# Hands-on Experiment # 2 : Worksheet

Section\_\_\_\_1\_\_\_\_\_\_ Date\_\_\_\_\_\_\_27 Jan 2020\_\_\_\_\_\_\_\_\_\_

No more than 3 students per one submission of this worksheet.

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In this lab, you should be able to write a program, compile, and run your program. You should be able to use simple mathematic operations to find the correct answer.

## Part A: Write a simple calculation program

1. Assign three double values to *a, b,* and c, all of which are coefficient in the quadratic equation, ax2+bx+c=0.
2. Find the answer of the equation. Assume that there exists solutions of a, b, and c.

List the source code of you program below.

A screen shot of a smart phone

Description automatically generated

Insert the screenshot of the output below.

A close up of a logo

Description automatically generated

## Part B: Change your data type

1. Use your program from Part A. But this time, change your data type to int for all variables, a, b, and c.
2. Check the result and guess the reason of the strange results.

Insert the screenshot of the output below.

A close up of a logo

Description automatically generated

The reason for these results is that Math.pow and Math.sqrt returns values which are doubles but the program is trying to convert them to integers, resulting in errors.

## Part C: Try to play with String

1. Assign a string “Hello” to variable *s1*
2. Add a string “ World” to s1, store the result in *s2*
3. Add a statement *s3=s1;*
4. Add a string “ Java” to *s3,* store the result in *s1*

Guess the value of *s1, s2,* and *s3*.

s1 = Hello Java  
s2 = Hello World  
s3 = Hello

Print the actual results obtained from the program.

A close up of a logo

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