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| 1 | Petya started to attend programming lessons. On the first lesson his task was to write a simple program. The program was supposed to do the following: in the given string, consisting if uppercase and lowercase Latin letters, it:  deletes all the vowels,  inserts a character "." before each consonant,  replaces all uppercase consonants with corresponding lowercase ones.  Vowels are letters "A", "O", "Y", "E", "U", "I", and the rest are consonants. The program's input is exactly one string, it should return the output as a single string, resulting after the program's processing the initial string.  Help Petya cope with this easy task.  Input  The first line represents input string of Petya's program. This string only consists of uppercase and lowercase Latin letters and its length is from 1 to 100, inclusive.  Output  Print the resulting string. It is guaranteed that this string is not empty.  Examples  input  tour  output  .t.r  input  Codeforces  output  .c.d.f.r.c.s  input  aBAcAba  output  .b.c.b |
| 2 | Xenia the beginner mathematician is a third year student at elementary school. She is now learning the addition operation.  The teacher has written down the sum of multiple numbers. Pupils should calculate the sum. To make the calculation easier, the sum only contains numbers 1, 2 and 3. Still, that isn't enough for Xenia. She is only beginning to count, so she can calculate a sum only if the summands follow in non-decreasing order. For example, she can't calculate sum 1+3+2+1 but she can calculate sums 1+1+2 and 3+3.  You've got the sum that was written on the board. Rearrange the summans and print the sum in such a way that Xenia can calculate the sum.  Input  The first line contains a non-empty string s — the sum Xenia needs to count. String s contains no spaces. It only contains digits and characters "+". Besides, string s is a correct sum of numbers 1, 2 and 3. String s is at most 100 characters long.  Output  Print the new sum that Xenia can count.  Examples  input  3+2+1  output  1+2+3  input  1+1+3+1+3  output  1+1+1+3+3  input  2  output  2 |
| 3 | Capitalization is writing a word with its first letter as a capital letter. Your task is to capitalize the given word.  Note, that during capitalization all the letters except the first one remains unchanged.  Input  A single line contains a non-empty word. This word consists of lowercase and uppercase English letters. The length of the word will not exceed 103.  Output  Output the given word after capitalization.  Examples  input  ApPLe  output  ApPLe  input  konjac  output  Konjac |
| 4 | Petya loves football very much. One day, as he was watching a football match, he was writing the players' current positions on a piece of paper. To simplify the situation he depicted it as a string consisting of zeroes and ones. A zero corresponds to players of one team; a one corresponds to players of another team. If there are at least 7 players of some team standing one after another, then the situation is considered dangerous. For example, the situation 00100110111111101 is dangerous and 11110111011101 is not. You are given the current situation. Determine whether it is dangerous or not.  Input  The first input line contains a non-empty string consisting of characters "0" and "1", which represents players. The length of the string does not exceed 100 characters. There's at least one player from each team present on the field.  Output  Print "YES" if the situation is dangerous. Otherwise, print "NO".  Examples  input  001001  output  NO  input  1000000001  output  YES |
| 5 | Those days, many boys use beautiful girls' photos as avatars in forums. So it is pretty hard to tell the gender of a user at the first glance. Last year, our hero went to a forum and had a nice chat with a beauty (he thought so). After that they talked very often and eventually they became a couple in the network.  But yesterday, he came to see "her" in the real world and found out "she" is actually a very strong man! Our hero is very sad and he is too tired to love again now. So he came up with a way to recognize users' genders by their user names.  This is his method: if the number of distinct characters in one's user name is odd, then he is a male, otherwise she is a female. You are given the string that denotes the user name, please help our hero to determine the gender of this user by his method.  Input  The first line contains a non-empty string, that contains only lowercase English letters — the user name. This string contains at most 100 letters.  Output  If it is a female by our hero's method, print "CHAT WITH HER!" (without the quotes), otherwise, print "IGNORE HIM!" (without the quotes).  Examples  input  wjmzbmr  output  CHAT WITH HER!  input  xiaodao  output  IGNORE HIM!  input  sevenkplus  output  CHAT WITH HER!  Note  For the first example. There are 6 distinct characters in "wjmzbmr". These characters are: "w", "j", "m", "z", "b", "r". So wjmzbmr is a female and you should print "CHAT WITH HER!". |
| 6 | Vasya is very upset that many people on the Net mix uppercase and lowercase letters in one word. That's why he decided to invent an extension for his favorite browser that would change the letters' register in every word so that it either only consisted of lowercase letters or, vice versa, only of uppercase ones. At that as little as possible letters should be changed in the word. For example, the word HoUse must be replaced with house, and the word ViP — with VIP. If a word contains an equal number of uppercase and lowercase letters, you should replace all the letters with lowercase ones. For example, maTRIx should be replaced by matrix. Your task is to use the given method on one given word.  Input  The first line contains a word s — it consists of uppercase and lowercase Latin letters and possesses the length from 1 to 100.  Output  Print the corrected word s. If the given word s has strictly more uppercase letters, make the word written in the uppercase register, otherwise - in the lowercase one.  Examples  input  HoUse  output  house  input  ViP  output  VIP  input  maTRIx  output  matrix |
| 7 | A word or a sentence in some language is called a pangram if all the characters of the alphabet of this language appear in it at least once. Pangrams are often used to demonstrate fonts in printing or test the output devices.  You are given a string consisting of lowercase and uppercase Latin letters. Check whether this string is a pangram. We say that the string contains a letter of the Latin alphabet if this letter occurs in the string in uppercase or lowercase.  Input  The first line contains a single integer n (1 ≤ n ≤ 100) — the number of characters in the string.  The second line contains the string. The string consists only of uppercase and lowercase Latin letters.  Output  Output "YES", if the string is a pangram and "NO" otherwise.  Examples  input  12 toosmallword  output  NO  input  35 TheQuickBrownFoxJumpsOverTheLazyDog  output  YES |
