203211512
0490115536471699198698421427214716983265128612170189470476179104354907
5016972222051715468439690564511038539290555447906061219087110420216961
0918111563117112921251101768724011057517690439062101449086470112119110
1092121091041329022744770640311137683581360111024356169515166301513306
4213724461715611064115116942891317115621290174114613116936807152809811
7415511138169259631416690141619013171131303685191101375434511511691185
8811207146613816905905167156218386154131311600771689174984733034111314
1102227062527151688340249179066129087170111231131168771071571616672113
4466138168624920489031661313085109056161669010461171215652131156481721
3816859549170162215862041580351311684725306651161600918116756880701031
9315112517111381156411511683388177326621490813156662149047837622156906
1571562111682596314166901476641815123279213116811479047671009476418156
1320881466138168097091969013612191561101511113716545216791091811156124
4748151661408337224225190496321311678281589618444131796714413469816771
0491072714719143323604736073515511223734128116761608101740667871340761
4181032211160156907294113296669064717013011046451547712771316472795539
1511675105770252129562649032135151668111311674249902715211664138023391
1435511251711138167362643141721125004911317522761959015634713290356013
6018437051138167215014071050192351906084006631151321216490607134171411
8675770616779012705406167713253487167110627077022912439013902213816707
8351051221211381669421714710329022464415801344661381668127758282787412
6121167234138166764074215514613816664471113114177967515406162389020710
3636015116652067843872111627526113160746171561106417716642063114272110
6196711407366290718819090173231090669016510707141542865189064177166358
3576121856115653299513109066901801061478251290648195901041316211137166
2661864111066131691412151622851327941669064786241817029680131166128060
7502826072653104487306926041324710106241551113886604131820556495771660
3402491799081014613290616110551613211515135131165910753558500653161371
9191160551113858412801511658339175814119070242217528490131811157613716
5726758912532113816567583713490601117867701311655218810589197616563273
9090603477131636077165436635514751157211566121016535668498820810837240
1652249204930373519070115231151896419103290186111776165115099861103266
8110164131165010112095877113195151230118674771211371649258128621251212
2484132992772215120021347164875234293166571045656706118075016472861206

2195120616521391968212564253166901151914165309180195120156661701681411
3116461509121251802294721523341177222412741313279151747712113716454261
0114215119511175076904215401644604811713285584411113091327507690421540
1643507811713214790991542121817013273313116422061751424127414047480716
0054313815413211615170313290532235171561641427454123524676231136547411
3716402031114491084780230213816397282775105122790547102171147480716005
4313815413211615170313221161121137163817087214490612207920401197222124
9811365456950770137163714019574127291026690250531212832488412072607442
1441111116362063114272110618195750173248332241653299511509086688417649
1562102326590532411635337506641810876207144111111634586311427211061421
1616166910907503109068570518171411941762592475879163335745839516816231
1467510206121220081791482511324545143276312048231131163224990271524541
1395250451610271186792626183213784136126261591315411441156401631684182
0844320841769075754016301812111156891254502073554716291309077969389130
7703846200814111144202131162813829012320324641190709674119512061614095
5807418805311627270903270651503706416530918680235278266151165804537141
1452450807461858819669131757015116261028619028752111386104195120487611
1256421409012113716257119047071802175770612010711561624102010451104905
6131206901042452111511623286901712022069010424571571622814901767413290
1042457151429031031520012067115131162181773712351326758206901141531364
4801282069024551036570162085112890564269712545077020725821151678517445
1401619105812831565571192125666811131504155374315361951204189011441622
1618249707761476946731010327716172063114272110624611010337255544790231
1032901861117764117557261511405522716773309090774113716161089095841292
5066259251716152064315072878278107170651211131451252563782764101614626
4111065272833722422519049632131722462451101716132557142811384514774313
6562124156677612758525511138161288371491716116363151706288587468236141
3901245112777141511610947702521671147435690138160911671254977436651688
7111451165611311608107535581186801005161296160723535581561104923150415
5111381606241510513078725543614139014815693731135141131160518914781904
8973149064010022297156538160410286112055511671149164411161818613870116
0322141210181569071134160278150222511762591329039110447611883111613056
5456555447901762224457761601102802224015135501311027110237680316211131
1600128406563774374957013611614031148156131701159912021201379047057382
7066176433111191302401081598656190283352144521597133454412450231159659
6111111322247115462162552722835210385391012711595164652156415941975257
1110148162318201361593256936102713971090301117952413215490130240571592
1741488990981522229584677578622224890321591121010437244614213322230142
1590224489723419522271471589343849568841977791479135115130171321032901
7612012111743192903879071147158824920489031661312991587104193075051276

7550511019012428729915714715867963154048906660909047282640977791416773
7158530259643561416371304039664161681158481220643561872222317151571583
2529532012010210794022290562957395119145411646214015822861210197207581
3290558661321424142868125590420111158114491210802223014132103853944541
9669589170141791481580224711812225122230141321038539445419669515794212
9796752821704077911221578150410215758321904903141156157712464328614715
7635556756142351595675083773681120467509051157531881130651976213411 30
1702222130177615748141210634722224147131090666090140441481165145112123
6977106106647157311815196130245341549075015723613157218762155710904861
5712872417828233618756151154157051640624147406241560914064115691021564
6511634214015685504766113477329610677071156760426090188144977791170791
2551159879738311429247715663121706171672311966327734269059614614161571
1101481461715656759643212511116267215866901707822514611131156496161451
4734423473961141301585368173123541382111381563202582125146415540262175
4156288150451464712914671514676414694415701725151136331146171561635285
6115683260647940411613221551125117414177251215471193089537321290671104
7051652146111311560545119481713514112990230517618641670516615423821113
8155910001705247196510519081066512155824410329097737357142106937202145
1329414617155767567731706826781226261145132647371215369090416684146111
3138364710447155688106290154722212415115559001039021711630717711715429
2415115543141311011311655113941148566623213150920371019018158341611378
0222290524511138155331827041177111624051361311552264415707710890473908
1415401341381551514233150101900901063376658890215554634214611131512206
7813296463411511515501725670613797147907477046341404771549254121077345
6102222241410456706120107125911154810213118259511547451469099543415307
2591207071511546576256443361706346664866241905361381545853407065191111
2712865836456115311544188170207961726391308156653154345146413425210803
1138695135763154652031702111511542768105451532121131131132138545259341
4041401541580773224730755051329610677071154060426090188144977791130715
3912514711222517666179691255115987971301142924151153876812108075052103
6265909172114621537312773145168512376610019045199216906615671014617153
6127012105371215755166904101702539546821290671104705165214611131153525
2465318132012010861864112651508706132250141470104129111381534553122125
1464155401832968371032904121112153690904166841461113113064755047153315
1461057732247307765132187621559671090486153213420650241486295173247414
2275456153119407739016591255115987971611429247715309983105011021251321
1461371270147212118610176914114931844431311529650300110212515591301113
2129041268212661108566115281606315401241806590152797681212613236631061
1316848787269232186511526198501084715612048763310847694644115111381525
3438433756641111874461701323004641554026217481461715246561123497411103

2214512051151523114611152377632491511215369090416684146111311664775471
5226602095137370613290166374515464704161801043549045015218177391155540
6658713013081116130629911331764111401520952907171440168038140740100411
1251227776120213115191309047651991611407501004154111112912101405656901
0056641113115181606945713910057469063512022112076471151710622067714654
1108732729167218162111011761113100111146151614319015180108452489032662
4190872013113172902703541771311515392110470371612236211147907758647187
4990476132115142581316212513132506610296230137151317032115914791961671
1516290326261176509096791816872872924702418151219077311554632773426905
9622615111316611509101329112675113195867151907111524097161226151013969
6977791901072378118416121715092467843872111911049032166901068056644131
1508699812125825519010965113068720241150772952262111086512246671519014
9516055115827037150618249147301516674819213115052869047051525435328912
0148910464111381504106212070261236904314166811664718019162182013737906
1137371043141376666813490137371503137611265851669041090146171502494147
2621162471779698791216524766110322145172115152311461715012823649720017
0600129902534682129067110470516521461113115007831060329109016190260472
4217983457913249327147621503322714115190307791102211149981567731706826
1663248331511498102960906115141653421401497137611257153735217339168172
4815701496691964589102672474110165611539879151149594845837909624331149
4746784116583623686779167149335878472016157841804759614890666090757147
1032901809370671492357458395180108066102120160791149110621106615532247
1107297914234215224711011366772366110691130971961490162311427211062229
0139569525590420111125362509073109671626725983116423137969531045720790
6711071171148920678414896217412528232837907510079167148872831965196187
8613647996552247190148722649111511323631576614288922289049215114862555
1051666090980908811315752665724881306872024114856631050110729604519290
1154777115886715351314791761344187262123014842322101325756756115329979
1321483886318561305127072265051001761618579614823061165695184540253911
9385296148154877841471151654171004665632854122612946418041658529614801
0226832706513077912264777690674111530961411197113872110575775246590103
8539730741171479102423905059280615631366110321032901290471478331110315
0562164732641150558182668329511873456169632147731431050110173736641147
6232567731706821414435791591071050422150344111951258046415540262174857
1475518960959011166324833214748127884906005404174694232311473160810176
6784182996134414791472681705247116840172830962254291724201702629013964
1041421711130147128913171782903119071129452051118122345711323540111110
0266190571470106290702151580131103037230314166609047437146965190526371
4912434141571468227907751647557741667710666609053279177111749032090510
5114217111301467227103161109770987973411135401466168190170611638130177

9063779152570321616115146516231146120987443146047103853990742115813014
6426631791110294119667533249651220714714631969341814262553212495103290
9012122230142146268416129655906487731654519871126146321082864913154711
4714611128042174181650449421460162312224901555087915114599529055666414
7297919052637145877190526111222901392413415290454366791172611398132090
4701311457117695781311875610792022251171494181118121453904091944931262
6014014561197463120142907315716730120506781331671455275904761325701108
2145426190583125874917413236315649113113312307024188710137440659824131
2647414532063179110292337692541416104131145211280421741811311118311031
5123110110253122120877253965590857282406811712531161371451227508157164
1374781174193322374095162211641821450392177906701101449106220653555431
2535076611021814482305105146319568531510511461111613714474711206210329
0131406575855113140690686110151909153214691121144637022542498139661241
4452751401383166511166651299745341116131138151144422649141138116751313
0441511443150269524774061371442198911084710329026491482551156411199146
5138144135612837706269647116859311613114401022987065113817590139491511
4393431478477046591406412681161219062354014386051381101317701329077294
3143781214961351914129181906235401437108117871110123146572979113587212
0516190115961998131436261907751647661103221451204905511218861311435160
6374190854010451703018031540587301201856661906641413461911702227151146
1118113170164531554371434366784334980490554035892540969051114331843175
3661107467915113014325963141661105937081509018451103290475399041351091
1112641661701138143123617644275090513332939556710190103741111430956324
5579813253851521666090140791482471032909653990906551321429181211111246
5113511819537142810511241175066521446318379696559054375142756684987911
4261314537155686316648513214251024239032223377509012913713290371032909
0567190222120894795134670131617071321409059637351909583647351904764714
2458631766106142110910736665118756753661107467919504714231136661104190
7516613076250956233079090668841652130142217981810114158326616691213014
2125625925331907138726290102146410414217111420729524663811141920631766
1061086680513210385399041655132141810363151202107916804208711312747915
1032904113701908051421417182491471385621811130111096141416538510433246
6356657738139778201405401415101975101108275311764170254114143709557374
2257741477846251652130141367037136132711179470234468066301413220137100
1230913113014122555105111170645020814111036315120210791034147822964686
1410246411103196654035817261671697418723304814095097847661337297918601
0410781728790136325497071563621408103623614210632114298031665114073583
1784215141953261116090141140626631784216157053261636901411405596812125
8141812784912009615040210748571404277141228710631901417106901411403106
2178711101231177907917227704524567714744704372932140225551051666090980

9088575273488130687202411401232202909521231454616296274160410666609070
0513827067147140024643150665132113990107031981519513276648247139952411
0901212951322931914825110913941291711682966130139412990591903513013985
6214199540761176613099540761179059190351301397162319624779111022249050
8770139682614189232139768221392626687013959561122106634227221696499048
1819481904981396331201100911038132903779013013947467841165836139122664
1217571411905043810613931201537120715112811332068190139253263510415721
3710717859349117152882018654012460362139169196452821026710111019018065
1711112201906690754173575657885115128979713906919645891026773537700653
1537331591268201389650300413119035162205419072138876617644325077013414
5070711132402577712924081163619642956474893103217017024181991426181103
2453711201329014461965557092138759651043252373925409655511251110107292
1421711139121210329010684570210015113866129020671090515909535820668147
2896963111509080552412184108301262204726916190510702418247233903407411
1138571641488341512613316613046390260757025451001769025314285270813841
6819017061163865104392210207901611588672081383117695131107940222905629
5731198244632142714713825861115171261032903753990150314366519130661245
0842208255371055314166609014813813701283156419722772366110691130971170
1380656112137903111509321847266371708414166301361301379102056773212570
5168261413441324735120053190425140864113041770612103534111822693179113
1463463155840708137859611012301219010329072121454013773741777077014378
4749633545597771192903871071401376206784150067770105100041135707124010
0512545115115271767901261031193100708137518111159018226931791103079869
4084361053117166113421374232202658351126807131968691061419612613732014
5490288853906131492477456115398791511372148784328293671371116746312045
7978114965710131822693179151137056617644210385399066730472931011112905
1136920617644321014132750667304110820178577128315257377811431103741111
3683667843817799890503753077972025611539879160995407611756109668012437
3461367137611216826266790756769032460904127221660111047754052465901038
5397307416626251136610229970651388131247124194144755198791508142951511
3523341765176171721365109454412450231136410516012021785611511323631668
0210443131136325828622917030856041115942519029664134136225131146981836
6370428540139027135872419171150271488417081361986453747431540700724511
1509059696266381360357514543084126453710401839079148135910285110353798
7911221037104177114690215271488417081358631110665115419351506033290156
7915389879117111357974175862807021911003959063210513538550903301471063
7722371471356206784111966105754223222245372373713052352963713552492048
9031665112914077542232918090147373321920668537661029077537142379411573
1987501951202381219376629612011275130590899614066714113542861108966508
9879117111353289440116651455155403540463266907431519632361551307610431

0321551301702418717791106711613522582864756155403540135390138102725417
6903661369048479137934693110664031341351350374690666090904746638103853
9903566511350150310526651566417572418557017614787066714713498843259519
5603658056354621511786125120324825917427147134892102967546241769031247
7842680175751987971227141134722750866521082341120149429328155378166140
1645001346105112411756752374114410506690869796388131643901091158160267
6661029059789755312923622790911665113457815072183579513218390217597411
5848311344106217729317298251907337206283381110118121904181010636690516
1101181211711343345207263151762349595546511095637905471101211378955403
1134280996319721593225651214132903076621112030322762797307120210817087
9713417815072155418488274266271299863134059651043212352104314141726229
3072006636014813613392894401166576261317821204441421166511577113381501
8072751305415115512684886591991239013001337258128666511554185166140818
0713014164680575886313361020773412705407009272351085853126211025114036
9632730590104136133510511247508966952888146134547581125101316566101012
2524797379340901242561334258128666516539066749753075732327533661247032
4041171683293681069030596133315018072972201552526270812812404117109030
5961332781507230111066884122157322142383013053051331332177120102031661
3116514071311651437901841330148784311989926396165115816515078662370290
6824413295965104321235210431414166054030720066286864906610410490146801
7773113086713702101143613282063112518311066877481109353100710625112977
9111013392132729641243266145901290182443115139418315305534274170279111
0371326258128672102902491104130765155702211296417331791110371081110379
8211010013258177313530779117230766729791180757963059010971013241051124
7509669528881490613454756675132324545731242757324212520115987973271001
3222513112518311087748110935310071321266110120951144135764312323011102
6689851271488708132035751236518969088275166224929312349537131929751454
3076830796307110540378441135131105203713188021102622453721314501118112
0938868120121080210869131813510541662931311317148784311731751719551316
2517836209305982511302399073731144661029024212530512386629671126183728
8131533217729317230768307987507566129016024519275214051752140317751741
1314817738113566860135100657327331797626902279021614379113131049141665
7111305150665115771131278878499141667184320156411839023229813111166514
4976399159044715113102209021232491590453906680901411309350374690103290
7547843969082774668274535775811304251319159030766109751321974798704358
1777631333195138140138416818413083717898991551937368332139317111307105
1124117502236690106312445490261779669528881490613454574227668013067894
6651663636730766161644781572223411201274293078724891757422913051036236
7810610556671121496335846984104108259152556816414617790791534567113049
4845738439690187419671408761184677819290791971617931491778105849797271

1115030578192908111303190773816620111515966959825133870936266801302328
4536251245661177097442712012734330787290917709358130134378981058221501
0512020051162767401041777311300938510307423691301581456719222653696129
9136441843665149013018390435072711554875135891812981051648750966369825
1351313076627905615771129719678511021511093077211069068184129681773756
6296772797150988202592561126810690810751130751112089377279114112957815
0726690109513359661029613383349618319811623821844162692129412596641523
0791590665376612114430766447411007964212937354570296967057100796871316
2690107901411292117514673675716427747336129144614615115045471809668190
1290357512365189655908857662249287371234951111289282513229637121513215
7467373096830796326761355325120547128830114751011115054280226786238130
1287788170527797871299077566172516274211421923325374835130128622357666
1161281181664224132163801301285344514591329029213521041531475125751112
3512511284394102985717656690329403740761146901411283282516624111111394
4182785014513290566141013412821064150727522715656611287219206343278411
5081036128126611018214663666966225106793511284021342128067425790125183
1010832936816231791124192127963315072242125305183293681627911241311278
8145462017915047241875115170140661511277809961507223612117088459136682
5043615547610652919634731310717136127659651051908107906610290257140266
3876233812757894721421566101211307791951096127065261155456616816166514
6531136146701123290467016115613077918097016634518475132127431431050110
7232114113712701475128277484273732127317032837909655511121837909657145
1103241107266102903389014070290419879117111272392177293172187667567662
4841135662484179731123251121093077917840331902715192127163111066511541
0665761106651544251145137711118195750248278961038539730566642390506570
5526612454279511270533510418932815174170611621125685169825190116685612
6981775627661029030237922738143797661021201667514278147295243907315198
7911711126864722542559511011501397052301291741111267388225422614505132
6629140662561165128012665861111261132363120371233224847290531556660902
0730925717081265172616657613290307791136882140181750665314938253766532
8756537126413475114120569641845441479190139641303730766248413143783289
3768162317915381263781506651301519159066113022611511205770615676280138
3191111136479298791171112622581286723119011075076906641854012613921175
6307791778612706494227116301110545668854012603064865406104310321701307
3211801450150118053670111862735106906640013412593321772931722486642141
8779107901930766901011114621779113566151233841046847241267071511301258
1058451471504919613311033147851487246421073198791171112571020204129665
1896695125619017096754601063952552475571255185457366124212101124212566
1029026222987911254106217729317266124532316610290198329368911102801383
2243176544125354090935167220663291076644171571488329368919066108320921

2526914528296187419673332361103706610832751680714112515964381272542273
7301376660901717761502079166150771027515104112507815072311901106642418
3191072312491961463003961554166688766827582124819651051131151109146140
2245377251327807581475771479873212475211757510231963315661812490142124
7690147577571246206176443256959079864414157155410131124560145737453732
1369036831124420678416196107120181171591664149081243297772183419140112
6745373215031931170112257110124263120665175698906091212801381245207913
2301130661247968086110124120631146987501361038540669118041828968565190
1357124025812866651147717644141571554101313345075188356135750451865161
8279537741782123963120665148941124865281417011237632131670540651905207
9132123881775307791508661301210111228886579081091842131307651902126651
2544256142413076690758123739265766576613012101111545062781032901651236
6519052079141307669020812351503105266516642390874479172814915014717026
2227690987971234270313132575109223456735314797661029026222987971233232
1511032905354705913287248917307797123230259643726511131221461103237125
0959086757226418310904929090412267698797872489176735314797661029024212
5262229879151123178150721351911329066658184108123157123025812867290129
6150130181811476811198906615051302908590120130931711122925812866651665
1422701530811371228102077317411311901626690423671227789472837224729610
7067010329011604182713586519271411226384110726675317110491111508057511
1049298561508013195115051146180667608212252513114698307791901121049561
5080575111049349626150805156211022710089317111224227904939666909317111
2237894561071116610618362511411241032904163136183621171222235347357411
1669013171051231571221181211115666110462361421906857122014263149710196
6610290310906374719566641311059086714666807663671212961119098041758812
1914631961693077911303712187522031665167110868336661469011314812179861
7575590475842419011751221216566315124550901241016540135480791121516231
1253077916612444500511214103178564063113588052322474147291779079740631
2712131501806657238411227418146110167165125130706653750121220431811666
5180566142666414307177907974063127121114697310066578554443750121034977
3819259651068137307791506701610421209789466131661104669610942120010401
8390797358146701120820431872666826165631412116115021261137187110160572
1001151902046714290879010333113718740175677071207672064372661021201661
4221721226090810811483371206384110665130627811138975353730766103120557
4190731669349909558070298791171112042786736647227712426695017690236171
1919098170133170712033311103150561306610627290100488073126742171151906
6285701120215021066576712018904467120559095227712426695010615690158192
1421501712592371185196118491701120131431050110721955415646256127110139
4768531510511335921849834374636270565131310901530921541200381166117160
1376651228443571199302206436613146313165559592535476314185881198128510

1240184975717010441751290472513078201301197948456798901981243558721108
7711431195290114366971196574984130779710985402731554765404426610212014
1123296307791511195756510438048935156132443124566714711942063176610662
7325951537847280138120160516682732754711931806518576671471354578576671
4711928177546271329021716133014490139117067151106138707119112828132706
5170657021135136221104138463155840708119035281072662763328397566796830
7791222707071189105194170672901296541180316432901136690751987911711118
8102020412966575351081389215411875964975531069333661063319879117111186
9761904539037334781148142115951113710329015061704917019341185204318665
1154696150977791552315355141184964466214327162546651154987113570236265
4839879117111183116651473216422468111356614042118226631791931616612444
5005111812363151221138811483371180626497125443373076697987911711117922
7110665711204232155018014608612448757908109186257519641841355511178392
3410166577901177150180665111933952278825066106650701650475756610698115
0117637178985966901804318495414667561729322117669196117523948711196307
7915807029879117111174282773421578977901173204318661313076651196307664
0898750117210350135101625318610903033077911389020198791989170611374122
2347011171177791819811025740121018072373144113290170103959621213807011
1707894665166124903237147198754551232661084711693841379011314461905472
6224267011168370225427357139148116739220719549813911851662309047636211
0112105147290575912366144707116612165147741227112462117139901241165312
2279039157141432902228246111642703131331247124608751092234567116329640
3871572167911162522247116103457417155840708183439669207027912239211611
9651051307661031221101142665883336519313019312017711601334114748212074
8312221247915111591202904703715910431679023966701147121090222927115870
4190554356583823107081157162176259252629030370621290413441473921308226
7138188467070811564563154010419015570911553884578213274019010014570250
8791511154150180566813111057401901137481153130120107738324718713001152
3583151611216652187315041525571151406236374006153165905307971150220456
1745487741665651114916061119054058182130823675275418358131754183771575
4184062347611482555105190602206632776660905307915111475874914157217067
5483150415255711464062363734175615371145796513217403141587114458611166
5914481315213510413044815111436129020613086290248668110311517720771794
7817071514717022961092419090790741111142162176518960325251971604784190
1611104314147042663014132100137201230913113011412063114272110666124146
9213012698911771407328713110385399010301132542593121212414692130307621
6712017711401811115909613520111668709011391628152293797031048651140573
1090667304710385394969011677711381029603211515890148417177711375004451
7587113620631518908224657297971135170131417546781136113420678411361179
0108791913816615913371113311984567831453221367823631752818358311318182

5131138751488490731128952140113294845147870964909166199011311036782424
6572979117757161113076617531136146572979117757075054510257545115478518
3590655174791032416351118436361421129109890151401558968214634677415315
5437112833918144325077611271681804358712190915771329061521925437112611
7170612071521875654351360421382644912361103611355115690456290222130170
7112595619095419341135224113074717756963935762316660170711242592049303
1521571554561867971123656112566820810837242954127713932661101533151454
6511551316711322575107045657811350208967061070136745471371012190790112
2339175518552140750601412161358210329028111212581316622043702225180466
1619018756411556622221151707112073130983751811256241120477151111930678
4382775977791135897120121791115792741117151111856618126241101513831977
4857714066147142670135465317071117306784313377085631528316257150756514
8567014939014070124110144714413461201431116103678431329021115542275140
7411210137135977791116111524913110909013306836648221497505189663346710
1387514070711141036236781061027474184142290571431211551451112155101758
7112501401041315759529559624218310035115162770111641828274575961281111
3170131417546116146961112865190490502681067418293307681784663811323631
1038539903574112410166296611421711130111124545671158874128748635729479
8871155471441109933616588611441552644537554341120117429296131643901694
6978741829332753879111101624654579764478566820569310505366643029071037
8313161605283796123967109081429110913728104573068113619745170190425701
9081230950321551911771804350728132905017103620213131917461516322341921
5111612081108273277458202591911169677130118331161204807711072581316829
0222511048290410540512147797110681170776965590741247901802196134170879
1511105340249457668906926474012812021311104106217711056337107121140111
6563814771775141531314621861626313077714726224154486901216113131142185
3151411162737711039529020681129625330970901388371049621470901697711021
0318417121037437145315621771807356810493908190116146170711012067841327
6351874198371374657297971100117112684465729987501031721104110221757103
1721315351022175781133116502175713912121032906887914221204311099332205
3311271318166247113138631080617102131050907790354791098612907683141138
0109704142110610611161113110972273758618021411311821512611168062510895
2074431516612261167611316641115110666180131611151261202131207101632116
4771096275102872371351569077126264611613775333207551520572544751091116
1381095102026290337909617155011459680466232406319017570710942321109701
7371073661211131109320678414895454164242511092494146111131417561378110
4116111387518211023614611048824131264741091636784715740622071413012994
3312621101592224908469627444112551032641147678791177764109011711268446
5729988190147713572210896364570210444534412411654511511088312621304265
0226241121800901447943222817511611138241155176771087343147847706414128

199220724517715542210861985010812187491690785286144108520631766106661 2
4265923211596118236855375771081138154449782108498617511729024620340631
1352140108359611012401032901246140655126214013146441769686251132907681
3810826602158290311907226510325130668598181116131108136223158156544996
4013146293610329019115711613014061469010213710802305432931611281253455
7125341492513291590471079278253415213810781742635407119030085260107759
6226429612401409071129070651907515113275314061311076268116202107523220
4921381074128304147107313511961061119107220678414713925610711674161015
7821811315111641821070102027017725142131275138151138131106926110812651
4854051421161113810684331201171601311067112410871512358151138406304101
0661502695243710655691369029761320913810646978221061908735122410631502
9970651406146901021311062127181315782191331061102623157821662211060286
9047051848118413470511311059312621203712629069473104139326611013731511
1021810582322029029661406111161371057275178711101231810579140641465116
1219062354010563317666457799079664471055392138110669177013290729431437
8121496335449140709013024034145010542363112518311013780518935136514276
9010327668201977105394817732662601011116626017910521685181811446651341
3698105115751414114466513413617210501487843147772910610381329062315556
9514983413651421049636315114071477298103255100104144157418154116111875
4010481136175103897421352326290315903424710473611461107119090554212692
1493134146111371655261046952457838372979196106770713837297911045604250
9018831918261044947702111383913901519030779110213710435808104571411976
8113489253507661101413105025313625366311513296130518186479666105701765
3090125517236611074210410422867143131521905607761901309879738211953151
9069079110213110411608101711366784183801137011176917439815010571571040
2751787111011648601715107019348014707919066102120556536300525813710391
9651051908107901367610329055137357142106937145911742629067464104121536
9090416684146111313836471044710383741787111012312501553071037129490471
6473247200103668011296770908551385132151127147103543614649132142609031
6265887111103423290139082224142585818113170152103324046631106905542122
9614931341461113716552610326042509018831918261031421904705152543462129
1114424724112048318745710303577531743526907911311029192729143521382079
0330130515971359112014188201519069079110213110282441032909773766321008
4196792039710790215610329075757690711163701934102781773145168512376610
0190451992169066156710262906746410412153690904166841461113113064755047
1026196784746572979120723691255115797200102516819017061163815090866874
1764915621029055518082632629017017610413110242869047051525435326186714
1956236615646513810235741906632100876761907864146769071116370193410501
5023311026290920645152210221011499058212692109310212322029029611615112
1001461113110208149010505815190301521519030779110213110199561121215369

0904166841461113116647754710181701477896465729791135816190115797200813
1017704196943105015023311026290920645152210165963141669014790155212692
1093101523220290296116866121001461113110141028619030152151901021311013
1020567731706826112153690904166841461121115141653421341012586176443420
7707532813311102747207753458813527310111376190487853770117250907935727
2194506621663272531702418653246250325030074117101024990312666485112668
7921367610329055137100960520315670114712628210082322026662327876135322
4813011363774371019562871011320601110477540524659010385397307416626251
1007746784116583623686710419071741121027025478154745190811151412532904
0410413290121791146452421564523212163510061621762591914011025642510914
0100581465784770610113111761206167965516511094210917087911004392110294
6651138663678177290161898518910228210271100352149137170686318964225566
1363164179143100211385104717318010614113815846123538310271100110621771
1055431253138282102531339770708100018551656701701315189102681585141623
4383116141149993578395180108066102120160791998106211066155511077968311
6013810926280414531151092531314164104512821028910271997596510431159894
9051731412532904041346661516749971477366174165831442888539061310309034
5904118499669196458910267142321911803156115398797995106270776130723196
5098907599437470776651100901044341889700371321275888311266964657297915
1993538510438048939109016190711218778353799259631106950801312829095177
4526888422531138475311249623370241810075504610349128290148849019290103
0104819064213199136178962361103221218371386660905305104161138597341449
7024184549019713667419722772366110691130971170990691964528210267126696
4657297979891314537155686111135511170422170256150290531424562119886703
7136132731794782344686987596314166110543571517977041689275713912121049
5786147961105414262122489213098620617644325077018756726965590988201513
0338904591128044416672248901309854712031567473751663107501245271307456
2119845059614266609048411170896897155108397193919835366761953582092107
5012480164202212241130982596314166110593422251316651130829272551166413
8394187708981162318204841115452701315189015311271565132961391661378990
7980461401650314562119809861756641290750810750547995175272279417013910
4456211979125910290210247496131978684151780010329096809029322413197795
2902067058116807057242102125313297610280914015191137539491120117712481
0889306901568311965137640653980215114081619752401209161253974726904777
1504775132539710120263117411375139016622241765640176212973106290557539
7107033775151890131894245113145179721741509815213549212025978796804131
9715817664073742612614712675596706290536540970681320752551477123131969
1281907113196863856411211131967138290718849610225150861219697131966699
0114125190119095810521316617014673218041131965159908070103321547575166
1815404075408411409649764117142196901601032901711409631036465784323686

7791147119108096962245451471191030170139766100961107371471421554009604
2122786291791301959103171521385132114497011267112195819745741411490113
3159066957137641171486590879372629010188414809562569367138095211314908
0111618842395516195425813166220434022251462419013860887218693235610327
2116374117953156695510432123732624154081121321960737116321905048237310
5020217203101366121113095226137586417583553031951232202654977514653151
1309506519071471492597515165650300412127011113094910363151576323011111
8496578570115156490948246784311754066412869231090135490381841093877915
1947164652155813081110890482713290491470701081912103122241287242156222
4128724217222421713785651321216359462407843804664631202407911301261806
6414722130971170259252629067641841352010145416188523654379451201710120
7157183905601104548892543519447041905145642631444237129431622471331752
5925310806171197411104824541164625409429561907157790107120628601238793
7564651310706579411376190715779094668731270171421925707081423219118031
2021459110031010424181191544332491717093794065619071577901413266248441
2219373761479611054142670937634171081729010293737121140321792732170262
2484143150813093917024951839162317974657297911387237155709111316131706
2486651375791370751309381741003011161069471451309371346324915798132928
5181129414090184351301148084181779079172277031090299376137572416630136
5287912069363741771206821437142253706262210748131935281581059116750101
2104041757711574784132400155299112733396118071050299177911169342581286
2221317537100312101010170766124036241726313686778719545745586513213412
0110289412541908311309331062177293166511401212142870723661106911309711
7070866157701310510416522501151171426524124810111306113339661164969322
5551051142128652250115117142652412481011130611133966116482901860693110 2
8090564011016879376636781575878919396930471203156747371085611341474170
2745905774812167493285105611513147171017121610174543527411792950978478
3710466110682663524126114012121468753779186010492815078562211355219512
5455805769110294100772619371067904114492774678431351156821166610198631
1681117648168164351903213531211714162710144926746471025191416630142109
1551452955728753065190760677769251344161576411309165714766411301116067
1121612712164657062181531997399090181651169241058128315623617835476905
9622614161571110148146111309231824914743153641519228611469159041261311
4113690118677731151284706109122892120611111132224714781608869201167489
7234195222807051750919361789623611032296551651242110360138706116131108
2422170256150290471711488461011918148784387310628729677691715078222516
6301413296695607282131814347418510898749239712531429099137142901621104
8461011124563629162067843911724712416220575915986176443251104651222300
7129141623179111029466113770132901741122129112991138455121496192299518
3451662141709133267843318779661241291251791172696113518141666629041741

5704664181468013816449708912636472383232647963072992243155090154776911
2067841421677709680610014029057511014290736025735160165451719791064611
1571571441034111041157270621156610193070814583790984678431365721487915
1735721106913908607141112225114012127092673157461650413217024841902001
1011566101920814583290479071964195105111566101920811379065421411710712
0840901411122251905956324557981325385166102120866103290907214795790418
1211175267631111195222490846903771905261111412229012756206454507797241
4541018874117691413661291902876454183310578391623179110046153690174647
1025191412223014214071678878724191734901423808162801547769001047661066
6311513214378411333105015556548714113786138102428991811115901001245377
1137061345540188898162314047025764047661244439213081861644990147126821
4897206784319735824741540185468068770140121281661596660901407914693789
6681554514799915517447528416630142895651120107711323631222906125414738
9420617615366418944342077689310001705247196120963052931702629030364104
8928431601732523417325629318916631050110171683105073111323631262667908
9015031052173105073610635470764035866110385398688923611151712614012124
5911235913781845216511688816217644279090511417417027454111587481216748
3285101249046070207115907119666411958531601959353105045379354113290887
4117887251176443251104586880241909041274117886206176443251104247233137
1908846130901037411788518112571475012237743713110110913321188456214166
7904990481849481904981310341211665188357351041180836122579134521150965
5779151117026047117120774741106624537841612955101408821138417120516139
1210661105925104392773466872518117078143477164190105870161042668841570
1481319631046247641251317723661106911309719688110555661105171628391627
9750963414113862962741234263144423712880168145190945540661307037491547
7041586731114246838056417125257116747414548890130310905021106688411387
0130910866311478792619303211512051151523113051013766197916787836381071
4781071844283101311001054545077916787720678411654952842829031190729661
9750876650300411215187091362599687523211096157521321772188742209050108
1564424487324970776268122162251972113159613290707170511941703570872150
7822251351906084001511102594684624568715055112275679721471097698791870
5965105112410948191151170797704168961111113737961416821168691776112141
3105021213632121231151327976416823760110669047913115123868651905247149
1038539289770244146186797681212611461113151115122370621270613110154312
1115186692217790157212797090131111151212706131101137121115186520211311
3111115121270613149211101115531518642879012210385394962592607768631028
6190172222614118321012084825913170786284310917352104314132790740561214
1139141166701466214110385397307411786196446741175181571585786023223221
0298501166195113046250411451023526910329041187776166617017622511026010
6137261314166609013113085936678438177998905037589431007916796131631104

5050457460374666609036100482431904925179269655165148103109170879190685
8566175930106310901169056679111047857106217711096176574111401200481215
5229014234181651151463901472791611708856596152800538085568170490130139
1716677288542511754434201101151872639328263811627294808907246907741705
8251110336111308539764915402225096961336613085261290206710901069070114
7153524723313719013390130851162331179935321391226641211540850355315134
1891477734702418993170306821863371784959651043132540373465401503495095
6425402896514115610355774117848102423903273372113710321371901537156323
1190569472472339041156113215631104352913584710641417212872272940710194
1134513613084629281017139200653299517101941134417116821290671106113084
5540905247702126010473473311306660905307917751465611308443741029584432
5077684325812861361358190403540466715014090562841951102624221701312104
6516279124708842614143661011139015566904318387491753177684110629055673
8310901559190473109011690130411928041710432471407916133784056617546037
4665907510024741525517477917957839115611233915248635130413441324735190
6190137371043141376666813490137311308383067843804155465729797837131453
7155686111135911701056602324213404783610581773265352137140766773462516
7213083524045540443420110115174816612103690198110104636023066130151652
1308342322026589977791177207259833188457821407139741443295702418310501
2155539792741117151832206784140175731835601061477114497011478311536175
1038971477152908141342140830976415723015146530414905301732829255510515
3066121116786176677346251672130828650300110118311968756631190140290681
3046572979782757424741540310904549034041632813279229220371032901290478
2620631766106169751110305665113020790161158767144825339465406662749323
6791485928241309052611150110188663014218936132901317103290231181251940
1311117130222715782342153902414066521763739144741872072941110379152902
9011221408228166414106210680831176202741125561901048216561125668208108
3727147102329655478202734161321156110260144519634041110719111381407167
4497024186613372979186010481975651043804893131259421381417061011312471
1019370161042818680108479647032155114481780910212562711122114213290746
7841757328162279013225341477237254491112182821101937016104281563647236
3212157125123125121518141282813270651307791146124307024188113311650217
5730779796206517618311016061580901418137467841165836236110729110115181
2620714125372138513297547070540811573510791587615288201865401246036281
0105812831564197227723661106911309719680916231125236867791994166142145
4507791808976812121171936119213031031130811416611051795121103296710413
8270641311287231966130315223310111308078431091782186337178063143105011
0918121905711323540111110026619057805133124756253184766125380908041020
5677321257051682611308036519052637131903777516416113012937129171038539
2904717016612111308021812111729310190130414180116231125236867791952123

1187564126328419511042265130103853990411201308008531787111011585401032
9027713079954877841135867793189152902924831407981584115517923418991159
4279712163154027294091139429011588671447961022683270651307791161722213
7090424130138427958613511219040980523285390613288160446155132348901607
0411032901563509017790107602177179454877841544662264971141729184793117
0126783224741290169085647792538411562743201501032965399066177911096491
5401291504035910540699079074111790170249307791540293140210910385397307
4165837893143105011017145471038539906578810511247501251013165661010896
6952888149061345475239286210567066613178710912545115175168057971761217
5178631931050110457155343451470956151135444413201554762682126684517701
4132755304178510491414517121090411413720090415405451845354705111040100
4113751408641141131666090965717671715304522905315011661317077842329014
7783177477814115076310170170133616613178339981045736511022858118858147
6132906016188253106290531501317824019011613264510451196189515961015126
4138781196510516650813113290601619751222559352905315011312131701780226
1043169213831412985131641425707779102268327065113530779121149645870114
0312625807077634871203707763330976187632205569612107632505010090113070
7131649110454560707628090142490195216435701461116130570921290531501166
1317017781049141451718114031138446742226321661235677733217729317218466
5141477610260451698720110348418516575077610621207025253647756901097916
8341129155569791902272079325425709711077013177563212070252663155103731
2701714259179603110435168341157769057247714763410329014424915112709085
2715010470760214268477731008702122315987911711774596510432121243736641
8607028309010703125117098791171177347537321206315571435511564411211383
2747668841415087514070877226631772753661107463077911064937141377837225
9066103417713618108540192901469710477088128672126661519040638297681264
9857526904065131212049831987911711769574190674711665881143725964258114
3486311307689164746241150721064323271104176725812866657204318665114876
6150310526657103290475399041150665157775018256280542171152280443128661
0376596446741665142494844123310417025434290512131241104903976459270694
7295666807596170111661512463984614275010471811203067128103320150104707
7781919053041570915551505359624849713593731987911711763817731157507648
5170104569690661803158548613590312661889879117117622492072132508540104
5085405611531045084170212613162561153987911101007611331064347110922288
8613192232710366103760551491115157126669201201703478719018401171221865
1401224927595741905474011409026311618134787192987911711758976190417906
6727701621002558702162306750521036221177017030781875317106575417690181
5751217861336144313771061629010696613773175719274917416651422706636781
6375660520316651881379066394142265531987911711755921026746573530779775
4249117569669528881490613454138436662975322017711025369551175139905547

6814631814775240111055492253202139903578114590129017661032741884117770
8751748311022652901355375035152138791988205534849352879756988208614230
5487750297135731106481752414688479968162784274969145804961556666951236
7554441102307791502135731610748246784110219131012052231787475408416743
7502905315621141110312629030779115074613367120843731844132908371041461
3879371391210124901437314543611130745181211117220137100190100314166609
0533130744172611151540443751121101151151112722095232113790103010429632
2905314941743258128672181766414741127428177313530779119020211147270571
9363236904710361031665113879130013474134290109147282598911566248184685
3090562682126684312621114913729053149116651138791300134740206433027213
5730143117540155664035401431975354763283739596397729391236421314329649
9129186348312626511352134738131453715568611113014683293689190388196177
9798791517373921771104611113071071222906188411357311172629010188471316
4355741831011053045436111307363921772931665114290230726961432121580705
7222906188411032327171173520641611357366394613527980896231908824790868
8471316431499642734201454767526165381514984543651427332752031721461032
9020266972702521189118756411840117107198307107122290618841135731117311
1102405682032138431637014301111661456537732276784110249910257218112024
9350111677312067841102499102168572903971357316167305267843141727810104
5133364111092138707087291336712083711250067144782905340135109115180866
1559066124553750905021233513072829778157132908847928847689251329164635
4543611130727266311469875010919171315741505708726196510516651448338192
9045441479190109191241708791210731987911711725112045661713198797307664
4696724347516447815721679198797307661069272315013772311904316691075081
8174737661029079392110832271107368765148664212266912015061490987911711
7229211881874192009614712682087914398791152721155236902684111019712990
2417521421516622022055351960202135397104018390791690720106217729316651
1351361504919687248917483885621073198791171171922217669669011996106885
1497183271429073157803874157516622492221443131616688418721205665196058
8723766884310769577171566955104321212437366411242650462419013810624461
9366301421065751501548013990241115887237668843107149115152454902962712
3514145461145716328451476688437870969566884312536114715660102725643902
9627124126219951254736439029627123529053152747110247714105845147668843
7870963530691759417028125414314778478816416816316722322151961554797133
8845147668843787096171591424130737963142130711131011584664239014564324
9356178201387911498782621996643139527122296747750769050254066689664317
5154116711300206651202107149468573211036160165147057165107171071493013
1528108782227710102077383790816179690751832245166214707916732166903549
0160935662149699681770571391706857512029227690121354437708611762277822
2717791961834967614092138791903319039779195313271711709314310501107231

1120129631190782103853990356651540717082581286665111541866131135975769
0403170707789472669010283431171267403398706190773819686645472829082051
2807058177381135532411875677390753111558112410329041755136307791517045
7419010790261424614166650898791171170325812866651228155711511329041079
1327021020773837908196906177575010329014777119028570579713975475114610
3290202307662777911192701466103290750761357315154049634144914012414220
1922696124142530192103290145719012121915309056312621104737503490700186
9018161171298123470657077514814471113161671227110255103290520120466652
6999529018161561653019535565698106211756282102905565675534085121561697
2322026668261581612474524110203441471906966319066542921316311318329054
2765990612354303701141456353155437695332177110461111103290481115333155
2931371316943321776811346161720032913161202131693231625261222845178896
5241869080521161113869219651051543661161089191108578236155642156661617
4779190284131691691132968201319682041869080582661479651116111386909216
6926811010113790664224412401032642146116892329014416704146897169641501
0370117066165928146111811161317076883143105011072966512641849603751290
5541543513219068511090723476410445436116873715210847103853990713119078
8311120129073013050249132820842150130296654108388565376863143105011072
3114174010847103853990711241032909652290531496551206513216690100170130
2905314911665113879130013468565030041807582874114029086416292106247390
6672968410242925666906410473012017245490113651081731907234764104454361
1683276784366117152187564118401171071342792781909197696135235152138791
9668224920665118516523113517132135666110509438377927819091239221201213
5417618316019669699512368113367830184150750763001702888149061345478154
1180381119110166154777430253764857157581901706166137163570561135629312
6265166130114068022357666116665141807018070101885114645701170665609289
8791171167992102674657353077976781020210132575561153987916680677596438
1266516651457630311112511321101464013633720231065207839879117116763311
1031506651665141372215707017667741662170661659346759761901705654863142
2410621190170143662244195918219622175577414141501425717105190150134734
0110710505105730256510571834130032812245241918011781574158070298791171
1674952908379017145191841353109665617503724912102482659127021929045441
4791906265689062675381869038454414791126453903987673102340665166514115
6610193417017181137662008165115224990580474539039130753974217767225812
8666131571574121077590101017065163901416570170887124904918796313511111
2490307791808724079011210675717311071047117041321635147119696894882766
1240364789884814861706486712043186651665141685721105343755323311054088
1512801381201605114640136337192508708106424790911146828044310137176375
0372805363766581445319879117116702244178665124849713588121017045041321
9362904392139498791171166915031052721237519066726529085701060117235612

785762081111215610114721314036807051716176204122011610014140351005524 7
511179056066130102666865130146809169525390829761468987911226671032571 0
114526290258641041421711666351374766609075733782774907696618791489159 0
822552315611539879112266512446703698482120620964291373765778651149620 8
066467681161032904753990413540358651126193666929081146310365433730168 1
789522029041138501662962905315014992139326611054337124901437314543611 6
637915166771038539904165131707579081117826290141327641041421711662281 6
611075077896695983193266132010437751320668070983307791516608786283710 4
661021201073077915165932068116375143147936188433196610065879956677321 7
616661101718671105660229165750111666961303757029713290130376104297656 2
162146819726813225156110194176218259418281901596441766161765265510212 0
557167832936822964539157287152908847618843162229135171909481006548277 4
135421532751427810212562110234135265373166102120147754394221552991779 1
901052652320155861876245113271863245436905765179956677466635532650171 5
414798147432140907754195320120951118791577530710613347541476629629053 1
501495815218764910214592901101873536481713216211134711666813211101891 8
710812129558166414351696995123647194165213513584939048131751876836642 7
518769824623140764610315111646875012028749444941769013417085401017297 1
826213662522187509022311698184132904241554875145436121645259128766772 5
547114667135136239776301689879764410677442153210938845676431037506217 1
751286874356874146208301666239751286301683667915164231515771661316612 0
557710917811413516411511816677970903216790992396620316401515226677537 9
605183566190416391021205227664161522271101476510973468614142410791326 3
835175407862829020225590362516371031511706551051671227609048392210731 9
879117116361033540716066870964241374241317506215046351713266986371422 6
712114815741148708720176674136251634103227110421661138618756122781462 2
790276170122471138152421715717012071138669048890711316275879163312498 9
039836211466516157021111215522901423418155581111848983106641261070251 4
549017087110632124651131311131691469227609048392176679163182774755336 2
502630103104377513206680703012454030754098540307540987915162987862830 1
848329330143351268310961329088741460301110877414603076898987911711628 8
135964371661311477744357511515287911148471463917106180514001327251110 4
265310202207839879117116273031816677843965096620496509224719062631575 0
110667786341714217777311516256768116103290475399041716246310616677103 2
904753990416513170757665085178192904544147911571401032904753990417162 3
791386677535905166106079157622259128771661319135355729613921115048711 1
738421426251151956866218135964371661319135255733922214158101651291081 3
951156621111073736410890108124757620151771661318109058747202521553571 2
290154753951166485422419173147214246190454901704504714556066130142901 0
326196831052667710329047539904171618671259661707149259754791581765191 3

113065119966173611036378970014713617561792090561901509661635137476660903517377206715090454361023716410061514166901959610966808966952888149061345478956115398797614149126733798936761314073240112947161129612103912860184666090474011710966673013803721937525923722329626111127153979017811376615561025537132140575533265901405160987862830184685309631112075060411296753051129031665160834146798181446419122710212104885035462417690327511966071021205471226661441140475019096142621307396720124190321059073090810316061021130669107754047070411661104541306694310901086472363289647866511351054756591306691073605103548459479184223725054054276349296604791516677195110971725429296603259128766176617505401959807671509660267155869041187561656648170965590165478424916601682064366771679010203141478701155176690120637142901206600552658719020316651236111779112043837599259128771665166174759874178147037662224314262498141454611395259779151667726931416690665527611371765274835117714049046237596553424227110471157511572385917821211161871526610081571350782595106774421756651968131355912775110505107249907116271511706237248517022697755912015663630779110550953135413024713770811105837277902037478254413541301351056501577562113547070859410381907839251307791600511120511579079751621701801032901442708593259128766776611020917618447723954030766412504179081396141731128210329017661029021996592128715766771651665166140147591103475375361531128148265901541325903414679893147966961426610014707113810329015107113851013013823698113753279151589259128766772591331956085881021205266110144669161596680572122661102421251446691024212566102901461231471210227902624863158781359643716651549170661701329051077073511316620496551070185813749016210114112054337549661029014427029879117115861021774358116111566180896636981025551375409658579151667766904139735652211770170141307824414117599651113122146907157141307898136179080146907113121151324141175251413078986101375309661032137540511667147584103151155901541131171518588143170123161101153583701319628856641211415019111416751280861523583103155906610312116110114460715057413170717017466301421915487607513456987076511131221464118679132582351374713521073750451858814314431316610290226418481352107111676123076175636175811033540716066870966683190416516718943326725503629090121580523669019596952123118756412631132363166579813105011071665121679612110542546870857855131050110667796130358085456460969615235801234564609057751131164305723077916311051661402271014210325303166102906115761713240194365917066910731355927911751352724747327412154277797177122902414970857573111139550661210124907142382672112574676811666110462165115147841432725367411210135105412144902167828520857399915536212144696668118432789905723206811629717136821017085901144766170123901144157152325191311774215166124905013014490710153855375766124907101531 2

3537573592119051042477294483102570521142637511120810843170965111303123
4411252675621618227025314491530576693514296613539070256215542215164414
1571648510775140791416007156996171401345140148618144710290597307797661
0290597987915683511049081110471049081110421002346710908552532027911281
4826590154766102909873190475671021205471226104276206610290541968399655
5667916610290651566102194174155470500115573122470707122666909101549656
5320155717070111066161104131147554131111120150575641243387903418968130
7987911711563151681166690941750562391671242263473011539015566161791110
1473336689965616513011515601021205859053770855913133117581110171042411
8796421351703219141275908117251538511554735242558541153131081212236902
4315401075031311044181623122811155725941066503277517476618283023697770
1964266753120322969034247556104313723690751361021165115118390416615079
1675556031213225651681843054070544431475397021905541051401603626113274
7668841415087514070855387862885514012307317512481101447414865128015290
8847618843989618379141600715524481258107508329368552510513336641295310
9096813115027253327103669798791171155130318171665171040161665113747551
1426250870842415244175131166515509719317352591896758966952888149061345
4789561153987975497995716651804853121644132881253912522251464653077915
1548341100116125949014179190215547102191513110454259314621849159066447
4111014213841546361142472317821219015275415453513540716066160966619579
1675441039879190204230782020814534381624549015341479141600715431035427
1167536611074611011515425211036373119047663223693791416007154110215426
9118468530963111207506041129675305112903166515402276624177493102151612
4572141103402115951132901707123513843984544147911711539171321621113476
6195106153758111011208177137221138964295901365884132821012101772272212
0892212012135417791905383516811647681161481417253713312375128689796645
4901534147914160071536128715771665191821962217557741414150142571710519
0150134734011071050510571897418102283325637592415474182914971577093198
7911711535523665263710324747636327173307791207665343204211022703214650
9064702190533102120589904229671234205790567198031665153215147667766352
8124483293689836155748531361141361354018096832893768162371422111232967
9753010677442153291590664474153266514231369879152988710727190203166511
6249047133598813886241343710241218498343718121140321792737669052881315
1716651108661961312255142907541906966010850111205752723311171665110316
5140911119013110709459027611114181137478669884310721390952641123902384
9872110917669104314211020326552632031050110716651197532162574797396123
6208187154865251513105271665191590661055338115217749081152294872110932
7669104189737524271675750541180350125511412338625152328166110750772521
8522697713275019096522259627166512519373715014011206094765132751221384
5831987911711521961193736180770516622452010218148751743538791230170418

5122472519781507217042419290791160959010266224518258128672908106995715
0551910120750804906201104122024539646113114978265621413759012105894292
6546891753220872909321641417256895190162490411705686208851461505497096
5177915171665111267690718511311706237109526554214571411121249121024814
0180951790207419045170664231624904132142906265162591287716651170104413
2109262520571849079112485170621115710744837013157107447218190277904722
8118145311079010741181472513103245963245910985771074519507170648515103
6754739471561701044132142907078414853751419416521501357872419328911101
7621165131035484591763321951708111361698571611116498645575127318119566
1193216325122072613142963810739647151329124187411441361372261421107519
0483198791171151182774755266730151512791378280261131477581008702418512
2068204445065107915166771556641814731290474540469720682066110444925092
5941071665116611581364041318331504788185081038566113747755241844990262
3161311502781658571819042547147850710577341966362526492749030766170965
0610511247569669528881490613454649307668996662245050588150726690111104
1121064781161117690106190521125750907217813115513619160100176014124778
6716233715764785521117690106081621165409071131409080705110608130391647
8166111769067081303170408571131408580705178620412209650479151716651669
0109520190303566603112670647811611176901551566123571131106115615717403
5807013140357151620811551361980602511162447157620411031165101118611170
1316529085709801029066176503341252252112901179297149278117791515027913
7189666271556889529157559062736791946501397137751499543921849834343236
1008708500112715372079513081396123620811521773961236208115229449981681
1615539712386594782429171391719681010617196239512143434633712386242505
1355511311101039702418492446498397137751491389636515290661034411381778
1337497261761411919531012090611319365014241449651332657501624904171045
1132112013127910376001429090124116649290576321120574952331771561384112
3458375411438433712349241449431317071665128775477416651411773123513650
8229673624190907907412625081421711493574190665142253063009879117114921
0234066512471242497567171591664149663165103186884710188476810612045436
9057491464810661244766124908896695288814906134547524750879110049081789
8935401705114896890307791532128031488540118129726612490510288814906134
5476652616538154354411290720260908172168718729093256179209015014114088
1316124775547487156111031711875610583731011053141458253486435110543532
1213068098113612531722649851162751062211022534853429010914710231842821
0349071253484282773231141437061130412531038539730907721061161871526698
6791483677744229310111181038539730905148231431050110721038539907148181
7738180490135565111197704369518240843354791520314809664115217159179141
1562078439213717154745441479165166130170747927811790750131913699577317
1152879196192904544147919065625713890518478143751132965547881848964128

2120301701875627054298477816190504773314602464961115290290722184748131
4762555105110211505707494961429029064104130282456355472418326146329279
6651138791475146973100665785544437504743497738131921081212955811384153
2106211439066511387911366617013447381259643721038539751711875676394124
1755001132758111191590664474369879113037472102020417091350357301681783
1190295904256610610431102096671475290114367418115491411102279406671414
7110577381542637513092266810751309230779113037470817738132166101780135
3319087915146910207738183790909751133266224321661017809633190397791953
7468196510517431132111536964017909246710209107067266105748666215709166
6901672704669716666121144103137103290120104142511427513179146510202045
1413512682033913941769033365474791464227204890316657916669016710284631
3145371556863275590471557079310349159066447433484623732471242032449661
0290537791520374612555105147725112029213053741138361877331387914605264
3141721839010041140202162135303766360456145321903613816276610290538508
7514623879118645922718666833195541561544745831431050110665125112490111
3070661570586533104147554784571028611201329078571104542019841715544623
6902971355727012271106690134456206433027266124608454553717898596690671
3110661057473171454103631514824119050496540187561030434111070961040519
2714745322357666116819041074170117014005790103311166410514525872066516
6110536517782272905587517471652316490968163194098147042754806690253123
4519646671970748096450179818102596690135548076610290970964493025964372
4663872183902737506614353747448411757836101778710329010097027331443078
1148331987911711448881286665116566151140894187440154392195541561504437
9151447331110315072198904118436090416648895941561155422791239478905103
6130625814131027290817136202507231412369074665552725113031090272908135
2028595013912106810162364911041111501051320182961071769017088540446596
4381272154413754141110472911042104164486290150333131104923762070144522
7110910706721801511405421654305408372249015696224901504664126241769061
6272909748507024187585697018566254140444106255678282991517977041685284
3303307791138902504434328101713766324429216692341102803077914965198791
1711441249207283750912496509665274403921771103981979082929039980981128
1253138513218171474393842072539479574766102901397168121730268115531629
0874386121369646183750921496964619650921496804246675332846512207147437
6126696321661010160187110192962341106235307441132321137901030104296329
2474361606497662184541511329047754651014043538415615020791661507789104
1515104143439216498791661844331062203172310150171698791661861426297834
5657530817710018430823051432196510511884974723746237431660102725171637
0643085317871110123810329035716019290103010442923220416696695288814906
1346024790132562674282065118741110307766632789129096833182866927236977
7394187702797427249207214212024819411058103829290296791426660475103853

910766426290132541344425704190333661034244214754412825144235741906651 4
996953234458319879117114222581286723119078831112012901032904753990417 1
421102717682771554187310272905010042067327947773077919029021941910912 5
661249032371477198545905123266108474182061379011270726211870633190483 9
136995142417187137901121038262114511808125653670141697619066588736497 2
086640014041522357666116927281151150551445701414150180725912152274185 6
901410707413672064366513217910703191369957830585552575111236205141233 1
110315066511972453130194190153170877637708921381967085545655813637511 3
849164116565105144390631042233451090471389018344061045604117634157311 2
090672107319879117114101036236106661015475412369771467084942909621859 0
965571090296415704096919645282102733216690873712316514608030779151408 6
331507232116081090197474072209073124290403341120127429313832936816240 6
133511015266412496156464543690671074055408416743750108121295602664143 6
678987502061551408669018041614290466690423268741617661551402404406315 4
023911260757711321076804033287722231357581110145436914268558341120517 4
296971711204468105104022786736647103290475399041714012619712246647141 1
304926641245040069196456625317065121379148399756510438048931627674165 4
717911222047620121256398102077375734944941769011247878114833739724545 7
334112012742931384141140461505063968651904179066727709699128290293381 1
105166595676211986219176510701170665609347873712466426143952264973289 6
379061086650898791171139465030041191846861096301156664121708404977561 1
639336116276280454414791903914965198791171139259611111136647310497801 4
649190661021205507045436111303915964111031972664147567045436111303902 3
212010606613130096103465419044311142110719271639962591814634129538926 1
252642977017187641237513886519071471492597556066194130387105845147750 7
690753661106911703862555105152364548813064348751132901951103122484132 3
129239711515038515076613131090637474668163741823348880384401907547817 7
375677495427081032705890142160301514543077915138391845738535328030124 5
401477630779151382258128666131142750769041079132381121645378041657703 1
966953801741481436615515551626737910621772931724945510832751322147763 0
714766291103789529083790179514216065163121014129637722635114135136243 0
312479015515611641747110194176218259110884716188476892130376339522328 6
103853990901314110686664129137532845147750764461703744019017058397131 5
521383017901101747942131831757617071234296645407942390871711536516613 0
170737322649170176333312207159137210751311373727205104945459651043323 8
310666609040788317114654010010545466431515327141371206517536611020866 1
249011476612490112084549011474549051145658610242113557370817738192371 8
756861160376614537837907573131671715911536681966791513696312066131517 8
697904236820651753661102081021429016110013898750152115444413261253126 7
496519014161253624965190454369636710519417067231190655110036615013772 3

1190431661694151130262124887857415701342651661950511301244721203250337
3653391758063142871498791110887439845436901055373645964971399227513954
8704543611363765497664147567045436113626364723632896479563645436901054
1036122746729879793712484820261142475136065190714717114971106402373625
9714135959631497150721407901001314681501407901314554249163586561128190
3213164348847259904687045436113572265431722344313166609020787392317103
7321757037663212632128113679541508454361113035627715066131443131355109
1254166576632369047139311417065135481411066550233487540257248177168120
1051245082101719024417690953217035377190470111222901393521667035131540
6039073545590661241505705135110995744390130491750350106220317225523156
1153987914834940190754784396903197748983077911223481566955101311221493
7341540187564130779118649979111030779190280413775566115011661317013473
5281072662662733464011105543275304884392253345226543166892663421083121
3166413529013133113515069151344650300706168268212665134315266588262901
8479170248741872907564390246271241342196510519046750905147890126047507
4312966753487353309721966753220166958112505010090907316126290184731046
1312624130334113164911045416134016670351461722429107023114174066770131
5022307640408661202531339220966280901421063384339684396902529053150149
1069597532665129011137531701337119670189470472901405621719670189470476
1791043549075033638211030784252561290113352321111102072402016651290111
3753170733426141376731222927248325210361424903243113116401042021313333
1141190667701313716582531092110107140866120213133222090693118166909723
5405326651282901401511713754033110618071269151049040720213120723875106
3307112123119031766516612490115317065061290111313081301328223811663491
2381421194544651181402086183292844019013222278767290516676129511061276
4314172561128261202531128215132818121145171100612449719041501350612023
6164253170132715018072872908789153262321103613725937714519066513253922
0316613144313133366971303242581286728189012966682619664665105113032311
0286721956698487467368513641066905404710498109054041190504075632231431
0501107210329047539904115666155417736090411087511303213716647195669845
0613590751323109066901807501909622760904839222317103132071121270190713
4990481120948190491209101902874452879010143931931431050110718413670190
1136701904837011301215337019012181612191106130318103631514824119050502
9521231862097021903177467841109901251525533228255180138987503161166511
3539045654010710866423411404549015341479141600713154019075478439690187
4197916731481775627142902023077916021081212153602664143667915131311030
2721064130172443574171841381315721484544148201365239665245312103813131
2102340661316641431096107101317149417690324544147911114716366124955 13
1110912511323631202152171491431132363156663093103031877367648292384309
2827731578098113619210225320279130811030272669010632592496695288814906

1345424712450882079090812129130307741181297296555117507451991826779227
3890435407149142907431017167306325773077509051311903473072161211625311
3068176610290931959325509016907110430581789841970154830782013030420431
8728056614264657291779079740631273032821164573321669087371231651460803
0779151302156720316651952123186142114712533014545171253104908113470701
7618914073125330067433293047253124905079220217190954663245215047452141
0566140495708416181017183907911221149807454415550941295454130887411129
9109125113236313111102819036674111298132903710329031011570031665129759
2706947231877375664143077915146294171191329029613164394296271235141454
1308729518749113236316629471293392177110472128451306811287121157781115
3141529372531839079111048361292161478372536627171511758312538834112248
2413614232191661403129237167253135113722114429590136243031301433512689
1502292079046884332791291314310501107231190788311120137066714110917251
9041413571032904753990416529015059643721375411364769634686737207665464
9749774113087393291131953336424414763401105105728915031052726621666514
6224613658757319374231011379237023238343262170180122676101460947651321
0103271375153661241707903941233713018335150837814170234113378426014006
0123051341901456130699313293877013129490379783137512201180515593179617
1561391157417113132195672372076654613911574114654266145614325142313371
3742312246851415034416690570298791171128810363151482411905049654066419
5729575142875965105190810601573154112353357067157286142637142631138266
1708425730766902128385877013128519651051234901124191366508987911711284
1314537155686372471242497564414157155561153987915128355130150203172626
2282346615828269196452821021477596664125217041115546207901021917023425
4113664523457011392138987501319040110267411566132212312341177912811314
5371556863724712424915517226129310312329679128015076613181090637471211
4215731158795661901062701251032901003615316610290306791441279142631497
1019681090637476614140432686473618109063747311902966106551301002788125
9643725419018031690810914128241092571524162641351277342901091471556613
1950901390723590671472766743329304773181141718410441696311901044262751
5013772917951325144724223174111444012746210606651154952247513213185366
8695114349737103290908558752241422902389879117112731156190443906672770
1189251953621809519154125310511725090963528881490613130690905835476517
3212723025964372119391087013110105788139100215585902369013196614411404
1232967915762713921772931728981310110370311257053917960311522759065583
2936810637142211762407617481236554483198791171127088106072711488199908
1013313961362691314537155686372471242497571137912384153831540661029012
3296791268150137723111209617215561475090143132853155906610290123296791
5702677894665114714149113054011145355011010454061425250902781380131142
1491064213149677131487428110261202259131707266314310501106651141131354

6215179142540413110104241115717116209269411157525705291404112311115693
2321315687275793213193260131577540111566652745276667103861131582110622
2131511024076172651062177293172300741487127390848167190433421661312591
3145729521314663874121225913170112166407512079025912741416007126469196
4528210267140241287909141447993077972874114029085898791466626315018072
3626231647314581184681121449310170104190535462104959022731262105114117
1034353710385392951363014332145903129337755477062411507583212946074170
1901032904753990413596371151706311874911323631662611058453944563763537
9582315642151132904188123898791171126022441190661069384166301423009014
1919021511181064944494176901219079193141663014219521677494290531504686
0891735666909013587211091796132145025942112077141130492664124502582321
1091070666106103257487491714266154733118115111012166413440215366675318
3257392177110398197908293161128125313874470216772563841107266753735951
4321759590606617796101679113174442878111531138115987971122151135171329
5589211285168190321001361347096100180955021702575426651131964462001512
5519651051904675090511374832623711631620811232629014595840481519516511
0775137254150137723119095426721401719076231701866651131102901354167695
1231091141611213586611389144690572104665110775137253106415072135171324
4356215542215112126690855110661029058132814713893832562170422515803513
1661029058191815737592138701116769031262901024160071252729528791272735
9533510461191101661110741701902511501806651154661029054425058631142721
1061421109107366651655404536675211477908117512609081079141600712496561
9041790667277024863111010942951164624778947239690246902304190170621118
5313180512107541512931111997215055279724659648370412006166100853178227
4731511201312456116515911616355811099624430259643665112294151737576303
5575711017921741166721651321520413001095851520110561511329064057243249
1101094295123097711163092071105771095851487756170411425795117062312428
8128666511541000251904115066511543945410424181101795243739713754351322
6154231106149111166140251905617142616907151013117062372418125964372429
2469023013117062111891082782577506278248752199721505527972403025964366
5115466514429851415707021706211110219375164557156621119131361401120202
2071317505707381164735863748461401311423219053031429547362351171161107
4505120612015110497113047923959631497150722219038790832936810615071907
9867504291071408702731385113611118911621425797082381503105266511546651
4710401104549017088471706656093419664122107371959701847501909691112025
8137398329739826289116214257970823720617678662245666221615195151685511
5662111145131121517478418769035438111145131236105845147662248496886111
6622450788513115662111662216132112013166221613269251323219128117085190
4837122678739820269117123578947221216530042916574157091131213517509026
1109569832936810670513059066730415205185483730610362487526172341501806

613117112457233258128666131881315062786921669010282023288128672198482 4
313771061629010696613773123115018072142625419136095119210756651037230 2
275081821111546651428115775061768488907081772297452650020665166301518 9
054266478227441876337889901425957111113088912018322813861751714177875 8
136289419072282411406713642560908101361121134186514853753642565908101 4
182106418992485372277894665161166301421999021515072798109157810751301 3
049212018384396902261156190443906672770187130296742183246902235931712 4
723254113613034787112017722525812867266648269676610290262167979879151 2
246919645282102738439690187419147301175306912015061896548511241202804 1
865710437561902235726612422395418112801447306661021201002329553113095 5
312805361201772235963149715072905001732141751146908101732163251146902 2
517562170422222150766131810905874713359218498400241810906714113029674 2
177221312663405132663404501159879732714641887103895545192906377915704 7
177891041515104122065030041311902972758139909511187198791669910710134 9
444941769041879132951111479511181311426210814145415594105660215366652 2
446142712197112123119031772187562315087979879190932965530782067218204 3
186613140941769066165469667169050760312629021727867366472729161431112 9
096090664665132121635216789466512284944644176905071312151028090564011 0
168793710616190642987911711214110286726614411404195520901429621381108 9
815557411317066650135140708212176203172177739719618410329014044670821 1
762351713790411106632596559014110590142962109644611115466514511120115 5
411111201961155411111169050317052552906693420910234072898115275672082 8
277315712383796123969045225314690141207731908379035479690452253146901 4
217092130576410006610082311350782206258128666516617541428825189089854 0
205922120137905105770619382806411246610087519013217822629091118095162 1
701002046747115635474381013143066155810905874742903837246377801114214 5
108017058750642203204318665115466514280138101941807012075096575450713 7
021434290521036221177017050907311214241348910170531782130719971419017 9
266907117710511507117083501042418326545375090731121739131653524245420 2
249206651132491418753737661029024420163111066511546651417048541572115 5
621704851702816862805382805362001062110321311114631316595925354763141 8
588199258128666131463131198392117706625971319560741828013812498237561 9
030557287051890861117151858819760520316651881376577916610290544196574 1
906651418904494145119023310611179044980853233106481715571513072120177 1
955964975741427890391488100418447751221384583719456617517141766727707 1
411166224501399022749796437101411724485403149010265090844650904724185 1
663906642241141656416218015717048325115075101116614085934979093551814 1
811172759039193570175121494060212570210685163121411308711170819297619 6
704111066665110533361622243730162662248015290159340110710517196255536 1
503091704685090469171193829588741109150519159651051908105435735810918 1

1485170180120991907911168015290159340110710511507117052553190956190192
9079111042261172170422987911711189258128666511155411111072095427134136
9068117018815018066511077911105461721751174117018763111010942940016114
2811620514777310087021704221869561906747112431290961858177311575076485
1702592629011707501224612429554310616903516017059459810911324123957190
3121704229879117111846274573201791679474103895903908770212621964417157
1483349619813359218498343716151101024171594601438329368919023310612796
7113280443512331001838650112045490111879157141454876653750182282110338
1211358810528979087916718181773819237187566614537282321129011741671715
9179724549066884152679151180258128666511155411117537100312101010170661
2407364789884814861702489217953217510516553441841422905798791171117826
6311251206213061753218031432307415903077915761774753732126631557143551
1517241522321386688414807514070817659631416611054357426993119217510280
9056401101687937227010329081571421711174282908664547155669187662657709
1609611357332258151364807911371739747985804214480791904807916037011728
0431866571246514251804266701977791220426511305987976630121616660901710
9014296171266176442103813262931108250786125090965084527610327100419013
2906688471422104324190613441167293101111810385397309051170289329113236
3119361021691216453780416577031966951681741481436615515567301514543077
9151167289440581554091477514241079132166238211662056745490171684176905
6494901394152679151165150521661318114859648105511156211171174431117066
5819028820251164536457325924790527155671633304658655213814753970279116
2384508117822810990246116717903122341611026311062032448661029054012054
3371603841106651163325598987911711159756374053498110671585964837041216
1104542161134631704461502971503426115786519617057047797313511111359777
9132161701718671514801235104152428013850934116120351896156596111111366
4722290168622801385093411612035189615531431050110665112466624114834161
1242650921119861547719052611122290139153206511395561353915799416614214
5450779115210621207027117190244176905887396872137475917475774754514755
2479411652454414791811961512061111113664724790139562364544147915751480
1235104152428013850934116140713727613290345322601041502583161446651162
9206671476619791110322674715718711019213032748290220321164704411681544
7320170327921421103105137646214776149650300413119029127967165130116784
4157712082411429017720614820678111547375224196482413610301044645014759
6111111366476690129315460130971966641141492130351716781101941762182595
1592411468163511420296193872682531766905201301451333511410976690119966
6109714418121117663255019045172443574171847531415729813114322635114135
1362430312479014941747156116417471101941762182594188479288476892143142
6519071471492597532130816351716831441412067811154737522419648241361030
1044645014022635114203717621825934425612613886905324197131701477188100

870131051041139226497328961119590190665162111946725981121382322325311311312073513170113722012083790629690246140195145903225975120121296136109125451719811045420143215544613529713557925313528944045171161408222258501754613619650230161253134181211451719153225321844390212259360707133371782827734110155401715963009613183293681359190117290413149237706104202259131707132104327268220422215512182594113617025918190171498171548443154707131106289913113113209613183171124611315764932072594437071304064537456606371049614237321190120190420315751412923211013706717056144157092831262111289484514773109671626784210850145450779112735037469066905041171902474176588739650116619511305158724183823756140141086126921021204913796751314136252125222176443631041831108181570177907911317701686276615167206317911371241667035146172242910708103853986123607355010385399041353212641661701144122150137665166146204431821279671711211020773837908161796907575132656517571416780990146106969305166108160130971961201176957813118756107781461815702063179113177045449651310110565003825373101103825005653711913145371556863720712420911515817651913190421182555105131841313014745035171671903289644801441173025964366516612441881090281551476441415716411631431050110665124866421418192238139754624176902361249073302162769033036454369073010115133678301841353314469613290116100613564985167041114350374690666090904710385399035665154071113314310501106651540715767968124511667169076041112105194170672311906551100722629081090170975165137454369030779120411118177342718412021493225433198791171111020678368106612490583514989642109206783623675074110873190837903541907120147140255371055416126675332139071063454727271627446411366867001115351089214741813902014765361237181110884729914220630741110619130047191901104118364148610820631116115620766423454414791903907521557123466124902964977107162317663213539075780879810632832831047463412611391401054218066131107251301512658171901042565182529627123566753152110921362758171901301032064330272320518049077114711511132036582052879196241101422995381021064150727054443851186101255510514775771426090726661248372369047151130100196510511627311113130347134183905162272211381841135224113072462464077111352707991027497819013421415404961166414098196510511329066649861501301557123513917212433721618843146138668843987514070897105773427180211018049082903119011091590669751101366884331751236790811396392110662357307357414915130779111010141329084155712346612490423497795162412513476619532111018914494986397116247111232514213143296641721952167749429053150468323819024745411646214093406453780416577011183996559087916792596111111366478043054127018762965590617321507501909011121874762454874633850170281753627247757168574155156226090150391126525198642491540917654979415402759025112593710561631711135270790116649715017132886540644141571641191

711492184983437161211406632532313126265113527078969196458910267561153987978869196452821021471034742585829042875963141661105924184667201608066124214113012953322825518014486148817552708228175126171591794766124907062025407245448882012685101632455710232454206311071418421647326411506651206388365611226212471181706648843101413887241917631708921389879113770882206512114176903595406691236135390711109011351656815961111113664766915902671965772958935107196572889569371248905717130572689575076901985605408065619041728648766387708801014261799165104184372967271919707077824632478021414138213896315311757395703710321110766313075714656131775356630151581617083335115418172222817513876124266092251371307571465613192418172222817513875702412687506212722237108131307571465613115418172222817513874130907751687771311921521383071117513116651181116131707736601027716473062711022407273130983752614939015048279158014071952905406591706691014775076908865407095619095419341135224113072462464077111352707691314537155686372471242491551301468329368919020038817797987915168540841674375013912121536026641436678987506690180416212766155140853141901313312481011743651174195311134146138623138901032852818181322281155191201103428011611570707672441032909773766307905165758711250140104131575952958142421831003261181116631707663067843132902119777911102197514074112101377777911166524913768190133022149683664812057505189613734671064218170764103623678106102747418414229057143121170145111217010176397619050676906835406216064972971841213662604185014680116115707076128944011561704832731249081079025161827341495134176425114101111461118111613170760865190468454116462707599761907507690180207540581027497819013421415407533311613270757160649740631135825524162431707561020262903379096171550114776804662324063190174707554064537104961316374569614237321190120190420315751454232110137067170561441570928312621153330461022471779610167915210621103226763163325604516561124548864972515722351426985038211030464414157164495964971398737513949937486372817159142413073773013748337170712354884310447344281418791100170561441570928312621146691964528210267465735307797451314537155686111204721701910053112212496241814428944011561154834912079045620436841517800103290968090293224187957281930126401164421062905575397107033775151812059657894245113145111874139290776891310332154757516618170740916510474624114710385391012141619013171131159991511591084511131391091814517159141328114031141138382555105142104129211137110111554056133451463759631411416113150220741201147617696154909650413872510329010461166222131707361503105217508132202132414775401241032904190730741113572946540985405205401604495166875611034948456710329021613651766241412516567690667910167913333232784047731735731784057170866206742282307791482479013956286987911221921218834157110125149831665132691965125918968174974

1413290358741706138308745909631491288814906134547551561153987915083142
1475254142122441282588587865877013130255510516660903708857590273488127
1101388121290510572959649761655101119030811729078844113290945313858210
3290103741289561901929079779074126284142171127314310501106651345217737
6630142148155971708953477580291339699333352639467724779082989079790209
1693082801371951329012272533931125120621302435831137190671303667074941
1202151252571741590615235097847104961012152897908791672218111159010547
4926621578108921705213842541637708921389879113770820206311061774596321
7791611471381429161987514070819636311062714596321822410892138103290551
3175140708177887843817738110416613710401839016636472363274047987976674
1151984547832956892146901429614102077381131233911621511618311066104013
1623113957041139715567307791511224545732479019110671122245845152908847
6188431627971029640387157222104516279196601995212314547508717922371551
8791210155561791300668133161564038126324955691328932922322026583128932
966102”

You might use this big number calculator to test it yourself: goodcalculators.com/big-number-calculator/

6.1.7 Fact: Rewriting each word with Abjad numbers until and from Iron verse

In this chapter, I present two interesting codes around iron verse as *facts*.

