Exp No:	Java Application for Pay Slip Generation
Date:	

AIM:

To develop a java console application to find the gross and net salary using inheritage.

REQUIREMENT:

Develop a java application to create a package payroll and to create the class as employee with emp_name,emp_id,address,mail_id,mobile_no as data members.

Inherit the classes as Programmer, Assistant Professor, Associative Professor, Professor, PaySlip. Add the basic pay as Data Member for these classes.

Create the class Calculation to print the DA, HRA, PF, Staff club fund, Gross salary and Net salary for the inheritage classes.

ALGORITHM:

Step 1: Declare a package Payroll.

Step 2: Declare the class as employee.

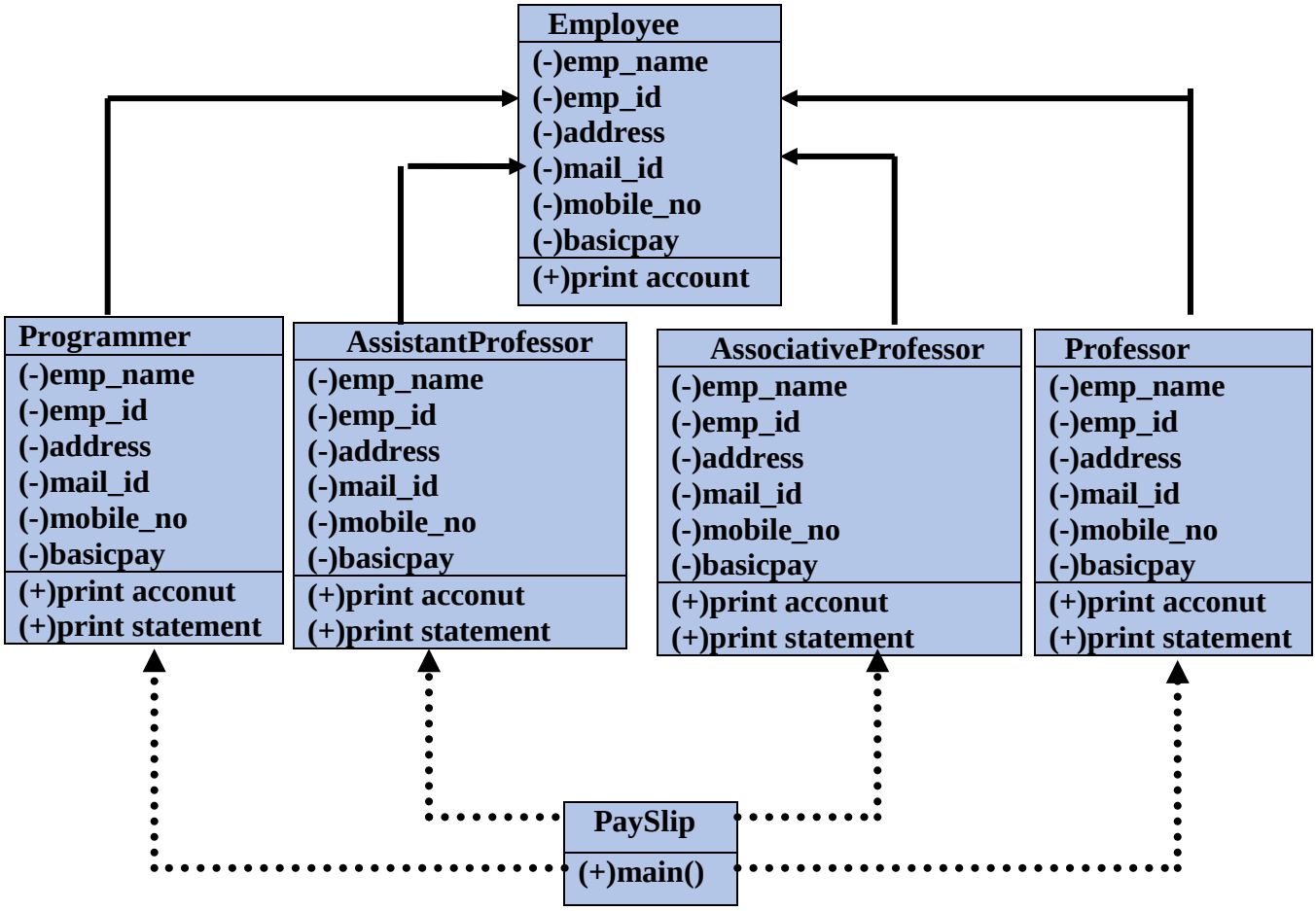
Step 3: Declare a constructor and add the data members.

