SLIIT
Discover Your Future

BSc (Hons) in Information Technology
Year 2

Tutorial Week 5

IT2030 – Object Oriented Programming **Semester 1, 2020**

Exercise 1

1) Write a simple program that calculates the square root of a number (`Math.sqrt()`). Identify the exception that can occur and write code to handle this using a try catch block.

2) The Following code would generate some Exceptions. Identify the Exception. Extend the code and handle all Exceptions.

```
class Exception03 {
  static int divide(String s1[]) { int x,y;
    x = Integer.parseInt(s1[0]);
    y = Integer.parseInt(s1[1]);
    return x/y;
  }
  public static void main (String args[ ]) {
    String a[] = {"10", "0"};
    System.out.println(a[0]+"/"+a[1]+" = "+divide(a));
  }
}
```

2) The Following code would generate some Exceptions. Identify the Exception. Extend the code and handle all Exceptions.

See the following exceptions.

https://docs.oracle.com/javase/8/docs/api/java/util/InputMismatchException.html
https://docs.oracle.com/javase/8/docs/api/java/lang/ArithmeticException.html
https://docs.oracle.com/javase/8/docs/api/java/lang/ArrayIndexOutOfBoundsException.html

```
import java.util.Scanner;

class Main {
  public static void main(String args[]) {

    Scanner myscanner = new Scanner(System.in);
    int size;
    int count = 0;
    int total = 0;
    float avg;
    System.out.println("Enter size of data : ");
    size = myscanner.nextInt();


     int data[] = new int[size];
     int index;

     System.out.print("Enter Index : ");
     index = myscanner.nextInt();
     while (index != -1) {
         System.out.print("Enter a marks : ");
         data[index] = myscanner.nextInt();
         count++;
         total += data[index];
         System.out.print("Enter Index : ");
         index = myscanner.nextInt();
     }
     for (int r=0; r< size; r++)
       System.out.println(r + " - " + data[r]);

     avg = (float) total/count;

     System.out.println("Average : " + avg);
  }
}
```