# Problem 2 – Worm Ipsum

Dr. Worm has decided to create an AI which generates random sentences. However, in the worm language, there are no words which have 2 equal characters. The Doctor does not know how to program the AI to follow these rules so he asks you for help.

You will receive several input lines containing **sentences**. They represent the random data rendered by the AI. Your task is to **validate every input line** and **process the words** inside the sentence.   
The sentences will **ALWAYS** **start** with a **capital letter** and **end** with a **dot** “.”, because the AI is simple.

**IGNORE** all input lines which contain **more** than **1 sentence**.   
**ALL** sentences will be **grammatically correct**.

You must then pass through each **VALID** input line, and go through the **words** in its **sentence**. If you find a **word** which has **2** or **more** **equal characters**, you must pick the **character** with the **MOST OCCURENCES** in that word.  
Then you must **REPLACE** every character in the word with **that** **character**. Example: “hello” = “lllll”.

Upon reading an input line, you should **validate** and **process** it. Then you should **print** the **result** of the processing. **Only after** **that** you should **read** the **next** **input** **line**.

The input **ends** when you **receive** the **command** “Worm Ipsum”.

### Input

* The input consists of several input lines containing one or more sentences.
* The input sequence **ends** when you **receive** the **command** “Worm Ipsum”.

### Output

* As output you should print **every valid** input line, **after** you’ve **processed** it.

### Constrains

* All sentences **WILL** be **grammatically correct**.
* There might be input lines with **2** or **more sentences** on them.
* The sentences may contain **any ASCII character**.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| This is a random sentence.  This is another random sentence.  You have downloaded data.  Worm Ipsum | This is a random eeeeeeee.  This is another random eeeeeeee.  You have dddddddddd aaaa. |
| Hello World.  How are you.  What are you doing. What will you do.  Will you come.  Worm Ipsum | lllll World.  How are you.  llll you come. |