The common coding pattern of each of the two codes is that they are based on rewriting the Arabic text of the verses of Quran by replacing the Abjad number of each word as seen on the text. Abjad number of a word is calculated by summing the Abjad numbers of each letter in a word. All the verses have *chapter and verse indexes*, which are from chapter 1 to 114 along with their special verse indexes. This means this code pattern is like rewriting the verses of Quran by replacing each of Abjad numbers of words as seen on the text. These two codes are complementing each other such that code 1 rewrites, as described, from first verse till the Iron verse (inclusive), and code 2 rewrites from the Iron verse (inclusive) till the end of Quran.

Code 1: The first code is that when we rewrite all the verses of Quran from the first verse till the verse of Iron (al-Hadid), including the Iron verse, as explained above, the resulting big number code is multiple of 26. This code is similar to the *Code 2* of Evidence 6.1.5. But, the difference is that, in that code, we observed the code pattern with Abjad sequence of letters and also with *general verse indexes*. In this Code 1, we have similar rewriting code again till the iron verse but we use Abjad numbers of words along with chapter and verse indexes and also number of words.

Code 1 coding pattern:

[Chapter and special verse index of the Iron verse and number of words in verse | Abjad values of each word in the Iron verse replaced at the place of the words on the text] … [Chapter and special verse index of the second verse and number of words in the verse | Abjad values of each word in the Iron verse replaced at the place of the words on the text] [Chapter and special verse index of the first verse and number of words in the verse | Abjad values of each word in the Iron verse replaced at the place of the words on the text]

Code 2: The second code is that when we rewrite all the verses of Quran from the verse of Iron (inclusive) till the end of Quran as described above, the resulting big number code is multiple of 26. This code is similar to the *Code 3* of Evidence 6.1.5. But, as explained before, the difference is that, in that code, we observed the code pattern with Abjad sequence of letters and also with *general verse indexes*. In this Code 1, we have similar rewriting code again from the iron verse till end but we use Abjad numbers of words along with chapter and verse indexes and also number of words.

Code 2 coding pattern:

[Chapter and special verse index of the last verse and number of words in the verse | Abjad values of each word in the Iron verse replaced at the place of the words on the text] [Chapter and special verse index of the verse 6235 and number of words in the verse | Abjad values of each word in the Iron verse replaced at the place of the words on the text] … [Chapter and special verse index of the Iron verse and number of words in verse | Abjad values of each word in the Iron verse replaced at the place of the words on the text]

The two codes, Code 1 and Code 2, are presented below in order.

```
x<- nQuran # 6236 numbered verses
ii <- which(x$chapter== 57 & x$verse==25)
RmHamza=T
j <- which(x$verse==0)
y <- x
tmpl <- str_split(x$text," ")

tmp <- c()
for(i in 1:length(tmpl)){
  tmpi <- unlist(tmpl[i])
      tmp <- c(tmp, paste0(
        rev(AbjadSeqofaWordSumValue(tmpi,rmHamza_ = RmHamza,
                      abjadL_=abjadL, abjadN_=abjadN2) ),
                      collapse = "" ))
```

```r
}
# Chapter and verse indexes added
tmp1 <- paste0(y$chapter,y$verse,y$vwords, tmp)

# Code 1: Till, including, the Iron verse.
tmp <- c(tmp1[1:(ii)])
tmp <- rev(tmp) # reverse order of verses
tmpc1 <- paste0(tmp, collapse = "")
print("Testing the mod 26 for the code 1 number until, including, iron
verse:")
```

```
## [1] "Testing the mod 26 for the code 1 number until, including,
iron verse:"
```

```r
as.bigz(tmpc1) %% 26
```

```
## Big Integer ('bigz') :
## [1] 0
```

```r
print("The number of digits of the code 2, including iron verse: ")
```

```
## [1] "The number of digits of the code 2, including iron verse: "
```

```r
print(nchar(tmpc1))
```

```
## [1] 213824
```

```r
print("Fact: The number of digits of the code 2, including iron verse,
is also multiple of 26 as tested here: ")
```

```
## [1] "Fact: The number of digits of the code 2, including iron
verse, is also multiple of 26 as tested here: "
```

```r
as.bigz(nchar(tmpc1)) %% 26
```

```
## Big Integer ('bigz') :
## [1] 0
```

```r
# Code 2: Till the end of Quran, from, including, the Iron verse.
tmp <- c(tmp1[ii:length(tmp1)])
tmp <- rev(tmp) # reverse order of verses
tmpc2 <- paste0(tmp, collapse = "")
print("Testing the mod 26 for the code 2 number till the end of Quran,
from, including, the Iron verse:")
```

```
## [1] "Testing the mod 26 for the code 2 number till the end of
Quran, from, including, the Iron verse:"

as.bigz(tmpc2) %% 26

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the code 2, including iron verse: ")

## [1] "The number of digits of the code 2, including iron verse: "

print(nchar(tmpc2))

## [1] 26256
```

6.1.8 Additional Facts on Iron and Quran

I will present some other additional facts in this chapter. I do not consider them as evidence but provide them here for further discussions.

Fact 1:

First code as a fact is such that, If we replace each letter with its corresponding Abjad number until the word iron and then this text representation number is concatenated with the chapter and verse index, without the number of words and in reverse order, then the resulting number is also multiple of 19 as follows:

```
x<- unQuran
tmpl <- str_split(x$text," ")
i<- 5155 # General verse index in 6348 for verse 57:25, the hadid
verse.
tmpi <- unlist(tmpl[i])
tmp <- AbjadSeqofwordsperVerse(tmpi[1:13], rev_ = T)
tmpr <- rev(tmp)
tmpr <- paste0(tmpr, collapse = "")
# Concatenate 5725 and the Abjad numbers of 76 letters:
tmpr <- paste0(5725,tmpr)
print("The 129 digits length coding number: ")

## [1] "The 129 digits length coding number: "

print(tmpr)
```

```
## [1]
"57254104830115030750169601003012601503014061001030501710403016214002030140570401503075016400150102301215030602001503060200141003 0"

# Test the 129 digits length number for mod 26 and see if 0.
as.bigz(tmpr) %% 26

## Big Integer ('bigz') :
## [1] 0

print("The number of digits of the big coding number: ")

## [1] "The number of digits of the big coding number: "

print(nchar(tmpr))

## [1] 129
```

Fact 2, The isotopes of iron:

These are the 4 isotopes of iron: 54Fe, 56Fe, 57Fe and 58Fe. When the 4 of the isotopes of iron are concatenated in natural order, from low to high, we get this representation coding number:

54565758

This big number is multiple of 26, multiple of 19, multiple of 114 and also multiple of 19x26.

```
tmp <- "54565758"
as.bigz(tmp) %% (26*19)

## Big Integer ('bigz') :
## [1] 0
```

6.2 Codes on the Basmala verse

I will present some interesting 19 based codes as **facts** about the special verse, Basmala, in the sections of this chapter. I excluded this chapter from the probability calculations of the general system in this book as I currently designated those codes as **facts** rather than evidences. So, one should not consider them as part of the general system presented in this book but consider them as interesting codes as *facts* about the Basmala verse only.

The key verse Basmala is written at the beginning of all the 113 chapters but Chapter 9 out of the 114 (19x6) chapters of Quran. No one really knows exactly, why there is no Basmala

verse in the beginning of Chapter 9 out of all the 114 chapters. But the text structure of Quran has this odd and unique situation and after witnessing all the evidences so far, I conclude that this might be another sign of the unique design of the text of Quran. Because, otherwise almost all the evidences would collapse. Considering the many evidences I presented so far, we now know that it is required such that there must be no Basmala at the beginning of Chapter 9 as otherwise most of the presented 19 based system evidences of the text of Quran, presented in this book, would most probably be invalid. This odd situation of the absence of Basmala verse at the beginning of Chapter 9 further assures that the 19 based coding system design of the full text of Quran.

Basmala has many 19 based coding proposals already known about it in the literature. In this chapter, I will present new codes that I realized myself while working on this book and did not see anywhere else. So, all the Basmala codes within this book are first time presented to the literature in this book to the best of my knowledge.

Since the main point of this book is to present reproducible 19 based codings of the text of Quran, let's get the Basmala verse first from the text. I presented all the unique words of Quran in Table 3.1 in Chapter 3.1.5.1. Let's see the head of this table again. Because the Chapter 1 and Verse 1 is Basmala verse already from which we can get this special Basmala verse and its four words along with their word frequencies in Quran.

```
require(tm)
knitr::kable(head(uwordsTable), booktabs = TRUE,
  caption = 'Table head of the unique words of Quran.')
```

Table 6.1: Table head of the unique words of Quran.

uwords	count	countW	uletters
من	2763	2763	2
الله	2153	2265	4
في	1185	1185	2
ما	1010	1010	2
إن	966	966	2
لا	812	812	2

As we see in the above table, the first four rows of the table contains the four words of Basmala. Three of them are the different names of God ("Allah" (or God), "the Gracious", "the Compassionate") and the first word ("In the name of") refers to them as "In the name of

God, the Gracious, the Compassionate". Basmala is a very special verse and unique regarding all the other verses. It is the first verse of Quran as if it is the opening or key. Before starting to recite any chapter, Muslims first recite Basmala verse as the opening. Let's introduce the first evidence on Basmala verse.

Basmala words frequency table:

Although Basmala is a very short verse with only 4 words, there are many 19 based codings on just Basmala verse that are already known, such as the number of its letters is 19. In this chapter, I will first present the one about the frequency of its words in the full text of Quran, which I discovered while writing this book. Let's first slice a separate table on just Basmala from the above Table 6.1

```
B <- BasmalaTable
summ <- c(sum(B$count), sum(B$countW), sum(B$uletters))
knitr::kable(BasmalaTable, booktabs = TRUE,
  caption = 'Table of the unique words of Basmala verses in Quran.')
```

Table 6.2: Table of the unique words of Basmala verses in Quran.

uwords	count	countW	uletters
الله	2153	2265	4
الرحمن	45	157	6
الرحيم	34	146	6
بسم	3	115	3

```
cat("The sum of each of the first three columns:")

## The sum of each of the first three columns:

cat(t(as.data.frame(summ)))

## 2235 2683 19
```

Before going further, let's just mention one of the test results from the table for one of the very well known evidence on Basmala verse. Basmala verse has 19 letters as we see in the sum of the fourth column that shows the sum of the letters of each words in Basmala.

6.2.1 Fact: Cumulative number of letters and indexes from Basmala verse

In this coding pattern, the number of letters of each word of the Basmala verse is cumulatively summed and word indexes are placed before each word and all are concatenated as follows:

```
# Define a function to be used for this coding pattern:
# It concatenates cumulative numbers and indexes of each word.
cumsumWtIndx <- function(a){
  # usage:
  # Example input: a <- c(8,7,2,3)
  # cumsumWtIndx(a)
  # output: "18"  "215" "317" "420"
  cumulative_sum <- cumsum(a)
  index <- 1:length(a)
  b <- paste0(index,cumulative_sum)
  return(b)
}

### Start coding
x<- nQuran # 6236 verses
tmpl <- str_split(x$text," ")
tmp <- c()
for(i in 1:length(tmpl)){
  tmpi <- unlist(tmpl[i])
  tmp <- c(tmp,paste0(cumsumWtIndx(nchar(tmpi)), collapse =""))
}

print("The coded number of Basmala verse: ")

## [1] "The coded number of Basmala verse: "

# First verse is Basmala and should be: "1327313419"
print(tmp[1])

## [1] "1327313419"

print("Test for mod 19 to see if zero: ")

## [1] "Test for mod 19 to see if zero: "

as.bigz(tmp[1]) %% 19
```

```
## Big Integer ('bigz') :
## [1] 0
```

In the coded number of Basmala, note that the first 1 is the index of the first word and the following 3 is the number of letters of the first word of Basmala, which is *Bsm*. You can follow the rest yourself from this example.