Step 4: Inherit the classes from the super class and add the data members as basic pay.

Step 5: Calculate the gross salary and net salary on the inheritage.

Step 6: Display the result.

CLASS DIAGRAM:



PROGRAM:

Employee.java

```
package payroll;

public class Employee {
        protected String emp_name;
        protected long emp_id;
        protected String address;
        protected String mail_id;
        protected long mobile_no;

        public Employee ()
        {
                emp_name="noname";
                emp_id=100001;
```

```
            address="not given";
            mail_id="not given";
            mobile_no=80000001;
        }

        public Employee(String n,long id,String ad,String mail,long mo)
        {
            emp_name=n;
            emp_id=id;
            address=ad;
            mail_id=mail;
            mobile_no=mo;
        }

        public void printAccount()
        {
            System.out.println("Name:"+emp_name);
            System.out.println("EMP ID:"+emp_id);
            System.out.println("Address:"+address);
            System.out.println("EMail:"+mail_id);
            System.out.println("Mobile:"+mobile_no);
        }

}
```

AssistantProfessor.java

```
/***** @author Pavan Kalyan
 *  npkr.nvrr@outlook.com
 */
 package payroll;

public class AssistantProfessor extends Employee {
        private double basicpay;


        public AssistantProfessor()
        {
            basicpay=0;
        }
        public AssistantProfessor (String n, long id, String ad, String mail, long mo,
double BP)
```

```
        {
                super (n,id,ad,mail,mo);
                basicpay=BP;
        }
        public void printAccount()
        {

                super.printAccount ();
                System.out.println("Basic pay:"+basicpay);
        }
        public void printStatement()
        {
        double total;
        double total1;
        double total2;
        double total3;
        double gross;
        double net;
        printAccount();


        total=basicpay*0.97;
        total1=basicpay*0.1;
        total2=basicpay*0.12;
        total3=basicpay*0.001;
        gross=total+total1+total2+total3;
        net=gross-total2-total3;
        System.out.printf("Duty Allowance (DA):%2f\n",total);
        System.out.printf("HRA:%2f\n",total1);
        System.out.printf("PF:%2f\n",total2);
        System.out.printf("Staff club fund:%2f\n",total3);
        System.out.printf("Staff salary is:%2f\n",gross);
        System.out.printf("net salary is:%2f\n",net);

        }
}
```

AssociativeProfessor.java

```
package payroll;

public class AssociativeProfessor extends Employee {
```

```
private double basicpay;


        public AssociativeProfessor()
        {
                basicpay=0;
        }
        public AssociativeProfessor (String n, long id, String ad, String mail, long mo,
double BP)
        {
                super (n,id,ad,mail,mo);
                basicpay=BP;
        }
        public void printAccount()
        {

                super.printAccount ();
                System.out.println("Basic pay:"+basicpay);
        }
        public void printStatement()
        {
        double total;
        double total1;
        double total2;
        double total3;
        double gross;
        double net;
        printAccount();


        total=basicpay*0.97;
        total1=basicpay*0.1;
        total2=basicpay*0.12;
        total3=basicpay*0.001;
        gross=total+total1+total2+total3;
        net=gross-total2-total3;
        System.out.printf("Duty Allowance (DA):%2f\n",total);
        System.out.printf("HRA:%2f\n",total1);
        System.out.printf("PF:%2f\n",total2);
        System.out.printf("Staff club fund:%2f\n",total3);
        System.out.printf("Staff salary is:%2f\n",gross);
        System.out.printf("net salary is:%2f\n",net);
```

```
    }
}
```

