LAB REPORT

CET 3640 – OL30

(SOFTWARE FOR COMPUTER CONTROL)

LAB#4

JAVA PROGRAM WITH ARRAY

Name: Puja Roy

Date: 3/23/22

Due Date: 3/26/22

DESCRIPTION OF THE LAB:

In this lab, I wrote a java program in Eclipse by declaring an array size of 11 numbers to allow the user to input 10 numbers that are between 10 and 100. The program verifies whether the input number ranges between 10 and 100. If a user enters a number that is not between 10 and 100, the for and while loop in the Java program alerts and prompts the user to enter a number that is between 10 and 100. On the other hand, if the user enters a repeated number, then the program alerts the user that the number has already been entered in the array and then displays the inputted numbers of the user. After that, the program prompts the user to input a number between 10 and 100 again. Once the user inputs 10 numbers between 10 and 100, the program executes the output of the numbers in the array that the user inputted.

```java
1  import java.util.Scanner;
2
3  //NAME: Puja Roy
4  //DATE: 3/23/22
5  public class lab4 {
6
7      public static void main(String[] args) {
8          // TODO Auto-generated method stub
9          int num[]=new int[11]; // Array of 11 num size
10             int temp=0,count,k=0;
11             Scanner s=new Scanner(System.in);
12             for(int i=0;i<11;i++) // This loop is a statement to enter 10 numbers ranging between 10 and 100
13             {
14             count=0; // This increments to verify if a duplicate number is found
15             System.out.print("Enter number:");
16             temp=s.nextInt();
17             while(temp<10 || temp>100){ // This loop prompts the user to enter numbers between 10 and 100
18             System.out.println("number should be b/w 10 and 100");
19             System.out.print("Enter number:");
20             temp=s.nextInt();
21             }
22             for(int j=0;j<k;j++) //Compares input to numbers in the array
23             {
24             if(temp==num[j])
25             {
26             count++;
27             System.out.print(temp+" has already been entered ");
28             }
29             }
30             if(count==0)
31             {
32             num[k]=temp; // The input is stored into the array unless a duplicate is found
33             k++; // k is used to indicate number of values that are stored into the array
34             }
35             for(int l=0;l<k;l++)
36             {
37             System.out.print(num[l]+" "); // Prints the elements in the array
38             }
```

<terminated> lab4 [Java Application] C:\Users\pujar\.p2\pool\plugins\org.eclipse.jus

```
Enter number: 10
10
Enter number: 20
10 20
Enter number: 30
10 20 30
Enter number: 40
10 20 30 40
Enter number: 50
10 20 30 40 50
Enter number: 60
10 20 30 40 50 60
Enter number: 3
number should be b/w 10 and 100
Enter number: 70
10 20 30 40 50 60 70
Enter number: 80
10 20 30 40 50 60 70 80
Enter number: 10
10 has already been entered 10 20 30 40 50 60 70 80
Enter number: 36
10 20 30 40 50 60 70 80 36
Enter number: 39
10 20 30 40 50 60 70 80 36 39
```