SLIIT UNI
THE KNOWLEDGE UNIVERSITY

Faculty of Computing

Year 1 Semester 1 (2024)

IT1120 – Introduction to Programming   Lab Sheet 04

Question 1 (Tutorial 3 – Q3)

Write a Java program to input a number from the keyboard and display whether it is Positive or Negative. If user input 0, display number is Zero.

Save the file inside '**Lab 4**' folder as: **ITxxxxxxxxLab4Q1.java**

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

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4598]
(c) Microsoft Corporation. All rights reserved.

C:\Users\vidan\Desktop\Lab 4>javac ITxxxxxxxxLab4Q1.java

C:\Users\vidan\Desktop\Lab 4>java ITxxxxxxxxLab4Q1
Enter a number: 7
The number is: Positive

C:\Users\vidan\Desktop\Lab 4>java ITxxxxxxxxLab4Q1
Enter a number: -3
The number is: Negative

C:\Users\vidan\Desktop\Lab 4>java ITxxxxxxxxLab4Q1
Enter a number: 0
The number is Zero
```

Question 2 (Tutorial 3 – Q4)

Final mark of a module is calculated by considering two components, exam marks and lab submission marks. The percentages taken from each component as the final mark.

Write a Java program to:

- Input the exam marks (given out of 100) and the lab submission marks (given out of 100) from the keyboard

- Validate the entered marks (should be greater than or equal to 0 and less than or equal to 100)

- Input the percentage taken from the exam mark and the lab submission mark from the keyboard

- Validate the values (entered percentages should add to 100)

- Calculate the final exam marks

Save the file inside '**Lab 4**' folder as: **ITxxxxxxxxLab4Q2.java**

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

Expected Output:

Question 3

Write a Java program to Q1 using **Ternary Operator (? :)** to check if the number is Positive or Negative or Zero.

Save the file inside '**Lab 4**' folder as: **ITxxxxxxxxLab4Q3.java**

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

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4598]
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C:\Users\vidan\Desktop\Lab 4>javac ITxxxxxxxxLab4Q3.java

C:\Users\vidan\Desktop\Lab 4>java ITxxxxxxxxLab4Q3
Enter a number: 37
The number is: Positive

C:\Users\vidan\Desktop\Lab 4>java ITxxxxxxxxLab4Q3
Enter a number: -52
The number is: Negative

C:\Users\vidan\Desktop\Lab 4>java ITxxxxxxxxLab4Q3
Enter a number: 0
The number is: Zero
```