

EX.NO:3

22-07-19

PAYSLIP GENERATION

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.

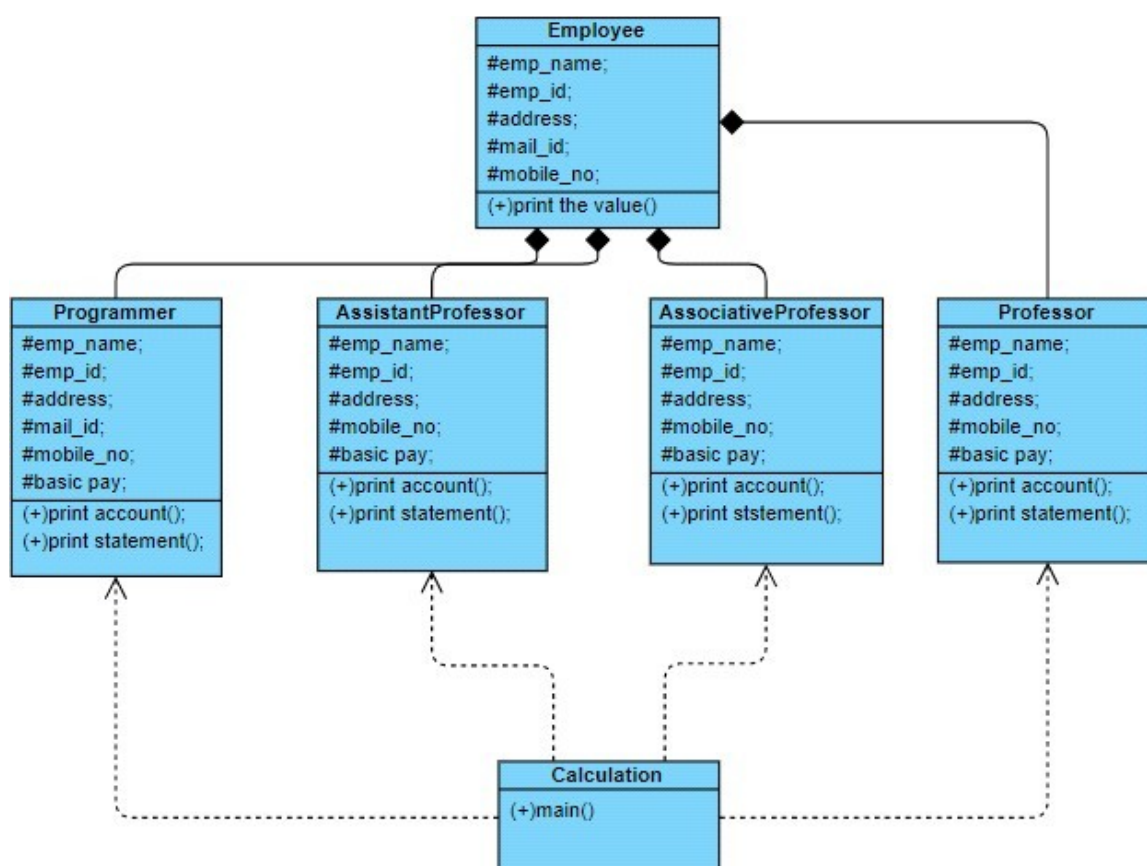
Inherit the classes as programmer,assistant professor,associative professor,professor.add the basic pay as data member for these classes.

create the class calculation to print the DA,HRA,PF,Staff club fund,gross salary and net salary for the inheritance 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.

CLASSDIAGRAM:



PROGRAM:

```
/**
 * program to represent employee details
 * creted brasapalle Neha reddy
 * 21221710049
 */

package payroll;

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

    public Employee ()
    {
        emp_name="name";
        emp_id=100001;
        address="not given";
        mail_id="not given";
        mobile_no=800000001;
    }

    public Employee(String n, String ad,double id,double mo, String mail)
    {
        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);
    }
}

package payroll;

public class PaySlips {
    public static void main(String[] args)
    {
        Employee emp;
        Programmerpro;
        AssistantProfessorAssistProf;
        AssociateProfessor AssocProf;
        Professor prof;
```

```

emp=new Employee("a","chennai",100001,974643,"a@gmail.com");
pro=new Programmer("f","chennai",100002,547955,"b@gmail.com",80000);
AssistProf=new AssistantProfessor("c","chenani",100003,879457,"c@gmail.com",50000);
AssocProf=new AssociateProfessor("d","chennai",100004,798464,"d@gmail.com",60000);
prof=new Professor("e","chennai",10005,879544,"e@gmail.com",70000);
emp.printAccount();
prof.printStatement();
pro.printStatement();
AssistProf.printStatement();
AssocProf.printStatement();

```

```

    }

```

```

}

```

```

package payroll;

```

```

public class Professor extends Employee { private
    double basicpay;
    public Professor()
    {
        basicpay=0;
    }
    public Professor(String n, String ad,double id,double mo, String mail, double bp)
    {
        super(n,ad,id,mo,mail); basicpay=bp;
    }
    public void printEmployee()
    {
        super.printAccount(); System.out.println("basicpay:"+basicpay);}
    public void printStatement()
    {
        double DA; double
        HRA; double PF;
        doublestafffund;
        double gross;
        double net;
        printAccount();
        DA=basicpay*0.97; HRA=basicpay*0.10;
        PF=basicpay*0.12;
        stafffund=basicpay*0.001;
        gross=DA+HRA+PF+stafffund;
        net=gross-PF-stafffund;
        System.out.printf("da:%2f\n",+DA);
    }
}

