Problem 3 – Format Helper

Your best friend Stamat is studying Bulgarian philology and he has to write essays all the time. Because you want to spent more time with him you decide to help him with his homework. You know that his teacher is super cocky about formatting a document so you want to create a simple text editor program, which will reformat a given text, based on some simple rules.

Write a JS program that detects bad formatting in a text and fixes it. The resulting text must follow these rules:

- Having a **single** space (" ") only **after** every one of those symbols: "**.,!?:;**" is **obligatory**.
- Having one or more spaces (" ") **before** every one of those symbols: "**.,!?:;**" is **forbidden**.
- Sequences like "**. . . !**" should be displayed as "**...!**"
- If there is a dot ("**.**") followed by spaces, then by any **digit(s)** this means that the text might be a number or a date – make sure that there are **no** following **spaces** after the dot.
- A text inside of quotes should be **trimmed** (e.g. **" text   "** → **"text"**)

Apply the rules in the same order that they are given above. Input will be passed as single string parameter representing the text to format/edit.

Input

The input data is passed to your function as an **array**, containing a single **string** element.

Output

Print on the **console** the edited text.

Constraints

- The text **inside** of the quotes can contain **any ASCII** symbol but quote (**"**)

Examples

Input
Terribly formatted text   . With chaotic spacings." Terrible quoting   "! Also this date is pretty confusing : 20   .   12. 16 .
Output
Terribly formatted text. With chaotic spacings. "Terrible quoting"! Also this date is pretty confusing: 20.12.16.

Input
Make,sure to give:proper spacing where is needed... !
Output
Make, sure to give: proper spacing where is needed...!