**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.