EX.NO:3	PAYSLIP GENERATION
22-07-19	

Aim:

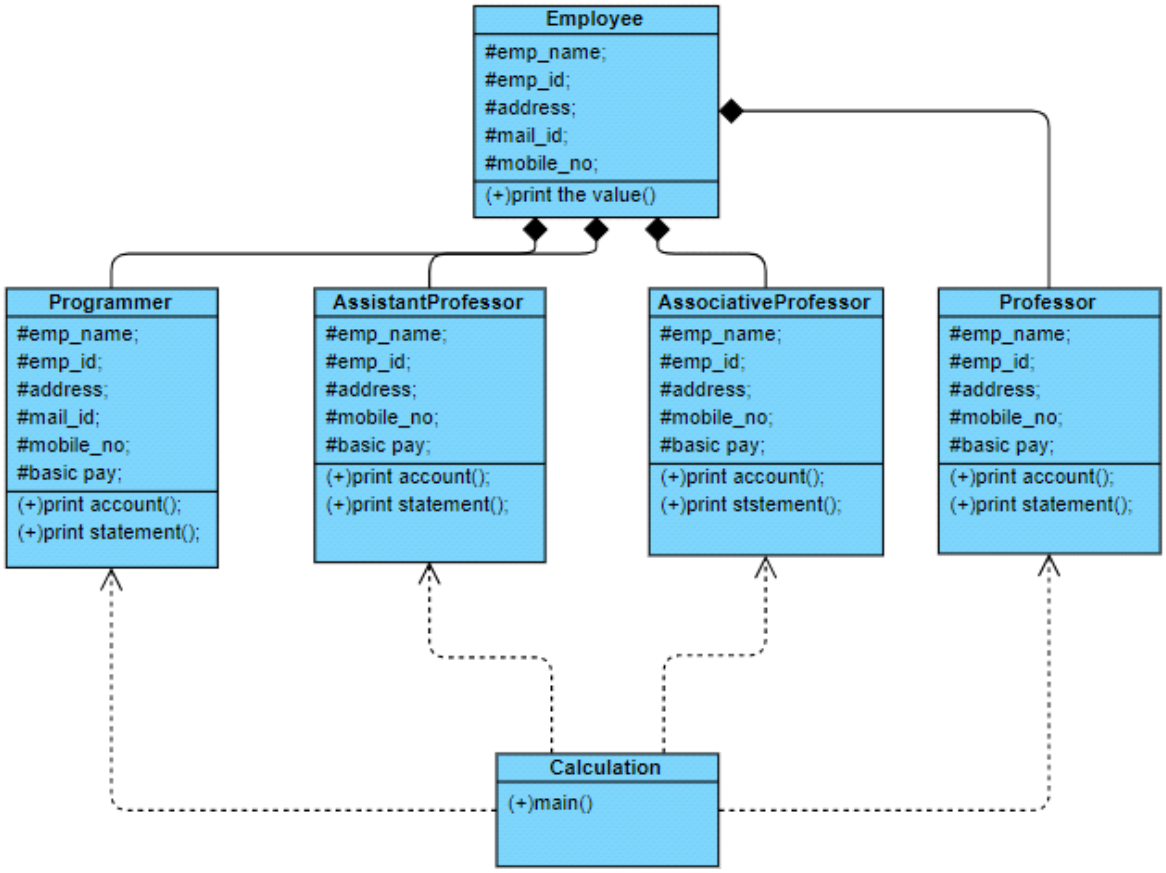
To create java application to find gross salary and net salary using inheritance.

Requirement:

