# Password Generator

## Overview :

The Password Generator is a command-line application that generates random passwords based on user-specified lengths. Each password is created using lowercase letters and is modified to include at least one number and one uppercase letter. This project demonstrates the use of loops, user input handling, string manipulation, and random number generation.

## Features :

1. **User Input for Number of Passwords**: The user specifies how many passwords to generate.
2. **User Input for Password Lengths**: The user provides the desired length for each password, with a minimum length constraint.
3. **Random Password Generation**: Generates passwords with random lowercase letters.
4. **Password Modification**: Ensures that each password contains at least one number and one uppercase letter.
5. **Display Generated Passwords**: Displays the generated passwords to the user.

## Code Description

### Imports :

* import random: Imports the random module to facilitate random selection of letters and numbers.

### Functions :

1. **generatePassword(pwlength)**
   * Generates a list of passwords based on the specified lengths.
   * Initializes the alphabet with lowercase letters.
   * Iterates over the desired password lengths and creates passwords.
   * Calls replaceWithNumber() to insert at least one random number into the password.
   * Calls replaceWithUppercaseLetter() to capitalize at least one letter in the password.
   * Returns the list of generated passwords.
2. **replaceWithNumber(pword)**
   * Replaces one or two characters in the first half of the password with random digits.
   * Takes a password string as input and returns the modified password.
3. **replaceWithUppercaseLetter(pword)**
   * Capitalizes one or two characters in the second half of the password.
   * Takes a password string as input and returns the modified password.
4. **main()**
   * Prompts the user to enter the number of passwords to generate.
   * Ensures that the minimum length of each password is at least 3.
   * Collects the desired lengths of the passwords from the user.
   * Calls generatePassword() with the collected lengths to generate passwords.
   * Displays each generated password to the user.

### Execution :

* The main() function controls the flow of the program.
* Prompts the user for input and processes the input to generate and display passwords.
* Ensures user inputs are validated and processed correctly.