Assignment 4

Objective:

- practice reading from, writing to, deleting, renaming files
- use **os** module
- Enhance programming skill to avoid/trap errors

Requirements:

In this assignment, you need to create a testing program. The program should have a menu with the following choices:

1. Take test
2. Add Test Question
3. Remove Test Question
4. Modify Test Question (optional)
5. Exit Program

You need to create your own test questions (<u>minimum 20 questions</u>); the test questions should be usable and look like this:

> Question 5: What is the capital city of British Columbia, Canada?
>   a. Vancouver
>   b. Toronto
>   c. Victoria
>   d. Kelowna

<u>In your file, you should have the right answer and points of that question too</u>; your question in the file can look like this:

What is the capital city of British Columbia, Canada?
Vancouver
Toronto
Victoria
Kelowna
c 5

Or it can also look like this:

   What is the capital city of British Columbia, Canada? ;Vancouver; Toronto; Victoria; Kelowna; c 5

Or other format, it all depends on how your code reads the file.

Take Test: If user choose to take test, your program will display the question and choices, after user enters the his/her choice, result will be displayed. If user answers the question correctly, the points of that question will be added to his <u>correct points</u>; otherwise, your program will display that's wrong answer and the points for the question will not be added to his <u>correct points</u>; Points for each question will always be added to **total points**.

When the user finish answering all the questions, your program should give an evaluation of his performance based on his/her points.

Add Test Question will add new question (including the question, choices, and answer) to the end of the file.

Remove Test Questions/Modify Test Questions will change the questions in the file and you need to make sure the changes will not mess up the layout of the file. Import **os** module to **remove** and **rename** files when you need to Modify Test Questions.

Exit Program: when Exit Program is chosen, your program will terminate.

Validation and Error Trapping: You also need to pay attention to validation and error trapping, for example, when a user takes the test, they can only answer the choices listed (a, b, c, d).