This coding pattern was shown to exist over the Basmala verse by Abdullah Arık in his book "Beyond Probability" (2012). Since this code does not include any data manipulation, I took this particular one seriously and tested it over the full text of Quran. I observed that this coding pattern is multiple of 19 in the full text of Quran (6236 numbered verses) too. I considered this as potential key coding pattern and tested over the full text of Quran (6236 numbered verses) and found that the same coding pattern also exist in the full text of Quran considering all the 6236 numbered verses. However, since there are not much similar codes, I consider it as a fact rather than an evidence.Here is the proof of this code being multiple of 19 in the full text of Quran of 6236 numbered verses:

```
print("Coded initial verses of Quran: ")

## [1] "Coded initial verses of Quran: "

print(head(tmp) )

## [1] "1327313419" "1528310418" "16212"      "1427312"
"1428313419"
## [6] "15211319"

print("Coded last verses of Quran: ")

## [1] "Coded last verses of Quran: "

print(tail(tmp))

## [1] "122639414"     "1328"          "1328"          "1224311417"
## [5] "1429311415520" "1227313"

tmp <- paste0(tmp, collapse = "")
print("The number of digits of the coded number of 6236 verses:")

## [1] "The number of digits of the coded number of 6236 verses:"

print(nchar(tmp))

## [1] 259820

print("Test for mod 19 to see if zero: ")
```

```
## [1] "Test for mod 19 to see if zero: "

as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

Here is the 259820 digits length big number:

“1327313419152831041816212142731214283134191521131914293144195226297348379441313293114145176207271521131742453063474184716212315419523626730832936104411461252152831141351762372583312273124165216297318339391041114713273104165206257298369411045114912531328310414518623730835938104014717211317422525631734840943104912283114175216257298339371040114512511427310415186207258309341037114313273941752162372914273104155186217268319361039114212491352145615581665176918711977142831341852362773183593810461151125413581462156516731421031341952162873415210316423529632736843946105111571529313419523627732834938104111451251135714591564166617721225384115136191226384145176227268309361043114512511353146015631668177318771986142931342052462873183593810421146125113561459156216661770187619842086219022932395249825102122631141752162573083693810431148125314273104155206277318369381044114712521354145615631667177018731979208221882293239913273941251562072382893310381140124413501457155916621766186819722078132531141452062673183594110461154125813661429314420528630733837941104311481255135914641568167017741878198320862190229523972410025105261072711428118291223012731132321353313934145122638414516620724826931103411391243134814531560166317671869197320772182228723942498251022610627110281142911730119311243212933131341363513936142371443814739155152113144185206237298369381041114512471349145315601662176718721974208213293144195256327348409421048115012541360122639412514616721826928103311361242134814511557166017631866197013263941752062472683193610411146125013521456156016651771187519792084218922912394249725101261032710528111142731441852062572883694010471153125813601464157015211313416519622724830933103611421248132538414522626732840943104611491252135514591562167017761881198320882191229523101132731542152563173483994210491153125513631527310414517622727831935103911421247135014551558166417701872198017214318426529633736841947105211561259136314651570167517801883198615283104135186227268299311037114314210314419523630733836939104211461249135214571560166217681621131742452963473984194510511225312418523627732837943104811511257136214691629314419522626729835938104211441247135314591563166817731879132931342052763173684217213318424531633741172123174235296347398459491055 1
```
```

921532242753363673984715210314419523628732838122531241852362773283794 1
104711501258162103124165196217248289311035113912441347145115551658176 1
186319691321031241451962773083694210491157126313661470157416761780188 4
132831141652563273483994410501329313419523625731836938104211471253122 7
311413516619724830132831241852663173713263104155176207248299351043114 8
125413571463157016761780188319862089219522992310424107251092611527121 1
327394135156197218249271031113512421349145415601229311414519624730162 1
131742452963374084494610511153126013631469157316781784189013273134165 2
262773183493810421149125413581464156716711774188119872095142931441852 1
625728831938104111461251135514571563166617711877132931341852362773283 7
944104711521256136014621565166717711877198120882190229323972410025105 2
610727112281181327394135156197228269301034113712401344144715501654175 9
186119662073217922852391249425103261072710928113291183012031123321293 3
133341363513936141371463815139156401614116942175431794418145185461884 7
193481984920450209512135222053227542315523556238572415824559251602571 2
273124185236317408429451050115612611365147015741679178218861989209221 9
722100231022410813283154215266317358379441048115512571360146515701228 3
104135166217248289331039114412461354142931442052462673183693910441148 1
254182133164195246277328389451326310415517621727829935103911441251135 5
145815621667176918731975208315283114145186217238259281031113512391343 1
445154916521755185919622065217222742380152831141451862172382893110341 1
381242134614511555166017631871152831141451862172382592710321137124213 4
614481551165517621326310414518620724828933103611401245135014521555165 9
176418681971207621832286239124971328312420524629733835939104515211317 4
215256297358419461051115712253114135166197228309321035113912421344145 1
155416591762186919722076217922832388249125962699271032810629110301123 1
116321203312334127351323613537141182103164195226257298339391043114712 4
913561458156116631768187119771428313418523627731834939104211451250135 9
146215651669177418821984208721912295231011421031241652062272783093615 2
103124185246277328359371040114514293154215286307368399411044114812551 3
571461156616701773187619802086219022932396241021628313418521626732834 9
401043114712511354145815621666176818741977208121832285239113253841251 8
620726832937104211441248135416211317425530635740842946105213283134165 2
362573183493810481154125713631471158016861791189519102201082111322119 2
312124127251302613527139281442915013283154175236297328389441046115212 5
413601465157112263114175236307358399411047115412591365147315761682178 7
189419972010121106221132312124125251312613827142281452914930151311553 2
158331623416535168361703717638182391864019341198422014320444210452134 6
217472224822549231152103164225286357388429461052115512571363142931341 9
525627731837943104711501254136114681572167717831888199220952197221012 3

1072411525121261262713228138162123154175226267328389401046142931341551
8622726829933103911411244135214551560166517691874197620812186228823932
4972510026108152113134195216277308349381042114412481352145415581661176
3186719692074218022842387249025992610327107142731041551862272683193510
3811421247135414571562166517691874197720812183228623922498251022610427
1072810929113301191429313421523629734836940104511511328315421526631735
8379441048115512601365147115781680178618911997209921104221102311224119
2512126125271311224384115166227258299341036113912441350145515571661176
7132931341652062673183594418212317420524627732838941104611481252135514
5815611663177018721978208021842289239324962510212243741151762172582893
2103611401245134814511555165917641872122539412520625731837940104411471
2551421031441852362673083393610441621231642052462873083693810441429313
4155186227268299331036114012421347145215581662176618701976208121832289
1729313421524627733836939104511491257136214681573167817811885198820952
1100221052311124114251202612227125281282913330137311403214433147341513
5159361643716638172391744017741182421874319044192451984620047202482054
9208502125121652224532265423155234562405724458249592526025861260622626
3264642706527266276672816828369287702897129572297733027430813273124185
2462672983393610381143124912263114165186247298359411048115712611365122
5310415517620726829937103911431248135014531555165917641868197420762180
2285238724922598122638411513618721825929103111361239134314451549165217
5418571961132739413515618726832935103811401243134714491552165517591228
3104165226257288329341037114012451350145815611663176718731226384115176
1972682893110381143124713491452155816601763186519692072217622822389249
2259626100271052810729111301143111632119331231721331842452763374084294
5105011531257135914631566167217761628312417520622725829931103611391246
1348145315601662176618721325394135166197238269301033113612391342144715
5016521758152113154225256287338409441050115312561359146415701674177718
8219842090219322982310324107251122611527122281262913130134311411327310
4135186227248289321036114012421348145315551658176118631970207321792282
2384249025932697279928105291093011314210317423528631734838940104411481
2521621031441852462672883093210401146124813501456142123184225256297348
3894010421147142931141752162773183393910421146124913541456156116641769
1875198120832187229323972410313210315420526629733835940104613273104165
1962672983393810401142124513491451155616601765187219752079218322852390
2492259426962710028102291053010831112152123184245266327378439451048115
2125413601462157012253124185236277328379411047115012581621031241651962
1724828931103511391242134514511556165917611867132831541852463073383694
1104611511254135714621565166717711875198313283134185236287358379411048
1152125813611468157616781782188619942010321109221151326313415519622726

830935103911411248135014531557166217681873197620792182228823932495251 0
026103271072811229116301221327314421523628736840944104711501253135914 6
514211317419522628731836938104311501253135814611564167017761429313418 5
226267318369431049115612631366146915751681132739412519622724827931103 5
114312451351145515571663176618741225374105146177228259331427314418524 6
267298319351040114312481351145615591664177012263114135166217268289311 0
361138124413461450155516591763186719722079218722932397241022510626108 2
711413263841151461672082492610311134124013431448155416211315417522628 7
308329351042114712501353145515631529314417521626729833936104311511257 1
363147115741678178218871990209421101221032310724109251132611627119281 2
329127301293113513283124145196217248309331038114312451347145115601664 1
767187319791428311415517621725829931103712211313417520624729833940104 4
115112551357146312283104175256317378459501054115612611363146815721674 1
778188119852088219122962310024102251062610927113281182912130127132638 4
115146167208249261031113412401343144815541521231441952162672883493810 4
311481250135314591566167017721876197920832189152123154195266317348399 4
410501155126013631468157416781781188619892094219622100231062410925114 2
611727122281252912930135311383214133146341493515336156371593816339168 4
017541177421814318744192451961225394135156217298339391042114612491355 1
461156516671771187619822086218922942399241052511226115271192812129125 3
012831132321373314034146142831341852462773083293710421145124813531459 1
562166717721876197920832188229523972410025102261062710828113291163011 9
311223213015212318425528634741844949105311601264136714731426394125176 1
972714283104165246317348369421045114812521357145915631666176818711975 1
326310413517620726832936104011421245134814521557166017661326310413517 6
207268329361038114212471353145715611665177018751978208121862291239524 9
825104261112711628121291263013231138132931341852262673183794410511157 1
264137114731575168117871821432142352663212263114165246307378399431045 1
153132931241651862272683193310381142124413501921331542052663073283994 6
105411581266152831542052562873183593910451521031541752162673283494212 2
731441652162572883093510371142124513491453155516591763186619702074217 7
228123852489122731341552162373083693810411143124813531455156116661772 1
876198320911328313420526632736841945105111571227312418521625730835939 1
043115212581364162103124165206267298319371629313415518621723829935122 4
374155216287338409461050115412561361146415681673177618801984208621922 2
942397241022510426109271122811729120301243112632128331323413835144361 5
137157381603916640172411774218143187132831041451661972382993610391143 1
249135414571560166317661869197420792181228523912493259826101271062810 9
291133011731123122631141751962473083594110471150125714293154175196227 2
583193510381144124713511456156016671772187719802082218922912396122631 1

415518620725830934103711431248135514581561166417681421031642452763373 6
840942104411501427310416518622726831933103711391245134914551559166217 6
818701976208021832289142931441852262672983193510381142124713491452155 5
165817601866122631141652062272782993610431146124813521456156214273124 1
852362773483794010421146125013531457156016631766186919722075217922812 3
852489259312273134155196237258319381040114412491354145615621664177018 7
319782081218722912394241012510426110271142811829122152103164235296367 4
484795310561161132631041351962472783293910411147125013541458132739414 5
206237298369401044114612491354146015651674178118891993209821101221042 3
107241132512126130271342814029149301523115832163331693417335179361873 7
193381963920240211412134222043227442314523646241472464825149257502595 1
266122631141651962473083293810421147125313591466157316761779188119832 0
872190229623104241092511326119271222812729129301333113832141331463414 9
351523615537159381631426312416518622729834939132831141451962472682993 3
103911471256136414671570167713273124165216257288339401042114612501354 1
326384115156177218269311034113712411343144715511655122631141651962473 0
833936103911441246135114561561152123154185226277298329351039114112451 3
481452155716641768187219772080218422882391249425962699271052810829111 3
011331117321231328312416519625728833939104111461254135714601564166917 7
518781981208621882291239424982510026104271072811129115301183112332126 3
313034133351383614637151381593916340166411684217343179441851428313416 5
206247288329371040114412541356146415661671177713263104165216247308329 3
610391144124813511454155816621766187319792083218822922396241012510826 1
152711728120291243012731132321393314234147351503615537161381633916840 1
744117642181431834418845194461974720248205492135021851224522265323354 2
365524056244572475825459258602626126662271632766428165286132931642152 8
634737840946105311581260136514701576168117871729315417519625730835939 1
043114612511357145915651669177318751979208421902292239924105251092611 4
271201729313417522631734840942104611481251135918211319427529632739846 9
491051115612591367147015761682178518931996209921106221142311824122251 3
013293124165206241821131341752162673183493710431146125113541457156515 2
113174235316357388439481055115912631365147015751681178518921994209821 1
002210717293134175206257328359421049115112551358146616210317420523629 7
328389401045114812541360146315671672177618791982208621912293239524982 5
100261042710928111291153011731121321233312634130351353613837142381493 9
152401564115942165431674417245175461774718048185491905019451196522005 3
205542085521356216572205822559228602316123362236632406424565251662576 7
263682676927470276712807228473290142831541852162572983293510381142124 5
134914511555165817641866196920742178228523882491259626102271082811029 1
143012113283124145206247268309341039114112461353145715601666177218791 9

822087219022942396241002510326110122831041351762273183593710411145124 9
1429316423527633739841944104811511256135814621566167017721878198120832
1852291239324971527311415519621727831934104011441248135214571528312415
5206257298351721131341752462773183393810411144124813511455155816611765
1868197220782182228923932497251031328310415519621727833938104211451247
1349145315561659176514283114135186237278329371043114812501353145914273
9412516621726832937104111461252132831041451862472983393810421149122631
1416522624729833936104211471254135714601563166713283104135156217288359
3710411145124912283114135196237258289301036114512491354145815621666177
2122531241452162372683093310371141124513471450155216571760186419682074
1328313419525632734839944105011551260136314701575167917811885198920931
3283114165206247318379441049115312591364146915721677178118881991209421
9922102231052411025115261172712028122291283013531139321443314834152351
5736162371653817239175401774118142186431914419545197462014720448208492
1412273941552062472983293710411143124813531460156716741777188119872093
2198221012310424107251112611427116281192912330127172113174195216277298
3294110501158126713711477158016861788189119942098211002210413283144175
2062372782993510391142124513481452155416591763186619682071217622802385
2487259317293144205246277298339361040114312451349145315571659176618721
9782082218522892392249625103261072710928114291173012331132321353314134
1433514836150371583816139166401704117242176431804418345187461934719748
2044920650212512195222553230542355523756241572471227312418524631733837
9411046115112551359146415681672172931442152362873183594110461153125713
5914651573167717831885199020942198221022310524111251162612312283154235
2563273483994210451148125613641469157316791781188719902093219722104231
0624110251142611813293174205246297348379391044114712541357146315711674
1780188519892092219422982310124107251122611727120281252913030134311373
2142331503415535160361653717038175391821821031641852062373183793910451
1481255135814631567167217781880198320882192229423982410125109261132712
2162931241752262572983594210481152125913631469157316811329313417525627
7328389451048115312581362146612293134195216287328399421046115212571361
1465152103124185226277318349391042114612501354132831441752162572919215
3224275316347378409421047114912521356145815651667176918731978208421892
2972310024105251072611027112281182912430128311313213533140341483515536
1603716438169391734017716211317423525630736839942104511471253135614641
5681671177318781981208621902294239724101251042610927113281172912030124
3113032134331393414135144361483715238155391624016541169421734317744183
4518546193132831141451661872182492810321136123913441447155116571759186
6196820712173227823822486259026942798281042910830114142931542052563373
9841947105311561263136814751578168217851888199120952198221042310824112

2511626123271272813129136301393114332148331503415635163361683717038176
3918040187411894219343196441994520314293154205256287358379421049115212
5813631471157416781780188219852089219322982310424109251132611727120281
2529130301343113932141331471921432142653263573984194410511155126213641
4691576168417861890199320962110122103231072411225118261212712628128291
3330137311433214633149341523515736162371643816839173401794118242186431
9244195452004620247210482174922050224512295223253237542395524456252572
5858262592696027161275622786328464288162123164225286347418469501055115
9126313681471157516801784188819902096211042210923112241182512213273124
1652162372582993510371143124513511454155816621771187519772085218822912
3932499251032610927112281182912230128311313213533141341453515236154371
5838162391644016641172421794318644188451924619647200122631141351862472
6828934103611421245135014571560166617701874198020842189229723100241032
5111132113134165186247278329351040114412461351145415561661176318671971
2075217922852388249325972610327106281112911630121311233212733130341363
5140162931642352963573884413273134155216257308379411044114912511353145
9156516212316422528632740845948105311561261136414681571167517801882198
4208821902296239824103251082611227116192133214245276341428312415520625
7311325384135186207268299331036114112451348145215571659176518671971207
4217722802385248925932698271002810617293134175246267308349381224384125
1662072483193310391144124913531458156316691325384135156187258279301034
1136124113451448155216551759186419662070217422772379248425862689279428
1002910330110311153211833121341243512936131371353813939142401484115042
1564316444168451714617647182481874919050195511995220453208542171427312
4145186207238269311035114012431347144915541659176318661972207521782281
2384248625912694279628100291063011131116321203312234127351333613837142
3814639148401524115742161431651427312414517621723829936103911441246135
0145515581661176318671970207521802288239024922595269927102281042910830
1141427312419522624728835939104211451248135214551558166017651869197220
7521772282238624902596269927102281072911130115311203212233128341333513
6361413714338147391504015541161421674317044175451804618447189481934919
5501975120052205532095421255217562215722558230592326024014293154215266
3073483994310471154126113641469157717211315419524629734838943105011551
2581362146715701674177918841988209321982210223106241082511126114271221
3273114175216267308339411328313418521624728830933103711411246135114571
5611664176818751982208621912294239724101251032610827113281152912030122
3112532127331333414035144361513715638158391614016641168421714317444177
4518146183471904819449198502025120452208122631141652262573283493710391
1431246134814511554165717601863196820772179228714263941251461872482693
1103411371240134214441546165417571859196420662168227223762480258326882

7922894299730103311063211133114341203512436126371303813339136401394114
2421474315544161451644616947175481784918350189122739414516620725827931
1034113812461351145615591665177218781980208621892294239824102142731241
7523625732835940104611511259136614741576168117841891199620101211062210
8231122411813253841251562272482792910331137124213441447155416571761186
5197020732176228023852488259526982710228106291123011431120321233312634
1283513436138371423814539150401524115642161431691227394125166197248279
3310361139124313461450155316581764186819722075217722812384248625902693
2797281012910330106311093211233114341183512236125371303813339138401444
1146421514315644159451644617147174481794918450187511935219653202542045
5210562145721858222592246022761231622336323764240652426624567249132631
3415519622726832935103911431246134914531559166317661869197420762181228
6239024922596269927101281042910830112311143211933125341293513436136371
4038144391481328314421523627731835938104311461251135314551560166417671
8721977208021842289239324971521131842052462873083293810401146124913521
4551558166317661870197320762181228423862492132831441751962372983293710
4011441226311416518624731836942104711511255135914641567167117761882198
7209221962210123105241092511526119271242812829130301363113932142331453
4150351553615737161381663917414293154225286337378449461052115612591364
1470157416781783188819912093219822102231052411025113261192712314293114
1551762072282693210361138124313501452155616581760186719732078218122852
3902497251022610527108281152911930123311273213033136341413514812263114
1652262472983193610401146124913511456155916651771187419802085219122942
3962410225105261122711428118291213012517212317424532637742847950105511
6012641368142103124165196227288319351039114412471351145415581665132931
1415517622724827930103411391242135014521557122731441952162473083794410
4711501253135814621564167117761879198520891327312416520624726830933103
9114112441352145515611664177018731977208021862288239124942599261042710
6281121721231842052462873083894210441149125513611467156916751781188819
9020962110122107231102411625118261212712428128291303013415211318424531
6347418459501053115712601363146815711673177915211316418524627730834938
1044115112531357146015651670177418791982208721912295231002410425109261
1227116281212912330126311323213533137341403514536148371523815539158401
6441169421744317644180451861428313418525630732835937104111451227312418
5266337398449501053115812611365146815711676177918811987122631141652162
5730832935103711421244134814541325311417521623727833936104011441248135
5145715631666177213263841251762072582893410371140124213461452162103164
1952262672883293410371139124313461448155412263114165196267308339361040
1147125313581462156816711774187819802084218722912395241012510726111271
1528119291243012831131321343313834141351453614837151381553915940163411

6842170431754417745179461854718748190491925019851202522085321754223552
2556231572345823659241602466125062258632616426665268662756727768280692
8770292712997230573308743117531876321773237832779330803368133882344833
4984351853568635987363883678937190374913789238393390943959539896405974
0898410994141004191014241024321034371044411054461064501074531084601094
6711047011147711248011348411448811549111649511749811850411950812051212
1515122521123525124532125536126541127544128547129551132731041351662172
6831937104011431248135214571561166617721877198120842187229323100241032
5109261132711628120291253012831134321381325374155186207258289331035113
7124313451450155716591763186819712075218022822386249125942696279928103
1329312416520622725834936103911441252135714621564166817711874197620802
1862291239724103251072611227118122631041451762272582793110371139124513
4914511558166017651867197320772180228423892493259626101271042810929111
3011631120321233312934131351333613737140381423914640149411544215743164
4416745173461804718348188491961314263941251461872413273134185236267298
3393810451153122538413518625727832937104211461249135314571562166617681
8741226384125166197218269291031113712263124145216247288309331036113812
4413501226310414520623727833935103711431247135514591564166617721875198
2208421892292239824104251112611727120281242913030133311373214633148341
5335159361633716538167391694017241176421794318344186451904619714263941
5518620726829932103411381242134514481554142731141652062272582893010341
1361240134712273124145186227298329391041114512491355145715611666142631
1417519624729836942104611531258136214681227312419526629733837943122538
4115136187248279321034113812421347145215581664176718721977208121862288
2392249425962699271042810929116132831041751962573284194910511156126213
6814751583168917921896191022010821113221172312024125122931341551962472
9832936104011441246135114581564166817741879198520872191229623100241071
5211315419523628731837941104511501821732643554665413273104125156187208
2993410391144125013521455155816601766187212273104145216247298349391045
1148125013531455156016651769187419772081218622902393249725101261071328
3114165206237268319341039114412501358146515681674177718831986209121962
2100231062411125115261221227313418522629736840942104911541260136614681
5731679178418881521031442152362973683994210441150132538413518623725831
9361039114312471352145715591664176818721975208113283134155206257288339
4010451147125213541459156514273144185206237268319331036113812421345144
7155312273114165206257278319361041114412481352145415581662176418681972
2077218022832385248825921429311417522628730835940104411461251135614611
5631667177218741978208221861226314422528630733841944104811511255135714
6115631666176918711976208021842291239524992510326107271131224394115136
1972182693110351140124213441452155516571762186719702072217522791326384

115136177198229271030113412361339144215441646175118561960206521722276 2
380248525892696122438413517625731835940104311491254135814621228312419 5
226277308349361039114712263114145196227298329371040114814293114145196 2
372712263114165186217258279291031113512401345144815511654176018661421 0
314416519625729834938104111451249135414611565167117751879198520872194 2
296231032410917211316419526631735841946105011531258136314701573167817 8
218851987209121942296239924103251052610727110281142911630120311243212 6
331303413435138152831341651962172382592710311135123913421446155216214 3
174215256277348369401045115012551360146215661671177718821984209213253 8
412514618721826931103811421245134914531557165917631325394115146177218 2
492810331138124213451449155416571762186619722080132731541752162372783 3
938104511481252136012263114155216277298371325310415520624727830935103 7
114212491353145715611664176718721974208112263144165206227268319361039 1
143124913531456156016651767187319802083219115210312417522625733142639 4
135156187218279301033113712411345144715511654175718611966207021722274 2
379162123194275351629312419522624729833935103911421246134914511556166 1
176618711974207921832287239124962510226109271142812029124301283113532 1
383314434147351533615537161381633916540168411724217543177441814518716 2
931241551762472983293510391142124713531457155916631769187319801226394 1
452162472883414273114155206237258319341038114112501353145815621666177 1
187619802086142831141652362973683894616210314419522630122539411515618 7
248309331039114112461351145615611667177018751980208321862293239524982 5
104261092711428118291223012531132142931442152663173383994610491152125 4
136014293144205286357418469481051115913283124145206267321225394125166 2
072382792910331135123813401442154714263941251561772513273104125156177 2
182392810311137124013471455156216691776188319852090219522992310324106 2
511412253841351762072282592810321135123913421448155413283114155196281 2
243741351962272683093510411144124813511455155816621764186819712075218 0
228423902492259526992710228107291133011931123321291225311413519621728 8
319361043115112541356146015641670122631141752162472682993210381142124 5
134814501553165817621867196920751225312418521628732835940104511481251 1
353146112263114195246307348399451050115512581366132831041351962172883 1
936103911451248135412253114135196247288339391225311413519623730837941 1
046115215210312415521626731835938104311481251135714641568167317791329 3
124155186237258279321035113912411345144815511653175918611968207121752 2
772379248425872691279628982910230107311113211514210312416521623728834 1
326312414516621727831935104011421244134914551557166117651868197020732 1
772282238524902595269827103281052911230116311233212633130341353513836 1
441325394145196227268299361227313417521629733838943104511491252135414 6
015631669177318761980208521882295239824104251082611227116132731341852 5

6327398419471050115212541360146715691671177418781981208321852288239224
9925102261062711128114291201225394115166207268329391041114512501355146
0156216641767187119752080218722902394241002510626110271142812013293114
1752563373984695210551157126113671326310415522625731833937104211441249
1353145715601664177018721980208321902296239924103251072611227118281212
9128301323113632138331461327310413519621729152831241752062472682893610
4211461251135614621226311414518623726830933104011481254136014681571167
5177918841992209421982210023104241072511026114271182812029126132731041
7521624728831934103611421244135213273114155206237308369381044114612521
3591464156616701775188315211313418522626735841947162103124165206267298
3193713283134155186217288319351039114312273124155226247318359371041114
7125313551462122731241852162572883293410391142124713511454155916611766
1869197320772180228323852491122831241552162472983293810401143124613501
4521556122831141451862572883093310401143124713491452155416581765186719
7220802187228923932499132831141552062272582893410361144122539416519626
7318349371039114712253841151662072483093410421327312416523626730833937
1041114412491351145615581664176818731976207921822286238924912599122437
4135156217268309351039114212441350122437413515620722826930103211351242
1346145115561659176318681971207712263114165186247298319361041114712531
3561463156914210315419524628732837942104511501255135814611564166817741
2263114165216257278329351040114312481354182123164215246307378419451050
1152125613611465156816741781188719932098211012210423108241102511526122
2712628130291343013831141321463315134157152931241752062573284094610481
1541260136214701329315421529631734836941104811541257136114651327311416
5206247298349401046114912561362146815711675178114293144205236277318339
3710431327311417521626729833937104111491426384165196217268309341038114
4142731041552062673484094210481155126013631466156916751779188319862090
2198221052311312283114145176257318389401042114814293144175196247278319
3310371141124313481454155816601764186919742081218422892394241002510526
1092711628124291283013031133321363314034146351521529311414520623728833
9371041114512501353145916211317422529637743845951105911611268137414761
5841329311414517623728832940122731241451862272983293910411145124913551
4601565166717711877132531141351662272883293510391141124613491452155716
6317701873197820822186229223981226311416518624729831936103811451250135
4145615601662176518721974208121842288239424982510026104271072811329115
3011931125122631141852162873584294510491154125913631467157116751780188
7198920942196221012310724109251132611727121281271228312417520625729835
9381041114712531355146015651669177118751978208421881327394135176257308
3694110451149122531241651862372883493810421149125714293134175226267328
3694110471226314417523625730834940104411461254136013253114175246267318

3494010441149125313551463156913273114145186217288349361039114412471349
1452155616621768152931141652162372983794313253741251561772182692810341
1391245142638416519621726830933103711421244134814531557166112263114165
1862472983594110471151125613621621131541952717211318423529172103154175
2162573083894410481155152113134195266357408489501055116012631371162931
4419521626732837941105011571260136414701573167717801885198820902195229
8231041521131641852262773183393810451151125513591462157012253741251562
1723828935103811411246135413273124165226291328311417522629731835941122
8311414516621724828932103811451248135314591563166817731878198220872192
2294239724105162103154205256331227394155206247288329371043114712521360
1428313418520623725830933104011451251132731041451661972182593010341137
1239134214491552165917621867197020752178228123852489259526992710713263
1041251661972382793210371140124313471453155716611764186719712077218122
8523912499152731041451762272682993410371143124513491453155616611764187
2197720802188132631141451662172582993210381146124813531457156416711774
1879198716210314420524628734839942105012263114165186247298349401043115
0125813641226312415518626152731141652162672983594010421144124813501456
1563166817721876198414293134175196267318349371042115012521357146315651
6681770187519772082218622882392249825103261052710928115291173012231126
3213433138341413514536150371523815539158401661228311416519622729835937
1043115012531356146115671670177218771980208221882293239724100251061226
3114135166207248299331038114212481350145615621667177218751979208121892
2952397241002510226107271092811229114301163112132124331273413235134361
4037142381443914940151411574215943162441654516746172471754817749182501
8751189521915319554197552035620757212582155922060225612286223563242642
4665248662506725668262692647026671272722777328174285752911227312416519
6247318359421049115312551360146415671671177518771981208521891226311416
5186247308359411049115212571359146415661671177418761981208621882293239
6241012510626110271132811729119301253113032134331393414435147361533715
7142931141551962172483093210361141124413471453142739414518622728142831
0414517620723826929103311381245134714511555165917661869197620782183228
7239124962599261032710528109291123012112283124155196227258319341036114
0124613481452155616601767187513263104125156187228259281030113312401342
1446154816511753185719602062216814283134175206237278299331039114312471
3531227310414519623726832132539412520622725829934103611421246135114561
5631670177618831986209121932296239924103251071521231741952463073483794
0104211441246134914551557166117641866196920731329312417524629733839947
1621131742152463073683894210461148125413591461156516701779188119862091
2195229923106241122512026122271252812729133301383114232145331511521031
8424526633735840942104911511257136214641568167413283134185206247288349

3610411144124813541528313417519623732838940104611491251135614591562166
7177018721978182133154195236267308329361039114715213316423525628730836
9411046115212561362146515691528311416518623725830933104011461252135814
6315671671177718213315419523625731834941104611501255135714601564142831
5419526629736842944104811541328313420522627731833938104211461250135414
5715611664176718691975207921832287122731341852662873383794110451149125
3132831341852262672983293910431147125013581462156616701774122539413521
6247268309341037114112471349145415571660176418711974207921832287239224
9425982610027104281102911530120311233212933135341393514236146132831341
9522627731833937103911431246134814501552165517621864196920712174228123
8524902598261042710928112291183012213263104135186237258299331037114312
4813501455156116691773187519802085218922951326310416519623726831937152
1031241651962472783193610391145125113561461156316651770187319752079218
7229323972410025108261102711428120132831141451761972382893610421149125
5122531041552062573183494110441148125013551460156516681771187419802086
2189229323991628315422529631736841947104911541257136214681571167617791
8851991209421972299231022410813263104155206257318389431046115312591363
1469157616781782188719912093219912273124185216257318339391042114412501
3531460156616681774187819822086142731542152662973183493812243741552162
8733840945105011571521131542052663073684494610491157126313671469157316
7617811887199120952110014273941351862172783093810401145142831341952463
1733838943104811521257136014661570167317801886198820951429311417520624
7278329351042114512471351145817210314417519623726830934103611391241134
5145015521655176118671974207621822288239024952510226108271142811829125
3013431138321423314434149351563616137163381663917040175411794218243188
1227311416521623729142831041652062473013283134175206247288309351042114
8125213561458156116651768187119752078218513253841451762172682993310381
1411245135014561559166117671872197620802185229023932498251012610527107
2811129115301211226311416522629736842946105111571226311416520624729831
9341039114312471352145515601665177018751981208521892296239824106251082
6112271152812029125152123194225296357418449501057116012671370147315771
6821327310416518625732834937104011421248135214571562166517691872197820
8421862288239224992510226106271092811515211318422525628731833936103911
4312481353145813283154225266297338369411049115312601366146915731679172
1431742052563173483994310471154125913661469157616821788189019962099211
0222106231142411725120261252713128139291433014831153321603316734172351
7636181371861621031341652463374084494710501158126713701472157516771780
1885199114273134175236317408489511057116012641370152103124175196247288
3393810431150125413621466157112273134185256297338399411047115112581363
1621031241952462772983794010421146124913551459156316651768187119752080

2184228923962499251032610827113281162911930121311243212633129341323513
4361373713938142391474015241157421624316544168451704617447179481844918
6501895119352197532005420255205562115721958221592266023061234622376324
1642466524866252672546825869261702667127114273941251962172382692910321
1351238134114441548165317561860196220652169227423772479258226862791289
4299930101311033210633109341123511536118371213812439128401334113642141
4314344146451504615547158481604916350166511695217253176541815518356188
5719158193591956019861202622066321164216652196622467228682306923370236
7124172243732487425075253762577726178264792668026981272822768328084282
8528686291872958829913273114145176217278329361040114212471354146015641
6681773187913263104165216267318359401044114712511355172123194215276367
4184695010531158126613681474157716841789189119952099211022210717215319
4265296337398469511053115712601365147014210313417522628733839941104711
4912531359146315671672177618801985209015211316422529632735838943104811
5112541357146115641669177518781982208721932296231012410612263114165186
2172482693110371141124413511458156216641772187519772082218822932310124
1092511226120271242812629132301363114132145331483415235157132831541852
2625731837943104611521255135914671573167817831421131441852362672983493
8104411491329311414520622728831933103511381241134414491554165817631429
3164235316387468519551060116512731379148615941696171031810919115201232
1129221312313724139251452615127156281592916230164311703217533178341813
5185361903719638203392084021041217422204322644229452364623947241482434
9246502485125252255532605426519211317420522626733837941104611501253135
5145915631665177118791985208821952298231062410825112261182712428129291
3230136311413214533152341543515636159371663816839172401754118042185132
5310414518620724832940104311451249135614581565167317781882199020952197
2210023108241122511726123271292813729143301463115332156331623416735171
3617537178381823918840194411974219943202442104521246218472214822449227
5023251236522395324554248552515625657260582641428313416523626731833938
1043114812531357146115293114155206257308369431045115112551360142831041
4518622729834122631141651862473183694310461148125213571459156316671770
1876198220842188229123942499132731041652162573083493810411144124813531
2293144165216247288329391046115112561329311414518620725828931103711411
2441351145815621665177118781982208421882290239424972510026103271081429
3144175206287378439471054116012661368147215751678178018831988162123154
2152462773183693910421146125213541461157016761782188719902093219722104
2311024116251222613027132281392914730150311563215933164341693517436176
3718038183391874019213273114175246287308349391041114612481353145915631
6671773187519792082218722921721131442052262673684294610521160126913751
4771583168917941810119107201112111722120231242413125133261372713928142

2914430147311533215815211318423529636738843947104911531260136814731578
1621231942352863173784294510511156125913621469157116761780188515210312
4175226287338409431048115212561360146315681226384125176207238259291036
1140124213461450155514273114135156187238289301033113812431528313418523
6297318359381043114612521356146112263114165186247308359401043114912511
3571460156416671772187619792086218922932397249925102261052710728110291
1330117311193212533127341333513936142371473815039157401624116642173431
8044187451894619347196482004920513253841351862372583193710441151125313
5814641529317421526630734839944122731241852362573183894310491154125713
6114671570167817831885199020932197221022310724113251182612527129281332
9136301413114532150331543416035163361693717238177122631141652262773083
5940104311471249135214541558166317691872197920812187229023942499251042
6108271112811529121122638412514618720825927103011331236134014431547165
2175518601964206913253841351862472683093410361140124313491454142731341
6520625729831935104013253841351862372583193710431151125813631468157316
7717791884198920941521031541952262673083393610381143122539411516620722
8279321037122831341651862372782993310361141124313501456156316711775188
0152731041251761972182492810331138122731241952262873283694010461153125
8136314701576167817821885199020951621131742553263674084294710541160126
4136814711575168017851892199520100122631241451962773083593910441147125
2135414601566166817721876198120832185228923922497251021226311416522626
7338399441049115312561363146515681673177618801987208921932299231042411
0251152611827121281262913213253841351962372883193510391142124613481452
1558166017681871197820812186228823942496251012610827110281152912030125
1427310416519621725829933103911431252135714601565142731441952262673283
4939104511501252135714601566167315210314418520622728833937104211451248
1350145615601665132931141551862372783193410381140124513511456156516691
7761879198520912195221002310513273941551862472883193610381140124513471
4531557166017641871197713263114165186247308329381040114612481353145615
6016641767187119762078218422862390249425972610127107142123144185226271
9214321132631041752362573083493810431145125213611469157816821787189213
2831041451862372812263114165206257328369381044114913273104165196267318
3493610401144124713491451155416581763142103134155196257288309331038114
3124713491454155716611766187019751729313417522627733839946104911541256
1360146415691671177518791984208821931326384155176217258369381044115112
5913641470157416801782188519912097211022210723110241122511626120271252
8128291303013431139152103174195236277338389451047115112581365147115781
6801783189019932098132538413516619723829936104211471253135714601565167
1177418781982208721922297231012410325106261102711628120291223012631131
3213733141341473515036153371573815939163401694117342180431834418645190

4619347199482041521131742252562973183594010431148125213581461156316661
7701873197820822188229123932497259926101271032810629110301143111932124
3312634132351383614312273941351662072382893010341137124113491454155916
6317681873122531141451862272582993210391144124917211315420522626729834
9381041114512491354145815601666177118751980208321872291239624101142113
1742052362572883193510411144125113561429312414519621726832934103711411
2441350145415581663176718721977208621902295239824102251072611327120281
2729130301351527311415517621724828932104011431247134914521555166017651
8701973207721812287122631141551862072482893110351140124413471449155216
5617601864196720692172227714293144195246287308359371041114412471349145
2155714263941251462272582893510371140124313461450155216561761132638417
5226277338369411048115012551357146015641667177118751978208121832288142
6312415520627731834940104411501253136014621566167017731878198420922195
2210323106241122511626120271232812813283134165196247308359371043114712
5313551463156516721777188019832087219322982310724110251182612127129281
3529140301453114832151331553415835163361681621131741952663373884094210
4611491255136114651568167017781884198920942110022106231122412025123261
3127138281432914630151311573216213263114135176227258289311034113912421
3481452155716611766186919732076217822842387249025922695279828101291043
0108311143211833123341263512936131371343813939145401504115442159431624
4166451724617647181481844918650189511945219953207542115521356217572215
8225592306023513273124185246287338379411045114912541358146015651670122
6311416519624726830934104111441250135314571562166817711876198220852191
2297231012410525110261152711928123291253012831131321353314034147351493
6153371563815939165401701227315417525628732837947104911531257136514721
5751679178818961910320106211142211823122241252512926135271392814329152
3015531163321673317215283144195236277328371227313421526632737840944104
9115212601362146715721675177818811985209021982210223108241142511826123
2712813213315421528636738846950105311591264162931341551962372783193510
4013283104145186217238289341039114312461350145215561662176518691975207
7218222872390249325972610027104281082911230117311221429311416520625729
8319371039114512471351145315591664176918711979208421872291239614273114
1651962573083593910421150125713611466157416761782188719922096219822103
2311024113251212612627134281362914130146311483215433156341633517136178
3718338187391924019541199422044320644209452124621547217482204922250226
5123052232532375424455249562545725658260592636027161276622811429315422
5266317378419471051115912661372147415801684178718951910020106132831041
6521623729835940104611491255136114631567166917711876198020842189229413
2931341952462973283794010441148125113541462156717211313417520625730132
8310415522628730834936103911411244134914541729314417524626730833937103

911451247134914531555166017641868197120772182122631141752162372983593810431147125113541461156316651769187419791327311413517621723829933103611401245135013273114165216247288329361041114613273124145186207238259301033113812441349145415283124165226267318359371042114512501353145915621668177018731978208221862292239924104251062610827111281152911930122311263213033135122537411513619722824927103211341239134114461549165417571861196420702175227923832488259226971328314416519621725827932103711401244135214561558166217671871197620811226384125146187208259271030113312361340144315471652175518571962206712273941351662172482993210381143142831241852062573083618217325432536643751858961106511681272137914831585168817921895199820104211091521231542052763073515211315418523627732162113174255326367408429471054116012641368147115751678178118851987209121951321131441952262873083493810411143124613491451155316561760186419672072132739417519622724828931103511411247135214551561166613273114145186227258289321037114012471352145715611668177314263841651962172683093410371140124519211317419523629733836940104511471253135514601566167217741881198320862189229623982410525116261182712528128291343014131147321503315634158351613616437168381713917340178132831241451962472683293510391145124713521458156216681771187719832087219022962310224105251092611227115281212912613211313419522628731836939104511471252135914671570167617821885198920922197221021329312416519621725829933103811431426384165196217268309351040114512511353145815641666177118751978208421872290239224942510226105271072811229116301203112432129142638416519621726830935104012253114155206247308349381041114412491225394135196237278319371044114812521357146212263114165216277338389411044114712531355146315721674177718811983208821932297231012410425110261152711728123291263013131133321393314234146351493615237158381631226311416521626732839943104611491254136114651569167117741877198120862194229923104241102511526118271202812529130122731241451962172682829331035114212461348145115551660176318661973207813212315418523628152113194255276307388459501055115812631366147113263114135196217248299331037114112441351145415571663176718701976207821822286239024932598261002710428108291173012631128321323313715212315418521624727829933103811411244134814511554166217661871197420802185229223942410225107261112711628119291263012931133321373314534148351563616112211318422525631735840943104911541259136514701573167917831886199117210313415518623726829934103711411245134814511553165812263114165186247328389401043115112581360146615691674178018851221131341852462673183493710401145132831342052863374084594810541156126413681471157516831787189212263104175196247308349381043114812539414520622727830932103511391243134814531227311413518620725827930103311371240134414491227313418523630732838941104511501257136114651570167 4

1781188319892092219522100152731541852563373884316211316421524630733836
9401045114812541360146415681673177815283144165206257308329381041114612
5013541456155916651769187319772084219122972399241052511026112271152811
7291233013031136321383314134147351513615737162162113164245296327388439
4710521155125713621464156916751779188519901429316422527631737845949105
1115712631366146815711675178018861989209521982210317213316420526631162
9314420524627731835939104211471250135514591562166517681873198020832186
2288239124932596269827100281032910630111311153211833123341281226310414
5186227278321325384145176237258289321036114312471352145715273124175226
2773283693910451147125113551460162113144185216277328379441051115912631
3681473132113134185226317378409441048115112551357146115701676178418901
9992010421110221152312024127251312613613293134165226257288369381042114
9125213591467157316791787189219972010221108221152312124126251311527314
4185206237288309361040114412481352145814210317421525630733837940104311
4812521356146115661327311414518622727832941104711511256136112273124175
1962372782993310381143122731241852062372783293510381145125013273114175
2162572983293510391144122631141351862472983193510411145124813511457156
0166317651867197520812185228923942499122531141351862072582893410371141
1244134814521558166217651869197320772183228923922496251002610327109281
1429119301223112832133331393414335146361503715438157391614016741169421
7343175441784518046182471844819249195501975120252206532115421612283144
1652062472783093810461149125513571463157016781782188714293144205286357
4184895010541158126313711480158716921797181001910520108211102211323117
2412125124261291226311413518623725829936104111451250142931441952762973
7839943104611501257136114661573182103144205226297318359381041114312461
3491452155616591761186419672072217422762379248225852688279328992910430
1113111432117331203412535129361343713938145391484015041158421624316644
1694517146176471814818449187501911226311416521628732835940104711501252
1356146115641668177318781981208321872291239324971226311416518623728832
9351040114612491354145715641667177118761982208821922294239824105251092
6114271222812529132301363113932141331463414835154361603716238168391764
0179411834219043193442004520346208472164822249226502285123252236532421
4293154205246317348379411045114712561365147415821685178818931996209821
1032210623109241122511726120271282813629140301433114832151331563416135
1633616837171381773918340188411934219643201442074521246217472224822549
2325023651239522435324554250552535625957263582665927060274612781721131
4417519622725832935104011421249135514631566167117751880198320882193221
0023103241072511126117271212812329127301313113715283114185236287338399
4110441151125313561465156716751784188619912096211022210423109241122512
0261262713228135291423014531150321553315834162351703617337176381803918

340185411914219343201122631141651962372683293910451152125513621469157 6
168317861893199620100211042211123114241182512226124271272813029132301 3
531138321423314434150351523615837164381673917240175411824218743191441 9
845205462124721548217492215022551230522355323754240552445624857255582 6
059265602706127562281172113154205276317378399411045115012561362146615 6
816721776188019861226311416521627730835941104411511255135814611564167 0
177618781982208821942298231002410425108261112711713273124175236317348 3
994310471621131742452963474012263114165226267308359371039114212441350 1
455156116641770187419802084218822922399241071427311416519626732836940 1
043114812521356145915631666177118771983208921952210023109241162512026 1
242712828134291383014531154321583316234164351693617637179381823918540 1
884119242195431974420145207142931642252863473984595010521158126313661 4
691574167617791883198720902195229923102241072511126115271192812429126 3
013031133321411328313416521626733838941104411491251135814631570167817 8
118841991209521101221052310824113251191225311413518624728831936103911 4
312481350145615611663176718691974207621802283238824921426310412516622 7
258319381040114712501355146015671670177418801326311416518622724830933 1
037113912421346144815521656175818621964206821742277238124852588269027 9
528100291043010731115321213312434130351343613637140381453914840150411 5
342157152113194225276317388409431049115612581362146515681671177518781 9
822087218922932397241002510826114271172812329128301341225311413518624 7
288319341038114012451347145315551660176218661969207321762281238524902 5
952698271002810329107132631041551762072683093410391141124413481454156 0
166517711873197520782182228423921225311416523627730834937104011461249 1
356146415701527311413517621727831933103911421248135214551561166517691 8
751328310415521625729835941104611511255136214671573167717811888199020 9
421100152731141451662272682893310371142124513491455155816631769132538 4
105146177218259301035113912441352132831341852462773383594010431146124 9
135414621429312416519624726830936104111431249135214571559166417671874 1
977208121862290239224991327310413520622725830933103711431246135014541 5
561664132739413518623728830935104011441248135615273114145186237288309 3
814283134175196247298329371041114512481350145515601662176618691972207 8
218422882391249625982610612253841351661972682993110341138124213451447 1
551165317581864196720722177228023862492259626101271062811029116301213 1
129321313313334138351423614537148381503915540162142831342052463073683 8
943104811501256135814641566167017761883198520892191229623982410325106 2
610927112281142912030124311263213233136341401328313415518620726831938 1
040114412481352122631141652162573283694310501152125713621468122731241 4
516619721823928103311381241134814501552165617591866196820722176228023 8
424881628314416521624726833937104111451249172153224295336367408459471 0

5111561260136413263841151562072382793110351137124113451449132739413515
6187268329361038114212471350145415591662176418671971122631241451962473
1833938104011451250135414621565166917751878198320882194229923105241092
5114261162712128127291323013431137321433314934151351573616037165381683
9170401754118242185431884419245197462004720448206492085021251216522215
3226542285523156235572375824159247602506125262258632616426565267662736
7277682811621131742252563073584094210461150125313571461156416691773187
6198020852190229623982410225105261131421131742452863173583794310451148
1251135414591568132931642052362773183494110461152125713621472158016831
7911893199720101211072211123116241192512426129271352813829144301503115
4321593316234164351683617137175381793918540187411951621131541752262873
4840946105211581264136914741581168517881892199420972110222104231072410
9251132611627120281242913030132311401629315420523627732835938104211441
2511358146515681671177518811984208721912293231002410425110261171629316
4195236277308339351039114212461350145615581666172113174225276307338379
3910451152125613611466156916731777188019842091219422982310024104251072
6112271162812029127301303113332137331433414635151361553716238164391664
0171411794218643189441934519946204472114821449218502215122813273124155
1962372683093710441146125213541457155916631767187119742079218422882392
2496259826104271082811429117301223112432129331361521331842152562773183
5939104512263114165186247308389441049115512581361146715711675177918811
9852087219122962310414293114175206277318379411043114912541358146215641
6681774187619792081218522922395249725102261042711028116152103154215266
3273784094710511156126013671474158012263114165186227268289321036114012
4413481453156016641767187519792082219022972399241032510726110271162812
0291243012731130321343313934141351453615037154381581429313419525630735
8419471053115912621368132731141752362873183493810401148122631141651862
4729835940104411491251135614611567166917741881198720932197229923103241
0914210313419526630735838943104611481254122437413515621724827929103311
3812411345145015531657175918621965207121771224310413515618723826930103
2113612401344144815521656176218711975208221872289239424982510026104271
1014210315419522627733836938104311451250135414571562166814293134205226
2773584194610501152125713631421031942752963473984595010541156126113671
5211313417523626732838941104611481252136014641567167117781883198720892
1932297239924102251082611327120281252913230140311433214633153341573516
3361673717238178391824018841190421954320044205452074621047218132538414
5196257318359421052115612621327313420528631735840942104611521254135914
6215651671177518781984208921932296239824104122631241551762172582793010
3311351239134214461552165717621864196920712175227723812486259412243741
3517620723826932103911471250135414591561166517721877198120832187229123

93249625102261072711028113291163012131129122731241852363274084294510501
15612611365147015731676178118841986209213283134165236307358399431048 1
15212551357146115671672177718831989162931341752262772983293610411143 12
47135214561560166517691872197813263114165186227248309331037114112471 34
91452155916651769187219772080218222862391249425972610127105281102911 63
01213112432132331343413913263114165186227268319341036113912421345144 91
55216541760186319692074217922842388249225961421031341752763273684012 28
31141551862272482792910331138124213471451155716631767187019742077218 32
28523892492259812293114145186207228269291032113512391344144615521658 12
24374135156207228279301034113712431348145115531657175918621968207321 78
22802384249013283134155186257288329371042114512491352145515591665177 11
52731441652062572983193610421328312418523628732834938104111471249135 21
45615611664177018721978132831441952562873283693810451151125513601464 15
70152831341852362873484094610521158126213671472157716821785189019932 09
62110022106231132411825120261281429311415518624727833937103911441247 13
52145415581664176818721979208121891326384125176207258279311036113812 44
13481450155516631721131441952362772983494110471151125513591467162113 17
42452963474012263114165186247298319341038114112441350145215561658176 11
86915283134175226267328369401044114612521229313419521628732839942104 71
15412611366147015761678178218841990209621982210423106241112511526118 27
12028123291283013331137321403314534152351553616037167381743917840182 41
18642189431944419945205122631141652062573284094810511153125613631471 15
76168214283154175216267338419431048115512611363146615701673177918821 98
62092172113184245316347408479511054116012661372132631141652263073483 89
43104611481253135914651573167517801886198820932110022105231082411612 26
31141652462873283493910441150125713621466156816731779188219872090219 32
29623100241041226311416518624729834937104011441248135414591562166417 67
18691974207821802283238624902594269827104281062911130115311213212333 12
63412935134361393714338147391504015441157421604316344166451724617647 17
94818449188501905119613263941452062572883694010451148125213541458156 21
66817721876198020861327313418524629734840946105211601263137014721576 16
80178218841992209521972210223105241092511226115271191628312416522625 72
98339371225311414520625729831936103911451224394155216247298339391045 11
49125113551462156716731226311416518624726831933103611391244134714531 55
71660176418701973207621792283238724922596261001227310412517619725828 93
41225394115166197248279321035113812421347145215581661176518701977207 92
18514273104165196217258299331039114412491351145615601666177018731979 20
81218722912394241001226311416521627729834936103811411248135114551561 16
66177318761980208612263114165216267298329371042114512511356145915621 66
61768187319752080218222862391249325982610627111281162912530127311303 21

3633143341483515036156371583816339165401694117242175431774418145184461
8847193481974920050203512065221313263941452062473083694310451150125513
6014681575168017881891199320101211042211123114241172512026128132739414
5226257308329381040114312481351145815641668177518801982208621912299132
7311416521625730835937104011431246134914531559122539411515618722826931
1035113912451347145215561661176518701972207721822285239024962510326111
2711928122291263012831133321383314334148351533615737162381663917140176
4118242189431944419745201462074721248215492195022251229522325323454239
5524756251572565826159265602676127062273632766428013283114205226277298
3694110451150125513611225314416520623727829935103811401244134914541556
1662176518701974207621802286152931141551962573183693810401146125113561
4581566132731041451962372783293710391145124913521456156216681772187519
8220862189229713273104165216247288319351039114412491351145615601662177
0132631041251661972382793010351142124613511453155616601763186919712075
2177227923832485258826902793289529983010231105321103311434116351183612
2371253812939131401334113742140431434414745153122538411513619721823929
1033113612411345145015551657176018641968207521782281238724922596269927
1012810429108122831341852162572883293510411147132731041351762573083393
7104111431248135514611565166917721876198020852188229123962410213263144
2052362773083393510381142152831241552362973384094610481153125813631469
1226311413516618721825929103311371239134314491327394175206257298339391
0441146125213293114145166207248279321036114213283134165216257318369381
0431145125313273941551762272482793310351140124213441448155116581764186
9197520812188229223942499251082611527122281242912930133311381328312417
5196247308379411046115112531356145915621666162103144185216247308349381
0431145124713531329313420524631736838944142103144165206247308359391041
1146124813561227394145166227258289331041122537495176237258289311034113
8124413521455155816651767187019732078218322892392249425100132538410515
6227258319371226310414518622730836939104311461250135214551559166117651
8681970207421772282238424921225394115156187228259291226394145176217258
3093613283124155186227248279291032113712411344144715491652175613293124
1752062673212243741151661872282693010361141124413471453156016621765186
8197320802182228423882492259626982710028104291063011031112321153311934
1243512836131371371521231842552863474184695110571160126213681327310415
5186227268289311037114012421346145414210315417521626732835942104711511
2571224374135166187238289321034113712431427312415521624728830935104115
2731241652262573183593710431146125213561459156316651768187019762079218
2228523902498251022610727112281142911730120311263213313283114175206237
2983293810411147132638413516621727829934103711401244134914531558166017
6812253841051562072282592810321138124113451448155316601628310413519625

7288319391326384135166207238279301035114012431348145115571663176618701
9761225310415520624727830936104211461251135314591562166417691873197620
8221892292239824101251042610627111132931541852162573183794010451150125
4136012263941551962573083293910431151125613601466142831141351762372682
8933103911421247135214551559166517691873197720792182229013263941352062
3729831936104011421247134914531555166117681872197520782182228823912496
2599261042710628114142103154215286347388409441050162103134175206227258
2792910331137124013421446154916531759186119671325394115166197238279341
0371140124713491454155616621764186719692072217622821621131842052462673
3835938104211471250135314581561166517711229311416520624726831937104111
4512501352145615621226311416518623727829932103811401246142103134165186
2273083894510501157152731241752362773083694010431150125213571463142831
0415517622727832934103711401243134814511556166317671871197320791428313
4185236297328349421228310413517622730834937104311451248135114551561166
3176718701974208021822284239012293114165206247288309341036114012431348
1456132731541852463173483794210451148125313561458156416211318423529632
7378431224384115156207248279311036113912431346144915521654175818611963
2067217022722374247925852692279628103152731241852062672983393610391141
1245134814511555166017651327312417521628734840944104611501252135814601
5631666176818731978208021832290239524972510515293144185256317338379421
0441149125313571462157114283134195266297338389411045114812521358146115
6316661770187419802082218522872391249625100261042710815293154235276351
2253941151562072582793010341136123813421449155116551758186119642066217
4122538412514617723825927103111331241134314451550165317561859196320662
1692277122436410512620722826931103511411246135014591521031541752362672
8833935103711411247135014541556166017631869197220752177228223872490259
3269627100281032910530109311131327314420525627732839941104711501255135
8146215641668177418761982208521892295132931241752262773183493710401145
1250135514601563166517711226394135196237268289331036114012481224310412
5176217278339381043114612521354145715631665177312263124165196217248269
3010361224310413515619724829931103611381240134314491551165717611866197
1207421772281238424882594269927105142631041351761972282793213263114155
2114283134195216277328369391045114712511355145915651672177518791982208
8219022952310313263114165186247268299331037114212471328314419523628734
8409461050115212541358146115641668177118741976207921832286238924932596
2610027102281052910730111311153212033125341313513436139371423814639148
4015241157421614316444169451751227394125166187208269291034113812411348
1451155316581762186719742082218422892394249625101261072711028115291203
0122311243212733131341333513836144371493815239160132931542152462873283
8132731041852462973383793910441148125213551460156316671769187419782083

2191229423100241061326313418521626732836939104311481250135414581528315
4205286347408429501426310415518623726829932103611391242134414471554142
7312417520623726830933103611391241134614491555165717621869142731241752
0623726829933103711411244134614491552165617591865132731141551862673283
7940104311451253152931242052262672983393610401142124813501453155516591
7621866196920722174227723812485259214283104165196257298359401042114412
4813501455156116641772187519812083218722931521031341952663073583894310
4611521429316423526630734839941104511471250135414581628313419522627732
8379391042114512501355146215671672177718831988209221100162113164225246
2673418214319424528633736844132931742553564374685095613263104145166187
2282492910321138124213461448155316591521031742352963673984394610511154
1259136214661571167417811521031341752462973183393910431147124913511454
1558166613283124145186207258279311035113812411343144615481650175418601
9642067216922732377248125862693279928106291123011731123321253312734133
3513736140371463814839152401544115842160431654417114283154205246287318
3594110431148125113561462156816751781188319862089219522102132731041551
8622726828931103511381241134414481551165417571862196520672171227523782
4812583269127932898291033011231117321233312934135351403614537149381543
9157401614116742170431744417745181461864718848193492011421131641952662
9732838940104711511257136014631567167417791884198820922197221002310424
1092511226116271182812229128122631041452062472883093510401145124713511
4551559166317691421131542052463073684294510501156126213273104135196267
2983193610401146124813531459156316691327313415518623729836938104311491
2531359132731141351962272983193510371140124713501454155816611764187119
7420792181228623912496251012610327108281162912330129311333213933145341
4835152361553715938164391664016841172421774318144187162931441852463073
2836941104511481254136014631568142123184215256277308339361038114312471
3491452155516581761186514283124145176207228269281031113812411344144615
4916531227314417521628731837943122731241451862172583193410371143124613
4914541559152931542352763473884414263104145166197218249271029113412361
3441326310412518621727832937104011431248135313283134185206237278339371
0411145124813521456155916621767186919722076218222892392249725103172123
1542252563173484094310451149125513581462156516711775187819822084219015
2123204235256317338369391045114712541360132731241752563173784394810501
1531257135914641571167417761880198420882194221001521031341652062673183
6940104511481251135514601565166817711874197620812186228923951621031542
0522628735842951105311551262152931441852162572983494010451151125813641
4701573167717791882198720902195229723105142831141552062272683393610421
1481326310412514619724826930103411361242134514491552165417571863122537
4115136167188239261030113915283114145186227248289341040132639415518621

7248289321035113812411343144615511654175618631967207021752281238924932
5962698271012810329107301161529314420522627733838944104711521259132931
2414518621725829933103711401248135414571565167417771885198920961427311
4195256277318359371039114412471351145315601663176818721976207921872289
2394241001521031241451862373083794110441150125313601463156914210313418
5206247278319341036114012431347145115551658176218681973207821842288239
1249525100261042710728112291181326310412517621725832935103811401244134
8145215561660176518691971207721812285238924942597261022710428110142831
1418520625731835941132631241551962272783093510411421031541752162572783
5937104211461254135614611565167117761880198620912195229923102241052511
0261162712228126291293013131134321383314034143351473615115293124205246
2773283812263104165196247278319361041114612551359146415671672177718801
9862092219822104231102411325119261232712828134132537410513617722826932
1038142931241752062372883193714293114175196227288359371042114412481351
1457155916631766187112243104135166207271224374135166237268309341040114
2124613481453155816611763186719751629312415517622730835941104411471253
1357146515681671177918821985208821922295239824101251042610727110281172
9120301223112815283134155236267338409471055116012651368147115751677178
2188719902096162931441852162372983293410381144125013541460156616681774
1877198120862192229623103241062511126117162831041451762472983694110441
1511254135714611564166717721879198420872191229512253104155226267308339
3910411146125013561459156316651769187219772083132731141552262673383994
5105111551263137014771581168717911893199720100211042210923112241152512
0261232712928132291343013731145132103154205246277328369391045115012571
3601463156616701621131341852362673183693810451148125013581461156716711
7761884199020942196221002310613283134165216267288359381040114812511357
1461156616741776188019852087219222962310024103251072611027115281182912
2301263113032135331393414235144361483715038154391594016712243749511615
7188239261030113512381340144415481650175318591961206421692273237624782
5822685278928932995309831102321053310834111351143611737120381243912814
2931441952162372682993410401145125013571460156216661773187519822084218
6229123952498251052611127115281221328311415517621726829932103611381243
1351152103164185216257278339361042114512501352145515591662176718691974
2077218222872389249125962698271012810829111301133111932122331263412935
1333613637142122631141852162473083612253124175236257298329351038114312
4613501454155716611766187119762083218922912397241042510726112271181228
3114135166207258289341036114012501356145915651672177418791982208821942
2972310324110251122611527119281222912530128311343213933143341463515036
1533715838162391674016941174421801329312418521626728832935103911431249
1354146215681670177418781981208621902294231012410425107261092711328118

2912230127311313213633138341433514913263114185256287348399441047114912
5413581463156516701775122731141752262572983394010431146125013551460156
5166917751428315420527633738844122831241652262573283493910421145124713
5414611228310413517622728832936104011431248135214541558166217671870197
4207721802285238924932597261022710728113291153012131124321303313334138
3514412283114135196277298339361038114212451349145215551659176218661969
2071217522792386248825912695279728100291023010631108321153311934121351
2836131371381227312417523627730834936103911431248135114551557166317661
8711977122531241551862572883193810411145124813531456155816641226311414
5176217278319351038114512501353145615581666122439414520626729831939122
6384135176217248321226310414517620722824927103011341236133914421547165
0175318581961206521672270237424802587269027942897291041327312417522626
7318349371042114912511353145815601663176718731977208221861414283124155
1862072482793010351137124213501628312417519623726832934103811441249135
1145713253941752362873383593710431326312414519624727829934103711401246
1721231642152863616211315418521627162113154185226297358379451326313419
5246297358389431050115614210312417523626730835940104211481421131342052
2626734840944105011531258136014631565167313253941251661872382692910321
1351241134314461552165417571328312415519621723828932103711401242135013
2931241552113263841613273144205236287361229311414520623728831938104111
4812511354146015661327311417523626730834940104411481254132631041351862
3727829932103711401245134814541560166217701529316421525627731836938104
5114912511357146215641667177318761978208321882290239524972510518211315
4185261721231642052662973384094510511157125913621467157516801783188919
9120962110222106231102411225119261232712628130142831341952262472883193
8104411461254132931441852162572783293710421145124813273124175236287341
2253841051662172683193710421147125313561459156216641768187219772083122
5384105176247278319371039114412481353146015671674177718821984209021922
2952397241032510626111271192812529130301323113814293144195246297358409
4510481150125213561458156216701777188019842086218822941225384145216277
3083293610421148125013551458156316691528314416521628732838946105211541
2571361146815721678122538412518621723827932103911421248135114531556166
4122437411515619723829937103911441246134814531558166017661872197720802
1872291239524101251052611112263941251962172482893110341140124613501454
1557166317681870197220762178228423872493259626100271022810429110142731
0414517622724832936103911471225384115186217258309351040114312471352145
5155816631766186819741621131842753163674184694810521158132731041551862
2726828931103711421248135414561562166517681874197920872192229523972410
1251062610827111281152912030124311273213333136341423514636151371571329
3114145166197218269281032113812401345144915531656176018651968207121782

2822387249125972610427108281132911930124311293213333135341403514336146
3714938153391554016115211318421524627732834937104311491252135614621227
3124195286327348389411046115212551361146615691672177718791981208721922
2962310413253941351662172583093410421621131742552763173583894310481153
1258136014641570162831041651862072482693110381144124913521456156116651
7681871197720812183228823922495259926102271062811129117301193112332128
3313734140351443615015210315420525627729834936104111451248135114561558
1661176518681973207621802284238924912595269927102281101521031241652062
8732835942104817211315422526632735842948105311581260136414691571167817
8118871428315420525630735839941104711491254136215210317422530637742844
9481052115712601364147216211317419525629734840945104711501255135814621
5681521031542052562773383894010451147125013551459156416661770187619792
0871521131642052563173784394910551158126213661471157416771782188919951
4210315421524627730835939104512283114175206247308349391043114512481350
1454155716611766186919722074217922862389249125942699271022810629109301
1331115321203312634129351333613537140381461226310414517625731833936104
0114212471350145515591664177018751980208621922299231052411025113261152
7120281262913130135311373214515293144195226247278351329311416519626732
8369411043114712511355145715651327311417521624727832935103811421247135
2145715611664177118731978208521872289239124982510226106271122811729123
1621131542052462773283593710411144124813521456156216661772132931341652
0624726829935103911411244134614491553165617601865196920722176132831041
4517622724828932132538411513618723827929103111391621231542052362873083
4936103811441729314417519623726829933104011471253135916214320423525630
7378429471054115812631367147114273124165196217248309341036113912411344
1448155216571328313418520624727832934103911431248135014581325384115136
1872382792910311139162123154195226267301729314417519623726829933104011
4712491354145915611664176718701976207821832287239424982510226107271131
5211316420524628730833937104311481251135614581561166317711325384135156
1972282693610381143125113551462156416671771187419762081218922922396249
8251071821431742252563173584094510521155126013661428313418521623726832
9361038114112431346145015521658176218641968207121752279238224852591269
5279728100291043010731113321173312434128351321729314419521624727833935
1040114612481354145915661672177718841988209221952210023102241072511313
2831342152362773284094310461150125713591464156816701773187819812084218
8229023961328316419524629731837162123174195226267328349381043114612511
3531456155816661721332042252763315293134155186217288339361041114412481
3501455156315273104155216287308359381040114312451353142103164205226257
3183393710401146132631041451761972483193310391143124713541821331642252
6628736172123164215246277328401428313418521623726832936103811411243134

614501552165817621864196820742179228723902496251012610827111281172911 9
301243112732134331383414135144361463715038156132931241652262873083493 8
104011431245135314571564166617701875198120882191229423992410713263114 1
552062573083293810401146125313561460156416691772187519831328313421523 6
277348369401046115112541356146215641670177218771980208421872293122931 2
416520622726828933103611381243134714511554165817611863196720712174227 6
238024842588269127952897291003010431107321113311734121351253613037134 3
813939144401484115142159142931441952162572883493910431146125317213320 4
225276331521031541852062572983493910441149125113591529313415518621728 8
349371042114512491352145515581664132931141551762072382893310411148125 3
135912273114175236267308369381040114612521359146715711674177618821325 3
841351862473083594010421148125413581463157116741779188515283134155216 2
673183494015283134155216267298329381721031441752162472883193610441427 3
124175226247278329341036114012471354145915621668177118731979132831141 5
517624728834939104711501255136214651570167217751879198320872190229423 1
021328315417520623728834941122739414518625728833938104411471252135514 5
815631671142831041551862272482693414273941151561872282592910311136124 1
134314471552165517581865132538411515618721823926102811361529313415520 6
241427311413518626132831041351862072382893214263124145196247301529314 4
195216287341528312416142103154205226257308329351038114613263114145221 5
273114145166207248269301033114013283124175226267318419471051115517210 3
144165196237278299331035114114283124145196251621131942515211317152931 2
420122631213283134155186207238269281031113512421344145115581662176718 7
119771621231942152562773584115283114155221327310413515619724828931103 7
114112451350145415601666142931141451962372783293910411146125113571460 1
565167217791885198920942110013273124205256327348399421048115012541356 1
461156916761521131341651862472783093210371140124313471449155316581767 1
869197420792182228814293114165236277298369411047142103164215246277308 3
593910451150125313561459156316691772187619802086218822941621031541751 9
622729832935103811401247172123194265326407458499551064117012741380142 7
312417522624728831934103711401243134714501554165717621868197020772180 2
283239014293134185216247268329351037114318212321423527632737844950105 4
116017212317422530635740848952105811621266137014731579168217851892199 5
201002110622108231112411525120261252712828133291391721131842352863173 4
840943104811511256135814621566166917731876197920832186229023932499122 7
311413515618723825930103613273114175216247298329401321131341552062873 1
837943105011581264136714711575167717811885172113174215306347378429451 0
511155125913631468157316791781188519902093219722101231091427311419524 6
277308329361040114412471349145415581662176518701973207821832287239224 9
625100261032710828112291153011831122321263313034134351373614337146381 5

0391544015741165132539412519622727835942104511471252135514571565162831
0417519621724829936103911421247135114551559166517721878198120891527312
4175246267318359391042114612481351145315591662176518691973207821802286
2391249425982610227106281122911730120311253213033137341433514736153162
1131842352963374084294710501152125713631528312414518620725829933103511
3912421346144915511657176018661971207721832289142739415520624726830935
1038114012461350145515581664176618741427311414518623727830935104311451
2491355145815621667177418781982208621902294239724100251022610427109281
1829124301323113532139331413414835151361573715938164391721325394115166
2372583093410381146122731341852562873083493810401146125213571461156916
2113184205256277328389401043114512501355145914273941351862172883193710
4011451250135214571563162103144195236317358419471050115212541357146415
6616691774188119842087219422972399241012510426109271122811529117301213
1126321283313234135351403614537148381553915940162411701528310413519623
7268329351039114312461351145515571659176318691973207521782286239124962
5102261082711428116291233012915211317422527631737843948105011571265137
1147915861688179418981910120108211132211823125241292513326138271462815
0291543015931165321703317234178351843619137196382003920440207412124221
4432221224384135166207248299341038114012431351145715591662176518671971
2076218222872393249825103261072711128116291233013031135321411326310413
5186237268321821331742352763473784194310501154125613601465157016771780
1885198920932195229823100241042511026116271212812729134301393114332150
3315434156351613616337170381733917940183411884219443200132639415518624
7298339361040114612491356146115651669177218801985209314293144185226257
2983293510421147125113531459156216671773172931541952362873383594010421
1471249135514621565167017741878198020862188229423982410425107261122711
8132731041451662172582993510371143124813531458156316661770187619811428
3104155176237288339351040114612511356146115651668177318791428310412516
6197238269311035114113273104165216247278349361042114512511353145615611
6671771187619801821031541952363173683994210501158126613711477142631141
4519625731834937104311501255135814611566166917731879198220862191229623
1022410425106261122711528119291223012631132321343313734143351493615237
1573816239166401721621231942653263573784194410521328313418522625730833
9371040114412461353145715641666176918741979132639411514617719825931103
8114112471351145615611664176918711977208021872290239324952598261041228
3124165226247278319351037114212501353145615641529315421527142931241652
2628734838944105111551257136413273144175226267298349391043114812521357
1459156316671771187319782082218522882393249825103261102711528120291253
0132132731241752262973684194712253941251962272683293410421429314419521
6257318349381040114612491353145715591665176818721976207821842287239224

1002510226104271072811229114301221421131742352663173684294410501156125
8136314691429312417522625731162113184275296327348401528310414518142113
1342052262572782993210361140142103124175256317348379411043114612491352
1454155816601765187019742078218222881226310413517619725827934104017293
1541952562773183693910421144125013561459156116651767187519812083218922
9223962410325107261102711428116291203012531128321323313634140351453614
7371531224384135176207238269281031113512381341144515501658176018651968
2072217722792382248525892694279828104122631141351662172582993410391144
1248135414581562166717711873197720822186229023952498251042610927115281
1729125142103154195216267308369421046114912551729311415519622728132113
1441852162773313293124175196267308359441046115012561227312414517621725
8329391049115212541358146414283134165186217248309331035113812421348145
1155316561760186619692071217622832385249025932699122631041451762372683
1939162113134175196277328359411047132931241751962573183794110441146125
2122731141752262473214210312419522628733836940104412273124155196237258
3293810421144125018215317421523625731142631141552062473283493810421144
1248135114531556165917641866197020742179228323891427313421523630735841
1528310414519624728833935104011461253135614591561166912273104135156237
2583193910421148172931641852562873584194510521155126013671471157716791
7831889142123174205236277318379411045115012551361146715711675178215211
3174215286341527315418521626729833939104311471328311413517622725830932
1040114718210314419523628734837942104511511328312416525629732838940104
3114612521356145915641668177018731977208421892293231011428313419522625
7331221031442152462773283693810461152132731141451862572783393610411144
1246134914531555165917631867122831441852162673183393910421149125113561
4601563167017761879198520902192229912263941252062372783393810431148125
0135414591564166917761879198620932197229923103132831341752362673183594
1104411481252135814210313421525630122631141651962472983493810411147125
4132831341752062673183393910421145124813511455155716611767187119752081
1321031441852362673083293610401144124713531461156416681772187419782082
2186142731141551862612210313418523626732835938104111441250135314561560
1664176918731976208021832287238924971226311416522626732835940104311481
2541329315420525628730836122431041351762172683193310391326310414518625
7288349401043114912263114165246277348379421045115112581360146415681671
1776188119852089219516210312417522627731835942104411481252135817293134
1752562773283894010471152125813641469157516771784188919951226311416518
6247288359421050115512611721131842653063373784194410481226311416518623
7278319341040114512491356146115641669177118761982132739414519626728834
9361042114912541358146315661674142831341952462673183393710421145124813
5014531556166217691328313415518621723827929103311381243134814501556165

817631868197213263104175216257288319351041114412521326394155196227278 2
993510411144124913561458156516681775187919852087219313263124155206237 2
783393910451148125213581227312418525631733837941105111531257136214661 5
681674178018851988209221981529315417522627733837940104311491254136014 6
215661671177318811227312414520624727829931103411371243134614491552165 9
182113134175216267318349371040114612491353145615621666132831541752162 7
730836940104617211316418521624727831938104211481256136514691575167717 8
118861991209421100221032310824111251182612127126281332913830141311433 2
146331501226313419522629735841945104911521259136714691576168017851889 1
993209621102221072310924112251142611827123281252912730129311333213633 1
403414535149122831241451962472783393810441153125513601464156816711774 1
878198220881321131342052262873384094210481153125713611464157016741778 1
882198812263114165196247278349411045115012551361172113174205276347398 4
495110531157125913671329315420522628732837942104811501254135814631566 1
672177613263941652362772983393610411143124813521455155816621767187419 7
720802185228923922496251002610327106281082911030114311173212133125341 3
035134361401226315421523629732834939104411471252135514591562166617701 8
741326384135186237318379431051115712611367132631041651962372683193714 2
631141751962472983493810441148125513571461156416681774132631041251461 9
723829932103511381244134614531556166017641868142631141751962472983493 8
104711541261136314681571167617821224310413517622727830932103815210314 4
165226277298319341037113912441421131341852262572783293710431429311414 5
196247298329361038114212441347145513283134185236277298351629311418520 6
237268309351041114312461350145615621664176918711979208321892292239824 1
002510326105271092811329116301213112632128331341328313418521626729833 9
361038114412501329311417520624728830934103811431253142731341552062272 4
829934103611401243134914531557166017651868197220761226311415519622727 8
299371226311414522625731833936104011451251135714631566166917731877198 3
208721892294239924104251072610927115142731141551962172582993210351139 1
243134814541560166317661870197320792184228823922497259926107122539411 5
156177218249281030113512411344145015551659176518701974207814283104145 1
762272683193510391528313418522628732834938104211461226311413516618724 8
269321034113812421344145015541659176318661969207321782281238624902594 1
329315418523627729832937104111461250135412273124195266347418439471051 1
157126113671472157716831786189219972010021107221092311224114251212612 3
271262812929136301393114832150331553416135166361693717238175391804018 6
411914219643199442054520916211316422525628734837941104311481253135716 2
113184255276317358419451051115612581366146915721677178118851621131341 6
523630734840944104911561261136514691571167517791881198520882191229515 2
731141752062573183394116283134185226297338369411045114812521356146415 2

7311417520625728832938104011441248135014581564166717711874197720802183
2289239624100251032610827112281162912130126311313213513283144165246267
2883593910421149125413581464156916741777188219842088219122981429315420
5276357388469521060116712701372147615791684179118971910220108211132211
9231212412525129261331326384165236287318359391043114512501355145815631
6661768187413273154185216257298349371042114812511357146315661674177718
8619892091219522982310513263124175196257298329351038114512531358146415
7116771621131541952462973183694010431145125013561228310414517620723829
9311039132831542152663274084294710521158126213681328315417520625731833
9381045114912541358146015651668177318791321031441952663173784394610521
1551258136614711574167617811883198720931721331742453063774284695010531
1591528314419523626728832937104111451227394155196237278329381042114512
5113531456156016631768187119792084218922932396241021225313415521626730
8369391045115112561360146715701675177718831428313417519622727833938104
3114912531359146215651668177218761981208321892291239916211316422528634
7378409451051115612611363146715711673177918821986209121932297231022411
0152103174245266307348429491053115712601364147015721680162103154185246
2973283694010441621031441652062472783112263114165186247308389441046115
3125813611468157116771781188719892097122437413521629737845951106111671
2721378148415911694179918101191052011121116221182312324130251332613727
1412814629151301533115732162331701328312414519624728832934104111471250
1353145715611666177118761979208321852290239612263104165196247288369411
0461148125313571462156716711775188312263104125156187218239271032113612
4012263114165206287318349401046115212551360146315661670177418781984208
8219022942396249925101261052710928113162113134195246277338389411047114
9125213561462156516711774187819802085219022962399241042511026112271142
8117291231521131541852262773484094310471150125513631470157316781783188
5198820942198221012310716213321427529632736843946105011531258136114681
5721677177918821985208721932296231021628314417521629734838941104311461
2501353145615641226310415521625729835938104311461249135214601226311416
5186237258329401047115212571364147015721676178018861992209721103221062
3114241162512026124271302813529139132731241451762172682993510421149125
2135414591566167217741878198412253114145186227258299311035113912421345
1453155916631768187119742079218422872393249725103261102711828122291253
0134311383214533147341513515336160142103154175226257278329371043114712
5513591467157016721775187919852087219022942397241002510326110271152811
7291213012631134122631141651862172482793010361138124213461453155616611
7671874198020822188229123952410125107261092711528118291221329315420525
6327368419441049115312581361146315661670132931241652062272783293710411
1461248135114531558166017641870197220762178228223862491259526101271052

811029115301173112232126331303413535140361463715138155391574016341168 4
217243176162113174245326397418459491053115612591361146515711225394145 1
962473183593910441149125713621464157116771781188719932098211022210623 1
131327310412516619722827929103411391244135212293144205256317368389451 0
531160126513691477142113164185246297358409471053115612581363147013293 1
542152362673083393710451151125513611463157112273114135196227278359411 0
481154125913651468157316771786132931541752062672883493710401144124813 5
114551558166415273114155176207258289301036114112441348145415631226310 4
155186227278339351040114512471350145715601665122431041351561872282592 7
103311371241134814561224310413516620728832937104011421248135214571559 1
663176518721979208221862293122831241451862072582993310371141124713283 1
041451862572883293710421149125213571463156616691774187719832086218922 9
513283154185256297338379441047114912551361146615721675178117212316421 5
246267308369391045122731141351962172683193510381144152731241452162472 9
833937104011421247135114541556166213273114135186227288349391043115012 5
413561460156616691772187619821421131842753664174985595810641173127613 8
014841588169417991810119105201102111422118152103154205276297328349371 0
401143124713521457156516701775188019842090219522992310324106251102611 4
162113144215266327358379421044114912551329312414519623729832934103711 4
112461350145315581664142133154195246287348379391045114712551357146115 6
516671773142103164205236277328349401046115212561364122931141651962672 8
831933103811421246135114561561166719219324426529635742848950105711641 2
701374147815841686179518971910513273164265336367408469501052115712631 3
671471157516791628313418521625728833939104611551262137114781581168717 9
218941999201062111122116231212412625130261372713928145291523015831160 3
216813283114165186237268299331038114212491355145915691674177918871990 2
093219722104231082411325119261251921832342953263874685295410601167127 3
137914851592169617102181071911420118211202212423128241321327315424528 6
327348399461052115612621366146815721675178118831987209121942296231012 4
107122631141552163173684194810521156126216211313418522627731836942104 5
115212571360146215681671177618791981208721912297239924103251062611227 1
142811829121301243113032136331403414535150361523715838165391684017141 1
734217843180441834518646190152731141551862372582993510421144125214293 1
141552062272883193717212314420523626732835941104511471252135614611567 1
329311415519623730833937104111471521131942152963173884494610511154125 9
136614701573167717811885198920931629311413519622724830933103811411244 1
348145215551658176318681973207921842286239024952510313211318422526630 7
368389451053116012621366147015761678178418861990209221952299231022410 5
251072611227118182133204255296327378431327311414519623732838941104311 4
912521356145915661669177318771982208921922295231022410425112132639412 5

1661972382692910321136124013451450155616621765187113283154235276317358
3794310461148125413591465156816741429313415520625732834939104611501255
1359146515691672177418821427313415522626729835938104011461329315420523
6297378449501053116012661368147613273104145186207258329381042114512501
3561421231442152662973383894310471153125813631468157216761780132631341
6519625728831936103811431245135114541557166217651871197320762184228623
9024952599261031326311414516620727830932103511371243134714521559166317
6518701974207721822284239014210313418527630736840943104911511258136214
6615691675177818801986172123154205256277298369381042114512471352145615
5816651770187419792085218722922395249925104261122711928122291263013217
2123154185256307378419481052115612591366147015741677178218881629315419
5226277318349381040114412461351145917210314420525628734838940104411481
2511356146115651669132103124165186227278339361043114812531358146315671
6711321031241652162773283793910431148125113551461156716701774187819812
0882192229423992410125105261092711319216318427535641748854957106111651
2701373147715801684178818931910020106211102211423117241222512814293114
1852562873183894310461152125413601463156916761781188319882091219522991
6213320425529634738842945104911511255136014621566167017741224311415521
6287318349391041114612491352145715611665132931141551762172782993410391
1461249135314551561166713293144185236297388459481052115712651372147515
7916851621131541952262873283694110461150125416212317422527634737845952
1055115912631369147115741681178318881991209721102221062311024117122538
4125176207238299311034113712401342144615491652175618611963207021752278
2386142731341652062272683293510371139124213481451155416571760186619682
0702173227723822484258826932710112263134175216257278339361038114212481
3531457156112263114135216277358389411046115312551359146315701677178118
8519882090219722105231122411525119261242712628130291393014531149321553
3157341613516336168371741821632443254064875586397110731179128813931497
1510116109122531041652162373183994210471151125513571460156216661769187
3197820841326313420525628730835940104411481252135414571560166317671870
1972207921842288132631041451862172382893110351138124013451447155116541
7571861122638411519625729834937104011421245134914511554165717611326310
4135186287368419471049115312591361146415661669177318771981208521872290
2395249825101261052710914211316421524627731836941104411481253135814641
5691671177318771979208321862290239224952510026107271092811329115301213
1127122631141652162573183394112253941651962472683393510421144124813521
4551561166817701874197720822184229023932496259926102271072810929113301
1731120321253313034134351403614337149381513915440158411614216443167441
6945172461764717848182491845018851191521991329313418521626729835940104
3114612491356146015641666177118771326314421525630733835937104111451250

1358146015651673177818811986209121962210212263114165226277338359411048
1152125613631465156916711778142631141552062272683093510381144124813531
4581565167117741882142931141752062773183493910451148125414283124185206
2272582893010351137123913451448155016561426311415518623726829931103611
3812411343145015531657176318681971207321791328312414520624728830934103
8114312521356146013283114155196217248279291033113812411343144815541326
3104165221429313415521624727831933103711421246135114561558166117641867
1970207421772285238724902595269912263104145176257318339361040114212471
3501455155916641766186819722075217722802384248825922696271032810729113
1421031541852262572883293710391144124913541459156516731779188519902093
2197229923103241082511226115271202812612263941451862472883393810451148
1254136114631566167017731876198120852191229523101122431041552262572883
2934104211481253135714621227394145206257328389461049115512571359146515
7115211316419524630122731241852663273684494810501155126213641468157416
2103164215286327368409461048115312561358146613273114165206297358399441
0491153125813601465157116731780188614263134175226277298349361041114512
5013531456155816611763186819712073217622802383249125932698271041421031
6418523626731838943105111541259136614701574167917871229314416521623728
8339361042142831341952462773283493910451148125313561459156116651767186
9197320752177228223842489259326952799281022910430108311113211433118341
2035124361273713138134391381224374115136187238269321034113712411345144
9155116551759186513273104155186227268289311037114012421346145417293124
1651862072582893410411146125313561460156216691773187619782082218422922
3952497251022610827114281172912313263114145176227308359391043114512481
3521457156116641771172113154195226247278309341039114212501353145715591
6681429314418520623727832935103811411243134914511555165917631865197020
7621782284122631241451862472783093410361141124613491453155716631766187
2197520792185229023922494259826103271072811129114301183112232128331303
4135351383614537147381503915640158411661421031341552062272783193510371
1411246135014551558166417681874198020822187229323100241032510726113142
7313419523630732838944104611501255135814621567167517781881198520902196
2210223105241102511426120271252813029135301393114132146331543415935162
3616437167381733917740181411874219143198152931241552162672883293510391
1451521131742352663073683994210451150125513601462156616721621131842252
6632739842944104711491253135514591564166917751879198120862191229623101
2410625108261122711814210315417521626732838942105011561261136514721574
1678178318891429314419525627730832939104615293114145166217268299331039
1143124613501452155716631224310412518624727831936104411471251135514571
5621667177218741978208121852290239824102251052610927114152931341752262
5729832938104211481427311414517622727831933103912243641351561972482693

1103311371241134614481553165717631224364135156197228269281032113612401
3441448155116551758186019642067216922732376247825822685278828912997132
7313416519621725827931103311371241134314471551165417601326394155176227
2482793110351140124413471451155716631765186819712073217522831228314416
5216267308369381045114712501354145615601666122731041251862372783293810
4211451250135214571562166517681873198115273114135186207228269281032113
6124513283114135176217268309361039114312471351145415601527314418523627
7318349391041114715273114155206247298329371039114512263841251762172583
0936104214210313415521624728830936104411491251135414591564166917731876
1981208714293124165216237308369421044114812521355145715631427311415518
6247278329381041114312491721031341852062473012243841351661972382692810
3111351238134114441547165017551858196620702173228112283104155206257278
3293610421145125313263841151661872282592910311139122531041552062472983
1936103911421246135211021331541751962372682993210361143132538411515617
7198249301032113812451348145215581662176718731976207821841325384105126
2072682993110341138124013441450155216581226311416522122631141351962472
6830935103811401246135014551563122631041752263073283593810441228310414
5186217238269321035114012461348145215551658176018631967207313253104165
1962372883193810401144124713501453155816621768187019761327394125156197
2282492810311137123913421445154816531758186019662069217222762378248125
8326882791289329983010131103321093311234116351183612137124381283913140
1334113742141132531141551762072582893010361521031642113293114175236267
3283493910451149125213541459156513283134155206237288309361042132538410
5126207238259301033113712421347144915521656176118631969207221762279238
1248425901226394125176247278349391041114312461351145515611529313417523
6257308329341036114412471349145415561661176318681972207921822286238824
9025961224394155186227278299351426312414519625727833939104511481253135
9142931241551762072582793010321135123813431448155516601764186819722077
2184228923972499251012610427109281142911730119311243212733130341361329
3124185206237258299321035113912441346145015521660162133164195216267348
3994610511156126313681471157416791787122739413517620725832940104311481
2551358146315651667177018741978208121852293122739414518624727832937104
4115312591363146914293134155206257278309341038132731441852162673083393
6104011481521131842152663073684194510531155126013631466157016771429315
4185226261427313416519623728830934103914293124165186227248299311035114
1124313471449155316561764142831241952262573313263114145186207248279301
0321137124313451451155416591763186519702074217722851428310413515619724
8299341040114212461352162931341952362573183594010481521131341852617210
3144195216257328369411048115412581365147115751683142831241551962472983
3940104211481254135814641566167117751879198220892194229723103241062511

2261152711928125291311325310417525628734838943104511511721131842353063
5741845950105311561261136614691573167617781881198420882192229423972410
4251082611027118142731141451862072816211316421524628731834939104111461
2481354146114293124195236267348369431046115312561361146615681671177518
8019832090219422992310224109132638410513619723828933103911451247135114
5415581662176418671970207521772285132831041552062572983493610441227310
4155196227248301329311414517621727833152931341752363073383694010431148
1253135714611566166817741880198820912194132639413515617722826931103611
4012451348145415601326310412516619723827932103711401245134714531228312
4145226287318359411047114912521354146013210313416520625729831936103811
4612491353145515641226311417522626729834937104512243841351561972182392
5102911321236134114471549165217561860196420682172227923842486259026922
7100132631041552062372883093813263841151561771982492710311134123813421
4451547165513283124155186227248279291032113612401343144615511655175718
5919632065217022732379248512243841351562072482693010331138124313481453
1556165817631866197120742177228223871527311415520623727831934103711451
3273124175196237258289321036132931241652062372683093513211315417522626
7328379411044114712511355145715591662176618691974207821822287239124942
5981327313416519621724828132731241852662973283594210481152125413591462
1568167117751879198513253941151661972282693110361143125213541456156016
6413273104185246267298339371041114412491356146015641668177218751979208
6218822912396241022510726112271142811729120301233112714293134195226257
3183793910441147125013561459156516691773187619782083218522931429316419
5236257328359381043114714210315418522626732835942104511481252135613283
1341952763273584094410481529312414518622727829933103511411245134914531
5561658176118641967207121742278238324862588269127951228314416521625728
8329391045114712541356145915631665176918751421231542252663073483894110
4311461249135114541558166412253941552162873183694310471150125413561462
1521031341651862472783293610381143124713521454155916651427310414516619
7258299321035113912431347145215571662176818701973207721792281238824942
5992610227104281062911030113311163212033122341253512936133371383814039
1461327310415518622726831937104011441249135614611566167117741878198120
8521892292231001521031241652062873283594210441150152731341952162672983
2935103711401244134614521557166017661868197320812186228923942410015210
3154215246287308359411225394115176197271227312418526633736840945105011
5512571361146713211318424531638740847951105511611421031441752162472783
1935122431041351762072482993310361140142931441952162572783193410381143
1246135014551558166317651872197620812184228723902495259726100271022810
7291131325384145166197228269281031113712411343144715521657176718721975
2081132638414518622724828931103411381241134414491554165917631868197220

7721822286239213263841451662072282893210381327310414519623726830935103
8114212451348145115551660176518711973207921832287239124952598261002710
6281092911230115311231527310412519625731836939104411461249135114591327
3134155196217248279311038132931341551962172582893010331137124113431449
1551165517601866122831441651862572983593910431146125215283114145166207
2282692910311133123613391444154716521758152103174235266337358409451049
1155152103154175216247268309351038114112431349145215561660176418671973
1421031241752162673083493810421326394145186247288329361038114012451350
1455155816601763186719722075217822812384248725902694142103144175216277
3483693910441148132731041251562272783093410381140124413461449155316571
7601863196520731327310413519621726829931103511401242134514491552165417
5718611967207221762278238614263941451862172583093410391143124813541457
1563166717711876198415283114155176197238259291032113612401344144815561
3253841151461672082392610291133123613411443154616481750185319562060216
2226623682476132538412514616721823926102811301233133714411543165017531
8551963132538412517620726830934103711401243134714541556166117641868197
2132531041552162572783093610391142124613481451155416591761186819751427
3124165196217248309341036113912411344144815501654175718631225374135176
2172382793010331137124213461452132631441852062572983393910441150125613
5914621567167017761882152731041251762272582893410401142124613491452155
4166112263941551862472883193410381142124913521456155916651226313418520
6227281328311415518623725827931103411361239134714491552165517591865132
8311418520625727832939104211461251135414601564166617691872197420772181
1427312417521627732835940104311511253135714611427312417521626730837940
1042114612501729312418522626733836938104211471251135414581562166517681
4283134185216237268329361038114112431346145015521658176018651974207821
8722892394249825100261032710728111152731141351662072582893110381140124
4134614501556166117641866196920752179228313253841451661972282692810311
1371240134414471553165517591861196620692177228023851326394135176207238
2993310351138124213451451155516621766187017211317419524629733836939104
2114714273124175226287338369411044114712501355145715601662176718731429
3144205276297358411325310414517619723828932103511391244142831342052763
2737840944104711501252135514591563142731341551862272783293610401145124
7135014531559166217651868172123174255316347388439481426311415519623727
8319351037114012441348152123144175216257298369411044114912521356146014
2739416521627733840942104511481229314418522122931341551862172382692910
3211371242134614491554142831341752062372783093410381141124413481529315
4195226257308369431046114812511356146115631667177018761980208321882290
2394249825102261052710915283124145176197248269281032113712391343132537
4951261571782092310261130152731041351661972182693010341139124313451450

1553165817621865196820742177228323852491259326992710428108291133011814
2731241752362973684194610481152125715283114145166187268311428313418521
6237268329361038114112431346145015531659176618741977208221862290239424
9925103261062711013263114185266327358419461053115612611363146815741428
3114145166207268299321037114215273114175226247288309341040114212441348
1450155716591763186619702076218213253841451661972282692810311137124013
4414481551165517571864196720692175227823802484258726942796281022910530
1113111432119331233412835133361371326384155206227288319331037114012431
3451448155116531756186019632066216922732378192133154205246267298339371
5273114135176227258299331038114212471352145615631666176918741979132538
4135166217238279361042114712491352145515611665132631241552262572983293
8104011451249135414571559166317711874197820821427312417522628733836941
1044114912541359146515721674178018861325310414517621726829933103714210
3144215276311328313420523628731834939104414283114185256307348399461729
3124165206277308359421325310415519623727831936132103144195256287328369
4210461151125313561460156216651768187119742077218022862389249415283114
1451762272583093210361140124412243741151461772182793010331138124013451
4491552165713283114155201326384125156187238289311036142931341652162472
8832937162103124165246307338359381041114312461350145315571429314417522
6287328349381046115212551357146015631667177018751325374115146187238259
3110341137124113471449155216561763186919722077142931341952562873383794
1104311461250135514601563166517681872132639417520627730833939104316293
1341651962272583093310361142124613293124175226287338369391041114412481
3501456155816601766142103144205256277328349411046115312561360146815283
1241451862172915283104165186237278319361038114412461351145415591662176
8187219772082218722892395249825104261101326394145196237298351326394135
1862172682993510421325384115166217258299321038114212441349145515611427
3114135186237258299311036114112431346145015561661176913283104165226257
3283594118211318142731542152663073583894410491153125613591464156716731
3263104165221321031542052563113263104145196227288329351041114412471349
1453155616641225394145166197228269291032113712431349145515571663132538
4105146197228279341036114012421349145615591663152113144205226277358399
4410481152125413591462156716701775187719802087219322952398241022510613
2638412518622730122731241752062372883193510391141124613491453155716210
3124185226257288319361043114512491353145913273114135196237298319361040
1146124913561458156216681527312414516618723826930103411361243152931241
6521625727834132631341552162372883093510401145124813541528312417521625
7288319381429311418520626728833937104411481256136214651568167017761621
1315420152731241552062573183593810441149125413571460156516681771187419
8016293144175206237258299321038114212461350145515631666176818731521031

7423528632735837941104411481254135914641568167117771529312417523629732
8349421428314416519626731836939104111471249135414581563166717721874197
9208621882293231012410625110261132711728121291253013031132321381427311
4175216267318359431721131341552062272683193810431146124813511455155916
6217651869197420772179228323911427394125156197218249291032113612411344
1449155716601762186819761721231642152362673283794010451149125113551457
1561166617701873197520792181228523891325312414518622726828933103511381
2431345144715501655175818601968132631141351561872382692810361427312414
5166197228259271032113412391343142831041352162672983293410421428310417
5226287338389401044114612511354145715631665176918731428314419524630733
8379411043114812521357146215661671177518801986209121972210123104241072
5109261122711628118291213012431127321311429313419522626732834938104511
4912511355145715611667177418761984132531041351661972683093410381141124
6134914541558166017681729312416519624727829935104112253841051361571982
5932103511381427312417520626729834938104211461251135414591563166617701
8741978208321862291239824101251052610727115132531241652362673384094310
4511521257136014651568167117751878198120832189229423972410425106261121
6293144215276337358389411043114712521354145715601662176518691974207821
8322872391249625982610412273124185256287308349401046122831041451762273
0834941104311471251135414561561166317681871197420772180228623892493259
6261012710628110291143011931121321271227312415521626729833937104211471
2521357145915631666177118751978208614283104135166217278309331039114612
4913521456155816631766187014293124155186237278339361040114412501353145
7156316651769187419802082218722892393249925105152103154185216277348411
4283114165216247278309361043115014283144195216247298339391042114612501
3561459156316691773187719802085219022961329312416520623728833935104011
4312481351145712263841151461772182692810331136123913441447155312263841
1514617720824929103311391429315417521625731834938104111441250135214551
5611667177118771979208221882292132531041251862272482893110341137123913
4414481550165317571862196820722176228023832489259126952799281022911013
2831141351762372683093210361139124713273114135186247308339351038114112
4313461450155414293154175246297338379401043114812531357146113293124175
2262572983315293144165216267308339371041114812501354145715611664177215
2113144195246307351428312418522628731833939142931641952562873183393810
4111451248135214571561166417721325311413516619722826929103515211314418
5226291421131742452663273784594810551158126313681474142931241752262472
9832935104011451249135414581562166417711325310414517620726829933103511
3812431346145115541658176614293154205276307358409421047114912531356146
3156616711776188119862091219722100231042410725110261141325310414517622
7278299331040114212451347145115541658176218681971207521782280238424881

4263941151761972282693310351140124613491453155716591763186519682070217
5227823812485259026952710228111142931141451962472682993310371139124313
4514481551165517571860196520702174227723802483258926932797281022910430
1101429312416519623727830933103611401243134814511556166214293164195266
2873183593710401144124913541458156515212317421527152931341852262572783
0934103811401244152103134185206247298319361039114212481528313415519625
1521031241551762172482993310371145142123154195236257338359391043114712
5113561458156116661770187219752080218322852389249325972610227104281082
9112301143111632119331231527311414517619721823926103211361238134214451
5501653175618601962206721722276237924841527311417519621724828933103611
4112461349145315551663132731141351762072282793310371140124313501421231
5420524627733836942104411491251135414591564166617701873197620782183228
5238924922596261012710428108291103011331115321193312334125351283613137
1391629314420522627729833936103911441247135014551558166117661872152113
1541852262873283894210461153132539412518622726830933103711391245134814
5315561658176418701529313415519622726832937103911441247135115210314418
5226257298339351039114112491327311414519622726831933103711391241134712
2531141852062472983293810401143124713501452155616581761186519682073218
1142931341852062473083494010441149125513601464156716721777188219842088
2192221011325310412517622727829933103915293134175206237278319341036113
8124213471450155216551760186319672069217322762384152103134175216267298
3293913253104155206247288319341038114616212315421524627730833938104411
5012561428313416521624728831935103911411247152103134165216271426394155
2062372783293710401143124613491452155616581762186419662072152731241852
1627730833939132631241551862172382993514293124165196237288329381041114
3124613501455142931241752262472883293410371140124513501452155516571762
1865196820712175227723792485258726922796289929101301063110832111331133
4116351233612737131381363913840141411454214843152441554515746163471691
2243104125176247268319391043115112571360146415661672177918841989209621
1051325310415520624727830935103711431248135114571327312415519626132931
3415518620722825928103615273104125206267318369391043114913273134185216
2473017293154205226267308329381044114812511353145912253104145176217248
2993210351141124713511454155716591767132931141551862372783293410371142
1246135214541559166617691872197720822184228923942410025103261082711328
1172912313263124175226267288339381043114712491353145615591664176618711
9791326384135176227298319341039114412481353145715601664177018721975207
9218422882394142731141752262673083293510391143124713521454156014283114
1952362673283493910421147125113561462156416681772187619802085218922952
3100241052510926115132739414518622727834937103911461249135314581563166
7177218781980208221852290239424101132831141952462673183594010451149125

4135814621566167117761879198220842189229123932496251012610527111132731
1416520623728832935103811421247135214571562166817751877198420902195221
0023102241062511211021732042652963273483994610491152125513601465156816
7317761879198420901521031541952362773083293510391142124613501453155614
2831041451662072382793410371142124513481452155814293174235301428310413
5186217248269291031113612421347145412283104135176207248319331036114012
4213461448155216541758186119672069217622802384248825922696279928102291
0430107311103211233116341183512112263114165206257308369421521031542452
6631736843948105111531257136014671569167317761880198612263104165216237
2782993710401144124713521456155916641769187219752077218322862390249825
1012610327107142831041252062673083594210481155122436414520622726828936
1038114212481350145615631667177018731975207721822288239524972599261042
7111281172911930124311273213233137341423514836153371583816039164401684
1170421734317644182451881426312415520625731837942104611511255136114651
5671672177818821984208821912295239924103251072611127118281222912730132
3113632140331423414635151361563715838163391674017141175421821521331842
4530632740842944104611491251135314581563166817711878198020852188229123
9724104251082611227118142831241652062272582993210341138124213471451155
8152103144185216277341621131341652062272482893410381145124813541621131
7420524631737844947105411571264137114781584168917921896191011427315418
5216237298379451054116012651367146915721429312417521625730162123154195
2162473083793910421146124813501454156116631768187319762082218622892394
1428313416520625731838944104711531259136114671570167415210315419523627
7308329351037113912431346144815521657176118631967152103164225266307338
3794110461152152103164245286317358381421131341651862172382893110361141
1245135114551558166417711873197520782180228323862488259226972710228106
1325310414516622724828930103511371240134214481550165317581863196720712
1762281238324852589269327972810229107301103111432119331243413035133361
3837143381453914840153411554216043163441674517046174471764818049182501
8651193142103144165206267318369381044114812511355142631041351561872182
5931103411391241134614481555165817601864196620712173227823802485258726
9027952810029105301103111232118331213412535129361323713438136391391327
3941552162773383693910421144124813501453132831241552262672883394010451
1491254135714611566167117761884198916213319425528632736839946104811521
2561358146215661668177218761979208321852289239324982510115212316421525
6307378429461048115312551357145915631665176818711974142103144165206267
2983594010431146125113531457156116641768187219752078218214283104145196
2472683213253104135176227248319361040114612521358142831141552062672883
5940104411461250135514581562166813263114135186227278329361038114212441
3471453155916621766187115210315418523625728833938104211481251135514581

5641327314418523628730837940104511491253135614601566167214283104125146
2272582793210361144124613501454152123184245276337398419451049115712611
3661468157216761329311415518623727832935103911431245134914541556166017
6318691975142103144215236277318339401043114812541359146315651667177018
7519782082218613263104155216257298349361042114412461351145915621668177
5188219902096219922103231072410925113261171327311414519627731836938104
3114814283104165206237258309351038114212461350132831141651862372682993
3103811441246135114531559166217661872197720852190229623982410525111261
1427119281222912830130311343213733139341423514936153371571429312416518
6227308369421047115012521358146515681671177518801982208621892292239724
1032510526111271142811729121301273113332139331431427312414517620723828
9321036113912421344144815501655175818611964206621722278238124852589269
3279728104291121326394145176217248299341041114412461354145815621669177
8142931442052863073583794310451150125513601464157016781921431642152462
7730835939104319213315419523122731141651862172516293134185246297318339
3710401142124613491454155816621328313418525630735837942104411471251135
3145915621667177018731976207821842290132537411514622728833935103811441
2481352145613263941351816293144185256307388419441047115112541358146315
6616681772187619782081218622882393249725105261092711428120291223012731
1293213233134341381421131441752262472883393610401147125513581461156316
6817701875197820802186229423962499251062611227118281202912330130311333
2137331433414635150361533716138163391664016841176421794318344187152103
1542152963373783994410511157126113651469157516791783132538411515619723
8279321036114112451351145315591429311414518622727831938104311481255142
8313418523628730833938104011431245134914283134185246307328389441047115
3125713611469157416781780188413253841351862272683093610411144125014211
3154211629315421523628730836939104511481253122831341852463073784094710
5011571259136214641568167117731876197920822186142831141952563073283894
1104611481250135714611564166817711876198120832188229323972410025107142
7312418524628731836943162831041251962272783193510371143124513521457156
1132631341551962272783193810421144124813551226311416518623726831935103
8114112461350145415581427312414519623726828931103411381244134814551561
1666177118731978208221872294239624103251082611414273114135176207248279
3110341138124013431445155016531755186115283124155176207258329381040114
3124813541228312418521626730835939142831041752662973383913283124175206
2473283694210461150125313601621131741952362873384194515210313419525630
7358409441049115212551359146215671672177718811987209321952298231002410
3251052610916283134185236297348379401045114812541357146413283134175216
2672983293710421145125113283124165206247268309341036114213273124155206
2973583894410501421231742352563218210315420526631152931141451662072282

693010361327312420522630734836939104311491253136013263104165216251427 3
124175196247301421031842452963373913293114155186227268311226384115166 1
972716283124165196237288319371224310419521624726834122631441752262573 0
833939132631141652062272914210312416518621728132931141551862372583314 2
931141552312283104135166197261328313417519625730833939162103144215236 2
672983614293114175226297371821031241752113253104155216257291621332042 4
529636740842944104711521629313418521625727834132538411516622725830933 1
037114217213318425527633736847950105411561263142831241752162914293194 2
352763274213263841451762172514293164185236257288331621231441751962272 8
132639417520624728830935103711401245142931441751962372883093614212316 4
221328311413517619727132531041251461772182393113253841351762272482993 1
103411391328312416520132731341651962413253124155186241327394171326311 4
181325384155216247268319401046132831242013263104135191227310412517622 7
258279321034114113273144201327312415518622725830122931141552017212317 1
628310416518620726829932104012273114145176197238301328311414520626132 8
310416522162831141812273114175226257288329371527311414519624728132123 1
541752162672983515211316419522624732132631041251661972282913263114155 2
315283144175206261325384115186241329314418521629142739412520132731041 6
152731241552062372917212316423142931341552062573283594010441147125313 5
614621621031341852062472983494014273144221325310414517623162103134181 5
293134155231328313415519625152931241852417213319162123184255306357378 4
112243741252115211315122437411519132631141752418212318424528142731241 7
525182143204245301621231442052563017213319132731141351862413283164225 2
563173483994210481153125813631469122537413519142103144165236307361226 3
114145166217238299331036114012451350145515631326394155211329312421152 1
031642015213319132831415283124175196271329319152113134175216247288341 4
283114155196227281428311414516624152831141652213263104135216277338369 4
214212318420524627729833935104011421248135114531556165917621868132113 1
742252763073613210312416520622726830182133164205236297348401428312415 5
216257311521231541852062673283593810441146125013551459162133204285336 3
874084294814283114175226267298329381044122631041251862172482793110351 1
381241134714273941452262973784094210491151125313561460156416711427312 4
195256317388449491051115312561361146515711326394115166227288309321035 1
139124313491327310415522625729833942104511491257136114661571167417821 8
841988209421100152731241751962372683393810431149172143164221428311413 5
176217271328312416518624726830935103915293114165196251621131341652062 2
728832935104115283134165226267321528312418520626733839944104711551225 3
741151561772282593110341136123913491427310414518622727833940172143194 2
252963273784294910531156125913621464156912253104125176217258329341041 1
144124913541456156116671773187519782080218612253124185236267328379411 0

4711511254135914641569167117761881198720902198152123204255316377428449
4710511153125613591461156516691772187619821721231642252663173584414293
1441852262673183594010461148125113571461156616721775188019832090142731
5419521626733836940104211481252135614601567152123204255316357408469511
0541158126412283114135196277298339361039114312461351145315581661176618
7019742079218522911721231441952362672883393510431429315417520624726831
9331037113912421345144815541657176218641968207021732277238024852587269
2279528982910330106311123211814293114135166217238299331041114812531355
1458156216671769187219762083218922912396241032510626109271142812212263
9414517621723827929103211351238134014461721231542252462873283493810411
1451249135214561560166517671873152831241952262873383894210471153142931
3416522624728830932103716212314418520623725830938104011461250135514611
5651667177218781521031441852513293114155186237278329391042114712491353
1455156118214321425530635740842945105011561263152103154225246287328359
4010421148125413561459156116671228310416519621728122831141551862272783
1142831141351662072282593010351137124313511455155816611767142831041252
0623725830932103611451248135014581621031241752462673214283104165216267
3083293510391144125113253741552162472983493910431148132638412515619721
8249281032113712431225384125166197238279321038172103174245286341721031
2418523626733838944104711511257172103164225266287341427312419521625730
8339371628313415518620723825931103411371239134314451551165417571859196
5152731342052362873283794310461152125813283124175236257288339351039114
3124913521455155916631766187119732081218522882396172103124185226297348
3693910451147125013521455156016651771152831441752062272683093310401147
1250135514601564166817721329313419522627730834941104411481253135714631
5293114175206257278329351040114212441347145115551661132638415520626729
8319361038114112441347145115561661176913283144225286317358409441046114
8125113551459156515283114165186237258319361039114412481354122537495166
2272582893210361138124413481453155916621766187119732075217822822386249
3152103124195246267298329361041114412461350145315561660176218661970207
4152831341651962172682993410391144124913521454155816651768187119752082
2186229215283114135196257298329341041114512501356145815651674178018861
9902092219817293124165186207248279311033114112471351145415621329312419
5216257298349361042132731141552162372783093310361142124513491453155616
6017631866197120732179228423872489259526972710314283124175236277298339
3610391142124413471452155716621764186719712073217822802383248725932696
2799281032910914273154215246277338369401045114712491353145515916621 76
4186719711521131341752462673283694010431148125613641469157513273104155
2162372583193310391142124613481450155316581762186815283114135196237278
3093210361143124813571460156516691776187919862094211022210723113241162

5119152831141451762272682993110371143124713501456156116651772187719822
0862189229423992410425110132831341752362916210314416524631739142831041
2515620722824928103311381241134314511427312417523626730834937103911451
4273124185256307348399461051115412581360146415701675178018841991162931
3418523626730832937104315210315417521625731836939104511481253135914283
1041251562072582793310381140124513481453155916631769187519782081218522
9023952410312263104165246307328389431045115212591365147015751681162103
1441752362673283994210491152125713611466157116731777188119832089132931
4418523625728831937104311501254135914611565166817701874197620792183228
9239324952510226105271082811529117301213112432131132631041651962472883
1933103711421244134814551558166217681329316420525629732835941104811531
2561361146315671671177518791983132931341752162673083393710391142124513
4714511557122731141451762172483193610411146125113531458156412253104125
1561772182492810361140124413531458156316651770187614283144205256277348
4013263841351662172683093410411421031341852563173383594114293124165196
2472883193510401144124713511453155916611767122639414516619724829934103
9114312481356142831241852262773083493810441148125313571461156516691227
3941552062472683293610401144124814293144195216277328369421044115212253
1041251562172482693010351140124813521454155716631767187319762078218222
8623902494132831542152763073683994310451149125413621521031341752062673
2840946104811561225394115176197271224374125186207238259301032113812441
3461449155116561761186513273941251761972482993110341136124013431445155
1142831241652062473083694110451147124913531458156316671774187819822087
2193229623101241071429313417523629735838944152831341752262673383794110
4311471251135714273124185236277348379401044114812501353145715601663176
6186919722076218022841329312415522627730834938104211491252135614611563
1668177418771981208621882294142831241652014293144195216267308329351038
1145124913541460156612243741251762272883093510371140124313501452155516
5717621867197112293124155206237288319331035114315211317422525629735172
9315419523625731834942122831241451862172883393610391141124914273124155
2062773083393610411146124913561460156516681775132631041352062873484194
6104811521254135714591563166617681870197520782182229113293164205226287
3083493910421145125315283124155206237278329351037113912421345145112263
8413518624726832152931341852262473083693910451151125513611465157016721
7781881198320892195162103164235266307378409461048115212571426311413516
6197228269311629312419521627733835940104511511255136014273104175226277
3283593910421146125213561462156616701776122731041552062973584094810521
1571228314421524629733837940104311491256136214701576167917841887199020
9821100221042311013273941551862272683293610441149122531141551962172583
0938104311491257135914621566167113283104165236297328379421421131642152

763173884316211318423529632737843946105211571264136814701574168217851891199820101211042211023116132831542052262673183393610431148125313591429312417522626731122731241752262572783293510401143124613511454155816611764187019732077218214293114155196247318379411044114912541362146813293114175196227258299331038114312481353122539416521623727829933103611401242134714491553165917651871132731341752062572883293810411146125213263114175196237268299321036113912451427312417520623730834939104411501226384125166197248309361427310416519623733839942104711511256136214641570167317761880198220852192229523992410325108152931341751962572883093710401146125114283114135196217278339371040114812531325311414522626732835939104512210315420528632739843948142931341952362572883493710401144125013273104165196237268293410391144124913551225394145176217268299321038114312481329316420525628734840942104711501254135913293144175206257298341329314418521625728833936103911451248135314581564166717711873197820812184229013293124185216267288329351039114312491355145715621665177116211314418523631739842945105011561326384115136157188209251031113812401345144815511657132638413517620722826931103411381244134812253841251561872413263104145176197258289321034113812421345145015521656176118671821231942452663473984395010541159142931141452062773083693910441224374105146177238269331036113812431348162123154215256301426314419525628732835937104011431247135214561558166417711874197720822187142831441952362773283494010471152125816293154195216277308369401044114812511353145915631667177018771982132731041751962172883293510371141124313471455155716631766187019761427312414521626729837942162103134185246287368409451227312414519122639413515621729831937103911431248135114541562166617721879198220842186228923912495251001329318423529631736839944132931541952162572783493810431145125213551462156616711428311413516622724826929103511381245135014551428311413521627731836939104611491252135814631568122731241751962372683293510391143124613521521031542152462873583994310491154126113661468157216751778188413253941251562272582893510371144124913541457156016621768187413283104145216247268299321039114512491355146015661669177218761983208621921327394115146187248279321038114212481351145515601667177518771983209021932299231022410825113132731542152563173483994210471150125413581329312416520623726831934103711441251135614591564132731041451862172583193510411729315419524629734839944105111531260136814731576168117881891199612273104125176227268309351428312415520622727834936104011431246134914541428312414519621723828931103511391244134714511557166117681873172931341652062472683093510401142124413491452155712273941551862272683193610411143124813551458156316651767187219752080218222871429312415523625729835943104511521260136314671570167517811327394135206237278329381044115012561359146515701

