| | Computer Science Department/College of Engineering and Computer Science

CSc 020: Programming Concepts and Methodology II (Fall 2016)

Lab 2 – Writing a simple Java program |
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Objective:

This lab is to introduce you to the jGRASP environment and to help you become familiar with some of the basic concepts in Java.

Overview:

In this lab you are to write a simple Java program to prompt a user for two N-digit integers (where N is ranged from 1 to 4) and print the product of the two integers in the following form when N=3 digits. You might consider to work on a specific case where N = 3 (See example below) first and then generalize this solution to other N values once you are finished the case where N = 3. If a user enters a value ouside of the range (i.e N = 6 with a first number is 123456 and a second number is 654321), your program will display an error and allow this user to try again.

```
          123
  X       246
  --------------------
          738
          492
      246
  --------------------
       30258
```

Students are welcome to write the program from afresh. However, if there is a need for hints, please refer to the pseudo code (PrintMultipOfNDigits.java) provided in SacCT.

Activities:

Analyze the steps required to compute the output lines, using the above example as your reference. Design your program, code, and test it.

Deliverables:

(1) Demonstrate your program's execution to your instructor.

(2) Uploaded your final java program (in text) and its ouput (in PDF or MS Doc) to SacCT. Additionally, using a debugger (learned from your lab 1) and set a breakpoint at the location where the final product was computed, do a screen capture of this debugged final value and attached this along with your deliverables.

Note: To earn a full mark in all of your CSC 20 labs, please be sure to include your name, date, and the program's description in the header section.