EXP.N0-3	PAY BILL CONVERTER
DATE – 23/07/19	

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.

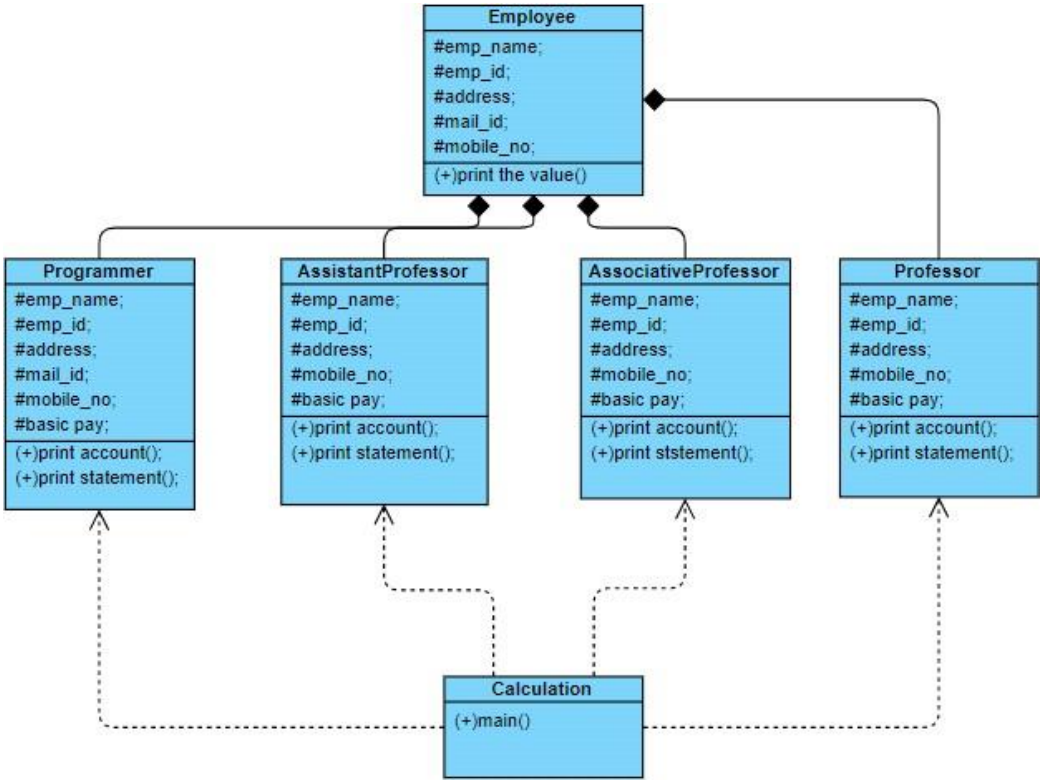
Inherit the classes as programmer,assistantprofessor,associativeprofessor,professor.add the basic pay as data member for these classes.

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

CLASS DIAGRAM:



PROGRAM:

```
/**
  * program to represent employee details
 * @author rohitha
 *    rohitha@gmail.com
 */

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="name";
        emp_id=123123;
        address="not given";
        mail_id="not given";
        mobile_no=91637543;
}
public Employee(String n,long id,String add,String mail,long num)
{
        emp_name=n;
        emp_id=id;
        address=add;
        mail_id=mail;
        mobile_no=num;
}
public void printaccount()
{
        System.out.println("Name of the employee:"+emp_name);
        System.out.println("Employee ID:"+emp_id);
        System.out.println("Address:"+address);
        System.out.println("Mail ID of the employee:"+mail_id);
        System.out.println("Mobile number of the employee:"+mobile_no);
        }
}



/**
```

```
 program to represent BP of programmer
 * @author Rohitha
 * rohitha@gmail.com
 */
package Payroll;

public class Programmer extends Employee {
        private double basicpay;
public Programmer()
{
       basicpay=0;
}
public Programmer(String n,long id,String add,String mail,long num,double BP)
{
        super(n,id,add,mail,num);
        basicpay=BP;
}
public void printAccount()
{
        super.printaccount();
        System.out.println("Basic pay:"+basicpay);
        System.out.println("-------------------------------------------------------
-------------------------------------------------");
}
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("gross salary is:%.2f\n",gross);
        System.out.printf("net salary is:%.2f\n",net);
                }
}


/**
 * program to represent BP of Assistant professor
 * @author Rohitha
 * rohitha@gmail.com
 */
package Payroll;

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

