EX.NO:-3	PAY SLIP GENERATION
DATE:-22-07-19	

AIM:

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

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.

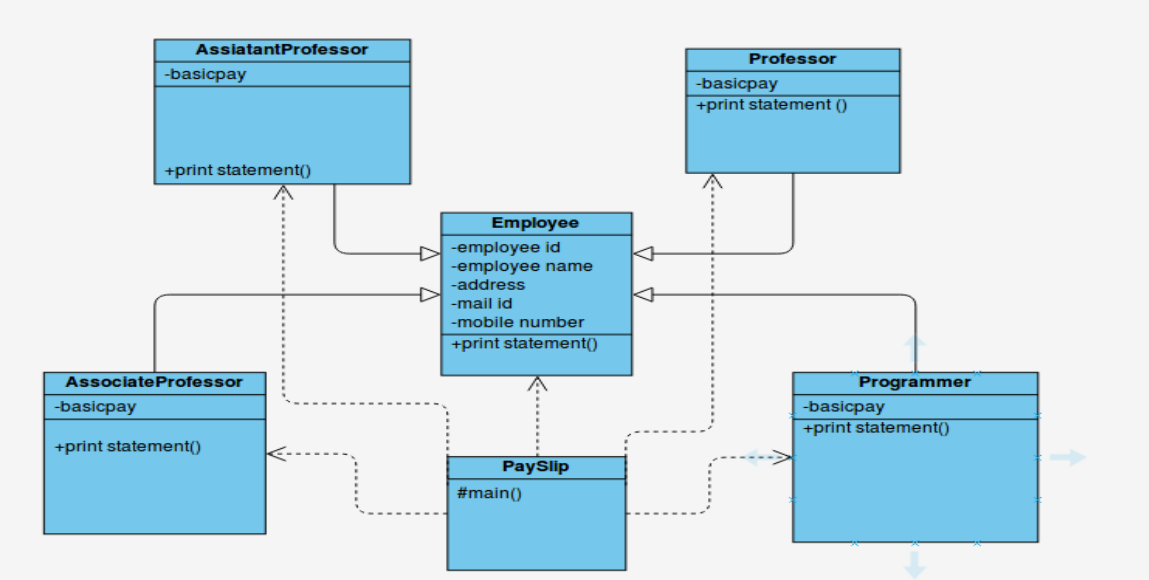
Inherit the classes as programmer,assistantprofessor,associativeprofessor,professor.add the basic pay as data member for these classes.

Create the class calculation to print the DA,HRA,PF,Staff club fund,gross salary and net salary for the inherited classes.

ALGORITHM:

1. Declare a package payroll.
2. Declare the class as employee.
3. Declare a constructor and add the data members.
4. Inherit the classes from the super class and add the data members as basic pay.
5. Calculate the gross salary and net salary on the inheritance.
6. Display the result.

CLASS DIAGRAM:



PROGRAM:

EMPLOYEE:-

```
package payroll;

public class Employee {
    protected String employeename;
    protected long employee_id;
```

```
        protected String address;
        protected String mail_id;
        protected long mobile_no;

        public Employee()
        {
        employeename="noname";
        employee_id=700001;
        address="not given";
        mail_id="not given";
        mobile_no=96000001;
        }
        public Employee(String n,long id,String ad,String mail,long mo)
        {
        employeename=n;
        employee_id=id;
        address=ad;
        mail_id=mail;
        mobile_no=mo;
        }
        public void printEmployee()
        {
        System.out.println("Name:"+employeename);
        System.out.println("Account ID:"+employee_id);
        System.out.println("Address:"+address);
        System.out.println("EMail:"+mail_id);
        System.out.println("Mobile:"+mobile_no);


        }

}

}
```

ASSOCIATE PROFESSOR:

```
 package payroll;


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 no,double bp)
{
super(n,id,ad,mail,no);
Basic_Pay=bp;
}
```

```
public void printEmployee()
{
super.printEmployee();
double DA,HRA,PF,STAFFCLUBFUND,GROSSSALARY,NETSALARY,DEDUCTION;
DA=0.97*Basic_Pay;
HRA=0.1*Basic_Pay;
PF=0.12*Basic_Pay;
STAFFCLUBFUND=10*Basic_Pay;
DEDUCTION=PF+STAFFCLUBFUND;
GROSSSALARY=Basic_Pay+DA+HRA+PF+STAFFCLUBFUND;
NETSALARY=GROSSSALARY-DEDUCTION;

System.out.println("Basic_Pay:"+Basic_Pay);
System.out.println("GROSSSALARY:"+GROSSSALARY);
System.out.println("NETSALARY:"+NETSALARY);
}

}
```