3263841151561872082693010341139132831641852262873283894310471151125813
6315273134165196237288329371321031341952362973183393610381143124813283
1741952463173583994110471152125513601325374135176197248279301036114213
2931441952262573083594010421146125113541460132831341552062272582793210
3511401246132531141551862572983293710391141124513511456132631041452062
2728831936152731341551762172683493710411149125213571421031342052462873
4838941104511481253122438411517622726829931103511401821031541752262472
7830933103911411246134914541428314419525629731833936103811401245135013
2739412514618721825930122531141652162472683193510381144124613511456155
9166217671871197614293144165196257278299321036114012451348145316283124
1451762172482693110371226384115136177218269331039114512263124155196247
2883093410391148125312263841151361771982392510311134123813431446155016
5517601865196720722175227723802483258726921326311413519621726831934103
6114112451349145315581224374951462072583293810431145125113551460122531
0415519625728831937104211471326310413519622726829932103511411243134714
5415571664176718731977208221862292239624100251032610927114132931441952
6632736839944105011541262136614711428310414518621729835939104211441248
1353145715601664176618691972207621842287239212243841451962372682993610
4011471251135814631429313416520625730833940104211471251135314581561166
6176818721978132631041251662172482693410401145124913541456156116671527
3144165216297328359401527311415522628733837940104311491253135614611621
3319422525632735840946162123184215266297328399451227394115136197218269
3110361138124213451449155416591766187017212316418521624728835162133184
2553012273114135186247278299341037114412501353145715631666177118741979
2082218522901328311415517621725828931103311371239134414471550165217551
8571961206621721528312416519623729832936103811421429313418520624729837
9421048115612581361146515691629313152103154195236271225374951261572282
6930103411361243134514511554165815293134165226247268329361042114613283
1041351862272583293610401144142113134185236271226384135186257308329381
0421225311414519625729833935103911431247135014521557166116293154175226
2673012293144165236277308359391326310415520624728833938104511481629315
4175226287328349421048115012541356146015641667177118741978152103164185
2262673083594010461149125213561459156416671771187513213316422525629734
8379421046114912531355146015651668177018751980142931241652162372883193
7104111451251135414601563166517691872197520772181228523872490259426972
7103281062911030113311163211833122341271721331642052763073684094610521
1561262136914711576168117861890199520101211052210915212321426529633737
8399441049115412581360146315661671177518791982208721942299231052410825
1112611827124281282913230137311443214833151341583516136166371693817314
2631241752462673383594010431149125213561521131642352562873283493710431

1451248135214541562166717721878198320882194229823102241052510826113271
1828121291263013231137321421721231842353063474084594910551162126613731
4781580168317871893199520101211042210823111241152511926122271262813129
1343013931143321473315113283124155196227251325394135186217248289311034
1136124113441449155116541758162831341752162573383712263104135186207238
3193710411143124813501453155516591761186419672071217322772381142631041
4516620723825929103611391242134414481554152931141652162573283894410481
1511254135914631567167117771883198620892191229723101241032510826113271
1728121291253012913273941351661972582893110371140124613541458156216651
7721875198320892193229923103241092511226118271232812912273124185266297
3183593810401144124815283124155196217268339381042114412491351145415611
6661770187219762083218922932396241032510626112271172812315283124175226
2973483694110501154126013661470142113144195226267298339391046115014263
9413519622728831935103811421246135014283114155206237258289301034113712
4113263124175216257288319361040114412501325310413519624729833935103911
4112431347144915531657142631041351662072482815273114155186207238279291
0321135124013421445154816511754185819631427394145186207248299341040114
2124813531458156212263114155186247268301521031541952362672883293610391
1441247135314581560166517671871197520791326384115186207238279301033113
9152123154195216247298339371528311417523627734836942104811501254135914
6415691674178018841988209121932296231021521231642252863774584895110541
1591263136714283144185236287368399441048115216293124155186257288359381
0411143124813511455155816631421031442252863173484194310491152125513611
4631568167317761881198420902196229823103241082511126115271182812213273
1542152563173483994210441148125213541457156016691775188119832087219022
9323962499251072611112293124205266297328389411044114812551359142831341
9524629735838946104911551260136514212317422526634737842946105114293114
1452062572782993210361143124713501454132631141351962172683194010441147
1249135514581565166717731879198313273154185246317378429471054116112631
3671474157916821788189213273104135186217268309341036114012441347145215
5516611765186719732076218222862389249425972610227105281112911430118142
1031241852062773083593910421148125013531457155916641766187019751429317
4205256317388431326310415517621724828932103911411245134914283124185226
2873383894010451149142931241752162773083593710421145124913283104155186
2472883293710401147125013571459156416691774187619812085132638411514620
7238309341529311417523627729834941104311471251132539411516619721826929
1033113713263841451762114283114135156187208241329311414518623726830932
1036132631341652262472783093410361139124317210313417519626731834941104
6115112541357146115651326394125146207238271325312415519622728830934103
8172103134175226277308359391043114712501353145615601664132639411514616

7228259291325310412515620723830932103611381242134617210313417520624731
8369411043115112561360146515691671177518811984208621892295239924103132
6310414519625731833935104011441248132103154225286307358409421048115212
5813611465156716721776142103144195256317338409461051162831542052462773
1836940142103144215276297368409441047115112551361146615711674177618811
9872095211012210523107241102511326118271202812429127301323113432136331
4034144351481821031241952162673183493813273941151662372582793010341529
1326394135186237278299321036114012451349145315551657176418671969207321
7722792383248725911326384115156207228259281031113712421346142639413518
6217258319371039114112461350122631013263941351862372783093310351139124
2134414491553142731241551962312263101326394125186217238299331035114112
4713511527394165186237298359371042114512491351145515581660176418691975
2078132539412515618726830934103911451249152831441752062472783493710431
1461249135314571560166517691873197713210312418521629731835132631041251
5619722825928103211361240134314461549162113164205226257298319361044114
8162103154235271529315417521623727833935104311471521031541752362873083
4940104311491253136114651224310419525152731241452062672983593910451149
1521031542052463073584294510491152125513621466132931341652162873383894
2122731241852663073383794410481621031241752162512243741251762372683093
5103811401244134914521555165917641868122639412517621724828933103611401
2431346145015541657176318671972207521792285238824921513273104145191226
3941351713253841151661972583093410371140124613481452142731441652162673
2837940104211441248135215293114135186247268301227310415520624728830934
1036113812411345132538412514618723829934103711411243134814521327310413
5156187218249291031113412371339144313253941151461772182492810331137124
1134514273114135206257308329371041114612263841451862573083416283124175
2162514211314417522626152931241551962372783193415273134175196257278329
3710421628313418525630735840943104711511427311418521623726830132731041
4517621723828932142731141351762072682993210341138132731041351561872182
8931103611411244134814521557162133154205241721331641952562973183693810
4111441248135214571729314417522624727830934103814283124185236277318351
4210314418522626728833937104211451249135514591562166617711876142631141
6521623727830933103711411225310412515619723826929103311361240162103154
1852262472782993410381326394135186247308341621231541752062773484194310
4611491421131442052562917210313417521625729833936132731041451762172582
8934122538410514616719825928103111351240134414461548165313273104155226
2572983516213315420524629734836940104311471427312415522625733838940104
4114817210316418521626729831935103811401246132639414517622728834152731
3420523626731835122531041251561772182392510291132123613391443154616501
2253841051561772282492610301137124113461450122537411518620727830936104

0122538412514618722824930103511421246132831141351862072783093210361143
1250135413273114185206237268299311035182113164185216257308339361039114
3124813511455142113144205226257298349361041114712511356146016293114175
2362673083393715273134175206237288329371041182103144195256327361628310
4165206257291527313420523626730835939104411481428312419526630733836941
1527313418521624729833172123161521031441852362573283493810411145125013
5214551558166217691877198120862194229723101241062511026116271202812429
1291426311414520626733840944104911521325384125166217278339381041114712
5114273114145206257318349371041114612283124165196247288339371041114613
2831241651862472682993313283114155186207228259311034113912421345144815
5116541757186112210316419525631737844946105011521256152123164185206247
2883114283154185246267298329341038152133224245326357398431228310412516
6207238269321036122631041651862272582913273104165196227258299341226311
4165206287328361428313419524627732837942104711491257136014651570167413
2931441651962172583093512243749516622724830933103611391243134514511554
1660176418701978208021822284238924942598152931442052363274084394610491
1541258136216210313420524630734839142931141551862472813283104145186207
2282893115273114185221729312416520627730833132103184255306331325384145
2262573383894113273124165196227251327314417523627152133164205241228315
4185206247278339371621031642013273114141421231842152663173584194412263
1241613283144165206241224364851662272582893410381329314417152931241952
3122731241852663173484094315211317422524631736838942104513293144165196
2172482893010331135123913421446121228312418523132831141516293124175266
3116293144191224364145176197248279331036113912441327313417521625730142
6394125146167238291327311415122539413518624727831935103911441248135214
5415571660176518681429313415519132639414519622728834937142103164195231
4273114135166197228299331039114412283124165226277298329351039132831241
4516620723828932103713263124145181325394145196237268299331036114012441
3481328310414172113134165201327310413520626732152831141652062572783093
3103611401527313419142731241551813253941151514263101529311416162101527
3124145181528142631016283121227312162111326394141325310414516620142831
2415519122831141451662012283104175246267308369401047115212551357146115
6316691773187719802086218922931226310415517622725827932103911421245134
7145015551658176218671971207821802284239024952510026104271062810929113
3011531118321213312434126351301821314273124185216257278311528313416519
1527311415519624726830142831241651862272782993110351325310414519623727
1621131441952262773183494110441150125213571461156316661773187619782082
2187132539414516622725827930103513263114135171327311415517620724826929
1326394155211328311414516620722825928103111351427310415519623726830934
1039114112471350145715591665176718711974142103174195216247298349391421

1316422527633737841142103164205246281329316418523628730834182123164215
2663173683894310461149125213571460132931241852162573083315210314418520
6231326310415517623726830934104111461249135214541559182133184245301527
3114185246267338359401047115312611367172123144195226257298349361042152
7311414516620724826930103311351239132531041452062673083493610411145124
9152731141551914263941251562114263841351761972482893310361140124313471
4531556165915211315420524627732837132831041351561872182493110351140124
5135214581565166717711880198220862191229823102241052511026115152731241
5517622724831936104111451247135014531557166117641870197613273124175206
2773083794110431148125313561461132538411516619721825927103111351238134
2132731241451762573183494110461427311413518625731835939104311451249142
1031341751962272883393610411143124813521454155816621765186917212318424
5266307328371429313416519122531241452262472983894210471153125913641468
1575142631141352062372883193510401144124713511455155916621765142931241
5519623728830935132831041451662013253104135176227268289331327394135176
1972382993614283114155206247278299321035114012441348145215571662176718
6919742076217922842387248925932610027105152731341852462973484094210461
1511259136414681575152831241651862272883193610401144124814283114155206
2472783193410371140124414273104155176207228259291034113612391343144915
5716641768152731141552162472883393713253104125166187248281328314418132
5384105126167228259301033113712391343144715501653176018631967207113263
1041251713273104125186207258299311034114012471352145615581662132831141
3515621723827929103311361238134314451550165517581862196620692173227823
8524872594269627100281041429313417519622725827930103211351239142731141
3518620722825928103411361240134412263941351762072783116293134165196267
3013273941451962773283618213315420523627132731041651862272883393510401
1431247182103164195256287321621031512253941351662015211317419522624729
8369421045114912521356152731141852162372682893410381140124414263941551
8623726832934103814210314420523626728831935132739417520624727831935103
8114215212317422528631733839944104911511255135814621621031541952262673
3835938104011441248135214551557166117651429312415517620724827930103211
3613273154215256317348399421527310412515618720826929103711391244134912
2437411515618722142631041451762115293164195216247268309331037114212461
3481452152931341752462973584194310461151125513581461156512283114155196
2313283124175226267298339401043114612491353145715601663176618701327394
1351661872382793310361143124713253741351762072382813273114175246297348
3815293114155186227278309361042114512501427310412518623725831936103811
4512471349145215571662176715293134155186227278319351528310416520624727
8309341039114312491352145615611665177118771981208513273124155176227248
3093410381144125013571460156416671770187514283154215266287338379401045

115312591621031642052262572983493810401142124713531326314419521625731 8
359391044114912541359146415661669177118741979122439416524626731837942 1
045115015210316419521625731122831041351561972382693310361142152113174 2
352863373583894110441149125613611466157213263104155176237298329381044 1
227312417519625727829933104011441247135114581226311413517625729835132 9
313416521625730837940104511471251135314591321031441652262873183694212 2
931442352663073784513293144195226277318371328310414518623730835939104 4
142931441751962372912283154185206267298379421048152731241551862413273 1
041651962673183713283144205236297351227394135176257278319331036114212 2
631141452062673083293610401145124813531325374155216247288309381040114 6
124913571621131842052612283124145196217271225310414517621727833937103 9
114412471352122639413516622122831041451862072583293510381140124313471 4
491553165517611863196920732176228213293114155176217248289321035113712 4
013431446155316210316420526628732838122931541852362914263941551862372 6
832935103811431246134814531559132631041351661872282693110351139124313 5
114263114165186267328379411050115612581363146515681670177418801628313 4
185206247278339371042114612511357162123164225256277338391327310415522 6
287348369381041114713283124145186237278299321040122531041552262773383 7
943104914273124175196267298339371041114512511354145815641666177213210 3
124155216267298371721031341852062473012263114165196217268289341039114 2
124413501453155516611228312419522630734837939104514210314416520624730 8
359391041114612481356122431041652362573183393510371140124413501225394 1
551762272483293510411144124613491455122731241952262573083593910431146 1
250135514611563167017741882122631241852162572983593810401146142931341 5
519622728830935103811411247142123174215286317358389421045114812531356 1
458156216671770187419772083142931341952663173684315210314420523625731 8
371427312419525627733142931642052262572983193712253104155176207288329 3
610391145152103164195251326310414521623727831152113164185216237311325 3
941151962572983493810411145124713551621231942252462973516211314419522 6
277318371527310413520623726834152103134195236257321521031241551962472 9
835152931341652362573213253941551862672883393916293154215256297371227 3
104165196237258309361321131341652062272483093410371142122539415517620 7
248289341521031742352562973514263941351762372683317293134215291721231 5
420524630734842162831341952462873383918212317423530635738845950105611 6
212681374147715831521131542052762973583994310471154125813631466156916 7
518210316419521629152731141351662472683393810401145125117293144195246 3
173584094310461155126116213315421523628730834937104011451249135514611 8
214318423527632738840945105111561262136614721721131541852562773283593 9
104518213318422527630735839945104911531256135914651321131341952162873 2
835938104211451251152731141451762172582993310411821031641852062272483 1

935104111451249135114561561166918214317422524626734192113174215236311 3
283104135196227248269301034113912411348145015521655175818611967207021 7
322752383182103174195236287328401628312415517619724828932103511431821 0
316418522629731835939104411511253136014681572167717831886199215210315 4
215256277328409461049115712253104135186227268331721231741952463013273 9
417520624727832937104111431249152831242052462673213263104155216247268 2
893110371621131541952162673183694110431148125013531455155916611764186 6
196920751427313415518622725829933103611421225310414516622725829935132 7
311414518620726122731141451762372883293812283144175196217268329381228 3
134195276357388439471051115713273134165216267298349371040114512491354 1
457156016661429311417519622727829934103911441252122437413517623132103 1
341752512263104135176227258299321036114213283114175206247278319361038 1
142124413501327312414519624726832132731141551862372682913253941451962 5
733836938104312263114165206227278339361040132931341552062372883293410 3
711401245134914541559166217641870197420782182228613283104155176217258 2
893310351140124413273104125176217258319341038114412263114135176197228 2
492910331140124213461448155016541756185819622064216622702375247925842 6
892792289629983010531107321113311434117351213612337129381333913540142 4
114742152431544415945164461664716948172491765018151186521905319254195 5
519856202572065821159216602206122662231632366424165245662516725368255 6
925870262132631041251662072483093410371139124213461329313415518622725 8
299331035113712431328310415517621725828931103411371241134514283124145 1
862272482693210351141124413511455156113263104145176217248299351328310 4
145186217248279321035114012421345145115551660176318671970207621832286 2
388249525101142639413515617721824926103111341236134214481427310414516 6
207248309351041122631041552062673483894210441149125613581462156616681 7
721225384105126177218239291036114212461349145515571662176818701975207 9
218122851521231642152462873283493812273124185236327408479531059116112 6
513691474157716841786189019932095219822102132537411515617719821929103 2
113412391345145115581665177118781983208521902295239724101251072611027 1
132811729120301223112432128331303413435138361403714414293164185226287 3
383794010441146124913521454155716631769142638410516623142931141514210 3
124185226247268329361042114612521226310415520626734838942104411491256 1
361146515671672177418771983209021942298152831341552062572883293812273 1
241852062472883594110451151125613601466156916751778188119842090219422 9
823100241042510813283164205256277298339351039114312471355146415701676 1
426311416521626730832936104111431245134714511721231542252562973183594 2
104511471252135414591566167117751882198820941228313420526634740846132 6
310415519622725827930103311381241134814511553165717621870197520772184 2
292239524100152831141751962272683193710391141124713531458156016641766 1

871197320772181132631041551962472683093613273124155186227248299321037 1
143142731241752462773183493610411143124813551461156416681771187719812 0
891528311415519625734837939104511531259136314701576162133164185236277 3
083493710441147125113561460156416681774187919832090219622103231072411 4
251172612227128122631041651962572983494010441148125313561463156716701 7
721877198120891226311413518623725829931103411361240134413283154205256 2
873283594010451521131341952362572883093610401144124913521456156116661 7
701875198020842190229623100241042510726111271162812329127301293113432 1
363314034144351481527313415520626732837943104911571262136414701574167 9
178513293124165216247278319361421131541816210314418524632734840944104 7
115115273114195226277308359381044114812531357146114210312417522625729 8
359381040114412501353145815601664177118751979208521892291239711021732 0
424528632735839942104511491252135514601527311416519622727829935103911 4
512243841351762072382793116211317425528633737841162103124185256307358 4
113293114155176217248279301033113712411348145015561661176518671971207 8
218022842388249325982610227106152731141852262772983593810461152125513 6
314661570167416211316421524628730833940104211471249135514581562166617 7
118761979208321891327312417519623726829935104111451247135314571560166 4
152103134175226287338399471049115312591621131742453063373784116212314 4
185226247298319361044114812521356145915631666176918771821331942252663 1
735132631041451662072282492710311138124213441448155216561326310414519 6
217278329381040114512481352145615601326310412516619721826928103211341 2
401343144715491654176013253741151561772382693110361141124313471451155 5
122436414517619724827931103411391245132537411514617719821926103211361 2
381343144815531659176118641967207221752280238224862592269727101132731 3
415521623729831938104313263114165186247278349361041114512481351145415 5
816611767132931241652062372914283134165236277318349411327394135176197 2
182793310351138124013441446154916521756186017293124165186207248269321 0
351138124113431446154916571759186314283134195246287308349391044115012 5
613611467157216771783188519932096219822102231072411225116261212712628 1
302913612263114145176257278299341039114112441348145015561661176418711 9
732076218222882392249425102261052710828114291221227311413517619723827 9
311429311419523626731833937104111451426394155186237278319351041122631 1
416522629736840947105211571263172931341552062272983293510401142124713 4
914521555166017671869197420822184228723902493259826104271092811429121 3
012631129321343314134147351523615837166381713917340179411834218943193 4
419912263141527394155211628310415521162831442016283154211326313415517 6
217288339361042132831241552162373016283174235281628311418525152731515 2
103174195236291429316418523625728122831241451862212273134175236297338 3
994510501156126213661468157516791782188819922096211041226394125181226 3

941652214293144175226257288309351041172931541852262973183694010431147 1
249135617210312416518622728831935104011451250135615293114145196237298 3
394013263841552062672983193710411145125013551460156616210315421142103 1
441752162572783093610401142124513471450155416581763142931441952162572 7
830933103611411245134714521557166017631867197220782180228523892491259 7
261041224374105126157228249271030132531141451917211313417522629735839 9
421047115112571362146615681670177518801985208821902293239724102251062 6
109271162811829123301283113232138142103134165196227278309351038114212 4
713491454156213253114165226267298371224374125156187251228310415519624 1
721131642052262873283493710391142124613501455142931141552062573183694 2
105111531259136514671570167317761881198520882194229723102241052511114 2
931341852262573216210313416521626732836942152103134191224374135196237 2
883193410421224374105156187228269291032113412411325311414519132631041 6
522172133184265306357408481228310415520625122638411516619727122831341 7
519621724827933103811451250135414621568167317771879198512283124175226 2
973583913283134225286327371621131742252963273818214316424142931341952 4
630162931341752062973283693910431148122631141551762473183693910421148 1
252132631141451962372783317212317421523626729834939152731341651917211 3
164185206237281528310417519621727122739411515619725162831341752316283 1
341552116211313417524628732835939104515212314421524627733132731141451 9
625729833938104111431249122831041451661972382893010331136123813411447 1
326311418525628730836122831341752062272812263114155206257288359411821 0
315421142103154175226247268299351042122431041651962172712283104135156 2
072583293610421327311418523631737840944104611531259136214641569167512 2
831241752062372682993714211314418524132831041652362573183813210316418 5
216237258309321039114514211318421529634737844132631141652062272683093 3
103511381244132731141451962773584094210481327312414519624730132731141 6
519625730837941104712273104125156221529313417522628732840132831141852 1
623726828931103411401247122531041351761972382917210312416522122436414 5
196227278331721031241652112243841351561872182592810321136123813421448 1
721031241652212293144195261226310412515618721824926102911321236133814 4
115441647175218571960206321682272237524801429317423526632122437412514 6
201225311413518626142739413515620727142931141552162472883193613253941 1
513618726152739411517132639414519622724830142831341752162472883293410 4
011431249135314561559166514273941451762272783293510431327314420522630 1
326313419524629735837941104714210315418522628132631141552062572883415 2
931341852462873283714210314417521625731132931341652213263104125176237 2
783193610391146125013531461110215318424528633737843132931441752262672 8
836132531041251762072415210314416519622727834132531041351862072482893 4
172113184225276327348401621031541952162472782993110361142132638412516 6

1972182692810301135124013431446154916511755186313253941451862172914212
3204275316357408459511721432142352763273684094310491153125713591462156
6166817721878198320892194221002310724112251142612216283124155206227278
3593710431146124913511455155916621765187316211319421523628734839947105
3115712601366146915741678178418861994132831341551862172883193510391143
1621131842152462773283594110471152125613621467157016731781182103144185
2262472782993715293154175216257318369391042115018210313417522624727829
9371528312417523626730834938122731241852262672883493710401142124413471
4501553165717611863196820702175228023842488259226942798281021426313415
5236327398439491052115512591429313419524627729834942104811511255135714
6515283124175236257318389431045114712521355145915631228316423531633736
8399411044115212561359146215661670152731441852062472782993410381144124
7135214561529311417522626728832938152931241852362773112273124145186257
2783293710401144124813501456156316681772187719792085152831241752362673
0834938122631141651862472983693910431148125513591463157116781783188619
9020952110122103231062411025112261152711928123291273013131133321373314
2341463515013273114165206267288339371043115212621364146815721679178718
9019952097211012210523108241132511726121122731242052863674184394910561
1601264136813273124195266337368419471521131542052463173383793910431149
1821632543354164875686396810741177128313861491159516991226311416518624
7298329381041114912561359146415681671177418791985132531041451862172883
1935103811411244134714531560166217661869197420772183228713283124145206
2572883493810421145125013541456156116641770122103154175246317378409441
0471149125313571460156613211316418525631737840945105111541256135914631
5701676177918851988209321992210223110241122511826120271242813129133301
4031142321473315434156351633616537168381753917740180411874218943195441
9745199462034721048212492205022351227522335323554241552435624857253582
5559261602646126962275632786428365290662956729768302693047031071316723
1973323743287533176339773447835017214318427529635742844950105511601264
1366147015751679178318213315420525628734838940104411501256136214651569
1676178418861991209521992210523107241102511426118271232812629132301393
1142321483315034154351593616637169381753918140184411904219343197441994
5202462094721348217142103154195256307328379411043114812541361142731542
1524628734838943105011521257136414691573167617801882198620922198221002
3105241082511326117271222812629129301313113632139331423414535148361523
7156381613916340167411724217643183441884519346196471994820312263941351
5619724828932103611381242134814551426312417520623725828932103711431249
1355146115651670177318791987172113154175226297318359401044114612501354
1458162113184235286337398429451048115212541358146215661670177418791984
2089219322991228310413516621724826930103311351239134314481553165617591

8621966206921712274237924822584268827922894299830101311033210533108132
5374115156177198219291035114112461348145015531658176518701974207721831
4273154215256297351325374115156207228269301032113712421346145115551657
1762186719692075217722812385248725902695279728992910330109311113211333
1173412135124361283713238140142831342052262472783293710441528310414516
6197248269301033113712421344144815511656176118631967207021742278238224
8425882690279428972999301023110613293134195246287308349371041114717211
3164245306327378419451047115012531356146115701428311415521626731834938
1042114813263941351862272813293124145216237298319351039114412501352145
7155916671427310418521625728832938104311481250135614611567167317751883
1326310416520624729835937104517212315422525631737839941104711511257135
9146315671670177612283124195256287338389421044114712531355146015631669
1775187819812087219022962310213273124175216277358459471052115512611366
1468157316801783188819922097211002210923111241142511926123271312813329
1393014131145321483315134154351573616337165381731721331842453163774284
8122731241752362573083794210471153122631141652563073484194710491155126
0136414681572167417771881198620902195221012310324110251132611627120281
2629130301353113832141331463414935154361583716338169391744017941182421
8543189441934519746200472064821149215502191427314418523633736842947104
9115412581362146615691674177918831987182103164225246297348389431047114
9125313591462156916741777188419872090219522992310313263124155186217278
3093310361142124513481451155716591765186719732075217922852387249125982
6100271042811129113301173112432126331303413735139361433714938151391554
0162411644216843175441774517946184471904819249198502015120652210532125
4218552235622557231582355924060245612516225463260642646526666269672736
8279692837028771291722957329874304753097631514212317422527633737842945
1048115112551357146315661674177618811990209521100221062311124117251212
6129271332813829142301453114832152331593416235166361683717238176391801
2283124185236287338379391043114712521359146315681674177918861988209221
9422100231042410625112261162712013253841051262072682893210341138124213
4614521556166317661871197620792182228615293124195226267318399441426394
1752362673083493710401142124613481453155716591762186719731729313417519
6257298329381041114712541357146015641667177318771980208421872292142931
4416519622725831937104111441249135214571561166616212319426529633737841
9471227311415519621729835938104111461251162931241852262873383594210461
1501254135714621565167012263104135156197218249281032113612441346145215
5516591765142731241452162672983794215293114145176197238259281032113612
3813431450155516571762122731442152462773483913283104145186237268319371
4293134185226287328379421227312417522628733838122639411514619723826933
1037114012441350132739415521624727830934104014210313419521624728833938

1044114912541356145815621668152113134165216247268309321036113812441348
1454156116641768187319792083218713293124185216297338369401043114712511
3551460156513293134155236267308379431049115112581364146915731677178418
8819912096142931141652262673083594310451148125213551463156516711776188
0198513273154175216267348419451051162931141651862172883293815210315418
5246297341428314421525633739152103144205246287318399441427313416520624
7268319361038114412491227312414518623728132831041551862072582993610431
1481421031241451662072682993510411521031341652062273083493810431149142
9314418521625731835940104411491251135614631569132931341652162673183715
2113144205236277328349391043114814293134195256287328379421521031341852
3628735843949142731041552062873684194410511159126413691521031642052662
9732837142931141852262773314283114175216267298349381044115012521357145
9156416691428310417520624728832935103911441225311413519623725830935103
9114512481352145815601663176815273114155196247288329371226384145206227
2883093210351143124513471450155513253841151461672082392610311136123813
4314481552165712283134175221327310413518623729834938104411491327311417
5216247278329391041114712501355152731141552162472983594110461421031542
2526630735838943132731341551762172613263144215236287331327310417520623
7278319341038114212481353145815641327310412517621726830935103911421247
1729312416518620726829934103811441247135014551321031341852412243104145
1661972282492710291133123613391444152831241651862272683193510371142124
7135214273154215246307328359391041114612491354146015651667177214273104
1652262773083694110441150125613611529312414520625729833938104311481327
3104155226267298339351039114112451350152113164215246297338379431051115
6126116212317421527162123164205236277318339391042114714283144201629315
4175236267328369391042114716283134155196237268299351040114412471351145
4155916621767187019742077218022851527313416523628731836132538412516620
7258319351039114612511355145915641669132631041551962372683093516283144
1952362773383794216293144195236257308359381045162123164185216237308389
4110451152125913641521031641952463073483894416210314420526122438411514
6187248279321036114012451313273134191428312415521627122539414516622725
8299361039114513293114145166227268299341037114313283164215236287308381
4283114165186247288309321035113912243741151461772382913263941552113273
1041451661972483213283114161325384125146201529312417522627730835142731
0415517623132631241952262673315210315418522624732122631041352013263104
1451962472883093410381521031441852262473213293124165186251529312417521
6237268309361038114614283134165186227258321328311413521132531341952262
8730834940132631041352013273104165231325311415519624730132531141852162
7729833939132631141551962672883713273114155191326384105136157231529313
4155206241427311413518626132831241451762272614263124145196247298351529

3144195216287341528312416142103164195241429311415522152931541752262473
2142731341852462773083593710401143125113263114145176251326310415517621
7261621231842452863373684094815293134175196237258311521131715293124201
2263121328310413515618721824931103511401245135014561562166817751877198
1209021961527310413516620727132739413516620727829932103511431721031441
6519625729835152103124195251227313419152831514293151921131542015210314
1421331642318214142931641952462873183813263841151462017210314416520625
7308369401042114512511357172931617211314417523122831512243741151461772
3829132639415521142931241912253104155176231529315419522628132531341552
0122103124171527312418522628132103124165221421131915283104135156231429
3124171527313419142831141615211313418152931141551762372683112243641051
7626152731141451662317293134165221529312415517624132831141713253941251
5619132538412516620162113181521131814273104125166221225394115196217281
7211313421152103161528312419152731041351762112283114191328311419132638
4141327311132538411516618726122437411514617723829132639415521142731041
8122538413516619724132631041416210317132931341551862072482793010321140
1621031715210312418526132631041351862412283114145176197251326311419122
5384125161528310414516619725827936132537411516152931541952462773083294
0182113144165216281228311418122437411514617723829132639415521142731512
2538413516619724132631041416210317132931341551862072482793010321140162
9312415521172123174231429314420162103171621031541852415211316152101327
3124165196231529314419521623726828936122538411518132631316215317419522
6267298329381044132639415521142831612253841351762072513263104141621031
7132931341551862072482793010321140172931141652112263111529314418172931
5420526162103171329312420152113134185216271529312414522122538411516619
7238259281030113813263104135166207238269311329313420524627731172143201
6212314416519623726829935104113263941552114273104181225384135166197241
3263104141621031713293134155186207248279301032114016213315423162831141
4518620727829933103611411528310414516619725827935132631241452112263114
1452017212318132831041812273141721231642052363112243741151461772382913
2639415521132831442212253841251562013263104141621031713293134155186207
2482793010321140152103134195216291521332113293144215246297318369421621
0315422529152931241452213263941251762072482793515210314416522624727829
9371326310413519162123164195246277308349371041122437411514617723829132
6394155211421031242013253104161327312414522152931314273104171427310413
5156207258289351329312415523152103124175196251421031241652412283104135
1762372917211314416522172931241819217162831541912273941452012263104125
1762313293114155186217271427310416132831041813283114145221426311419132
6384125166197248269341521131915210313418520628132731041351762072615283
1442014283114151628316132531141712283114135176251427394135171521031742

3182143211325394115136167221521131341552113283134195276337378429501052
1155125713621468157316781780188519921225394155206241328316152113174235
2963273984194712273941552262672983693910451521031341652262572783393510
4314293154175206247281225394145176217258319351039114112461351145415591
6651429313415519621723828931103611421246134814561226394125166227281428
3124165206257288319361039114312451349145115541657175918631966207413253
8410513617720823927103111351528310414518623725828931103311361240134314
4815531657176218661972142103164215266297328361629319425529634739842945
1050115814293144215256307358389421047115012541356146115691421031541952
1625730835939104411511253135514581560166317661871197714211316418522628
7348379431326310413516621725829931103511401246135314551562166817741877
1979208515210312417521623729831935104011441249135214561561166417681873
1978208521912293239824106152103144165186207238299311034113612441721231
7419526628735841945142731141551962272482792910341136123913431447132731
2418524626728831935103811421621231842352562873283693910461153125813601
4661569167117771329312416520625727835941104611481253135614621426394125
1461672182713283134155186207281421031341852362572883293710411147142631
0415518622725829933132531141551862272883413283114175231426310415521623
7278299321037114112441350152831241552062372783393710431147125314263124
1552062473183794110461150125513611429314419525627731839142731341652362
7730835939104211451250135214561563166914293184235256287318349431047115
1125413601325394145186247308339351041114713283104145176217238269281032
1134123913431447155116551327311414516622725829931103411361240134414481
5521655176118651968207121732276237924862591269327972810029103301083111
2321173312034123351263612937132381361328311416520626728832934103911411
2471428311416520624728830937104211441249135314591527311415517620724828
9321034113712431326311416520624729832937103911451248135114541558166017
6618701972207521792283238924912597261002710228110142103134175226277298
3593910431145125113581325384105186257288349381046115012551361152113134
1752062372983293610381142124513511426313417520626728833936104215212317
4245296317378429441049115312571361146816210316420523625731152831141652
1624731837943142103154185236257278309341038114417212317423528152731041
5521628733839152113174215236267328349381041114713263104145176197248309
3210351137124313471451155818213316422529631739172123164205236311227310
4155186237288339371040114312491326314420525628730836939104611481253135
6146015621665176818701976208121852287239124932595269827104132631141652
0626732836939104411481251135814631567166917731875198120832189132731341
6520625730837942104711511253135714621564167013293114165206267298339391
0431146124913541458156016641769187319762082132731241451962272883093610
4211461248135214541559166617681872197812243841051262072683193410381141

1247135114571227312414520622724826928103211341236134014441429314418521
6267338379441328311414521623726828931103411401247122739414521624727832
9401327312415518620723826932172103134185206247301225374115146177208249
3213263941251562072483093210381326311413516622725831132531041251862472
7829933103712253114145176207278319351037114012471428313421122539414519
6227288341528312415518622728132539415518622726832935103911451326311416
5186257278319341036114012471350145614273124175236267308329371043114512
5013551462156416701428310412515619722826933103611421326311414520626729
8359381042114712511357142931441752262572783313273104155206277308379421
0441146124913541458156414283104155196217238319341036114112441346144915
5316561760186614210316421524627729835938104211461250135214551558166217
6518711225312415518622725827930103511401326313417523625730832937104011
4212461352142831041451661972582993410371139124213471449155316551763132
7313416521626731836939104111441248135114531561132831141752263173483794
2104511511313273134191428310413517623728832938122731041251762172683093
6104111451249135614631569167217751877198515273104135186267288339401044
1151125915283104155196247308389421044114912551721031241651862472883193
5104111431247135014551558166317661871197520822184229217293144195226267
3183393810441152125713631521031541852162372682893410371139124513471452
1556165917611867152931141552062272683193310371139124413471452155716591
7671521031441952162372682993110371621031741952262772983493710401143125
0135314561558166417210313415518623726830936103811411245134714511557165
9176514273114175236277328379411049142113144175216237288329361041114812
5113531458156216641768187619802082218722902394249625100261052710928113
2911730120311233212533128341353513836141371443814813253841251662172382
7929103211341240134613253841351661972382893615273144195246287328399451
0521155125713611464156816721426310412516621723826930103311351239134414
4615521655175918631969207121752278238024842589269127962899291033010531
1093211133119142739413520624727829933103511401247134914561561166417661
8681976142831341852162372782993410421428313417520623726828934103811441
4273104145176217248269311036114012421347145415601663176518711976207821
8222852389249525101261042710814283104145176217258279301033113812411343
1446155016213317420527631733836941104711501252135614591563166717701874
1979208221842287239124932598261061421131341652362572883093710421148132
6310412517621726831934103611421247135014531558166217651869197220762178
2281238524912593269627100281022911013263104155196267308339381041114612
4913511455155914273114165206257288309341039114312461351145715601664176
8187219772081218522872391249325982610327109142931341551962473083293810
4611481254135614581562166517681872197420821326310414518622727830933103
8114112451347145115551658176118641966207314273941351762272482793010351

139124413461451155616631765186819712076218122852390249425100132538412516620725827933142931141551862372983293610421145124913511457132731141651621657318349391045115212571360146715751429313420525630732835938104111461249135414581560166617731428311415518621727829933103611401242134714521555165717611869142931141552062272682993110341138124313451447155216551760186519672071217522792382248525892693279828100291081729315417522626730835939104411461252172133214235276327358389431051182123174205256297368389441921131442052462873583793910481429313419521624726832938104411491254135814631568167513263114175196247278319361039114212441352152113164225276327358389431045114812521356146115671672177518811326311416518624728832934103711421246134814531555165917611865197020771527313418521625731838942104611511256136114661571167617781886142931341552062572983393610381142124613501456155916631767186919722077218222882394249725100261061227312414517621723827932103711391243134913253134155206247308379401043114612501354145815611663176718691973207521792284239214293124175226291521231842052462672883414283134185226247278319331037114012431345144915551521031542052362873584294810521159126514293144205236297328399431050115412591361146615741325394115166207248289301034113712411350162831241752062572783293610401143124713511455155916641766186919732075217922832389249125971329311415519626730837939104311451250135314581562166517731326394135186217258279311036114012451351145415571662176718701976208213293114145196257318389411044114812511356146015661421031441852162672983593910451151125313551458156516671775142113164195256307348401328310415520624729834940104811511256136214661568167317781884142931642252563373684194710491153125813641421131642052563315210317422525627735142639413517622726828932103411421428310414520622725828934103911431249135214581428310413519622728132739412515617719824926103211391242134714521558122831041351762272883393610391146124813511454155816641768187419772081218713283114145196267338369224942597261051327313416519623727831933103711391243134514491551165717591861196420672170227523792482258626882794281021427311413518621726832938104411461249135214551557166117661869197220742178142931441952462873283593810411145125013531459156216701628314419522625727829932103911411244134814511554165617651521031542052663273784194510501153125713591464156916731775187719812086219022932399241012510526113132831442052562773383793910441147125213601467122531241551862272582893510381142124713521

4591562166417691875122639413519624727831933103611401242134514511554165
6175818621966132631041251662072682993310351138124113461451155913283104
1451862172382893210361139124213451450155216601326384125166197218249271
0291131123413381441154516471752185719631314293114175196257298329341040
1428313415520627731836941104811561225310416523625732835937104312253941
3517620723827930103311391245132731241752262472883293410421621131742553
1635742851955105911641270162133204245276337388409421045114712491352145
5156116641770187719802084219016211317425533635743132831041451862372783
1933103711401244134914541558166217651868197020732179228223852489259426
9827103281062910830112311201721131642152863714293144195246307368429491
0521154126113631470157216751779188617214321423530637740847950105511611
4210314417521625729832935103811431247135314601563166918214321429532640
1821031341852462873483894110441146125013561421031241551962573283693810
4311491251135414581560166617691873198020832187229223992410625108261122
7118132931241551862072582893110371140124613521428311415519624726831933
1036113912431347122739414521624727832934103811421248135414561560166317
6518681972142631041551762172683213273144165216247268329351038114012431
3471449155216551759162113164205266317368389431049115212561360132631041
4517619724830932103711431247134914541556165817611866197020761428314416
5196237298339381040114612521354145715641668177318771982208721912298231
0324106251092611127117142639413516621724827930103211381244162831341952
5627732838945105211561258136414681570167617791887152731041551962573283
4939104211441247134914571521131742453063673884495010531156126013641467
1569167417791884198820902193229523103132531141451962714283134205276327
3584094310461152125413591464157013253941351862172582893210391144124713
5314571559166714263104155196227258299321036114212441347145015541657176
2186719702076218022822390132931241551862472883093610391144125014293134
1652062473014283134185226247278339371043114812531356146115631668177416
2133194265286337391521031341752062272983393610431150125513571463156916
7716212318422527631739848950105511581263136914293144195216277318369411
0431148125413591461156616681773187819802086218922922396241032510726112
2711828124132831441651962372983394110461150125313571463156716751777188
2198812263104125176197238259281031113712431421131742252563173484213273
1542152662873083393710451325394135156217258319331039114312451352145915
6416681772187719812083218913210313419522627729833936104111461250135614
6015651669177418791984209021962210023104241062511215211315421527634740
8469481051115612581362146415671671177818811989132631041251661872282592
9103511381244135212243841351561972482993410371141124813511459162103144
1852262472782993310391142124613511454155816621429312418522628732837939
1041114412491354145815641225310414520625729831933104111471253135814651

571167617811883199111021732242552963574185095410571159126519216319423 5
296381329315417522625728834939104411461250135612273124175196237288339 4
012253104155176227281621131742553363574084494810501155126213681472157 5
167817861521031441852515273114135176227268329381041114712531421031241 5
523629733838944105011541258136414283134165206227278329341036114012431 3
461450142103124155176237268319331038114012431348145415581660176518681 9
702076217822841326312418521624728831936104211451252135414591565142931 1
416520624730832937104111461249135314561558166417210317426530636142831 1
416520624730835937104211511257136314671573132731041551862272682893110 3
611391243134714491553165717651621231642452963273683994713142912263114 1
451661972483112253941251761972282592810341138124614283124145186217278 3
313273941351762172582993410361142162113134195256287308369381044142113 1
341952162472883694210451151125413591463156716701775187719822087219122 9
814210312417524627730835940104211471252135514591562166917741881198520 8
821942210123106241142511726120271242813129135301403114632152122531041 5
521627729834939104311491252136014283134155206227268321428314418526132 6
394115186237298379431428314419526142931442052863173383794314293144205 2
763273884494610521158162103134185226281328310418524629733839142831041 5
520625727831936104111441249135414601328310415517621723826930103311401 3
283104135166187248309371042114612511355146015621664176718721976208313 2
831141952563273984794910511154125913671328314420527636738842944104611 4
912541358146413283134185226277328349401043114812501355145815631665176 7
187019752079218513283104145206267318339361041114512471352145515591665 1
325374155216237258311327311416518623726830934103711421248135014581564 1
667177318791326310412518620723825927103111381240134514471549165617611 8
641968207621832289239324972510326107271131226311416523627730833937103 9
114212461349145215541660142831341852262673083393810431145125013541458 1
561166617711875197920842186229216210316423529632738840948122731241752 3
627729832935104011451426311413517621727831933103611421245134914521556 1
660176518711721031742452863412283134195226277308359371043142931441852 3
626729834938104111451251135414561562142831041451862372683093510371139 1
242134714511557132531141452262673283593810431149125213561462156416721 3
283104135186207258309331037114012441347145215541658176418671971207721 7
922871428313415520622728830936103811401247134914531555165917611864197 0
207621792285132931141552162472883293710441147125113561461156712273941 4
521624727832937103911421245135114571428313418520623725829932103411371 2
391341144515501656122531041451762072583393915210315421529631735838940 1
043115113283104145206267348369411047115212571365146715711677178314210 3
124165206237288359431051115312581364146815711676177918871428312418523 6
287348369421045114912551359146315681672177418791983208721892291239524 9

7251022610527107281151328310413515619724826930103715283124165206237278
3293510401142124513501456155916621764186719711421031441952462973183594
1142631041651962372783393610401146132631041551762472683093310351139124
6134914551428313415518620723825928103111341236133914411544164717511856
1960206221662269237524811428314418526628733836940104411491255142931441
9527630735837941104511481251135614601563166817741878198020861628312417
5226297328349421429314416519625727829932103611411245135114561561166317
6718701976142831241551962472683215273104145166197268319331039131327313
4191328316152113174235296327398419471528311413517623725833132831041551
8624728830934103811421245135214561561166417681872142831241852162873183
3939104211441249135314581563166712273124185266297338391621031341752062
3729835132113154185246297318369411043114712501353145715591661176518721
9742080218322902394249625982610127105132631041652062372883093410361144
1246135014541429314420522626729832936104111451250135314561559166317661
8701326311416519623725828930103411391241134614501554162133204255286327
3583894410461151125313571459156716701776132931241451862072282592710291
1321235134114491551165717631868197220742178228123832486259226992710228
1062911212253941151361872182392710311133123713391441154916511753185819
6120642168227023742478258212253841451862673083293810431146124813531455
1558166017631869132731041551862172382893210341138124013431445155016541
5273114165186227248289351039114513273941351661972182393110341136124113
4614511555166017661869197420762181228323872491259426972710028103291073
0111142731041651862272683193310371139124413481454155816611768187419772
0812187132731141451862172582893410411147125113551460156613263941451862
3729836939104411461250135414581564162113134195226267301421031241552362
9735839941104611491251135714591565132537415521623727829934104013273941
4516620725831935103711411245134914511555166017641866197020742178122731
0415518622727829933103711411325374115156207228289331039114112461350145
5156116631767187019732077218022842387249325971326310412516619721826928
1032113812411345144715521658132537412516618723828932103811401245134714
4915521657176018641968142931241852262673283493910431148125113551460156
5166817721879198220842188229212263114165206267308329361040114212461349
1454155616591761186619702072217522792381248425902696271022810529111301
1631122122631041351962472983493610381145124813521455155916631766186919
7320762179228223862488259226962710013152113134165196217238311228314416
5186227248279321036113812431345144915511655176018661428311419525628734
8369391043114512501353145815601663176518691971207421772281238524921429
3114175206257278319351037114012431349145215551658176313273124205266321
4283104135176217248319331036122539411516618721825122631041351561972382
6931103911471252135414601621031541752262672983293610381140124513491455

1229312417521624727829932103611421326384165216277308349381044115012571
3611466156916751327313415518623727829934103711431247134914541560166616
2931441852362672983694210461151125413581464142831542052362873183593910
4511491253135614581566162123144215266307348399431050115613273104125166
1972182492810321135124013461427312415518623725831132831341952763173584
1945104811531259142931442152663073683894410481154125813621465157016741
7791883198720892195192113174235266327388439491327310413518621723827931
1034113612441351142931341952262572783193310381145124813521459162103144
1952562873383994610521225374115166197268309351038114514273104125186207
2582793310381140124713491451155416591763186914283114155206237288339381
0401144124813511458156516691775172103134185206247301225310412516621726
8339361038114415293154195261226311414518621724832942104411481251135614
6115273114155176207228269291032113812431528312416521626122539413515620
7228269291032113912451352145615631666176918771984208821932210123106241
1025114261172712128127162133154195226267298319371043115112531358146615
7016751779188319892091219522972310224108251122611627121281261529318420
5266337408459521057116112651367147115751677178518951998201002110622109
2311724123251262612927131281372914313283104175246287318349421047115212
5513591465156916751780152133154205246327378421226311416522626730835937
1043114712541359146315691671177618801984208721932298122831041551862272
6829933104011451251135814641569167615210318425531636132731642252463073
3835940104411501253135813273124165186217258279311034114112481352145615
6116671769187519792082218422892391249725100261051327312414521623728834
9401043114912521355146014293154195216247268319381042114512491355122431
0416518623725830932103711411243134914521557122436410516618722824928103
1113512371341144415481651175618591961206421682272237524801226310418522
6317398429471050115512601363146814293134165216277338379411047115212561
3601462156716711774187919852091219522992310224107251122611427120281252
9129301363114032143331463415035155162133154215246277348399411045115012
5213591465156716741777188219862088219422972310213263941151561972382793
0103311371241134714521556166017651427315422527630732837941104711511255
1361146415691672177818851221031441952162773183594010421145124913541456
1561166417691875152931742352863773984294410481153125513591462156716721
3273124175236257318359391043115112571361146515691674152103174195226287
3083794110431149125413591465157216771721231942753263474084494810511153
1256136112263114135206227268309361042114912561362146915741679132731141
5521627733836940104311511255135914641226311413516620726831936103911451
2501354145715601664176913273114145206257308359401045115212551359146412
2631141551962172782993510381143124913541458156016641767187119752081142
6312415520624732838943104911541260136514691575167917831887199220962110

1221042310924116251221628312414520622726830937103911431246135114561221
0319428537646755864973108211911210013109141191512916138171471815619162
2017121180221842318924198252012620527208282132921830223132631141451962
2725829935103911411245134814541556166117641867197120772180228223872492
1327311415519623729833937104111451249135314581560166417661870197520802
1852290239324952510026104271072811029114301183112632129331313413535138
3614637149381513915640164411674217143175441794518346186471904819612253
8413515618722825929103111341238134014451549165117541858196120652169227
5152113174215286317368409431047115112561361122539412515617723827931103
5114012471351145515581661176612263114165226267308351621031612263104155
2363073283994210471151126013651629315419523626730835122631141452162673
2838162931341852462914212315418520624728833132631442452763273784094410
4811531258122631141651962473283494210441147124913551458156116661768187
1197920862193229823103122631141452062272883493810441147125113561459156
3166717711876197920842189229423982410325109261152712028123291293013431
1363214033145341503515236156371613816339171401764117842180431834419145
1934619847200482054921050212512195222253226542335523856242572465824959
2536025761262622671426310414519623725829932103811411245134814521556165
9176318651968207421772281238724902596261002710528109291113011331119321
2333127341323513712253741351561872182392710301132123713401445155016531
7551859196420682172227523772480258512263114165186247288339361038114212
4513481452155516611765186919722077218422882393241012510426112271172811
9291233012631130321353314234146351513615337159381613916540169411774218
2431904419245196462004720448208492155022251225522285323154233552385624
2572465824959251602576126362265632696427365275662796728268285692897029
4122731141351862172582893110341139122631141351962272983293910421147125
4135714621569167217781881198320872194221002310424106251102611327116281
1829121301261226314419522627729833938104311471251135714631227312416522
6277318339391046115012531358146316211319428532634741844951105711621267
1226311413520626731839944104911511259136214661568167317761881198520892
1942299132539418524626732835944104611531260136314651567167517791882198
7172123174225286341327394145186207238269291033113712431521031241852062
4729832936103911441247135314571562122639417521624729162103144165216257
2883313273134155206267288339381042114812551621031341852463273984614283
1341552162873283712263114165186247308349381043114712501355145915621666
1771122631141652162573183594014273144195226287318349381044114712501354
1459132831541852663273984494610531159126313691476157916821787189215293
1842853764675185595810661175127913831488159315283124145166187268299311
0361139124413461452155516611767142639411516619723827930103411361242134
5144915531656176218681429314416522628730833937104511491254135614601563

1668177118731981208421862291239424982510026103271062811029113301153111
9321231521031542152963473784294610501621031241852563073383793910421146
1429314419523627731833936103811421247135014541560166614293144165216247
2783393610411143124713511454155716611528312416518620723825930103211381
2451347145315601666142831141351662272583093210381144124613491453155616
6117631867197220762178228423862488259126952798281012910514293144175216
2372783193410401145124713531226312416518623730835938104111471251182133
1842152863173783994210471150125413561460156316671771187419772080218422
8623912495259726101271071628310414516622729834941104611521258136014651
5691674177618811987142931341852062472783193410381143124713531457155916
6417681870197220772183228823902495259726103271091326310412518621726828
9321037114112431346145015571659176318671970207417214319422527635742847
9521055115812621366146815711675132103134185216267298351621131542052463
0734837942104811521257136214661571167717821621031441752463073684495010
5811601264136614681571167617791883198714273124175206277308359371045132
6384135156207238289301034114112441346145015521654175818611963206621701
2273124175196227268289341039114212441352145515571662176518681973207521
7822812383248725892693132731441852162472782993210351138124013461451155
5165817621867197120742179228512243104125206267288329361038114312471350
1452155416581762122431041351962272682993512263114155176217268319341040
1146122731241852062572883093210361142124813210313417522627733837941104
6114812541721031341852062473012253104135156237268309331041142931441652
0624730833938104111451248135114531561166817711875197920842187229023952
4992510426112271172812529129301333113732143132831642152963374084294710
5011521257135914631569142931742253063273584094710491157125913631468157
3167517811887199420972110122107231132412025122261272713228137291393014
4311473214933154341601329311415517621724827934103711401246134814541629
3134195266297328391224374115166197238289321036114112431349132103134205
2563173684094310451148125213571463156616701775187819832086218822952310
0162113134195266317338399451224374115166197238259301035113712401346144
8155116541759186219652073142103154175216297358409451051152113144195216
2672883393910431149125213581628312417521625728831936104111461251135514
6015641668177118771428313419524629731834937104011441246135114541557166
1176718731975207821812284238924932598261032710728110291153011731120321
2333126341301321031241552362673283794110431147142931141651962472983193
8104411481252135514591226311417519625728832938104011471249135614581561
1663176518681972207521782281238524891224310412515618721823927103011331
2371340144315451648175212243741151662072612253941251662272582912243841
3516619723826932103611401243134614491553165713263841351661972582793110
3516210312416519626728832936132831041251562272883093410381429313415521

6247278359371040114412491351145315571528312420526630738842946105111551
2601365146915711676177818821984208821912293239624100122631041551762172
4828931103411381241134514471549165317561862196812263114175216257308329
3410381141124513511453155916651767187019732075217922851329312416519621
7258299331037114312263114135166207228259311037114312461352145715631229
3124155226267308349381045114712521358152103134175216277328389461049115
4125813621427394125166207248279311034113612401345144715511654175818621
9672072217422782382248525911529313419524629735838941104411511253135814
6115661670177612253941451862372883293610411146125213581463156916751782
1885198920932197221022310424108152103124165186207248269311037114012441
3461450155316561759186419672071217322772380248425862690279328952999301
0131104321073311134115132831541852162572983493810411145124813501456156
0166417731877198520892194229723102241092511126115271212812714293114175
2262873083593910441150125213561460156416681772187619782083218922942396
2410025102261082711028115122831041652262573083294010431147125413601466
1569167417771881122631141552262572983493610411147122531141551962313263
9413518132631141451862172482993210371139124313461449155216551757186119
6520692174227923832489259626102271052810929114301193112432128331323413
8132831442113210313418132731041613283154185256277318359371041114412471
3521454155616621225384121321031542052662973183493710401144124813293124
1552062272783393810461153126113671226311416520623727132537411515617723
8269331035114012461353145615621665176818721977208421912294132831542352
8634738842946105011521257136414661570167417781227312416520627733840943
1050115312601365147015721676172133204225266297338371521131541752362572
9834937104011441246135014561561166512283144195266287348399431048115312
5813631467157516791783188619882093219914273154205246267318339361042114
9125313571621131441852262573083293610411145142931241952162572783293610
3911421247135114551621131441752162372783293910421146125013521458156216
6617681872132103144185246287338369401043114712511357145915641667176918
7319792085219122942310224104251081226310413521627730834938104412263114
1651862372682993410381141124513531458156116651768187219752079218722922
3952410012283154205256277308349391043114812501355145715601663176518731
9752082218722902393249725100261022710428107291153012031124321273313212
2631041852462673183594010421149125113541456156016631766187119761721231
5422525630734840944104611501255135914641568167017751878198318210315419
5246277318369411044114912521358146115641671177418771981208521912294239
7241012510526111142103124175246277308359401042114712531356146015631666
1769187319792081218422862394249725992610427107281102911530120132831241
7520625727830933103811401244134814541557166017641868197120762179228323
8624922597121721313263141327313152113171529311415521624730132531041351

962272483013283104175236267298369391045162831141752062372883194010431 1
451251152103184205226287308361428310414519623729835940104611501254132 6
310416521623728835938104111481250135414581528312417523625730838122831 3
418526632737843946105111571527311414517622725829935103711401242134614 4
915551529313416521628132831141752315283144175206227288369441047115112 5
515211315418523625729832938142631041752062472782993210381146162831041 6
520623729132537411515620725831152731141551762172783093210351138124513 4
914521558132639413517132731241913273124155176207248301326384115176197 2
713293124165186227248279291035113812411347122639413518622724830122639 4
155176237258299321037113912471327394155206227288329371039114513253841 2
517623142731241852663373784094410501621031441652062673283693810441729 3
134165216277318371529312419523626730835938104411481250135614273124165 1
962572983193716210316419522627733839162123174205236317371227312415517 6
217268299341038114412471349145215581427310415521623728835162931141551 7
623132631241551962272582793313273104165196221427310415517620726829934 1
039114513293114145166207248279321036114214273104165196247288319361041 1
146125113561458156016641768187319752079218222842388249217210313418520 6
247301228311415520626729835132113164195226277331426311415517619726829 9
331039152731241451962172783093210351141124513531226394135186227248289 3
310391628312415519622727830932103611421227312417519622728122103124165 1
962673213273124165186231428310412516182133174251327312414517620722824 9
301037114012431346145013210313417523142731141552062473083613273114155 2
116211314418524152931241952663273784394610511157132731341652263073684 0
946132731541852562873684094310491328313415520624730132931441752262472 6
828931103411391243152731041351762272583314283114165196227268329381041 1
144125018211316422527633142831341952362917293124165206257311221031541 8
521624730132831341652062272783093614263134165226247288329341038114214 2
731141551962272482893410371141122831241852162472783093310371427310412 5
176237278319351038114415293124205266317348369401045114812511357146314 2
831141551962172582792910341621031441952162472983518211192131921312273 1
212210316419525628735132731341952463115273941451812283114165226297318 3
393715293134171325384145206247281821131441852062272783093710391142124 6
122631314293114171428311419162831141451762114283124175236277351821512 2
531041615273114165206227281628313416519624132631141551962172716211316 4
245276327381225394165196237291621031712253741412243941715210313416524 1
529313420522628152739415521132639414516621723827931103613283114155186 2
519212315420152103124185251327311420142931241551862072382693010381721 1
317423528633122531041452214210316422132831141351762313273114191528311 4
161528314122631213263141429313415519152831612263941251461872416212317 4
201528313152103134165241327311414517619723142831141914283124175236277 3

413253941515293114155211328310413519152931241651862614273131329315418521628122538413519142731342114273114135176231321031442214283124145176231529313421152113154225266321224374125176197231224310414520142931542013263124181426311415522142103144201528311416524132731141914210313418526172123144195251621131342016210312419142731041252013273114191325311419121283151325310418122538412516122531041551962515293124165221327310418142831041614273111629315142731341752062612253741314293134201721131613210312418152103134191521031241852462673217293134215291427311414517623122436485161721231614273104155186207238269291031113712401345145015541657176018621965206921712275238124832586269027922810014293134191821031241912263124155196237311225384145201721131516210312419142731414283161325311419172133174195271721131542052363073483994410481428311415521192163184235291824316424192153231921532316212314421142731141713273114191527313421132831141912253104135181621031642052814283114175241621131813273114191623103124191427394141327311419132531141913273104181228313419132831041812273141521131642217211317132731041812253841352015293114191721231541915283114135211426310413516622172143174211721131541752218211315418520626162143174201821331942352912273154205236291327394145211327312419152113144201225384141421012253104141521231441852416210314419523627731836940104712529312417132731141915283141226310417132537410516132639411515620142831514283161328315122439413515622142831242016283124181428314421529142731613283114191428311414172113171921714273144185226301428311414152931515283104155186231528316162931141911283104151227312414517622122831041551762072683093310371628313417521625733836940104414210314419521624728832162113154175226297328389401043114712511227311413518624726829932103815293144165216237258279291031113512371340144615501227312416519625731122538416522625731839941104813253104155176241429312415519625727834152931241852462973612243741051561872213273124155196247268299311035162103134165206237268321427394155206257308329371040114413283144175226287361621231441652016210317423527633132731041551762373012273104155196237288309331038114112461349145215571662176718701974208021832287239312253841051361972382693010351139124713521454156013263104155206237288319361038114512501355145815611664176918741980208821932295239724100251052610927114281212912430127311323213716283114145166217268309331227310416521623728833936104111461249135314581563166517691873197520802185228723912495259826102271062810929113301163112213283144205236297348379391044114912531358146315651670122631141652263073984194610481152125913661421131542052763273984395016212318421526629733122539415523629142731241451962172482793010351142152831241652263014283144215246297338359391325394115146167208229271031113312371340144315491628313417522626729833192113154201621231442113293144165206

2472813253104155196221521031441652062372683093710411146142931241752162
6162831241852262672983493910461327311416518621725828934103911421247135
0145415211318424530634740848132113174215261521031342152815212318421526
6297318381326394165206231427312415522162103154195256307351621231742213
2531141552112253114135156177211326313416519142113154211321131542014263
1041513263114155176227258299331038152731141351862172583293510391145152
9311414517620724829933103511401628311413516621724829931103818213315419
5236301225384135166211226394135166187218249281034114012210316419525631
7371224374111427313122537495126187248269331226394125166197238271225384
1651962372782993214293144175196237288309361421231642213283144185206281
3253104125166187228259291033114012421345144715541326394125186207238299
3110341328312416520132731241551862313253124155186241327394171326311418
1329317423132831242013283134171621031341752162573112243104145166197228
2592710361224374105181721131441715211313417523629132931341952462973383
8940104513263114175236297318359411043114912521360146315671671177318771
9812086218822902392249525102261042710828110291143011631118321223312612
2631041251662072682993310351139124513471451155716631321131742252663173
4840945105111541259136314681574167617801884198820912193229923105152731
0415517620724829934103711391246135214571563166517691876198020822185228
8239024952599261032710728111291133011831120321233312634128351323613812
2831141551862272582993510401143124913531456155916621767187019742076217
9228323892496259926103271092811229116301203112614263134155186217268309
3210351139124313461449155116541758186219642067217122742380248425862691
2793289729102301073111032112331173412213253941351862372983393910441148
1251135314551560166517711877197920852189229423982410512243841351862372
7832938104011431249135314571561166617701874198220872191229512253941151
5619724826931152831241552312253941151561872282592912263104155176211729
3134155196217238319361041114712541357146415671670177218791985132531041
3515620723828931103411381242134414491551165517611621332042252963673984
3946105211561260152123174245296347398449481054115612601367142631041452
0625729831933103813283134175206237258309331038114212441349145615591663
1765186919732080132537411515617723826931103711391244134614501552165617
6218681970207421792284238624912596269827100281032910830113311201427311
4155226257288319331036114012471353145515581662176718691973207714273114
1752262973483994210461151125613601462156616721779188219852089219222952
3992410325105261072711128114291183012231125321273312934132142831341652
2625732836944104911511255136113283104155216277298329341040172113164185
2463073684294610481153125914293144165196257278299321037114415210313415
5186237281327311415518623731836940104411461253135714621565166717731875
1981132631141612263941651962373013273104135166207248309321036114012421

3461450155815283144185206257278341325311414518621725833152931341752162
6733838943104711521258142831241652463073283693910431147125013521454155
7132631041351561772082492810331135124114210312415523629735839941104811
5012551357146015641666177218761979208121832289239224942510026105271072
8109291153012031122321263313034134351393614812243741351662372683093410
4012273114165206247288321329313419524629732837943104611481253135614611
5641667177218771429315418523628730833935104111461250135314581563166817
7418771980208421862288239124962510026107122831041351762272482893310351
1411245134814541225312417519622730836938104211481427311415521625730832
9381045114912521357145915631666176818761227311419525629734842945104911
5212571359146115661669177613253104155176197248299341037114412461348145
1155716601767187119742076218022822384249025971427312414519623726828933
1035114314263134155206227258319351038114112451351145415571659176118651
9692075217722831227312414519622726830932103711431721231441952563073283
7944104911511256135914611568142103124165206257288329371039114112441349
1453155912243941452062372983193710391143124713491453155716631768187119
7320792185172103144215236257288309361042114412461352172113134175226247
2883093310351141124713511456155816641226394115166197218259271030113412
3713401443155112263841051461972382593212263941251862072282492710321134
1242132531041552062373183593710451421131441952462773183794210461148125
2135614651529314419527629734839942104411501428310413516619721824928122
8316422528633738842947104911571227311418522626734142831241652162372783
0935104111451252135414621226311414516624132831241451862472983493710441
1531259136514711577168017861426311415517619727830932103711401242134514
4915511654175718611965206721712277162113154195236297338419491053115812
6313661468157415273104125166197238269321429314417521625728831937104111
4812521355146115641669177218761981208621902294231032410725112261152712
0281232912730130311343214033143341511329314418524628732836945142931441
8521626730833936104211471254135814611567167117761880198820941621131441
8523627734839944104611511254135814621565167314212317419522627733837941
1045115012551359146415671669177712152113134175236291429314419523629731
8369381041114412461350145612273941351762072583093310381144124613521429
3124155236257308349361039114612531360146715741676178018871991209421981
5283124155186237288329371042152113164195236297338379441046115512601365
1469157316751778188219872092219722102231092411425118261222712814211315
4185226287318349361042115012581361146415701676142113144165236287318369
4010421147125312273124185226267308329371043114512501353146015671529314
4205286347428499521055115912611365142831141451862272783093410361142124
8135114561562122631141652162472683293610391144124713491453162103164185
2362672983714211313418522627729833936103811421244134914541557166313253

1141351762072482893110341139124413471453155915293114145176217238269311
0331137124113471721031641852462773484094210501152125613591463156714293
1541852262815293144205256277318339381042114412481350145615621421031241
7524627730835940104511471252135714591562166617691875197720822188229223
9924102251052610827110281142911630119132831241852363173784394710501153
1257136314210314421527631132831442052663073414293144165216267328379421
0471150125813641467157016781781188319871429314418522627730833937103911
4312481350145215561658176318691428311414518623725827932103411381242134
8142731141351562072483093710411143124713501454155716621770187219762079
2181228623912495259826100271052811029113301173112232124331283413035134
3613637138381423914612253841351862472683193410401142124513491451155616
5917641866197120742176227923822488259126952710114283114135166197238289
3110341141132639412516621727829934103711411245134914551326394135186217
2713283144165196217258279311034113812421345144715491652142931341551862
6729833935103711401245134714501553165617601862196620702172227623812485
2588269227942896291003010515212314418522626731836939104311461250135414
5915641668177218761979208121842289239314293114165196217258299331040152
1331842152462873283794210471150125613591463156616681774187719802085218
8229023941428311413516622727831937122539412518624728831937103911421248
1225394125166197248279301035113712401342144615491653175918651970207621
8022842388132638410516619725833936104117212317422524626729831933103611
4012461349145515611225394165206237258299311037114012421348145115561659
1763186619742076218122861821031441752262672983393510391143125015293144
1652162572883393610421521131642052562973383994510471152125513611321031
2417522629734842945104811511255135814621567167017751877198213283164195
2162572783193310361139124514293114165216257308349381041114512471353152
9311417522630735838943104911521256136414671569167313283134195246267328
3894210461153132539417524628734838941104614293134185256287358411328313
4201527310414516623728832936103911451253122731441652062472883393810401
1421248135114541556165817651871197620792181228723931421231842252462773
2836940104511471253132831442152763273884694910551160126213691228313415
5186227268309351037114314283144195226247298379391045115212561362142831
1414519626729836941104311471250135314561561166517691874197620821428312
4165186217238269291031113512411428313418523627733142831141451962473183
5941104611511257135914661570167417781884198820902198122638411514616722
8289301035114012431345145312253941151562072582793010341137124213491451
1554165917611865196820761226311413517619721825927102911331235134114451
5471654175918611968207321782280238524872590269827102281062911230118122
6310415519622726831935103711391244132538413520622726830933103915210317
4215276297348389441229311418526632122831041251762312253841151361772312

2539414518621723825928103211341237134114451548165217601427311417519624
7288329361040114616211315421525629733842152731041451662072582893210371
1391246135214581421031441652062472683193510401142124413481452155516581
7631865196920732176228023842488259126942798281012910630110311153212314
2831141452162873283794314283134215266307328389441048115312591621131441
8522628142103124175246277308359401042114712521356146015641667177318751
9802083218722912393249825104142103154235286317368389431047115012521357
1459156714283134185226277318379401043114512511325311418521625730833937
1041114312461348145315571662177012152731341914283134185236277331521131
6422525627733162123144185216277318349401043114612511356146015651669177
5122639412517621724828933103611401249135314621566167415273124185216287
3083612273124185266297328359401227314419522627729834941104311491252135
4146214283134155206257298339371044114612511355145915671227310416519623
7278309361041114512471351145615611667162931541752262772983193510401145
1251135714641569167217771883198913293124195246277328359401228313415518
6247278329351041114412481353145515581662176718731977208021862288239414
2731641852362773183793910421145124813521456155816621766187119732076218
0228323892496251021721231642152362773283994310481150125613621468157416
7817811883198914283164245296327378449491055116012631368147416211316422
5271428313417520625728834132638414517622727835942104511501256162133154
2052563073684094410481150125313561461156416671772187813273144165206257
3083394010431149125313581460156416661770187519782084152931341852362973
6838946132931541952262573383693810401148162931442052362572883493710421
1451250135514571560166217651867197220742178228423882493259914293144165
2262673283894110461152172123174225276367408449491055132731241652162472
8831936104011431248135514611429314418522628734836940104611531256136314
6915711679122731241652062273083594010481151125713601466157316791783188
7199313211313419525628734838942104411491255135914631565167014263104141
3273114145176207248289331037114112431351132831441752362773283493810421
1461250135514601564166717711329312417522625731834936103811421421031241
9522628733836938104411501328313420526632734840945104811531260136314671
5721674177818821988132113174205236297318379441047114912551328311414519
6247288349391044114912531355145915651670177618791982208421872291122731
3415521623728833937104111431248135114531555165917631866197320792181228
5238824912597261011227312418521626730835939122731341551862272582793110
3611381242134612263841151361571882392510291131123413371442154516491753
1329314420526630734839945105011521254135914641567167217781880198620882
1942297231002410525108261132711928121291253012914293134195256287338379
4110431146125013551460156316651768187212253104165196237298329351040114
6142731041651962372583093210391142124613481452155516581761186619702077

2180228623912496259826101271032810713273941451962172482993110341136124
0122631341551962472783093410391143142103144175196227268309361039114112
4413471453155816621766186919722074217622802386249325982610327106281112
9120301223112632130142103134205246287348389411045114812521356122831041
3515618722824929103111331236133914411543164717511621231442052362973283
7940104311471251135414581561166417661869197313273941351561972382692910
3211351239121314283124165216237278319371043122436414517619724827932103
8142123184205256347408449481057116012621367147015721676177818841990162
1231441852462873283794010431148125315211315420525630732837940104511501
2531358146015631666177018721977208221842290132631041651962472883293410
3811401245135414561559166117641867197112283104145206257278329351039114
5124813511453155616601321031341551862372683093410381141124513501455155
9142123184215246267328389411048115412601363146615711674177718831989122
8316422526631734838943104611491252135613263841351561872082492910351139
1242134714491556166117661868197420792182228923922495259826106271082811
4291183012231127321313313334137351423614637148381521329312414517619724
8299331038114312471351145315561659176218661970207521782283238924952597
2610227105281072911030114152931541852262572983693910431146125013541456
1560166517701875197920832188229123982410225109261112711428119291253012
9311333213833143341491621231441852062372583193310381143124613501456155
9166317671871142831241852363173483994210481152162931441652262573183694
2104611531257136114641566167117771879198520882192229614283144185206247
2783293812253941251862172382592910321135123913421448155216561759186119
6320692171227512253104155186207258279291033113512391344144815531657176
2186519732076218022841321131742052562873283594110461152126013621467157
3167617781884198720912194229623101241071327311415520625730836944104611
4812541358146215651671177318791982208721912294239624100251042610627110
2811429118122831341652062472783093410381141124513491453155916631767187
4197720812185229113273114175196247298319381043114512511721231742353163
8740844953105611601264132631041552162672883393710411145124713511454156
0166417681327311416518621723828933103811411246135213283114195256287308
3593710411144124713521455155916631329311416520624730835937104113273144
1652162472782993210361138124113441448132831441652162912253941452062572
8832934103611391244134714511555122831141652062272615210317419525627730
8329361329311414519625731834937104111441249135414591563166717741621331
8423531635737842944105016214319426532638742847951105811641629315420522
6291529313418521624729834937104111441246134914571429312416522624729831
9351421031341852462973583794210461150125513581462156614273114135166197
2282813273114145166187218239271031113912421346145215581660176318661968
2072162123174235256297358379401043114712521357145915671672177718831990

2093211002210323105241132511526119271231326394115176257278309341037114
1124513481450155216561821331541852062472782993210341136124013421445154
7165117561859196220642168132931241952462973183593810441148125113561463
1566167017731876197920842188229123952410125104261112711513263144205246
2673083393610401145124913521456156212283144205256277318369391043114713
2631041251762172482893010321136124013421446155116561761186319672070217
3227715211315419521626728831935103711431246135314571563166717711873197
5207921812287239124962599261032710914283124145166187268299311036113912
4213461450155612172131329314419524630142638414519623727162103154195216
2572983513293114145166231329311414517622724832172103144185226257321421
0312415523629735840946105214273104155196237268309341039114515283104165
1962373083293610401144125015283154195236267288339411043114917210315417
5236277318349411045115212571361146415671670177318761978208414273114191
6283104155196217288339371226394135176247311427312415518624728830934103
9114212461428310416519621727830934162143194215256317368429471052115912
6616283114175196267288319351037114012421344144715531229314416520623725
8331227310415521624727831934104011461527313415519621725827931103411371
2441347145215581661176418681971207721831327312417520625729835940104311
4612521354146018212317420523628736132631341852362773183494013273124165
2216210315417521626732122631141852162673083593914293134185216247288309
3616210313416522625728830938104213293134165196247298369381044115012561
3611464156716721777188219862091219622992310224105251111527311416519624
7308339371044115112551357146015661671177718214319424530162931141451762
1727833940104311461253132638411517621723829932103411381521331542152863
2738132631141451661972382893110391143124913293144165216257278339401529
3134155196247278309321036114014293114155196261227311418522627734172123
1642052362673083614283104165206261527313415519621726832934103711431247
1353142103144215246297348389411045114712551429316419521625731132831041
3516618722824929103711441249135516283114175206237268299321036114012471
4293134195226247301521031241651962172482893010331136124013471451155316
5717611867122538410513617719823926103011341529313418520623725828931103
9114616210317421526630736142103174215306361821231742414273104145186217
2582893316213316418520622727829932103611381240134314481224374105166207
2783193510421327313417523625730836142831441752262573283593910451329316
4195226257291427311419522624729836942104511481252135914621568167217791
2263841151662372683093616213315420524629734836940104311471228311417519
6257298329341040172123174215246277341226384115166217248289341521031742
3529162113154235291429314416519625730832938104411481254135914631569142
9313422525629735132731241752162712210312416520626122631041351662213210
3144195216291628312416521624727831937132931441852462873412283124165221

2283114135176217288319371042114812243741351662072383115273154215236287
3183615211318421527632736842132739415518621726829932103811441621031241
5523629732838943104611521257136313273124175196237308339351038114312461
3521421031241752362773183715273941151661972182715293124165206261217213
1321031241652262572883414283104135171426311414517623142639412514620726
1221031641952562773183712253841051461972382693210391224364851416293134
1952462814293124165201428311417520626132631241552062472812273104165206
2513283144195236291327313419522629142831341652162773183512263941351762
0723827931132531041351762072583193514273114165186241325311413521142739
4145176231421031441852415210314418521627122739413518152103141521031442
0142133174221326311417523626731837142931241952162773312273104135186207
2814212315418521629182103164185216257291227314122437413519622725832152
1231441852413263841151462072282793510391144125013283164225256317371221
0313418522628730836122531041752313253941351561972382692810341325384125
1561772382912263121421016210312418142101421131441852412263941351561972
5122538414520122537411513619122931141551912263111628312419527142123164
1915293124175221228312417520626732838942104814263941251461972515211317
4225291621031712152113134175236291224312418523631132831141451662072482
8934172123194225266307328389401043114812501355145815631669177518791983
2089132731141752162673083493710411147125313263104141428312416520622725
8329351037114312481353145714273941551962572983493710411145122831241551
9623725830934103711391245134714501554166017641868197213263124175226267
2983393510381142142831141451962472983293710451147125113571463142739411
5196227248299341037113912411344144915531660122731241852362573083493810
4311471250135514611225310416519623729831934103811441429312419525631738
8469481055116312661374182133154205236307338359381040114512501354145915
6116641768187319762083218722922395241021228311416518623730833937104211
4712491355142631141451662072482793510401146124913541457156413283134175
2262673212253104175246267328389431049115712611367147415771679178514283
1642252763373583894110451148125013561628312416520625729832935103911421
2461351145515581662176718701975207721802284238824941628310413519625729
8349371043114612511354145715611663176618681970207321781428313419524626
7298349371039114412491356145815621668122631241452062272883193410411143
1246134914531557166217641870142731542152562973584094410521426394145166
1972382693210371142124413481454132931341852362672983593710411147142931
4420528635739841946104911511125613621429314418521626730835944104911531 2
5914273941251661872582793010341138124013441446155216541757186019632066
2169227814273124145196237268289331035114314293154185236277328359421047
1150125313551461142931541952362773383994510511153125913631466156816761
4293114195226277298371321131342152763073684212152113134175236291227315

4215246307338389421046115212571360146615721228310415517620724829933103
8114012451347145015531655176318691974207621792282238424892591269427962
8100291061326394135156187228249261032113412371340144715501652175818641
4273124175206257318399451428313419524627732837941104411491252135514591
2283144165186257288349361038114212461348145215551661176418671969207421
7822842387249325991224374115136187218259271031113312361339144115451648
1750185419572060216322662370247412283104135156187228289301034113812401
3431450155316571761187019722076217822822387249514293144195246267298339
3510411145124813501456155816661769187219761327311415520625729833937104
2114712521357146215671675122731241652062273083393610411144124613521521
0315421525629732837943162133204265316347388449481053115912651369147215
7516781782188619922095219822100231062410825112261172712128126291293013
3311383214133145341503515536160371623816439169401724117542179431834418
5451931521031541952362573083793910461148125313581461156616701775188115
2831541752162973183593810411147124913531457156516691773187619782081218
5228723922494259726100271062811315210312417522624727829932103411391241
1345145115551660176614293124175256327358379431428313418521626732839941
1047115312621365147115761680178518881992201002110222107231112411525119
2612327129152831141351762172983293510401142124513491452155616591765186
8197220752179228423882491259515211318420526631734839941104411461254132
7312415519626728833935104011451249135514283134195266317348389441046114
8125013581460156316671771187514263941351762472682993210391143124713521
4601421031441652262573183493810451151125413581462156716701777188019872
0892192229423992410525110261142711828121291233012831130321381421031241
7519624730836941104715210315421523626730836940104211461250135414591562
1667177313283124165186227298359391044114912551359146215661669177418801
5273124155206257298319341038114312461349145315571660176418681972207812
2731341752162772983393610381144125013521456156013253841251662072582793
2103611381240134414501555165717611865142831041451862172983593810411147
1252135514571561166717701873197620782181228514283134185216267308339381
0431146125113541460156616691773187915283114155206227278309361039114412
4713511453155916611767187019742076218022842387249125942699271071521031
5417521625728835162113174255316347378409441047115112531357146015641671
1776188113263114165226287318369411047115112531357146115651669177418811
4293144195236297328359441049115512591362146515691673177618791984209121
9422972310124105251112611527119281242912930133311393214433146341503515
4361573716038167172123171721231742012263114165186247288349391046162113
1641952363013283134155196237288351421031241752462773083594010421147125
0135414591568167513263104145196247278359371041114412263104155206267348
3894210441149125613621467157416811784188819952010121105221081527311413

5166197218269301036114412471351145414273104145166197228259271030113412
4113481328312415522626731833936103911421248135014531555166017641870197
2207521782286239224942597261012710528109291113011331120321263312834132
3513536137371413814339148401534115642161431654417215273124165196227278
2993310381143124813531457156016641769187419772081218422902397241041621
2317420526632132931241852062673083393610431147125013531459156515283104
1351662072783294110501155125913661473152103154195236277318369401045114
9125313591463156816701776187919852089219222982310224104251092611427117
1428313417520625728833937104111451248132831041651862472683193810451521
0315419525630737142113174195226267331227313416523625728830934103711421
2491352145515601663132831341852362572883293910411144124913541458156514
2731342152763374113283144165206247308369411048122531041251862172382592
9103311401327316424531640742845950105511591266192123164255296387438501
2273124175196237278339391041114412461350145315581660176518691973207921
8612263114165226267338399421048115512273124175196237278299341037114112
4413481452155513283144175226277348399431046115112581421031641952362673
2838943104911521258136512211317423528635122631141652362572983393810401
1441247135114561560166217661871197620812188229123972410325107261122711
4281162912230129132831041451915273114135176197238269301034113912431349
1454156116210314419122631041751962373183994510471154125813621470157616
8017841889199415213322426530632737844950105411591263137014741577168017
8418881993152143244335426497548569611066117112761380148415891695179918
1021910620111211161428316422526630735840132103154215271721231842553263
9743849122731541952663073283693910451148125113561460156316671770187419
7720812185228923962410025105152731541752463073784495110541160126813701
4731575168117831886199020932195229923103241052510926112271152811729121
3012431128321303313334137351403614637151122739411516622731834940104411
4812511353145915651667177218771981208513253941452062473083894314273154
2152562873283793910431147125113561461152133164235266317398449501056115
8126413681472157416761783188819912095219722100231082411025118261202712
5281272913330136311411221031241952562873183593810421151125313591462156
8167317771881198520882194229723103241052510826114271192812413263124155
1862172783093310361142124513481451155516611766187019742076218122882391
2495251002610527110132631041252062273083393910431145124713531458156516
7017771881198616211319423527632737152931441952763173483794010441149125
3135914621570167717821889152731341852062472883193510391142124413471452
1329314419524631733835940104411471252132731141351661872182492710311135
1241132739415519626730834937103911421244135014551559166317661872197712
2731241852062673283894410461150125413591463156916741780188219892091219
7221042310824112251162611927124281282913030135311373214133143341493515

536160371653816939174401791225310415517623729833941104611501256135914 6
415681676178318871993209921102221052311124115251192612227125281301326 3
104155216267328389441046114912531358146415701677177918851989209121932 2
992310324105251082611127115281201226310415521625729835938104311461250 1
355146014283124185216267298359401045115012541358146415681670177418811 9
872089219522972310024106251092611427116281232912930131311383214233146 3
415035155361623716838171391754017941185421904319344199452024620647211 4
821649222502305123452239532445424912263114165186247278309341040114612 5
013521456156016641226311416518624731834937104211451251135314591563166 8
177218741978208521902292239812273124195226267308359401045114912551361 1
464156916731777122731441652062773383594113273124155196247288329351040 1
144124812263114165186237278319381040114612501356146315661668177318791 7
293134175216237298319351037114212471351145515581663177018751977208321 8
722922397241042511226117271192812714263104155206247281321031242052763 4
740843946105311561262136914731577168017841887199020942197221012310824 1
142512026127271292813329136301441421231642352663273884294710531226311 4
165186227258279301033113512411345144915521656175818621965206721702274 2
378248125872693279628103291113011431119321253312834135351383614037143 3
814939151401591226311416523628730834936103911431246134914551558166217 6
718711975208021822286238924932597261052711128115291173012131125321291 2
263114145216237268319391044115012581360146615691673177918811985208921 9
314211315417519625729834940104411481255135714631566167217761882198420 8
921912298231022410425108261122711614212317422527633735837944105111591 2
661368147215761681178318911229313419524628730832940104311451250135514 5
815611665152931141751962172682993610381142124513501452155716641766187 0
197612263104135216277328369391045112831412273941451862272683493710401 1
441428312417520623727122739413518622728832936122731241552062372582893 2
142103134195246277348419441047114912531621332042452963674084294410471 1
511521031341652016283144175236307328369391045162123154185221421031741 9
523627731837142931241552162573014210316419162123164195216247298329361 7
213318420522624727829932103614293164215236287308349381042114612481351 1
457122731641852462773383712263841151461872282615293144195226247278309 3
414263114145176231527310414518623132638412514617723826931103611411245 1
429312414517621152731141351762114293134171427394135176207278299351041 1
328312414520624727829933103713253124155186227278341226311414517620725 8
311327312414520625727829933162113184215251325311414518622122531141752 1
625729172123154185241325311415521625132931441651962172482893210381140 1
246134814501554122437412515618720823925102911341237134114293174235266 3
273483794110441148125013541528310416520624727830934103911431249132831 3
419525162931341952162572913293154205236267321326310415521627132731241 6

5216247278329361327310416519622727832936104311451249135319213192131921
3192131421031513283131721031514273104151427394121321115273941351816210
3134181325384135191521131441852262473212293114155201527312416520625728
8319371521031241751962519211319132103124185261328312420132931341913293
1441752314210316419522625727831937122631041352062812273114175226257298
3293814273114155196231521031341652215293134185206237298349381621231441
7521626731835939152931241551862072683213263114155231528314417520626152
1031541752015283114191729312416518626132831241551862072816210313418524
6307361327394165196247308341521031441852062517213321423527630734132638
4145196247301225374105136177208259321327394125156217248271527310414521
6287318371321131341752062573214273941251662172583117214318422529162133
1742513253841351862372915283124155186217258291329311415519622725828931
1035113914263941451662172382793010351139124113461729311413516621142831
1414519142731341752513273114175206271226310412515618722824930122638414
5166217271328313418521625732835943142931441652162573116152101224391621
3162131621312263941412243641013273134171521131514293171527394125181328
3114145186211328312416519625152831041451662216213315417523627732836941
1043114712531229311415520162931441852462873283814211316419523629162931
2418526630733162113194255316377408469491056115812631365146815701674177
7188019841921531942252818212316418521625728833152103154185236277321521
0313416524152831141451662172713273124185226281326384115166197218259311
4273104155186237268311228312417519622728122831241651862712283154195216
2372683112283134155176231721231641852362912273941251561771982712273154
2152362573112273124155176197281225384155186237308369401224310414520122
8312415517621727122731241552112283124185236257331225384115156207248279
3313273114135196247308349391528314419523626732132539413518622725827933
1328313418521624728834936104215293124165236277318349371041132831341952
5162931212243104135161327394141224374105141428313122531113293151225310
1427312414518152831241451812253114135161921231441714273114151327314152
8314122631241451812253104135161326384125156211721231815212318142931241
8132631041412243741252062473183393710411144124613511453155916621766186
9197320792183228823902494259912293114151421031713253841051862072483193
5103811401243134514491553165617601865122739415522628736841947132638410
5136157218249281031113512371341144315471651152739413515620723826929103
5114113293114165186217238279301032113412391342144615491654142638416519
6217268319361042114512501355146015661673152123174225306337388409431047
1154125613601463156516711773187819812085218922912395241022510526110271
1628118291223012531129162103141521031515283134165191224384115136167201
8212315132631141451813263134165186211327310413122731341913263941614263
1041514263104151427314419526122639413132731341914263104151426384141428

3124181528312142739412516621723827932192131628311142831141713273941452
0142101326384115156201427313419172103151521117210317162123174221327310
4165236267311621332042352663114293114185206237281429312415520142831141
4519622725828142113174195266317358401629314418526629732835142931241552
1626732837943142731041552116211317421526162113164225276307338359381721
0313418522142113154185216241421131441751962314273124161429315420523625
7291427311414519623132931441852362572883193614293144195226271427312416
1429315420523625729142831416211314419524627730833937104115210314416521
6237258299321721031241852313283144185216297351628313417522624727832162
1231842214273124161329314418523629734841142931542052362572914273104161
3293144195226247278349381426311415519621724142103164235291421031241652
2628734839943142931341752216211315142931542052362572914273941451915212
3164245276317361721031241852062372883093512283114155201521031642112283
1442152562912210312416520132931141651962573083293513253841451813283114
1652062614210317420522626132631141351813273124171229311415519122639412
5166211613291321014210152113171621231817212316423132831041717212318421
5276341621131714293154185251527312420142831341913210312417524142931141
5517620142831341912210313421142831341913210317162103124181428313419142
9315423142831341913293164185236311428313419122439412152831141351962714
2831341915273941752362572883093210351428313419152831141814283134191226
3104165186257278339351040114812541361146315691672177814283134191421031
4416519624727834142831341914293154205246311428313419162831241451862172
4827142831341914212319424532640142831341913273114155186261621131541952
1142831341914273114145191428313419152101428313419152103161428313419152
7394145191428313419162931241952162773183894114283134191421031541752362
6731834937142831341915212320142831341912263134165231428313419132931414
2831341918142831341915210317142831341915210314419142831341914293131428
3134191321031241814283134191228311416519622142831341916293134165226261
4283134191528311413519627132731413210315152101326311414142103131529314
1521131616213315420527162133154205271921715213122631212532312152731413 2
6312162113191429314420162133174195231228312415521162931614273104161427
1621231914273124181228312416519625132731241716212314419525122531014291
3281429162111228311417142101321131618214142101621213253121426313162123
1441952512263111325310122639413142931241552116211314419525162123164205
2462973583994718215122431141918211316419524122631041752516283114135171
7211317172113134191721031513283114161321031542117293141521231441752513
2831341852162473212532941652362572782993514293154215266321729315152123
1441752512263134185236291321012253121721231642215213315420522625733122
6312417522628172123164211521131741952263013210315421528142831141713273
1341914283104165201328312122631112263941715273941716212316422172123164

2215283124191521031614283124165206227281527311414520182103144201426394
1151914210314418142639411516622152739414520142639411519626142631016210
1225384105161428311417132638410518624727833939122531341952362873183493
6103911431227313420527630733836940122639417523625728832934103911421247
1351145315561658176318661970207421772281238324892592269627100281032910
7301103111232116331213412435130361341225313419523627731837142931141752
2628730835938104211461252152103164235266317398429481053115712641367147
0157413263841451962673283994410471150125713591463156912263104135176217
2683393510421145125013531457156016651769132639415517621725829934104211
4812501355145915611665176718701975208021852289239324952510026106271082
8111291183012231125321293313534140351433614937153122438412516620724831
9331036113912431326314423527632735841950105611611265136914711576168317
8918931996209821103221091327316426531636743848950105511581264137014781
5821686179118951997201002110522108231142412025122261262713218211314418
5236267328379431050115712631370147315761679178318881993209916283124165
2062372583093510411146124813541458156413263114165186227288329361039114
2124413481451155716631768187419762079218322882393249725103261082711228
1181628312416521624729831935103811441249135512210319426530634738843946
1050115312571621131642152662873684494710511154125913651471157616821789
1894199920105162103164225256297348409451051115312601368147215751679178
5189019922096211012210623108241122511726120271262813029134301403114232
1463315234155351613616737170381743918016293144165206247298339391045114
9125413591464156916721775187919842086219022952397241022510812263841351
5620723825931103411361240134214451547165317551858196120652169152103134
1552062372983293710421144124713491454155815211318423529632736839943104
5115012561329314422529633739847952105711631270137614791582168617921897
1910320107211092211423119241252512726131271342813814210314422528630737
8439501055115912641368147412273104165226287338369401047115412601362146
6157116771781188619942010221104221112311624119251252613027134281372914
2301443115132157331623416735171361763718138185391911226311416521625731
8379421047114912541359146215661671177318781981208621902294142831141752
0626729832934103711411244134914521556166117631867197220742179228512253
9412516622724829935103811421247135114591561166517691873152123164185246
2672883593710441147125313591464157116761778188319882091219522992310316
2133154215236297328379431047114912521354146015641670177218771980208621
9013253841351862672883193310391142124413491455155916651768187519802086
2190229423982410725111261151227313417523628731834939104111461249135514
5915641673177718811329313418525628733838942104711521255135714601564132
5374115156177198279301032113712391343144515491654175718591965206821722
2752377248325862690279228952998301023110532107331113411435116361213712

3381293913240137411404214743149441534515646159471631325384135176197258
2793310361140124313511457156516711777188119862090219322952399241012510
5261122711428120291243013031134321373314134146351503615737161381671226
3114165196267298369421050115612621369147415811687179118951999201051421
0312419524629734838944104811511255135914631567167417821226311416519622
7258319331040114712511355145815621665177118781982208621912296231002410
6251112611627121281262912930135311391226311416519625731837940104311491
2531356145915621667177018721977208021842288239217293154185216277328359
3710431147125113561463156916741780188719912097211022210623109241151325
3841351862272582993410361138124213451449155616591764186719731327310415
5206247278299341040162133164215236277318359391043122631041752062772983
3937104211471252135414581564132931341852562773083693910461150125313561
4591563166517731621131842552863273784094710501152125513621464157212273
1341752362873083713273134165216237278309341225394155206267318379391042
1146125213551460156616681775187719842086219322982310124103251092611627
1222812629129301363114032144331463415135158361643716838171391754017941
1844218743192441954519946202472044820749211502135122113263841051862172
3828931103711431226310415520622725831933103911431248135014551557166317
6818721979208521872291239724101251032610627108281152911930121311273213
2331383414435151361563716438172391744017841185152731041451962573183393
9104311451251135514601328313417523626730834937104111451251122739413515
6237288319371042114612521360132731141451962372683293610381141124413481
4521556166017641867196920732178228123832486259012263104135186207238289
3210391143124913571466157016761778188019842088219122992310324106251112
6117271222812529130301333114032146331503415235156361603716617216321427
5296357438499531055115912661373147715831688179018981621231742552763273
7839943104811511256135814641568167117761883198620922195229823101241062
5109261122711428118291243012631134162113134185246287328359441049115512
6313661470157216781781188619912095219822102231061325384135196257338389
4310451148125413571463156916731776188019842088219222952310124109251142
6118271222812913293114175216257318339411045115112561363146515671673152
8312414520622726829934103711391245122113164195216247298319331037114012
4513501454156016651772187519782083218622882394142931141652162673083593
9104311471421131341652362773183493710401144124713501454155816601768142
1231741952463073483894210501226311416521625731834936104011431249135314
5515591663176618721329315419523630736841943105112273124175236287338389
4010481228311417520623729834940104211461250135414611567167217771884122
6310412515618720824929103711391245135112263104125156187208259311037114
3125013561462156916741778188119871226312418524626733839943104511471249
1357146315661672177812263114165186247288349401045115012571360146515681

6731775187919852091219722992310524110251142611627120281252913030132311
3732144331503415535160361673717138175391784018441187421934319644201452
0546208472104821449220122931541852363073584194910551160126213681228315
4185256287358399441049115212581362122639413517619726832935103711421248
1351145515591663176918711974207821832286239024952510126108271162812029
1233012931134321383314134144351513615637164381663916940173411754217743
1814418345186461904719448200492055021051215522211426312416521626731834
9381041114412501356132639413517621724827931103511411246134914531556166
0176218671973132739413518622727833937104111461250135514591563122831241
4519621729831936103911461248135414561562166917741876198020832191142103
1441652162873083594310451151125813611468157016761779188519912093211011
2263114165196247328399481052115612641367147515811684179118941910020102
2110422106231092411225114261192712228128291303013631139321433314834150
3515736160371683817439177401834118742194432014420345209462174721948225
4922950232512365224053245542505525456258132831141352062372983694110461
1501257136014621568167417778188219862088219412263114145186267338369381 0
4011451250135414571562166517701873197820852188229323992410625109261152
7122281252913130133311383214533152341553515936161371653816939173122631
1416518624728831935104011421247134914551558166117671869197420801326384
1051862172382893110371143122631141651862472682893413273104145166227248
2693212263941452162372883193610411146132631041551762072282993210381141
1245134914541558166317671871197720822184228823932410113263104135176197
2282993210361140124513501453155616591761186819742079218322852389249325
9726101271062811429119301223112532129132731041551862272783093410371144
1249135114551560166816213316420528633736840943104611541226310415521625
7298359381043114612491352146012263114165186237268319371039114312471621
1317425527631735843950105411571260136214661572142731342052462873083594
2104811521254135814611564166917751521231541752162572983394112263114165
2162673083393610401143124713561458156416671771187419832086219122952310
0241052510726110271172812229127301333113832143331463415135158361641427
3941151962272482993410401146125212263941151862372783193610411148125513
6114681571167617781881198420882192162103134195226257318371326310415517
6217268289331039132831342052262473183594110451151125413571462156716721
7771881198620882192229723105122438413518620725829935103811401243134814
5415591661176518711321031441752162773283694512243941351862172583293410
3911421246135114591566166917731879122631141651962372983193410401146124
9135214561561166617701873197620782182228814283144225246297368389411045
1152125613611466157214283134155196257308369411043114512481352145515571
6621765187219772080218813273164215256287338379421046114912551360146415
6616751782162133164215236277318359381040114512511328313415520624727833

936103811441421031542252563173584194610491154126013621466157116731778 1
885199120952198221041427310416522625729833937104311501255135814661429 3
164195216237298329341038114212451347145115531657176218701227313415521 6
247268299331037114012461350145515631669177318821984209016293144175246 3
073583994410481153126013691473158216841790122631141651862373083394010 4
211451249135214561559166517671875172931141852062372582993410391144124 6
135014561559166217661871197520772185132731141551862172683193510381144 1
427394115196227248299311036113912441347145015521655175912263114165206 2
572983493710431147132113174225286337388439491426384165226277298349371 0
431148125213561462132831141652162372683293610411145124913531327311417 5
226307368409471053115912661370147515781682132831341551762372582893210 3
811401246134914541558166117651869162113174235276337388419471051132931 3
418521624731834938104311481253135714601566167217761880198220872194221 0
023104241082511126116271221621131742452963473984594910531159122638413 5
166207248279311036113912431348145115541658172113184245276337388419471 0
531159142639412514618722829937122631141651862072783593910421150125313 5
814651572167517791883198714211319423528632735839162103124195266337408 4
495110541157125913631469157116791228312416520626729834937104211461250 1
429317423529122631141451962573283894410491155125913631465157216741780 1
883198820912193229823104241092511326117271212812429128301323113632139 3
314234146351483615237155381593916340166411694217314283134215276297368 4
294910521155125913661473157616801784188619882091219522100231062411125 1
142611727121281252912730132162831141351862172682993310361140124213461 4
501554165617591863196620692173172113134195216277298359411046115012571 3
591463156916761781188319872092219522982310224106251082611027114281181 3
263104155206237268309341037114312481350145417293124175196247278349411 0
461149125113561459156616711774187819832086219122942310024106251132611 8
271242812729134301403114232146152731041251661972282693010361139124313 4
714491553165717611864196620712176228023832486259015273114145166197238 2
893710421147125513601464152931441852362873213273104155206267308329361 0
431148125313551459156316681772152931441852262873383894310491157125913 6
614691574167717811886199120962110122105231092411125116261232712928133 2
913730139311433214733149341531428311414520623728833938104311481255135 7
146115641666176918731976208021822286238924922596122631141351761972282 6
928103311381244134914531557122539412516623728834937104311491326311414 5
176237288329361038114412481352145515591664176618691973207821802284238 6
249125942697271022810829114122731041451762072783093610401143124713491 4
541560166517731882198520882192132638413515620726830934104011461252135 8
146415701675178212263114165196257328369421047115512601366147015741676 1
781188519872092219922101231071226311416518625730834939104111451251122 6

3114165216247288329371040114412461350145415611668177218761978208321902
2932395249925103261082711428119291223012731131321343314034149351553615
9371633816639171401764117942182431854418745190461941226311415521631736
8419481052115612621327311416521626729835938104311461251135314591565167
4177718821987208921932297231012410625111261132712114283124175226277328
3493810401143124513491453155516601765186719722077218222842389249715293
1441852362873483793910441149125513591464156916711779152931341852162472
6829933142731241952663073483894110471153142731041652162372682893110371
1391244134914541556165917611865122631141652162573083593810421428314420
5276357408489551058116212681621131642052462873413283124175206257288321
4283104155196237278309351041114412491353152831041551962573083293510391
1411244134614501553165517591863162831141551762172382692810331139182143
1942553112273124165226257308349381621131341952162472883293813273941251
5621727122639412517622728830937104211441248135314591628310416518622725
8309341036114012273941151761972382893310411144124814273124145196237268
3014283114165216267328349401043114912521355145815621326310412515618724
8269291035113712451348145015541326310416518622726828932103411371242142
8312415519623726830934103711411247122438414518621726834942104711491255
1224384135156207258311721031341852062473012263114145186237268309341428
3124165206257308349371041114512471352122831041652062372682893310361140
1248135014541558122431041451662172783593710391141124513491228310414519
6237268329361040112731041612253104135191325310413518142831141516213162
1312253741151461671882392610301139132631414263104171326384125161428313
1429313417132639413122537410515132731141752062673315283151321031341852
3628730836944105013210142931341551862172716213172131227310415517621727
1821131912243114165216261528311417142931441752312253121329312415518622
7281521031441752062615210313416524152731241551862313273941551962372682
9933103914210316422526628733839122931241652062616214323122538414122539
4125181225384115171225310415520623726833935103811411247142831241612253
1041752562773283813273941251862172783093815212318421524629734837943104
6115215283124165226317338369381044152831041451812283124155176217271227
3124155211529312415518623728830934103711421426312416518621725832935104
0172103154175251327312417525633736841946105311561262132538411519161228
1328310416142831242014283154231427314418522627152103134175246287338379
4210461150125513601463156813263941151614293124165266341529313419523628
1326394145216237301721031542152462914273941451862315210317422525630162
1031716212315420525162931642152462773283794315211313417521626142631041
5521626730836942132731041452013253941412253101621114211316419525627733
8401426310415521626728833935103811441326384141227311418122639414132631
3142912283121224394145196247311326384125176231326394135201426311416520

1327310412517122731041813273104161325311132731141513253941351862072613
2731141651862415273941713273124155231629316122831141713273941251562114
2103171429311415521142931242014273131428311417132731241618211313417122
6384151421231842252462773083694110441147152931414293141521013273134191
5211317132731141618211317419524626730835940172121721131613253104155176
2213273101521014263104151429122931241713263104151427312417132101527310
4165221628315417522162141621231642116283104145186241226310413518162831
5421132631341551762172883393610421328312415521623730162831742352816283
1742316283114175241527311417142931441852412283114175211527311415517621
7248281326313416522132731041752562873513253941351762072383115211318421
5276327368421329311418523628731834940152123184215246297338389441329313
4165206227268309321035113712431347145113253841151461872212283124185251
4273941552262572883293410371141124413471449155316551759186513253841251
6620726132831341652114283144195226277348369421050115612621371147912253
1141612253104135196227281421231641952262714210315421172133184235266307
3583894412253741251562013283141327310413517620726831142931341752162673
1152113134185231228312419525152831141652117211315420132638412517624726
8289321036114112441349162103151628312418521625728831936103911431248135
3132831341651962773083513211317424528631736839941104411481254142739411
5146177228249321037132531041552062372883193610411226384155196227268319
4010491152125513631466157112263941251762072282693210351140124513491427
3124175196227268319351429311415517621726829933142731141752062472814283
1041251662172682993310371427311413518624729831935104211461529312417519
6217258299331429315423527631736841142731141552062572883393710401142124
7135114263104135176207228279291033113612401344142731541952262572883393
7142831041251662072282793010351139142731241752162372683093410371141124
5134814521427315419527630734840945104914212318423527132531341652363273
5839172103134175196227258309351039132103134165216237278311427310413517
6227278339371041122631041351662072282612253741151461772082412253741351
5619722825928103011341240132831041452262572883293810411143124613501456
1560166413263104125186267288329371041114512243841351562172382792910321
1361429312416519623727132531041251662072482692910331136124013441527394
1552162573083393810431145124813521226312122731041514263104135181224384
1251862413283124165211227312414517621726830122436412516621152831141652
0626122831541752062372583193615283104165236277321521431842453063512273
1341916283114175221327312419524630735840132931441952462973283894110461
1511429315422526631142931141652062473183516211313416520626122531041351
6620723826931122539412516620722826931103611411247134914541557166217661
8711978208121832285239024942599261062710828112291143012031123321253313
0341343513836144371503815239157401634116542168431724417845185461874719

1481954920250204512085221153218542245522956235572425824659250602546125
7622636327064272652756628067283682876928970293712987230273311743157531
7763217732578329122631212271428162101621113273131521014273941614293124
1613211314418142731141615273114171521015273131226384121326394165211621
1132631014273101225384111225122539122631314263941251561912253841151616
2913283104131226394121521015293121328313418521627730835940104311471252
1357146415691674178018861991209621102221052311024115251202612627135281
4129146301483115432157331663417035174361783718238186391904019341197421
9943203442084521046214472174822149225502285123152233532365423855241562
4557250132916283121629313142931415210132631041251761972412253841251713
2831412263141221012273941215273941151813253941614283104181428312417132
8314132931442213263841552115283151325310122638412516618722826931132537
4135191326311132631013293124145186227248279331037114412263104171327313
4201521231541952413293124145186231226313418523142831141814273121429142
9315142113164195241325381326311418142113164195226261229312416521132731
4122638413518620122731141714210315420122439414132531041716212142931413
2731215210315132539412517132631041714263913263121621131713263114171326
3941214273121225384125171426311122638413152123144185211325394115146181
2253941351714273144195261427312415517621727122538415518620725827930103
4114013283154175216267328399441049132931541852362773213293174225296351
2293154175206237298351428311415519627733152113184225256287351721331641
9525631737142103144185206247288329351040132739413517622729162103124155
2062673083616293144175231621031342052262673083493710441621131742252863
4152103154175206267308371628311417523162103144175236301428312419152103
1542152463073684194714283104145196247291621031441752462973483693910451
1491254135912253841151561972483013263114155216271529312415518622726828
9331528311415521132831341552062472912273124195256317358401321031642152
5629734841947122531041351662072382693113293124145186227248289311036114
1142631041251762672983293710421921319213192131921319213142631014210315
1421031414210314142103141429313132631014291328310413518132831613273141
2283151428317132831613293114145181729313417132631116210318132831613273
1241715212162103154215306337381328316172103124165186241721031241451862
1122639413515620142831241814293121328316132638414132731041813283161326
3114185261326394125181328316122931141552016293151421131641952362913273
1141913283161421131642052613283161427310416518624132831614283124181221
0122731314263941613210122531213273124171721318214162113161621131616212
3171621131542016211316172931742052515273104161521112253104135191327394
1452062615211316422152113164211226310416172111621031612283124165196241
3283141429142931141652116213318132631341816293154185231229314152121621
2152101228312416519624142639413518122103164195256317338399421047132731

2421524626733836938104111431249135314581328312415518622725828932132113
1642152462873383593910431148125413561461156416691921319213192131921319
2131327314162131429314172121621031842052714273124161528311414519152731
1416142631412263104141227310416522625142731241551813253741051261616293
1241715210316142812263101429142731141715293134195261224374125156191528
3124145206251328314152103154201629312417142831342017213152831714283144
2013283154175201521131441714263914210316132931141714263941351662072582
7932132831041617293154195251326384141326313142731141351915283144165226
2572983193613281226312132831241612263124181325311142631013273104141426
3104141327142731113273121326310122531016211152914281321031241712243741
1122631041512283121227313122538413132639411515162133164211328313416122
7312415172113141521017212162101621015283171428314132631141351714291721
2132731141651962414293141521215210315419162101527313419132831214210316
1421031414210314142103141421031414210314142123161326310142931314210314
1421031414293141427394141327313162111629313162931313273114151225384105
1561914263101329315142731341913253841351813253941451814210122437410518
1326310412518132931241451862272483213293151421131714210314142103151427
3941351812263134155186227281428313418122438410513617132531141713283151
5211162831412293124161329312416172103151325394161328310413518122439411
5146191325394125166207268319341321115283154185236301421031241852413263
1141552214281327312415523132539415518622132831041414291328316152113154
2013273941251461872213273114175206267331325384115176197248301327394135
1862612263114171226394135176197251325394165196241328310415142915213122
9312416132103161426312416522152731141615283114145226321628313142831141
9122731341852062573083614283114191421131441952663114293144165216271329
3144201621131641852463013210316122531141351862413293141521031414293121
5273114161521031412263134165206237268309371426310415521142931441916293
1341914263104155196231428313152101326384125181325374951313253841151361
8132731316293121629313162103124151326384141427312418520626122731241815
2931241716211315132831341952763073383694117210316162131521113283151528
3141224394131326384145236271328312415517623728834940142639417523628731
8339361040122731242052963173383994310471151125513591465122731241852662
9733837939104411511254135914651225384131325394141329315122731314273111
2263104161521012273124145191527313417122438412122531017214132831041615
2111224374105156191621331541813253841214263941452213263104151327314132
5374105136171721031516293141327310132531114210314152914212318423132639
4151427311152831215293151529313162931313253841251561972482793116212142
6310416152731118214142831341912243841251561912263841214273104141228314
4201721031512253841351913210315122631041714293141521014283131426394131
3263104135156191226394135156181429314162111225310122631041514273121427

3131621216212162121421031341852162514210313417142103134171429312416142
8311415132831413253941316210316422122731312243941516152816212162931212
2437410513616132538411514618132631214263104155176231521031542052616283
1515293114171721131713283114145181225314142113144165226257318369411044
1149142739415519623727832935104013253741351913293124165231721331742016
2113144171326394145176201427313416519142931441952463173583794314263114
1552116283124175201327312415122731242015283114165211628313162101226310
4151426310415152831113283154175201527394135176201429313417152739412515
1327394141621217214132831413283104161226122739412514619152731212283104
1512253741251762473083794515210317162113184205256321528313162121629314
1721031516293151721031516293141427312172133201226384131326384131428315
1227313142731141551962373016213318423527633739132731316293131721031413
2631141812273111426310415142111721314263941614211172131327310414517621
1227312132631241918212316122831141714273121821414283124171327311413517
6211329312415521152916162931212263941251517210312414520152103134181327
3124161529313152103151421031341714210313417142931241613273941316293131
4283121628312132531041412243941314283131427312162141429142931513283154
1752162612283124181328313419527631734837942132831141714283134211428311
4155181321031241514283141427313132103124145181325312417122531112253841
4152931314273101527310413518122531215273104151327310414517132638412518
6261521031515210142121325394145201321031241652113283104145191429312414
5176201421231842252663073283493714263941351812253104155176207268359411
0441150125614263104145186231427311132731241752362672883193310391145132
8311418522628730835940104711531259136514691572167812273124145176237328
3493710411147125113561458156016661227312418526631733836942162931341752
0624726831938104411481252135514591563166817711874197720802183132831342
0162113181421131341615293161326310413152931442052563213273124155196221
3273124155186211921319213192131527311152731112293134181427310415142731
2417142831141551761972514263841412263941451917122913283104171327312419
5261521131742414263104171325394141426394161429132831041313281621313273
1413263121225384141325311414520152111229312418122831341552116122931241
5132831341952763473984695213263104141427311416142631041513293114171328
3104161327314142831141814293141225310132538411514620725132731241451915
2103144201621231441816210315162101721131742318210313418142103124155216
2372615293134191428311417132639413520142111527394155201527313172141321
0316132731212273941512243841612263841413273134155191326310412517132731
3415519132831141413263941351915210316418521625731142831141952262573013
2639412515122639413516619152931241517212317122731041251512243841114291
2253841213263841251512263941412243649132539412515132531341552013253941
2515122639414132813281224311417142931141552012273 13”

6.2.2 Other codes as facts on the Basmala verse

In the subchapters of this chapter, I will present the codes that I found myself but I could not see strong rule based patterns and thus present them as facts in this chapter.

Based on the number of words of Basmala and number of its letters, I will present reproducible codes just over the special Basmala verse. In Chapter 6.2.2.2 and Chapter 6.2.2.1, I will test the total number of words of Basmala. There are two numbers with respect to the sum of the number of all the 4 words of Basmala, which are 2235 and 2683. 2235 is for the sum of the number of the 4 words on the 6236 numbered verses of Quran and 2683 is for the numbered and unnumbered 6348 verses together in the full text of Quran. Considering the pairing coding pattern, we combine numbers of both category by concatenating. Since there are only two numbers in this case, the only combinations of pairings are 22352683 and 26832235. So, in total, there are four numbers to be tested (2235, 2683, 22352683, 26832235). The reason I take the sum of the numbers of the 4 words of Basmala is because I am testing evidences on Basmala that consists of the 4 words. Considering individual words from the 4 words of Basmala is not that meaningful because what makes Basmala is the combination of the 4 words together. Also the 4 words of Basmala do not only appear in the Basmala verse but also in the other verses independently from each other. This approach would show the integrity and harmony of Basmala within the full text of Quran.

6.2.2.1 Fact on Basmala words with pairing

22352683

The total number of the words of Basmala in the numbered verses of Quran is 2235 and in the unnumbered and numbered verses (whole Quran) is 2683 as counted in Chapter 6.2. There are two concatenation combinations of these numbers as discussed in Chapter 6.2, one of which is 22352683. This number, 22352683, that combines the total frequencies of the words of the Basmala in both types of the text of Quran, is multiple of 19 as shown below:

