**Project Three**

For this project you will create a guessing game. The computer will randomly (think) of a number between 1 and a number entered by the player, then ask the player to try to guess the number. If the number is incorrect (does not match the computer’s number) the program should ask the player to try again. You should validate the user’s input and if invalid require a new entry until it is valid.

The player will then continually guess numbers until the player guesses the computer’s number. If the player’s number is higher than the computer’s number the program will let the user know that it is too high; likewise for too low. The game ends when the numbers match. At the end of the game, the program should print a congratulatory message containing the number. In addition, print the following information: the number of guesses it took the player to guess the correct number, how many guesses were too high and how many were too low. Ask the user if they want to play again. Continue playing until the user indicates they do not want to continue.

Add comments throughout and the pseudocode at the top.

Submit your .java file and a cropped screenshot of your running program showing all program interactions by email. The project is considered submitted at the time it arrives in my inbox.

Note: be sure to do your own work, start early, develop incrementally, test often, and use systematic debugging. Do not copy answers from other sources.

Grading

|  |  |  |
| --- | --- | --- |
| Game compiles/runs | 25 |  |
| Game works correctly for all test cases | 45 | Test 3: 15 points |
| ~~Pseudo Code~~ | ~~15~~ |  |
| Comments throughout | 10 |  |
| Grammatically correct results | 5 |  |
| Program runs until user stops | 15 |  |

Test1: 100 ,,,

Test2: 1

Test3: -10 max, then 10 max, then guess of -2, then guess of 5, …

Test4: 0