

CSC 130: Introduction to Computer Science

Lab One

Objectives:

To create comments in a program
To define and initialize variables
Prompt a user for input and accept input from the keyboard
To develop simple arithmetic expressions
To print output to the screen

Assignment:

You will create a program called **LastNameFirstInitialLab1**.

1. Go under the line in the program that is package lastnameFirstinitiallab1. Add the import statement needed to be able to get input.
2. Add a blank line and then write a **documentation comment (javadoc comment)** containing the integrity policy statement. You can find this in Canvas: **Modules > Help Files**. Under the statement, but still in the block, type your first and last name for the signature, press Tab and type the date. You will not need to use underlining.
3. Add a blank line and then add a **line comment** that displays the words: Lab One
4. Add a blank line and then add a **block comment (paragraph comment)** that has the following two lines:
Your first and last name
The course name (CSC 130, Sec #) // Sec # will be your section #.

The comments using my name look like this:

```
package kikuchiLab1;

import java.util.Scanner;

/**
 *
 * My words and actions will reflect Academic Integrity.
 * I will not cheat or lie or steal in academic matters.
 * I will promote integrity in the UNCG community.
 * Christine Kikuchi    08/04/2021
 */

// Lab One

/*
    Christine Kikuchi
    CSC 130, Sec #
*/

public class KikuchiCLab1 {
```

5. Under the line that is `public static void main(String[] args) {`
add a print line that displays the words Lab One
6. Add two more print lines to print your name and course name with section #.
7. Add a blank line and then print out the program information as shown in the sample (see page3). **Hint:** To print a blank line, use `System.out.println();`
8. Add a blank line and then define the variables shown in the input and output columns of the defining diagram. The variables will be initialized to have the values of zero. All of the variables will be integers.
9. Add a blank line and then ask the user to enter values for the Number_One and Number_Two, using two separate input lines.
10. Calculate and print the sum, product, and difference of the two numbers.
11. Print out the sum, product, and difference as shown in the sample.

Notes:

- The program's output will use the variables. (**Please use the variable names shown in the defining diagram**)
- Do not worry about formatting the numbers.
- Use the sample to see what your program needs to look like. Use the same verbiage.

Defining Diagram

Input	Processing	Output
Number_One, Number_Two	Define & initialize numbers	Sum, Difference, Product
	Calculate Sum, Difference, Product	
	Display Sum, Difference, Product	

Algorithm

NumberPlay

```

Output words Lab One
Output programmers' name
Output words CSC 130, Sec #
Get Number_One
Get Number_Two
Calculate Sum = Number_One + Number_Two
Calculate Product = Number_One * Number_Two
Calculate Difference = Number_One - Number_Two
Output Sum
Output Product
Output Difference

```

END

To Submit this lab:

In Canvas, upload the Java file to the assignment. This will be the file called
LastNameFirstInitialLab1.java

Notes:

- Do not go above the objectives of the assignment. I will not expect to see any selection, iteration, or special formatting for example.
- Since you will be receiving input, you will need to import the Scanner class.
- Make sure your program uses proper indentation and wise use of whitespace. You can select Source from the menu and then select Format. This will automatically help with indentation and some whitespace issues. However, check it yourself afterward to be sure it is as readable as possible.
- The grading rubric is at the end of the assignment.

SAMPLE RUN SCREENS

First time running the program (Variable values are shown as *bold italics*)

Lab One
Christine Kikuchi
CSC 130, Sec #

This program will define and initialize two numbers.
The user will be asked to enter the two numbers.
The program will then do the calculations to show you
the sum, product, and difference of the two numbers.

Enter a whole number: **5**
Enter another whole number: **3**

The sum of **5 + 3 = 8**
The difference of **5 - 3 = 2**
The product of **5 * 3 = 15**

Second time running the program (Variable values are shown as bold italics)

Lab One
Christine Kikuchi
CSC 130, Sec #

This program will define and initialize two numbers.
The user will be asked to enter the two numbers.
The program will then do the calculations to show you
the sum, product, and difference of the two numbers.

Enter a whole number: **112**
Enter another whole number: **250**

The sum of **112 + 250 = 362**
The difference of **112 - 250 = -138**
The product of **112 * 250 = 28000**