**Technical Design Document Exercise 7**

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**Date Created:** 10/18/2025

**Program Description:** This program allows the user to enter a paragraph that may include sentences beginning with numbers. It uses regular expressions to split the paragraph into individual sentences, displays each sentence on its own line, and then prints the total number of sentences found.

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

### **1. Function Name: ​​**get\_paragraph()

**Description:** Prompts the user to enter a paragraph of text that may include sentences beginning with numbers.

**Parameters:** None

**Variables:**

1. paragraph - stores the paragraph entered by the user.

**Logical Steps:**

1. Display a message asking the user to input a paragraph.
2. Store the user’s input in a variable.
3. Return the input for processing.

**Returns:** The entered paragraph as a string.

**2. Function Name:** split\_sentences(paragraph)

**Description:** Uses a regular expression to split the paragraph into a list of sentences based on punctuation marks like ., ?, or !.

**Parameters:** paragraph - the string entered by the user.

**Variables:**

1. sentences - a list containing each individual sentence after splitting.

**Logical Steps:**

1. Apply the regular expression (?<=[.!?])\s+ to split sentences at punctuation marks followed by spaces.
2. Remove any extra spaces or blank entries.
3. Return the clean list of sentences.

**Returns:** A list containing all sentences in the paragraph.

**3. Function Name:** main()

**Description:** Coordinates the paragraph flow, prompts for input, calls the sentence, splitting function, displays each sentence, and prints the total count.

**Parameters:** None

**Variables:**

1. paragraph - stores user input.
2. sentences - stores the list of sentences returned by split\_setences().

**Logical Steps:**

1. Call get\_paragraph() to retrieve the input text.
2. Call split\_sentences() to divide the paragraph into sentences.
3. Loop through and print each sentence with numbering.
4. Display the total number of sentences.

**Returns:** None

**Constants:** None

**Link to your repository:**

[loganflynnn (Logan Flynn)](https://github.com/loganflynnn)

**Output Screenshot:**