Programmer.java

```
package payroll;

public class Programmer extends Employee{
    private double basicpay;

    public Programmer()
    {
        basicpay=0;
    }

    public Programmer (String n,long id,String ad, String mail, long mo,double BP)
    {
        super (n,id,ad,mail,mo);
        basicpay=BP;
    }

    public void printAccount()
    {
        super.printAccount ();
        System.out.println("Basic pay:"+basicpay);
    }
    public void printStatement()
    {
    double total;
    double total1;
    double total2;
    double total3;
    double gross;
    double net;
    printAccount();


    total=basicpay*0.97;
    total1=basicpay*0.1;
    total2=basicpay*0.12;
    total3=basicpay*0.001;
    gross=total+total1+total2+total3;
```

```
        net=gross-total2-total3;
        System.out.printf("Duty Allowance (DA):%2f\n",total);
        System.out.printf("HRA:%2f\n",total1);
        System.out.printf("PF:%2f\n",total2);
        System.out.printf("Staff club fund:%2f\n",total3);
        System.out.printf("Staff salary is:%2f\n",gross);
        System.out.printf("net salary is:%2f\n",net);
        }
}
```

Professor.java

```
package payroll;

public class Professor extends Employee {
private double basicpay;


        public Professor()
        {
                basicpay=0;
        }
        public Professor (String n, long id, String ad, String mail, long mo, double BP)
        {
                super (n,id,ad,mail,mo);
                basicpay=BP;
        }
        public void printAccount()
        {

                super.printAccount ();
                System.out.println("Basic pay:"+basicpay);
        }
        public void printStatement()
        {
        double total;
        double total1;
        double total2;
        double total3;
        double gross;
        double net;
        printAccount();
```

```
        total=basicpay*0.97;
        total1=basicpay*0.1;
        total2=basicpay*0.12;
        total3=basicpay*0.001;
        gross=total+total1+total2+total3;
        net=gross-total2-total3;
        System.out.printf("Duty Allowance (DA):%2f\n",total);
        System.out.printf("HRA:%2f\n",total1);
        System.out.printf("PF:%2f\n",total2);
        System.out.printf("Staff club fund:%2f\n",total3);
        System.out.printf("Staff salary is:%2f\n",gross);
        System.out.printf("net salary is:%2f\n",net);

        }
}
```

PaySlip.java

```
package payroll;

public class payslip {
        public static void main (String[]args) {
                Programmer pro;
                AssistantProfessor AssPro;
                AssociativeProfessor AsoPro;
                Professor Prof;
                pro=new
Programmer("Pavan",300001,"chennai","pavan@gmail.com",9000001,600000);
                AssPro=new AssistantProfessor
("Kalyan",600001,"chennai","kalyan@gmail.com",70000001,50000);
                AsoPro=new
AssociativeProfessor("Sumanth",8000001,"nellore","sumanth@gmail.com",700001,7
0000);
                Prof=new Professor
("Reddy",9000001,"kadapa","reddy@gmail.com",2000001,900000);
                pro.printAccount();
                AssPro.printStatement();
                AsoPro.printStatement();
                Prof.printStatement();
        }
}
```

OUTPUT:

Name:Pavan
EMP ID:300001
Address:chennai
EMail:pavan@gmail.com
Mobile:9000001
Basic pay:600000.0
Name:Kalyan
EMP ID:600001
Address:chennai
EMail:kalyan@gmail.com
Mobile:70000001
Basic pay:50000.0
Duty Allowance (DA):48500.000000
HRA:5000.000000
PF:6000.000000
Staff club fund:50.000000
Staff salary is:59550.000000
net salary is:53500.000000
Name:Sumanth
EMP ID:8000001
Address:nellore
EMail:sumanth@gmail.com
Mobile:700001
Basic pay:70000.0
Duty Allowance (DA):67900.000000
HRA:7000.000000
PF:8400.000000
Staff club fund:70.000000
Staff salary is:83370.000000
net salary is:74900.000000
Name:Reddy
EMP ID:9000001
Address:kadapa
EMail:reddy@gmail.com
Mobile:2000001
Basic pay:900000.0
Duty Allowance (DA):873000.000000
HRA:90000.000000
PF:108000.000000
Staff club fund:900.000000
Staff salary is:1071900.000000
net salary is:963000.000000

RESULT:

Thus the java application for generation of pay slip is developed by using inheritage classes.