

## COP3275 Spring 2016 Project 1

Due Date : 01/20/2016 11:55pm

This project covers the fundamentals of C and formatted input/output. (The first three chapters of textbook)

We provide you a code snippet and a Makefile. A makefile is a text file that helps build your program. It's useful when you have a bunch of source files rely on complex dependent libraries to build your binary. Basically what you need to do is type "make" in shell and it automatically builds your binary. For this project, however, you're not required to modify the makefile. Just leave the way it is and only modify the source code. But keep in mind that makefile is useful and it's important in advanced programming.

You only need to modify the project1.c file we give to you.

```
#include <stdio.h>

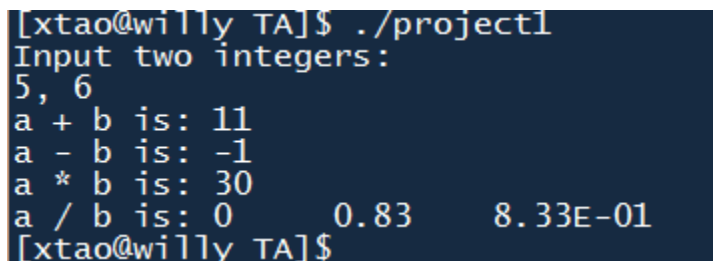
int main(void){

    //Add your own code here.

    return 0;

}
```

You need to take in two numbers a and b, separated by a comma and output the a+b, a-b, a\*b and a/b. An example is provided:



```
[xtao@willy TA]$ ./project1
Input two integers:
5, 6
a + b is: 11
a - b is: -1
a * b is: 30
a / b is: 0      0.83      8.33E-01
[xtao@willy TA]$
```

In this example, you take in two integers and output the result. For the last line of a/b, the three numbers are integer division result of a/b, float division result of a/b and float division result of a/b in scientific format. We mentioned in class that two integers division would give you a round down result. So 5/6 gives you 0. In order to get the correct division result, you will first store the number a into a floating number, i.e. float c = a; then perform operations of c/b for the last two output. You need to keep only two digits after the dot for these two output.

If you don't have linux environment, you can try to use an IDE or online compiler to test whether your program works the way it is. When using an IDE, generally a window would pop out, display the result, and closes itself if no error happens. This means you probably only notice a window come out without observing the correct output for a decent long time. You may insert a breakpoint to show the result.