⟲ REBOOT ACADEMY

Python Assignment 3

PASSWORD Checker and Generator

PART 1:

Menu should be given:

1. Password Checker
2. Password Generator
3. quit

note: Menu should be in loop, it should appear again and again to ask input from user till user chooses to quit.

PART 2: Password Checker

First asked to **input** a password and then start checking its strength.

strength checking criteria:

Strength of the password is checked using a point system which awards and deducts points based on the password:

1. firstly, basic number of points are awarded according to the length of the password, for example if the password is 9 letters long then you should add 9 to the points.
2. 5 points are awarded for each when:
   a. There is at least one lowercase letter.
   b. There is at least one upper case letter
   c. There is at least one digit
   d. There is at least one symbol
      Allowed symbols [! , # , $, % , ^ , & , * , (,) ,_ , - , + , =]
   e. If the password length is in between 8-20 characters.
3. 5 points are deducted for each when:
   a. All characters are lowercase.
   b. All characters are uppercase.
   c. All are digits
   d. Password is too short <8.

4. 5 points are deducted for every set of 3 consecutive letters on each row of the qwerty keyboard if they exist in the password.

5. The score is totalled and points too low [<15] will be classed as weak password and user will sent back to the menu. Strong password will may be accepted

Part 3: Password Generator

1. Firstly, a **random** number between 8-15 is generated and this is considered as the length of the password.
2. Now, the password chooses a random combination of letters, symbols, and digits for that length
3. The points of the generated password should be calculated using password checker function.
4. This process is **repeated** until the password has a high point score and is strong password.
5. If the password is a strong password it should display as output.