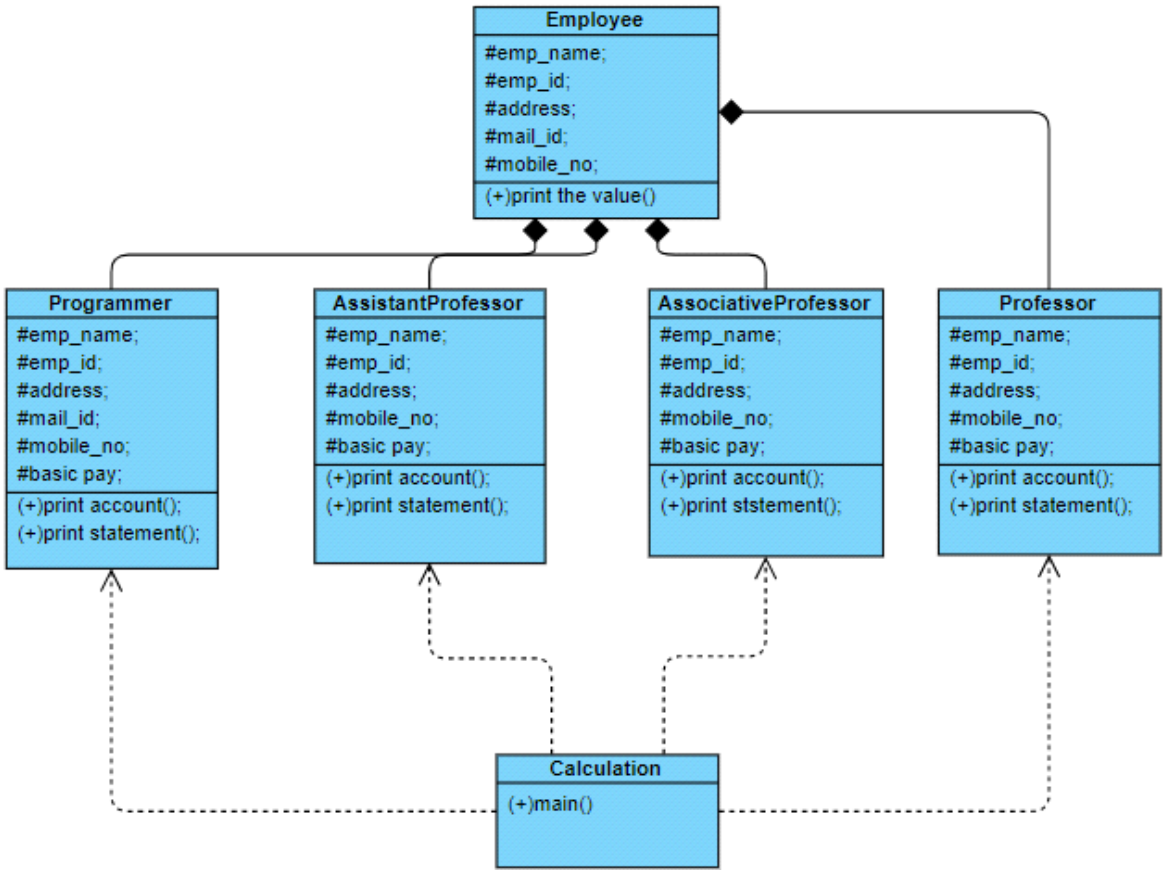
Develop a java application to create package payroll and to create the class as employee with emp_name,emp_id,mail,address as data member.Inherit the classes as programmer,professor,assisstant professor,assiciate professor.Add basic pay as data member for subclasses.

Alogrithm:

Step1:Declare a package payroll.
Step2:Declare the class as employee.
Step3:Declare constructor and add data members.
Step4:Inherit the classes from the super class and add data member as basic pay.
Step5:Calculate the gross salary and net salary.
Step6:Display the results.



Class diagram:



Class diagram:

