SLIIT UNI
THE KNOWLEDGE UNIVERSITY

Faculty of Computing

Year 1 Semester 1 (2024)

IT1120 – Introduction to Programming Lab Sheet 08

Question 1 (Tutorial 7 – Q1)

a) Write a Java program to input numbers via keyboard to an array called ***myArray***. Size of the array is 5.

Print the contents of the ***myArray*** in the reverse order you entered.

Save the file inside '**Lab 8**' folder as: **ITxxxxxxxxLab8Q1A.java**

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

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4780]
(c) Microsoft Corporation. All rights reserved.

C:\Users\junius.a\Desktop\Lab 8>javac ITxxxxxxxxLab8Q1A.java

C:\Users\junius.a\Desktop\Lab 8>java ITxxxxxxxxLab8Q1A
Enter 5 Numbers:
Enter Number 1: 20
Enter Number 2: 40
Enter Number 3: 60
Enter Number 4: 80
Enter Number 5: 100

Array in Reverse Order:
100 80 60 40 20
```

b) Create another array called ***evenArray***. Find the even numbers of array ***myArray*** and store them in ***evenArray***.

Save the file inside '**Lab 8**' folder as: **ITxxxxxxxxLab8Q1B.java**

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

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4780]
(c) Microsoft Corporation. All rights reserved.

C:\Users\junius.a\Desktop\Lab 8>javac ITxxxxxxxxLab8Q1B.java

C:\Users\junius.a\Desktop\Lab 8>java ITxxxxxxxxLab8Q1B
Enter 5 Numbers:
Enter Number 1: 10
Enter Number 2: 11
Enter Number 3: 12
Enter Number 4: 13
Enter Number 5: 14

myArray Contents:
10 11 12 13 14

evenArray Contents:
10 12 14 0 0
```

Question 2 (Tutorial 7 – Q2)

Write a Java program to add the content of array A and B and store it in a new array called C.

int A[5] = 10, 20, 30, 40, 50;

int B[5] = 34, 67, 12, 89, 12;

int C[5];

Calculate A+B and store in Array C

Save the file inside '**Lab 8**' folder as: **ITxxxxxxxxLab8Q2.java**

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

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4780]
(c) Microsoft Corporation. All rights reserved.

C:\Users\junius.a\Desktop\Lab 8>javac ITxxxxxxxxLab8Q2.java

C:\Users\junius.a\Desktop\Lab 8>java ITxxxxxxxxLab8Q2

A Array Contents:
10 20 30 40 50

B Array Contents:
34 67 12 89 12

C Array Contents (A + B):
44 87 42 129 62
```

Question 3 (Tutorial 7 – Q3)

Write a Java program to create an integer array of size 6.

Input numbers from the keyboard and store 6 positive numbers in the array.

If a negative number or zero is entered, display an error message.

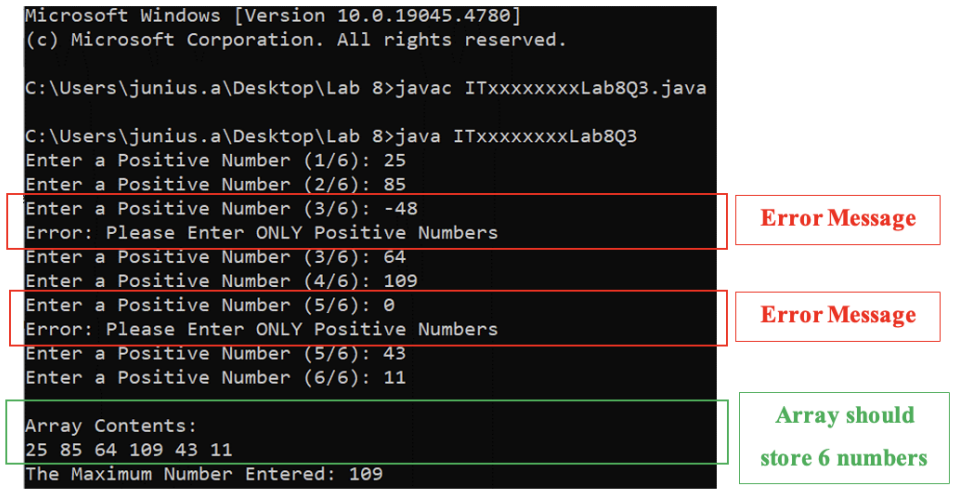
Finally, find the **maximum number**.

Note: A total of 6 positive numbers should be stored in the array

Save the file inside '**Lab 8**' folder as: **ITxxxxxxxxLab8Q3.java**

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

Expected Output:



Question 4 (Tutorial 7 – Q4)

Write a Java program to insert Student IDs of 8 students and store in an array called ***studentsArray***. If a negative number or zero is entered, display an error message.

Then ask user to enter a Student ID from the keyboard and find whether the Student ID is available in the array:

- Display message *'Student is Available'* if the student is found.
- Display message *'Student is Not Available'* if the student is not found.

Save the file inside '**Lab 8**' folder as: **ITxxxxxxxxLab8Q4.java**

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

Expected Output: