# Problem 2 - Emoji Detector

Problem for exam preparation for the [Programming Fundamentals Course @SoftUni](https://softuni.bg/courses/programming-fundamentals-csharp-java-js-python).

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 ::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. | |