**Sentence Counter**

**Name:** Bryan Yadiel Caban Rodriguez

**Date Created:** Jan 13, 2025

**Program Description:** A program that accurately counts and displays the number of sentences in a text input by the user. The program uses regular expressions to identify sentences, including those that begin with numbers. It extracts each sentence from the input text, displays them individually, and provides a total count of sentences found.

**Functions used in the Program:**

1. **Function Name:** runcode()

**Description:** Checks if the user wants to run the program by prompting for a yes/no response.

**Parameters:** None

**Variables:**

* runcode (str) - stores the user's input on whether to run the program

**Logical Steps:**

1. Prompt the user asking if they want to run the code
2. Convert the user's input to lowercase using casefold()
3. Return the processed input

**Returns:** str - The user's response in lowercase ('y' or 'n')

1. **Function Name:** extract\_sentences(text)

**Description:** Extracts individual sentences from the input text using regular expressions.

**Parameters:**

* text (str) - The text input by the user to be analyzed

**Variables:**

* pattern (str) - Regular expression pattern for sentence identification
* sentences (list) - List to store extracted sentences

**Logical Steps:**

1. Define regex pattern to match sentences starting with letters or numbers
2. Use re.findall to extract all matching sentences from the text
3. Return the list of sentences

**Returns:** list - A list of all sentences found in the text

1. **Function Name:** display\_sentences(sentences)

**Description:** Displays each extracted sentence and provides a count of the total number of sentences.

**Parameters:**

* sentences (list) - List of sentences extracted from the text

**Variables:** None

**Logical Steps:**

1. Iterate through each sentence in the list
2. Print each sentence preceded by an arrow symbol
3. Print the total number of sentences found

**Returns:** None

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

**Description:** Main function that manages user input and coordinates sentence extraction and display.

**Parameters:** None

**Variables:**

* text (str) - Stores the text input by the user
* sentences (list) - Stores the extracted sentences

**Logical Steps:**

1. Prompt user for the text input
2. Call extract\_sentences() to process the text
3. Call display\_sentences() to show results

**Returns:** None

**Overall Program Logical Flow:**

1. Program starts and asks if user wants to run the code (runcode())
2. If yes:
   * main() is called
   * User inputs text
   * Text is processed to extract sentences (extract\_sentences())
   * Extracted sentences are displayed with a count (display\_sentences())
   * Program returns to ask if user wants to run again
3. If no:
   * Displays goodbye message
   * Program ends

**Link to your repository:** https://github.com/xXTeinsXx/COP2373