OOP using JAVA – Practical 03

ID – 28865

Exercise 3-1: Develop a code for the following scenario.

“An encapsulated class contains three variables to store Name, Age and Salary of the employee. Evelop getters and setters to set and get values . Develop a test class to test your code.”

Now modify the same code by trying to replace the setters using a constructor.

**package com.company.employeetext;**

**public class Employee {**

**private String name;**

**private int age;**

**private double salary;**

**public void setName(String name){**

**this.name = name;**

**}**

**public String getName(){**

**return name;**

**}**

**public void setAge(int age){**

**this.age = age;**

**}**

**public int getAge(){**

**return age;**

**}**

**public void setSalary(double salary){**

**this.salary = salary;**

**}**

**public double getSalary(){**

**return salary;**

**}**

**}**

**package com.company.employeetext;**

**public class EmployeeText {**

**public static void main(String[] args) {**

**Employee e1 = new Employee();**

**e1.setName("Tharuka");**

**e1.setAge(23);**

**e1.setSalary(20000.00);**

**System.out.println("Employee Name = " + e1.getName());**

**System.out.println("Employee Age = " + e1.getAge());**

**System.out.println("Employee Salary = " + e1.getSalary())**

**}**

**}**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**package com.company.employeetext;**

**public class Employee {**

**private String name;**

**private int age;**

**private double salary;**

**public Employee(String name,int age,double salary){**

**this.name = name;**

**this.age = age;**

**this.salary = salary;**

**}**

**public String getName(){**

**return name;**

**}**

**public int getAge(){**

**return age;**

**}**

**public double getSalary(){**

**return salary;**

**}**

**}**

**package com.company.employeetext;**

**public class EmployeeText {**

**public static void main(String[] args) {**

**Employee e1 = new Employee("Tharuka",23,20000.00);**

**System.out.println("Employee Name = " + e1.getName());**

**System.out.println("Employee Age = " + e1.getAge());**

**System.out.println("Employee Salary = " + e1.getSalary());**

**}**

**}**

Exercise 3-2: Code for the last example that we have discussed during the class. We need the following Output. (Use Netbeans code generation option where necessary)

Employee Name: xxxxx (Use setter to set and getter to retrieve)

Basic Salary: xxxx (Use setter to set and getter to retrieve)

Bonus: xxxx (You may use the constructor to pass this value)

Bonus Amount: xxxxx (Develop a separate method to calculate Bonus amount. Bonus amount is the total of Bonus and Basic Salary)

E.g.

Employee Name: Bogdan

Basic Salary: 50000

Bonus: 10000

Bonus Amount: 60000

**package com.company.employeetext;**

**public class Employee {**

**private String EmpName;**

**private double BSalary,Bonus,BonusAmount;**

**public void setEmpName(String EmployeeName){**

**EmpName = EmployeeName;**

**}**

**public void setBSalary(double BasicSalary){**

**BSalary = BasicSalary;**

**}**

**public String getEmpName(){**

**return EmpName;**

**}**

**public double getBSalary(){**

**return BSalary;**

**}**

**public Employee(double Bonus){**

**this.Bonus = Bonus;**

**}**

**public double getBonus(){**

**return Bonus;**

**}**

**public void BonusAmount(){**

**BonusAmount = BSalary + Bonus;**

**System.out.println("BonusAmount is " + BonusAmount);**

**}**

**}**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

package com.company.employeetext;

public class EmployeeText {

public static void main(String[] args) {

Employee e1 = new Employee(8000.00);

e1.setEmpName("Tharuka");

System.out.println("Employee Name is " + e1.getEmpName());

e1.setBSalary(40000.00);

System.out.println("Employee Salary is " + e1.getBSalary());

System.out.println("Bonus is " + e1.getBonus());

e1.BonusAmount();

}

}