

## Lab 2- Problem Set – OOP(Java)

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1. Write a Java to calculate the area and perimeter of a Rectangle, and display the result.

*Hints: The area of a Rectangle = length  $\times$  width, perimeter =  $2 \times (\text{length} + \text{width})$ .*

2. Write a Java to calculate the VAT (Value Added Tax) over an amount

*Hints: VAT = 15% of the amount*

3. Write a Java to find whether a given number is odd or even

*Hints: use IF-ELSE*

4. Write a Java to find the largest number from three given numbers

*Hints: use IF-ELSE*

5. Write a Java to print all the odd numbers between 10 to 100

*Hints: use LOOP & IF-ELSE*

6. Write a Java to search an element from an array

*Hints: use LOOP, IF-ELSE & ARRAY*

7. Print the following shapes

*Hints: use NESTED LOOP*

*	1 2 3	A
**	12	B C
***	1	D E F

8. Declare a 2D array like following and print the following shapes

*Hints: use 2D ARRAY & NESTED LOOP*

The array to declare				Shapes to print	
1	2	3	A	1 2 3	A
1	2	B	C	12	B C
1	D	E	F	1	D E F