

Java Assignment – 2

Code:

```
Employee.java PermanentEmployee.java ContractorEmployee.java Main.java
import java.lang.Comparable;

public class Employee {
    private String employeeID;
    private String employeeName;
    private String employeeDepartment;

    public Employee(String employeeID,String employeeName,String employeeDepartment) {
        this.employeeID = employeeID;
        this.employeeName = employeeName;
        this.employeeDepartment = employeeDepartment;
    }

    public String getemployeeID() {
        return employeeID;
    }

    public void setemployeeID() {
        this.employeeID = employeeID;
    }

    public String getemployeeName() {
        return employeeName;
    }

    public void setemployeeName() {
        this.employeeName = employeeName;
    }

    public String employeeDepartment() {
        return employeeDepartment;
    }

    public void setemployeeDepartment() {
        this.employeeDepartment = employeeDepartment;
    }

    public String toString() {
        return String.format("%-10s %-20s %-15s",this.employeeID, this.employeeName, this.employeeDepartment);
    }

    public int compareTo(Employee o) {
        int eid=Integer.parseInt(this.employeeID);
```

```
Employee.java PermanentEmployee.java ContractorEmployee.java Main.java
2 public class PermanentEmployee extends Employee{
3     private double monthlySalary;
4     private double pf;
5     private double tax;
6
7     public PermanentEmployee(String employeeID, String employeeName, String employeeDepartment, double monthlySalary ) {
8         super(employeeID, employeeName, employeeDepartment);
9         this.monthlySalary=monthlySalary;
10        this.pf=0.15*monthlySalary;
11        this.tax=(this.monthlySalary+this.pf);
12    }
13
14    public double getMonthlySalary() {
15        return monthlySalary;
16    }
17
18    public void setMonthlySalary(double monthlySalary) {
19        this.monthlySalary = monthlySalary;
20    }
21
22    public double getPf() {
23        return pf;
24    }
25
26    public void setPf() {
27        this.pf = 0.15*monthlySalary;
28    }
29
30    public double getTax() {
31        return tax;
32    }
33
34    public void setTax(double tax) {
35        this.tax = (monthlySalary+pf)*0.28;
36    }
37
38    public void calculateTax() {
39        tax =(monthlySalary+pf)*0.28;
40        System.out.println("Tax for Employee: "+getemployeeID()+ " "+getemployeeName()+ " : "+tax);
41    }
42
43    public String toString() {
44        return super.toString()+String.format("%-15s %-15s",this.monthlySalary,this.pf);
45    }
```

```

Employee.java PermanentEmployee.java ContractorEmployee.java Main.java
2 public class ContractorEmployee extends Employee{
3     private int Contractperiod;
4     private double contractAmount;
5     private double tax;
6
7     public ContractorEmployee(String employeeID, String employeeName, String employeeDepartment, int Contractperiod, double contractAmount) {
8         super(employeeID, employeeName, employeeDepartment);
9         this.Contractperiod=Contractperiod;
10        this.contractAmount=contractAmount;
11        this.tax=contractAmount*0.28;
12    }
13
14    public int getContractperiod() {
15        return Contractperiod;
16    }
17
18    public void setContractperiod(int Contractperiod) {
19        this.Contractperiod = Contractperiod;
20    }
21
22    public double getContractAmount() {
23        return contractAmount;
24    }
25
26    public void setContractAmount(double contractAmount) {
27        this.contractAmount = contractAmount;
28    }
29
30    public double getTax() {
31        return tax;
32    }
33
34    public void setTax(double tax) {
35        this.tax = contractAmount*0.28;
36    }
37
38    public void calculateTax() {
39        tax = contractAmount*0.28;
40        System.out.println("Tax for the Employee: "+getEmployeeID()+" "+getEmployeeName()+" : "+tax);
41    }
42
43    public String toString() {
44        return super.toString()+String.format("%-15s %-15s",this.Contractperiod,this.contractAmount);
45    }

```

```

Employee.java PermanentEmployee.java ContractorEmployee.java Main.java
import java.util.Scanner;

public class Main {
    public static void main(String args[]) {
        Employee emp;
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter Employee ID: ");
        String empID = sc.nextLine();

        System.out.println("Enter Employee Name: ");
        String empName = sc.nextLine();

        System.out.println("Enter Employee Department: ");
        String empDepartment = sc.nextLine();

        int eid = Integer.parseInt(empID);
        if((eid)%2==0) {
            System.out.println("Enter Employee Monthly Salary: ");
            double empSalary=sc.nextDouble();
            emp=new PermanentEmployee(empID, empName, empDepartment, empSalary);
        }
        else {
            System.out.println("Enter Employee Contract Period: ");
            int empContractPeriod = sc.nextInt();

            System.out.println("Enter Employee Contract Salary: ");
            double empcontractAmount=sc.nextDouble();
            emp = new ContractorEmployee(empID, empName, empDepartment, empContractPeriod, empcontractAmount);
        }

        String employeeDetails = emp.toString();
        System.out.println("Employee Details: ");
        System.out.println(employeeDetails);
        sc.close();
    }
}

```

Output:

```
Problems @ Javadoc Declaration Console
<terminated> Main (1) [Java Application] C:\Users\amaan\Downloads\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (06-Jan-2022, 5:58:29 pm -
Enter Employee ID:
1
Enter Employee Name:
Jay
Enter Employee Department:
Sales
Enter Employee Contract Period:
2
Enter Employee Contract Salary:
20000
Employee Details:
1      Jay      Sales      2      20000.0
```