

Cot 3011 Project 3 --- More Chapters 5 and 6 --- Repetition and Selection

Due: Tuesday February 11 before 5 PM late. (Late submissions before 5 PM February 12.)

Objective:

Write a C program that allows the user to play a guessing game. Your program will randomly select an integer between 1-100. The user will then begin guessing numbers. After each guess your program should display a message to the user indicating one of three things:

- 1) let them know they won
- 2) tell them to guess lower
- 3) tell them to guess higher.

When they guess the number correctly print a message indicating how many guesses they required.

Finally, print a message to let them know how they did.

- 1) If they used 3 or less attempts, tell them something very nice.
- 2) If they used 4 to 6 attempts, tell them they're not too bad.
- 3) If they used more than 6 attempts tell them to try a different algorithm.

Allow Multiple Games to be played

When the user completes one guessing game, ask them if they would like to play another. Let them play as many games as they like. When they choose to quit, display the following information:

Number of games played.

Average number of guesses per game.

Sample Run:

```
You are guessing a number between 1 and 100
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```
Please enter your guess now -- 50
Too low, please guess higher.
Please enter your guess now -- 75
Too low, please guess higher.
Please enter your guess now -- 87
Too low, please guess higher.
Please enter your guess now -- 92
Too high, please guess lower.
Please enter your guess now -- 89
Wow, that's it!
```

```
You needed 5 guesses to get the correct answer, not too bad.
```

Style/Format

Be sure to include appropriate documentation.

Be sure to format your code as discussed in class. For example, curly braces should line up and all blocks of code should be indented.

Project Submission:

Submit your project using the eLearning dropbox. Notice that there is a dropbox for late submissions.

For this project simply submit the file containing your source code (.c).