

**EXP NO: 3**

**DATE:23/7/19**

## **JAVA APPLICATION TO GENERATE PAY SLIP**

### **Aim:**

To develop a java application in order to generate a pay slip for the employee with their gross and net salary.

### **Requirement:**

Create a package payroll. Develop a java application with Employee class with emp\_name, emp\_id, address, mail\_id, mobile\_no as members. Inherit the classes, Programmer, Assistant Professor, Associate Professor and Professor from Employee class. Add basicPay (BP) as the member of all the inherited classes with 97% of BP as DA, 10 % of BP as HRA, 12% of BP as PF, 0.1% of BP for staff club fund. Generate pay slips for the employees with their gross and net salary.

### **Algorithm:**

Step1: create class employee with required attributes members function and constructor in package payroll .

Step2: create class programmer inherit employee with required attributes , methods in package payroll.

Step3: create class assistant professor, associate professor and professor inheriting from class employee with required attributes, methods and constructor in package payroll.

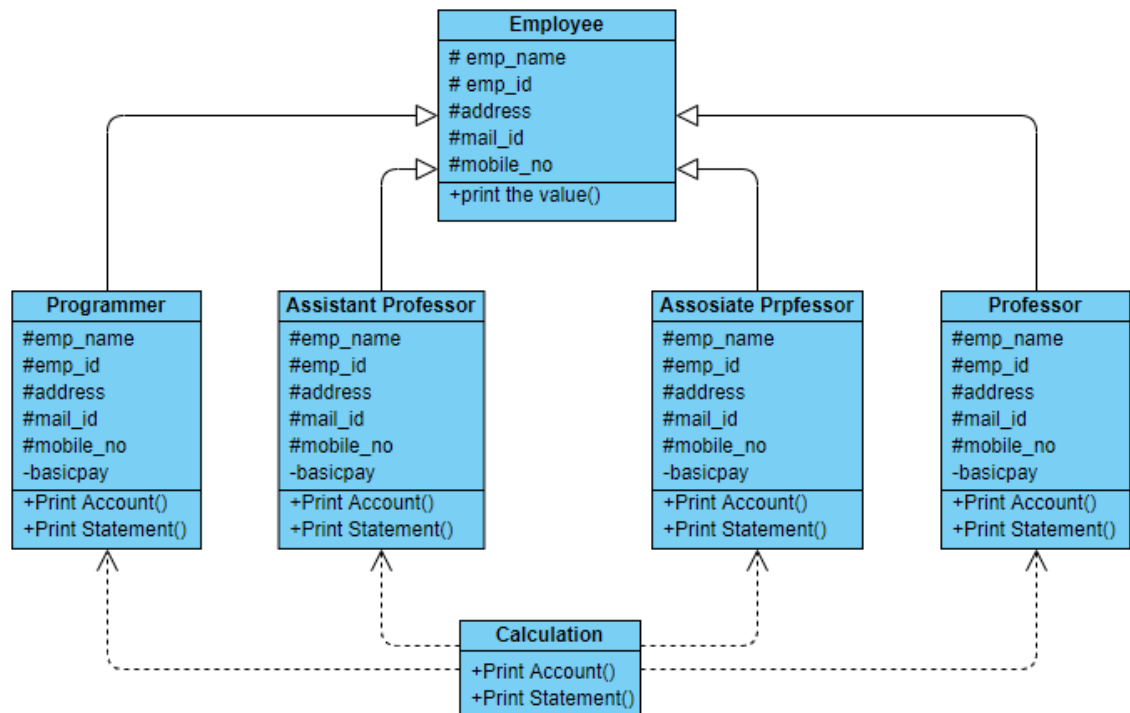
Step4: create class payslip with static main function.

Step5: create object for employee, programmer, assistant professor, associate professor and professor.

Step6: initialise object with value passed through constructor .

Step7: display the data.

## Class Diagram:



## Program:

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\*/

package Payment;

public class Employee {

    public String emp\_name;

    private long emp\_id;

    protected String address;

    public String mail\_id;

```
protected long mobile_no;
```

```
public Employee()
```

```
{
```

```
    emp_name="lokesh";
```

```
    emp_id=10031;
```

```
    address="not given";
```

```
    mail_id="not given";
```

```
    mobile_no=9841127485l;
```

```
}
```

```
public Employee(String n,long id,String ad,String mail,long num)
```

```
{
```

```
    emp_name=n;
```

```
    emp_id=id;
```

```
    address=ad;
```

```
    mail_id=mail;
```

```
    mobile_no=num;
```

```
}
```

```
public void printEmployee()
```

```
{
```

```
    System.out.println("Name:"+emp_name);
```

```
    System.out.println("ID:"+emp_id);
```

```
    System.out.println("Address:"+address);
```

```
    System.out.println("Email:"+mail_id);
```

```
    System.out.println("Mobile:"+mobile_no);
```

```
}
```

```
}
```

```
/**
```

```
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```