Program:

```
/******
 * program  to represent  salary  of employees
 * developed by
 * @author Mahesh k
 *
 */
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("Account ID:"+emp_id);
		System.out.println("Address:"+address);
		System.out.println("EMail:"+mail_id);
		System.out.println("Mobile:"+mobile_no);
	}

}
```

```
package payroll;

public class AssisstantProfessor extends Employee {
	private double basic_pay;
	private double da;
	private double hra;
	private double pf;
	private double staff_club;
	private double gross_salary;
	private double net_salary;


	public AssisstantProfessor()
	{
		basic_pay=0;

	}

	public AssisstantProfessor(String n,long id,String ad,String mail,long mo,double bp)
	{
		super(n,id,ad,mail,mo);
		basic_pay=bp;
```

```
	}


	public void Calculation()
	{
		da=(97.0/100)*basic_pay;
		hra=(10.0/100)*basic_pay;
		pf=(12.0/100)*basic_pay;
		staff_club=(0.001)*basic_pay;
		gross_salary=da+hra+basic_pay;
		net_salary=gross_salary-(pf+staff_club);
	}

	public void printAccount()
	{
		super.printAccount();
		System.out.println("Basic_Pay:"+basic_pay);
		System.out.println("Gross_salary:"+gross_salary);
		System.out.println("Net_salary:"+net_salary);
	}

}



package payroll;

public class AssociativeProfessor extends Employee {
	private double basic_pay;
	private double da;
	private double hra;
	private double pf;
	private double staff_club;
	private double gross_salary;
	private double net_salary;


	public AssociativeProfessor()
	{
		basic_pay=0;
	}

	public AssociativeProfessor(String n,long id,String ad,String mail,long mo,double bp)
	{
		super(n,id,ad,mail,mo);
		basic_pay=bp;

	}
```

```
	public void Calculation()
	{
		da=(97.0/100)*basic_pay;
		hra=(10.0/100)*basic_pay;
		pf=(12.0/100)*basic_pay;
		staff_club=(0.001)*basic_pay;
		gross_salary=da+hra+basic_pay;
		net_salary=(gross_salary)-(pf+staff_club);
	}
	public void printAccount()
	{
		super.printAccount();
		System.out.println("Basic_Pay:"+basic_pay);
		System.out.println("Gross_salary:"+gross_salary);
		System.out.println("Net_salary:"+net_salary);
	}

}


package payroll;

public class Professor extends Employee {
	private double basic_pay;
	private double da;
	private double hra;
	private double pf;
	private double staff_club;
	private double gross_salary;
	private double net_salary;


	public Professor()
	{
		basic_pay=0;

	}

	public Professor(String n,long id,String ad,String mail,long mo,double bp)
	{
		super(n,id,ad,mail,mo);
		basic_pay=bp;

	}



	public void Calculation()
	{
		da=(97.0/100)*basic_pay;
		hra=(10.0/100)*basic_pay;
		pf=(12.0/100)*basic_pay;
```

```
		staff_club=(0.001)*basic_pay;
		gross_salary=da+hra+basic_pay;
		net_salary=(gross_salary)-(pf+staff_club);
	}

	public void printAccount()
	{
		super.printAccount();
		System.out.println("Basic_Pay:"+basic_pay);
		System.out.println("Gross_salary:"+gross_salary);
		System.out.println("Net_salary:"+net_salary);
	}
}
```

```
package payroll;

public class Programmer extends Employee {
	private double basic_pay;
	private double da;
	private double hra;
	private double pf;
	private double staff_club;
	private double gross_salary;
	private double net_salary;


	public Programmer()
	{
		basic_pay=0;

	}

	public Programmer(String n,long id,String ad,String mail,long mo,double bp)
	{
		super(n,id,ad,mail,mo);
		basic_pay=bp;

	}



	public void Calculation()
	{
		da=(97.0/100)*basic_pay;
		hra=(10.0/100)*basic_pay;
		pf=(12.0/100)*basic_pay;
		staff_club=(0.001)*basic_pay;
		gross_salary=da+hra+basic_pay;
		net_salary=(gross_salary)-(pf+staff_club);
```

```
	}
	public void printAccount()
	{
		super.printAccount();
		System.out.println("Basic_Pay:"+basic_pay);
		System.out.println("Gross_salary:"+gross_salary);
		System.out.println("Net_salary:"+net_salary);
	}

}



package payroll;

import payroll.Employee;
import payroll.Programmer;
import payroll.AssisstantProfessor;
import payroll.Professor;
import payroll.AssociativeProfessor;

public class Salary {
	public static void main(String[] args) {
		Employee emp;
		Programmer prog;
		AssisstantProfessor ass1;
		AssociativeProfessor ass2;
		Professor pro;

			emp=new
Employee("Raja",300001,"Chennai","account@gmail.com",9000000001l);

			prog=new
Programmer("Kamal",600001,"Chennai","account@gmail.com",70000000011, 100000);

			ass1=new
AssisstantProfessor("Kala",800001,"Chennai","account@gmail.com",40000000011,50000);

			ass2=new
AssociativeProfessor("Sheeba",900001,"Tuticorin","abc@gmail.com",500000012l,60000);

			pro=new
Professor("Mani",500001,"Madurai","mani@gmail.com",600000009l,10000);


			prog.Calculation();
			ass1.Calculation();
			ass2.Calculation();
			pro.Calculation();

			emp.printAccount();
			prog.printAccount();
```

```
                    ass1.printAccount();
                    ass2.printAccount();
                    pro.printAccount();

        }
}
```

Output:

```
Name:Raja
Account ID:300001
Address:Chennai
EMail:account@gmail.com
Mobile:9000000001
Name:Kamal
Account ID:600001
Address:Chennai
EMail:account@gmail.com
Mobile:7000000001
Basic_Pay:100000.0
Gross_salary:207000.0
Net_salary:194900.0
Name:Kala
Account ID:800001
Address:Chennai
EMail:account@gmail.com
Mobile:4000000001
Basic_Pay:50000.0
Gross_salary:103500.0
Net_salary:97450.0
Name:Sheeba
Account ID:900001
Address:Tuticorin
EMail:abc@gmail.com
Mobile:500000012
Basic_Pay:60000.0
Gross_salary:124200.0
Net_salary:116940.0
Name:Mani
Account ID:500001
Address:Madurai
EMail:mani@gmail.com
Mobile:600000009
Basic_Pay:10000.0
Gross_salary:20700.0
Net_salary:19490.0
```

Result:

Hence a java application to find gross and net salary using inheritance is created.