Python Programming Assignment 8: File I/O and Exceptions

Word Counter
In this assignment, you will be tasked with creating a Python program that reads a text file, counts the occurrences of each word, and handles exceptions that may occur during the process.

Requirements
You need to create a Python program that accomplishes the following:

1. **Reading the file**
   ● Prompt the user to enter the name of a text file they want to analyze. You can expect the text file to be in the current directory of your python program.
   ● Implement a function to read the contents of the file and store them in a string variable.

2. **Word Count**
   ● Implement a function that takes the file content string as input and counts the occurrences of each word.
   ● Ignore the case sensitivity, meaning "Word" and "word" should be treated as the same word.
   ● Disregard punctuation marks such as periods, commas, question marks, etc.
   ● Store the word frequencies in a dictionary, where the keys are the words, and the values are the counts.

3. **Output**
   ● Display the word frequencies to the user in a readable format, sorted alphabetically.
   ● Display the total number of words in the file.

4. **Exception Handling:**
   ● Handle potential exceptions gracefully. If the file does not exist, inform the user instead of crashing the program.
   ● Ensure that the program is not case-sensitive when handling file names (e.g., "file.txt" and "File.TXT" should be treated as the same).

Example Output

```
> Enter the name of the text file: sample.txt

Word Frequencies:
-----------------
apple: 3
banana: 1
cherry: 2
grape: 2
orange: 1

Total Words in the File: 9
```

Note

- Make sure to comment your code and use meaningful variable names to enhance readability.
- Submit a folder containing your python program to the for assignment 8 dropbox on moodle