LAB 06

Modules, and File Handling

Implement each parsing option in a module and create a parser package.

1. **File Input:**

   - Ask the user to enter the path to a text file they want to parse. Ensure the file exists and handle any potential exceptions.

2. **File Reading:**

   - Read the content of the text file.

3. **Parsing Options:**

   - Provide the user with several parsing options, such as:

     - Count the number of lines in the file.

     - Count the number of words in the file.

     - Extract and display all email addresses from the file.

     - Extract and display all URLs from the file.

     - Search for specific keywords or phrases in the file and display their occurrences.

4. **Parsing Functions:**

   - Implement separate functions for each parsing option, such as **count_lines**, **count_words**, **extract_emails**, **extract_urls**, and **search_keywords**.

   - These functions should take the file's content as input and return the respective results.

5. **User Interaction:**

   - Display a menu for the user to select which parsing option they want to perform.

   - Depending on the user's choice, call the corresponding parsing function and display the results.

6. **Output:**

   - For each parsing option, display the results to the user.

7. **Save Output**

   - Save the parsing results to a new file.

sample.txt:

Contact Information:

- Email: user@example.com

- Phone: +1 (123) 456-7890

- Website: https://www.example.com

Keywords: Python, parsing, file handling, text, sample

Here's another email: support@example.com.

URLs:

- https://www.python.org

- https://www.github.com

- https://www.stackoverflow.com