```

```

        System.out.printf("hra:%2f\n",+HRA); System.out.printf("PF:%2f\n",
        +PF); System.out.printf("Staff club fund:%2f\n",+stafffund);
        System.out.printf("salary :%2f\n",+gross); System.out.printf("net
        salary :%2f\n",+net);

```

```

    }

```

```

}

```

```

package payroll;

```

```

public class Programmer extends Employee { private
    double basicpay;

```

```

    public Programmer()

```

```

    {

```

```

        basicpay=0;

```

```

    }

```

```

    public Programmer (String n, String ad,double id,double mo, String mail, double bp)

```

```

    {

```

```

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

```

```

        basicpay=bp;

```

```

    }

```

```

    public void printAccount()

```

```

    {

```

```

        super.printAccount ();

```

```

        System.out.println("Basicpay:"+basicpay);

```

```

    }

```

```

    public void printStatement()

```

```

    {

```

```

        double DA; double

```

```

        HRA; double PF;

```

```

        double stafffund;

        double gross; double

        net; printAccount();

        DA=basicpay*0.97;

        HRA=basicpay*0.1;

        PF=basicpay*0.12;

        stafffund=basicpay*0.0010;

        gross=DA+HRA+PF+stafffund;

        net=gross-PF-stafffund;

        System.out.printf("Duty Allowance (DA):%2f\n",DA);

        System.out.printf("HRA:%2f\n",HRA); System.out.printf("PF:

        %2f\n",PF); System.out.printf("Staff club fund:%2f\n",stafffund);

        System.out.printf("salary :%2f\n",gross); System.out.printf("net

        salary :%2f\n",net);

    }

}

package payroll;

public class AssociateProfessor extends Employee { private double
    basicpay;
    public AssociateProfessor()

        {

            basicpay=0;

        }

    public AssociateProfessor (String n, String ad,double id,double mo, String mail,
double bp)

    {

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

        basicpay=bp;

    }

    public void printEmployee()

```

```
{
    super.printAccount ();

    System.out.println("Basicpay:"+basicpay);
}

public void printStatement()
{
    double DA; double
    HRA; double PF;
    double stafffund;
    double gross; double
    net; printAccount();
    DA=basicpay*0.97;
    HRA=basicpay*0.10;
    PF=basicpay*0.12;
    stafffund=basicpay*0.001;
    gross=DA+HRA+PF+stafffund;
```

```
net=gross-PF-stafffund;
```

```
System.out.printf("da:%2f\n",+DA); System.out.printf("hra:%2f\n",  
+HRA); System.out.printf("PF:%2f\n",+PF); System.out.printf("Staff  
club fund:%2f\n",+stafffund); System.out.printf("salary :%2f\n",  
+gross); System.out.printf("net salary :%2f\n",+net);
```

```
}
```

```
}
```

```
package payroll;
```

```
public class AssistantProfessor extends Employee { private double  
    basicpay;
```

```
    public AssistantProfessor()
```

```
    {
```

```
        basicpay=0;
```

```
    }
```

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

```
    {
```

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

```
        basicpay=bp;
```

```
    }
```

```
    public void printEmployee()
```

```
    {          super.printAccount ();
```

```
        System.out.println("Basicpay:"+basicpay);
```

```
    }
```

```
    public void printStatement()
```

```
    {
```

```
        double DA; double
```

```
        HRA; double PF;
```

```
        double stafffund;
```

```

double gross; double

net; printAccount();

DA=basicpay*0.97;

HRA=basicpay*0.1;

PF=basicpay*0.12;

stafffund=basicpay*0.0010;

gross=DA+HRA+PF+stafffund;

net=gross-PF-stafffund;

System.out.printf("da:%2f\n",+DA);

System.out.printf("hra:%2f\n",+HRA); System.out.printf("PF:%2f\n",
+PF); System.out.printf("Staff club fund:%2f\n",+stafffund);

System.out.printf("salary:%2f\n",+gross); System.out.printf("net
salary :%2f\n",+net);

}
}

```

output:

```

Name:a
EMP ID:100001.0
Address:chennaiEM
ail:a@gmail.comMo
bile:974643.0
Name:e
EMPID:10005.0
Address:chennaiEM
ail:e@gmail.comMo
bile:879544.0
da:67900.000000
hra:7000.000000
PF:8400.000000
Staff club fund:70.000000 salary :
83370.000000
net salary :74900.000000 Name:f
EMP ID:100002.0
Address:chennaiEM
ail:b@gmail.comMo
bile:547955.0 Basic
pay:80000.0
Duty Allowance (DA):77600.000000
HRA:8000.000000
PF:9600.000000
Staff club fund:80.000000 salary :
95280.000000

```


net salary :85600.000000 Name:c
EMP ID:100003.0
Address:chenaniEM
[ail:c@gmail.com](mailto:c@gmail.com)Mo
bile:879457.0
da:48500.000000
hra:5000.000000
PF:6000.000000
Staff club fund:50.000000
salary:59550.000000
net salary :53500.000000 Name:d
EMP ID:100004.0
Address:chennaiEM
[ail:d@gmail.com](mailto:d@gmail.com)Mo
bile:798464.0
da:58200.000000
hra:6000.000000
PF:7200.000000
Staff club fund:60.000000 salary :
71460.000000
net salary :64200.000000

RESULT:

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