Rob Navarro Assignment 3 (Group Part)

**Understanding:** The main purpose of this assignment is to create a program that has the user pick a number for another user to guess. The program helps the user picking the answer find the answer by telling them if their guess is too high or too low. This process continues until the user correctly guesses the number.

The new techniques that will be used for this assignment will be relationship operators, if/else statements, loops. The relationship operators are necessary in order to compare the originally value picked by the user and the guesses that the second user is inputting. These values will be compared by using a set of if/else statements that will check the relationship between the actual value and the guess, and then choose a path based on the relationship. A while loop will be used so that the guessing user can continue to guess until they guess the correct value. Once the correct value is found the while loop will end, which will also allow the program to end.

**Testing Plan:**

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| **Pick a positive number and have the first guess be a negative number.** | **The program should say that the number is “higher” and then guide the user until they guess the correct number.** |
| **Pick a positive number and have the first guess be higher than the than the picked number.** | **The program should say that the number is “lower” and should guide the user until they guess the correct number.** |
| **Pick a positive number and have the first guess be a positive number but lower than the picked number.** | **The program should say that the number is “higher” and then guide the user until the guess the correct number.** |
| **Pick a negative number and have the first guess be a negative number that is lower than the number that was picked.** | **The program should say that the number is “higher” and then guide the user until the guess the correct number.** |
| **Pick a negative number and have the first guess be a negative number that is higher than the number that was picked.** | **The program should say that the number is “lower” and should guide the user until they guess the correct number.** |
| **Pick a negative number and have the first guess be 0.** | **The program should say that the number is “lower” and should guide the user until they guess the correct number.** |
| **Pick a positive number and have the first guess be 0.** | **The program should say that the number is “higher” and then guide the user until the guess the correct number.** |

**Design:**

Pseudo Code:

Prompt the user with “Enter the number for the player guess.”

Set guess counter to 0

While user Guess = False

Ask the player to “Enter your guess”

If guess > userNumber

Print “lower”

Add 1 to the guess counter

Else if guess < userNumber

Print “higher”

Increase guess counter by 1

Else

userGuess = True

Increase guess counter by 1

Print “You guessed it in \_ tries” where \_ is the value of guess counter.