

EGR 121 Spring 2022
Programming Assignment #2
Due Date: April 8, 2022

Instructions:

Create a program called "Guess a Number"

The objective of game is for the user to guess the "winning number" from a number range in the fewest amount of guesses. Your program will use a random number generator to generate the "winning number". First, the program should ask the USER to select a difficulty level: easy, medium or difficult. The difficulty level will determine the range of numbers to the user will guess from.

"easy" has a range of 1-10

"medium" has a range of 1-50

"hard" has a range of 1-100

If the user attempts to select a level different from any listed above then reject the input and force the user to select the difficulty level again until they select one of the three above.

After the user selects the difficulty level the game begins.

The user will enter a number (a guess) between a given range i.e.(easy level, 1-10). You will need to count the number of guesses the user makes. Your program will respond to the User's guess in three ways:

1. Your program will inform the user if the guess was correct or incorrect.
2. If the guess is incorrect then inform the user if their guess was either "too low" or "too high" to help guide the user to the correct number.
3. Once the user correctly guess the right number you should output to the terminal a message containing the "winning number" and the number of attempts it took the user to guess the right number.

Requirements:

- Write a separate function *"generateWinningNumber(difficulty level)"* to randomly generate the winning number based on the difficulty level.
- Use a *do while* loop to force the use to enter the correct difficulty level
- Use a *do while* loop to allow the user to keep guessing until they get the winning number.

Hints:

- Switch statement could be useful with respect to difficulty level