

Emily, a botanist, wants to classify plant names based on their characteristics. She writes a program where a plant name list is entered as a sentence, and all plant names with vowels at the beginning are replaced with their length, while others remain unchanged. As a software consultant, help her automate the process.

For example, if the input is "Oak Maple Elm", converting to lowercase "oak maple elm", the words starting with the vowels are "oak" (length 3) and "elm" (length 3), resulting in the sentence "3 maple 3".

Constraints:

- Convert the input sentence to lowercase before processing.
- Identify words that start with a vowel (a, e, i, o, u) and replace them with their length.
- If no words start with a vowel, display:  
"No words start with a vowel"
- If the sentence contains non-alphabetic



characters other than spaces, display: "<input sentence> is an invalid sentence".

- Otherwise, display the transformed sentence as: "The transformed sentence is <resulted-sentence>".

Note:

- In the sample I/O provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.
- Ensure to follow the object-oriented specifications provided in the question.
- Adhere to the code template, if provided.

Sample Input/output 1:

Enter the sentence

Olive Pine Oak

The transformed sentence is 5 Pine 3

Sample I/O 2:

Enter the sentence

Rose Lily Tulip!

Rose Lily Tulip! is an invalid sentence

Sample I/O 3:

Enter the sentence

Maple Birch Spruce

No words start with a vowel.