# **Random Password Generator**

## **Description:**

The Random Password Generator is a Command line tool used to generate secure and random passwords with customizable length and complexity. It allows the users to specify various requirements for the password such as uppercase letters, lowercase letters, digits and special characters.

#### **Commands**

## **1.Basic usage:** Python - password generator.py

This Command will run the password generator tool interactively, prompting the user to input the desired parameters for generating the password.

# 2. password length: --length <length>

Specify length of password to be generated. Replace length with the desired integer value. If not specified default length is 12 characters.

### 3. Uppercase letters: --uppercase

Includes uppercase letters in the generated password.

#### 4. Lowercase letters: --lowercase

Includes lowercase letters in the generated password.

### 5. Digits: --digits

Includes digits (0-9) in the generated password.

# 6. Special Characters: --special-chars

Includes special characters like \$@#\*& in the generated password.

### **Steps:**

- 1.Start the Script: using **password generator.py** in your pycharm or any other terminal you are using.
- 2.Input Password Length: When prompted, enter the desired length of your password. This should be a numerical value
- 3. Character Inclusion Prompts:

Respond to the following prompts to include specific character types in your password:

Include uppercase letters? (y/n): Enter 'y' to include or 'n' to exclude uppercase letters.

Include lowercase letters? (y/n): Enter 'y' to include or 'n' to exclude lowercase letters.

Include digits? (y/n): Enter 'y' to include or 'n' to exclude digits.

Include special characters? (y/n): Enter 'y' to include or 'n' to exclude special characters.

4. Generation and Output:

The script will generate a password based on your responses and print it on the screen.

#### **Example:**

Welcome to the Random Password Generator!

Enter the length of the password: 12

Include uppercase letters? (y/n): y

Include lowercase letters? (y/n): n

Include digits? (y/n): y

Include special characters? (y/n): n

Generated Password: UEM3DMEMNEZ5

#### **Notes:**

- Ensure at least one character type is selected otherwise the script will inform to select at least one option and terminate.
- The generated passwords are secure and resistant to brute-force attacks and guessing, making them suitable for various purposes including online accounts and secure access.