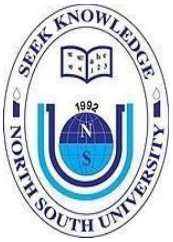

CSE 215L: Programming language II Lab
Faculty: Dr. Mohammad Rashedur Rahman (RRn)
Sec: 09
Lab-16 [Exception Handling], Summer-2020
Lab Instructor: Md. Mustafizur Rahman

Objective:

- To understand exception handling and its implementation

Tasks:

1. Write a program that creates an integer array of size 100 and initializes it with random values:
   int a = (int) (Math.random() * 100);
   The program then takes an integer from the user, use it as an index and tries to print the corresponding element of that array. If the index is out of array size, the program should catch it and display an appropriate message. If the index number is valid, then try to divide the corresponding number of that index by any integer and print that result. Also, try to catch the necessary exception if it tries to divide by zero. Finally, print the line “Program Ends”.

2. Write a program that takes 10 positive integers from the user and prints the sum. If any negative value is entered, the program should catch it as an exception and display “Input positive integer only”. The program must continue taking input until it gets 10 positive integers.

3. Create a **Triangle** class. Now create a user-defined exception class named **IllegalTriangleException** class that extends **Exception**. If the sum of any two sides is not greater than the third side, the **Triangle** class should **throw IllegalTriangleException.**

4. Create a user-defined exception class named **MyException** which extends **Exception**. Now in your main class which contains the main method, create another static method named getSquareRoot() to compute the square root of any given number. From the main method, call the getSquareRoot() method and it **throws** exception of **MyException** class. The exception is thrown when we pass a negative number as parameter for computing square root. The method from which getSquareRoot() is called, will handle the exception.