# Lab - Java - Scanner and File I/O

# **Overview**

Write code that performs input/output operations. You will need to use the keyboard, console, and files.

## Part 1

Write a program that will do the following:

- 1. Read in two numbers from the user.
- 2. Multiply those numbers together.
- 3. Print out the result.

Note: Use a formatted string to show the result.

## Part 2

Modify the program so that it writes the result to a file instead of the screen (first number, second number, and result)

# Part 3

Modify the program so that it reads the two numbers from a file instead of the keyboard. You will need to manually create an input file that contains the two numbers.

#### Part 4

Modify the program so that it keeps reading data from the input file until it reaches the end of file. You will need to add more data to the input file. Hint: There needs to be a loop.

### Part 5

Modify the program so that output data appears in columns. Using printf with columns (not tabs) to format the output.

1st column – First number 2nd column – Second number 3rd column – Result of multiplication

## Part 6

Modify the output so that there are column headers above each column.

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