



Java Basics

Training Assignment


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RECORD OF CHANGES

No	Effective Date	Change Description	Reason	Reviewer	Approver
1	20/May/2020	Create a new assignment	Create new	DieuNT1	VinhNV

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	CODE:	Assignment01_Opt1
	TYPE:	Long
	LOC:	N/A
	DURATION:	90 MINUTES

Java OOP(I)

Objective

- Java Class and Objects, Java Methods, Java Constructor, Java Strings, Java Access Modifiers, Java this keyword, Java final keyword, Java Recursion, Java instanceof Operator

Business needs

- TBD

Working requirements

- Working environment: Eclipse IDE.
- Delivery: Source code, deployment and testing, reviewing evident packaged in a compress archive.

Product architecture

- N/A

Technologies

The product implements one or more technology:

- Java basics
- Java OOP (I)

Stored Data

- N/A

Exercise 1:

Create a class named 'Student' with String variable 'name' and integer variable 'roll_no'. Assign the value of roll_no as '2' and that of name as "John" by creating an object of the class Student.

Exercise 2:

Write a program to print the area of a rectangle by creating a class named 'Area' taking the values of its length and breadth as parameters of its constructor and having a method named 'returnArea' which returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

Exercise 3:

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
Robert	1994	64C- WallsStreat
Sam	2000	68D- WallsStreat
John	1999	26B- WallsStreat

Exercise 4:

Write a program by creating an 'Employee' class having the following methods and print the final salary.

- 1 - 'getInfo()' which takes the salary, number of hours of work per day of employee as parameter
- 2 - 'AddSal()' which adds \$10 to salary of the employee if it is less than \$500.
- 3 - 'AddWork()' which adds \$5 to salary of employee if the number of hours of work per day is more than 6 hours.

Exercise 5:

Create a class called 'Matrix' containing constructor that initializes the number of rows and number of columns of a new Matrix object. The Matrix class has the following information:

- 1 - number of rows of matrix
- 2 - number of columns of matrix
- 3 - elements of matrix in the form of 2D array

-- THE END --