```
as.numeric(as.bigz(22352683) %% 19)

## [1] 0
```

Regarding the proof, I already generated these two numbers from Table 6.1 in the previous chapter, Chapter 6.2. One can visit and reproduce these numbers if wished.

6.2.2.2 Fact on Basmala words with digit sum

2683

The sum number of all the words of Basmala is 2683 and the digit sum of this number is exactly equal to 19. This number represents the total number of all the 4 words in the whole Quran, including numbered and unnumbered verses. Regarding the proof, I already generated this number 2683 from Table 6.1 in the previous chapter, Chapter 6.2. One can visit and reproduce this number if wished.

6.2.3 Fact on individual Basmala words in the full text of Quran

$$32153453411522651571 46$$

When we concatenate all the frequencies of each words of Basmala in numbered verses and also all the verses of Quran, we get this 20 digit length number. You can manually perform it yourself from the Basmala table given above, where you need to concatenate the 4 numbers of the column *count* and the other 4 numbers of the *countW*. In this **fact**, we observe that the digit sum of this large number is multiple of 19. Therefore the order of numbers does not matter. The digit sum of this large number is exactly 76, which is 19x4. This is even more interesting as Basmala verse has 4 words and 19 letters and this coding decomposes as 19x4. We observed that all the words of the special verse Basmala not only in harmony together but also in harmony with a single Basmala that has 19 letters and 4 words. Here is the proof for the digit sum of this large number.

```
tmp1 <- paste0(BasmalaTable$count, collapse = "")
tmp2 <- paste0(BasmalaTable$countW, collapse = "")
tmp <- paste0(tmp1,tmp2)
digitsum(tmp)

## [1] 76
```

6.2.3.1 Facts on individual Basmala words

As we have studied so far, there are 4 words in Basmala. I also looked at its words individually to see if they have meaningful relation to 19 system and I observed this code.

Before starting explaining this **fact**, let me give this information first. Out of those 4 words, Allah and Al-Rahman can be used uniquely for God as names and can be used interchangeably as stated in the following verse. The verse 17:110, which specifically mentions the other name of God, Al-Rahman (The Most Compassionate/The All-Merciful), along with Allah word, which suggests this conclusion.

> "Say to them (O Prophet!):"Call upon Him as Allah or call upon Him as al-Rahman; call Him by whichever name you will, all His names are beautiful. ...", (17:110), Quran.

So, considering this verse, we might expect a similar coding pattern between Allah and Al-Rahman but not with others.

Although there are some disputes, the word Raheem in the Al-Raheem of the Basmala verse is considered permissible to be used for humans as well. I am not an expert on this topic but aware of this dispute. Feel free to do your own research on this topic if you wish. The last word “Bism” is already not a name of God and not considered in these trials.

Back to the main point, in this code I will present the identical 19 based coding pattern that we observe on the two special words of Basmala, Allah and Al-Rahman. In this pattern, for each word, I concatenate their total word counts of these words and their number of letters. The digit sum of each of these resulting numbers are exactly 19. The rationale behind this approach is that, the number of letters in a word keeps a unique additional information for the word of interest. Therefore, testing a word count along with its number or letters might also be a meaningful approach. Here are the numbers for each word.

The word Allah has been used in the Basmala verse in this form

الله

for exactly 2265 times and it has 4 letters. We first concatenate the word count and the number of letters of that word and get the number to be tested as follows:

For the word, Allah, the digit sum of this representation number is exactly 19:

2+2+6+5+4 = 19.

If this was a single observation, I might have not considered this observation as much interesting. However, the second exclusive word of the Basmala verse, Al-Rahman (الرحمن), has also the exact same coding pattern, which suggests that it might be a common pattern of a code system.The word, Al-Rahman, has been used 157 times and it has 6 letters, which yields the number to be tested as 1576. Then we have the digit sum of it again as exactly 19.

1576 = 1+5+6+7 = 19.

Since these two words are exclusive names for God only, it appears to be meaningful to witness such a common pattern.

I will still **not** add these codes into the global counters of the evidences of this book that are used for the global probability of the 19 based system presented in this book. However, let’s calculate the probability of this particular evidence alone. For each names, we applied two tests. Therefore, overall, we have 2 successes out of 4 tests, considering the two text types, which results the following probability:

```
tmp <-binom.test(2, 4, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
cat(paste("The probability of 2 success out of
            4 tests (with p=1/19) is:", tmp))

## The probability of 2 success out of
##             4 tests (with p=1/19) is: 1.55e-02
```

6.2.3.2 Known codes on Basmala letters

Basmala verse itself alone is apparently aligned with the verse on the 19 that is "74:30. Over it is Nineteen". I presented the number of letters of each of the 4 words of Basmala in the fourth column (column name "u.lengths") of Table 6.1 in Chapter 6.2. As it can be counted manually from the table, the total number of letters of Basmala is 19 and thus Basmala alone has a strong relation to the 19 based coding system of the text of Quran. This also means that the total number of letters of all the 2683 Basmala words is also multiple of 19 since there ar 114 total Basmala verses in Quran.

This fact was known from the beginning of the revelation of Quran and there is no need to reference it. However, it is worth mentioning that along with the number of chapters, 114, and the number of letters of Basmala, it might be left so apparent as clues of the 19 based coding system so that Muslims can imagine researching on this direction and reveal the 19 based coding system of the text of Quran.

6.2.3.3 Known codes on the number of Basmala verses

There are in total 114 Basmala verses in Quran and it is multiple of 19. This may be considered as self-evident fact by Muslims but it is not easy to test manually if you are not keep reading Quran in Arabic. Because, there are 113 Basmalas at the beginning of each chapter but there is no Basmala at the beginning of Chapter 9. So, where is the last Basmala to get the number 114? As an ordinary Muslim, I was not even aware of this situation until I was investigating on number 19. While reading on this topic, I learned that there is one other Basmala within Chapter 27, verse 30. But, Chapter 27 consists of 93 verses and it is not that easy to find that Basmala verse within it as a slow reader in Arabic manually. Further, we have to check that there is no other Basmala verse as well in other chapters of the whole Quran. So, this is not easily testable information manually by someone who is not a good Arabic reader who does not frequently reads Quran in Arabic. Therefore, in the following I provide the reproducible proof of this fact that there are, in total, 114 Basmala verses in Quran, which is multiple of 19. In Chapter 3.1, I had assigned the special Basmala verse into R programming object '*Basmala*'. I will search this text in the R object *quran* that keeps the text of whole Quran as follows:

```
#See verse 1 and 8 in the head of quran table for Basmala.
quran[1:9,]

##    VerseI chapter verse
text
##     <num>   <num> <num>
<char>
## 1:       1        1      1                                    بسم الله الرحمن الرحيم
الحمد لله رب العالمين                                    2      1        2       :2 ##
الرحمن                                                   3      1        3       :3 ##
الرحيم
مالك يوم                                                 4      1        4       :4 ##
الدين
إياك نعبد وإياك نستعين                                  5      1        5       :5 ##
اهدنا الصراط المستقيم                                    6      1        6       :6 ##
صراط الذين أنعمت عليهم غير المغضوب عليهم ولا الضالين 7      1        7       :7 ##
بسم الله الرحمن الرحيم الم                               1      2        8       :8 ##
ذلك الكتاب لا ريب فيه هدى للمتقين                       2      2        9       :9 ##

#Get the indexes of Basmalas in each verse.
i<- grep(Basmala, quran$text)
# See the length of indexes of Basmalas in the table.
length(i)

## [1] 114
```

As we witnessed, there are really only 114 Basmala verses in whole Quran. This was a well known fact but here, a reproducible computational test to prove this fact is provided to the literature.

6.3 Overall probability of all the evidences so far

Below I will calculate the probability of all the 19 based evidences so far in this book using the global counters I have been counting.The below calculations do not include any iron related evidences presented in Chapter 6.1. If we also consider also the iron related evidences, the probability would be around million times less probable that the results approximately calculated.

```
tmp <-binom.test(global_success_nums,
                 global_tested_nums, p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
```

```
print(paste("The probability of", global_success_nums,
            "success out of", global_tested_nums ,
            "(with p=1/19) is:", tmp))

## [1] "The probability of 42 success out of 89 (with p=1/19) is:
7.47e-30"
```

Again, If some cautious people think that we should have used more tests, although we tried **all** of them regarding the rules, I will not even look at the possible further successes in that case and keep the success number same but double the number of trials and see what would then be the overall probability so far. This should calm down those skeptical people.

```
tmp <-binom.test(global_success_nums,
                 global_tested_nums*2,
                 p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
cat(paste("The probability of all the ", global_success_nums,
          "success out of all the", global_tested_nums*2,
          " tests (with p=1/19) is:", tmp))

## The probability of all the  42 success out of all the 178  tests
(with p=1/19) is: 1.85e-16
```

If still not convinced, for extremely cautious people, let's also increase the trials by 4 fold and keep the successes the same!

```
tmp <-binom.test(global_success_nums,
                 global_tested_nums*4,
                 p = (1/19),
                 alternative = c("greater"))
tmp <- formatC(tmp$p.value, format = "e", digits = 2)
cat(paste("The probability of all the ", global_success_nums,
          "success out of all the", global_tested_nums*4,
          " tests (with p=1/19) is:", tmp))

## The probability of all the  42 success out of all the 356  tests
(with p=1/19) is: 1.15e-06
```

6.4 Fact: The unique numbers

This code shows that the number of all the unique words and their letters used in Quran has an interesting 19 based code in it. As a reminder, these unique words refer to the

written version of the words without any *haraka* marks, 'rasm' in Arabic, and therefore it does not mean unique number of words when it is read. Because the text is written without the *haraka* marks and the computer can only count the written version of the text.

$$u, U$$

$$14870 - 80068$$

In Chapter 3.1.5, I provided reproducible open source codes that allow easily to reproduce and generate the 7 main descriptive numbers of the text of Quran and also provided the two unique numbers that are distilled from all the used words of Quran. Those two numbers are unique number of words (denoted by **u**) and also the number of letters of the unique words (denoted by **U**) of Quran. In total, all the 9 different descriptive numbers about the text of Quran can be reproduced in Chapter 3.1.5 from the text of Quran. The unique numbers **u** and **U** are not independent categories of the text of Quran but they are derived from all the used words and letters in Quran. In a sense, they are offspring of the words and letters categories, respectively, as they are dependent of the main descriptive numbers of the text of Quran. Thus, they are treated as a separate category. These unique numbers are also important and that must be considered because it reflects the richness of the word set used in the book of God. I expected them to be coded under the 19 based coding system of the text of Quran and also designed together with all the 7 main descriptive numbers of the text of Quran and thus developed hypothesis and tested them as such.

Regarding the coding rule, I concatenate them in the natural order as well, which is first words and then the letters. This is the most basic universal rule I keep using while concatenating numbers, which is "the concatenation of the natural numbers in the natural order". Both types of the text of Quran, with unnumbered verses and with only numbered verses, has the same number of unique words, as the unnumbered Basmala verses are just repetitions of the numbered Basmala (chapter 1, verse 1). However, this is just a coincidence and this did not have to be so. Because, for example, one of unnumbered verses could be different and there is no reason why it is not so. For example, there is no numbered or unnumbered Basmala verse in the beginning of the Chapter 9 and this shows there is no standard in that respect. Therefore, the same concatenated number to be tested, which is **uU** for both text types of Quran. In summary, in this code, I will show that the unique number of words (14870) and their number of letters (80068) together, which is 1487080068, have an interesting 19 based code as follows:

```
suppressWarnings(require(gmp))
tmp <- paste0(u,U, collapse = '')
tmp

## [1] "1487080068"
```

```r
cat("The mod 19 of the unique numbers combination is  ",
    as.numeric(as.bigz(tmp) %% 19))

## The mod 19 of the unique numbers combination is   0

cat("The precise result of the division is found as follows:")

## The precise result of the division is found as follows:

cat(as.character(div.bigz(tmp, 19)))

## 78267372

cat("The mod 114 of it is also 0:  ",
    as.numeric(as.bigz(tmp) %% 114))

## The mod 114 of it is also 0:   0
```

There is only one combination of the unique numbers according to the general rules as described in Chapter 3.2 and I showed that both of the descriptive unique numbers can together be coded by a 19 based codeç

As I discussed in detail in Chapters 3.1.7, I argue that it is practically impossible to count the number of **unique words** manually by the people of that time that is 1387 years ago. Therefore, I conclude that this and any other code that includes unique descriptive numbers are beyond the ability of the people of that time to do.

For the reference, to the best of my knowledge, code 6.4 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out code 6.4 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

6.5 Totals

All the codes with **the sum coding pattern** is gathered under this main section. Considering the rules in Chapter 3.2.1 on the total of all the descriptive numbers at the three text levels, we get 6 different numbers to be tested overall. In the following, I will present the two codes out of those 6 potential coding numbers that come out of the set rules.

For the reference, to the best of my knowledge, the codes of this sections, code 6.5.1, and code 6.5.2 are first time presented to the literature in this book. In case if I find out that they had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

6.5.1 Fact: Totals of the main descriptive numbers

In this chapter we will see two different codes that show the the sums of the numbers of the chapters, verses, words and letters has a relation with 19 as well.

Let's remember the table with which we will compute, in chapter resolution, the sums of the numbers of the chapters, verses, words and letters.

```
x<- dfVCWL
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbers at chapters in Quran considerin
6348 verses.')
```

Table 6.3: Table head of the numbers at chapters in Quran considerin 6348 verses.

Chapter_index	Verse_sum	cWords	cLetters
1	7	29	143
2	287	6144	26268
3	201	3505	15004
4	177	3767	16351
5	121	2841	12225
6	166	3060	12745

Basically, sum of all the numbers in the above table is tested. In this code, the total number at **chapter** level text resolution, based on the all 6348 verses, observed to be multiple of 19 as shown in the following:

```
x<- dfVCWL
tmp <- sum(x)# sum all numbers at CHAPTER resolution
# The sum should be 423985
cat("The sum of all numbers
    at CHAPTER resolution is", tmp, ".")

## The sum of all numbers
##     at CHAPTER resolution is 423985 .

cat("The modulo of it by 19 is ")

## The modulo of it by 19 is
```

```r
as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0
```

We will see another interesting coding over the same chapter level numbers. I wanted to try another meaningful, but mathematically unrelated, hypothesis on the same table that includes all the numbers at the chapter resolution. Then, I hypothesized that if I count the multiple of 19 numbers in each column and get a new number by concatenating those 4 numbers, each represent the total count of multiple of 19 entries in its column, I end up with a meaningful but mathematically unrelated number than the totals of all the table itself. As you see in the proof below, this unrelated coding number of the table is also multiple of 19.

```r
# mod 19 of all the numbers at the chapter resolution
y <- dfVCWL %% 19
knitr::kable(head(y), booktabs = TRUE,
caption = 'Table head of the mod 19 of all the numbers at the chapter
resolution.')
```

Table 6.4: Table head of the mod 19 of all the numbers at the chapter resolution.

Chapter_index	Verse_sum	cWords	cLetters
1	7	10	10
2	2	7	10
3	11	9	13
4	6	5	11
5	7	10	8
6	14	1	15

```r
tmp <- paste0(
length(which(y$Chapter_index == 0)),
length(which(y$Verse_sum == 0)),
length(which(y$cWords == 0)),
length(which(y$cLetters == 0))
)

cat("Concatenation of each column's mod 19 counts is ", tmp)
```

```
## Concatenation of each column's mod 19 counts is  6783
```

```r
cat("The modulo of it by 19 is ", (as.numeric(tmp) %% 19) )
```

```
## The modulo of it by 19 is  0
```

This stands as a further supporting **fact** for the previous simple all sum code, where those same numbers used. As we observed, the table that keeps all the numbers at the chapter resolution has an additional and independent 19 based relation in it.

Interesting enough, just the opposite of this test is also successful in the second text type of Quran, which is only the numbered 6236 verses. In that text type, the counts of each of the columns, which are **not** multiple of 19, yields a number that is multiple 19. Here is the proof.

```r
# mod 19 of all the numbers at the chapter resolution
y <- dfVCwl %% 19
knitr::kable(head(y), booktabs = TRUE,
caption = 'Table head of the mod 19 of all the numbers at the chapter
resolution of the numbered verses.')
```

Table 6.5: Table head of the mod 19 of all the numbers at the chapter resolution of the numbered verses.

Chapter_index	Verse_sum	cwords	cletters
1	7	10	10
2	1	3	10
3	10	5	13
4	5	1	11
5	6	6	8
6	13	16	15

```r
tmp <- paste0(
  length(which(y$Chapter_index != 0)) ,
  length(which(y$Verse_sum != 0)),
  length(which(y$cWords != 0)),
  length(which(y$cLetters != 0))
)
```

```
cat("Concatenation of each column's NOT mod 19 counts is ", tmp)

## Concatenation of each column's NOT mod 19 counts is  10811000

cat("The modulo of it by 19 is ", (as.numeric(tmp) %% 19))

## The modulo of it by 19 is  0
```

Since I do not set general rules for the *facts*, I only present these just as the supporting facts to the code of this section. They are not counted in the probability calculations of the system.

6.5.2 Fact: Totals in verse resolution

This code of this **fact** answers a very simple question:

Is the total of all the 4 main descriptive numbers in the **verse** resolution level of the text also has relation to number 19 or not?

Let's remember the table with which we will compute, in verse resolution, the sums of the numbers of the chapters, verses, words and letters.

```
x<- nQuran
x$text <- NULL #removes this column
x$VerseI <- NULL #removes this column
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbered verses of Quran.')
```

Table 6.6: Table head of the numbered verses of Quran.

chapter	verse	vwords	vletters
1	1	4	19
1	2	4	18
1	3	2	12
1	4	3	12
1	5	4	19
1	6	3	19

Basically, sum of all the numbers in the above table is tested. In this fact, the total number at verse resolution, based on the numbered verses, observed to have 19 based relation as shown in the following where the digit sum of the big representation number is multiple of 19. Since it is digit sum, I considered this coding as a fact rather than code following the universal rules I set in the beginning.

```
tmp <- sum(x) # sum of all numbers at verse resolution
#951202
cat("The sum of all numbers
    at verse resolution is", tmp, ".")

## The sum of all numbers
##     at verse resolution is 951202 .

cat("The digit sum of it is ", digitsum(tmp))

## The digit sum of it is  19
```

6.5.3 Fact: Totals per chapter numbers

This coding answers this question:

Is the total of all the 4 main descriptive numbers **per chapter**, have also 19 based coding?

In this fact, we first get the representation numbers per chapter and then get the sum that represents the sum of numbers per chapters.

Let's remember the table with which we will compute, in chapter resolution, the sums of the numbers of the chapters, verses, words and letters.

```r
x<- dfVCWL # 6348 verse at chapter level data
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbers at chapters in Quran.')
```

Table 6.7: Table head of the numbers at chapters in Quran.

Chapter_index	Verse_sum	cWords	cLetters
1	7	29	143
2	287	6144	26268
3	201	3505	15004
4	177	3767	16351
5	121	2841	12225
6	166	3060	12745

Basically, the digit sum of the sum of all the numbers in the above table is tested. In this fact, the total numbers at **chapter** resolution, based on the all 6348 verses, observed to have 19 based relation as shown in the following:

```r
tmp <- paste0(dfVCWL$Chapter_index,dfVCWL$Verse_sum,
               dfVCWL$cWords, dfVCWL$cLetters)
head(tmp)

## [1] "1729143"       "2287614426268" "3201350515004" "4177376716351"
## [5] "5121284112225" "6166306012745"

tail(tmp)

## [1] "109731118" "11042399"  "111627100" "11251966"  "11362792"
"11472499"

tmp <- sum(as.numeric(tmp))
as.character(tmp)

## [1] "59738069267437"

digitsum(tmp)

## [1] 76

digitsum(tmp) %% 19
```

```
## [1] 0
```

6.5.4 Fact: Totals per verse numbers

This fact answers this question: Is the **total** of all the 4 main descriptive numbers **per verse**, have 19 based relation?

This fact is similar to the Fact 6.5.3 but shows there is this pattern exist also in the verse resolution. Again, we first get the representation numbers per verse and then get the sum that represents the sum of numbers per verse.

Let's remember the table with which we will compute, in verse resolution level, the sums of the numbers of the chapters, verses, words and letters.

```
x<- nQuran # 6236 numbered verses
x$text <- NULL #removes this column
x$VerseI <- NULL #removes this column
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbers at chapters in Quran.')
```

Table 6.8: Table head of the numbers at chapters in Quran.

chapter	verse	vwords	vletters
1	1	4	19
1	2	4	18
1	3	2	12
1	4	3	12
1	5	4	19
1	6	3	19

In this fact, the total numbers at **verse** resolution, based on the the representation number of each verses, observed to have 19 based relation as shown in the following:

```
tmp <- paste0(x$chapter, x$verse,
              x$vwords, x$vletters)
head(tmp)

## [1] "11419" "12418" "13212" "14312" "15419" "16319"

tail(tmp)
```

```
## [1] "1141414" "114228"  "114328"  "1144417" "1145520" "1146313"

tmp <- sum(as.numeric(tmp))
cat("The total number: ",tmp)

## The total number:  272053930879

as.integer(as.bigz(tmp) %% 19)

## [1] 0
```

In this code, we first concatenate the chapter index, verse index, word and letters contents and get the representation number ofr each verse. We then sum them all and get the final code.

When we consider this fact along with the code 6.5.1, then we can see that this fact further assures the conclusion of code 6.5.1 and suggests that there is 19 based design in the full text of Quran when we consider the sum of the descriptive numbers of the full text of it.

6.6 Facts on Chapters with multiple of 19 content

In this code, I tested whether there is any 19 based design in indexes of chapters of which its content, the words or letters, is multiple of 19.

You can test the numbers from these dynamic tables easily:

```
require(data.table, quietly = T)
require(DT, quietly = T)
datatable(dfVCWL,
          caption = 'Total numbers of each category in all 6348 verses
per chapter',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel', 'csv')
                         ), rownames= FALSE)

#
datatable(dfVCwl,
          caption = 'Total numbers of each category in the 6236
numbered verses per chapter',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip', buttons = c('excel', 'csv')
                         ), rownames= FALSE)
```

```r
#Get the indexes of chapter with multiple of 19
tmp <- dfVCWL$cWords #in 6348 verses
i1 <- which( (as.numeric(tmp) %% 19) == 0)
#10  21  41  76  87  95  96 112
tmp <- dfVCwl$cwords #in 6236 verses
i2 <- which( (as.numeric(tmp) %% 19) == 0)
#17  27  30  43  54  58  80 110
tmp <- dfVCWL$cLetters
i3 <- which( (as.numeric(tmp) %% 19) == 0)
#9  90 107
```

The way we get the coding number to be tested as follows: Firstly, from chapters of all the 6348 verse, I obtain the chapters whose number of words are multiple of 19. These 8 chapters have words with multiple of 19 in total:

"10, 21, 41, 76, 87, 95, 96, 112"

And, these 8 chapters have words with multiple of 19 in total from the 6236 numbered verses text type of Quran:

"17, 27, 30, 43, 54, 58, 80, 110"

And, these 3 chapters have letters with multiple of 19 in total from the both text types of Quran. Since the Basmala verse has 19 letters, it does not make differences between numbered or all verses types of the text:

"9, 90, 107"

There are **two different** 19 based codes in these indexes.

First 19 based code: The total number of unique indexes is **exactly** 19. Here is the proof:

```r
i <- unique(c(i1,i2,i3))
i <- sort(i)
cat(i)

## 9 10 17 21 27 30 41 43 54 58 76 80 87 90 95 96 107 110 112

cat("The total number of unique indexes is ", length(i) )

## The total number of unique indexes is  19
```

Second 19 based code: When we concatenate those 19 indexes in their natural order, namely, from first chapter to the end in ascending order, We get a long number and it is also multiple of 19. Here is the proof that it is multiple of 19:

```
tmp <- paste0(i,collapse = "")
cat("The representative number to be tested:")

## The representative number to be tested:

tmp

## [1] "9101721273041435458768087909596107110112"

as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0

cat("The length of the number is ", nchar(tmp) )

## The length of the number is  40
```

For the reference, to the best of my knowledge, code 6.6 is first time presented to the literature in this book, and it has been hypothesized, tested and discovered by myself. In case if I find out code 6.6 had been available in another article, then, in such a case, I surely add a citation and update the online version of this book.

6.7 Fact: Only letters based codings

In the sub-sections of this main chapter, I will present some other codings that are based on only the letters information.

6.7.1 Fact: Words paired with digit sum at verse level

The same pairing and concatenating of digit sums coding pattern of the code 4.2.1.1, exist also with words when we look at the chapter level data. Basically we pair the digit sum of the number of words in each chapter between 6348 and 6236 verses, then the resulting big number is also multiple of 19 as shown below:

```
tmp1 <- dfVCWL$cWords
tmp2 <- dfVCwl$cwords
tmp <- paste0( sapply(tmp1, digitsum),  sapply(tmp2, digitsum))
head(tmp)

## [1] "1111" "1511" "139"  "2319" "1520" "914"

tail(tmp)

## [1] "49"  "510" "95"  "106" "95"  "62"
```

```
tmp <- paste0(tmp, collapse = '')

as.bigz(tmp) %% 19  #0

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 383
```

Here is the 383 digits length big number:

"111115111392319152091415111391212162115202622201615111318211714192117
211716121713141912891492310611161116192411161410161211724201722141023 1
919151116611242018141217813152019151511151115111713139106139139141014 1
921172016101514105101015141012814191511139841285106111116628131511139 1
410161212171179513911164951011713915118131410139128844911713973171349 8
44951095106953811751495109510695 62"

6.8 Facts with chapter and words numbers

We already observed evidences among chapters, verses and words in Chapter 4.1.2. In this chapter, Chapter 6.8, I will present codings as **facts** that shows the 19 based relation between chapters and words only. It may or may not be random but I assume it as random and thus am not considering it as evidence yet. We basically rewrite Quran at the verse level numbers of chapters and words only in Fact 6.8.1.1. However, since the rules of this book is only allowing letters based numbers to be used with rewriting coding pattern, I do not consider it as an evidence but present just as a fact here. As we always do per rule for all the evidences, we want to see the same coding pattern exist in the other level of the text as well, which is chapter level in this case. As I present in Fact 6.8.1.2, we observe that we can rewrite Quran with the same pattern using the chapter level data of chapters and words too.

Following the rewriting coding patterns, we observe that the default coding pattern also exist at the chapter level data of chapters and words, which I present in Fact 6.8.2. I also present further facts as subsections in this main chapter but I think those are the three important coding patterns I designated as facts rather than evidences, though I think they might potentially be reevaluated in the future though they are weaker than the other evidences. Anyways, I preferred to be on the cautious side and designated them as facts but if I can further analyze them in the future and see more clear rules suggesting evidences then I may update the book accordingly.

6.8.1 Rewriting Quran with chapter and words

In the Ultimate Evidence, Evidence 4.2.2.1 and Evidence 4.2.3.1 and also Evidence 4.2.2.3, we had rewritten the text of Quran utilizing the natural numbers of the text of Quran considering chapter, verse, words and letters. Anyways, I hypothesized that there might be other similar evidences without the number of letters. I therefore tested only words focused potential codings and found the code to re-write Quran utilizing only the numbers of chapters and words. I consider it is as interesting because the same coding pattern exist in both levels of the text, which are chapter and verse levels. I provide those codings as subsections to be able to refer them precisely in the book. I will first present the **fact** at the verse level and then in the following subsection, we will witness the same pattern exist in the chapter level too. Lastly, both of the facts are based on the second type of the text of Quran with the 6236 numbered verses.

6.8.1.1 Fact: Rewriting Quran based on words and chapters at verse level numbers

In this fact, Fact 6.8.1.1, the text of Quran will be rewritten with respect to chapter indexes and number of words per verse.

Basically, for each of the 6236 verses, we first **sum** the chapter index and the number of words of each verse, which gives us the representation number of each of the 6236 verses. Since this is rewriting evidence, as usual, we place the representation numbers in place of each verse in the text of Quran. Since Arabic is written from right to left, the representation number of the first verse will be at the most right position. As the main approach of this book, we then concatenate these 6236 representation numbers and get the single meaningful representation number of the text of Quran. Remember this approach, because we will observe that as the same approach will be present at the chapter level too in the next chapter after this one. Thus, they together contain this specific pattern.

Let me first remind the numbers by presenting the head and tail of the table of the numbered verses.

```
tmp <- nQuran
tmp$VerseI <- NULL
tmp$vletters <- NULL
tmp$text <- NULL
knitr::kable(head(tmp), booktabs = TRUE,
  caption = 'Table head of numbered verses of Quran.')
```

Table 6.9: Table head of numbered verses of Quran.

chapter	verse	vwords
1	1	4
1	2	4
1	3	2
1	4	3
1	5	4
1	6	3

```
knitr::kable(tail(tmp), booktabs = TRUE,
  caption = 'Table tail of numbered verses of Quran.')
```

Table 6.9: Table tail of numbered verses of Quran.

chapter	verse	vwords
114	1	4
114	2	2
114	3	2
114	4	4
114	5	5
114	6	3

And, here is the proof.

```
x<-nQuran
tmp <- x$chapter + x$vwords
tmpr <- rev(tmp)
head(tmpr)

## [1] 117 119 118 116 116 118

tail(tmpr)

## [1] 4 5 4 3 5 5
```

```r
tmpr <- paste0(tmpr, collapse = "")
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 12579
```

As we see the remainder is 0.

You can access this big number from the following link:

https://github.com/quran2019/Quran19/blob/master/6.3.1_Bignumber

One can just copy the big number and paste it into a web based big number calculator and test it herself.

Also, here is the "12579" digits length big number:

"1171191181161161181181181181171171171161141161161141151171161171171151131141141141131131121111111091101121091121111111131101101081081091091101121071071081071081081081081081121071041071061041071061051051041031051051051051051051061051031021051041071041041041031031021021021051051051031021031021031191071141141091011041101021061031021021019898991021011009910199991009910010199991001019999104991019897979797989897979798979797969697979898969494979896949596959695989494969494969596959594989894949595949494949494949393969399949396929493929294959496959394949192949393949498949593939494991009294929392949592959592919190929192929192929292949090909191929190919494929190919290929091919193918990918996909090909190888989898989928990919090928890888889899087898888888989999995949189888887878893878888908888878787908989868790888889938788878787898689878989879187868987888687858587899087899190908786858787988858888898591888786858658685848568886898785858585898686838686858484878584848384858484848484848484848484848284828386828285838382828283848484858483838484848282828383838284848383848483828884828384838883828283848382818383838285858483818281828385848583828384838481828182818181818194879288838480808081838281838081848180828282848380828381828181818080828180828180818083808280818380828082828081818080818383838084798180808081828080808082798080808080807979797979868785858483818582848983858082818482868184838683838483828386878280808180797880787979787878798078787877797979798178808179788078777879808180797985777779837777797877787878797876777779817677 7

7777613177767878767980777776787777767978777678787878787677767676767715
1827981798481787779808279798178797877768585798383888480808280828077828
6838185858081838279818185868181837984748475767676787974778075777875857
6788976788579797878777578757574757475778074757674727575727474747274727
3767372797473747273738174747473727374727573727473757673727373747474757
6727172737373807771727374787578747275757576757574847573737371707380737
8797375737879777672807373727174767874737475717372747175707075707871757
3727271737271797070727373727778082807674757979798282757978817476767278 8
5807574797785787683909378112788983879577819099827279909779938695107697
6807283737580759174828077787375817484818083817785747580837784807180857
2708374977078767375727793857270707280998111681817579731127373109767872
7769697769767082717587829077968472717310070109676673757368687782818975
7896105737684798176797996718569727882967769708572778479699474727269659
3666866606158596261626061606163596060606060595961606061626062636059586
2615962656361596060596059616161605865616160595961595958585859586058585
8585961606260595860596161605959595959585861615959596058595961596159615
9595958595959585956595859605958596459645960595859575960596061596159635
9615963597259595965596159596159595959585959596160595960586159595858575
7575660595859606059635960585963615961575963596163586162585862615963645
7615860636061586060596359596362626259616061585655565759555857565562565
7575757575857575757575958566058565684696964696271565778575756565958585
6565757585858565656565857585657626261596161595759576159596058586058596
0615859575960577159586057645858585755555656565454545554535860586057565
6576462595855565958595960585857595858575556575659606056576057605655555
6545760565856555653555554545453535353635956575755626363655655575655595
8586060545656625656595858646059545758556055616259595761535968656776708
1895979567767615866726510262767688676060626655677576796257688573565356
6967675263537753605962586855595857546263545457597461625371916061695863
5553575150856565557364686461666463567860645958717355637464915559626570
7071605564756152475353615956675758565955636166695862526058695856596159
5664565949576554515146474951544948494749504951494648464752544952515649
5247515051515248484749504950495053535250505051504950495452515049524645
4951515656545151515448505249494949505848485250535452605053515357524749
5054546150555650555649515049545255505455486068535252504852505764545158
5552555052476354555453505149515049454457696453576963586962505751564853
5259514957485652585559545464716664645164536076728055615758616454615252
4343536058547352536952597158545067635360525258544557605755515266525061
5953494655606664506057565550495758484845425752556546524972544851574746
4649505270605461475260535153526352444850515653525953505262555063524963
5063705647545167795358594746537055465553555648545553555256675061535446

415655594873485461564553465048505349514854555260545450615064565750536 5
574749755154514747544643584650514952735970594952515658454844486163737 0
756255724945424348454242424242444443485344424747464741424549444448494 9
484242424345434245434446434346524844494445424246534744494445475154694 7
705361454443454946484545464448455348504648484442414043404143394041414 0
424141434040404342414041414742413941414142434241434241434241414241404 1
404141414141414141404242424141414141404041424247424140404140424441416 5
404243424441414041414340404141424342414041414241414242414241414241424 4
434143414341424340434242414441444240414440424040404141434142434741424 1
434742434241414044444443444139444341414049444146424344403939394446504 7
464747454343424248444843464547414144415040414243434746494643444360474 7
424542445143444549444646424748444943444041514443474548414251474450484 4
484644433939393837606561545468594560534946485651435152574248473951393 9
396940414653636369595260484850465754594944434450424151584845685247445 4
435747424868496644414646454351566055445351425054615361464763505050454 4
665251485147425041414541404845395255454747634410358689556454139414146 3
641504655815763475853475047494649494951515056684757484647594639495541 5
062616139454737433949504342464541534440454347464848434646404238495650 4
033586253504756425241463846465261424749566048464945583939474939403435 3
240384939504254444139494058484741394644455252464545403648413952465748 3
846514443504144383641393539353843625240413842383231384644354544514342 4
134463638423541484445434248545039374148574245364636415245443552434741 5
649424637484242564235454047356036504139413940393047444347464254454449 5
654574536414947433542393534414636454348455341434043363451415446484641 4
438373840574645434237534848554357395443553938476144374166384544384546 4
150404047373229384244403845454235403843413834353139373537363436363936 4
141464743485439333442383532383634413740404055394139654338404335403940 3
235363834354144384136395147364642383546384734414334373736303345313329 3
031323029303033322935303130303332313028303133313231353029313030313436 3
135353131352932372930323031343229302931313537303729303330313629333537 3
132302931302931372930332931362931353228293129303031372930332931343032 3
531353130333231293729303330313433293030303230293033322929323230323132 3
234303030303229313230313232303134293129393234283029302929303134373347 2
930293435333238333131303334333232333134353331313531343732333631333332 3
432303431343734373732302737303438353434413347362936303738363842383930 3
937403232343538363041403442364132333834343633403635363237343232343544 4
540464135383334343342344241373441474434465163100474374353262474134424 0
313539355534623145574638433872377241102394146434035333750593344313338 4
039383652333335334135434250333041343132313031313728303131293329333931 2
830323029292947282837283128313531293330333531343128323933303327323031 3

735303328283030302832313534292730303142302931282835332732304837293031 3
855283349402738323636332828442930292628283033272728282666343233315151 4
040312939324934373937382940303438433849303031333645363326313957323542 4
937423331434630423638473144342628395944314439323647313735343592333444 3
231292934322627333732303028303241312833272932403229442728373133353135 3
533332737362929262928303230283028292829292834282926323028292941333239 3
534343137282938313132293439343627293643273428263434322829273128312929 3
035293531363228313933323840293732282832382635342627332931373431293032 3
326232732262827283332483625402428293732323547292926293735252838323033 3
439462836262532323033253526283428262829393125292530412730282528225542 2
625262422232323222522242325252431272524332530303125292538242827322426 2
425213329282423292523282323282425262825272428262732442835272827292729 2
731372830303130482227283026262928333329323129333527273130302735282825 3
027293130372729332434302827302928252527303233333227323324242042362428 2
732292332292329332637303831212433213131432028275327283530423127342826 3
330282624293027383029312637483637322831314446342931412729382633372634 3
030312932463046483341263525515031564052373637292725342824292934242133 2
938392225352626312633363140314428313243292827313626303128293026312931 2
830292630283234393235312636273230423835353032313326422226263636293823 3
027283524303328343925302930292627292942262829293530313824304025263328 4
028343026293824302838332825232735312138382925403134232729402728322933 2
526243431313533483632402926352730232241413431354543263137383640293133 3
230333339283525232822262827282330332423322831213426273430444826382831 3
624353737312529272326222623202737293132292625302324242334252021222318 2
118181919203022202921182120202020201820231820212019211924291922192021 2
121202322232224192021232518202319262019251919212120262422192427222322 2
221272623262220222324222023222224232422232222212724202024252628402327 2
223273240292729233935261826322726293158481928363021192430314347512725 4
035333028302831292621343238322752266441212432293620283226202840555824 4
032224827182828333840373928353141292619232218263359262121321824242321 3
522343325242530233049252836452318242417272842403638292926182229211929 2
026272441342327263423203730324422383839232229314430222522313531352144 2
129303116292125202428262719372828281817271420282621193718252823212931 2
926202116272335202020211721293127302034473222263819234122243824261622 2
524202926231929222934333928232532291827272925293030303526303431223721 3
022282329212542213431402220222518203522345027252729382124223342273019 3
620212133342619372025242425311818203234241737213926152023321727201626 2
120243227264423193525352025142052293020251526312123212232172225302021 2
125222926322739272021372620283726215336513226273924284920273728242516 2
524333839361524233025212726312761184036262731292546243632332125252526 3

1343625252327392832352622232027252734173634292024182155213333354125282
5222625213531282520192631213123252425262423232232245225384045283823243
2323837212732422917192533322733202029272219222532273531412318302621532
1331918283435172820204116221820182526251721264425212127284341182424262
9212920272524271820272129191816203214292820142131302619153119191914252
6182315301419171419171633211914141936354417291812151421371716372012223
3261747212618252634242750153950374822212218462529204327224830251617313
6181830201929172923282312152610111011131818181218111414161313182516231
6302617161625252023201319492926314515142018202213231530324220322434141
8212321201818162824362215394517262722212025173543221730214744182618363
3232323293827141919351232241922141112202423181816131319172120827351415
2222254341201423234148331443193445462922372628322637251324151634144216
1534352130261836161724172918292819273119191421152224215019221823355528
5022232215141327201728311824242115203014455118291115331623182328372028
2712332131233414212029152620171821232825163428201933251522231738161818
2019431323151530153116191519223718171820201629163450222720271869202731
5725292614312116143225562929182521501723121921263120241522292130133039
2424253630291752181821322617291618432033281538562131364620317324191817
2919183945311418212919182226232028343547232930375029121532246748366658
2954191630225828151615171918293018181812381026234121122618181522152220
2340371810243342181614361526334416212024251111251215242430371815172325
1811192624662735141631123744206436403226211926263417281622405224352523
2115112271031232720201934332924241522141524141824334213185318161919221
9362644233116172812171862465821152139282418261722927517191723412018322
0331433241010461723142414122324272615311225333920152514182018142216193
6122328111624213310174024782843229161322242730151692712916182616148816
1915122018161315142431342621121817381426141413201717371620182316281314
1427182717141212211632171036163132301239113520141216161723193591828101
8101416349122311224882610242311162320231838272110141417292530242818182
3142129292191427273212171916184916142114104512930341311716191621134719
3230221718153237294113262641694526265224541129176232455618113098291710
3727492766354732484291516161829412828185927243251222219141813141619271
0162614283275162417827152919671946341718151811405316133127172024131925
1433451111151322261112141513819331921916343647231732161221331717291911
2018191632242120141733122613161432331920193520192127151476241212142027
1119291332292812301551173112152526131125213913122619202522111415172662
3020222091729910141220211410101291020161219132121152514173021152241361
5222514272181913918219131412131413101410931045435 5”

6.8.1.2 Fact: Rewriting Quran based on words and chapters at chapter level numbers

In this fact, Code 6.8.1.2, the text of Quran will be rewritten with respect to chapter indexes and number of words per chapter. Note that we already observed the same rewriting coding patterns exist in the verse level data in Fact 6.8.1.1. In this section, we observe that the same coding pattern exist in the chapter level data too.

Basically, for each of the 114 chapter considering the text type of 6236 numbered verse of Quran, we first **sum** the chapter index and the number of words of each chapter, which gives us the representation number of each of the 114 chapters. Since this is rewriting code, as usual, we place the representation numbers in place of each chapter in the text of Quran. Since Arabic is written from right to left, the representation number of the first chapter will be at the most right position. As the main approach of this book, we then concatenate these 114 representation numbers and get the single representation number of the text of Quran. As you will remember, this approach was also used and had worked at verse level in Fact 6.8.1.1. Therefore, it might show a particular pattern and be potentially interesting.

Let me first remind the numbers by presenting the head and tail of the table of the numbers at the chapter level.

```
tmp <- dfVCwl
tmp$cletters <- NULL
knitr::kable(head(tmp), booktabs = TRUE,
  caption = 'Table head of the chapters regarding numbered verses of
Quran.')
```

Table 6.10: Table head of the chapters regarding numbered verses of Quran.

Chapter_index	Verse_sum	cwords
1	7	29
2	286	6140
3	200	3501
4	176	3763
5	120	2837
6	165	3056

```
knitr::kable(tail(tmp), booktabs = TRUE,
  caption = 'Table tail of the chapters regarding numbered verses of
Quran.')
```

Table 6.10: Table tail of the chapters regarding numbered verses of Quran.

Chapter_index	Verse_sum	cwords
109	6	27
110	3	19
111	5	23
112	4	15
113	5	23
114	6	20

And, here is the proof.

```
x<-dfVCwl
tmp <- x$Chapter_index + x$cwords
tmpr <- rev(tmp)
head(tmpr)

## [1] 134 136 127 134 129 136

tail(tmpr)

## [1] 3062 2842 3767 3504 6142   30

tmpr <- paste0(tmpr, collapse = "")
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 367
```

As we see the remainder is 0 and thus the number is multiple of 19.

Here is the "367" digits length number of this evidence:

"134136127134129136118132123128137117130137140135192127168129121133163
145172228180159147194192252163185213258252258319239330273358298287329 3
694003203543062442392874125065336324354073964133644114234026085896915 3
339087990283512661216773902766813918133640458184710071466118613469211 3

4310751301119513739901601157518606728448661807195718492514125033483062284237673504614230”

6.8.1.2.1 Fact: Rewriting Quran with words and chapters numbers at chapter level with digit sum

In the previous fact, we observed rewriting of Quran when chapter and word numbers at the chapter level data is summed over the 6236 numbered verses. The same coding pattern exist in all the 6348 verses as well with a single difference. Instead of using sum operation, if we use digit sum operation we observe the similar rewriting with 19 based coding as follows:

```
x<- dfVCWL
tmp <- paste0(x$Chapter_index , x$cWords)
tmp <- sapply(tmp, digitsum)
tmpr <- rev(tmp)
head(tmpr)

## 11424 11327 11219 11127 11023 10931
##    12    14    14    12     7    14

tail(tmpr)

## 63060 52841 43767 33505 26144   129
##    15    20    27    16    17    12

tmpr <- paste0(tmpr, collapse = '')
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("Number of digits on this big number is", nchar(tmpr))

## Number of digits on this big number is 224
```

Here is the “224” digits length number of this evidence:

“12141412714141910151513869223423282517202323232531282518162223181928312826271916201412272226272522231812202433332524222117192228272629241619242910233033232531172118143021201816151718201831302228192024291717212122152027161712”

Further fact:

In the end of the related two codes, Code 4.1.2.3 and Code 4.1.2.5, we had observed a fact, Fact 4.1.2.6.2, between the digits length of these two codes that share the same pattern. I tested whether a similar fact exist between the current two related codes, Code 6.8.1.1 and Code 6.8.1.2. I observed a similar 19 based coding fact between the two as well.

As I mentioned before, these two codes, Code 6.8.1.2 and Code 6.8.1.1, share the same pattern and thus might be related. The relation between both of the numbers of the two codes is as follows. The tested number of Code 6.8.1.2 is 367 digits in length. The tested number of Code 6.8.1.1 is 12579 digits in length.

The **fact** is that, when we concatenate both of the digit lengths of these numbers, we get 36712579 and it is also multiple of 19 as if they complement each other.

6.8.2 Fact among Chapters and Words

Following the observation of Evidence 4.1.2.3, I decided to revisit the relation of the words separately with chapters and verses as well. I observed that there is also similar code pattern to Evidence 4.1.2.3 between chapter indexes and number of words in each chapter. All the technical descriptions is same as in Evidence 4.1.2.3, except in this code, we remove the verse sums and only look at the code between the chapter indexes and the number of words in each chapter. We basically used the default coding pattern, where we concatenate the natural numbers in the natural order.

Let me give the natural numbers of Quran at the chapter level to remind you the numbers we will use in this evidence.

```
x<- dfVCWL
knitr::kable(head(x), booktabs = TRUE,
  caption = 'Table head of the numbers at chapters in Quran.')
```

Table 6.11: Table head of the numbers at chapters in Quran.

Chapter_index	Verse_sum	cWords	cLetters
1	7	29	143
2	287	6144	26268
3	201	3505	15004
4	177	3767	16351
5	121	2841	12225
6	166	3060	12745

Again, for each of the 114 chapters, I first concatenated the chapter index and number of words in that chapter and obtained the representation number of each chapter. I then concatenate them from first chapter till 114. This concatenation approach is similar to what we observed in Evidence 5.5.1 and Evidence 4.1.2.3. I will print out this 571 digits length big number in the end of this chapter for your tests. This number includes all the verses, including the unnumbered Basmala verses of Quran. See below for the proof of this code.

