Assignment-4

This **assignment-4** is a team/group assignment to foster student's ability to work in a team by following a common set of rules to achieve common goals and learn secure programming.

This assignment must be done by students enrolled in a group with the prefix **"PA456Groups"** Please make sure you find your group members for this assignment. Go to your Groups tab on the course site, and find your group member in a group name with the mentioned prefix.

Goals:

The goals of this group assignment are as follows:

- To learn how to filter file names and file contents for file input/output validation. A secure program must validate proper file input to the program and also the contents in the file.

  Other goals are:

- To foster discussion and learning on the topics of the course discussed during an entire week.
- To encourage using a collaboratory tool such as a github.com repository that can be shared and edited remotely by multiple members.
- To encourage using a programming collaboratory tool such as Slack, Zoom, and email to communicate and effectively discuss with each other.
- To bolster skills in documenting a software project

  Inside your Pycharm project you created for ***assignment-****2 (in previous weeks)*, download and copy a skeletal python module named ***Confighandler.py*** and file ***my_config.txt*** from Instructor's repository **301-sp** in github.com.

  - A complete repository can be downloaded as a zip file through https://github.com/convexnaresh/301-sp/archive/main.zip

  The file ***my_config.txt*** has a configuration setting keywords such as *controls, progress, slideNumber,* etc. The values associated with such settings can be assigned true or false (separated by a colon (:)).

  The file ***Confighandler.py*** has two major functions/methods with the stated inputs, logic, and outputs. Your job is to implement the following functions as described:

1. A function-1 named **validate_file**(filename)

   i) Receives a parameter—filename
   ii) Write the proper logic to check if the supplied filename is a text file; if it is, then it returns true; otherwise, it returns false.

2. Another function-2 named **parse_file**(filename***)***

i) Receives a parameter—***filename***
ii) Write a logic to read the file and print all the setting keywords which are set to be true.

The main function **main() (already written for you, do not modify this function)**

Deliverables for this group assignment

Each group should create its group's repository on github.com and commit final versions of the following two files into the same repository:

1. The program file ***Confighandler*.py** with the above functions and implementations in python.

To have your submissions graded, please add your Instructor ***(convex.naresh@gmail.com)*** as one of the project's collaborators. Your Instructor can download and execute your programs to grade them. No modification to files in the repository is permitted after the due date of this assignment. On your D2L dropbox for this assignment, please submit the ***HTTPS URL*** of your repository.

In case you have a problem, any single member of your group should submit the above two files in your D2L dropbox for this assignment.

Grading Criteria:

1. Creating and sharing a project repository for this assignment with Instructor's email address ***convex.naresh@gmail.com*** **+40 pts**. The repository must contain two files:
    a. ***Confighandler.py***
    b. ***my_config.dat***

    Note:
    - It does not apply to those who have already shared a GitHub repository with the Instructor while doing assignment-1. However, the same repository must contain the python program files.
    - The repository must be updated with the final program version by the assigned due date for full credit.

2. File names as specified format, program heading, proper spacings, comments, and documentation of the project, **+50 pts.**
3. **Function-1**
    a. Correct function names, parameters and correct returns (if any) **(10pts)**
    b. Correct logic and implementation **(40pts)**
4. **Function-2**
    a. Correct function names, parameters and correct returns (if any) **(10pts)**
    b. Correct logic and implementation **(40pts)**

Total: 190 pts to be scaled to 100.

For details, refer to the **rubrics** attached with assignment-4.

__R__emember to agree on, check or verify what your group member submits if anything wrong will affect all the members equally.

Good Luck