**Technical Design Document**

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**Program Description:**

This program prompts the user to input a paragraph of text and uses regex to find each individual sentence in the paragraph. It then prints each sentence one by one and displays the number of sentences found in the paragraph.

**Functions used in the Program (list in order as they are called):**

1. **Function Name:** getSentences

**Description:** This function takes a paragraph as a parameter, then uses regex to match each individual sentence and return them as a list.

**Parameters:**

paragraph (string) – User-supplied string containing sentences to be matched.

**Variables:**

pattern (string) – Regex pattern used to find sentences in paragraph.

**Logical Steps:**

1. Define regex pattern to match any amount of characters preceding either a period, question mark, or exclamation point.
2. Use re.findall on paragraph using pattern to find every sentence in paragraph.
3. Return result of re.findall method.

**Returns:** List of every match.

2. **Function Name:** main

**Description:** The main function takes a user-supplied paragraph, and using getSentences, counts and displays each individual sentence in the paragraph.

**Parameters:** This function takes no parameters.

**Variables:**

userInput (string) – Used to store the paragraph the user inputs.

sentences (list) – Used to store the output of the getSentences function.

sentenceCounter (int) – Accumulator used to count and display number of sentences in the paragraph.

**Logical Steps:**

1. Prompt user to input a paragraph of text and store it in userInput variable.
2. Call getSentences function on userInput and store the list returned in sentences variable.
3. Initialize sentenceCount variable.
4. Iterate over sentences. On each loop, print a sentence from sentences list and increment sentenceCount by one.
5. Use sentenceCount variable to display number of sentences within a formatted string.

**Returns:** This function does not return anything.

**Link to your repository:** https://github.com/HenryH-SCF/COP2373

**Output Screenshot: (make sure big enough so I can see)**

