CMPS 2010 Lab 3

Spring 2024

Part 1 (lab3-1.cpp)

Write a number guessing game that meets the following requirements:

1. Generate a random number between -10 and 10 and store it as an **integer**. Do not forget to seed rand() !
2. Use <u>relational operators</u> and <u>logical operators</u> to give the user **AT LEAST 4 CLUES** about the number.
3. Ask the user to guess the number and store it as an **integer**.
4. Use <u>relational operators</u> and <u>logical operators</u> to notify the user if their guess was correct or incorrect.
5. Output the correct answer.
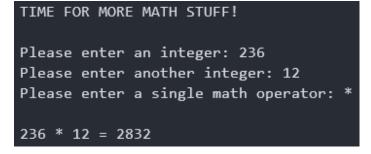
The output might look something like this:

```
**************************************************
*            WELCOME TO THE GUESSING GAME!        *
**************************************************

The number is positive
The number is even
The number is between -3 and 3 (inclusive)

 GUESS THE NUMBER!: 2

Correct!
The number was 2.
```

Part 2 (lab3-2.cpp)

Write a math program that meets the following requirements:

1. Ask the user for two numbers and store them as **integers**.
2. Ask the user for a single math operator (+ - * / %) and use **cin.get()** to save the operator as a **character**.
3. Use a **switch statement** to check which operator the user chose.
4. Complete the math operation using the numbers provided and output the results.
5. The **default** case of the switch statement should notify the user that they did not enter a valid operator.

The final output should look something like this:

```
TIME FOR MORE MATH STUFF!

Please enter an integer: 236
Please enter another integer: 12
Please enter a single math operator: *

236 * 12 = 2832
```

Run this command from your <u>lab3</u> folder to submit your work.

```
/home/fac/paul/s/submit.sh
```