**CSC 210: LAB ASSIGNMENT 1: EXCEPTIONS**

1. Consider the following question and the answer given:

Write a complete Java program that prompts the user for two nonnegative integer numbers. Your program should handle bad input data.

**Answer:**

**import java.util.\*;**

**public class GetNumbers2**

**{**

**public static void main(String args[]) throws InputMismatchException**

**{**

**Scanner stdin = new Scanner(System.in);**

**System.out.print("Enter the first non-negative number: ");**

**int firstNumber = stdin.nextInt();**

**System.out.print("Enter the second non-negative number: ");**

**int secondNumber = stdin.nextInt();**

**System.out.println("Your numbers are " + firstNumber + "and " + secondNumber);**

**}**

**}**

1. Compile and execute the program with some negative numbers and observe what happens
2. Include an **if** statement to test if any of the two inputs is –ve and throw an InputMismatchException in the body of the **if** statement. Compile and execute with some –ve inputs and observe what happens.
3. Revise the program above to use a try/catch block to handle the InputMismatchException.
4. Define an exception class called NegativeNumberException. The class should have a constructor with no parameters. If an exception is thrown with this zero-argument constructor, getMessage should return “Negative Number Not Allowed!” The class should also have a constructor with a single parameter of type String. If an exception is thrown with this constructor, then getMessage returns the value that was used as an argument to the constructor. Write a driver program to test your exception class.
5. Define an exception class called DiskDriveNotReady. The class should have a constructor with no parameters. If an exception is thrown with this zero-argument constructor, getMessage should return “Disk Drive Not Ready!” The class should also have a constructor with a single parameter of type String. If an exception is thrown with this constructor, then getMessage returns the value that was used as an argument to the constructor.