## Computer Programming I ( LAB - 6 )

Program Name	Description
BSLab6a.java	Write a java program that prints the following messages to the screen

### Output

Java is a computer programming language that is:

- Concurrent,
- Class-based,
- Object-oriented, and
- Specifically designed to have as few implementation dependencies as possible.

Program Name	Description
BSLab6b.java	Write a Java program which:  Defines <b>two</b> integer variables (varBase & varHeight).  Give each variable a value.  Displays the following messages:

## Output

Base..: <Value-of-varBase>
Height: <Value-of-varHeight>

Area of the triangle is: <Result-of-calculation>

 ${\tt NOTE:}$  The formula to calculate the area of a triangle is:

Area = 
$$\frac{\text{Height x Base}}{2}$$

## Computer Programming I (LAB - 6)

Program Name	Description
BSLab6c.java	Write a Java program that prints the month of the year based on a number.  The program should validate the content of a variable and display the month of the year based on the value of the variable, the output should be:

### Output

Month: <value-of-the-variable> - <month-of-the-year>

### For example:

If the value of the variable is 9, then this should be the output:

Month: 9 - September

If the value of the variable is not a valid month, the program should display:

#### NOT A VALID MONTH

Program Name	Description
BSLab6d.java	Write a Java program that displays the name of a season based on a month.  The program should validate the content of a variable, and the season associated with the month, based on the following table:  Summer: December to February. Autumn: March to May. Winter: June to August. Spring: September to November.  The output should be:
	The output should be:

## Output

Season: <Name-of-the-season>

#### For example:

If the value of the variable is 9, then this should be the output:

Season: Spring

If the value of the variable is not a valid month, the program should display:

NOT A VALID MONTH

# Computer Programming I (LAB - 6)

Program Name	Description
BSLab6e.java	Using a <b>while</b> loop, write a Java program which displays the following pattern:
Output	
30 29 28 27 2 20 19 18 17 16	35 34 33 32 31 25 24 23 22 21

Program Name	Description
BSLab6f.java	Using only one <b>for</b> loop, write a Java program which counts how many numbers are divisible by 10, 11, 12, 13, 14 and 15 between 10 and 500, and displays the result to the screen.
Output	
Divisible by 11 Divisible by 12 Divisible by 13 Divisible by 14	<pre>: <qty-of-numbers-divisible-by-10> : <qty-of-numbers-divisible-by-11> : <qty-of-numbers-divisible-by-12> : <qty-of-numbers-divisible-by-13> : <qty-of-numbers-divisible-by-14> : <qty-of-numbers-divisible-by-15></qty-of-numbers-divisible-by-15></qty-of-numbers-divisible-by-14></qty-of-numbers-divisible-by-13></qty-of-numbers-divisible-by-12></qty-of-numbers-divisible-by-11></qty-of-numbers-divisible-by-10></pre>

# Computer Programming I (LAB - 6)

Program Name	Description
BSLab6g.java	Write a program that creates, and stores 10 numbers. Each element of the array should be populated with a random number between 256 and 512 (inclusive). The program should calculate the sum and the average of the elements. It should also produce the following output:  Note: The program should use only one loop to perform both tasks

## Output

496 349 407 338 287 485 418 432 277 313

**Sum:** 3802

**Avg:** 380

NOTE: The numbers above are examples. Your program will probably produce a

different output.

Program Name	Description
BSLab6h.java	<ol> <li>Write a Java program which:</li> <li>Defines two variables, populates them with random numbers between 1 and 50, and displays them to the screen;</li> <li>Defines a list of five numbers, populates them with random numbers between 1 and 50, and displays them to the screen;</li> <li>Displays a message to the screen based on the following rules:         <ul> <li>"You won the list then displays:</li></ul></li></ol>
Outrout	

## **Output**

1st Number: 27 2nd Number: 9

List..: 34 25 9 49 11

Result: Nearly there!