```
 */
```

```
package Payment;
```

```

public class Programmer extends Employee{
    private double basic_pay;
public Programmer()
    {
        basic_pay=0;
    }
public Programmer(String n,long id,String ad,String mail,long num,double bp)
{
    super(n,id,ad,mail,num);
    basic_pay=bp;
}
public void printAccount()
{
    System.out.println("BASIC_PAY:"+basic_pay);
}

public void printEmployee()
{
    super.printEmployee();
    double da,hra,pf,clubfund,grosssalary,netsalary,deduction;
    da=0.97*basic_pay;
    hra=0.1*basic_pay;
    pf=0.12*basic_pay;
    clubfund=0.1*basic_pay;
    deduction=pf+clubfund;
    grosssalary=basic_pay+da+hra;
    netsalary=grosssalary+deduction;

    System.out.println("DA:"+da);
    System.out.println("HRA:"+hra);
    System.out.println("PF:"+pf);
}
}

```

```
System.out.println("CLUB FUND:"+clubfund);  
System.out.println("DEDUCTION:"+deduction);  
System.out.println("NETSALARY:"+netsalary);  
System.out.println("GROSS SALARY:"+grosssalary);
```

```
}
```

```
}
```

```
/** * Created By Avinash Raja
```

```
package Payment;
```

```
public class AssistantProfessor extends Employee{
```

```
    private double basic_pay;
```

```
    public AssistantProfessor()
```

```
    {
```

```
        basic_pay=0;
```

```
    }
```

```
    public AssistantProfessor(String n,long id,String ad,String mail,long num,double bp)
```

```
    {
```

```
        super(n,id,ad,mail,num);
```

```
        basic_pay=bp;
```

```
    }
```

```
    public void printAccount()
```

```
    {
```

```
        System.out.println("BASIC_PAY:"+basic_pay);
```

```
    }
```

```
    public void printEmpolyee()
```

```
    {
```

```
        super.printEmployee();
```

```
        double da,hra,pf,clubfund,grosssalary,netsalary,deduction;
```

```
        da=0.97*basic_pay;
```

```
        hra=0.1*basic_pay;
```

```

pf=0.12*basic_pay;
clubfund=0.1*basic_pay;
deduction=pf+clubfund;
grosssalary=basic_pay+da+hra;
netsalary=grosssalary+deduction;
System.out.println("DA:"+da);
System.out.println("HRA:"+hra);
System.out.println("PF:"+pf);
System.out.println("CLUB FUND:"+clubfund);
System.out.println("DEDUCTION:"+deduction);
System.out.println("GROSSSALARY:"+grosssalary);
System.out.println("NETSALARY:"+netsalary);

```

```

}

```

```

}

```

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\*/

```

package Payment;

```

```

public class AssistantProfessor extends Employee{

```

```

    private double basic_pay;

```

```

    public AssistantProfessor()

```

```

    {

```

```

        basic_pay=0;

```

```

    }

```

```

    public AssistantProfessor(String n,long id,String ad,String mail,long num,double bp)

```

```

    {

```

```

        super(n,id,ad,mail,num);

```

```

        basic_pay=bp;

```

```

    }

```

```

    public void printAccount()

```

```

    {

```

```

        System.out.println("BASIC_PAY:"+basic_pay);

```

```

    }

    public void printEmpolyee()
    {
        super.printEmployee();
        double da,hra,pf,clubfund,grosssalary,netsalary,deduction;
        da=0.97*basic_pay;
        hra=0.1*basic_pay;
        pf=0.12*basic_pay;
        clubfund=0.1*basic_pay;
        deduction=pf+clubfund;
        grosssalary=basic_pay+da+hra;
        netsalary=grosssalary+deduction;
        System.out.println("DA:"+da);
        System.out.println("HRA:"+hra);
        System.out.println("PF:"+pf);
        System.out.println("CLUB FUND:"+clubfund);
        System.out.println("DEDUCTION:"+deduction);
        System.out.println("GROSSSALARY:"+grosssalary);
        System.out.println("NETSALARY:"+netsalary);
    }
}

/**
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 */

package Payment;

public class AssociateProfessor extends Employee {
    private double basic_pay;

