

## Problem 3. Regexmon

Bojomon and Didimon are both pokemons which like to capture specific elements from a text. But they always fight so they decided to take turns in capturing things. Didimon is **first**, of course, because “ladies first”.



**Bojomon** matches only **pokewords**.

A **pokeword** consists of **2 sequences** of **alphabet letters**, separated by a **dash** ('-'). Example: “pika-pika”

**Didimon** matches everything **EXCEPT** **alphabet letters** and **dashes**.

You will get a **single string**, containing random ASCII characters, from the input.

**Didimon starts first**. If she **finds** a **match**, she prints it on the console, and **switches turns** with Bojomon.

Then Bojomon starts matching **AFTER Didimon's match**, **IGNORING** everything **before** it, from the string. When he finds a match, he prints it and **switches turns** with **Didimon**, and she starts matching **AFTER** Bojomon's match.

This process **repeats** until **the one** who is **at turn** does **NOT** match **anything** till the end of the string.

Example: “!!!aa-aa?\_?”

1. **Didimon** matches “!!!”, then she **switches** with Bojomon.
2. Bojomon **starts after Didimon's match** and so he has “aa-aa?\_?”. He matches “aa-aa” and **switches** with Didimon.
3. Didimon **starts after Bojomon's match** and so she has “?\_?”. She matches “?\_?” and **switches** with Bojomon again.
4. Bojomon **starts after Didimon's match** and so he has “” (empty string). He matches **nothing** and the program **ends**.

### Input

- The input will consist of a **single line**, containing the **text**, that Bojomon and Didimon are going to match.

### Output

- As output you should print Bojomon and Didimon's **matches**, each on a **new line**.

### Constraints

- The input string may contain **any ASCII character**.
- Allowed time / memory: **100ms / 16MB**.

### Examples

Input	Output
^^^pika-pika^^^	^^^ pika-pika ^^^

!.!asd-asd---?!chuuuu!!!asd-dsa	!.! asd-asd ?! asd-dsa
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