```
        basicpay=0;
}
public AssistantProfessor(String n,long id,String add,String mail,long num,double BP)
{
        super(n,id,add,mail,num);
        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("gross salary is:%.2f\n",gross);
        System.out.printf("net salary is:%.2f\n",net);
        System.out.println("-------------------------------------------------------
-------------------------------------------------");
        }
}

/**
 * program to represent BP of Associative professor
 * @author rohitha
 * rohitha@gmail.com
 */
package Payroll;

public class AssociativeProfessor extends Employee {
        private double basicpay;
public AssociativeProfessor()
{
       basicpay=0;
}
public AssociativeProfessor(String n,long id,String add,String mail,long num,double
BP)
{
        super(n,id,add,mail,num);
        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("gross salary is:%.2f\n",gross);
        System.out.printf("net salary is:%.2f\n",net);
        System.out.println("-------------------------------------------------------
-------------------------------------------------");
        }
}


/**
 * program to represent BP of professor
```

```
 * @author Rohitha
 * rohitha@gmail.com
 */
package Payroll;

public class Professor extends Employee {
        private double basicpay;
public Professor()
{
       basicpay=0;
}
public Professor(String n,long id,String add,String mail,long num,double BP)
{
        super(n,id,add,mail,num);
        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("gross salary is:%.2f\n",gross);
        System.out.printf("net salary is:%.2f\n",net);
        System.out.println("-------------------------------------------------------
-----------------------------------------------");
            }
}
```

CALCULATION:

```
/* Program to represent gross and net salary
 * rohitha
 * rohitha@gmail.com
 */
package Payroll;

public class Calculation {

    public static void main(String[] args) {
        Programmer pro;
            AssistantProfessor Asspro;
```

```
        AssociativeProfessor Asopro;

        Professor prof;

            pro=new
Programmer("sunitha",17001300,"Chennai","account@gmail.com",900000000l,60000);


            Asspro=new
AssistantProfessor("mahesh",17001301,"Chennai","account@gmail.com",7000000001l,70000)
;


            Asopro=new
AssociativeProfessor("mahalakshmi",17001302,"Chennai","account@gmail.com",4000000001l
,80000);


            prof=new
Professor("nithin",17001303,"chennai","account@gmail.com",2000000001,10000);

            pro.printAccount();

            Asspro.printStatement();

            Asopro.printStatement();

            prof.printStatement();

            }


}
```

OUTPUT:

Name of the employee:sunitha

Employee ID:17001300

Address:Chennai

Mail ID of the employee:account@gmail.com

Mobile number of the employee:900000000

Basic pay:60000.0

Name of the employee:mahesh

Employee ID:17001301

Address:Chennai

Mail ID of the employee:account@gmail.com

Mobile number of the employee:7000000001

Basic pay:70000.0

duty allowance(DA):67900.00

HRA:7000.00

PF:8400.000000

staff club fund:70.00

gross salary is:83370.00

net salary is:74900.00

Name of the employee:mahalakshmi

Employee ID:17001302

Address:Chennai

Mail ID of the employee:account@gmail.com

Mobile number of the employee:4000000001

Basic pay:80000.0

duty allowance(DA):77600.00

HRA:8000.00

PF:9600.000000

staff club fund:80.00

gross salary is:95280.00

net salary is:85600.00

Name of the employee:nithin

Employee ID:17001303

Address:chennai

Mail ID of the employee:account@gmail.com

Mobile number of the employee:2000000001

Basic pay:100000.0

duty allowance(DA):97000.00

HRA:10000.00

PF:12000.000000

staff club fund:100.00

gross salary is:119100.00

net salary is:107000.00

RESULT:

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