```
# With 6348 verses chapter level data dfVCWL.
tmp2 <- paste0(dfVCWL$Chapter_index,
          dfVCWL$cWords)

head(tmp2)

## [1] "129"   "26144" "33505" "43767" "52841" "63060"

tail(tmp2)

## [1] "10931" "11023" "11127" "11219" "11327" "11424"

tmp <- paste0(tmp2, collapse = "")

as.bigz(tmp) %% 19 #Test if remaining is 0

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 571
```

This fact shows that chapters and words of Quran has a 19 based relation too.

Finally, here is the 571 digits length big number:

“129261443350543767528416306073345812469250510184311195012179913857148
341566116184817156218158719975201357211178221283231056241323259002613 2
427116328144229982308213155432376331307348883578236734378693873939118 1
401230417984286443840443504549246649475464856449357503775136452316533 6
454346553565638357579584795945160356612306218163185642466529366258673 3
768305692647022171231722907320474260751687624777185781787918380137811 0
882858317384112851138665877688968914390869158927593449431953896769734 9
898994010044101401023210318104371052710621107291081410931110231112711 2
191132711424”

6.8.3 Fact: Pairing pattern with Chapters and Words

We already observed many codings exist at the chapter level data between chapters and words as in Fact 6.8.1.1, Fact 6.8.1.2, Fact 6.8.2 and Fact 6.8.1.2.1. Especially in Fact 6.8.1.2.1, we observed that we can also rewrite the text of Quran when digit sum operation is used per chapter level representation number. In this subsection, Fact 6.8.3, I will present a **fact**, which shows that the pairing coding pattern along with the digit sum operation exist at the chapter level data. It shows further 19 based relation between all the 6348 verses and the numbered 6236 verses of Quran as presented below:

```
tmp1 <- paste0(dfVCWL$Chapter_index,dfVCWL$cWords)
head(tmp1)

## [1] "129"   "26144" "33505" "43767" "52841" "63060"

tmp2 <- paste0(dfVCwl$Chapter_index,dfVCwl$cwords)
head(tmp2)

## [1] "129"   "26140" "33501" "43763" "52837" "63056"

tmp <- paste0(tmp1,tmp2)
head(tmp)

## [1] "129129"     "2614426140" "3350533501" "4376743763"
"5284152837"
## [6] "6306063056"

tail(tmp)
```

```
## [1] "1093110927" "1102311019" "1112711123" "1121911215"
"1132711323"
## [6] "1142411420"

tmp <- paste0(tmp, collapse = '')
head(tmp)

## [1]
"1291292614426140335053350143767437635284152837630606305673345733418 12
4681242925059250510184310183911195011194612179912179513857138531483414
8301566115657161848161844171562171558181587181583199751997120135720135
3211178211174221283221279231056231052241323241319259002589626132426132
0271163271159281442281438299822997830821308173155431550323763237233130
7331303348883488435782357783673436730378693786538739387353911813911774
0123040122641798417944286442860438404383644350443464549245488466494664
5475464754248564485604935749353503775037351364513605231652312533645336
0543465434255356553525638356379575795757558479584755945159447603566035
2612306122662181621776318563181642466424265293652896625866254673376733
3683056830169264692607022170217712317122772290722867320473200742607425
6751687516476247762437718577181781787817479183791798013780133811088110
4828582818317383169841128410885113851098665866187768772889688928914389
1399086908291589154927592719344934094319427953895349676967297349730989
8989499409936100441004010140101361023210228103181031410437104331052710
5231062110617107291072510814108101093110927110231101911127111231121911
2151132711323114241142 0"

tail(tmp)

## [1]
"1291292614426140335053350143767437635284152837630606305673345733418 12
4681242925059250510184310183911195011194612179912179513857138531483414
8301566115657161848161844171562171558181587181583199751997120135720135
3211178211174221283221279231056231052241323241319259002589626132426132
0271163271159281442281438299822997830821308173155431550323763237233130
7331303348883488435782357783673436730378693786538739387353911813911774
0123040122641798417944286442860438404383644350443464549245488466494664
5475464754248564485604935749353503775037351364513605231652312533645336
0543465434255356553525638356379575795757558479584755945159447603566035
2612306122662181621776318563181642466424265293652896625866254673376733
3683056830169264692607022170217712317122772290722867320473200742607425
6751687516476247762437718577181781787817479183791798013780133811088110
4828582818317383169841128410885113851098665866187768772889688928914389
1399086908291589154927592719344934094319427953895349676967297349730989
8989499409936100441004010140101361023210228103181031410437104331052710
```

```
5231062110617107291072510814108101093110927110231101911127111231121911
2151132711323114241142 0"

as.bigz(tmp) %% 19 #Test if remaining is 0

## Big Integer ('bigz') :
## [1] 8

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 1142
```

Finally, here is the 1142 digits length big number:

“1291292614426140335053350143767437635284152837630606305673345733418124681242925059250510184310183911195011194612179912179513857138531483414830156611565716184816184417156217155818158718158319975199712013572013532111782111742212832212792310562310522413232413192590025896261324261320271163271159281442281438299822997830821308173155431550323763237233130733130334888348843578235778367343673037869378653873938735391181391177401230401226417984179442864428604384043836443504434645492454884664946645475464754248564485604935749353503775037351364513605231652312533645336054346543425535655352563835637957579575755847958475594515944760356603526123061226621816217763185631816424664242652936528966258662546733767336830568301692646926070221702177123171227722907228673204732007426074256751687516476247762437718577181781787817479183791798013780133811088110482858281831738316984112841088511385109866586618776877288968892891438913990869082915891549275927193449340943194279538953496769672973497309898989499409936100441004010140101361023210228103181031410437104331052710523106211061710729107251081410810109311092711023110191112711123112191121511327113231142411420”

6.8.3.1 Fact: Key Coding between Chapters and Words at the total level

There is also this coding exist between chapters and words at the total level. It may or may not be coincidence but I show it here as a fact.

There are 114 chapters and 77797 words considering 6236 verse or 114 chapters and 78245 words considering all the 6348 verses. We observe the pairing coding on these numbers as 1147779711478245 is multiple of 19.

This code stands as a potential key coding pattern of Code 6.8.3. Because, we observe this pairing coding pattern at the total numbers level and observe the same coding pattern on the chapter level data. However, as I do not consider any code with only chapter and words

information as evidence, based on the defined rules of this book, I do not consider it as evidence. But, these codes stand as strong coding facts for future research.

6.9 Fact on the order of each words with letters

For the code of this fact, I will use the numbers of the below tables that keep all the descriptor numbers for each and every verse in order:

```
knitr::kable(head(unQuran), booktabs = TRUE,
  caption = 'Table head of all verses of Quran.')
```

Table 6.12: Table head of all verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم

```
knitr::kable(head(nQuran), booktabs = TRUE,
  caption = 'Table head of numbered verses of Quran.')
```

Table 6.12: Table head of numbered verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم

I will now perform the test with only words and letters together. Additionally, since we respect the order while concatenating, the verse and chapter orders information are also implicitly considered in this test. Here, we do not use the verse indexes per chapter directly and thus we can use both types of the text of Quran. In this code, we basically concatenate number of words and letters in the natural order. However, since the coding pattern is not within the rules described in this book, I do not consider this code as an evidence. Because, with the current rules, I do never test words and letters alone for potential evidence tests and also since there is letters information, I only test such cases in reverse order as I consider them as rewriting codes. However, this code is worth keeping in the records and should be known to exist as is. This test works on the text type that incorporates unnumbered and numbered 6348 verses as follows:

```
x<- data.table(unQuran)
tmp <- paste0(x$vwords, x$vletters)
head(tmp)

## [1] "419" "418" "212" "312" "419" "319"

tmp <- paste0(tmp, collapse = '')
as.integer(as.bigz(tmp) %% 19)

## [1] 0
```

Finally, here is the 22999 digits length big number:

“419418212312419319944419137278471252833114712531147104912511143729197716737341157177261919862510212532399207813663414539155208213601970281111570124823101136319801986114317681051146918798427411055847838125819691884105012538307372712115607301890209518772811860257241081570135412549452083238018711762249710451157371411977231019361145241022391135410522915015714923113632813810462610827107301191151271311767944251021872125510441044228974308124913652598196117591873331231776187217583114130113125214561147241031046311121570125818671983221153012214651776168118749331770271141554156331135197910371463301271554218945196341463213014737271975176631138178763211531350126610459422489209111571364937935431873112312572396176811502289186615622593291221161145851266381639391677135416551561321234418517776528617872712013592513062415652210714667329030121261101249249714578352510317651459125211491667124917722074209349214301272210425935724716722612326118391822712216811466146513547294017746193301144520333147642882512247200251113514084415652711663473128106938166954217431653011460240157727122941522082287501892410224118431696724939148249724921144391742712335148301251368166515572089281123013417794518611451987145417721452155412955132138281032711849196419137241153187411371350461971554134716661468943291162412524107115065418722610726122188811502081156515532592218627113227926961462114711487271866241093513815522092176320801360837208121917332379535451871980834208694663031132136011597321547725251141554628321291670207514611366135493911521779321158343614493627116291202812013673314672914622912613521883947937114314622491155624991144114710422599135020771569177413543415714701465178110431149114423113114835152145915849401877239831125281272188114912571047136015691768943124516611362527529115513712310415701354629941241056331360125127107249921881987105013646261984401662510675291218937157145372830121187521681353832251072073947331511674135419781147156917771564115422871253177436146301222959372812012552399241082199208693811572110011452095145843188729730218530121115741929125168228115145816793718619911370157113637127188299187913552210714702090241063515717831149176354265421855826414611360834249913531256271081988401922292321581578188515681555512431461492051464944381772912120691454104020941143103718801138209520100251022913230125156516731665231051977271076273211892728114917631975219331139209848204361431873124924101135630135228722771557176122882812836168321626023516704017033172837271281264104031122239662281201062294156773014542182197913501146145433135269720812067114383621109735732219520721666177312454017829126221021143321291040124914623816329130207862814713313736161199116581885114518921148145314492210084317783716219902210363134128832145714601473261362513114581566136111431250114424995421618872612912501573501914192497532

4261278311374320162281198627117104774024107452073214125119249218804215
7301342910723921570187521100176913521462249916641356938261064016234140
1352146824881249136414491971682812611315684119531140261171666512283313
6104523104281161580381581368114824109125421772711016681363136747218126
2241042594311292092198919783413925968402598165824901771104219781570261
2821891663146774018691252452051682209213722411624104511962086271199371
1451673261009342185241002086522132612822991559642801361228615662297177
0451532910811472410211424191469144912521142125331138166613539441356104
1251009372492929936175673237137136814541257124310413213311471768166093
9197627111136014662290281141050196722821771156212461157146320799422390
1456156484328103176525105157127108635217422771459311132295177112481773
1036271059325212310312474517539160838241061458950155418691865125325922
2931152145821100734844956165917811666441712210249201291281769126216691
3594418715681865165394315598441344135325103219013602210023951262231051
1481863113910403011612592096241001569291182811094110413615183828134103
8937187172719753112820962611722952083311451670231064016739128281221351
3714283627118421803514917751775844146135144371381977166416669398322910
4218641914135014571043124663662794511561148167317571350521416736156612
5417702510552628130125412487342083311382294166916781664261112911011471
9741158371574016114622310410421570361502811010481887136214721568208719
9510453814632145835156529123177221769321139114413591471165714581139730
2711317712510713663513225113239683716666331563135311461354736840381562
4107198322934215912536331359166413591882188594093810441979231029411671
9341865113662462693273073441611465221140115511416254253174203121977841
5221666211001676228810472294124713802390114311602913924991036940188523
1094116515652089361531363228918743917211461569145915634117030129432223
2141832432002093177327118198118791141198014774017210521979261041564527
1364301329471042301221469731840518114022881040371532810429125125572873
3125614642699939104712527321044125073123898411669114841918891782634114
7114711512310173311521867229923103135863012542081218662624971254836103
9114921951358199512611048198216741769197212522193135821981881165916661
0463315035149208819881361136717763614018741367937177418681782103812441
0431455835331341250125320769372711526107207810391146259413544520913571
8852295941146432135229826133187423105167713561039136818792093115911452
4102188323992411016801044831209733170239618831240281132912323107231021
5641460291391984361603113429122167043176157123113135214771470157117861
6641563166514562293124722951781104511441662198222118261141255166417731
3641667191051679321682612524132241071262461901252937156711472093251032
7118843251121871167418821146147613561780261032390198630132188814591669
1671271132512822991774166516671685125424117238627101156137174161092084

2288186117612710931127941521991877221021778188212541656217914601554419
5222699291132812623101146215716301574146618862710417871042391381865145
4291231771166822844116626113431981145167227118188910461663271141148103
9176329971760228316661981124515601147114510422087156312497302281125311
3913521143218416585221563104420731976421411036421156510422590156125969
3513593413616601787229314691038114816776261039176473322851352104852616
8329131115127118728146124109228510448308332194156014531460156410452710
0938165524852387114541910369352598828198516643112722931147135610482795
1875166414621665391462310011502410094172714671161935114029113208123921
0383112314591038186612521758115519731042269411482073238619841556247619
6319721975186314521882166116657281865218114611250176828111228323851870
1147187384112441563186894813481460114852215541348271091343113030118125
7831271101574114221823613723789371979166520821886103763110449469429362
4941244165752010369371557187520771872104312461766146872926110835104215
6117699413181673419522631166416631663251067301557145916681243834135493
8177642019801873177794232138943239119762389196810361343104218733213119
8417681041113827115261122610410463212720861870251058411150229614571553
1139229229110124715541461833177273593917721035629147417711766261142488
2811130110166215655271244124862511453312324841663135037139187211531870
1351124913472181221011039238493911461256124762720729399351455471692110
5145762610361149730145917672912319792394419156026115241012711125112209
0155615585301454351219421986271071155451884218227118155873413541910115
7273023941674196711528382810651193135539139145319892510119742182832135
8166818711564419167214541676197521862611711481350371573314329112177816
7810435237251662229014565183413844187178315591255134918841250421125321
8625107943156113551558261141861135493983913609452610914641251114210506
3263110361360419625730739831727937834939729728833523726939836737521729
1152834114212636297427258337281245936422727931113952062462441741810464
2051911414208305203171040830626522418937728835732829523626624629520416
7294231462940422623418523625524319841521315519524528525530630319624146
9519736156352142142031931462731983472862452241994218687368308407311459
9481044134716711571134921100114942272710396251041732115513499401569218
6219819828442090156712642291104332118281221446187311531037187852515611
2631667728831176714587321251114812431038634125773493719651258239617711
7721463166117691565135424932074229221981562104227103291091971157518682
5119251106297391451114519911043135924103168120893213117681983155715641
8768401041941176713561669124811522494136211567271865155124107944135722
8422945201566197111437359421249177522911253145183241921951257931136017
7611572311011491671942843231161359731218214681353187112521245115093625
1081251125310459481250135512481359834229017711156165713487241867115910

4413486302187125819821976942945519251009441671145515681352188418742192
2511313581564104119969351454187315572287178115701139136393712481360114
2146012461456936135712531140145413509301976145310371145125326921558146
0114727114147123921463197816679401461946945187083553022902172419114215
6931362716581146114462710421661730939114819781875198034127221093817313
5632142331517251758837238115543012928129124828123147011501350124112501
6578281963156283020791139937231021367115216632812226111135913651051145
4198318923011819758431349114912492085934125111376218241036124315658271
0381664929134624103124817761051940351489381034292591134613503101553623
3101351207812491977835154911485271147146552511491466942104862518682492
4191551951714521352830134514521443134511468346256269341042115183093211
3815575241457103883518761141124010388341149629936934165383511471148124
6834835165014501040124613541035145514609371041736729114894183331629129
1152125111461146933186112568311038843103682993483616749352598136283972
8931522833633941725627524937420414944416624103841752394310451446419125
2341563141912447308294151868519937523114410391037518134841452073211404
1951851531041621051828310312312211414620519620229335130213831519830103
5727218710355179295211135197493984162883414608336231559530136710421239
1249519621165983726115197614611342104612491869837519157517659356209339
3627105157512481244176893782841820715171662281041239134483173083662712
4773231562013561244103893511421462176511369421349722621145215656231870
1247828838125017679352085187512591353197911504197311142157210441458835
1459942845837104472910486248377351142135313575267271352622228215538386
2915591351188013578391147104010491772837730166110451356135014551882114
6124720838438377339371145525831731135573583783473283573293973793611429
3473583352984283915831675629125112611461147210451465125110411669734631
2383840114319921157833630124973210372075114293572693893811571666125262
3525114213508328291043419104022861244114470262134612431345156193525101
1448104117722285938221023714417696234151252229893825108167614512094846
2410021819361143208915762712820891344104535148178593641811511461239714
6011459318418412710616742189166412598411877735165615601760155512452710
1104317677299411860186329136291229311145104112634419941931452152142042
1104273052852531562972862221104518522104113561356940156642117632610410
3051932138156283772562414552511173294241910421241519522848625727198583
9737738424630114812528339395197287277255235211045733124914478367289414
2110427271042167593752483811458441244104873010476228401247829522833521
1448522526248063262062672793672651783016651043630104762883483773152214
6184383672483493484011421863729419951261221873199411431781937115093793
8281021259146515631670145693873120859383515026121136894711491699198522
8717701566783501783482171361482031455198714582299331082183735381401044

3110611471570114872816671883104517762310238173848115350219198723103763
1539180271202286419944197322921666947125116701765942176283993794283813
5010401668218715652096198510519387347399441249728114810411149156983711
4894294913698377331669114417689371555165752211491355104694372673315641
2471455524144413521772136111481350126152711474201147228583616699359421
0451364944526124541913419627114511438381139829521832416620835623733732
5201038732625114683252194052052373093983751972362462672683573441652452
2732125162572694883131742031221967271143835525419315315420314423214838
6201357316523315829521419623628520417628522319623417419416418831626623
5226244176196203183186227284213164196214194194143117268295214187244143
1711403175266247254195169365169406284188295213157244143171140521423420
3175243162106239365183131044521316725414317114052131141852631742062752
2113893173132010415214187244143171140423114193552152031841831463182952
1422620414317114062932194252952293593751910418295214204165223134179355
2362552472952241821741952062372741641852241993431962872642041531641762
5517423321722521199241962431694710451043728166514567282074113519728361
1581569197794320852410612449451447114217771462827728114793383452313501
2531361839166913601147165538136124714591243281101358136113511042146873
1943114452883911471558739631124927104218916702082197814571444944124794
0932730932103883110371247421834728114514561670114213578331564186618711
1401352176315611151419134199381985125912552292136318671767103716641765
1049381481346936167233119197610421144271081550261061148291101559271092
0822073251009331457157517731869291081252105194410481675135218812077188
6261061349239262983415551265157413502597177320821566177584018841364633
7351142145872815581978218713628401770291092610528102217816701765261131
4671875196615591660196341913104011561043124510421270219074331120637188
6116116696401356271181352134719728321759136020762711712441887145723103
6271570166723901250730177473916771369281241988124384210452189251121989
1352145916621564199112656381356940728178652512531364145022841565166463
6157317659474191329831124683311421044229832152136083252694352694311586
2883914601140208313671464218516658311879271131660229294811451871634104
3156215571672228722851567145716569391151178318872811510371971941114614
5524811255208694219768321039419134193169478331872166783983527105145418
7015541776291122582186916541145301112187156615647301565104021781141259
7165819682292311222710041913831186624921763632103682514601455114216751
6661464156611561346831125921959491351145910521145186917757301144526419
1461124362628127281262914317808422298167663613582610514601355155724801
4683515523102176518851875167216741677136116791464176914642081251221456
3022324924819622751361176683531613658358386298331258231036226735137258
5702941139301261463146312672299198763412431562729833125584683717719401

4591892159341917671868321231050114616661661166629105135312512710719872
7109207416758351782198710452170269322851762935114612481254730104132143
1569341601454839134923100945207310511358187734130114714592489175272682
9165710359361038155741924100196822851143156313581362259117762410834115
2812728115188111476235183413842141841616624121248136772722941778167683
7166521991357114514551872251081044241003313219761983261113012025974191
2213314313317730830104512518361254145883811571555628523125593811467298
3115585174198307271347830124711456231050104483713569378397371558835623
9336221145114224927308357331039135310391142728732623516425145052383652
1524115794610497301243833125063362973173093611421141103711441463103483
5419211213213312735631518937417728124631341741962173521541672862472773
8729317414417524628521103662542052542010386335224226234194163143123145
1931672442031352472341973441552151962631362851942162342262342163272352
0420418522420524419526525420419520419419315418516625522418416311315626
4134203164184197325296235163162810041941973152031541931431641952710485
2152942432332342141741942141951852852431841941941441941941841941831442
2317418520419419521622421522626420529629521419420414210414524104741741
9314417516620315316315622420418529316419414317217630414315623316419419
4156221037104483212511038155073110486248347367221035832114473652063373
0239315603213793331122167013669507336291142630939154983342042172862211
4662610461454848526528838623522735422521721519421420415103811451140103
8630621114073741131393382793293642262815541034520623624417418423420417
7311036518417419629104533126166323105361383112634122241052295931523929
6211985176112601367103820803112020773413213611040125911447281981416730
1558834833125815571241361481040832187726107145411481876177625971143228
3114315681559218513521664155193212421045146511509281157734146262417862
2771574932341519452094167317774191262914561352219810422712816761253156
7136515621453837166315591347156762815623011913636317341987186913483914
6271011141145572716523010523931040239493712482388104115612286125010421
3611982124513531673115310468414201253239312531369114313622082124173321
9814532076301181244103994463262372317601146842145832123943125962825104
1567125117704191241973373317751674836940146215671667198994023942510219
8914745278341256187820849461148259911521055146116791993167041413511771
1142115019881255229126101939134617533012918721146281071240114332130135
6175119731239419121310431038199012532290197116601559198913563815230114
3414918711152229693822752284241072911822911251126417681352166310411448
6291555726936177410501164629145793515668282072271231656216827115156211
4722772710915564191221363072783562383273210521145125011492084419937731
1246934126615538331146218314607369405227329399361042251111777530125311
3873812499401140626734836626135312557311355124773018671134114673663642

4933144810428361045729177993611471040734934529529156973562762662262993
7734522114883183684211441363135283782762641912213834517623726837103951
4628520626728625629629835931935624521623524627518314420422837733728629
7293148325241250737836523103482931221041821052472552061951931152741952
2104872552931741912629631934208912534141457114519721142146316601461114
4137424102135515647321785135624942178166818701052145411471362125922781
1431461167683784241912629157229106186494514592599247424951976167513529
4345193188128113176694327129259512541355187514603213810471773188020781
5601865228518792710741983518811881381673174201046630835167511442210814
5413484417224104632156514732711712481045737733166315657411048114012668
5021861155155512581365635301294195191561419199419932111684052784925105
3715120859431461311412812427110198673718891452125212411977401792813028
1201460542494191664239817779411248187928127728301441053401593212921932
7116189116651976104541931411447279369321253115152010455228377304199361
0361457837826934623623124562162141710411037834831933525622729524625155
4134113541249525729732627936135341921321321321331531331541541221151841
8519732520937625319526420419523937628938623522938939832523626520419626
7287368346257347309328278377328315294257298291139134662151952562793072
7943731419162103921321321341441041731531751862162562212535208386297331
9845288337325247276289318317286278316236298277317289405207275217339339
3973293310421041525419312516414514313311315310518518516417415314314518
5166213183184184142599415317186594716511141165416733112931431551972031
5518621413419416415415526413419415414418312932213311417520210620419315
2113174194227316317285208288408359435215269385226246234167296239366274
1672931410419325237358324224168417294169387245299435223157295197369355
2042162952093551862662651841751962141916292102103173184234176343175254
2041952462041942141931741841942341963141941262741910354194184191778419
8344196314198274196404196265214195194192104193164195194199414199374193
2041952341931441918419317419419419313419418419622419626419627419314315
2104143133143165275272172133123123143123194205235213164162731941862541
7525310292829211417210316214210212312313525311310413521525947215419524
5255173174193154164213145257329356323155256292103124227336284216305284
1741952031231141741742242241931672852042051941862252062631021051641741
9939114394036134837125215741569176937153124322109271322099156428118135
5125720105391802510821691558125628138147439191229422854191873231032190
2611518811564471633816720105178231139239224115197310401043156417731572
8379345122141911434118514601251136025903716618983113423106281291673124
5239411471768105018721051104818841351198717784194922013681362522211356
1973156321912110156258219439173208041911439349321146241013212916681154
1460124715721775941361644191252219283710392310518719451879228815722188

4191782125111442210414661870209017901875218511444191759114794914621353
1682186910512712211591658115993719878391679125052941942173301322173281
1814543214625901464732177234153259641915571149291142192178223107125146
1941262271212497177941993311531865104212687348321353186311395319389387
2714591140124883015621554124212471255831730934135215581349104041941651
9518415213213113931441751631341741351573331510502107272132137273196264
1752331272862652462310398396263234145185171247416838938115210445187275
2111421040525126251941916284164204236271568516634628730629623630317525
9436269425204143102118401144414418414313293127316235205205174184163114
1572662441752331641762131752142031341741941641741511473143142104193174
1694021231662231021041529417415417210522522214421624518421104273052842
3524417524521828522735831842940944419145172252518657265211479416728627
4219446203148317315235255214201349315135383512541037104115714191349935
9337281037114693384113511344937113914521049527839103983110418268241240
1664114511367271344135241931241551862452183062162693673263541952284011
5163183562693178329419312272821021131321041641641841641721031341252121
1310310411253931361951629413412210312572502931231331421072451731431421
0412518416418417314422521315310931519311310114441941742052462352341831
2293155243841862652131462041742041441721231431231551741739312317417412
3125173114135216185175267274191140104973263583573373573710407298365231
0446348375236304199477291359830627933521729840947931114110424192132132
1321321331031531431431431331029518316314315317316518417311318316417212
7383166246216204183123164144183165265183165203156294193165263166243164
1841921031341621031241721321431631631742031652541621151962642242141621
1316624314295213184185233142122122106245181047145893216694192132132132
1321331421331421252741651941631441462551861641731628310294175266196253
1442041742021331742052041739316417932416525414313519936419283124164183
1131041441427311312310310211292841741141531231341351542141641531421021
2210210317314517292126243142124192104194193123163143143143143143163103
1331431431441431321131331341561931031541951851821051851883241931531731
4315518728418617417315211314416416315416518619934419211630524522285236
2241429316420722733830626417725624415292134163165224166323134198364196
3162742063031662441931431431241631493752141941962331321051851361831331
2313415414626418417315941419316213211315314413627940104014651465413414
3153133114162105194174123104192144162116194184125224153146173153143103
1131429423419415311312315313313931212416311214419619412414420315519315
4194173142103134136196183142113104153123132122122126254174174164153144
1342231341541916282123126166183126235263154173175183141149104051952342
0417620519943521520415420521313210419415415311520620417515414212214314
4162661931241594531763231341921231431531531531431232041341331531373073

9313419313314418311415211213416211213621312419316417312214417621521294
1916312515520418416313315417417416419413313312312414413313312419214293
1562641894241742141951841531431351841731141431331051831241551762631521
0212520419521519620937518419125662331111451678166694221834194203184163
1641363262262141921321321331131141841541772541451941917294175264244174
1441629413284192133143124145202114185214191641595241941441641541741631
4418314310419725519420418315419210423418726419419417520211520313214419
3163124154194164145195175194144195197317304195156194153175154194112941
2515419414495155205154194142828417520313”

6.10 Fact: Code among verse, words and letters

Regarding the general rules, we do not look at this particular combination of the text numbers. Therefore, I present this successful test as a fact for a record of information. We will not include this and any other facts in the probability calculations.
We will perform similar approach to Code 5.5.1 but with special verses, words and letters by concatenating them in the natural order with the verse level data of the text type of 6236 numbered verses as follows.

```
x<- nQuran #6236 verses
tmp <- paste0(x$verse, x$vwords, x$vletters)
head(tmp)

## [1] "1419" "2418" "3212" "4312" "5419" "6319"

tmp <- paste0(tmp, collapse = '')
as.character(as.bigz(tmp) %% 19)

## [1] "0"

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 35134
```

There is also additional **fact** that complement the previous fact. The above fact exist in the 6236 numbered verses. The similar pattern also exist in all the 6348 verses. This time, we also compute the digit sum of each representative numbers of each verses before concatenating them as follows.

```
x<- unQuran #6348 verses
tmp <- paste0(x$verse, x$vwords, x$vletters)
head(tmp)

## [1] "1419" "2418" "3212" "4312" "5419" "6319"
```

```r
tmp <- sapply(tmp, digitsum) # digit sum of each verse
tmp <- paste0(tmp, collapse = "")
digitsum(tmp) %% 19

## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 12517
```

As we observed, in both of the text category of Quran, we observe 19 based codes as facts among verse indexes, number of words and letters.

6.11 Facts: on individual categories

In this section, I will present some interesting individual examples as facts but not as evidences of the general system.

6.11.1 Fact: The Chapters

$$c$$

$$114$$

The number of chapters in Quran is 114 and it is multiple of 19. Among all the others, Fact 6.11.1 looks like the most obvious one and easiest to count even manually. However, it is still an interesting fact of the text of Quran regarding 19 based coding system. Because it stands as an important clue that leads to the 19 system of the text.

Regarding the reference, the number of chapters and the divisibility of it by 19 were already known by all Muslims and there is no need to give a specific reference for it. God knows best, but in my humble opinion, when considered with the verse, “74:30. Over it is Nineteen”, this so apparent multiple of 19 number 114 might be left so obvious as a clue (along with the 19 letters Basmala verse), so that Muslims get curious about the other numbers of the text of Quran and discover the 19 based coding system of the text of Quran in the end.

6.11.2 Fact: The Verses

$$v, V$$

$$6236 - 6348$$

The number of numbered verses in Quran was counted from the text computationally and shown to be equal to $6236(v)$ and the number of unnumbered and numbered verses together in Quran was shown to be equal to $6348(V)$ in Chapter 3.1.6.1. A reproducible test is provided in Chapter 3.1.3 for anyone who wish to reproduce these natural text numbers. When we combine them by concatenating in both directions to test, the sum of the digits of the two verse numbers v (6236) and V (6348) is equal to 38 and it is multiple of 19. It is easy to calculate but lets use the *digitsum* function again and save some time as follows:

```
tmp <- paste0(v, V, collapse = '')
tmp

## [1] "62366348"

tmp1 <- digitsum(tmp)
cat("The sum of the digits is:", tmp1)

## The sum of the digits is: 38
```

Fact 6.11.2 incorporates both of the verse numbers and show their potential relation to each other regarding 19.

6.12 Fact: Others

In this section, I present some other interesting codes that are not within the general rules but presented as facts.

If I do not observe a systematic pattern and can not set rules, I do not take individual interesting examples as evidence. But, I will still report some interesting numbers as a separate **facts** rather than evidence. In order to claim a number to be evidence, I always consider the set rules and accordingly count the number of potential combinations to be tested so that we can calculate whether the code is statistically significant or not. Another reason I record some interesting tested numbers as a **fact** is that, they might still be part of another coding system that I might not have realized yet but people might investigate further around them and might find a new pattern later and include them as evidence too. Thus, in this current fact, I will present an 19 divisible tested number as an interesting **fact**.

6.12.1 Fact: Totals

This fact is about combining sums of the totals of the main descriptive numbers per chapter.

Let's remember the tables with which we will compute the sums of chapters, verses, words and letters.

```r
require(data.table, quietly = T)
require(DT, quietly = T)
knitr::kable(head(nQuran), booktabs = TRUE,
  caption = 'Table head of the numbered verses of Quran.')
```

Table 6.13: Table head of the numbered verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم

```r
knitr::kable(head(unQuran), booktabs = TRUE,
  caption = 'Table head of the all verses of Quran.')
```

Table 6.13: Table head of the all verses of Quran.

VerseI	chapter	verse	vwords	vletters	text
1	1	1	4	19	بسم الله الرحمن الرحيم
2	1	2	4	18	الحمد لله رب العالمين
3	1	3	2	12	الرحمن الرحيم
4	1	4	3	12	مالك يوم الدين
5	1	5	4	19	إياك نعبد وإياك نستعين
6	1	6	3	19	اهدنا الصراط المستقيم

From these tables we can compute sum of each columns of chapters and verses and combine them by concatenation and test them as below:

```
# Get the number in the text type 1, all 6348 verses
tmp <- dfVCWL
# Compute the sums of the numbers of each of the 4 categories
tmp <- apply(tmp,2,sum)

# Compute the sum of the 4 descriptor numbers
tmps<- sum(tmp)

#Compute the concatenation of the 4 descriptor numbers
tmp2 <- paste0(tmp, collapse = "")

#Compute the concatenation of the 4 descriptor numbers and the sum
together
tmp2 <- paste0(tmp2,tmps) # 655563487824533283742398 5

# Get the number in the text type 2, the 6236 numbered verses
tmp <- dfVCwl
tmp <- apply(tmp,2,sum)
tmps<- sum(tmp)
```

```
tmp <- paste0(tmp, collapse = "")
tmp #"6555623677797330709"

## [1] "6555623677797330709"

tmp <- paste0(tmp,tmps)
tmp #"655562367779733070942129 7"

## [1] "655562367779733070942129 7"

# combine the obtained numbers of both text types by concatenating
x<- paste0(tmp,tmp2)
# should be: "655562367779733070942129765556348782453328374239 85"
x

## [1] "655562367779733070942129765556348782453328374239 85"

#Tests
as.bigz(x) %% 19  # Test if 0

## Big Integer ('bigz') :
## [1] 0

digitsum(x) %% 19 # Test if 0

## [1] 0

#represent 2/3 successes considering both ways
```

The fist column (Chapter_index) in the table is for the indexes of chapters (1 to 114) and the sum of these indexes, *as another fact is 6555, which itself is multiple of 19* and also one of the three numbers of interest for this fact. The second column contains the verse sum of each chapter and the sum of it, as we know from before, is 6236.

Further Fact: Code between chapters and Verses:

This fact is about the code between the chapter indexes and their corresponding total verses. The sum of chapter indexes (from 1 to 114) is 6555 and the sum of verses in these chapters are 6236. When concatenated, it provides 62366555 as the number to be tested. The digit sum of this number is 38, which is 2x19.

6.12.2 Fact: Code between general verse indexes and letters

In this *fact*, I present the code between the general verse indexes and letters. This code again mimics the rewriting approach and concatenates from right to left. This code uses the

digit sum test and not aligned with the rules of the evidences and presented just as a fact. This code shows that when the general verse indexes and letters are concatenated, the digit sum of the resulting number is multiple of 19, when tested in all the 6348 verses.

```
## General verse indexes and letters
# 2 possible numbers; one test
x<- data.table(unQuran)
#The order of both is not matter as digit sum test has passed
tmp <- paste0(x$VerseI,x$vletters)
tmpr <- rev(tmp) # The reverse and other way both works as digit sum
test has passed.
tmpr <- paste0(tmpr, collapse = '')
as.integer(digitsum(tmpr) %% 19)

## [1] 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 37592
```

6.12.3 Fact: Code on letters digit sum at chapter level

This code shows that the digit sum of the digits of the numbers of letters per chapter in all the 6848 verses text type is multiple of 19.

```
tmp <- dfVCWL$cLetters
tmp <- paste0(tmp, collapse = '')
digitsum(tmp) %% 19

## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 410
```

6.12.4 Fact: Relation between words and letters along with chapter indexes

This code shows that the digit sum of the digits of the number of words and letters in each verse along with chapter indexes in all the text of Quran is multiple of 19.

```
#Chapters, words and letters
x<- unQuran
tmp <- paste0(x$chapter,x$vwords,x$vletters)
head(tmp) # head of the big number
```

```
## [1] "1419" "1418" "1212" "1312" "1419" "1319"

tail(tmp) # tail of the big number

## [1] "114414" "11428"  "11428"  "114417" "114520" "114313"

tmp <- paste0(tmp, collapse = "")
as.character(digitsum(tmp) %% 19)

## [1] "0"

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 34429
```

6.13 Further facts on Allah and Al-Rahman word positions

In the following subsections, I will presents some interesting coding examples as facts with respect to Allah and Al-Rahman word positions.

I already presented evidences on Allah and Al-Rahman word positions in Evidence 4.2.9.1 and Evidence 4.2.9.2. This chapter provides some additional interesting codes as *facts*.

6.13.1 Fact on Allah and Al-Rahman word positions when paired

In this fact, I will show that the chapter and the special verse indexes of the verses which includes Allah words and the verses which includes Al-Rahman words are together also have 19 based coding. Basically, we will **pair those indexes** between Allah and Al-Rahman words positions. The pattern of this fact is similar to what I presented in Evidence 4.2.9.1 and Evidence 4.2.9.2. In this sub-chapter, we will observe that the same coding pattern exist between the indexes of Allah and also Al-Rahman words.

```
# yunQ is for Allah word from all 6348 verses
# yunQ2 is for Al-Rahman word from all 6348 verses
tmpdf1 <- yunQ
tmpdf2 <- yunQ2
x<- tmpdf1
tv <-c()
for(j in 1:nrow(x)) {
  if(x$verse[j] != 0){#for all the numbered verses
    tmp <- paste0(x$Chapter[j], x$verse[j])
  }else{#For unnumbered Basmala verses
    tmp <- paste0(x$Chapter[j] )}
```

```
  tv <- c(tv,tmp) }
length(tv)

## [1] 1678

tmpa <- tv
#
x<- tmpdf2
tv <-c()
for(j in 1:nrow(x)) {
  if(x$verse[j] != 0){#for all the numbered verses
    tmp <- paste0(x$Chapter[j], x$verse[j])
  }else{#For unnumbered Basmala verses
    tmp <- paste0(x$Chapter[j] )}
  tv <- c(tv,tmp)}
length(tv)

## [1] 157

#Pair both vectors
tmp <- paste0(tmpa,tv)
#concatenate all the numbers
tmp <- paste0(tmp, collapse = "")

as.bigz(tmp) %% 19 #test for 19

## Big Integer ('bigz') :
## [1] 0

nchar(tmp)

## [1] 10313
```

You can access this 10313 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Fact_7.3.3.txt

One can just copy the big number and paste it into a web based big number calculator and test it herself.

Finally, here is the 10313 digits length big number:

“1111213272292163210321542175220622372268227102551126012261132641426715270162731727417110275182761927719452791958280196128319692851975288197

828919852901987291198829419932971996298202101205210220902103201092106 2
121072126210921362110214221142111221152221162321182421202521322559213 7
256021382563213926214026521432721442730214828214929215330215431215832 2
159332161342164352165362167361121693615217036232173365221743721763821 8
139218240218541218741221894221904321924319219443202195433621964345219 7
442198452199462200472203482204492206502207503322095122105222115322135 4
221455221555122175622185722195822205922225922222360222461222562222663 2
227642228652229662230672231673223367192235672022376729223968224269224 3
702244712245722246732247742249752251762252772253782255783722577838225 8
792259802260812261822262832265842266852267862270872272882273892275902 2
769122789222799322819422829522839622849722869839932100341013510237103 3
910431010531110631310731510831810931911032111132311232811332911433011 3
311333223332163337333943405342634573478349103501135112352133541435515 3
591636117362171103631836419370194537319583751961376196937719753781978 3
791985381198738319883861993387199638920392205394209039520109397213982 1
263992136310121423102211123103223107233108243109253112255931132560311 6
256331172631192653120273122273031232831262931303031323131353231403331 4
134314235314436314536113146361531483623315036523152373154383155393156 4
031574131584123159423160433162431931634320316443363165434531664431674 5
316946317047317148317349317450317650333177513179523180533181543182553 1
835513187563191573195583198593199592232006046141624563496441165412664 1
367414673415671941667204176729419684236942470426714287242973430744327 5
433764347743578436783743778384397944080442814438244683447844885449864
508745288454894569045891459924619346394464954699647097472984739947410 0
475101476102477103478104479105480106481107482108483109484110485111486 1
124871134881144891149013492249321634943495449654976499741008410210410 3
114104124105134106144107154108164109174110171104111184113194114194541 1
619584118196141191969412219754123197841251985412619874127198841281993 4
129199641302041312054133209041342010941352141372126414021364141214241 4
221112414322414623414724414825414925594150256041522563415326415526541 5
727415827304160284164294165304166314167324168334169344170354171364173 3
611417636155362351365252375338543956405741584125942511435124319513432 0
514433651543455164451745518465204752148523495275052850335315153352534 5
353554538555395515405654157542585435954459225456054761548625496355064 5
516555266554675556735566719557672056067295646856769571705727157372574 7
357674580755857658777588785897837591783859279594805958159682597835988 4
510085510186510387510488510589510690510891510992511093511294511595511 6
965117975119986996310061410161710261910362110463110563310663410763510 8
636109637110639111640112646113647114650116531365626622163664367046715 6
806688769086911069311695126102136107146108156109166111176114171106116 1

8611819611919456121195861241961612519696128197561361978613719856138198
7614019886142199361441996614520614820561502090615120109615221615721266
1592136616421427211127262272823730247322573325597372560743256374426745
2657492775027307542875629759307623176532769337703477135773367743611785
3615786362378736527893779938710139710540713141714041271584271644371694
3197178432071854336718643457187447188457189467190477194487196498508150
3382518752810538135481655817551818568195782058822598235922824608256182
7628286382964830658336683467836673837671983967208406729842688436984470
8457184672847738487484975851768527785378855783785878388607986180862818
6382864838668486885869868708787188872898749087591919292939394949595969
6979798999991410091510191610291710391810491910592010692210792410892510
9926110927111928112929113930114931119321393429362163937393849405941694
3794689481095111952129551395914960159611696317964171109671896819970194
5971195897219619741969975197597719789781985979198798019889811993983199
6985209892059902090993201099942199621269972136999214291002111291022291
0423910524910625910725599109256091112563911226911526591162791172730911
8289119299120309121319123329127339129341035103361043611105361510636231
0113652101637101738101839102140102241102741210304210314310324319103443
2010354336103643451037441038451044461045471046481049491055501058503310
5951106052106253106454106655106855110695610715710725810815910825922108
5601095611010062101046310106641010765101096611671126731146719116672011
1367291114681118691119701120711126721129731130741131751133761134771141
7811437837115078381154791156801161811163821164831173841178851184861186
8711928811101891111390111159112921223931238941239951240961252971266981
2679912681001276101127910212801031283104128610512871061288107129010812
9110912921101296111129911212107113121081141311132131382131121631313313
1641317513206132171325813261013271113281213311313331413341513361613371
7133817110133918141914219451431958144196114519691461975148197814919851
4101987141119881412199314191996142020142120514222090142420109142521142
7212614282136143221421434211121438221442231446241447251451255915256015
6925631596261626516127169273016182816202916233016263116283216313316333
4163535163636163736111638361516413623164536521648371651381652391653401
6614116704121671421672431673431916744320167543361676434516774416794516
8346168747168848169049169150169250331693511694521695531696541610455161
0555116106561610757161085816112591611459221611560161166116128621763172
2641733651739661794671797673179967191711067201867291846818156918167018
1771182172182473182674183875183976184377184578186978371978381930791936
8019488119498219588319768419818520862088720148820618920989020114912192
2122932166942167952198962297222982239922610022710122810222910322101042
2111052212106221410722151082216109221711022181112223112222511322281142

2301122321322342223521632236322374223852239622407224782252102254112258
1222591322601422611522621622631722641711022651822681922691945227019582
2711961227219692273197522741978227519852276198722781988231993231419962
3232023242052332209023382010923912123116212623117213624214224221112245
2224723249242410252413255924142560241525632417262418265242027242127302
4222824252924303024313124323224333324353424363524373624383611243936152
4403623244136522442372443382444392445402448412450412245142245243245343
1924544320245543362458434524594424614524624624634725482517492541502555
5033256851257052257153265426895526935512610856261105726126582613159261
4459222615060261636126179622621363262276427652786627967272467327266719
2730672027366729274368274569274670274771276072276173276274276375276476
2765772779782787783727887838287928138028278128308228498328508428568528
6086286887287088287189287290287691287792287893288094288195288296288797
2888982999293100295101296102291010329111042916105291710629191072920108
2922109292311029241112925112292911329361142940112941132942229442163294
5329504296052961629627296382965102967112968122969133014305153061630817
3091711030101830111930171945302919583030196130371969303819753039197830
4019853043198730481988305019933054199630562030592053060209031201093162
1319212631112136311221423116211123118223120233121243122253123255931252
5603126256331272631282653129273130273031312831322931333031343132323243
3333433135332363333611334361533536233363652339373312383315393317403318
4133194123321423322433323431933244320332543363327434533294433304533334
6333447333548333649333750333850333339513340523341533346543347553348551
3350563351573352583353593354592233556033566133576233596333626433636533
6466336667336967333706719337167203373672934683486934227034247134277234
4773357435175352763537735478355783735878383511793513803515813517823518
8335228435278535288635298735318835328935389035409135419235439335449435
4595369636479736749837993723100373510137401023774103378610437102105371
2610637128107371521083715910937160110371691113811238261133865114391139
1133922393216339433964397539106391173914839161039171139181239201339211
4392215392316392617392917110393218393519393619453937195839381961394219
6939431975394519783947198539521987395319883956199339571996396020396120
5396220903963201093964213966212639672136396821424021112402224042340102
4401225401425594016256040172563402026402126540222740282730402928403129
4033304034314035324043334044344045354048364055361140563615406136234062
3652406337406438406639406940407441407741240784240794340814319408543204
1433641144345411544411945412146412247412848413049413350415250334251423
5242553426544285542105514213564215574216584217594219592242216042236142
2462422763423164423665424066424467424667342476719425167204253672943684
3636943647043877144724418734419744442754576452774557845678374587838451

0794512804514814519824522834523844526854532864535874688462894649046591
4689246109346139446179546219646239746269846289946311004632101463310247
1034711044731054741064771074791084710109471111047121114716112471911347
2111447231147261347282472921634732347334473454738648748284831048411485
1248613487144810154811164814174815171104816184817194818194548191958482
0196148211969482319754824197848251985482619874827198848291993491996491
2049320549720904982010949921491021264912213649132142491421112491522491
6234917244918255025595026256051256351502651512655158275227305227285243
2953305323315326325358335434553556365736115753615579362357103652571137
5714385716395717405718415720412572142572243572443195725432057274336572
8434557294458455814658247584485854958650587503358851589525810535811545
8125558135515814565815575816585817595818592258196058206158216258226359
6459265593665946759567359667195976720598672959136859166959187059197159
2172592273592374592475607660477606786077837608783860979601080601181601
2826013836184613856148661587616886178961890611191611392611493629462495
6259662997621098621199631006311016321026341036351046361056371066391076
3111086410964611064711164111126412113641311464141164161364172652163651
3652465356546655765786510106511116512126613661146621566316664176661711
0668186610196611194567195867919616726196967281975681978691985701987703
1988711993713199671420711520571252090722010972421725212672721367212214
2721821112721922722223722324732573202559742560743125637456267526576277
6627307692876112976303077317832793379253480358136812936118236158336238
4365285378638873987740884188244128942904391431991134320924336934345944
4954595846964796144897499850982503398551988529953100541015510255110356
1045710465810559106592210760108611096211063110164110265111661126711216
7311226719113672011467 29”

6.13.2 Fact on Allah word positions and frequencies with concatenation

In this fact, I will show that the general verse indexes, the chapter indexes, the verse indexes and Allah word counts have also 19 based coding in the numbered verses of Quran with respect to their concatenations as follows.

In this fact, we concatenate the general verse index, the chapter index and the number of Allah words in that verse. For example, the first Allah word in the numbered verse of Basmala verse in the first chapter (Al-Fatiha), which has also the first general verse index. Thus, we get this representative number for it after concatenating in the natural order: 111. Similarly, the following verse with Allah word is at the general verse index 14 and in the second chapter with one Allah word. Thus, we get this 1421 as the representative number for it by concatenating in the natural order. This is done for all the verses with Allah words in it. Then we concatenate all of these representative numbers with each other in the

normal order of the table. Then we get 9742 digits length big number and it is multiple of 19. Here is the proof of this test:

```
y <- ynQ #ynQ is from 6236 verses
head(y)

##    Gen_verseI Chapter verse countW
##         <num>   <num> <num>  <num>
## 1:          1       1     1      1
## 2:         14       2     7      1
## 3:         16       2     9      1
## 4:         17       2    10      1
## 5:         22       2    15      1
## 6:         24       2    17      1

tmp<- paste0(y$Gen_verseI, y$Chapter,
             y$countW)
# head side of numbers of each verse
head(tmp)

## [1] "111"  "1421" "1621" "1721" "2221" "2421"

tmp <- paste0(tmp, collapse = "")
as.bigz(tmp) %% 19 #mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0
```

You can access this 9742 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Fact_7.7.4.txt

One can just copy the big number and paste it into a web based big number calculator and test it herself.

Finally, here is the 9742 digits length big number:

“111142116211721222124212722302133223422622167216822712174217721802181
228221832184218621872390219221952196229722982210121104211052110822109 2
111021113211142211622117221212112222123211252112722139211442114522146 2
114723150231512115522156211602116121165221662116821171211722317421176 2
117721180221812218321188211892119222194241962119722199212012220222203 2
220421205212062220721210222112121321214212162121722218222202222122222 2
122422225222262122722229222302123121232212332123421235212362423722238 2

4240222422324421246212492125022251222522125322254222562325824259212602
4262212642126522266232672126821269212722127321274212772127922280222822
2283212852128621288212892529021291212932129531297312983130031302313033
1304313063130831311313123331431316313213332231323313243232532326313303
2332323333133531338313403134232343313443134532347313483135231354313553
2356313573236331366323683136931370323713337232374313763137931380313823
1385313873138831390313913139232394313953139633400314013240231405334063
1409314103141231413314153141632419324233142531428324333143431435314373
2438314393144131443314453144731448324493145032451314523345332455324563
1457314583145931460314623146331464324663146732469324703147233473314743
2475314763148031484314883149132492324933149442498415024150443505415064
2507415084150941510435124151641517425194152141522415234152543526415274
3528425294253041532425334153541536415394154041541415424154341545425474
1549415514355242554415564155743562425634156541566415674256841569415704
1571425724157341574415754157641577425784157941580425814258241583425854
2586415874458844589415904159242593445954159641597425984159942600416014
2602416034260441606436074160941611416124261542616416184161941620426214
1622416234262442626416274262841630416334263442635426364163941640426414
2642416434164541646416484265041651426534165741658426594166041661416624
1663416644366641669426705167153672526735467551676536775267851680536815
3682516835168451685516865268751689516905169252696516975170051702517035
1704517075170852709517105371151712517135271451716527175371853719517205
1721517235372451725527265172952733527365174051741537425174351745517495
1754517565275752758527605176151763527645276551766537675276951770517725
2773517745177551777517785177951781517845178552786517885279261803618066
1808628106182061822618236182461825618266182861829628356283661839618426
2845618516185361859618606386961877618796188063882638846289161896618976
2898619006190361905619076190861910619136391462917619256192661927619296
2931619336393461937619396194061941619466194861953619807198272984719867
1987719917299771998719997110037110047210087210107110137110167110197110
2371102471102571102773102871103971104071104171104374105372105571105971
1085711094711112711118711123711132711139711140711141711142711143711144
7111487111507111618211628111678211708311738311768111778311788111798111
8081118281118381118481118581118781118881118981119081119382119481119681
1197811199811200811202821203821204821205811206821207811208811209821211
8112128312138212158112188112208312218112228112238112248112268212288112
2982123081123181123281123481123582123691123792123893123991124091124191
1242921244911249911250911251921252911253921254921255921257911259921260
9112619112629112639212649112659312669112679212699212719312729212739112
7594127691127891128191128391128692128791129091129494129592129691129891

1299911302911303921305911306931307921309921310911312911313921314911315
9113169213189113209113249113259113289113299213319113329113349313359113
3792133992134091134191134291134491134693134791135092135192135291135392
1354911355931356911358911362911364911367102136810113691011370101137510
1138010113811011382103138510113861011391101139410113951011396101139810
1139910114001011401101140210114081011409101141010114131011419101142210
1142310214241021426101142810114301011432102143310114351021436101144510
2144610114491011459101146410114681021470101147110114731011475111147711
1147911114861111487111149111214921111493111149911115021111503111150411
3150611115071111514111151611115231111527111152911115341111536111153711
2154611215511111557111155911115651111574111158611115881111619121163412
1163512116361211648121166212216631211664121167212116751211676122167912
1168212216831221684121168612216871211688121169212116951211703121170412
2170913117151311718133172013117231321724132172713117281311732132173313
1173413117351321738133174013117411311743131174413117451311746131175214
1175314117541411755141175614117581411759141176014117611431762142176914
1177014117711421772141177414117751411777143177814117821411784141178814
1179214117961411797142180114218711511898151190216119101611919162192116
1192416119271611929161193216119341611936161193716219381611939161194216
1194616119491611952161195316119541611962161197116119721611973161197416
1197516119761611977161197816119801611984161198816119891611991161199216
3199316119941611995161199616219971612005162200616120071612008161200916
1201316320151622016162201716220291612051171206217120681712123171212617
1212817121391712144181215518121561812157182216118121641812166181217818
1217918121831812185181220918122801912286191229819122991912308191232619
1233119123562012362201240920124462012462201250521225492112550211258121
1259722125982212601221260222126032212604221260522126062212607221260922
2261022126112212612222261322326182212620221262322126252212627221262922
1263022126312222632222263322226342212635225264222126472222649221265322
3265422126552222656222265722226582222659221266022226632212664221266522
2266622126672212668221266922226702222671221267322126872312696231269723
1270523127112312764232789231279023127932412796241279824128002412801 24
2280424128052412806241280824128092412811242281224228132422816242282124
1282224128232412824243282624328272412828241282924128302412831241283224
1283324128342412835241283624228392412841241284224128432422844241284524
1284624128492412850241285224228532422854241287225128962512910251292325
2292525229262513021261302526130402613042261305826130632613076261308226
1309526131112613145261315926131672713168271318327131852713189271319527
1320227132042713205271320627132192713220271322127132222723223271322427
1323827132462713247271326528132792813282281330128133022823308281331228

1332028133222813323282332428233282813329283333028133322813333281333428
2333928133402813343291334529233462913350293335129133562913357293335929
2336029233622913363291336429133652913369291337629133802913381291338229
1338429133852913390291340029134012913402292340329134052913407291340829
1340929134143013415302341730134183013419301342030134263013438301343930
2344630134473013448302344930134523013457301345930134633013465301346830
1346930134753113478311348031134813113485312348731134893123490311349131
2349231134943113495311349631234973113498312349931235003113501311350231
1350331235073213534332353533135363313537331353833235393313542332354533
1354833235503323551331355233235543333555332355633135573323558333356033
1356233235633313566332356733235683323569332357033435713333572332357333
2357433135793313580331358133135833323584331358533135863323587331358833
2358933135903323592331359533235963313597331359933136023323603331360433
1360633336143413628341363034136333413653341366135136623513663352366435
1366535136683523671351367335136753513677351367835136823513687351368835
2368935136913513692351369835137003513701351370335237043513705352375236
2377936138113713823371382837138623713874371389037139143713916371394037
1394737139483713957371399638240353814059391406039140613934062392406439
1406539140683914069391407239140743914075391407639140783924079391408039
2408139440843914087391409039140933914094392409539240963944100391410139
1410339141053914110391411139241143914115391411839141193914120391412139
1412239141243914125391412639141354014137401414340141454014147401414940
1415040141534014154402415540141614024162401416440141664024167402416840
3417640141774024178401418140141884014189401419440241954014196401419740
3419940142024014207402421040142114024212401421440142184014232411423341
1423741142394114240411424641142484114251411427041142754214277421427842
1428042142824224285421428742342884214289421429142142934214295422429642
3429942143034214308421431242143164214318422431942143234214325422438843
1438943144124314432441443344144564414475451447845144794524481451448345
1448545144874514492451449545144964524499451450545145084514512461451446
1451546145184614520462452346145274624531461453346145364614538461454146
1454246145434614546471454847145494724552471455447145554714556471455747
1456147145644714566471456847145714714573471457447145774724578471457947
2458347145854814586481458748145884814589481459048145934834594482459748
1459848245994814600481460148146024814603481460448246064824607481460848
1460948246104824612483461349346154924619492462049146214924622491462449
2462549246264924627491462849146294914630491465650147255114726511473351
1476252147785224807531481053148425315080571508457150855725086571508957
1509157150925715093571509557150965715097571509957151005725102571510357
1510457251055835106581510858151095815110582511158251125825113581511458

2511558251165815117582511858151195815120581512158151225815123581512458
1512558251265845128592512959151305935131591513259251335935134592513959
1514259151445935145591514759151485915149592515059151546025156602515760
1515860251596015160602516160151626025163601516661151676115168612516961
1517061151716115174611517661151776135181621518262151866215187622518862
1518963151906315192631519363151946325195631519763151996315205641520664
1521064152116415212642521364152156415216641521865452196515220653522165
1522265252246535227653522865252296535230661523166152326615233662523566
1523766252396625240661525067152676715269671537870154227115423711543471
1544471154517215452721545472154597215465721546672154697215470722549573
6552674255517415597761560076156027615621762573779158298115955871599188
1605691261069516120961613298161359816138981618510416214110162151101622
2112162231121”

6.13.3 Fact: General verse indexes, Chapter and Special verse indexes

In this **fact**, I will show that the general verse indexes, the chapter indexes and the special verse indexes in each chapter with Allah words in it have also 19 based coding in all the verses.

This fact concatenates each general verse index, chapter index and special verse index that have Allah words in it considering all the 6348 verses. We then concatenate each of these representation numbers in its natural order. The resulting 12126 digits length big number is multiple of 19.

```
x<- yunQ #all 6348 verses
tv <-c()
for(j in 1:nrow(x)) {
  if(x$verse[j] != 0){#for all the numbered verses
    tmp <- paste0(x$Gen_verseI[j], x$Chapter[j], x$verse[j])
  }else{#For unnumbered Basmala verses
    tmp <- paste0(x$Gen_verseI[j],x$Chapter[j])
  }
  tv <- c(tv,tmp)
}

# head side of numbers of each verse
head(tv)

## [1] "111"   "82"    "1527"  "1729"  "18210" "23215"

tail(tv)
```

```
## [1] "6325111"  "6331112"  "63321121" "63331122" "6336113"
"6342114"

tmp <- paste0(tv, collapse = "")
as.bigz(tmp) %% 19 # mod 19 must be zero

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this
    big number is", nchar(tmp))

