

Faculty of Computing

IT1120 – Introduction to Programming Year 1 Semester 1 (2024)

Tutorial 10

Question 1

- a) Write a Java program that checks if a mark entered from the keyboard is greater than or equal to 0 and less than or equal to 100.
 - Use assert to verify the condition. If the mark is not in the given range, program should throw an **Assertion Error** with the message 'Invalid Mark'. If not display 'Mark is Validated'.
- b) Modify the above program to have a method called **validateMark()** and use assert inside the method.

```
import java.util.Scanner;
public class ETute10Q1 {
  public static void main(String[] args) {
     // Create a Scanner object for input
     Scanner k = new Scanner(System.in);
     System.out.println();
     System.out.print("Enter the mark (0 - 100): ");
     int mark = k.nextInt();
     validateMark(mark);
  }
  // A Method without a return value, hence the return type is set to 'void'
  public static void validateMark(int mark) {
     // Assertion - To check if the Mark is in the Valid Range
     assert (mark >= 0 && mark <= 100) : "Invalid Mark";</pre>
     System.out.println();
     System.out.println("Mark is Validated");
  }
}
```