

Lab 10

Method

Name-Surname.....Student No.....Section (LAB).....

Lab instruction

1. Open VS code or JAVA IDE in your computer.
2. Create a new java class name TestMax.java, then write the following code.

```
public class TestMax {
    /** Main method */
    public static void main(String[] args) {
        int i = 5;
        int j = 2;
        int k = max(i, j); // Invoke max method
        System.out.println("The maximum between " + i +
            " and " + j + " is " + k);
    }

    /** Return the max between two numbers */
    public static int max(int num1, int num2) {
        int result;

        if (num1 > num2)
            result = num1;
        else
            result = num2;

        return result; // Return result
    }
}
```

3. Compile and run program. See the output of the program.
4. If we add `int x = 9;` and `int y = 7;` in to the main method. Modify the program to finding the maximum number.

*****CHECK POINT #1*****

3. Write the program to convert the temperature Fahrenheit to Celsius or Celsius to Fahrenheit. The program shall receive the input from user to choose the formula in the table below. Apply the method to convert the temperature and the program will repeat after give the answer to user. User can input the sentinel value for stop and exit the program

input	Formula
c	$^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times \frac{5}{9}$
f	$^{\circ}\text{F} = \frac{9 \times ^{\circ}\text{C}}{5} + 32$

*****CHECK POINT #2*****

4. Write a method that returns the distance of two points using the following method header. Create the program that can receive the input from user and show the result of calculation.

```
public static double distance(double x1, double y1, double
x2, double y2)
```

The formula for computing the distance between two points is

$$\sqrt{(x1 - x2)^2 + (y2 - y1)^2}$$

*****CHECK POINT #3*****

5. Write a java program that can receive the integer number from user and print the text of number on the screen. Use the void method to display the text of number. ***The output of the program may reverse digit of number, it will very nice if you can print the output same as the input.

Example output

```
Enter number: 21354
```

```
222222
```

```
    22
```

```
    22
```

```
    22
```

```
222222
```

```
1111
```

```
    11
```

```
    11
```

```
    11
```

```
    11
```

```
333333
```

```
    33
```

```
33333
```

```
    33
```

```
333333
```

```
5555555
```

```
55
```

```
5555555
```

```
    55
```

```
5555555
```

```
44  44
```

```
44  44
```

```
4444444
```

```
    44
```

```
    44
```

*****CHECK POINT #4*****

-----End of Lab-----