

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.

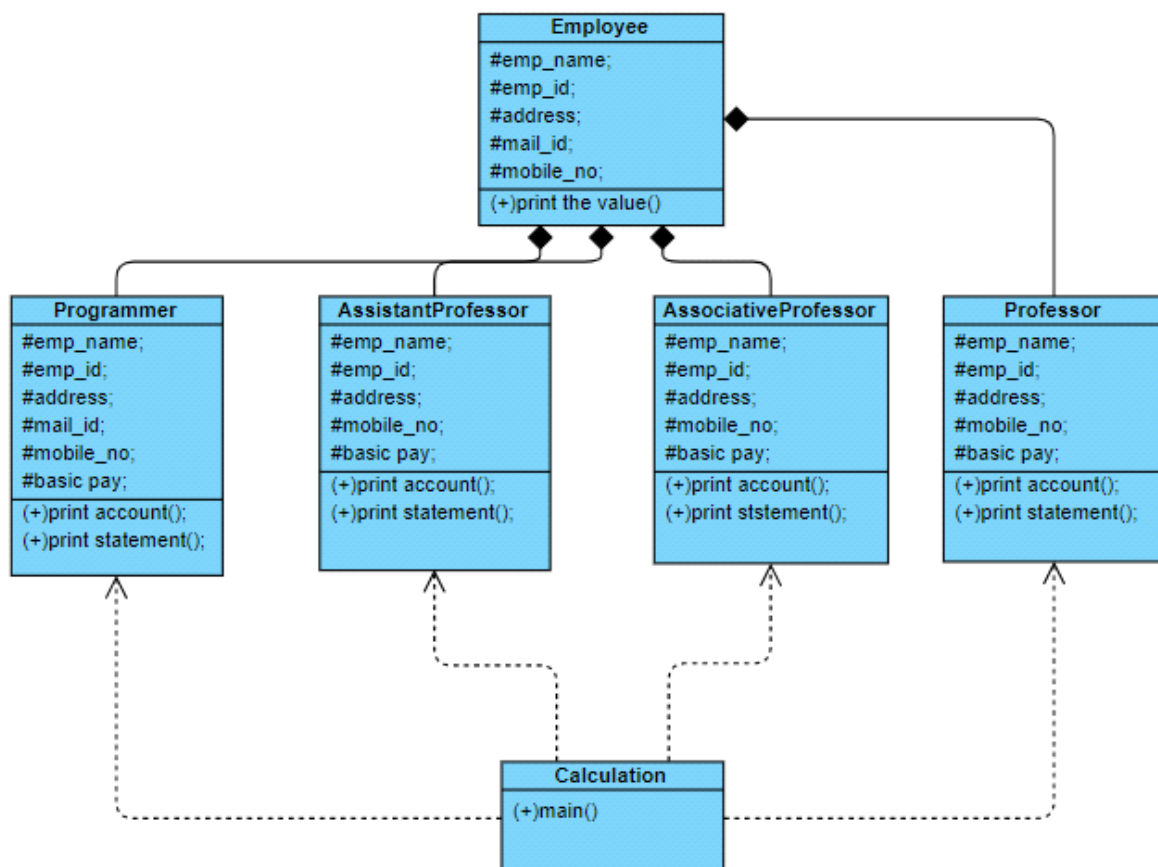
Inherit the classes as programmer,assistantprofessor,associativeprofessor,professor.add the basic pay as data member for these classes.

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

CLASS DIAGRAM:



PROGRAM:

```
/**
 * program to represent employee details
 * creted by ngurusai
 */

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;
        Programmer pro;
        AssistantProfessor AssistProf;
        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",100005,879544,"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;

        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 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("Basic pay:"+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("Basic pay:"+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("Basic pay:"+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:chennai
EMail:a@gmail.com
Mobile:974643.0
Name:e
EMP ID:10005.0
Address:chennai
EMail:e@gmail.com
Mobile: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:chennai
EMail:b@gmail.com
Mobile: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:chenani
EMail:c@gmail.com
Mobile: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:chennai
EMail:d@gmail.com
Mobile: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.