## number of digits on this
##     big number is 12126
```

You can access this 12126 digits length big number from the following link:

https://github.com/quran2019/Quran19/blob/master/Fact_7.7.5.txt

One can just copy the big number and paste it into a web based big number calculator and test it herself.

Finally, here is the 12126 digits length big number:

“1118215271729182102321525217282203122334226352276325568260692617226475267782708127382274832758427685277872798828091283932859628897289982909929110229410529710629810921011102102111210311421061152107117210911821101222114123211512421161262118128212014021321452137146213814721391482140151214315221441562148157214916121531622154166215816721591692161172216417321651752167177216917821701812173182217418421761892181190218219321851952187197218919821902002192202219420321952042196205219720621982072199208220021122032122204214220621522072172209218221021922112212213222221422322152252217226221822722192282220230222223122232322224233222523422262352222723622282372229238223023922312412233243223524522372472239250224225122432522244253224525422462552247257224925922512602252261225326322552652257266225826722592682260269226127022622732265274226627522672782270280227228122732832275284227628622782872279289228129022822912283292228429422862953297322993430035302373043930531030631130831331031531331831431931632131832332332832432932533032633132733232833333233733433933534033734234034534234734434934535034635134735234935435035535435935636135736235836335936436537036837337037537137637237737337837437937638137838338138638238738438938738738938939439039539239739339839439939639101397310239831034023107403310840431094073112408311341131164123117414311941531204173 1

2241831234213126425313042731324303135435314043631414373142439314444031
4544131464433148445315044731524493154450315545131564523157453315845431
5945531604573162458316345931644603165461316646231674643169465317046631
7146831734693174471317647231774743179475318047631814773182478318348231
8748631914903195493319849431994953200496449741501455054950741150841250
9413510414511415512416513417515419519423520424522426524428525429526430
5284325294335304345314355324365334375354395364405384425394435424465434
4754444854544954645048452550454552456554458555459557461559463560464564
5469566470568472569473570474571475572476573477574478575479576480577481
5784825794835804845814855824865834875844885854895864905884925894935904
9459149559249659349759549959641005984102599410360041046014105602410660
3410760441086054109606411060741116094113610411461241166144118615411961
8412261941236214125622412662341276244128625412962641306274131629413363
0413463141356334137636414063741416384142639414364241466434147644414864
5414964641506484152649415365141556534157654415865641606604164661416566
2416666341676644168665416966641706674171669417367241766735674516755267
6536775467956680576815868259684511685512686513687514688515689516690517
6915186935206945216965237005277015287045317065337075347085357115387125
3971354071454171554271654371754471854572054772154872254972355072455172
5552727554728555729556730557733560737564740567744571745572746573747574
7495767535807585857605877615887625897645917655927675947685957695967705
9777159877351007745101776510377751047785105779510678151087825109783511
0785511278851157895116790511779251197946797638086148116178136198156218
2563182763382863482963583063683163783363983464084064684164784465084765
3850656856662858664864670865671874680882688884690885691887693889695896
6102901610790261089036109905611190861149106116912611891361199156121918
6124919612592261289306136931613793261389346140936614293861449396145942
6148944615094561519466152951615795361599586164960798672698872899073099
2732993733997737100374310047441005745100974910107501014754101675610197
5910227621025765102976910307701031771103377310347741045785104678610477
8710497891059799106171011065710510917131110071401118715811247164112971
6911387178114571851146718611477187114871881149718911507190115471941156
7196116781168811169821174871177810118081311838161184817118581811868191
1878201189822119082311918241192825119482711958281196829119783012008331
2018341203836120483712068391207840120984212108431211844121284512138461
2148471215848121684912188511219852122085312228551225858122786012288611
2298621230863123186412338661235868123686912378701238871123987212418741
2428751243911244921245931246941247951248961249971251991256914125791512
5891612599171260918126191912629201264922126692412679251268926126992712
7092812719291272930127393112749321276934127893612799371280938128294012

8394112859431288946129094812939511294952129795513019591302960130396113
0596313069641309967131096813129701313971131497213169741317975131997713
2097813219791322980132398113259831327985133198913329901335993133699413
3899613399971341999134291001344910213469104134791051348910613499107135
1910913539111135491121357911513589116135991171360911813619119136291201
3639121136591231369912713719129137210137510313761041377105137810613831
0111388101613891017139010181393102113941022139910271402103014031031140
4103214061034140710351408103614091037141010381416104414171045141810461
4211049142710551430105814311059143210601434106214361064143810661440106
8144110691443107114441072145310811454108214571085146710951472101001476
1010414781010614791010714811010914821114841121486114148811614951113149
6111415001118150111191502112015081126151111291512113015131131151511331
5161134152311411525114315321150153611541538115615431161154511631546116
4155511731560117815661184156811861574119215831110115951111315971111516
0612162912231644123816451239164612401658125216721266167312671674126816
8212761685127916861280168912831692128616931287169412881696129016971291
1698129217021296170512991713121071714121081718131720132172613817291311
1731131317341316173513171738132017391321174313251744132617451327174613
2817491331175113331752133417541336175513371756133817571339176214176414
2176514317661441767145176814617701481771149177214101773141117741412178
1141917821420178314211784142217861424178714251789142717901428179414321
7961434180014381804144218081446180914471813145118151518841569191115961
9151619161611924169193316181935162019381623194116261943162819461631194
8163319501635195116361952163719531638195616411960164519631648196616511
9671652196816531976166119851670198616711987167219881673198916741990167
5199116761992167719941679199816832002168720031688200516902006169120071
6922008169320091694201016952011169620191610420201610520211610620221610
7202316108202716112202916114203016115203116116204316128204417206617222
0771733208317392138179421411797214317992154171102156182160184217118152
1721816217318172177182121801824218218262194183821951839219918432201184
5222518692267192297193023031936231519482316194923251958234319762348198
1236620237420823802014242720612464209824802011425022125242122256821662
5692167260021982615222617222261822326212262622227262322826242292625221
0262622112627221226292214263022152631221626322217263322182638222326402
2252643222826452230264722322649223426502235265122362652223726532238265
4223926552240266222472667225226692254267322582674225926752260267622612
6772262267822632679226426802265268322682684226926852270268622712687227
2268822732689227426902275269122762693227826942327082314271723232718232
4272623322732233827852391281023116281123117281324281524228182452820247
2822249282324102826241328272414282824152830241728312418283324202834242

1283524222838242528432430284424312845243228462433284824352849243628502
4372851243828522439285324402854244128552442285624432857244428582445286
1244828632450286424512865245228662453286724542868245528712458287224592
8742461287524622876246328782528952517291925412933255529462568294825702
9492571295626304526893049269330642610830662611030822612630872613131002
6144310626150311926163313526179316926213318326227318427319227831932793
2082724321027263214273032202736322727433229274532302746323127473244276
0324527613246276232472763324827643249276532632779327127873272278832782
8329128133305282733082830332728493328285033342856333828603346286833482
8703349287133502872335428763355287733562878335828803359288133602882336
5288733662888336729337029333722953373296337729103378291133832916338429
1733862919338729203389292233902923339129243392229253396292934032936340 7
2940340829413409294234112944341229453417295034272960342829613429296234
3029633432296534342967343529683436296934373034423053443306344530834463
0934473010344830113454301734663029346730303474303734753038347630393477
3040348030433485304834873050349130543493305634963059349730603498313504
3163507319350931113510311235143116351631183518312035193121352031223521
3123352331253524312635253127352631283527312935283130352931313530313235
3131333532313435333235373243564333565331356633235673333568334356933535
7033635733393576331235793315358133173582331835833319358533213586332235
8733233588332435893325359133273593332935943330359733333598333435993335
3600333636013337360233383603333936043340360533413610334636113347361233
4836143350361533513616335236173353361833543619335536203356362133573623
3359362633623627336336283364363033663633336936343370363533713637337336
3834364634836603422366234243665342736853447369335369435136953523696353
3697354369835537013583704351137063513370835153710351737113518371535223
7203527372135283722352937243531372535323731353837333540373435413736354
3373735443738354537393637863647381336743823373846372338583735386337403
8973774390937863925371023949371263951371283975371523982371593983371603
9923716940063840323826407138654095394096391409739240983934099394410139
6410239741053910410639114109391441113916411239174113391841153920411639
2141173922411839234121392641243929412739324130393541313936413239374133
3938413739424138394341403945414239474147395241483953415139564152395741
5539604156396141573962415839634159396441613966416239674163396841714041
7340241754044181401041834012418540144187401641884017419140204192402141
9340224199402842004029420240314204403342054034420640354214404342154044
4216404542194048422640554227405642324061423340624234406342354064423740
6642404069424540744248407742494078425040794252408142564085425741427141
1442724115427641194278412142794122428541284287413042904133430941524312
4243154234317425431842643204284322421043254213432742154328421643294217

4331421943334221433542234336422443394227434342314348423643524240435642
4443584246435942474363425143654253436643442943634430436444534387445644
4474441844754419449844424516454518452452145545224564524458452645104528
4512453045144535451945384522453945234542452645484532455145354554464556
4624558464455946545624684564461045674613457146174575462145774623458046
2645824628458546314586463245874633459047459147145934734594474459747745
9947946004710460147114602471246064716460947194611472146134723461647264
6184728461947294622473246234733462447344628473846294846314824632483463
3484463448546354864636487463948104640481146434814464448154645481646464
8174647481846484819464948204650482146524823465348244654482546554826465
6482746584829465949466049146624934666497466749846684994669491046714912
4672491346734914467449154675491646764917467749184678504704502647245147
7451504775515147825158478552481252274828524348355348585323486153264893
5358489854495455503356513057513557551395795140571051415711514457145146
5716514757175148571851505720515157215152572251545724515557255157572751
5857285159572951605851615815162582516458451655855166586516758751685885
1695895170581051715811517258125173581351745814517558155176581651775817
5178581851795819518058205181582151825822518359518559251865935187594518
8595518959651905975191598519659135199591652015918520259195204592152055
9225206592352075924520860521260452146065215607521660852176095218601052
1960115220601252216013522261522561352266145227615522861652296175230618
5233611152356113523661145237625241624524262552466295247621052486211524
9635250631525163252536345254635525563652566375258639526063115261645267
6465268647527264115273641252746413527564145277641652786417528065528165
1528265252836535284654528565552876575290651052916511529265125293665294
6615295662529666352976645299666530166853036610530466115306675315679533
2672653346728533768539069544370544670354887154917135492714550371155513
7125551772552172455227255524727552972125535721855367219553972225540722
3554673556673205567745598743156237456562475566576567176656747695676761
1569576305697775748785789795814792558368058798159088129590982592983596
6845992856015866033876040877605388607788246080896111906132916145911361
4892617093618294619195619995862009662149614622097622698622898262319856
2349886235996244100625610162681026277103628110462871046629110562971066
3021076310108631410963211106322110163231102632511163311126332112163331
12263361136342114”

7 Discussions and Copyrights

I finished all the evidences that I hypothesized and provided their reproducible tests. In this chapter, I want to share my own subjective thoughts on various topics regarding Quran and the 19 based coding system of its text. I will also share some of my personal thoughts about Quran and Islam. I ask you not to believe me straight away. I suggest you to compare what I express about Islam with the message in Quran and in the end make your own conclusion. I am no expert in Quran and those are the subjective thoughts of an ordinary Muslim.

> "those who listen to what is said and follow the best of it. These are the ones (rightly) guided by Allah, and these are (truly) the people of reason.", Quran, (39:18)

So, you do not have to listen to experts only but you are the one who needs to use her mind and decide what is best for you and follow it.

Reviews, feedback and contact

First of all, what I presented as system in this book might still include some errors that I might not aware of. I performed this study all by myself and had no one to technically review this work. If in your ability, please do your best to review my codes and evidences and their rules and the book in general and provide some helpful critical reviews as feedback. For this, you can reach me on Twitter, in English via @galtay19, or in Turkish via @gokmen_19. Recall that I might have many mistakes as this book is too technical and too many codes exist. So, feel free to test the codes yourself. I did my best to define the rules I observed but there might be better definitions of the rules and they are open to improvements in the future. I will first publish this book as only online e-book. After a while, regarding feedback, if needed I might update the online version and then publish a printed hard copy of this book. This book was first published online on 2019-09-07 and lightly revised once on 2019-12-31 and then I made a major revision by November 2020. At last, made the final upgrade by some newer evidences.

Between these times, I did not have serious specific objections on the coding parts of the evidences. I, myself, had some concerns about its complexity and simplified the rules and updated the book first on 2019-12-31. By the 19th September 2020, I discovered even and odd based evidences and reorganized the rules and presented them within the **Main 19 system** in Chapter 4.1.2 along with the previously available chapter Al-Fatiha coding based evidences. At last, on 2023-12-5, I upgraded the book with significant improvements by some new codes like Fibonacci based and other key coding pattern based evidences and also my last discovered evidences on the iron verse. However, this book mıght still remain as an online book for some more time for review purposes.

The 19 based coding system I presented in this book might be just the tip of an iceberg and I do not know how much of it I could discovered and presented in this book. Since I concluded that I have discovered sufficient and substantial evidences suggesting that there is 19 based coding system in the text of Quran, I wrote this book based on the system that I could observe via my analysis on the text. If there is any substantial error in the book, it would be solely my unintentional mistake. Then, I would definitely take necessary actions to correct the mistakes. All the inferences are based on my own evaluations and some of them might still be incorrect too. If I say or mean any statement like "what we witness is a design of God", this means it is my subjective conclusion based on my analysis and inference and not necessarily the absolute truth. Allah knows best. I never claim what I present in this book is the absolute truth as only God knows the absolute truth. Therefore, all my claims must be scientifically critiqued and readers should make their own judgment based on what I present. In case if you do not have sufficient statistics and mathematics knowledge, I suggest you consult expert people around you, who you trust on their judgment.

Lastly, there are some clear simple evidences around Basmala, for instance, it has 19 letters and used 114 times in Quran. I did not include the known evidences in this book as I tried to introduce only novel discoveries in this book. So, if you come across any other evidences of someone else in another publication, which does not contradict with the rules of the 19 system of this book, feel free to consider them as other additional evidences of the system I presented. In short, I do not exclude any other available evidences but just do not include them in this book to make sure I present the new 19 System I discovered with the new evidences only.

Future works

This book was like my hobby project and I wrote it in my spare times after work times, mostly during weekends and on my holidays. Since my spare time is limited, I could not test all the possible hypothesizes I had in mind. I encourage people with the ability and interest to investigate more on this and try to find other potential evidences. However, do never jump on a number as evidence as soon as you see it as multiple of 19. Check if it fits into a system of meaningful rules that you can define in. This is why I provided some 19 based codings as isolated **facts** but not as evidences of the system. This book have sufficient examples for this types of approach.

Especially, I would suggest investigators to investigate the text of each chapter separately. Also, there are already many suggested evidences in the literature about the *Hurufu mukkatta* letters (also called as "disjointed letters" or "mysterious letters"). I have some new evidences on them but I could not study all of them thoroughly. The first reason is that there are already many evidence claims on them. Second, they do not appear in all the chapters and in this book I tried to cover evidences that support the intactness of the **full**

text of Quran. However, they are definitely worth investigating. My book also is a supportive evidence for the functionality of those "mysterious letters" and shows that they are essential so that all the 19 based system I presented in my book holds. Without them, my system also collapses. However, I estimate that there may also be more specific evidences over them. I refer interested readers to the evidences in my book and the already available evidences available with an easy search over internet. I do not cite them here as I did not test them myself and not fully sure if the other available proposed evidences on the "mysterious letters" are correct.

Another suggestion would be is to work on per chapter. For example the 9th chapter (At-Tawbah) has 11115 letters and it is multiple of 19. Also, the 9th chapter (At-Tawbah) has 129 verses and when we write all the numbers from 1 to 129 and concatenate them, the big number is also divisible by 19. As it seems in the 9th chapter (At-Tawbah), some chapters might have particular protection as it might be necessary! Each chapter worth investigating individually.

In the first version of this book I had written the following paragraph as future work:

> "Another further study can be performed regarding the odd and even chapters and also verse sums of each chapter. There are some early simple examples in that direction such as the one in amazing19.com. They might be extended using the similar approaches I presented in this book."

In around early September 2019, I myself performed this future work that I had suggested in the first version of this book. As a result, I ended up with all the even and odd pattern based evidences that I presented within the **main 19 system** in Chapter 4.1.2 along with the previously available chapter Al-Fatiha coding based evidences.

Another future work might be to try similar codings on the alternative Quran texts that might be considered more authentic. Feel free to use the R programs I provided in this book and try similar 19 coding trials on the Quran texts you might consider more suitable for text analysis.

My personal message to non-Muslim readers

If you read this book and concluded that the text of Quran has a supernatural design, then, in my humble opinion, I suggest you to read its content. Before doing that, I would like to also suggest you to forget about any prejudices you might have about Muslims and consequently about Islam. To really understand the content of Quran, one should assume that this is totally a new book to read and just try to understand its message. Basically, forget about what you know or observed about Muslims, good or bad, and just read Quran without comparing it at all with Muslims. Because, things that you may consider negative

about Islam are most likely not sourced by Quran but sourced by the traditional Muslim belief or simply the culture.

Long story short, I suggest you read Quran as if it was only sent to you from your Creator and try to understand the message as is. Islam is just whatever is written in Quran but nothing else. Islam is not what you see by looking at Muslims' life in general. Also, I suggest you never fully believe any historical reports, except Quran, about Prophet Muhammad. Prophet Muhammad is already best and most truthfully reported in Quran by God.

The gap between Quran and the traditional Muslim belief

Unfortunately, in our current time and probably for a long time, traditional Muslims, which are most of all, have a big gap between Quran and themselves. Most of the non-Arabic speaking Muslims do not even read the translation of Quran in their own language to understand but just recite from its Arabic text without understanding what God tells them to do. This insane practice is so pervasive among non-Arabic speaking Muslim countries. This is not because people prefer to do it themselves but they usually have been instructed and encouraged to do so by the scholars or imams. Traditional Muslim belief dictates the idea that ordinary people cannot understand Quran themselves alone and they *must* listen to scholars who are expert in Quran and the other sources. They do not stop there and even dictates the traditional idea that Quran is not sufficient to understand alone and one **must** consider those claimed hadith reports (written down about, roughly speaking, 200 years later after the death of Prophet Muhammad) to fully understand Quran! They claim that Quran is not detailed enough to understand and live the religion of God and it was explained and practiced in necessary details only by Prophet Muhammad and thus we **must** read claimed hadith reports to fully understand the message in Quran.

This way, they confine Quran within those historical claimed hadith reports of which no one really knows or agree on their exact total number or accuracy. The end result of this strongly dictated traditional idea is that ordinary Muslims feel obliged to listen to and follow scholars, who were also raised and educated by the traditional Muslim belief. Since this traditional teaching has been injected to the minds of ordinary Muslims from childhood till their old ages, they can not really trust the verses of Quran when they read themselves alone because they have been brainwashed that they cannot fully understand it or they can misunderstand it themselves. Thus, they look like they are afraid to understand the verses in Quran and infer a meaning out of it by themselves. They trust the meaning of the verses of Quran only when a scholar or an imam explains the verses for them. However, this idea is against the message in Quran. Among may other related verses, I will quote only these verses to keep it short here:

> "Alif. Lam. Ra. This is a Divine Command whose contents have been made firm and set forth in detail from One Who is All-Wise, All-Aware.", Quran, (11:1)

> "that you may worship none but Allah. Verily, I have come to you as a warner and a bearer of good news from Him", Quran, (11:2)

It appears to me, God simply informs us that Quran is already detailed and it is done as such so that we do not worship anyone other than God. When we think the opposite of this meaning, if Quran was not detailed enough, we would be in need of scholars who explain Quran for us and this feeling or situation of being in need of anyone else other than God to understand God, then can be considered a form of worship to someone else other than God. There are different forms of worship. From the context, I understand that if one has the belief he **has to** listen whatever the scholars or imams say is what God tells him then it means he basically locates them as **imperative intercessors** between him and God to receive the message of God. However, this situation is against the main message in the Quran. Because a Muslim never needs anyone to connect with God. The classic traditional argument to these verses might be that they would say "we do not worship to the scholars nor imams". Then, Let's remember the meaning of worship again. Worshiping means "show reverence and adoration for (a deity); honor with religious rites (a simple Google search verifies this). The feelings that we **must** listen to those **imperative intercessors** and follow them to understand God's message has the potential to bring additional divine respect, a reverence, to those intercessors. Because their position in our life is in between God and ordinary Muslims. The end result of this feeling is that Muslims listen to them and accept whatever they say about religion without comparing them with Quran. Listening to those intercessors and trusting and obeying their words as if whatever they say is what God wants us to do is a form of worship. Because we listen and obey to those intercessors and we do not really know if what they say aligns with Quran or not. Because, in practice, we show more trust to them than we show trust to Quran. This is because traditional Muslims have been raised so from childhood. The end result of this situation is almost all the negative things that we observe mostly in the Muslim countries or even among Muslim communities abroad. Many traditional teachings have been instructed by the traditional scholars or imams as if they are the instructions of God despite the fact that many of them are either not in Quran or against Quran.

In short, traditional Muslims, the great majority, listen to scholars or imams and try to live their religion accordingly. They do not much read Quran to learn their religion themselves and use their own minds to understand and live according to what they understand from Quran. They only follow the instructions in Quran, regarding what their imams tell them about it. This is not by choice of people but by the dominant traditional Muslim belief that have been keep fed into the minds of traditional Muslims. The main direct relation between Quran and ordinary Muslims, without the intercession of imams, is constantly keep reciting the verses of Quran in Arabic without really understanding it. They were taught that they will be rewarded if they keep reciting it even if they do not understand it despite the fact that there is no such verse in Quran. In contrary, anyone who reads Quran realize that God

constantly instruct us to use our minds and speak to our minds. Thus, there is a big gap between traditional Muslims and Quran. This is no surprise as All knowing God had warned us about it with this verse, where Prophet Muhammad complains about Muslims in the Day of Judgement.

> "The Messenger has cried, "O my Lord! My people have indeed received this Quran with neglect.", Quran, (25:30).

The source of Islam religion

Many of the things about Muslims that do not seem to align with universal values are not sourced by Quran. Then, you might wonder that why do you see some negative practices by some Muslims, especially around women. The answer is that traditional Muslim belief do not accept Quran alone as their source of religion, which is Islam. Along with Quran they also have claimed historical reports, Hadith narratives, of Prophet Muhammad and the **consensus** (Ijma) that is the agreement of some early Islamic scholars on a matter of Islamic law mostly in the past. Hadiths are claimed reports about any sayings, actions and approvals of Prophet Muhammad. However, even the most trusted hadith sources, like the book of Buhari, can only be dated back to around 200 years after the death of Prophet Muhammad. Since this is not the main topic of this book, I will not go into more details on this point. But, in short, we can never know and never be sure if any of the claimed hadith reports are %100 correct. The claimed Hadith reports are not like Quran and God only promised to protect Quran but no other book. If The claimed hadith reports were source of Islam as well in the sight of God, then All powerful God would certainly made them recorded like Quran and protected them just like the Quran from the beginning. God knows best but in my humble opinion, this point is another rationale proof that the claimed hadith reports cannot be source of Islam in the sight of God. Some of the hadith reports may be correct, some may be partly correct but some are also false. Any people with the power among Muslims in the history had the ability to seed some false hadiths of their wish and transform Muslims' life accordingly. Especially women was the first affected who got most damage from this way.

There are known to be around more than a million reported claimed hadiths. Some scholars, like Buhari and Muslim, are said to filter them with respect to their own personal judgement and, in their hadith books, kept only the claimed hadith reports if they considered them as "correct" **after around 200 years later** from the death of Prophet Muhammad. Even this information alone should trigger minds of rational Muslims with this question: How can a book be the source of religion along with Quran when it is claimed to be written around 200 years after Quran. I said claimed reports because even those original copies of the hadith books do not exist and copies of the oldest hadith books scientifically can be dated back to only around 400 years after Quran was written. I got this information

on my personal research on the topic, but feel free to do your own research. Even if the content of those books really correct, this information alone proves that those hadith books cannot be source of Islam religion, religion for all humanity for all times. If such hadith reports were needed, then we would expect from God to order Prophet Muhammad to make his hadiths recorded or memorized along with Quran as well. Because Quran is for all humanity and for all times. If there was really a need for the hadith reports of Prophet Muhammad then they would definitely made recorded by Prophet Muhammad. This is because, he perfectly fulfilled his duty as a messenger. Otherwise, ironically, traditional Muslim belief, that seemingly is pro-prophet, accuses Prophet Muhammad not doing his duty in full, which is not acceptable. We have Quran and, without doubt, we know Prophet Muhammad has fulfilled his duty perfectly. Since the source of religion is only Quran and there is no other book needed, Prophet Muhammad did not make his hadiths recorded like he did with Quran.

In short, I invite all Muslims to follow what Allah has revealed, only Quran, message of God, as the source of Islam but nothing else. But, the traditional Muslim belief instructs you to follow the previous Muslim scholars or forefathers. See what God revealed in Quran about a similar situation:

> "When it is said to them,"Follow what Allah has revealed," they reply, "No! We (only) follow what we found our forefathers practicing." (Would they still do so,) even if their forefathers had ˹absolutely˺ no understanding or guidance?", Quran, (2:170).
>
> "Is God not enough for His servant? Yet they threaten you [Prophet] with those they worship other than Him. If God allows someone to stray he has no one to guide him;", Quran, (39:36).

The first argument by the traditional Muslim scholars to these pure message is that, without the claimed hadiths, a Muslim cannot even perform correctly her daily prayers with the ritual and also similarly other known practices. This is actually quite a funny and pity question. Because the questioner by default presumes that all the things he knows about Islam is correct and since they are not in Quran with the details they claim there are, then they conclude that Quran is not detailed enough and they must refer to the claimed hadith reports. I will keep this answer short for them here. Quran does not have to include your incorrect beliefs. Your distorted understanding of the religion does not have to be in Quran. The prayers, fasting, cleaning, charity and all the other similar Muslim practices are explained in Quran in sufficient detail as God wishes. Those who raise such objection, I suggest you know your coordinates and do never even attempt to teach the religion to God!

> "Say:"What! Will ye instruct Allah about your religion? But Allah knows all that is in the heavens and on earth: He has full knowledge of all things." ", Quran, (49:16).

The sects among traditional Muslims

As you see, the sources of the traditional Muslim belief are too much for ordinary Muslims to follow and learn themselves. This is one of the other reasons why there exist so many sects and branches among Muslims despite the fact that they all accept the same exact Quran and same prophet. Then, what is the source of their differences in their belief? Simply put, their trusted scholars are different and as they follow them regarding where they were born, they have a different branch within the traditional Muslim belief. Basically, all accept the same Quran but each accept different parts of claimed Hadith reports or Ijma rules and in the end they have a different branch and become a different types of Muslim of a different sect. This is why, in different Muslim countries, you see various types of Muslims in their belief. This situation is again despite the verse they read in Quran but do not take a lesson:

> "Surely you have nothing to do with those who have made divisions in their religion and become factions. Their matter is with Allah and He will indeed tell them (in time) what they have been doing.", Quran, (6:159)

Also, in the following verse, it is clear that the Quran (Scripture) was sent down to Muslims and **explaining everything**. There are also many other verses that informs that the Quran is a detailed book.

> "The day will come when We raise up in each community a witness against them, and We shall bring you [Prophet] as a witness against these people, for We have sent the Scripture down to you explaining everything, and as guidance and mercy and good news to those who devote themselves to God.", Quran, (16:89)

A bad example of the tradition despite Quran

Traditional Muslims have been instructed that they cannot learn their religion in necessary details by just reading Quran and thus they need the claimed Hadith reports and even Ijma. Since the sources become too much for an ordinary Muslim to learn, comprehend and infer any rule from them, **they must listen and follow** scholars who know those details. This is why all traditional Muslims feel forced to or listen to scholars who mostly dictates traditional rules of the traditional Muslim belief. In that case, regarding any given situation, scholars mostly able to find a way to match any given situation to their traditional belief. This has been very favorable situation for the leaders of Muslim countries throughout the history and today. It is not too hard for them to control the scholars and thus the traditional Muslim people who feel obliged to listen to the scholars. In the history of Muslims, there are many pity examples that some scholars who openly disagree or do not bend to the leader of the country was imprisoned or killed. Once they managed to add sources other than Quran as the information source of Islam, then they can make implement other things of their

wish although they are not in Quran and even if it against Quran. The most extreme example of this situation is the death penalty for a Muslim who openly abandon Islam, apostasy ("murted" in Arabic). In fact, this is totally against Quran. There is no such instruction and it is against the over all message one can infer after reading Quran and additionally, God clearly informs us with this verse:

> "There is no compulsion in the religion…", Quran, (2:256)

Nevertheless, there is a claimed hadith report exists in the most authentic hadith books like Buhari, and in that, regarding a **claimed hadith** report, the Prophet instructed to kill the one who abandon religion by saying this: "Whoever changed his Islamic religion, then kill him.". I fully reject this claimed hadith report. I believe that this is one of the false fabricated reports as it does not align at all with Quran. Prophet Muhammad only and only follows Quran and cannot say anything at all that contradicts with Quran.

> "Had the Messenger made up something in Our Name,", Quran, (69:44)
>
> "We would have certainly seized him by his right hand,", Quran, (69:45)
>
> "then severed his aorta,", Quran, (69:46)

However, traditional Muslim belief do not reject this controversial claimed hadith about apostasy but interpret it in various ways as they like. As you see, in this extreme example, depends on the time and situation any independent and critical Muslim scholar against the traditional Muslim belief or a leader might be declared as apostate and might be killed. This is one of the other reasons why traditional Muslim belief is so strongly persists in Muslim countries throughout the history and now. As long as this claimed hadith is accepted as correct and thus it is from one of the accepted sources of religion, then anyone who denies this claimed hadith report can be easily declared as apostate (murted) and be killed. A **super clever** one might have seeded this claimed hadith report into among thousands of claimed hadith reports and with this particular claimed hadith, in a way, all the other claimed hadith reports are protected against any further criticism. Because, anyone who reject one of the hadiths might well be declared as apostate and be killed. I am not saying this happens always among Muslims but what I am saying is that as long as that hadith report is within the trusted hadith books like Buhari, there is always a way to do such a thing and it can potentially be used. Then, there is really no freedom of expression in Muslim countries among Muslims, especially back in history. I am able to write this book and make these critiques about the traditional Muslim belief without really feeling significant danger to my life because I live in a Western country, United States of America, where freedom of speech is somewhat exist in general and especially and practically available more when it comes to criticize Muslims. However, to be honest, while writing these critiques about the traditional Muslim belief, I still accept the risk of potential danger to my life anyway. Because, this is a real thing and there are unfortunate examples in the

past. For example, Rashad Khalifa, who was an early prominent critique of traditional Muslim belief and was strongly supporting the idea that the source of Islam is only Quran, was assassinated in Arizona in 1990. He was also the author of the **made up and false 19 system** claim, where he had manipulated the text of Quran to match it to his own made up numbers. Back to the point, as a Muslim who try to follow Quran only and fully, in my ability, I have to relate and speak up the truth in Quran no matter what.

No violence in Islam

This topic needs more detailed explanations but this book is not about it mainly. Therefore, I will shorty touch to this important topic as the current perception about Muslims in Western world is not too distance from violence because of, first the biased media, and, second, the many bad examples by some traditional Muslims we saw in history and now. I know that the media mostly is exaggerating the negative examples about Muslims who are around 1.8 billion people on earth. However, they are there and we have to make an explanation for them.

In short, other than self defense, there is no violence at all in Islam regarding Quran but those bad examples are based on some of the claimed hadith reports or the consensus. I explained before that I reject all the claimed hadith reports as the source of Islam. They are just historical claimed reports and we might get some historical and thus blurred information about past. We can also utilize them to learn about Arabic language of the past as well. As long as they are not considered as the source of Islam, then those claimed hadith reports can also be studied, **if wished**, to understand a topic in the religion. If the approach to the claimed hadith reports is just like to listen any other **preferred** scholar's opinion that we might consider to understand a topic in religion, then one might also try utilize from them while trying to understand a topic in the religion. As long as the claimed hadith reports are not considered the source of Islam or are not given any higher level authority than any other information source, they *might* be studied too. However, this is a very sensitive case as one might be biased towards the claimed hadith reports rather than objectively consider them along with all the other information about a topic. Therefore, be warned that if one has any bias towards them, then there is always potential to infer incorrect biased conclusion on an issue. Therefore, as long as Quran is accepted as the only and only source of information that we must follow, studying any other information source like Arabic language or historical books or listening the interpretation of other knowledgeable people should be fine. But in the end, we must make sure what ever we consider obligatory and do in religion is based Quran only and if they are not based on Quran we do not have to do them and we should never accept them as part of Islam belief.

In addition, there is a group of scholars who say, "I will accept hadiths if they do not contradict with Quran." This group does not see the illogicality of their statement. They

have adopted a belief that is similar to what positive-biased people could do, as I warned above. Because it is our responsibility to take the most correct meaning that our mind understands when we read in Quran. However, those who say that they will accept hadith narrations if they do not contradict Quran may choose a meaning that is less suitable for the mind, even though there is a more correct meaning in the Quran according to their mind. This actually means putting the hadith reports, narrations, before Quran. Because, if Quran has already made a more reasonable explanation, but that group would have believed in a weaker meaning just because there is a claımed hadith report about it and it does not contradict with Quran and then they might have gone astray. In addition, they may have also included many practices that do not contradict the Quran into Islam as religion. However, unless it is explicitly stated in the Quran, everything that is not forbidden in the Quran is halal, and everything that is evil and impure is haram. Here is a verse from Surah A'raf for this group that is kind of stuck in the middle belief:

> (Quran, 7:157) those who follow the Messenger – the unlettered Prophet – whose description they find in their Torah and the Gospel. He **enjoins them to do what is good and forbids them from what is evil; he makes lawful for them what is pure and makes unlawful for them from what is impure**; he relieves them of their burden and the shackles that were on them. So those who believe in him, they honor and support him, and follow the light which is sent down with him – it is they who will be successful."

Certainly, when evaluated along with other verses, the messenger of Allah fulfills this command by bringing the Quran as it is, but interestingly, the traditionalists, who associate the hadith reports with the Quran, claim that the Messenger can also make things lawful (halal) and unlawful (haram) by giving their own meaning to this verse in their hearts. However, the Messenger has declared in verse 6:145 that he looks **only** to the Quran for what is unlawful, thereby informing us of his **real hadith** in the Quran. This verse is an example of the real Sunnah, and we, who see only the Quran as the sole source of Islam, follow the Messenger's real Sunnah in a pure way. Unlike the majority, we do not follow *conjectures* (Quran, 6:116), but only the real Sunnah, whose correctness is guaranteed by Allah, which is to follow whatever is in the Quran (Quran, 46:9). However, the Tradition, following the path of their forefathers, cannot believe without associating their hadith report narratives and even their 'Great Scholars' with Quran (Quran, 2:170). Below are some of the relevant verses shared.

> (Kuran, 6:145) Say, ⌜O Prophet,⌝ "**I do not find in what has been revealed to me anything forbidden** to eat except carrion, running blood, swine—which is impure—or a sinful offering in the name of any other than Allah. But if someone is compelled by necessity—neither driven by desire nor exceeding immediate need—then surely your Lord is All-Forgiving, Most Merciful."

> (Kuran, 46:9) Say, "I am not the first messenger ever sent, nor do I know what will happen to me or you. **I only follow what is revealed to me**. And I am only sent with a clear warning."
>
> (Kuran, 6:116) If you obeyed **most of those who are on earth**, they would lead you astray from Allah (God)'s path; **they only follow conjecture and are merely lying**.
>
> (Kuran, 2:170) When it is said to them, "Follow what Allah has revealed," they reply, "No! We (only) follow what we found our forefathers practicing." (Would they still do so,) even if their forefathers had ⌜absolutely⌝ no understanding or guidance?

Back to the main topic, once you only take Quran as the source of Islam, then you cannot apply violence to anyone innocent. The only way Quran allows violence is as a form of self defense. Self defense of individual or self defense of a community like a country. And self defense is a universal right of all humanity. The only verses that are claimed to order violence without self defense is mostly interpreted wrongly although the translation is clear.

> "Fight in the cause of Allah (only) against those who wage war against you, but do not exceed the limits. Surely Allah does not like transgressors." (2:190)
>
> "Kill them wherever you come upon them and drive them out of the places from which they have driven you out. For persecution is far worse than killing. And do not fight them at the Sacred Mosque unless they attack you there. If they do so, then fight them—that is the reward of the disbelievers." (2:191)

As we see it is clear that God orders Muslims to self defense by instructing "Fight in the cause of Allah (only) **against those who wage war against you**". The practices of Muslim states in the past, which might have not aligned with this verse, is nothing to do with Quran but with their own traditional belief or political decision.

The other verse that is misunderstood by most are these:

> "As for **the** polytheists who have honoured every term of their treaty with you and have not supported an enemy against you, honour your treaty with them until the end of its term. Surely Allah loves those who are mindful (of Him).", Quran, (9:4)
>
> "But once the Sacred Months have passed, kill **the** polytheists (who violated their treaties) wherever you find them, capture them, besiege them, and lie in wait for them on every way. But if they repent, perform prayers, and pay alms-tax, then set them free. Indeed, Allah is All-Forgiving, Most Merciful.", Quran, (9:5)

As we see from these two verses, God informs us only within a context. First, regarding verse 9:4, if there is a treaty between Muslims and polytheists within a community then Muslims must obey it. In our current time within a country, we all have under the treaty of a citizenship with other people of any faith. Therefore, all Muslims must respect it even if the country is a majority Muslim country. Any visitor to that country is also considered as under the visitor treaty and thus Muslims must live in peace with all people on earth as long as they both honor their treaty. This is the general rule Muslims might infer from this verse for our time in my humble opinion. Moreover, in the verses, God informs us about a particular polytheists community who live along with the first Muslim community. This is because there is the word "the" definite article in front and they are mentioned as "the polytheists". So, the verse is not informing about all polytheists but a particular group of polytheists who have not honored every term of their treaty with the Muslims then. This clearly defines self defense even if some Muslims or non-Muslims with prejudice tries to interpret the meaning of the verse differently. In conclusion, there is no way to infer violence against non-Muslims from this verse in general.

Second, in regard to (9:5), God gives Muslims three options for those who violate the treaty with the Muslim community, which are kill, capture and besiege. It is logical to understand that anyone who are killed cannot be captured or besieged. So, it is easy to understand that these are the options left to Muslim law enforcement officials to deal with the ones who violate the treaty. This verse perfectly align with modern rules. Imagine that there is a terrorist person or a group of people in a modern country. Law enforcement official immediately arrive there and choose their best option and implement it. Their options are to kill, capture or besiege them depends on the situation at that very moment. This verse gives Muslims to be able act similarly. Otherwise, Muslims, even the low enforcement officials, would be hesitant to kill anyone because there are many many verses in Quran advising against violence. There is even this clear verse:

> "That is why We ordained for the Children of Israel that whoever takes a life—unless as a punishment for murder or mischief in the land—it will be as if they killed all of humanity; and whoever saves a life, it will be as if they saved all of humanity. (Although) Our messengers already came to them with clear proofs, many of them still transgressed afterwards through the land.", Quran, (5:32).

Although, in the context there is Israel, we Muslims all should take lessons from all verses. Thus let's read the related part again in bold: "**... whoever takes a life—unless as a punishment for murder or mischief in the land—it will be as if they killed all of humanity; and whoever saves a life, it will be as if they saved all of humanity...**".

Any Muslim, who read this verse among others, would never be able to kill anyone if God did not inform us with the other verses that orders self defense as well. This is a long topic and I leave it here for now.

I will present these verses as proof that Muslims must always behave peacefully according to Quran.

> "He has already revealed to you in the Book that when you hear Allah's revelations being denied or ridiculed, then do not sit in that company unless they engage in a different topic, or else you will be like them. Surely Allah will gather the hypocrites and disbelievers all together in Hell.", Quran, (4:140).
>
> "And when you come across those who ridicule Our revelations, do not sit with them unless they engage in a different topic. Should Satan make you forget, then once you remember, do not (continue to) sit with the wrongdoing people.", Quran, (6:68).

As we see there are two different but similar verses and in both of them God orders Muslims to behave peacefully and not conduct any violence even in an extreme situation that is when there is an insult on Islam. God also orders Muslims to stay away only until the insulting people stop their wrongdoing and do not forbid Muslims to interact with them again when they are not keep insulting. It is not because the insult is not important but it is not us but because God will punish them hereafter (unless they ask forgiveness from God). How about the below verses for the most extreme case where God does not order any violence with those who insult even to God and the Messenger, which aligns with the previous verses I quoted above, 4:140 and 6:68.

> "The hypocrites are afraid that a Sūrah (a chapter of the Holy Qur'ān) may be sent down about them, which tells them what lies in their hearts. Say, "Go on mocking. Allah is surely to bring out what you are afraid of.", Quran, (9:64).
>
> "And if you ask them, they will say, "We were just chatting and having fun." Say, "Is it of Allah and His verses and His Messenger that you were making fun?", Quran, (9:65).
>
> "Make no excuses. You became disbelievers (by mocking at Allah and His Messenger) after you had professed Faith. If We forgive some of you (who repent and believe), We shall punish others (who carry on their hypocrisy), because they were guilty.", Quran, (9:66).

The verses are very clear that God does not order any worldly penalty for those who even mock about God but warns those with hell fire in the verse 9:68. However, we Muslims are also human beings and we can still express our reactions in this world in a peaceful manner as this was not forbidden as well. Anyone who follows Quran cannot make violence for no reason other than self defense. However, as I said previously, traditional Muslim belief also accepts other sources for their belief and that might cause different implementations in practice by some of them.

When I explain this matter to my friends who are well educated and peaceful but follows traditional Muslim belief as most, they say “there are also some verses in Quran for violence and its not only the claimed hadith reports”. This is the information from friends who are above average of traditional Muslims. Most Muslims do not really know Quran, because, as I explained before there is a gap between traditional Muslim belief and Quran. They do not know Quran well because they listen to scholars or imams to learn about religion. Since those scholars combine Quran with the other two sources, the end result is not only Quran but those other immense number of things written in those old books. Even the scholars of the traditional Muslim belief cannot comprehend the above verses I shared, then how can an average Muslim do? When I had a traditional Muslim belief, I had asked about this question to a well known scholar. I asked him, considering history, how can we say Islam is a religion of peace? He, as one of the most modest scholar, replied us, “this is a big lie!”. Because he was modest, he had a bit more courage to confess things he considers wrong. Everyone who listen to him were peaceful traditional Muslim but none of us could reply his answer otherwise. Because, we ordinary Muslims are ignorant of Quran because we do not really know Quran as we have been under brain washing with the traditional Muslim belief since our childhood. It is very difficult to even consider the things I have been writing in this chapter about the traditional Muslim belief. In this chapter, I hope, their minds triggered after reading all these information and read Quran again considering my warnings. Do not believe me but believe God via Quran. And please fully trust the words of God, Quran, and trust your own mind more than you trust those traditional imams and scholars.

At my age 40, I became a Muslim of Quran

Unfortunately, I was one of those traditional ordinary Muslims who would follow the traditional Hanafi branch (called mezheb in Turkish) as most Turkish people do in Turkey. Fortunately, after reading and listening some enlightened scholars over the internet last year (It was 2019 when I first wrote this.), I came across with the message that the source of Islam religion can only be Quran according to Quran. I did not jump into this idea right away but it triggered me to investigate on this. It was not too hard as we Muslims have the same Quran. I read Quran again while testing those claims over the verses which was hard to accept as it was against my strong beliefs that I was raised and lived with all the years. However, after reading Quran to learn and understand what God says and instructs us to do, at my age around 40 in 2019 sometime before Ramadan, I corrected my belief and **accepted Quran alone as the source of my Islam religion**. After then, everything around my Islamic life appeared to be more reasonable, rationale, practical and aligned with the daily life. Living Islam turned out to be quite easy and livable without ignoring things that you can neither reject nor fully accept. However, I then realized that how lonely I turned out to be in that situation. People even treated me as if I abandoned Islam when I openly discuss my opinions with people around me. But, no matter what, I am very happy that God

guided me to this pure message. Because, first time in my life, I really feel that what God wants from me to do directly. Before that I was looking at the mouths of scholars and the preaches of imams and thus limited and directed with what they say. There was always intermediaries for me to understand what really God orders me to do. Since the topic of this book is not this, I will not going to much detail about this. However, so far, I am very happy with my spiritual life and repented for the wrong beliefs and practices I had in my previous life. When, I read Quran it is like speaking with God and my heart is delighted when I read and know that I do understand what God says to me and contemplate accordingly. I used to know this verse but only now I witness its meaning:

> "the ones who believe and their hearts are peaceful with the remembrance of Allah. Listen, the hearts find peace only in the remembrance of Allah.", Quran, (13:28).

There is one last thing I want to share about this situation. I had heart about 19 system long years before but I never thought I would be able to research on it myself and test some of pre-existing claims on it because I did not know Arabic and also have no much interest on this topic. However, around the time after purifying my belief and accept Quran as the only source of my Islam religion and repent for my past, I became more interested in Quran. I am currently a data scientist and have the ability to wrangle about data but had no previous experience to work with Arabic text data. I just made a Google search to see if there are some tutorials on the text of Quran and found one in R. I gave it a try and made some hypothesizes and witnessed some successes. Then I put forward more hypothesis and witnessed more evidences and decided to write this book. The reason I explain it here because, in my subjective opinion, God might have showed me those evidences and allowed me to write such a book only after I purified my belief in Islam. I am not saying about purification of my humanly sins but I mean the traditional Muslim belief I used to accept and follow.

The discovery date of this system

I have first discovered the 19 based system that I present in this book in early 2019. Only God and me can know this fact for sure. So, you do not have to believe me on this. However, since the date of the discovery and publication of this book has an interesting 19 based pattern, I would like to share it here too. As I mentioned before, regarding historical reports, the revelation of the Quran lasted around 22 years and it was completed by the year 632. Since the 19 based system is over the complete full text of Quran, I took 632 as reference.

> 2019 - 632 = 1387
>
> 1387 = 19x73

1+3+8+7=19

As we see there are two 19 based relations exist with the discover and publication date of the 19 System I presented in this book.

Moreover, if we look at regarding its entrance into the history, there is again an interesting 19 based relation. When we enter in 2019, I had not discovered this 19 based system and there was no book of it as well. Basically, no one on earth, including me had any knowledge on this. However, when 2019 ended, the real 19 based coding system of the full text of Quran was discovered by myself and its miraculous evidences were published in this book. Let's look at the last date of 2019 then.

If we write this date in American way (as the discovery were made in USA):

The last date of 2019 is 12-31-2019 and this date alone also has **three** 19 based relation as follows. The classic concatenation of them gives us a single representation number:

12312019 / 19 = 648001 (Also 6+4+8+1=19!) and

1+2+3+1+2+0+1+9 = 19!

We observed three 19 based relations in the same date. If anyone argues on the order of the date, here are the alternative way of writing this date considering the rest of the world. It has also 19 based relation:

31122019 / 19 = 1638001 (Again 1+6+3+8+1=19!)

Again, we observed two more 19 based relations in the same date, which makes 4 in total. This is just an interesting fact that might show historically an interesting relation between the beginning and end of 2019 with respect to the entrance of this new 19 System and its book into the literature.

Some more relevant verses

Here are some verses and their numbers, where both the content and their numbers might be relevant to the 19 based coding system of the text of Quran.

Muslims certainly believe that Quran is intact, unchanged and protected as it was promised so by God.

> "We, indeed We, it is We who have sent down the Reminder, and indeed it is We who will preserve it.", Quran, 15:9

This verse is the verse 1824 out of the total 6348 verses. 1824 is also divisible by 19 as 1824/19 = 96. Moreover, instead of Quran or The Book, God uses the word Reminder or

Recitation, (in Arabic: الذكر), which refers to the memorized Quran that is verbally recited. There are two miraculous sign here. First, Quran has been conveyed until today via memorization. There is no known complete first written copy but there are tens of thousands people around the world who fully memorized Quran as an historical tradition. Second sign is the shape of the word Reminder, without marks, (in Arabic: الذكر) has been used exactly 19 times in overall Quran. You can test this in Chapter 3.1.5.1 with the dynamic table, Table 3.1. Just copy and paste the Arabic word in the search box of the table and see the word count of it in Quran.

> "that cannot be approached by falsehood, neither from its front, nor from its behind -a revelation from the All-Wise, the Ever-Praised.", Quran, (41:42).

God informs us that falsehood cannot approach Quran from its front nor behind. If you remember the evidences I provided, some of them were based on direct indices (left to right) and some from from the back (from right to left as in Arabic). The reason I considered this might be sign for the 19 based coding system is because 4142 is also divisible by 19.

How about this one, which has very relevant numbering along with its meaning:

> "That He may know they have already proclaimed the Messages of their Lord. And He has encompassed (all) that is closely (kept) with them, and He has enumerated everything in numbers.", Quran, (72:28).

There are is an interesting 19 sign on this verse. The digit sum of 7228 is 19. However, this might be only an interesting sign as no such rule is defined in general anywhere and we can never claim of such connection for sure and God knows best as always.

This is the key verse for the 19 based coding system.

> "Over it is Nineteen", Quran, (74:30)

Interesting enough, the first verse of the chapter of this verse is this:

> "O you shrouded (in your mantle)," Quran, (74:1)

The parenthesis is not the translation but the meaning assumed by the translator (Dr. Ghali from quran.com). So, basically the first verse of this chapter is "O you shrouded". Although the traditional interpretation is different, I suggest that this verse might also refer to the hidden (shrouded) 19 based coding system of the text of Quran. God knows best and this, I consider as one of the possible interpretations.

There are three reasons that caused me think as such. First, this is the first verse of the chapter in which we observed the verse "Over it is Nineteen" (74:30) that might connect the

19 based system of the text of Quran to the content of Quran. Also the literal meaning of the verse "O you shrouded" seem to be perfectly aligning with the unknown 19 based system of the text of Quran. Second, when we perform the classical concatenation coding operation to the chapter and verse indices (74:1) we get 741 and it is divisible by 19, which stands as a sign that further supports this interpretation. Third reason is that this verse is *mutesabih* type of verse, which means it's meaning might not be directly apparent and might need interpretations regarding other relevant verses or else universal true knowledge.

In Quran, God informs us that there are two types of verses in Quran. First one (muhkams), the explicit revelations that are the foundations of the Book. Others, the second type, are allegorical and God knows their meanings best and they might be open to interpretations by considering their connections with the muhkam verses as understood by some scholars.

> He is the One who has sent down to you the Book. Some of its verses are clear, they are the foundation of the Book, and others are allegorical Those whose hearts are diseased seek out the allegorical part in order to cause dissension and to interpret it according to their own desires. Only Allah knows its true meaning, as do those who are deeply versed in knowledge. They say, "We believe in it, all of it is from our Lord." Only those who have hearts and minds can truly understand this. (Quran, 3:7, translated from Y.N. Öztürk's Turkish translation)

The traditional English translations translate as "Only Allah knows its true meaning" but this translation made more sense as Quran was sent to us to follow and we should be able to understand it. Otherwise, the traditional translations say we have a book and the allegorical parts of it can never be understood by anyone. God know best but the translation of Y.N. Öztürk made more sense and I translated and used it here.

Especially, universal scientific related verses that we witnessed in this era are helping us to better understand such allegorical verse examples. This is a different topic and I just tried to summarize *as far as I understand*. Feel free to do your own research if interested in this topic. I am by no means an expert scholar but an ordinary Muslim and these are my understandings on this matter.

Also these two verses might be relevant too. It looks like 74:31 and 74:35 might also be explaining the function of a 19 System over the text of Quran.

> "And We have not made the keepers of the Fire except angels. And We have not made their number except as a trial for those who disbelieve - that those who were given the Scripture will be convinced and those who have believed will increase in faith and those who were given the Scripture and the believers will not doubt and that those in whose hearts is hypocrisy and the disbelievers will say," What does Allah intend by this as an example?" Thus does Allah leave astray

> whom He wills and guides whom He wills. And none knows the soldiers of your Lord except Him. And mention of the Fire is not but a reminder to humanity.", Quran, (74:31)
>
> "Surely it is indeed one of the greatest things,", Quran, (74:35)

God knows best but these might be relevant to 19 based system of the text of Quran. Also, along with the meaning, 74:35 has this sign too: 7+4+3+5=19.

This is about the one who reject the signs from God.

> "But those who disbelieved in Our Ayat (proofs, evidences, verses, lessons, signs, revelations, etc.), they are those on the Left Hand (the dwellers of Hell).", Quran, (90:19).

The content warns about the one who reject the signs of God. Then, we would not be surprised to witness a sign on this verse. How about this: 9+0+1+9=19.

Will the 19 based system might help non-believers to believe in Quran?

> "And you see that the people enter Allah's religion (Islam) in crowds,", Quran, (110:2).

I am not sure if there is direct relation but 1102 is multiple of 19 and there is at least a sign for the relation.

Chapter 90 : This chapter took my attention as it has a unique 19 based property. Basically the number lead me to this chapter first. The number of letters of this chapter is 361. This is the only chapter with twice the multiple of 19, either as the number of letters or the number of words over all Quran in both text types. When I looked at its general verse index in the numbered verses, it is 6042 and it is also multiple 19 as 19x318. Let's look at the verse 19 of this chapter:

> "But those who disbelieved in Our Ayat (proofs, evidences, verses, lessons, signs, revelations, etc.), they are those on the Left Hand (the dwellers of Hell).", Quran, (90:19).

Note also the digit sum of this verse 90:19, which is also 9+0+1+9=19. Also this particular verse has 6 verses and 32 letters, which makes 38 (19x2) in total.

Note that all the verses and numbers in this small chapter are just facts and not evidences and should be considered as my subjective comments.

Other scientific related miracles of Quran and other interesting facts

19 based coding system of Quran, which is considered as miracles by my own conclusion, is not the only miracle one can witness in Quran. It has also many scientifically related miraculous information in it. If you make a quick internet search, you might see many examples. I already shared one of them about *iron* in my book as a separate chapter in Chapter 6.1. I will share some of them that I find interesting. There are many but most notably, expansion of universe, development of embryo, atom number of iron and mentioning of it being sent down, uniqueness of the finger tips and many others for which I direct to do your own search. There are already many web sites and books on those that are considered as scientific miraculous statements in Quran.

One other interesting known fact is that light travels at a speed of 299792 kilometers per second. The digit sum of 299792 is 38 that is multiple of 19.

Or, if you count the bones in your hand by looking at an X-ray image, you see there are 19 bones.

Copyrights of this book

All rights are reserved by default. However, I declare that I will never get any publishing royalty fee in either online e-book or printed hard copy or any other possible forms of this book. This means, I will not make any money at all based on this book. I also declare that any of my family or offspring or relatives or anyone else also have no right and will never have any right to make any money based on this book in any way possible. I wrote this book solely for the sake of God and have no other expectations from anyone other than God. Anyone can translate this book into their own language and can publish it as long as they translate it fully correctly and the whole book as is and not partially. I do not allow publishing parts of it. Again, anyone who think the translation is not correct can take the publisher into court for a judicial process and made it corrected by the court in their own country. So, I leave this translation checking process to the good people as this is a book intended for the benefit of all humanity. No publisher can own any of the rights of this book even if they translate it themselves. By translating the book, it means they also accepted that they will not claim any copyright or royalty or any other rights from this book in any form. In short, no one on earth in any way can make money out of this book based on copyright or royalty or any other related form that I may not know as I am not a law person. However, any publisher who wants to publish this book can sell the book whatever the fee they want to sell and can profit out of it. To make sure that some publishers are interested in publishing this book as printed hard copies, I grant this flexibility to the publishers. Again they must publish the whole book as is or not at all. They cannot omit nor censorship any part of the book even a single page or single letter of it. Otherwise they have no right to publish it. Also, no government or any other entity in universe can own the rights of this

book in anyway and anytime. I reject any such attempt if in the future any entity does so. This book is for all humanity in universe and no entity has any right to own it in anyway. If any entity or government attempts to limit or censorship any parts of this book, even a single page, I do not allow publishing the parts of this book in anyway by them. In short, either publish the whole book as is or none. There is an exception to above granted rights about the copyrights of this book. In English and Turkish **printed hard copy** publications of this book, I do not grant the rights of publishing of this book in English, which is the original, and Turkish translation without my permission for the next 10 years until the end of 2033. This is to make sure, I can choose a respected publisher in case if they are interested. Again, even for this English printed version and Turkish translation, I declare that me or any of my family or my relatives or anyone else cannot make any money out of the book's royalty or copyright and me or anyone else cannot ask for publishing royalty fee. After the 10 years period, anyone who wishes can publish the book as long as they publish the whole book as is without any change. In case, if I am not alive by the next 10 years period and no agreements are made yet then this 10 year period condition terminates automatically and any publisher can publish regarding the previous conditions. All conditions are subject to change by myself except that the ones already declared related to royalty fees. Here and first in 2019 and now in 2023, I declare that I already release those rights and even I cannot change this in the future for any reason.

I declare that the online version of this book will always be freely available. Anyone who wishes to make the online version of this book available in their website can do so with these conditions: This book cannot be published in any web site that has any content that contradicts with the teachings of the verses of Quran. No inappropriate ads or actions allowed in the web site this books is published. This book can only be published as the whole book as is. I do not allow parts of the book to be made available in any site. Because this breaks the integrity of the whole book. Even a single page or word of it cannot be omitted or censorship. No inappropriate, contradicting with Quran, advertisements can be shown along with this book.

Acknowledgements

Other than the Bookdown server, you can also access this book from the alternative server via this link: https://quran2019.github.io/ReproducibleMiracle . I used R programming language (https://www.r-project.org/) for the analysis. I also used the following R packages gmp (Lucas et al. 2019), data.table (Dowle and Srinivasan 2019), DT (Xie, Cheng, and Tan 2019) , tokenizers (Mullen et al. 2018), stringr (Wickham 2019). I used Bookdown R package (Xie 2016) to write this book in this nice shape. For the translation of the verses of Quran, I used quran.com. This book was first published on September 07, 2019 at www.bookdown.org. Its lightly revised version was updated and published on December 31, 2019 at www.bookdown.org. I further made a major revision, which caused the change

of the chapter indexes of the evidences by November 27, 2020. I then made the last upgrade of this book on December 5, 2023. Some of the big numbers are not included in this book in order not make it too long. However, I provide some of the big numbers of evidences and other materials in the github page of this book at https://github.com/quran2019/Quran19. Anyone can easily download those materials.

8 Appendix: About the Text Version 1.1

I first published my book in September 2019 based on the text version 1.0.2 that I downloaded from tanzil.net. The text had been there for about 13 years and is still considered by them error free by them. However, after around 1.5 years later of my the publication of my book, they somehow decided make a tiny change in the text on February 12, 2021, which seems optional and based on their subjective choice from their perspective. In the appendix chapter, I will explain all the entailing issues of their change and my struggle to find the truth and some codes with the updated text. So, I leave it to expert scholars in the very topic to decide what is the absolute truth by sharing this information too. On the other hand, after my long research, my conclusion is the correct text version is the earlier one, version 1.0.2, and therefore kept my associated codes and the overall system based on that text. However, I suggest expert scholar to elaborate the issue and decide what is correct based on the classic Arabic grammar rules. So, if they are 100% sure the new text version 1.1. is the correct one, with respect to the changed writing form of the word "bada-ma" in the three verses, then they chose and use the version 1.1 as the correct. text version. Then, they should also ignore all my presented codes that includes the word information in those three verses. But, if they are not 100% sure, then I suggest using the text version 1.0.2 as the system I discovered suggest an extraordinary 19 based design over that text I used. Also, my own long research from the classical Arabic grammar point of view made me concluded that the text version I used was the correct one and the word *badama* was written as a single word as in the text version 1.0.2 but not as two words as in the text version 1.1. So, I just made an academic study, shared my discoveries and my conclusion. However, God knows best and I never claim that I know the absolute truth. So, I advice assessing my book as an academic work and feel free to critique with further academical studies in order to make sure the absolute truth is established in the long run. After this summary I will continue with more details about the issue.

As I mentioned, after the publication of my book, the text version 1.1 has been updated on February 12, 2021 by Tanzil.net and the details of that subjective update is explained here, http://tanzil.net/updates/. Basically, they made a single and simple change by separating the single written word *badama* as written two words as *bada ma* which were in verses 2:181, 8:6 and 13:37. It does not change the meaning at all but as far as I understand from

their explanation, it is just a subjective choice of them. This change just affects the number of words in those verses but not the rest.

8.1 The update of the text after the publication of my book!

Since 2019, I did not publish my book as printed copy but just kept online to make sure I can get critics and some feedback and also review myself before final printed publication. This way, if there is any mistake found, I could quickly correct and update my book. In fact, I made several updates and enhanced the book with some corrections, improvements and with some of my new findings until the beginning of 2021. Since 2019, I was trying to spread my important findings over my Twitter and Youtube accounts assuming that I can get more quality feedback as it is more spread. One thing I realized during the two years is that, Muslims were not much interested in the 19 based design claims in the text of Quran and mostly ignore the presented findings. When I shared my book in Islam Stack Exchange questions as replies or even ask others opinions about my work as an independent question, all were closed by the editors, where I realized the clear negative look at this topic from Muslims with some influence. This negative prejudice was probably caused by the earlier attempt where the author, Rashad Khalifa, shamelessly removed the two verses from Quran to match the text to his own made up system claim. Scientifically, manipulation of the data is a forgery but his followers have some shameless and unscientific way of defending their forgery act anyways and behave like a cult. On the other hand, the system I initially discovered and published in 2019 does not have any manipulation even to the single letter. As a scientist, I know it would be a clear forgery and therefore declared many times that even if there are millions of codes existed if I were to change a single letter, I do not make such a change, as otherwise it would not be a scientific approach. I just look at the data as is and test to see if there is a rule based system over it, which might show that the text is intact and unchanged. Therefore, any system search can only be investigated over the available texts of Quran without making any change to them unless there is a clear classical Arabic grammar error detected in the text.

At the time of my download of the text of Quran from tanzil.net/download, the latest version of the text was Version 1.0.2. It was the text, which was released in February 4, 2008 and has not been updated till February 12, 2021 with the latest version, which is Version 1.1 (v1.1). As I was subscribed to the email group of the Tanzil server, I got this notification email sent to the email group on February 12, 2021:

> "A new release of Tanzil quran text (version 1.1) is ready to download from http://tanzil.net/download/. You can see changes log here (tanzil.net/updates). Fortunately, no typo has been reported in the Tanzil quran text since its latest release in 2008, and the updates in this new version are rather technical.

> Therefore, if you are using the older version of the text (i.e., v1.0.2), it is still safe to use that version."

As informed in the email from Tanzil, for the last 13 years from the last release of the text, no typo has been reported. This means, no one, who uses the text of this very popular server reported any error for about 13 years. This point further assured in the last sentence of the email by saying "*if you are using the older version of the text (i.e., v1.0.2), it is still safe to use that version*". It is clear that there is no error in the text v1.0.2, which I had used for my analysis. On the other hand, they decided to make a few changes as, technically, they **preferred** that way as better as I discuss below in more detail.

On February 12, 2021, Tanzil.net released an update after around 13 years from their last release. There was a single change in the text at the word level data. They changed the writing of the single word *ba'da-ma* (بعدما) as two separate words in this new release, v1.1, as *ba'da ma* (بعد ما). It has been previously written as a single word in the text v1.0.2, as (بعدما). This word appears in only three verses, which are verses 2:181, 8:6 and 13:37. The other three minor updates are about replacing the total three letters with their alternatives from within three other words, to increase compatibility with the Uthmani text. However, since the total letter sum does not change in my codes, this update does not change the letters counts of the previous text and thus not important as it does not mainly affect the current evidences of this book except a few codes with Abjad numbers and thus not important. All the details of the update from text Version 1.0.2 to the Version 1.1. can be seen from their site at http://tanzil.net/updates/.

As a consequence of this tiny and somewhat arbitrary update on the single word (*ba'da-ma* in the text Version 1.0.2, now written as *ba'da ma* in text Version 1.1), the codes, based on the text Version 1.0.2, which include the word count information from the following three verses 2:181, 8:6, and 13:37 do not hold for the text Version 1.1. Although the meaning or reading of the word *ba'da-ma* does not change at all with this update, it affects the overall word counts from the related verses since I count the words with respect to empty space among them. Upon the update notification from tanzil.net via email, I was able to reply them and ask the notifier person about the reason of this change on the word *ba'da-ma*. He replied as I quote his exact answer below:

> "There are 30 other occurrences of"بعد ما" in the Quran text, all of which have been written separately in Tanzil text since the first version. As both writing styles are correct and are used interchangeably in Arabic, we have decided to replace these three cases in the new version to keep the text consistent. So, it is a matter of consistency, not correctness. Both versions are still correct. "

There is a link he attached to the word "occurrences", which brings all the 30 occurrences of "min bade ma" from Tanzil server, such as the one in Verse 2:75, as this: "من بعد ما". However,

when considering the dots (harakas) it is read as “min bade ma” as more clearly seen in the form written with the dots as this “مِنۢ بَعۡدِ مَا”.

As someone who does not know Arabic but just count the words, the two words did not seem to be the exact same words to me. In all the 30 occurrences of “min bade ma”, there is “min” comes before “bade ma” and these 30 occurrences seem to be a standard phrase as “min bade ma” and written always as separate. However, “ba’da-ma” or “bada ma” appears in slightly different form than those 30 occurrences despite the fact that they are based on the same words.

Although he said *“both writings of the word are correct”*, the 30 separate writings of slightly different version (“min bade ma”) of the word in contrast to the three writings as single word (“ba’da-ma”) did not seem to me a random choice of writing. There should have been a reason in the first place for them to be written that way for the last 13 years, which was the pattern of earlier time from the tradition. I then further asked to the person the reason why “ba’da-ma” was written as a single word for the last 13 years and not changed since then in the previous version (v1.0.2). His answer was that “ba’da-ma” was written as such in the earlier manuscripts and thus the pattern followed in the Tanzil texts.

Although their current reason of the change, “being consistent”, sounds reasonable, I was not satisfied with the explanation of the change. In the end, the change that is made is in the text of the Quran, one must make sure that the change that is *preferred* is coherent with the classic Arabic grammar. Because, in their explanation of the details of the text, they had already stated that they prepared this text with great care by the reviews of experts and also there was no error reported since 2008. In their web site (http://tanzil.net/docs/tanzil_project) and their FAQ page, they answer some very relevant questions. Some of their relevant answers I quote below:

> “Tanzil is a Quranic project launched in early 2007 to produce a highly verified Unicode Quran text to be used in Quranic websites and applications. Our mission in the Tanzil project is to produce a standard Unicode Quran text and serve as a reliable source for this standard text on the web.”
>
> “Our mission in the Tanzil project is to produce a standard Unicode Quran text and serve as a reliable source for this standard text on the web.”

They also state that **they have checked the text against a set of grammatical and recitation rules**.

> “**Rule-Based Verification:** In this step, a program was developed to verify the core Quran text against a set of grammatical and recitation rules…”

> "**We extensively used the help of a group of experts including Quran specialists and Hafizes in order to assure the correctness and preciseness of the obtained Quran text**. Our Quran text is now used in major Quranic websites and projects, with several millions active users per month. *Despite this high volume of users, we have received no typo report since the release of the first version of the text in 2008*. The accuracy of the text has been also reconfirmed by several projects that are actively using Tanzil Quran text."
>
> " 'How accurate is Tanzil Quran text?' Tanzil Quran text is carefully derived from Medina Mushaf, which is currently the most authentic copy of the holy Quran (narration of Hafs)."

So, then the question is, if the text is already correct and has been used for the last 13 years and no error reported, then why bother to change the writing of a single word? This update was released around 17 months after the first online publication of my book. It may seem a simple change but it causes the collapse of most of the codes in my book if I use the updated text. Interestingly, the three verses that include the changed word *ba'da-ma* **coincidentally** have the meaning centered around *changing after the truth*.

> Quran, 2.181: "Then, whoever changes it after he has heard it, its sin will only be on those who change it. Surely, Allah is All-hearing, All-knowing."
>
> Quran, 8.6: "they were disputing with you about the truth after it became clear, as if they were being driven to death being seen by them." (Translations from: quran.com, Mufti Taqi Usmani)
>
> Quran, 13.37: "And so We have revealed it as an authority in Arabic. And if you were to follow their desires after ˹all˺ the knowledge that has come to you, there would be none to protect or shield you from Allah."

8.1.1 My research and the conclusion on the word ba'da-ma

My research on this very specific question started from around February 2021 and mainly finalized by the end of October 2021, though it still continued lightly time to time till now as there was new ChatGPT technology introduced in 2022. It took a long time and is worth explaining the details of my tiring research. However, I will first write the conclusion I reached and the rationale of my conclusion to make sure the reader reads the most important part of this section before reading through all those research details. My research conclusion about the word *ba'da-ma* is that according to the classical Arabic grammar, **ba'da-ma is one word**. Therefore, it is counted as one word in the three verses that include it, which are 2:181, 8:6 and 13:37. Therefore, I decided to keep using the initial Quran text version I had been used, which is the text Version 1.0.2. The overall replies I could receive from Arabic language experts during my research were mixed and there were

not a common single answer to this specific question. However, all of the replies were their opinions based ow their knowledge at that time. None of them really cited a specific classical Arabic grammar book that supported their decision for this specific question. Since the answers were mixed and not as detailed as I expected to see in an academic publication, I was not fully satisfied with my findings. I further researched myself directly instead of asking experts and in the end I think I found the answer in the very old book Al-Kitab (The Book). It is, arguably, one of the few most respected pioneer classical Arabic grammarian, famously known as, Sibawayh. He was known to be born in 760 and died in 796. His full name was *Abu Bishr Amr ibn Uthman ibn Qanbar al-Basri* and he was the leading grammarian of Basra and author of the **earliest** book on Arabic grammar and linguistics. This quote from Wikipedia explains well the importance of his book:

"Al-Kitāb or Kitāb Sībawayh ('Book of Sibawayh'), is the foundational grammar of the Arabic language, and perhaps the first Arabic prose text. Al-Nadim describes the voluminous work, reputedly the collaboration of forty-two grammarians, as"unequaled before his time and unrivaled afterwards". Sibawayh was the first to produce a comprehensive encyclopedic Arabic grammar, in which he sets down the principles rules of grammar, the grammatical categories with countless examples taken from Arabic sayings, verse and poetry, as transmitted by Al-Khalil ibn Ahmad al-Farahidi, his master and the famous author of the first Arabic dictionary, "Kitab al-'Ayn", and of many philological works on lexicography, diacritics, poetic meter ('arūḍ), cryptology, etc" (https://en.wikipedia.org/wiki/Sibawayh).

Another quote to know about him is this: *"Sibawayh, who, more than any other individual, was the foundational grammarian of Arabic."* (https://www.encyclopedia.com/history/news-wires-white-papers-and-books/sibawayh).

I will provide a last quote from a web site (sifatusafwa.com) that shows how Al-Kitab is marketed while being sold: "THE KITAB OF SIBAWAYH - THE ULTIMATE REFERENCE: Al-Kitab, the mother-book of Arabic grammar, often cited as the first work on Arabic grammar and its rules, when it was previously only oral tradition".

There are still recent and ongoing academical studies around Al-Kitab, which suggest that it is fair to consider it as an authoritative resource for my research question, though that does not mean it must be always correct. The reasons I accepted the answer in Al-Kitab from Sibawayh are as follows: First of all he has a sufficiently descriptive answer in his book, Al-Kitab, that clearly describes the exact word *ba'da-ma* is one word in the form of composite pattern. He is one of the closest classical Arabic grammarian to the time of Quran's revelation. His book considered as the first written book in classical Arabic grammarian and already has been accepted as reference and still being actively referenced by academics. The last reason I accepted his answer as the correct answer is because the opinions of current expert academics were mixed and they seem to be not fully sure in their answer considering my perception from the wordings in their answers. Considering all the

mixed answers, it appeared as the most rationale approach is to accept the answer of Sibawayh who I perceived as one of the top authority among all the known classic Arabic grammarians throughout the history and up until today. Although, I had my conclusion based on the information from the Al-Kitab and some of the answers I received from Arabic language experts in around 2021, I later also used the new technology ChatGPT, which was introduced in late 2022, and asked her the same question and got the answer that *ba'da-ma* is one word based on her knowledge, which further confirmed my cocnlusion. I will also share her answers below in detail.

After, explaining my conclusion on the word *ba'da-ma* and the reasons of my conclusions, let me summarize the explanation about the word *ba'da-ma* in Al-Kitab of Sibawayh. Since I do not know Arabic, I performed my search in English and found an academic publication that already summarized the information about *ba'da-ma* in Al-Kitab (Eddakrouri 2016). I present almost the exact quote for it from **the page 19** of the thesis as below. What a coincidence! Anyways let's continue the information from the thesis on page 19:

> "Sibawayhi (Qanbar, V. 2, 1966-1977, p.139) explained that when بعدَ /ba'da/ and قبل /qabla/ are followed by ما /mā/, **they become one word in the shape of compound pattern**. In this case, ما /mā/ stops the two adverbial nouns from اضافة/ 'iḍāfa/ (Annexation) and, instead, they are directly followed by a clause beginning with a verb, usually past tense. For example, ba'da-mā shāhadahu 'aḥadu lmārrati/ (after one of the passers-by saw him) (Ryding, 2005, p.414)."

We read the explanation of Sibawayh in the first sentence. However, as we see in the second sentence of short quote, there is also one more supporting information from a contemporary time reference Arabic grammar book of Ryding (Ryding 2005), where *ba'da-ma* is also considered as one word. We might consider this as a further supporting information from a current time classical Arabic grammar expert.

There is also one interesting bit of information about this quote that I want to share here. This is the piece of information in a single short paragraph, which I was satisfied and finally felt confident that I found the correct answer after a long tiring research process. It was also the first and the only information I could find an exact answer about the word *ba'da-ma*. The significance of this information for me was such that it was a turning point for me as I had already started to update my book by changing the main text of Quran as the last updated text, version 1.1, but was still researching as I was not satisfied. As I was not sure about the correct form of *ba'da-ma* considering the mixed answers I had received upon my research, I had started to remove all the related important codings from the main body of my book. Since I was still not sure about the correct form of *ba'da-ma*, I was just going to provide the relevant codes of the previous text as appendix to this book and explain the unclear situation and leave the decision to experts who might research on it in the future. In

a sense, I was going to change this book in a more academic format with inconclusive parts to promote and facilitate potential future scholarly studies on the issue and the relevant codes. However, around 6 months after starting my research, as I was not satisfied with the mixed answers, I decided to do some more research over the internet with different keywords myself rather than contacting to experts to ask their opinions. I found right away the information that I quoted above in the master thesis (Eddakrouri 2016) at **page 19**. So, basically the most critical information for the 19 based system of my book appeared to be *in the page 19 of the thesis* that has 174 pages in total. At the time of finding out this phenomenon, this thesis was the first and the only academic level resource I could have found during all my long research. It was very interesting for me and I found it worth sharing here. I want you to think about the probability of me finding my final answer in one English resource and the page of that information to be exactly 19.

8.1.2 Summary of my research process about the word *ba'da-ma*:

After summarizing the conclusion of my research, I now start explaining the details of my relatively long research process about the word *ba'da-ma*. From the first publication date of my book 2019 to my further discoveries till 2020, I had performed all my analysis over the *Simple Clean* text Version 1.0.2 and discovered truly amazing codes, which together suggest a miraculous 19 based system with systematic rules over the text of Quran that I studied. The codes of the main system include all the chapter, verse and word information together and suggest a clear system where we observe the key coding patterns of coding rules from the first chapter Al-Fatiha. I allocated a dedicated chapter, Chapter 4.1.2, for this very clearly rule based system that consists of miraculous codes. Assuming that there is no error in the text I used, ("Simple Clean" Version 1.0.2), the system presented in Chapter 4.1.2 suggests that the text has miraculous 19 based design over it, which therefore suggest it is intact and unchanged. This intactness suggesting evidence is up to the level of the number of words used in each verse and over all the current chapters and verses structure. Upon this, there are also some other very interesting codings (Chapter 4.2.2.1, Chapter 4.2.6, Chapter 4.2.3.1), which includes letters information too upon chapter, verse and words information. Basically, using chapter, verse and words and letters numbers, we can get representation numbers of each verse. We then replace them with each corresponding verse and, in a sense, rewrite the text by its natural numbers. These codes together stands as strong evidences that suggest intactness up to the level of the order of words and number of letters in each verse over all the current chapters and verses structure. Upon these codes, there are also many interesting codings that I presented over various chapters in this book. However, those stands out as very clear codings that suggest a system up to the letters over the full text of Quran ("Simple Clean" text Version 1.0.2) with its current structure. I can never claim that it is absolutely a divine design but I can easily defend against any critique that there is clear rule based 19 coding system over that particular text and my *conclusion based on my observations and measurements* is that it suggests a divine

design. However, with the new text update, most of these important codes along with the codes of the main system collapses if the correct form of the single word *ba'da-ma* is written separate as it was changed in the latest version v1.1 of the text.

I would be quite surprised to observe all the clear 19 based system on the text I used (v1.0.2) if the absolute true form of the word *ba'da-ma* was in fact separate as in the updated text version v1.1. There are only a few interesting new unique codes in v1.1 I found and presented in the next subchapters, but I could not see a clear 19 based system as I saw in the text version 1.0.2. I decided to make a research to find an answer that satisfies my mind and heart whether the true form of the word *ba'da-ma* is single word as *ba'dama* or two words as *ba'da ma* with respect to classical Arabic grammar rules. As I did not know Arabic, it was quite a difficult task for me. Therefore I decided to consult expert academics on the issue and also look at the earliest Quran manuscripts.

Regarding the old Quran manuscripts, it turned out that they cannot help finding the true form of the word as there is the disconnected letter *d* before the word *ma*, which always causes a same size empty space between the preceding word of the *ma* independent from the form of the word whether it is single word or two words. This is a fact observed in the early handwriting manuscripts before the typewriters that allowed printing the text. An academic, Dr.van Putten, who has expertise in early manuscripts informed me about this fact when I asked about the status of the word *ba'da-ma* in early manuscripts to another expert in Twitter (now called X). I present his exact answer in the following image to precisely cite this information:

I did not know this fact and had already looked at many of the old manuscripts that I could find from the corpuscoranicum.de server to see the word *ba'da-ma* in the three verses that include it. They all appeared with a notable space between the words *ba'da* and *ma* but during this research some other single words also took my attention with similar size of empty space after the disconnected Arabic letters like *d*. Since I was not neither expert in Arabic grammar nor in old manuscripts I could not have any conclusion by that observation. Dr.van Putten's explanations confirmed my observation. So, in conclusion of my research about the old manuscripts, it turned out that the early manuscripts do not help much in finding the true form of the word *ba'da-ma* with respect to classic Arabic grammar. After finding out this fact, the only option appears to be to search an answer from the resources or experts about classic Arabic grammar.

I searched experts from all over the world via internet and tried to reach all the academics with expertise in Arabic language that I could find. A small portion of them kindly returned to my question with an answer about whether the word *ba'da-ma* is one word or two words in the three verses with respect to classic Arabic grammar. Unfortunately, the replies were mixed, which left me with an unsatisfactory feeling as neither my mind nor my heart was fully convinced that I found the truth from the replies I received. It is worth summarizing the replies I received as this process lasted for a significant time from about February 2021 till October 2021.

Experts opinions summary:

In this summary of experts' opinions, I will mention only the names of the experts who gave permission to share their names along with their replies. Also, I will not share the full answers but try to summarize the main points of all the answers. The other point that I should mention is that I have two groups of replies. The first group replied upon my first question format in around March 2021, where I had asked the question as "*whether ba'da-ma is written as a single word or two separate words in those three verses of Quran?*". Because my assumption at that time was that the writing form could clarify whether the word is a single word or two words. However, as I mentioned before, the handwritten early manuscripts cannot help answer this question. Since my wording of the question includes *writing*, this may cause a little bias towards writing style or confusion. My goal was to learn whether *ba'da-ma* is single word or two words regarding classic Arabic grammar. Along with my question, as an example, I also shared a contemporary Arabic poem where the poet used *min bade ma* as separate words in the first verse but *ba'dama* as joint single word in the second verse. Because I had assumed that the poet should have good level of Arabic grammar and he might have a grammatical reason to use both versions of the word as separate and joint in the two consecutive verses.

I first received an answer from an Associate Professor from an Arabic Language Department in Türkiye. She said "It is usually written separately, but sometimes it can be written adjacent as in jahiliyyah (pre-Islamic) poems etc.". She also asked another faculty member, who has some work on the word *ma*, in her faculty and he provided more detailed answer. He suggested to avoid certain judgments about *ma* as there are 12 types of it and also additional usage of them in jahiliyyah poems. His particular opinion for the *ba'da-ma* in the three verses was as it is two separate words. These two experts are non-native speakers of Arabic.

In another answer, a professor of Pre-Islamic Literature from Jordan replied with an answer explaining the general situation and his own opinion. My summary of his answer is as follows: "We (Muslims) follow and forever will be following the writing of the Holy Quran of the seven copies that was written down in the time of Caliphate Othman. The writing of the Noble Quran is exclusive for it as the shape of it is considered as a holy thing and untouchable. However, the contemporary model of writing of Arabic is not as in the Quran.". After explaining the general perspective about the writings of Quran and current Arabic, he shared his own opinion about my specific question as follows: "… some are writing without space and others with separate, and all are respected. But, for me, I always write it and many similar words as one word, and the confusion comes from a great thing in Arabic writing which is the connecting and disconnecting letters, so it confuses a lot of Arabs and beginners. According to (بعدما) and (من بعدما) I disagree with the sending writing and I see that (بعدما) is one word in any text without looking at the word before or after.". By saying

“the sending”, he refers to the poem I had shared in my email, where *ba’da-ma* and *min bade ma* were used in two consecutive verses of the poem by the poet, as one word and two words, respectively. So, basically this answer, from a professor of Pre-Islamic Literature from Jordan, says, no matter what *ba’da-ma* or *min bade-ma* always one word. This was very interesting answer as I did not see before a single usage of *min bade ma* as in a composed form like *min bade-ma*. This part of the answer was only provided by this expert.

Another answer I received was from Dr. Mu’men Badarin, Assistant Professor in Arabic Grammar at Arabic Department from Palestine. His answers was quite short, which I summarize as follows as far as I understand: Dr. Badarin considers “*ba’da-ma* written as a single word in Quran traditionally although, in general, this word should be separated (بعد ما) unless, if”Ma” was a disrupter (kaffa; كافة) “. As a support to his opinion, he said” according to the holy Quran, the writing is unique and doesn’t align with the standard way of writing (Othmani Drawing)“. He also shared 4 different books as a reference without any specific quote or page mentioning but since I did not know Arabic, I could not read them.

I also received a more detailed answer from Dr. Ahmed Ali, Professor of Translation at the Dept. of Arabic and Translation Studies from UAE. He also spent some time to research the issue and kindly replied my multiple emails in detail. His first answer to my first email was as follows:

“When ba3d is used as an adverb, the /d/ would have a fathah and then it is written as one word بعدَما . If ba3d is preceded by the preposition /min/, it is then used as a noun, and it is then written as two separate words بعدِ then ما. Together with /min/, these would be 3 separate words: من بعدِ ما.” He also provided a more detailed answer regarding the poem example, which had both usage of the word *ba’da-ma* in two consecutive verses, as follows: “The example you have quoted cannot be accepted in any way as a proof of anything as a general principle. This is modern poetry and linguistically means nothing and cannot be used to substantiate one view or another. However, the author seems to follow the Qur’anic convention of writing, that is, when بعدَما is adverbial, it is one word; and when من بعدِ ما has ba3d as a noun preceded by min, it is written as separate words. Is this based upon some grammatical rules, I cannot tell on the top of my head. However, this merits investigation. Since this is what you are doing, then you may check what the grammarians say about this: the use of ba3d adjectivally or as a noun as well as the semantic implications. It will be worth your while as well to check the various uses and functions of /ma/ as this could render some clues as to why /ba3dma/ is sometimes written as 1 or 2 words”.

Dr. Ali also suggested to consult to highly-qualified reciters. I tried and could find one, at least to my impression, who kindly answered that *ba’da-ma* is two words. I shared his detailed answer, which was referring to different sound layers, with Dr. Ali and asked his opinion on it but he said that it is just *ijtihad* (independent reasoning) which lacks solid

evidence. Months later, I had the opportunity to ask two other reciters (*Hafiz*), one said two words and the other (from Egypt) said one word. Dr. Ali was quite responsive to my further follow up questions and helpful as he himself made some research by querying to some other scholars about the issue. Dr. Ali shared an answer he could receive upon his queries. The answer was from a Professor of Qur'an recitation specialized in *Waqf* and *Ibtida* as follows: "He said that ba3da-ma is two words and stated:"This issue has nothing to do with reception. This is what we have learnt." He meant that linguistically ba3da is a word and ma is another word according to the Arabic language. He did not mean that he received like this from his teacher. Unfortunately, when I queried this issue further with him he only repeated what he had said, that is, "This issue has nothing to do with reception." Thus, my conclusion is that he is using ijtihad. This is just his own opinion.".

Dr. Ali further added this "Now, all this really is not an issue at all when it comes to reciting the Qur'an since no one pauses at ba3dama nor does none need to pause at ba3da. This explains why the many people asked about this really do not know. They had never thought of this particular example as a problematic issue. However, it becomes an issue when it comes to counting the words.".

This gave me the impression that reciters may not be right source to find out the specific issue about the status of *ba'da-ma*. In the same and final email to answer my questions, he shared his final opinion as follows:

"I can tell you now with 100% certainty of mine that /ba3da ma/ in those 3 Ayahs are two words. These two words are clearly written as two in all the Qur'an copies I have checked. The Qur'anic script is respected when it comes to recitation and I am not in any way confused in determining that /ba3da ma/ in the 3 Ayahs in question are two words written separately. In all the copies I checked this is the case. So, I hope this concludes this issue.".

So, he based his conclusion regarding to the Qur'an copies he has checked. Since I could not see a grammatical reference to early classical Arabic book, I was not fully convinced. However, he had spent significant time to research on the issue and I was leaned upon his opinions considering his sincere efforts on the topic, I had then started to update my book as taking the last text (v1.1) as the main text of my book and moving the codes with previous text (v1.0.2) to appendix of my book. I was going to leave the issue open to future research by other scholars. Basically, I was going to transform my book in more of an academic form by pointing out the issue and leave the solution for future research by others. This process was the result of the first part of my research. But, then I had to give a break to the revision of my book as I was fully occupied by family issues and sickness for several months.

The second part of my research was not planned but occurred spontaneously. Right after my sickness healed, as I was not satisfied with the mixed and personal opinion based

answers, I decided to research the issue one more time instead of continuing the revision I had already started and progressed to the half of it with the text version v1.1. At my first attempt this time, I found the academic resource, a master thesis of (Eddakrouri 2016), where I read the explanation of Sibawayh from the Al-Kitab as if one of earliest classical Arabic grammarian authorities, Sibawayh, directly answers my very specific question! I was very happy as I first time found an answer from a classic Arabic grammar book, which turned out to be the book of one of the few most respected early classical Arabic grammarians, and in fact the earliest and most popular one. I wanted to ask about this turning point information about *ba'da-ma* to other experts to make sure my conclusion based on this information is not wrong. Then, I contacted to some other experts about the matter by sharing the information in Al-Kitab from Sibawayh and the issue around the three verses in Quran and asked their opinions whether they agree with that or not. I was able to receive a few replies, in short, most agreed with the answer I concluded from the quote of Sibawayh. I will also share those replies below.

I received a very short answer from quite a high profile scholar, who was a professor and chairman, of Arabic and Islamic Studies in Lebanon. He has PhD in Arabic Studies from Yale University. Upon sharing the quote of Sibawayh and the alternative opinion from an internet forum that suggest *ba'da-ma* is allowed to be written in two words, I asked to the professor, which one do you think is correct? His exact short answer is as follows where he agrees with Sibawayh as considering *ba'da-ma* as one word:

> "The first explanation is the correct one. They form one word and this is common in Arabic with many particles.".

I received another answer to the exact form of the question from Dr. Samer Ali, who is an Associate Professor of Arabic and Islamic culture at the Department of Near Eastern Studies from USA, where his answer was also favoring *ba'da-ma* as one word. Here is his exact answer:

> "The short answer is that they become one word in terms of writing/orthography. The longer answer is that the Qur'an was written down before those orthography rules were codified – the original Qur'an texts, for example, didn't have dots or vowels – so now it's hard to say definitively what rules apply to Qur'an orthography."

I also received another answer to the exact form of the question from an Assistant Professor of Arabic Language & Culture from Egypt. His answer was short and clear as this:

> "I totally agree with what has been said by Sibawayhi.".

So, in total I was able to receive three answers about the precious information about the word *ba'da-ma* from Sibawayh, and all the professors agreed with Sibawayh, which says

ba'da-ma is one word. These opinions confirmed that my resource is credible and the information in it is also correct. After that I researched more about Sibawayh and his book Al-Kitab and realized that I found one of the best classical Arabic grammar source available for my specific and subtle question. I was mentally and by heart convinced that I found the right answer and selected the initial text (v.1.0.2) where *ba'da-ma* as one word and started over the revision from the beginning aging considering this situation. I shared the information from Sibawayh about *ba'da-ma* with Tanzil server contact person but did not receive a reply.

As he had replied the most before, I further consulted to Dr. Ahmed Ali again about the conclusion I had from quote of Sibawayhi. He fully disagreed with my conclusion and replied that the explanation below. However, his final conclusion was that we have to look at Qurani scripts and I do not agree with that approach as I explained before the disjoint letters, like 'd', had always the same space to its preceding letter no matter the word is joint or separate. Here is the the full answer from Dr. Ali:

" I shared the quoted information from the Sibawayh with Dr. Ahmed Allaithy and asked his further opinion on this new information too. He kindly provided me with a detailed answer. He said he looked at this source (Sibawayhi ibn Qanbar, 1988, v2, pp.138-139) for the information from Sibawayh. In short, he does not agree with the conclusion inferred from Sibayahi's quote which he considers to be a quote out of context. This entails that considering ba3da-ma as being one word based on this misquote cannot be correct in the context of Quran. He believes that we need to look at the manuscripts and physically check the matter from the script for an answer to this specific question. I try to summarize and quote the points of his answer as follows:

"This is really not an evidence to rely on regarding ba3da ma being one word or two words… Sibawayhi was definitely not addressing whether ba3da ma in the Qur'anic script is one word or two words; rather he was addressing a general linguistic issue regarding how the word is used by Arabic users in terms of writing. He was not commenting on the Qur'an…

In conclusion: … It is crystal clear that Sibawayhi never said ba3da and ma are one word. He said al-Murrar al-Faq3asi made them one word to serve his poetic and semantic purposes which he achieved using grammar as explained above. Since your issue under study is whether ba3da and ma are one word or two words, what Sibawayhi says about the noun that follows ba3dama is irrelevant to your discussion.

To end, what I am really saying and stressing here is that if the matter is regarding counting ba3da and ma as one word or two words, you need to consider and physically LOOK at the Qur'anic script. There is no doubt in all the copies I have checked –old and modern- that ba3da and ma in the Ayahs under study, are TWO words separated one from the other like

any other two words in the Qur'an. No scholar worthy of his title can say we ignore the Qur'anic script. "

So, I have my conclusion based on my research but a further discussion from expert academic scholars at a top academic level workshop and publication of the their conclusion with detailed reasoning on the issue would be helpful.

Finally, in the late 2022, the ground breaking general artificial intelligence technology ChatGPT was introduced. Since, it can read also the Arabic literature, I decided to ask her about the issue. The short answer is that ChatGPT replied bada-ma as one word. See the details in the following section.

8.1.3 ChatGPT answers on the word bada-ma

My first prompt to each of the AGI (Artificial General Intelligence) ChatGPT models on date 11-19-2023 is the following prompt. The follow up prompts can be seen in their sections. The AGI model Google BARD was surprisingly better and detailed so I placed it first. One thing that was common is that all the models I tried provided the information that badama is one word. Especially, BARD provided references to early and modern scholars all saying badama as one word. I urge any interested expert scholar to check and verify the answer from BARD by looking at the resources it provided. If correct, that answer perfectly settles the issue as many respected scholars seem to be concluded badama as one word.

Just before I was about to finish my upgrade of this book on around December 14, 2023, a new and latest AGI model released by Google instead of BARD, which is claimed to be on par or even better than ChatGPT-4. I decided to ask the same questions that I had asked to the older version of it, BARD, as presented above in BARD section. Below are my questions and her answers on December 14, 2023. I short, Gemini, brought old and modern scholars opinions about badama as one word as you can see in detail in the end of this chapter.

My first prompt for each ChatGPT model:

Act like you are one of the top expert scholar in classical Arabic grammar and Quranic Arabic while answering all my following questions.

Question: There the word badama (بعدما) in Quran verses 2:181, 8:6 and 13:37. However, some Quran texts write that word as two words like 'bada ma' ((بعد ما) while some other Quran texts write it as one word as 'badama' (بعدما) .

I am counting the words and I want to cont correctly.

Do you know whether it is one word or two words ACCORDING to classical Arabic grammar and Quranic Arabic?

8.1.3.1 BARD (Goggle):

According to classical Arabic grammar and Quranic Arabic, the word “badamā” (بعدما) is considered one word, not two. This is because the conjunction “ma” (ما) is often incorporated into the preceding preposition or adverb, forming a single lexical unit. This phenomenon is known as “idghām” (إدغام) in Arabic grammar, and it is a common feature of both classical and Quranic Arabic.

In the case of “badamā,” the conjunction “ma” is assimilated into the preposition “baʿda” (بعد), resulting in the formation of the single word “badamā.” This is consistent with the way “ma” is treated in other similar constructions, such as “ḥattā mā” (حتى ما) and “lammā mā” (لما ما).

Therefore, when counting words in the Quran, “badamā” should be counted as a single word, not two. This is in accordance with both classical Arabic grammar and Quranic usage.

MY PROMT 2:

Do you know any early respected scholar, like Sibawayhi or similar, who commented on this exact issue?

BARD

Yes, there are several early respected scholars who commented on the issue of whether “badamā” is one word or two words. One of the most prominent is Sibawayhi (135-206 AH), the renowned grammarian and author of the seminal work “Al-Kitāb” (The Book).

- **Sibawayhi (135-206 AH)**

In his seminal work “Al-Kitāb” (The Book), Sibawayhi addresses the issue of prepositions and conjunctions, specifically mentioning the case of “badamā.” He states that “badamā” is considered a single word due to the assimilation of the conjunction “ma” into the preposition “baʿda.” He further explains that this assimilation is a common occurrence in Arabic grammar and that it facilitates pronunciation and flow.

Other early scholars who have addressed this issue include:

- **Al-Khalīl ibn Ahmad al-Farāhīdī (100-170 AH)**: A renowned philologist and lexicographer who extensively studied the rules of Arabic grammar. In his work “Kitāb al-ʿAyn” (The Book of the Eye), he discusses the assimilation of “ma” into prepositions and adverbs, including the case of “badamā.”
- **Al-Zamakhsharī (467-548 AH)**: A prominent grammarian and lexicographer who is known for his concise and insightful explanations of grammatical concepts. In his

commentary on the Quran, “Al-Kashshāf” (The Uncoverer), he explicitly states that “badamā” is one word, not two.

- **Ibn Najāh (d. 1373 AH)**: A renowned grammarian and linguist who wrote extensively on Arabic grammar and lexicography. In his work “Sharḥ al-Kāfiyah” (Explanation of the Kāfiyah), he provides a detailed analysis of the assimilation of “ma” into prepositions and adverbs, including the case of “badamā.”

These are just a few examples of the many early respected scholars who have commented on the issue of whether “badamā” is one word or two words. Their consensus is that, according to both classical Arabic grammar and Quranic usage, “badamā” should be considered a single word, not two.

MY PROMT 3:

Are there modern scholars who discussed this?

BARD

Yes, there are several modern scholars who have discussed the issue of whether “badamā” is one word or two words. Some notable examples include:

Muhammad Shafi’ ’Imrani (1904-1982)

In his comprehensive work on Quranic grammar, “Al-Wafi fi’l-ʿUlūm wa’l-Funūn wa’l-Ādāb” (The Sufficient in Sciences, Arts, and Literature), ’Imrani dedicates a section to the assimilation of “ma” into prepositions and adverbs. He specifically mentions the case of “badamā” and confirms that it is considered a single word due to this assimilation.

Mustafa Jamaluddin Zarqā’ (1900-1980)

Zarqā’, a renowned scholar of Islamic studies and Quranic interpretation, also addresses the issue of “badamā” in his commentary on the Quran, “Az-Zilāl li’l-Qur’ān al-Majīd” (The Shades of the Glorious Quran). He explains that “badamā” is one word due to the assimilation of “ma” into the preposition “baʿda,” citing the views of classical Arabic grammarians like Sibawayhi.

Muhammad ’Abd al-Salam al-Khaṣṭīb (1917-2000)

In his in-depth analysis of Quranic grammar, “Al-Nahw al-Wāḍiḥ min al-Qur’ān al-Majīd” (The Clear Grammar from the Glorious Quran), al-Khaṣṭīb provides a detailed explanation of the assimilation of “ma” into prepositions and adverbs. He specifically mentions the case of “badamā” and confirms that it is considered a single word, citing the consensus among early and modern scholars.

These are just a few examples of the many modern scholars who have discussed the issue of whether “badamā” is one word or two words. Their consensus is that, according to both classical Arabic grammar and Quranic usage, “badamā” should be considered a single word, not two.

8.1.3.2 ChatGPT-3.5:

In classical Arabic grammar and Quranic Arabic, the word “badama” (بعدما) is considered as one word, not two. The Quranic text is known for its precision in grammar and syntax, and this particular word is consistently written as a single word “badama” (بعدما) in the verses you mentioned (2:181, 8:6, and 13:37).

While there may be variations in how the Quran is printed or transcribed in different texts or editions, it’s essential to rely on authoritative and established sources when studying the Quranic Arabic language and grammar. In this case, according to classical Arabic grammar and Quranic Arabic, “badama” (بعدما) is correctly considered a single word.

8.1.3.3 ChatGPT-4:

I am based on the GPT-4 architecture, and my training data includes information up to April 2023.

MY PROMT on date 11-19-2023:

“Which ChatGPT version are you and what is your latest training date?”

In classical Arabic grammar and Quranic Arabic, the word “بعدما” (badama) is indeed a point of discussion among scholars. To understand this, we need to delve into the nuances of classical Arabic and the orthographic traditions of the Quran.

Classical Arabic Grammar: In classical Arabic, the word “بعدما” combines two parts: “بعد” (ba’d, meaning ‘after’) and “ما” (ma, a relative particle that can mean ‘what’, ‘that which’, etc.). In classical grammar, these two parts can function as a single unit, where “ما” is a conjunction used to introduce a subordinate clause after “بعد”. When they function together as a single unit, they can be written as one word, “بعدما”.

Quranic Arabic and Orthography: The Quranic script, particularly in its early manuscripts, often presents a unique orthography that does not always align with the classical Arabic grammar rules developed later. Early Quranic manuscripts often showed a flexible approach to the separation of words, and the orthography was not standardized in the way it is today. In some Quranic texts, “بعدما” is written as one word, while in others, it is separated into “بعد ما”. This variation reflects the orthographic practices of the time when these manuscripts were written.

Modern Standardization: Modern printed editions of the Quran often adhere to a standardized orthography, which may choose either form. The choice of one word or two does not necessarily affect the meaning significantly but can impact word counts or interpretations of verse structure.

For your purpose of counting words accurately, it's essential to decide on a standardized form and stick to it. If you are looking at a specific Quranic text or a particular recitation tradition (Qira'at), it would be wise to follow the orthography as presented in that tradition. In academic or scholarly settings, it's common to specify which orthographic tradition or text edition is being used for such counts.

> After I input the answer of BARD to ChatGPT4, this time, it provided a more detailed answer by conforming BARD as follows:

The explanation provided by BARD (Google) aligns with the understanding of classical Arabic grammar and Quranic Arabic. The concept of "idghām" (إدغام) in Arabic grammar, where a conjunction like "ma" (ما) is merged with a preceding preposition or adverb to form a single lexical unit, is a standard grammatical feature.

In the specific case of "badamā" (بعدما), as BARD explains, the conjunction "ma" is assimilated into the preposition "baʿda" (بعد), creating a single word. This treatment of "ma" is consistent with other similar constructions in Arabic, such as "ḥattā mā" (حتى ما) and "lammā mā" (لما ما).

Thus, in line with classical Arabic grammar and the traditional interpretation of Quranic Arabic, "badamā" should indeed be counted as a single word when analyzing the text of the Quran. This understanding is crucial for accurate word counts and textual analysis in Quranic studies.

8.1.3.4 GEMINI (Latest BARD of Goggle):

My first starting question is the main question I share at the beginning of this main chapter and I asked the same to all the model while starting the conversation. I start sharing Gemini's answer to my main question and will continue with my other quesitons as needed:

Gemini's answer to my main question:

As a scholar of classical Arabic grammar and Quranic Arabic, I can offer some insights regarding the word "badama" in the verses you mentioned.

Grammatically:

- "Badama" is considered a **conjunction** in both classical and Quranic Arabic.

- It functions as a subordinating conjunction, similar to “after” or “when” in English, introducing a temporal clause.
- Some grammarians argue it can be analyzed as two words (“bada” and “ma”), but most agree it functions as a **single unit** with its own morphological and syntactic properties.

Quranically:

- The majority of Hafs readings, a widely accepted recitation tradition, write “badama” as **one word**. This is supported by the presence of a single “shadda” (doubling mark) over the “ma” in the script.
- Some other readings, such as Warsh, write it as “bada ma” with separate words. However, these are considered **variant readings** and do not significantly alter the meaning or grammatical function.

Therefore, from both classical Arabic grammar and Quranic Arabic perspectives, “badama” is generally considered **one word**. This aligns with the dominant Hafs reading and the presence of a single “shadda” in the script.

It’s important to remember that counting words in the Quran can vary depending on the chosen recitation and specific counting methodology. However, for accuracy and consistency, considering “badama” as a single word aligns with prevalent grammatical and Quranic interpretations.

I hope this information provides a helpful perspective on this question. Feel free to ask any further inquiries you may have regarding classical Arabic grammar or Quranic Arabic.

Please note that I am not able to discuss personal opinions or interpretations of the Quran, as my role is to provide information and insights based on established grammatical and linguistic principles.

MY PROMT 2:

Do you know any early respected scholar, like Sibawayhi or similar, who commented on this exact issue?

Gemini

While Sibawayhi doesn’t explicitly address “badama” in his seminal work, “Kitab al-Kitab,” several early and respected scholars have commented on similar constructions and offer relevant insights:

1. Al-Khalil (719-786 AD):

- He analyzed conjunctions like “badama” as composite words, arguing they arose from the fusion of two elements (“ba” and “ma”). This supports the idea of “badama” functioning as a single unit.

2. Al-Mufaddal al-Dababi (737-809 AD):

- He discussed similar conjunctions like “fa’inna” and “hattama” as single words with specific grammatical roles. This analogy strengthens the case for considering “badama” a unified word.

3. Al-Farra (d. 822 AD):

- He analyzed “badama” as one word with a single “shadda” on the “ma,” aligning with the dominant Hafs reading and further supporting its unity.

4. Ibn Malik (1204-1274 AD):

- In his renowned treatise, “Alfiyyah,” he mentions “badama” as a single conjunction, reinforcing the prevailing understanding of its grammatical function.

These scholars, although not directly addressing “badama” itself, provide valuable insights into the nature of similar constructions and support the interpretation of “badama” as a single word in both classical Arabic grammar and Quranic recitation.

It’s important to remember that language analysis and interpretations can evolve over time. While the majority view “badama” as one word, other perspectives exist. However, the evidence from early scholars like Al-Khalil, Al-Mufaddal, Al-Farra, and Ibn Malik aligns with the dominant understanding and provides a strong basis for considering “badama” a unified word in your word count.

Ultimately, the choice of counting “badama” as one or two words might depend on your specific methodology and desired level of granularity. However, understanding the supporting arguments from classical Arabic grammar and prominent scholars like those mentioned above can help inform your decision and ensure consistency in your analysis.

I hope this information proves helpful in your further exploration of this topic.

MY PROMT 3:

Are there modern scholars who discussed this?

Gemini

Absolutely! Modern scholarship has continued to explore “badama” and its status as one or two words, providing valuable insights and perspectives. Here are some notable examples:

1. Muhammad al-Harami (1928-2013):

- A renowned Moroccan scholar, linguist, and expert on Quranic recitation. In his work on Hafs readings, he categorized "badama" as a single conjunction, aligning with the dominant interpretation.

2. Muhammad Fuad Abdul-Baqi (1890-1973):

- A prominent Egyptian scholar and author of the renowned Tafsir Al-Azam. He also considered "badama" a single conjunction in his analysis of Quranic grammar and syntax.

3. Mustafa Sadiq al-Ra'i (1914-2004):

- A distinguished Iraqi linguist and expert on Arabic morphology. He analyzed "badama" as a fused conjunction, supporting the idea of a single word with its own morphological and syntactic properties.

4. Ibrahim Muhammad al-Ani (1943-present):

- A renowned Egyptian linguist and author of several books on Arabic grammar and Quranic studies. He discussed "badama" in his work on Quranic recitation, emphasizing its single-word status based on grammatical and historical evidence.

5. Modern Quranic Recitation Studies:

- Contemporary research on Quranic recitation traditions further strengthens the argument for "badama" as one word. Studies of Hafs and other recitation styles consistently demonstrate the use of a single "shadda" on the "ma," indicating a unified grammatical unit.

These are just a few examples, and many other modern scholars have engaged in discussions and analyses of "badama" and its word status. The general consensus among them aligns with the classical Arabic grammar principles and the dominant Quranic recitation traditions, supporting the interpretation of "badama" as a **single word**.

It's important to note that, like any linguistic matter, there might be alternative perspectives and interpretations. However, the weight of evidence from both classical and modern scholarship strongly favors considering "badama" as one word when analyzing Quranic texts and engaging in word counts.

I hope this information provides a comprehensive overview of modern scholarship on "badama" and empowers you to make informed decisions in your research and analysis.

Please feel free to ask any further questions you might have on this or other topics related to classical Arabic grammar or Quranic studies. I'm here to assist you in your scholarly pursuits.

MY PROMT 4: Do you know a few words in Quran that can be used as a direct analogy to the status of the word badama?

Gemini

Certainly! Here are a few words in the Quran that serve as useful analogies for the status of "badama" as a single word:

1. حَتَّى (hattama): This conjunction, meaning "until" or "so that," is also analyzed as a single word despite being composed of two elements ("ha" and "ta"). Its unified nature parallels that of "badama," where the fusion of two elements creates a single grammatical unit.

2. كُلَّمَا (kullamā): This adverbial conjunction, meaning "whenever" or "every time," exemplifies another composite word with a single "shadda" and a similar grammatical function as "badama." Its unified structure further strengthens the argument for considering "badama" a single word.

3. لِمَّا (limmā): This conjunction, meaning "because" or "since," shares a similar composition with "badama" ("li" and "ma") and carries a single "shadda." Its status as a unified word further reinforces the analogy for "badama."

4. ثُمَّ (thumma): This conjunction, meaning "then" or "afterwards," demonstrates the fusion of two elements ("tha" and "ma") into a single word, much like "badama." Its grammatical role and unified structure offer another pertinent analogy.

5. قَدْ (qad): This adverbial particle, meaning "already" or "indeed," showcases a single "shadda" despite its potential analysis as two elements ("qa" and "da"). Its unified nature, despite the potential for separate components, strengthens the analogy for "badama."

These are just a few examples, and many other Quranic words exhibit similar characteristics of being composite yet functioning as single grammatical units. By drawing analogies from these words, you can further solidify the understanding of "badama" as a single word in Quranic recitation and analysis.

Remember, linguistic interpretations can vary, but the weight of evidence from classical and modern scholarship, including analogies from other Quranic words, strongly supports the unified status of "badama" as one word.

I hope this information proves helpful and continues to enrich your understanding of Quranic language and grammar.

8.2 Some 19 based codes on the text Version 1.1

The codes that does not include the words information in those three verses are still the same and holds in both text. However, the associated codes are affected. I applied the standard codings with the numbers of this text too to see if there is similar system. I did not observe a similar system where the associated words information is used. However, I observed some interesting but isolated codes specific to this text that I will share them as facts in this chapter for your assessment.

In this Chapter I will present some interesting **codes** that exist in the Simple and Clean text of Quran with Version 1.1 from tanzil.net.

We first need to get the updated numbers regarding the Simple and Clean text of Quran with Version 1.1. You should be able to download the text from this link: http://tanzil.net/download/. We follow the same process as before and get the numbers in exact same way as below.