    public AssociateProfessor()
    {
        basic_pay=0;
    }
}

```

```

public AssociateProfessor(String n,long id,String ad,String mail,long num,double bp)
{
    super(n,id,ad,mail,num);
    basic_pay=bp;
}
public void printAccount()
{
    System.out.println("BASIC_PAY:"+basic_pay);
}
public void printEmployee()
{
    super.printEmployee();
    double da,hra,pf,clubfund,grosssalary,netsalary,deduction;
    da=0.97*basic_pay;
    hra=0.1*basic_pay;
    pf=0.12*basic_pay;
    clubfund=0.1*basic_pay;
    deduction=pf+clubfund;
    grosssalary=basic_pay+da+hra;
    netsalary=grosssalary+deduction;
    System.out.println("DA:"+da);
    System.out.println("HRA:"+hra);
    System.out.println("PF:"+pf);
    System.out.println("CLUB FUND:"+clubfund);
    System.out.println("DEDUCTION:"+deduction);
    System.out.println("GROSSSALARY:"+grosssalary);
    System.out.println("NETSALARY:"+netsalary);
}
}

```

/\*\*



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\*/

package Payment;

public class Professor extends Employee {

private double basic\_pay;

public Professor()

{

basic\_pay=0;

}

public Professor(String n,long id,String ad,String mail,long num,double bp)

{

super(n,id,ad,mail,num);

basic\_pay=bp;

} \* Created By Avinash Raja

package Payment;

public class Professor extends Employee {

private double basic\_pay;

public Professor()

{

basic\_pay=0;

}

public Professor(String n,long id,String ad,String mail,long num,double bp)

{

super(n,id,ad,mail,num);

basic\_pay=bp;

}

public void printAccount()

{

System.out.println("BASIC\_PAY:"+basic\_pay);

}

```
public void printEmployee()
{
    super.printEmployee();
    double da,hra,pf,clubfund,grosssalary,netsalary,deduction;
    da=0.97*basic_pay;
    hra=0.1*basic_pay;
    pf=0.12*basic_pay;
    clubfund=0.1*basic_pay;
    deduction=pf+clubfund;
    grosssalary=basic_pay+da+hra;
    netsalary=grosssalary+deduction;
    System.out.println("DA:"+da);
    System.out.println("HRA:"+hra);
    System.out.println("PF:"+pf);
    System.out.println("CLUB FUND:"+clubfund);
    System.out.println("DEDUCTION:"+deduction);
    System.out.println("GROSSSALARY:"+grosssalary);
    System.out.println("NETSALARY:"+netsalary);
}
}
```

```
public void printAccount()
{
    System.out.println("BASIC_PAY:"+basic_pay);
}
public void printEmployee()
{
    super.printEmployee();
    double da,hra,pf,clubfund,grosssalary,netsalary,deduction;
    da=0.97*basic_pay;
```

```

        hra=0.1*basic_pay;
        pf=0.12*basic_pay;
        clubfund=0.1*basic_pay;
        deduction=pf+clubfund;
        grosssalary=basic_pay+da+hra;
        netsalary=grosssalary+deduction;
        System.out.println("DA:"+da);
        System.out.println("HRA:"+hra);
        System.out.println("PF:"+pf);
        System.out.println("CLUB FUND:"+clubfund);
        System.out.println("DEDUCTION:"+deduction);
        System.out.println("GROSSSALARY:"+grosssalary);
        System.out.println("NETSALARY:"+netsalary);
    }
}

```

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\*/

package Payment;

import Payment.Employee;

import Payment.Programmer;

import Payment.AssistantProfessor;

import Payment.AssociateProfessor;

import Payment.Professor;

public class Calculation {

public static void main(String[] args) {

Programmer pro1;

AssistantProfessor asp1;

AssociateProfessor ap1;

Professor p1;

```
        pro1=new
Programmer("divakar",10008,"chennai","diva08@gmail",9841127487,5000);

        asp1=new
AssistantProfessor("shelton",10020,"chennai","shel20@gmail",9841127488,5500);

        ap1=new
AssociateProfessor("charan",10018,"chennai","charan18@gmail",9841127489,6000);

        p1=new
Professor("kishore",10023,"chennai","kishore23@gmail",9841127480,6500);

        pro1.printEmployee();

        asp1.printEmployee();

        ap1.printEmployee();

        p1.printEmployee();

    }

}
```

## output:

Name:divakar  
ID:10008  
Address:chennai  
Email:diva08@gmail  
Mobile:9841127487  
DA:4850.0  
HRA:500.0  
PF:600.0  
CLUB FUND:500.0  
DEDUCTION:1100.0  
NETSALARY:11450.0  
GROSS SALARY:10350.0

Name:shelton  
ID:10020  
Address:chennai  
Email:shel20@gmail  
Mobile:9841127488  
DA:5010.0  
HRA:550.0  
PF:650.0  
CLUB FUND:550.0  
DEDUCTION:1250.0  
GROSSSALARY:11300.0  
NETSALARY:12420.0

Name:charan  
ID:10018  
Address:chennai  
Email:charan18@gmail  
Mobile:9841127489  
DA:5820.0  
HRA:600.0  
PF:720.0  
CLUB FUND:600.0  
DEDUCTION:1320.0  
GROSSSALARY:12420.0  
NETSALARY:13740.0

Name:kishore  
ID:10023  
Address:chennai  
Email:kishore23@gmail  
Mobile:9841127480  
DA:6305.0  
HRA:650.0  
PF:780.0  
CLUB FUND:650.0  
DEDUCTION:1430.0  
GROSSSALARY:13455.0  
NETSALARY:14885.0

## **Result:**

Thus the java console application for currency,distance and time convertor is verified with output