Practical Session · Tech Foundations · 17/04/2018

Introduction to Platform Technologies: Python
Duration: 1 hour

PART 1

An international bank's website requires the users to input **username** and **password** to register in their website.
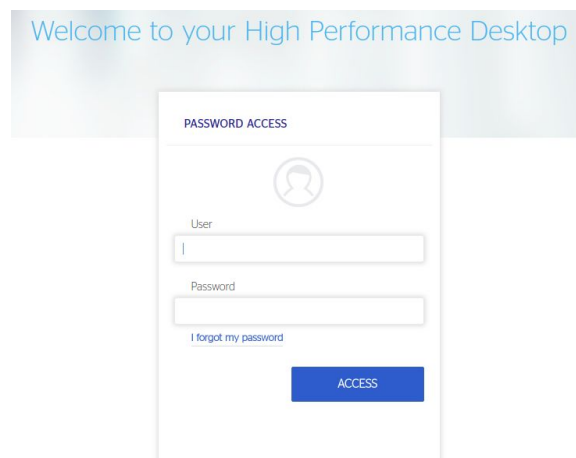
Using **functions**, write a program to
- Ask the user to *enter his username and password.*
- *Check the validity* of the entered password.

Following are the criteria for checking the password:
1. At least 1 number between [0-9]
2. At least 1 letter between [A-Z]
3. At least 1 character from [$#@]
4. Minimum length of transaction password: 6
5. Maximum length of transaction password: 12

Hint
- You can use the following list to check lowercase and uppercase characters in the password. ['a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','w','x','y','z']
- To assign inputs from console to variables use the function: **input(**"message"**)**

PART 2

Choosing a new password is not an easy task. *afernandez* has been trying to choose a correct password for an entire day, and finally he has got some of them.

Help him to detect what mistakes he did while trying to type a valid password and show him which of his passwords were totally fine.

For this part you will use the file **userlogs.csv**.

- Load the file as a **dataframe** using the knowledge acquired in the *pandas session*.
- Create two new columns,
  - One indicates whether the password is valid or not.
  - The other one describes the mistake made
- Save the resulting dataframe in **userlogserrors.csv**. Check *pd.DataFrame.to_csv?*
- Print the valid passwords.