# CS1050 – Lab 2

## Spring 2019

### Concepts to Practice

- Simple input/output
- Integer variables
- Arithmetic operators
- Extend Prelab 2

### Submission Information

Submit this assignment by following the instructions given by your TA. SUBMIT ONLY the .c file (no a.out or executable file is required). All of the lab assignments must be submitted before the end of the lab using the lab code given by the TA.

Use the following submit command:

submit <class> <assignment> <filename>

For example:

submit CS1050 LAB_2 m-lab2.c

Filename must be: *sectionletter-lab2.c* (include your respective lab section), e.g., m-lab2.c

### Description

For the lab assignment, write a C program that reads in two integer numbers from user input. The first integer may be any integer and should be called A. The second integer may be any integer other than zero and should be called B. If the user inputs zero for the second integer, print an error message and ask the user to enter the second integer again.

Print the following:

- Print the values of A and B.
- Print the value of A and B added together.
- Print the value of A minus B.
- Print the value of A and B multiplied together.
- Print the value of A divided by B.
- Print the integer remainder of A divided by B.
- **BONUS**: You can optionally print which number has the larger absolute value for bonus points.

## Sample Output 1 (bold case shows user input)

```
jer676@tc-m610-login-node623:>compile m-lab2.c
jer676@tc-m610-login-node623:>./a.out
Enter 2 integers separated by spaces: 7 -7


*** Initial values ***
A = 7
B = -7

*** Calculated values ***
A plus B = 0
A minus B = 14
A times B = -49
A divided by B = -1
A divided by B remainder = 0
BONUS: A=7 and B=-7 so the absolute values are the same
```

## Sample Output 2 (bold case shows user input)

```
jer676@tc-m610-login-node623:>compile m-lab2.c
jer676@tc-m610-login-node623:>./a.out
Enter 2 integers separated by spaces: -23 0

The 2nd integer may not be zero.  Please enter it again: 3


*** Initial values ***
A = -23
B = 3

*** Calculated values ***
A plus B = -20
A minus B = -26
A times B = -69
A divided by B = -7
A divided by B remainder = -2
BONUS: A=-23 has the larger absolute value
```

# Guidelines for Grading Lab 2
# 40 Points Possible (+5 points Bonus)

## General

If your program does not compile, or produce any input/output then your lab will receive a grade of **zero points**.

**5 points**: Header, comments, and general coding style.
**5 points**: Reading the two inputs correctly from the user using scanf along with the correct messages.
**5 points**: Making sure there is no division by zero.
**25 points**: Performing the arithmetic operations (5 for each).
**5 points [BONUS]**: Finding the larger number in absolute value and printing it.