SLIIT UNI
THE KNOWLEDGE UNIVERSITY

Faculty of Computing

Year 1 Semester 1 (2024)

IT1120 – Introduction to Programming Lab Sheet 10

Question 1

a) Write a Java program that checks if a mark entered from the keyboard is within the valid range of 0 to 100 (inclusive).

Use assertions to verify that the mark is within the specified range. If the mark is outside this range, the program should throw an **Assertion Error** with the message ***'Invalid Mark'***. If the mark is valid, display the message ***'Mark is Validated'***.

b) Modify the above program to determine the Grade.

If the mark is valid, the program should then determine the corresponding letter grade: 'A' for marks 75 and above, 'B' for marks 60 to 74, 'C' for marks 50 to 59, 'D' for marks 40 to 49, and 'F' for marks below 40.

Use assertions to verify the grade assigned. If the grade assigned is incorrect, the program should throw an **Assertion Error** with the message ***'Incorrect Grade Assigned'***.

Save the file inside **'Lab 10'** folder as: **ITxxxxxxxxLab10Q1.java**

Replace 'ITxx xxx xxx' of the filename, with your own Student ID.

Expected Output: