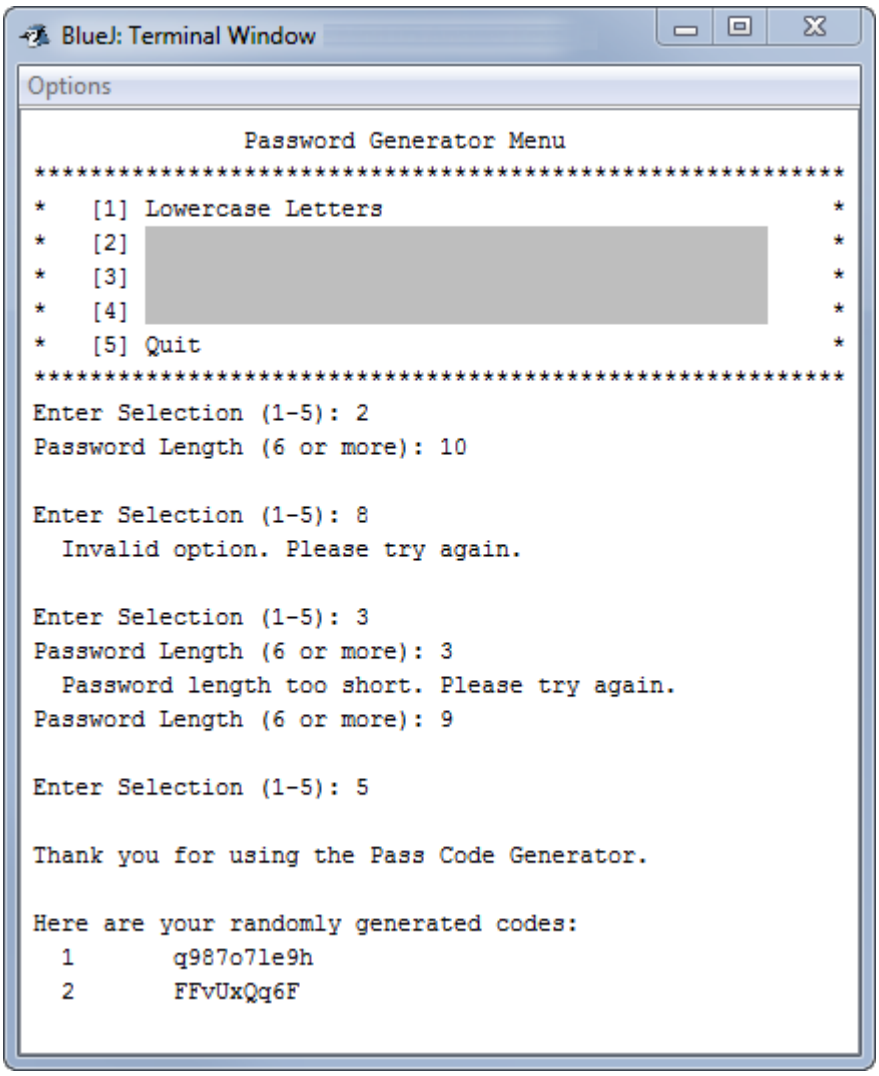
04.07 Assignment Instructions: Secret Passcodes

Instructions: Write a program to generate random passwords; the user should be able to select the character set and the length.

1. Create a new project called 04.07 Password Generator in the Mod04 Assignments folder.
2. Create a class called SecretPasscodes in the newly-created project folder.
3. Display a menu giving the user a choice of at least four different character sets to use to construct the password and the option to stop.
    a. Do not use the first range of punctuation symbols with ASCII values from 33–47.
    b. Ensure the user's choice is valid.
4. Allow the user to select the number of characters in the password.
    a. The minimum length allowed should be six.
    b. Ensure the user's choice is valid.
5. Create a randomly-generated password from the character set selected by the user and write it to a text file.
    a. Utilize Math.random() or Random class methods; the choice is yours.
    b. Use an ASCII chart to determine the range of numbers needed to generate the desired characters.
    c. Do not assign character sets to arrays or strings.
6. When the user opts to stop, read the passwords from the text file and neatly display them on the screen.
7. Open the **StarterCode407.java** file to begin your program.

Suggestions: Make an outline on paper, use pseudocode, or diagram logic sections with a flowchart. Would it be easier to write the 1st or the 4th menu option first?

Expected Output: The output of the program should resemble the following screen shot:


BlueJ: Terminal Window
Options
Password Generator Menu
[1] Lowercase Letters
[2]
[3]
[4]
[5] Quit
Enter Selection (1-5): 2
Password Length (6 or more): 10
Enter Selection (1-5): 8
Invalid option. Please try again.
Enter Selection (1-5): 3
Password Length (6 or more): 3
Password length too short. Please try again.
Password Length (6 or more): 9
Enter Selection (1-5): 5
Thank you for using the Pass Code Generator.
Here are your randomly generated codes:
1 q987o7le9h
2 FFvUxQq6F

Print