ASSISTANT PROFESSOR:-

```
package payroll;


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 no,double bp)
{
super(n,id,ad,mail,no);
Basic_Pay=bp;
}
public void printEmployee()
{
super.printEmployee();
double DA,HRA,PF,STAFFCLUBFUND,GROSSSALARY,NETSALARY,DEDUCTION;
DA=0.97*Basic_Pay;
HRA=0.1*Basic_Pay;
PF=0.12*Basic_Pay;
STAFFCLUBFUND=10*Basic_Pay;
DEDUCTION=PF+STAFFCLUBFUND;
GROSSSALARY=Basic_Pay+DA+HRA+PF+STAFFCLUBFUND;
NETSALARY=GROSSSALARY-DEDUCTION;

System.out.println("Basic_Pay:"+Basic_Pay);
System.out.println("GROSSSALARY:"+GROSSSALARY);
System.out.println("NETSALARY:"+NETSALARY);
}
```

```
}
```

PROFESSOR:

```
package payroll;

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 no,double bp)
{
super(n,id,ad,mail,no);
Basic_Pay=bp;
}
public void printEmployee()
{
super.printEmployee();

double DA,HRA,PF,STAFFCLUBFUND,GROSSSALARY,NETSALARY,DEDUCTION;
DA=0.97*Basic_Pay;
HRA=0.1*Basic_Pay;
PF=0.12*Basic_Pay;
STAFFCLUBFUND=10*Basic_Pay;
DEDUCTION=PF+STAFFCLUBFUND;
GROSSSALARY=Basic_Pay+DA+HRA+PF+STAFFCLUBFUND;
NETSALARY=GROSSSALARY-DEDUCTION;

System.out.println("Basic_Pay:"+Basic_Pay);
System.out.println("GROSSSALARY:"+GROSSSALARY);
System.out.println("NETSALARY:"+NETSALARY);

}
}
```

PROGRAMMER:-

```
package payroll;

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 no,double bp)
{
super(n,id,ad,mail,no);
Basic_Pay=bp;
}
public void printEmployee()
{
super.printEmployee();
double DA,HRA,PF,STAFFCLUBFUND,GROSSSALARY,NETSALARY,DEDUCTION;
DA=0.97*Basic_Pay;
HRA=0.1*Basic_Pay;
PF=0.12*Basic_Pay;
STAFFCLUBFUND=10*Basic_Pay;
DEDUCTION=PF+STAFFCLUBFUND;
GROSSSALARY=Basic_Pay+DA+HRA+PF+STAFFCLUBFUND;
NETSALARY=GROSSSALARY-DEDUCTION;

System.out.println("Basic_Pay:"+Basic_Pay);
System.out.println("GROSSSALARY:"+GROSSSALARY);
System.out.println("NETSALARY:"+NETSALARY);

}

}
```

PAYSLIP:-

```
package payroll;

import payroll.AssistantProfessor;
import payroll.AssociateProfessor;
import payroll.Employee;
import payroll.Professor;
import payroll.Programmer;
public class Payslip {

public static void main(String[] args) {
Employee emp1;
AssistantProfessor asp1;
AssociateProfessor ap1;
Professor p1;
Programmer pro1;

emp1=new Employee("Tamil",300001,"Chennai","account@gmail.com",90000000001l);

asp1=new AssistantProfessor("Moni",600001,"Chennai","account@gmail.com",7000000001l,
500000.00);

ap1=new
AssociateProfessor("Maari",600001,"Chennai","account@gmail.com",400000001l,200000.00);
```

```
p1=new Professor("Rosi",800001,"Chennai","account@gmail.com",4000000001l,30000.00);

pro1=new Programmer("sobhi",800001,"Chennai","account@gmail.com",4000000001l,40000.00);

emp1.printEmployee();
asp1.printEmployee();
ap1.printEmployee();
p1.printEmployee();
pro1.printEmployee();
}

}
```

OUTPUT:-

```
Name:Tamil
Account ID:300001
Address:Chennai
EMail:account@gmail.com
Mobile:90000000001
Name:Moni
Account ID:600001
Address:Chennai
EMail:account@gmail.com
Mobile:7000000001
Basic_Pay:500000.0
GROSSSALARY:6095000.0
NETSALARY:1035000.0
Name:Maari
Account ID:600001
Address:Chennai
EMail:account@gmail.com
Mobile:400000001
Basic_Pay:200000.0
GROSSSALARY:2438000.0
NETSALARY:414000.0
Name:Rosi
Account ID:800001
Address:Chennai
EMail:account@gmail.com
Mobile:4000000001
Basic_Pay:30000.0
GROSSSALARY:365700.0
NETSALARY:62100.0
Name:sobhi
Account ID:800001
Address:Chennai
EMail:account@gmail.com
Mobile:4000000001
Basic_Pay:40000.0
GROSSSALARY:487600.0
NETSALARY:82800.0
```

RESULT:

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