Assignment: 1
Course: Automation
Date: March 2022
Due Date: 1st April 2022
Submission on Blackboard
Weightage = 15%

Description:

This assignment is related to automation concepts that we have discussed in the lecture. This assignment aims to push you towards knowing the usage of some of those concepts. We have discussed the basics of these concepts during lectures, and now it's time foryou to dig more, research, and puts some effort into implementing those concepts on your own. An assignment does not always contain the things, which you have already done exactly during Lecture/Practical. The assignment aims to make you put some effort on your own to understand and implement things.

Requirements:

- Provide a detailed report on all of the tasks.
- Provide step-by-step configuration/implementation steps for each task.
- Provide requirements for each task in its section.
- Provide files and screenshots for proof that you have completed these tasks yourself.
- Provide the code files for each task separately with the report. So that, I can run files easily.
- *Each student is supposed to work individually on their assignment. If two assignments will be found similar. Both will get **ZERO** marks. So, please do not share your assignment answers and files with others and do not copy from the others.*
- There is no word limit for the report. But do not unnecessarily extend the description. If you can explain anything in four lines, do not occupy one full page for the explanation.
- Submit your report in PDF format, except those code files.

Question 1: (10 marks)

Write the script for the following tasks. Provide separate files for each of them.

1. Every day, the first thing you do on your computer is to open a few files like a news website, a word document to note down the daily task. (2 marks)

2. To delete files from Temporary Internet files. (2 marks)

3. To check for the '.exe' file and 'bat or cmd' files created or saved between today and yesterday (last 24 hours). Usually, the viruses use this extension which can easily be executed. If there is an exe/bat/cmd file, show the list with time date, and path. Then ask input if you want to delete any particular file, and finally delete that file. (create dummy exe/bat/cmd files) (6 marks)

Question 2: (10 Marks, 5+5)

a. Write a program in Python in which a user must enter a first name, last name, username, email ID, and password. Now, check the password at the runtime for each user input, if it satisfies the password requirements. Display a message if it does not until the requirements are satisfied.
Each password must contain a number, a capital letter, and a special character like /, $, ! etc. Save this information in excel or a notepad file with each new record on a new line (separator either tab or comma).
Try to find a solution here for hiding the passwords from the display of that file. But, when password information requires to be matched at login. It can be matched.

b. Ask a user to log in, using the same username and password from the above file. After 3 attempts, a user must be blocked for 2 minutes. Do not allow the user to attempt login for the next 1 minute. If a user attempts, show a message that your password is blocked with a message as 'Unauthorised attempt'.

Question 3: (10 marks, 5+5)

a) Write a script to run any program on the pool of guest machines (you can use two guest machines) using a batch file.

b) Write a script to check OS updates are up to date. Run update command to update the OS system, if it is not. You can use two machines for this. Do not run individual commands for each machine. Either use a loop or try to use IP addresses range (if you can).

Weightage:

	Total marks	Marks distribution
Question 1	10	Description (description, methodology (way to solve and its clarity)) - Implementation (code, running, output including screenshots) -
Question 2	10	Description (description, methodology (way to solve and its clarity)) – Implementation (code, running, output including screenshots) -
Question 3	10	Description (description, methodology (way to solve and its clarity)) – 4Implementation (code, running, output including screenshots) -