| 8 | The translation from the Berland language into the Birland language is not an easy task. Those languages are very similar: a berlandish word differs from a birlandish word with the same meaning a little: it is spelled (and pronounced) reversely. For example, a Berlandish word code corresponds to a Birlandish word edoc. However, it's easy to make a mistake during the «translation». Vasya translated word s from Berlandish into Birlandish as t. Help him: find out if he translated the word correctly.  Input  The first line contains word s, the second line contains word t. The words consist of lowercase Latin letters. The input data do not consist unnecessary spaces. The words are not empty and their lengths do not exceed 100 symbols.  Output  If the word t is a word s, written reversely, print YES, otherwise print NO.  Examples  input  code edoc  output  YES  input  abb aba  output  NO  input  code code  output  NO |
| 9 | Anton likes to play chess, and so does his friend Danik.  Once they have played n games in a row. For each game it's known who was the winner — Anton or Danik. None of the games ended with a tie.  Now Anton wonders, who won more games, he or Danik? Help him determine this.  Input  The first line of the input contains a single integer n (1 ≤ n ≤ 100 000) — the number of games played.  The second line contains a string s, consisting of n uppercase English letters 'A' and 'D' — the outcome of each of the games. The i-th character of the string is equal to 'A' if the Anton won the i-th game and 'D' if Danik won the i-th game.  Output  If Anton won more games than Danik, print "Anton" (without quotes) in the only line of the output.  If Danik won more games than Anton, print "Danik" (without quotes) in the only line of the output.  If Anton and Danik won the same number of games, print "Friendship" (without quotes).  Examples  input  6 ADAAAA  output  Anton  input  7 DDDAADA  output  Danik  input  6 DADADA  output  Friendship  Note  In the first sample, Anton won 6 games, while Danik — only 1. Hence, the answer is "Anton".  In the second sample, Anton won 3 games and Danik won 4 games, so the answer is "Danik".  In the third sample, both Anton and Danik won 3 games and the answer is "Friendship". |
| 10 | wHAT DO WE NEED cAPS LOCK FOR?  Caps lock is a computer keyboard key. Pressing it sets an input mode in which typed letters are capital by default. If it is pressed by accident, it leads to accidents like the one we had in the first passage.  Let's consider that a word has been typed with the Caps lock key accidentally switched on, if:  either it only contains uppercase letters;  or all letters except for the first one are uppercase.  In this case we should automatically change the case of all letters. For example, the case of the letters that form words "hELLO", "HTTP", "z" should be changed.  Write a program that applies the rule mentioned above. If the rule cannot be applied, the program should leave the word unchanged.  Input  The first line of the input data contains a word consisting of uppercase and lowercase Latin letters. The word's length is from 1 to 100 characters, inclusive.  Output  Print the result of the given word's processing.  Examples  input  cAPS  output  Caps  input  Lock  output  Lock |
| 11 | When Serezha was three years old, he was given a set of cards with letters for his birthday. They were arranged into words in the way which formed the boy's mother favorite number in binary notation. Serezha started playing with them immediately and shuffled them because he wasn't yet able to read. His father decided to rearrange them. Help him restore the original number, on condition that it was the maximum possible one.  Input  The first line contains a single integer nn (1⩽n⩽1051⩽n⩽105) — the length of the string. The second line contains a string consisting of English lowercase letters: 'z', 'e', 'r', 'o' and 'n'.  It is guaranteed that it is possible to rearrange the letters in such a way that they form a sequence of words, each being either "zero" which corresponds to the digit 00 or "one" which corresponds to the digit 11.  Output  Print the maximum possible number in binary notation. Print binary digits separated by a space. The leading zeroes are allowed.  Examples  input  4  ezor  output  0  input  10  nznooeeoer  output  1 1 0  Note  In the first example, the correct initial ordering is "zero".  In the second example, the correct initial ordering is "oneonezero". |
| 12 | You can not just take the file and send it. When Polycarp trying to send a file in the social network "Codehorses", he encountered an unexpected problem. If the name of the file contains three or more "x" (lowercase Latin letters "x") in a row, the system considers that the file content does not correspond to the social network topic. In this case, the file is not sent and an error message is displayed.  Determine the minimum number of characters to remove from the file name so after that the name does not contain "xxx" as a substring. Print 0 if the file name does not initially contain a forbidden substring "xxx".  You can delete characters in arbitrary positions (not necessarily consecutive). If you delete a character, then the length of a string is reduced by 11. For example, if you delete the character in the position 22 from the string "exxxii", then the resulting string is "exxii".  Input  The first line contains integer nn (3≤n≤100)(3≤n≤100) — the length of the file name.  The second line contains a string of length nn consisting of lowercase Latin letters only — the file name.  Output  Print the minimum number of characters to remove from the file name so after that the name does not contain "xxx" as a substring. If initially the file name dost not contain a forbidden substring "xxx", print 0.  Examples  input  6 xxxiii  output  1  input  5 xxoxx  output  0  input  10 xxxxxxxxxx  output  8  Note  In the first example Polycarp tried to send a file with name contains number 3333, written in Roman numerals. But he can not just send the file, because it name contains three letters "x" in a row. To send the file he needs to remove any one of this letters. |
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