**Creating a Password Complexity Checker Tool with Python**

**Objective**: To Build a tool that assesses the strength of a password based on criteria such as; length, presence of upper case and lower case letters, numbers, and special characters. Provide feedback to users on the password strength.

**Steps Followed:**

1. **Setting Up and Installation of Python**:
   * Installed Python and ensured it was added to the system PATH.
   * Used IDLE for initial development and testing of the script.
2. **Python Script Writing** :
   * Created a script named password\_strength\_checker.py.
   * Implemented functions to check for password length, uppercase letters, lowercase letters, numbers, and special characters.
   * Combined these functions to assess password strength and provide feedback.
3. **Script Testing**:
   * Ran the script using IDLE to verify functionality and ensure correct output.
   * Tested various passwords to check for accurate strength assessment.
4. **Run Script via Command Prompt/ IDLE**:
   * Opened Command Prompt on Windows.
   * Navigated to the script’s directory using the cd command.
   * Executed the script using the python password\_strength\_checker.py command.
   * Provided input and observed the output to validate script performance.

### Using IDLE

**1. Open IDLE**

* **Windows**: Search for "IDLE" in the Start menu.
* **macOS**: You can find IDLE in your Applications folder under Python.
* **Linux**: You may need to install IDLE separately if it’s not included in your Python installation.

**2. Create a New Python File**

1. Open IDLE.
2. In the IDLE shell window, go to File > New File to open a new editor window.
3. Save the new file as password\_strength\_checker.py (or any name you prefer).

#### 3. Write Your Code

#### 4. Run Your Script

1. To run your script, go back to the editor window and select Run > Run Module (or press F5).You’ll see a prompt in the IDLE shell asking for your password input.

**Outcome**: Successfully created a functional password strength assessment tool that evaluates and provides feedback on password security based on common criteria.