

CHALLENGE 2: PASSWORD STRENGTH

SUGGESTED TIME: 20 MINUTES

A programmer is designing a program which should ask the user to enter a password and then display a message saying how secure that password is.

The program currently contains errors, but it should function as shown below:

```
Please enter a password Banana123$
Your password is secure
```

Example program output for a password which passes all 5 checks

There are 5 conditions the password is checked for:

1. Does the password contain a capital letter?
2. Does the password contain a lower case letter?
3. Does the password contain any punctuation?
4. Does the password contain any numbers?
5. Is the password more than 5 characters long?

The strength of the password is determined by how many of these conditions are met:

Number of conditions met	Password strength
0	Dangerously insecure
1	Insecure
2	Weak
3	Medium
4	Strong
5	Secure

Password strength

Using the file Q02.py, amend the lines at the bottom of the code to give the:

- fix the syntax error on original line 8

```
PUNCTUATION = "!\"£$%^&* () {} [] :@~;'#<>?"
```

- fix the syntax error on original line 26

```
def containsAnyOf(pPassword, pCharacters):
```

- fix the NameError error on original line 48

```
    return (Strength)
```

- fix the logic error to call the calcPasswordStrength function on original line 56

```
    passwordStrength = calcPasswordStrength
```

- fix the syntax error on original line 59

```
    print("Your password is " + PASSWORD_DESCRIPTIONS[passwordStrength])
```

Do **not** add any additional functionality

Save your file in the COMPLETED_CODING folder as **Q02_FINISHED.py**

A self marking online version of this challenge can be found here:

<https://blog.withcode.uk/2022/03/q2-python-exam-practice-questions-for-edexcel-gcse-computer-science/>