Technical Design Document

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Name: Sentence Splitter Program (Version 2)  
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Program Description

This program processes a user-input paragraph, extracts individual sentences, and displays them in a numbered sequence. It uses a regular expression pattern to identify sentence boundaries based on uppercase letters and numbers at the beginning of sentences. The program also counts and displays the total number of sentences detected.

Functions Used

1. split\_sentence(paragraph)
   * Extracts sentences that start with an uppercase letter or number.
   * Uses regex r'[A-Z0-9].\*?[.!?](?= [A-Z0-9]|$)' to detect sentence boundaries.
   * Prints each sentence in a numbered format.
   * Displays the total sentence count.
2. main()
   * Prompts the user for paragraph input.
   * Calls split\_sentence(paragraph) to process and display sentences.

Logical Steps

1. User Input Handling
   * Prompt the user to enter a paragraph.
2. Sentence Extraction using Regex
   * Apply re.findall() with the specified regex pattern to extract sentences.
   * Ensure sentences start with uppercase letters or numbers.
3. Sentence Formatting and Display
   * Iterate through extracted sentences.
   * Print them with an index.
4. Total Sentence Count
   * Display the total number of extracted sentences.

Repository Link: https://github.com/khoakhi3/COP2373/upload/master

A screenshot of a computer

AI-generated content may be incorrect.