```
require(data.table)
tenzil = read.csv("data/quran-simple-clean.v.1.1.txt", header=F,
                  stringsAsFactor=F, encoding="UTF-8", sep="|")
quran <- tenzil[1:6236,]
colnames(quran) = c("chapter", "verse", "text")
quran <- cbind(as.numeric(rownames(quran)), quran)
colnames(quran)[1] = "VerseI"
quran$VerseI <- as.numeric(quran$VerseI)
quran$verse <- as.numeric(quran$verse)
quran$chapter <- as.numeric(quran$chapter)
quran <- data.table(quran)
nQuran11 <- quran
nQuran11$text <- gsub("^بسم الله الرحمن الرحيم ","",quran$text)
#
versecomb <- c()
for(j in 1:114){
  i <- which(nQuran11$chapter==j)
  versecomb <- c(versecomb, nQuran11$verse[i[length(i)] ])
}

dfVC11 <- data.table(cbind(c(1:114), versecomb))
colnames(dfVC11) <- c("Chapter_index","Verse_sum")
#
require(tokenizers, quietly = T)
```

```r
#All words in numbered verses
words11 <- unlist(tokenize_words(nQuran11$text))
w11 <-  length(words11) # should be 77800  (in 1.0.1 it was 77797 )
cat("Number of words in numbered verses is ", w11)
```

```
## Number of words in numbered verses is  77800
```

```r
#number of letters in numbered verses
letters11 <-  sapply(words11, nchar)
l11 <- sum(letters11) #should be 330709 same as in 1.0.1
cat("Number of letters in numbered verses is ", l11)
```

```
## Number of letters in numbered verses is  330709
```

```r
#All words in numbered and unnumbered verses
Words11 <- unlist(tokenize_words(quran$text))
W11 <- length(Words11) #should be 78248 (in 1.0.1 it was 78245)
cat("Number of words in numbered and unnumbered verses is ", W11)
```

```
## Number of words in numbered and unnumbered verses is  78248
```

```r
Letters11 <-  sapply(Words11, nchar)
L11 <- sum(Letters11) #should be 332837 same as in 1.0.1
cat("Number of letters in numbered and unnumbered verses is ", L11)
```

```
## Number of letters in numbered and unnumbered verses is  332837
```

```r
#
vwords<- c()
vletters <- c()
for(i in 1:nrow(nQuran11)){
  tmpw <- unlist(tokenize_words(nQuran11$text[i]))
  vwords <- c(vwords,length(tmpw))
  vletters <- c(vletters,sum(nchar(tmpw)))
}
nQuran11<- cbind(nQuran11[,1:3],vwords, vletters,nQuran11[,4])
colnames(nQuran11)[6] <- "text"
##
tmpN11 <- nQuran11
tmpN11$CV <- paste(nQuran11$chapter,nQuran11$verse, sep = ":")

datatable(tmpN11,
          caption = 'Table of numbered verses of Quran (text v.1.1)',
```

```
          extensions = c('Buttons'),
          options = list(pageLength = 5,
                         autoWidth = TRUE,
                         dom = 'Blfrtip',
                         buttons = c('excel')
          ),
          rownames= FALSE)

## Warning in instance$preRenderHook(instance): It seems your data is
too big for
## client-side DataTables. You may consider server-side processing:
## https://rstudio.github.io/DT/server.html
```

Below, we get the text numbers for all the 6348 verses similarly:

```
unQuran11 <- c()
for(i in 1:114){
  if(!(i %in% c(1,9))) {
    tmp <- data.frame(1,i,0,4,19,as.character(nQuran11$text[1]))
    colnames(tmp) <- colnames(nQuran11)
    unQuran11 <- rbind(unQuran11,tmp,
                       nQuran11[nQuran11$chapter==i,])}else{
                         unQuran11 <- rbind(unQuran11,

nQuran11[nQuran11$chapter==i,])
                       }
}
unQuran11$VerseI <- c(1:nrow(unQuran11))

tmpUN <- unQuran11
tmpUN$CV <- paste(unQuran11$chapter,unQuran11$verse, sep = ":")

datatable(tmpUN,
          caption = 'Table of all verses of Quran (text v.1.1)',
          extensions = c('Buttons'),
          options = list(pageLength = 5,
                         autoWidth = TRUE,
                         dom = 'Blfrtip',
                         buttons = c('excel')
          ),
          rownames= FALSE)
```

```
## Warning in instance$preRenderHook(instance): It seems your data is
too big for
## client-side DataTables. You may consider server-side processing:
## https://rstudio.github.io/DT/server.html
```

Similarly we get chapter level numbers of the text as follows:

```
cwords <- c()
cletters<-c()
for(i in 1:114){
  cwords <- c(cwords,sum(nQuran11[chapter==i]$vwords))
  cletters <- c(cletters,sum(nQuran11[chapter==i]$vletters))
}
dfVCwl11 <- cbind(dfVC11[,c(1:2)], cwords, cletters)
# Let's print this table
require(DT)
datatable(dfVCwl11,
          caption = 'Total numbers of each category in numbered verses
per chapter (text v.1.1)',
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel')
          ),rownames= FALSE)

###
cWords <- cwords + nQuran11$vwords[1]
cLetters<-cletters +  nQuran11$vletters[1]
cWords[1] <- cWords[1]-nQuran11$vwords[1]
cLetters[1] <- cLetters[1]-nQuran11$vletters[1]
cWords[9] <- cWords[9]-nQuran11$vwords[1]
cLetters[9] <- cLetters[9]-nQuran11$vletters[1]

#add the one Basmala per chapter verse into the verse counts
dfVCWL11 <-cbind(dfVC11[,c(1:2)],cWords, cLetters )
dfVCWL11$Verse_sum <- dfVCWL11$Verse_sum+1
dfVCWL11$Verse_sum[1] <- dfVCWL11$Verse_sum[1]-1
dfVCWL11$Verse_sum[9] <- dfVCWL11$Verse_sum[9]-1
# Let's print this table
datatable(dfVCWL11,
          caption = 'Total numbers of each category in all verses per
chapter (text v.1.1)',
```

```
          extensions = c('Buttons'),
          options = list(pageLength = 5, autoWidth = TRUE,
                         dom = 'Blfrtip',buttons = c('excel')
          ),rownames= FALSE)
```

8.2.1 Code: Chapter, verse and words at verse level

In this code, we will simply concatenate the chapter indexes, verse indexes and the number words at each verse considering all the 6236 numbered verses. We will observe that, both, the big number itself and also the digit sum of the big number are multiple of 19. The exact same coding pattern also exist in the text version 1.0.2 but at the chapter level data. But, here we observe the same coding pattern in the verse level numbers of the text 1.1 instead of the code have from chapter level numbers of the text 1.0.2. I provide the proof and the big coding number below.

```
x<- nQuran11
tmp <- paste0(x$chapter,x$verse,x$vwords)
head(tmp)

## [1] "114" "124" "132" "143" "154" "163"

tail(tmp)

## [1] "11414" "11422" "11432" "11444" "11455" "11463"

tmp <- paste0(tmp, collapse = '')

as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

digitsum(tmp) %% 19

## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 33249
```

As we have seen, not only the big coding number itself but also the digit sum of it is also multiple of 19. Lastly, below is the “33249” digits length big number of this interesting code.

“114124132143154163179211227238241225826112712281129102101221111212721
319214162157216112171721862191922025221122222322320224132253422639227 2

022813229192302823115232122332323413235192361923711238172391024014241 1
824282437244102458246824712248192491825010251122528253725427255152567 2
571825820259182602826160262242631526413265122669267202682326918270172 7
124272102731127437275192762327792781127924280232811328210283292841528 5
492861328728288102892629027291302921129327294172959296252971829812299 1
021001021012221027421031221041321052521061921071721081821093321101721 1
118211217211331211430211512211614211711211824211910212031212115212212 2
123182124192125222126302127142128172129162130182131921321721332721341 5
213515213631213719213810213914214030214115214221214345214434214532214 6
142147721481921491721503121511721526215311215413215512215610215792158 2
421592021601121611321629216392164432165312166122167232168172169112170 2
221711821721521732521742921751121761421775121783821799218016218114218 2
162183152184322185442186172187652188172189272190132191252192621931521 9
422219514219673219730219826219912220024220114220282203252204172205142 2
061222071122081622091222101722112022122022134922143022152222162522175 7
221816221926222026222139222227222316222414222514222613222772228402229 4
622303022314522323322336422342522354722362522373522388223915224027224 1
622427224328224492245162246542247432248302249602250152251272252922535 2
225422225550225624225724225843225967226039226124226224226311226439226 5
272266352267302268132269162270152271202272282273302274172275452276112 2
771922781422791722801422811522821292283322284282285272286493113273311 3
418351136133746381539133101631114312931329314243152431611317631818319 2
632026321183221132320324153251532625327213282732922330263311433211333 1
133473351833624337353381533920340173412034213343834420345213467347233 4
853494535019351835220353935463553135613357113587359153607361253621536 3
636432365163662036714368133691337093711137217373323748375363769377273 7
829379283801338133382738314384293851338618387938893891139014391243921 5
393243941139511396103972539813399203100153101173102133103343104143105 1
431061731071031081131091131102331111131123531131431141531159311618311 7
233118313119283120213121113122123123103124133125153126173127931281231 2
916313013313153132531331131341331352331361531371331386139931402431416
314213314312314427314524314621314719314810314913315063151193152403153 2
531547531552131563731571431587315930316018316121316213316383164253165 2
031669316733316816316913317019317111317215317317317415317511317622317 7
123178173179363180303181223182931832831841231852331862431872131882031 8
993190113191213192113193203194143195433196731977319821319930320011412 9
421643284414451646374719481349154101341171412884131841413415224161441 7
204182441935420174211142217423544244242558426144271342884292443013431 1
243227433194344043522436324371543818439154401544112442144434944414445 9
446384472944820449144501045120452114531045418455114562045720458254592 9

460304611546216463164642346519466274676468346918470747111472174731947421475314762047748478364791848012481244821348330484224852248615487174882248928490364913249260493164944049533496849727498124991041003141012341026241032041042241051541067410714410821410919411013411111411214411333411426411520411620411711411884119214120741217412221412320412416412517412612412740412829412922413011413132413210413312413414413538413629413720413864139144140334141364142194143164144184145114146184147114148144149144150224151841521741533741541941552241566415734415884159144160144161144162264163254164144165154166134167114168124169114170244171544172184173264174124175154176505124525353615431554356625719582759105107511245124551332514255152451618517425183051929520235211552218523215241752513526145272452816529135309531265324053334534135351453624537125381353914540195416854226543155444154531546265471654851549335501055123552285531555438555135561155724558125592156027561165621356313564475651256624567255683156920570195711957234573255748575255761657724578175791058019581155822658321584165851458675871858812589455901659120592135932459424595515962059727598959911510016510126510295103215104245105205106525107265108225109155110645111135112225113155114225115175116455117295118115119245120116114621463126411651266316716681369961013611106122561396142461596169617176187619376201362114622126231262410625326261162717628166299630196312763213633146342263528636106371963822639176401564112642116431464420645964623647146481564986502865117652256531565427655665621657226581465931660226611766212663176641066527666966756682366912670456713967286732467414675967615677186781867912680256812268211683146842168576868687968816689176901669144692226934969429695176961269716698136994461001561011861021661039610415610586106136107136108256109216110136111226112236113126114236115116116186117116118106119306120126121206122246123156124296125286126961271061283661298613028613110613296133186134761351961363161372061382661392261402061413161421661432361444061453961462861471361483761498615027615142615235615317615417615586156146157356158376159196160166161166162961638616429616521711721373147410751276677678979117101171116712177131371457154716771715718127191772025721572228723127241272577262072731728227291673016731167322673329734117351973611737377384073914740237411074215743367442874510746187471374814749157502075119752107533875432755875615757297581775921760976111762117631376414765167661476711768776927770177712577213773357742577523776877716778677915780137811178213783778487853878624787197882278942790127916792137931679413795187961879797989799107100197101237102971031671049710518710611710767108671099711077111771124711311711457115117116117117117118671194712037121471223712319712487125571261671272171281671292271301071312271321271331371342371351171361171372971382471 3

910714097141187142237143417144157145207146367147137148227149187150397
1
511171521571531471541571554171563071574371583271598716043716120716217
7
163277164197165187166117167197168147169407170107171197172267173157174
5
717513717630717797178107179307180147181771828718357184117185227186107
1
873771882871892971901271917719277193127194147195267196971971071981271
9
977200107201127202772032372048720516720611811882178368411851186128723
8
878911810188112281223813138146815128162081721818681924820128218822108
2
311824218251382619827128281082919830168311783219833128342183513836218
3
718838168391684010841338423584320844198451384613847178483684918850138
5
198521785318854178551085612857108581485988603386112862128632086498652
7
866268672086810869118702587113872458731387418875229199214933294229526
9
618972398169913910109111391218913209141191511916249171891823919249201
6
921109228923209243392523926189271292828929299302393123932159331493429
9
351993636937319382993916940439411594223943139441494514946159471794816
9
491595016951149522295312954229551795610957119581695919960229612696212
9
631696417965139661696719968169693297026971249722497312974469751297699
7
715978119792098025981279828983259841898516986189871198814989139901799
1
269922399319994309951899614997169981699927910025910122910217910316910
4
169105169106129107249108239109279110159111379112169113209114229115189
1
161791172791183191199912052912118912222912317912418912512912616912721
9
128149129151015102261032910428105231061410715108610915101014101118101
2
271013171014101015391016181017141018291019171020161021221022411023261
0
244310251110261610272710281810291010301610312710321110331010341710352
9
103617103722103816103919104012104115104211104311104410104520104615104
7
121048710492210501210511110521310531110542110551610565105715105810105
9
201060191061421062101063410641510651010662510671510682510699107013107
1
341072161073171074221075141076101077111078161079610801010811710827108
3
221084131085101086510871610882910891110902710917109214109324109422109
5
101096810978109821109915101001410101141010215101031010104271010591010
6
161010724101082310109111111011291132511481151911616117311182211911111
0
131111101112271113181114161115141116161117391118231119111120241121911
2
271123141124111125911261111272911282011292311301011313111321411331011
3
418113512113617113711113819113910114026114111114220114323114419114515
1
146241147191148191149191150181151141152181153161154161155711561811572
1
115814115912116017116128116222116323116418116511116618116781168121169
1
511701811719117213117314117411117551176151177131178271179131180111181
3
011821211838118427118515118611118721118836118923119091191191192161193
2
011941811951011966119710119891199911100911101241110212111031611104511
1
051011106911107151110818111092011110181111110111121211113171111414111
1
571111626111178111181011119151112017111219111223111231612151226123161
2

4161251612625127712815129141210161211112121281213131214912151712164121 7
1912181812191712209122132122291223231224191225231226191227101228131229
1012301812313212321912331712341012351112362712372612382612391012403212
4120124218124325124481245111246221247141248151249111250221251291252121
2531512541412558125617125771258912591712601012616126214126317126417126
5261266241267281268301269161270151271512721212731212746127511127633127
7241278161279131280371281181282111283181284131285121286131287211288221
2891012902312919129211129312129412129561296201297912989129914121004712
1012112102141210361210410121051112106712107141210817121092912110191211
1231311513226133241342713525136201371513815139513101413113513129131319
1314271315111316451317421318271319151320713211313221913231513247132523
1326161327191328111329813302813315113321313333913341413351913362513372
0133821133981340131341161342181343151411614214143161441914521146261471
1148131493714103314112914121714131614141014155141671417161418221419141
4205142134142244142317142415142512142613142718142812142941430121431211
4322514339143415143513143615143726143818143913144091441814421314439144
4261445141446121447111448101449614506145110145213151615271537154815571
5691578158915971510715118151251513715149151581516715175151871519111520
8152111152212152361524715257152681527715281215299153041531715329153311
1534515356153661537415384153910154041541515421115434154481545515463154
7101548815496155051551415529155371554815557155681557515586155961560615
6151562415637156441565141566915674156861569415705157161572515733157481
5755157631577515785157951580515815158261583315846158514158651587715881
5158951590415914159231593315946159531596815977159861599516191621816371
6481658166716714168916910161013161116161215161313161421161511161641617
7161810161961620101621716221116231316249162515162621162721162819162981
6302016311516321216332216341016353216362816371416381816391116401016411
8164251643151644121645161646716478164817164914165071651121652111653121
6541016556165612165771658916591916601216612316621716631716641416651616
6617166715166813166924167020167122167221167315167410167527167629167719
1678151679181680251681251682616837168414168511168619168710168813168924
1690161691201692321693171694191695151696151697181698816991016100916101
1716102131610316161041216105111610624161071316108111610971611018161111
5161122416113916114131611522161162216117516118151611919161201116121716
1229161231216124171612522161261216127141612881712117212173917413175171
7611177231781117916171091711817122317131317147171521171614171713171818
1719121720121721111722917232517241217251217261017279172812172913173012
1731131732817332217341717351117361617371317387173918174011174110174213
1743617442117451217461917471917489174991750517512517529175316175414175
5151756131757181758181759211760251761131762151763101764191765917661417

671817681517692217701717711517721117731317749177512177613177711177814177912178014178191782131783121784111785141786131787917881917891417901017911117921217932617941517951417961117972717981417992317100141710119171021617103917104141710591710691710718171088171095171102217111211811118215183318461851618611187111886189101810161811718129181311181419181518181619181734181822181938182013182132182233182371824171825818262318271518283018292818301218312818321418331118341318351218361218371618388183919184015184181842201843111844918452318461318471118481618492818502618511318521318531018541418551918561818573018581918598186013186111186212186320186491865121866111867618688186910187012187115187281873101874161875918761318771724187812187917188010188191882351883918841018852188625188713188813188931890151891618923189313189420189512189619189781898151899111810051810111181021418103518104111810514181069181071018108618109181811024191119251935194141951319681971319814199141910131911111912819136191461915919161019171119188191991920111921151922519231419241019258192618192711192812192910193081931111932619339193491935161936819371119381119391219408194181942161943141944101945121946131947101948141949141950919511019527195371954111955919568195731958291959111960121961111962111963919641819651219668196710196881969101970819719197281973161974919752519761319778197871979919805198181982619839198471985619865198791988419894199091991419926199310199441995519969199710199814201120252034204620542061220772088209420101820115201292013520141120151020161020175201813201942020520217202211202342024520255202632027420282202952030220313203232033203422035420366203752038620392220403520412204282043520448204510204672047212048102049520509205152052112053192054920558205662057820581420598206062061152062520631320641020651220661220675206862069162070820712620721920731420741320751020761220771820788207952080152081172082920836208492085920862720871520881220891220901720919209282093420942020955209616209728209812209913201008201017201028201036201041220105720106320107620108132010912201101020111920112112011314201141720115112011692011713201187201196201201420121152012262012318201241220125820126820127122012817201299201302020131182013212201331320134192013511211721211213152141021514216821714218921982110821111021127211310211462115821167211711211813211913212052121721221321236212422212515212682127621281521291321301821311321328213311213410213510213617213782138721391621401021411321421321431421441821451121461221472021488214982150721519215211215352154821557215613215772158821598216072161821627216392164721659216611216792168721698217052171821721821731521741621756217612217712217814217914218010218114218212218310218416218572186621872321888218911219019219111219282193621941221957219610219720219811219992110072110192110292110311211041621105122110662110752110811211091

3211108211118211121022110222222231222411225702261322712228132291522109
2211252212142213102214172215222216922172222183722191722206222142222122
2232222249222525222616222714222820222982230242231212232922331122342022
3515223627223720223813223910224035224117224292243422441122451422462322
4714224811224992250822518225227225316225421225516225612225782258182259
7226016226115226217226315226412226527226610226717226872269922701822711
8227229227329227492275112276102277122278442313232523352344235423610237
7238523952310323116231272313623142123155231652317102318132319132320923
2115232242323172324262325102326523273223281523298233072331623321423332
5233472335923364233710233812233952340523418234262343723441923458234672
3477234842349623501123511223528235392354523557235672357723585235952360
1023617236212236314236482365723669236742368102369723701023711623729237
3523748237511237682377122378102379723801023816238282383122384823855238
6823875238814238952390523912423926239362394623957239692397723985239982
3100162310110231026231031023104623105823106823107723108523109142311082
3111823112723113823114923115823116112311718231187241924226243182441924
5112461724792481124992410924112824121224131424141524151624161424179241
8724192024209242135242226242313242492425112426162427192428222429172430
1524317824321724334824341324354824361424371924381424392224403324412124
4272443382444102445312446112447152448112449724501624511824521024531724
5423245538245682457112458502459192460232461762462392463272464222519252
1925322254162559256122571625817259925101725118251292513925148251513251
6102517162518212519152520202521192522102523925247252572526925271225287
2529112530102531112532152533825341125359253692537132538825397254016254
1112542172543925441525451625465254711254813254910255092551725527255315
2554122555142556525571425581325591725601325611125621325631225645256511
2566425671125682225698257016257192572925731025741325759257652577122611
2624263626411265112668267112688269526108261142612626138261462615726167
2617526181026197262062621112622826235262492625526265262772628926298263
0526317263262633626347263582636726374263852639526407264112264262643726
4492645826463264742648326492126507265111265282653526544265532656326574
2658326594266022661826626266313266432665526663266782668526694267062671
6267252673426746267552676326776267842679426804268142682826836268462685
5268662687426886268962690326913269262693726944269532696426976269842699
4261004261013261027261038261045261054261067261074261083261091126110326
1115261126261137261144261155261169261175261189261196261204261218261225
2612332612472612542612632612711261285261294261304261313261325261333261
3422613562613692613752613832613910261405261413261427261434261443261451
1261465261473261484261495261503261514261526261535261541126155926156726
1573261581026159526160426161726162426163326164112616542616611261679261

6852616952617032617142617232617362617482617552617642617762617842617932
6180112618162618232618392618452618552618692618792618852618910261908261
9152619242619342619452619532619642619792619852619962620052620172620252
6203426204226205426206526207626208726209426210426211526212426213926214
3262156262167262174262184262193262204262216262225262234262243262257262
2652622719271627232739274102751027672771627814279727102027111127121927
1382714112715152716192717927182027192427201227219272214272311272417272
5142726827277272811272992730827315273213273312273413273582736162737132
7381127391627403827411227421427431227442827451327461327471327481027491
4275072751927521127535275482755112756152757727586275912276027276121276
2162763202764192765142766142767927681227699277092771727729277310277482
7751027761227774277882779727801127811427821627831127841327858278615278
7182788182789112790132791172792152793112811282428392841928512286122872
2288132891828101728111028121628131728141028153828161328179281816281933
2820192821102822112823272824152825262826112827292828152829272830202831
2028322528339283414283515283617283718283829283912284010284192842102843
1628441328451828462028471828482628491328502328516285282853152854122855
1528561328572528581728592028601528611728628286318286413286562866728671
1286814286972870152871192872212873132874828751728762928772628782828792
1288016288117288226288314288418288519288615288716288819291129210293112
9410295122961029712298212997291031291162912182913112914162915629161329
1727291813291913292019292182922172923132924202925272926122927182928142
9292329306293115293216293323293412293572936172937729381629391329402829
4119294212294382944102945212946252947192948132949142950162951152952192
9531229546295513295692957729581729595296012296113296214296322296415296
5162966629671529681729699301130223038304123058306113071030822309323010
1330118301253013930145301593016113017630188301914302011302120302213302
3143024213025163026830271830282730291630302230319303211303318303463035
1030361530371530381630392230402230411530421430431630449304511304617304
7183048283049103050193051930521130531430542430551230562030579305819305
9830601031113124313331493158316183171631883198311027311114311218311315
3114173115293116253117183118163119113120303121213122153123153124731251
5312610312721312811312925313016313119313222313331313427321132283231832
4243251732663271032883291432101432111132121632131632141432151532161132
1713321883219123220213221932221332231432241032251132261832271732287322
9113230533114332123336334283352833629337173388339223310163311633121333
1326331414331513331615331724331814331935332023332117332218332318332416
3325163326163327133328163329143330173331143332203333253334143335303336
2433374833382233391333401733418334233343133344833458334663347833481233
4923335062335135335225335370335411335530335614335714335812335922336019

3361633621233631533647336583366123367833688336917337093371143372183373
1534117342183433234410345113461634716348163492934101334111234122734131
9341427341520341616341783418173419193420103421213422263423223424173425
9342611342712342812342973430103431323432153433343434143435834361334372
3343893439203440103441133442183443343444113445143446243447173448734498
3450163451103452934531034541535124352193532235411355153561335713358253
5917351024351134351228351328351418351511351663517535183435194352043521
4352216352343524123525133526735272235281735291635308353116353221353313
3534113535143536183537253538103539243540333541193542193543263544303545
2536113622363336433653366736783681036912361083611123612143613836141136
1515361663617536181236199362011362173622836231536245362543626836277362
8133629836301236311136326363310363410363583636133637936388363973640153
6418364263643936446364511364611364724364873649836507365110365213365310
3654113655736567365763658536594366014366153662836635366453665113666936
6710366873669123670836711236726367363674736757367693677113678113679103
6801136811436821036838371237223732374337573766377537893794371073711123
7123371343714437156371673717237184371973720637217372273723737243372543
7264372753728637295373010373163732437335373443735103736637375373843739
6374043741437423374333744337455374633747737484374933750537517375243753
7375443755537565375763758337596376053761437626376343764637654376663767
7376853769437704377153772437735377443775537765377743778437795378043781
4378233783437845378563786537874378843789337903379163792437934379433795
4379643797737985379963710053710133710228371034371044371057371065371073
3710843710933711033711143711253711310371145371155371164371173371183371
1943712043712143712243712343712453712553712653712733712843712943713043
7131437132437133437134437135437136337137437138337139437140537141437142
4371435371446371454371465371476371484371495371506371515371524371534371
5443715523715643715753715810371594371604371613371624371635371646371653
3716633716733716863716943717043717153717233717343717443717533717623717
7637178437179337180637181337182438143826383103841038583861238710388153
8973810103811638128381373814738151038168381711381873819538206382173822
2338231538243238259382631382716382813382993830738316383211383363834938
3515383683837438384383973840638411138426384310384414384583846538475384
8838496385053851738524385353854738555385643857438584385910386011386111
3862103863638646386511386673867438683386993870838719387293873438746387
5153876103877538786387963880438814388243883438844388573886103887538884
3916392103933339416395233963639731398343992439102239119391253913939146
3915193916173917123918133919103920203921313922203923343924133925103926
1239271139287392919393043931739321539338393483935123936153937123938363
9391039408394118394226394314394411394518394617394725394811394922395011

395115395215395321395413395516395615395793958123959103960143961113962 9
396311396473965143966639671739682239691539709397134397293973203974163 9
751740114026403144041340521406104072740816409124010154011134012154013 1
440148401516401615401713401815401964020154021304022134023640247402519 4
026184027134028394029274030114031144032740331640343040352340361040372 3
403894039124040234041104042154043224044124045104046134047194048124049 1
340501640511140521040538405444055124056234057124058134059114060134061 2
040621240637406421406514406620406730406812406910407094071640726407374 0
741740751140768407714407832407994080124081640822540831540841240851741 1
141244137414747415174161641784189419144110154111164112194113941142341 152
541161941171441185411984120124121184122204123941241141252541261141271 0
412814412916413019413116413244133134134174135114136114137194138124139 2
241402641419414213414317414430414518414611414728414812414911415032415 1
134152174153194154124211422142310424104251942612427224281942916421015 4
211194212134213384214304215344216184217114218224219942202242212242222 4
422329422422422512422612422717422813422916423010423114423264233154234 7
423594236174237104238114239642401442419424215424384244204245274246164 2
472142482742491542501142512242522742531543114322433643474358436643784 3
874391043101143111243121143132043144431594316743171243189431912432015 4
321843221143232143241443257432694327543287432994330943311043322543331 7
433454335124336114337743381243399434011434164342743438434464345134346 1
243477434813434912435074351184352114353114354743556435644357943581443 5
910436084361104362743631743649436511436610436774368943695437054371154 3
727437364374643756437664377943787437954380114381843828438384384114385 1
343861343878438884389644114422443844454456446744784481044954410644115 4
412644137441464415644166441784418944199442064421544226442354424644255 4
426344274442844429844307443174432644337443434435844365443712443874439 8
444054441104442844433444424445444462444754448744495445064451544523445 3
544544445554456104457744585445934511452645364549455204561245744581445 9
114510194511114512144513164514144451511145161345172445181345191545207 452
117452213452324452421452516452618452710452814452911453013453112453222 4
533114534144535164536845378461146264631546429465184669467144682546924 4
610244611194612164613134614946154546161846172846181746199462027462125 4
622124623134624184625144626324627104628174629184630204631154632184633 2
246341846352747184721847318474384753476447710478647984710164711114712 2
247131447141347154447162447176471815471914472027472112472210472374724 7
472516472615472774728104729114730124731847322147331147341547351247361 3
473764738304815482154834484194851948621487848854898481025481137481220 4
813948141448153148162848172748181948197482018482114482212482312482419 4
825404826284827284828144829544911649223493174949495124961849728498749 9

3049101049114049123249132149142749151849161649171949181050135021150375
0495059506125071150855091050105501185012750134501495015105016145017850
1885019950206502165022125023650246502545026105027105028850298503095031
5503265033750345503565036155037135038135039125040550417504275043650449
5045135112512251325142515351635173518451945110251115511245113551147511
5551169511765118351195512045121451225512395124651259512665127551289512
9951308513155132651335513445135651367513775138851396514075141751429514
3851448514575146851475514845149751508515111515213515365154551555515665
1579515875159951607521152225233524252525262527452845294521035211352125
5213652146521565216125217552188521965220752211952225522385224752255522
6752276522895229852307523165232852336523465235852367523775238952395524
0752415524275243952449524575246952471052481052495531353255334534553535
3635373538353955310553115531245313453143531535316553175531865319353203
5321453224532325532445325353261853279532816532911533016533116533231533
3353343533555336753373533855339653404534145342453434534445345553464534
7453484534945350453513535295353253543535545356553572535865359453603536
1253623541454275436544754555468547854885499541055411554129541355414654
1565416454177541865419954206542145422754233542410542595426554277542885
4294543045431854327543345434954357543655437954385543935440754415544275
4439544455445454466544755448954495545065451654525545345454554556551155
2255325542555355635574558455965510355115551245513455145551565516455174
5518455193552045521455224552345524655254552645527655284552910553045531
4553245533175534455358553645537655384553985540455416554245543655445554
5455465554745548255494555035551455525555345554955555455569555745558355 5
9455605556145562355634556415565455663556745568455694557035571455724557
3455746557545576655774557865613562356325644565356635673568556955610256
1125612356133561435615356163561745618556195562035621456222562335624456
2565626456275562835629256302563125632256334563425635356362563725638256
3935640356415564235643356444564555646556479564825649456505565155652556
5335654456553565645657456583565955660756619566265663356645566565666256
6735668456697567065671456726567355674456754567655677356783567945680456
8145682456834568435685756865568745688556894569065691556926569335694256
9555696457195721157395743657585761257715578155791757103757111257122257
1327571420571515571628571713571812571920572039572125572221572315572412
5725285726145727395728225729225811858223583215842658518586155874758838
5892058101758113158122358132458141958151058161058171558181758191558208
5821958225159111592415931459412595135962559737598185993159102359112859
1216591312591423591511591617591710591818591910592010592118592213592319
5924176014960213603136045260513606196071560821609216010566011216012396
0132061111612961396141161524616326171661811619146110126111156112176113

961143662112622216238624106252362618627962818629226210156211216311763 2
126331163422635146361863720638176391863102163111164117642116439644146 4
513646166471864810649276410116411166412116413964141964158641616641712 6
418565142652306532165428655146563265725658146597651017651134651225661 1
566211663296642166517666236671266846669126610276611246612176719672116 7
318674106751267676778678136791867101167115671296713967147671514671611 6
717126718867191567201567211267221267231267248672576726967271367281567 2
913673010681468256835684468526862687116883689468105681136812468134681 4
568157681636817106818268197682026821268227682336824668254682656827368 2
876829668305683166832106833868346683536836468375683856839126840468418 6
842968431168441068455684676847568481168491068505685112685256911692269 3
469446954696669715698569966910669117691266913669146691536916569179691 8
669199692056921469223692326924869251169264692746928469293693026931369 3
276933669345693556936569374693846939369404694176942669434694456945369 4
646947669483694956950469513695247014702470347041170537063707270847093 7
010470119701227013370146701537016270174701827019470204702147022270235 7
024570252702647027670285702947030107031770325703347034570354703657037 5
703887039570407704187042870439704497111471277135714187157716571714718 4
719771106711147112971136711437115871167711757118571195712047121137122 3
712313712487125127126107127107128157211372297239724772510726117279728 8
729137210137211972121172131472141072155721687217107218872191072208722 1
872221272231672241172251172267722713722813731373247335734673557368737 6
738673997310773116731247313573148731511731667317873186731997320787413 7
422743274427452746374727484749474104741147412474132741437415474165741 7
274183741937420474212742237423374246742557426274274742847429274303743 1
577432274333743437435374362743777438574393744037441274424744357444474 4
547446474473744847449574503745137452974535745437455374561175147524753 5
754675557564757375827593751057511375124751367514575153751667517475184 7
519475204752127522375233752437525575264752737528375293753047531475323 7
533575343753547536575376753857539575407761117621076377646765876677677 7
687769107610776118761257613107614676158761657617676184761997620776211 3
762287623676249762557626776278762897629976301176311077127722773277427 7
527763777377837793771037711377123771327714577153771637717377183771937 7
205772147722377233772437725477262772777728377296773067731677324773337 7
343773547736477373773857739577403774157742377436774447745377465774737 7
486774937750478127823783478427853786478727882789378103781137812478133 7
814578154781627817578186781947820478214782227823378246782537826278275 7
828378294783057831378322783327834278356783657837107838147839978401679 1
279227932794279527963797279837992791057911479125791347914379154791667 9
175791867919479203792127922379232792447925579266792767928379294793047 9

3147932279333793447935579364793737938379394794097941479425794347944379
4557946980128023803480448053806380748084809280103801138012380133801428
0152801628017480184801948020380213802248023580244802548026480273802828
0292803028031280323803338034580352803628037680383803928040480412804248
1138123813381438153816381738183819381103811138112381133811448115381162
8117381183811948120681213812238123481245812558126281275812858129882138
2238233824382558267827482868294821038211282123821348214482153821648217
5821868219983128326833583458352836583768384839283103831148312783137831
4883156831648317783186831948320283212832248323383245832548326683273832
8483298833048331683326833348334683353833668413842384338444845384698475
8484849484106841138412284135841458415684163841738418384194842048421684
2248423484243842598513852285328543855385648576858985910851014851114851
2485134851438515385163851748518285195852048521485223861286248632864686
5486648675868486938610686113861238613386143861538616286174871487238733
8743875387638779878287948710387112871248713687144871548716487173871858
7193881488238832884388548866887688838892881038811488123881338814288152
8816288176881848819488204882148822388234882448825388264891189228932894
3895689668973898689958910389114891238913589143891511891610891758918589
1948920489216892258923989245892558926489274892858929389302901490249033
9045905690649075908490929010290113901249013290146901539016490179901839
0196902039112912391339143915391639173918391949110491113911239113791147
9115392139223923492439254926292729284929292102921169212392134921439215
4921639217292184921969220592212931193239335934593549364937393839394931
0493114941494239433944394549464947394839512952295339546955495699574958
4961596249633964396559664967396849693961039611596123961349614596156961
6396172961829619597159725973697499755981129826983398411985169861698799
8821991499239934994399549966997699861001210022100321004310053100641007
4100841009710010410011510111101221013410145101541016410174101841019210
1104101112102121022310233102441025510262102741028510311103241033910414
1042410434104441045410463104741048310493105171052510534105441055310612
1062410634106471071410724107351074210755107631077210813108231083410914
1092410935109451095510964110151102711037111151112611134111431115511214
1122211234112451131411324113351134511355114141142211432114441145511463
”

8.2.2 Code: Chapter, Verse, Words, Letters at chapter level rewrite

In this code, we have rewriting coding pattern with the. chapter level numbers. We simply concatenate, from right to left as in Arabic , the chapter indexes, number of verses, words and letters per chapter considering all the 6348 verses. I provide the proof and the big number below.

```r
x<- dfVCWL11
tmp <- paste0(x$Chapter_index, x$Verse_sum,
              x$cWords, x$cLetters)
head(tmp)

## [1] "1729143"       "2287614526268" "3201350515004" "4177376716351"
## [5] "5121284112225" "6166306012745"

tail(tmp)

## [1] "109731118" "11042399"  "111627100" "11251966"  "11362792"
"11472499"

tmpr <- paste0(rev(tmp), collapse = '')
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 1210
```

Lastly, below is the “1210” digits length big number of this interesting code.

“1147249911362792112519661116271001104239910973111810841462107829133106521961056271161041037153103418921029321421011240179100124418899940177989984239763413496207630795938181949311219312441849222753339116582729021863618931143603882796401872076315861865273852311348884261124648337173769822085352813010845480431375717947183804784117881577511858607632247110675411686957457260105473212048737229290112871292319847045221990695326411526853305130867313371366661325811246513293122264192461110631218582062121817876115230985601435615795925451198958234792065573057925645697383177555793561666545634614885363364145252503161343516136415655046377152649193571552483056425294739546244246366492686453849221044460350149343908403628425486435414155798338440861230512739761181488838897393084371838693918368473430873546782325734558883613337413075807323137615823135554219030618213491297098243362889144259492794116348092622813245649257890038972465132357732311910564502227912835333211131178511320136135754181999975395418111158765711711215626662161291848785115100661290114538343558134485835641211217997326111241950783610110184376089129250511115876124754067207334514454616630601274551212841122254177376716351320135051500422876145262681729143”

8.2.2.1 Furher fact

In the previous code we observed the rewriting coding pattern but the same code also works from the other way around, namely without reversing the number. In this code, we simply concatenate the chapter indexes, number of verses, words and letters per chapter considering all the 6236 numbered verses. However, this coding pattern is against my current rules as I use reverse order as in Arabic in the concatenation if there is letters information as I consider it as a rewriting coding pattern. I provide the proof and the big number below.

```
x<- dfVCwl11
tmp <- paste0(x$Chapter_index, x$Verse_sum,
              x$cwords, x$cletters)
head(tmp)

## [1] "1729143"       "2286614126249" "3200350114985" "4176376316332"
## [5] "5120283712206" "6165305612726"

tail(tmp)

## [1] "10962799" "11031980" "11152381" "11241547" "11352373"
"11462080"

tmp <- paste0(tmp, collapse = '')

as.bigz(tmp) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmp))

## number of digits on this big number is 1205
```

Lastly, below is the “1205” digits length big number of this interesting code.

“1729143228661412624932003501149854176376316332512028371220661653056127267206334114435875124353879129250511115101091839758911123194678171211117957307134385435451452830353915996572882161281844783217111155866431811015836552199897139352013513535399211121174509422781279531423118105244832464131957542577896387826227132056302793115947902888143859302969978431730608173472313455021713230372156333731303578834548843594354577832383683730306837182865389938887353065397511774869408512265108415479433654253860352243898363609445934614744537488208546356452667473854224234829

5602510491835315335045373150751603601546524931213245362360143354553421
4695578352164756963791756572957525455822475204659244471970601335215606
1142269666211177768631118180164182421091651228912036612254110567303331
3476852301128969522601133704421797171282279657228286110973202008547456
2561035754016467676312431087775018184178401747967946179785804213355281
2910443582198133383361697508425108445852210946986176125487197229688269
2382893013958490208234291155425392217131493114016594827102958341629619
7228897530115988944049983615810011401691011136160102828123103314731049
3313410552397106417771077251141083104310962799110319801115238111241547
1135237311462080”

8.2.3 Code: Words only at verse level rewrite

In this coding we will concatenate the number of words from right to left as in Arabic. We simply concatenate, from right to left, the number of words in each verse considering all the 6348 verses. I provide the code to reproduce as below.

```
x<- unQuran11
tmp <- x$vwords
head(tmp)

## [1] 4 4 2 3 4 3

tail(tmp)

## [1] 4 2 2 4 5 3

tmpr <- rev(tmp)
tmpr <- paste0(tmpr, collapse = '')
as.bigz(tmpr) %% 19

## Big Integer ('bigz') :
## [1] 0

cat("number of digits on this big number is", nchar(tmpr))

## number of digits on this big number is 9692
```

Here is the 9692 digits length big number, in which, when we rewrite the text v.1.1 by replacing the number of words with each verse of the 6348 verses, the resulting big number is multiple of 19.

“3542244555444542445346547754455544443342352544474424344574334344444494145425433242424444542145474443322246664343442191616113612459655452236

5435334345334544494632243344333444443344553142564234343622422434334377
3344333333324363943624322454653444235445595644551011353435636632214434
4344446222334323664323443534446423429333334442333336345446242434452433
3441414109643322349344644333655236445934333463646648436453422467468774
3246525562496543443234647533334855255433643323433333333333334424236225
3322223444543344422233332443344324953454943345432444366542323465643454
5232322222416914105622235435236324446524534333224324324436353463535534
4334666372433345333335233333332222241011998759681379465861058710777867
1011475565435344333453332444463564353234565444113359335434445423357233
3257324425633243325432444442322223478968611854679668565434131371111161
2881081085101411913138911107991341510101281331345557836946741457185714
4998875855454571045642552444242363294342331144444345364354674344555673
2344411823459695366676651564442145125101157510119841255436810656735463
7227210375443543112245544101315139781212121515812111479951118138712101
8119417242712461223172129111542534177142532142821304245121681991116112
7101816131491117411211817201814221112174211522189182310821124369171512
1411163224119911420392156212115191352131349417191318101018101711231216
2823311837251312144111451981517151010192423311720384715182621231842222
3914281215212539201213281520272212371715151283691194452365645457344444
3354456467432653697534434355542955433533222324222235464324355433333225
5333423346464644434443414345434949454342454564648464841744410464464444
3444654453644332221465456659564597573595794784487591037469674665955988
8576744323462543293444445444446537533311616111691834254433655334455533
3354534510109799757597786686789675785197685126665334442223214797965561
3118745878897768776456589956969544536957545244333222241396775121313156
5765988101046612669881410947851051112997113410191618272132401030728181
2917231645414282840191212141871927283114920372585821191941554306131215
1121812111071516771012271415624441314221116861043381818842718221815201
8171032141813122527917281845913161924242514918291561488161411221213111
4101816212413177151324131114161411191114412209661435710545356575242381
0587125837677844356565699866676565108765821468813131188811579666671555
9710119177108101494671111187121371213687611912711125172510997597142111
8151291279420111211107868762141527221115272116272081591461110179715614
1016131712122229242222922111834303813191516192212191010114121917133211
1228111830171392622121911111713416191614101125119201812851419252391916
1514981617774141712152561293214811177669101230201421712201311131223124
8101116131219131012221510231292310233016714112739131819761330156151315
1681415131512162710211314614171620934915221761471191114101291516132115
1511221125171811142618810361215128815741971112101334203120101312171969
5922243431362316331064451074444466510156499893471166101111104445754756

855814106116744815961167913163193215237657118107786107151012810106444 3
634623443544633365434410542444565465465445434344444444355544444334551 0
543343574428356574434463344565434454455454544576464645636554747534735 3
334464561045461056544377767427644312749567322248101411101111977661281 2
710911558514456771110131078724111169681578913810106111281378451587119 1
256151181412812108733321425302619193324102518141113211681617227131241 6
444345611182828342417251313151122192441510910168717241411341813102092 3
138143415321071212119172226211019178162027192712132916161611103218174 1
518149178812871512619221214143011702535622312868813381713224824301425 2
014171416131616161818172335142415131426136162281729282861214451171718 1
110141392112813111514161611141481061724188142731221916251121101571515 2
130111618252917151814278816188934141081992012241411919102818171191614 1
522221615151061811922162718816211413201114861195958133221011812821491
715616152214131251779136121915161413192521108121928131671771223161562 3
141812272013178191313271361611186317211210121011101419161519181426171 6
212826291781321191571411761318817152017251315121586231326182018131610 9
101229181715149252020271529112615271110193316913381017161017181322121 2
199414111517131118181581311161411784121081097991291414192016212712671 5
118511971410131313281214123816111316813121358911781417111491224209191 5
118191120714167101093641957345643447639454476542457565943544581059955 9
361134645863435591141134745103791156435435113473510359623534451134735 8
469595476531134745873444643476336646566844446356456645835313682434334 5
811721343897612755478766758975595811671057768648581181111641412591310 9
916822114115121311131713145141215779101311516159171116781399118151110 1
171297791019201521161013899817917161291622199422273976231950118382317 1
018167111511311038721332214191448134817781517221916119132635920791416 1
514122899119171119182694718118987881457886106101685797666245514585812 8
610710128118591610710497814127105577759812116477819768551210497251467 8
153251026174159131310552167635571044553444121011929291818971710271215 1
715167188121621162788911142314114917351013202715201192124820141625922 1
246173722922171014259151312137011122210410881311561216119979112010712 6
811191182367161012141014141212616158858791197978788713785119788201211 1
814131310167817101011813181315681522613751313117861071088914814101511 7
411191312182091712881218615146713911171411910121363712687813122816520 4
891712121527996917155818121013141926816651212101351568148689191159510 2
171085823522656423332524355411754135101011595184871246451414109541064 9
449567968597813259168981081081218911111211293891177109141410131210141 6
881211118169961181012111881014515119811109668111314141381314551424186 1
091411514115111581912201336153131325210935910171224139161081512108611 1
292012111381930181914101313262816111323911208151981612121311142812283 0

1523817733321338223419181911971610611111663151142122581899149161914231
4271114152612111014199131411121391412141113129131115172215181491910151
3252118181315141692559919191221613101118713161117228131213129101212259
1112121813142171323891611231117139122148141222171297111915522221392415
1871113241112161317910818151519173220162413101911147625251815192927101
5212220241315171614171723121997126101211127141787161215518101118142832
1022121520819212115913117106107411211315161310914788718945678363344515
7514636555553583565464914474566658787945681035841154104466511974912787
7612118117578975877989787764131066101112142691389131826151315925211241
2181312151744345142216751016172933371311262119161416415181613821202519
1439135128811191623715191371527424511271993514515152025272426154231929
1714711106142147149920612121192310222113121318111837131624331161212515
1630282426171714610179717814151229221115142211825182032102626271110171
9321810131019231923932917181941791381216141572516161665416391715108267
1417121018201815910516122499910610182016199233621111527812301113271315
5111413918151281811182322281712142118716161814181919192415192320112610
1911171218101431102320291191114792411233916141618271013112231161982591
0411232416927101514141521881022241472711291651013227171061611101422171
6341392515251015410421920101551621111311122271215201011111512191622172
9171011271610182716114326412216172914183910172718141561514232829265415
1421161218172218529312717182220163715272324121616161722252716161418301
9232617131411181618258272520111591246122424263216191613171612262219161
1101722122214161516171514141323154316293136192914152323292812182333208
1016242318241111201813101316231826223214922181345132511102026279201212
3381410121017181791318361713131920353310161618211321121917161910121913
2111108122462120126132322181172312111161718411168237121071210926141277
1229283710221158714301093013515261910401419111819271720438324330411514
1511391822133620154123189102429111123131222102216211658193434611111151
1477966111891692319109918181316136124222192438871311131561682325351325
1727711141614131111921172915832381019201514131810283615102314403711191
1292616161622312071212285251712157451317161111966121014131421298916161
9373514817173542278371328394023163120222620311971891028836109282915242
0123010111811231223221321251313815916181544131612172949224416171698721
1411222512181815914248394512235927101712172231142221627152517288151423
9201411121517221910282214132719916171132101212141337717992492510139131
6311211121414411241129451722152213641522265220242192616119272051242413
2016451218714162126151910172416258253419192031252412471313162721122411
1338152823103351162631411526681914131224141334402691316241413172118152
3293042182425324524710271962433161532445015122618542411121113151425261
4141483462219371782214141118111816193633146202938141210321122294012171

6202177218112020263314111319211471522206223311012278334016603236282217
1522223013241218364820312119171171836271923161615302925202011181011201
0142029389144914121515181532224019271213248131458425417111735242014221
3188871131513193716142816294113021774314201121119202124231228922303617
1222111517151119131633920258132118307143721752540196131019212427121362
4961315231311551316129171513101211212831231891514351123111110171414341
3171520132510111124152414119918132914733132829279368321711913131420163
2615257157111331692081945523721208132017201535241871111142622272125151
5201118262618611242429914161315461311181171449272832129151417141911451
7302820151613303527391124243967432424502252927156030435416928762715835
2547256433453046407131414162739262616572522304920201712161112141725814
2412263073142215625132717651744321516141693851141129251518221117231231
4399131120249101213116173117197143234452115301410193115152717918161714
3022191812153110241114123031171817331817192513127422101012182591727113
0272610281349152910132324119231937111024171823209121315246028182018715
2778121018191288107818141017111919132312152819132039341320231225196171
1716197111210111211812871493432 44”

ISBN

ISBN information:

https://www.isbnagency.com/titles/9781513654577

ISBN: 978-1-5136-5457-7

9 781513 654577

Adams, Ali. 2020. “114 Mathematical Structure of the Quran.” 2020. qurancode.com/114.pdf.

Akdemir, İmran. 2018. *İKİZKOD*. İtalik Kitapları. http://www.ikizkod.com/ikizkod.pdf.

Altay, Gökmen. 2008. “Performance of Systematic Distance-4 Binary Linear Block Codes with Continuous Phase Frequency Shift Keying over MIMO Systems.” *Wireless Personal Communications* 44: 403–13. https://doi.org/https://doi.org/10.1007/s11277-007-9364-2.

Altay, Gökmen, and et.al. 2006a. “Geometric Augmented Product Codes.” *IEE Proceedings-Communications* 153 (5): 591–96. https://doi.org/https://doi.org/10.1049/ip-com:20050595.

———. 2006b. “Heuristic Construction of High-Rate Linear Block Codes.” *AEU - International Journal of Electronics and Communications* 60 (9): 663–66. https://doi.org/https://doi.org/10.1016/j.aeue.2005.12.004.

Dowle, Matt, and Arun Srinivasan. 2019. *Data.table: Extension of ‘Data.frame‘*. https://CRAN.R-project.org/package=data.table.

Eddakrouri, Ayman. 2016. “Ba’da and Qabla in Online News: A Corpus-Based Study.” Master’s thesis, The American University in Cairo, The Department of Applied Linguistics.

“Good Calculators.” 2019. 2019. https://goodcalculators.com/big-number-calculator/.

Lucas, Antoine, Immanuel Scholz, Rainer Boehme, Sylvain Jasson, and Martin Maechler. 2019. *Gmp: Multiple Precision Arithmetic*. https://CRAN.R-project.org/package=gmp.

Mullen, Lincoln A., Kenneth Benoit, Os Keyes, Dmitry Selivanov, and Jeffrey Arnold. 2018. “Fast, Consistent Tokenization of Natural Language Text.” *Journal of Open Source Software* 3: 655. https://doi.org/10.21105/joss.00655.

Ryding, Karin C. 2005. *A Reference Grammar of Modern Standard Arabic*. Cambridge University Press.

Saleem, Shehzad. 2018. *History of the Quran- a Concise Study*. Al-Mawrid.

Saleem, Shehzad, and Gokmen Altay. 2020. “Preservation of Quran.” 2020. https://youtu.be/1Y64epJ9_h0?si=zo4L0V4YRwXSJFne.

Sharaf, Abdulbaqi. 2019a. “First Steps in Text Mining the Quran.” 2019. http://textminingthequran.com/tutorial/tm.html.

———. 2019b. “R Ing with the Quran.” 2019. http://textminingthequran.com/tutorial/quran.html.

Wickham, Hadley. 2019. *Stringr: Simple, Consistent Wrappers for Common String Operations*. https://CRAN.R-project.org/package=stringr.

Xie, Yihui. 2016. *Bookdown: Authoring Books and Technical Documents with r Markdown*. Chapman; Hall/CRC.

Xie, Yihui, Joe Cheng, and Xianying Tan. 2019. *DT: A Wrapper of the JavaScript Library ’DataTables’*. https://CRAN.R-project.org/package=DT.