

Object Oriented Programming (Assignment-1)

[Instructions for submission: See in the Last Page of this document]

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1. Write a program that would print the information (name, year of joining, salary, address) of three employees by creating a class named 'Employee'. The output should be as follows:

Name	Year of joining	Address
Raton	1995	64C- WallsStreat
Sami	2020	68D- WallsStreat
Johny	2019	26B- WallsStreat

2. Write a program to print the following rectangle using Loop.



The diagram shows a right-angled triangle of asterisks on the left, with the text 'Java Patterns' and 'How to make this TRIANGLE' on the right.

3. Write a Java program that does the following:

- a. Display a prompt and ask the user to enter his or her name.
- b. Display a prompt and ask the user to enter three integers, called a,b,c respectively. These numbers will represent the coefficients of a quadratic equation:

$$ax^2 + bx + c$$

- c. Print the formula they have entered on the screen.
- d. Next print to the screen the derivative of the equation as a formula. For a quadratic equation above, the derivative will be $2ax + b$. Your output should fill in the actual values for a and b and perform any necessary multiplications.
- e. Next ask the user to enter a value for x. x can be any number, not just an integer, so you should choose an appropriate type for the variable.
- f. Print to the screen the result of

$$2ax + b$$

A sample run of this program should look as follows:

- ⇒ Please enter your name: Zahid
- ⇒ Now enter 3 numbers: 3 5 6
- ⇒ The formula you have entered is: $4x^2 + 5x + 6$
- ⇒ The derivative of the equation is $8x+5$
- ⇒ Enter a value for x: 4
- ⇒ The derivative at the above point is: 37.0

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Instructions for submission:

- ❖ Write your ID, Name and Section.
- ❖ Uploaded documents (pdf, jpeg, png)