Problem 2 - Emoji Detector

Problem for exam preparation for the Programming Fundamentals Course @SoftUni.
Submit your solutions in the SoftUni judge system at https://judge.softuni.org/Contests/Practice/Index/2302#1.

Your task is to write a program that extracts emojis from a text and find the threshold based on the input.

You have to get your **cool threshold**. It is obtained by **multiplying all** the digits found in the input. The cool threshold could be a **huge number**, so be mindful.

An emoji is valid when:

- It is surrounded by 2 characters, either `"::"` or `"**"`
- It is **at least 3** characters long (**without** the surrounding symbols)
- **It starts** with a **capital letter**
- Continues with **lowercase** letters **only**

Examples of valid emojis: `::Joy::`, `**Banana**`, `::Wink::`

Examples of invalid emojis: `::Joy**`, `::fox:es:`, `**Monk3ys**`, `:Snak::Es::`

You need to count **all valid emojis** in the text and calculate their **coolness**. The coolness of the emoji is **determined** by summing all the **ASCII values of all letters** in the emoji.

Examples: `::Joy:: - 306, **Banana** - 577, ::Wink:: - 409`

You need to print the result of the cool threshold and, after that to take all emojis out of the text, count them and print **only the cool ones** on the console.

Input

- On the single input, you will receive a piece of string.

Output

- On the first line of the output, print the obtained Cool threshold in the format:
  `"Cool threshold: {coolThresholdSum}"`
- On the following line, **print the count of all emojis** found in the text in format:

```
"{countOfAllEmojis} emojis found in the text. The cool ones are:
{cool emoji 1}
{cool emoji 2}
…
{cool emoji N}"
```

Constraints

There will always be at least one digit in the text!

Examples

Input	Output

In the Sofia Zoo there are 311 animals in total! ::Smiley:: This includes 3 **Tigers**, 1 ::Elephant:, 12 **Monk3ys**, a **Gorilla::, 5 ::fox:es: and 21 different types of :Snak::Es::. ::Mooning:: **Shy**	Cool threshold: 540 4 emojis found in the text. The cool ones are: ::Smiley:: **Tigers** ::Mooning::

Comments

You can see all the valid emojis in green. There are various reasons why the rest are not valid, examine them carefully. The "cool threshold" is 3*1*1*3*1*1*2*3*5*2*1 = 540.

::Smiley:: -> 83 + 109 + 105 + 108 + 101 + 121 = 627 > 540 -> cool

Tigers -> 84 + 105 + 103 + 101 + 114 + 115 = 622 > 540 -> cool

::Mooning:: -> 77 + 111 + 111 + 110 + 105 + 110 + 103 = 727 > 540 -> cool

Shy -> 83 + 104 + 121 = 308 < 540 -> not cool

In the end, we print the count of all valid emojis found and each of the cool ones on a new line.

Input	Output
5, 4, 3, 2, 1, go! The 1-th consecutive banana-eating contest has begun! ::Joy:: **Banana** ::Wink:: **Vali** ::valid_emoji::	Cool threshold: 120 4 emojis found in the text. The cool ones are: ::Joy:: **Banana** ::Wink:: **Vali**

Input	Output
It is a long established fact that 1 a reader will be distracted by 9 the readable content of a page when looking at its layout. The point of using ::LoremIpsum:: is that it has a more-or-less normal 3 distribution of 8 letters, as opposed to using 'Content here, content 99 here', making it look like readable **English**.	Cool threshold: 17496 1 emojis found in the text. The cool ones are:

Comments

You can see **English** is a valid emoji, but the sum of ASCII **is not bigger** than the cool threshold. That's why we **don't** print anything in the end.

JS Examples

Input	Output
["In the Sofia Zoo there are 311 animals in total! ::Smiley:: This includes 3 **Tigers**, 1 ::Elephant:, 12 **Monk3ys**, a **Gorilla::, 5 ::fox:es: and 21 different types of :Snak::Es::. ::Mooning:: **Shy**"])	Cool threshold: 540 4 emojis found in the text. The cool ones are: ::Smiley:: **Tigers** ::Mooning::
Comments	
You can see all the valid emojis in green. There are various reasons why the rest are not valid, examine them carefully. The "cool threshold" is 3*1*1*3*1*1*2*3*5*2*1 = 540. ::Smiley:: -> 83 + 109 + 105 + 108 + 101 + 121 = 627 > 540 -> cool **Tigers** -> 84 + 105 + 103 + 101 + 114 + 115 = 622 > 540 -> cool ::Mooning:: -> 77 + 111 + 111 + 110 + 105 + 110 + 103 = 727 > 540 -> cool **Shy** -> 83 + 104 + 121 = 308 < 540 -> not cool In the end, we print the count of all valid emojis found and each of the cool ones on a new line.	
Input	**Output**
(["5, 4, 3, 2, 1, go! The 1-th consecutive banana-eating contest has begun! ::Joy:: **Banana** ::Wink:: **Vali** ::valid_emoji::"])	Cool threshold: 120 4 emojis found in the text. The cool ones are: ::Joy:: **Banana** ::Wink:: **Vali**
Input	**Output**
(["It is a long established fact that 1 a reader will be distracted by 9 the readable content of a page when looking at its layout. The point of using	Cool threshold: 17496 1 emojis found in the text. The cool ones are:

::LoremIpsum:: is that it has a more-or-less normal 3 distribution of 8 letters, as opposed to using 'Content here, content 99 here', making it look like readable **English**."])	

Comments
You can see **English** is a valid emoji, but the sum of ASCII **is not bigger** than the cool threshold. That's why we **don't** print anything in the end.