**Objective**

For this program, you will be writing parts of a text based number guessing game. The program will allow the user a limited number of tries to guess a randomly generated number. The program will give hints to the user after each guess, expressing whether the guess was too high or too low.

**Program Background**

In this number guessing game, the computer generates a random number between 1 and 100, and stores it in a variable. The user is then asked to guess what the number is. If the user guesses correctly, they win. After the user finishes a game, they are asked whether or not they want to play again. The game ends if the user chooses not to play again.

After downloading the starter code here: <http://logicfusion.ca/courses/page/P1>, please complete the following tasks:

1. Write a loop to limit the user to 7 guesses only. (1.5 marks)
2. End the loop if the user guesses correctly before their 7th try. (Hint: use break;) (1 mark)
3. Write in the conditions for when the user’s guess is too high, too low, or correct, and display a message telling them this. (1.5 marks)
4. Display a message telling the user how many more guesses they have. (Hint: create a variable to keep count of the number of guesses). (1.5 marks)
5. Display a message telling the user they have run out of guesses if they have not guessed the correct number by their 7th try. Make sure they can still play again. (1 mark)
6. Create a variable to keep track of the number of times the user guesses right. (1 mark)
7. When the user decides not to play again, display the number of guesses they guessed successfully. (1 mark)
8. Make sure the user cannot enter anything besides integers from 1 to 100. If they do, allow them to re-enter. This should not take up one of their 7 guesses. (1.5 marks)

Total Mark: /10

\*\*Note: Look at the blue comments. It will give you hints on where to write code for some of the tasks, and inform you on what you should/should not change.\*\*

**Your completed program should output and display something like this:**

**(note: *italicized* words are user input)**

Welcome to the Number Guessing Game!

I have generated a random number between 1 and 100. Please guess what the number is.*50*

Your guess is too low!

You have 6 more guesses.*75*

Your guess is too high!

You have 5 more guesses.*63*

You've guessed the correct number!

Play again? (y/n)*n*

You managed to guess a total of 1 numbers correctly.

Thank you for playing!