Ex 03	PAYSLIP GENERATION
23-07-19	

AIM:

To develop a java console application to generate pay slips for the employees with their gross and,net salary.

REQUIREMENT:

Java application with Employee clas with empname, empid, address, mailid, mobileno as members.

Inherit the classes Programmer, AssistantProfessor, AssociateProfessor and Professor from Employee class. Add basicpay(BP) as the member of all the inherited classes with 97% of BP as DA, 10% of BP as HRA, 12% of BP as PF, 0.1% of BP for staffclub fund.

ALGORITHMS:

Step1: Create class Employee with required attributes, member functions and constructors in package payrollll.

Step 2: Create class Programmer inherit Employee with required attributes, methods in package payroll.

Step 3: Create classes AssistantProfessor, AssociateProfessor and Professor inheriting from class Employee with required attributes, methods and constructors in package payroll.

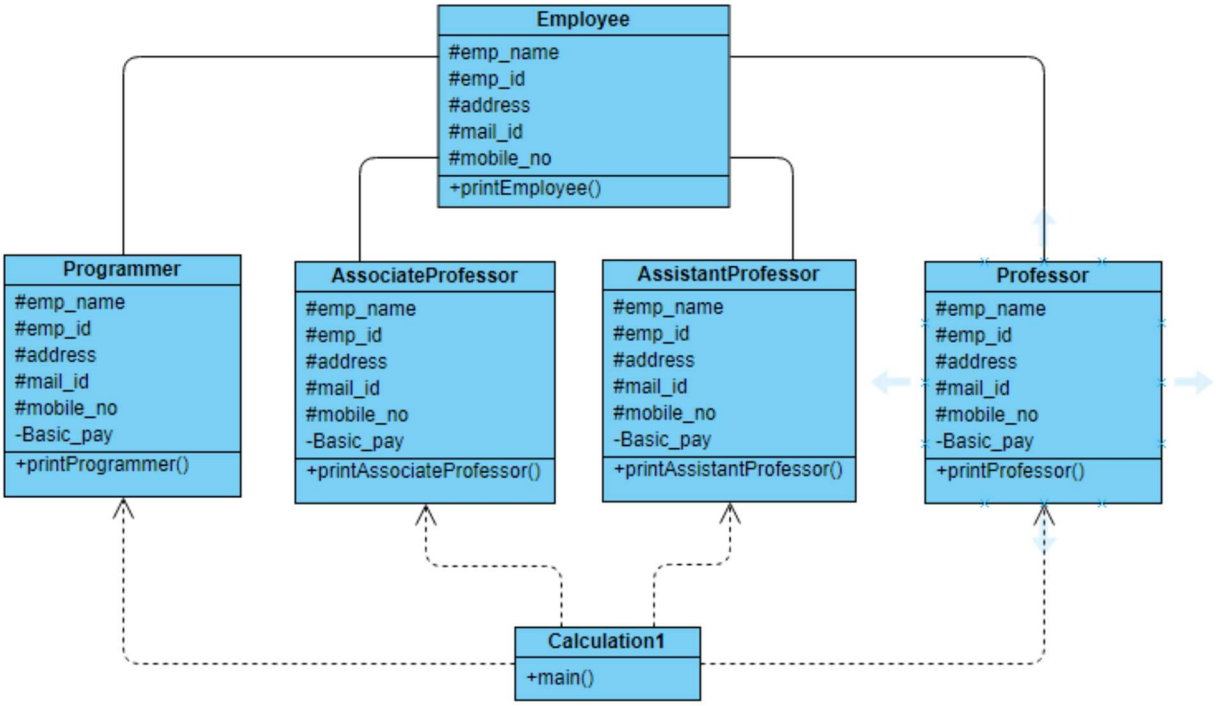
Step 4: Create class Payslip with static main function.

Step 5: Create objects for Employee, Programmer, AssistantProfessor, AssociateProfessor and Professor.

Step 6: Initialize objects with values passed through constructor arguments.

Step 7: Display data.

CLASS DIAGRAM:



PROGRAM:

----------Payroll----------

……Employee……

```
/*This program is created by
Kaarthikeyan.G
email:gk81299@gmail.com
*/


package payroll;
import java.util.Scanner;
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="no name";
        emp_id=10001;
        address="not given";
        mobile_no=80001;
}
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 read()
{
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the employee id:");
        emp_id=sc.nextInt();
        System.out.println("enter the employee name:");
        emp_name=sc.next();
        System.out.println("enter the mail id:");
        mail_id=sc.next();
        System.out.println("enter the mobile no:");
```

```
                mobile_no=sc.nextInt();
                System.out.println("enter the address:");
                address=sc.next();
        }
        public void printaccount()
        {
        System.out.println("name:"+emp_name);
        System.out.println("account id:"+emp_id);
        System.out.println("address:"+address);
        System.out.println("+mail:"+mail_id);
        System.out.println("mobile:"+mobile_no);

}}
```

……AssistantProfessor……

```
/*created by kaarthikeyan
 * email:gk81299@gmail.com
 *
 */
package payroll;
import java.util.Scanner;
public class AssistantProfessor extends Employee{
        private double basic_pay;
        public double da;
        public double hra;
        public double pf;
        public double staff_club;
        public double gross_salary;
        public double net_salary;
        public AssistantProfessor()
```

```
{
basic_pay=0;
}
public AssistantProfessor(String n,long id,String ad,String mail,long mo,long bp)
{
super(n,id,ad,mail,mo);
basic_pay=bp;
}public void read1()
{
Scanner sc=new Scanner(System.in);
System.out.println("enter the basic salary");
emp_name=sc.next();
}
public void calculation()
{
da=(97.0/100)*basic_pay;
hra=(10.0/100)*basic_pay;
pf=(12.0/100)*basic_pay;
staff_club=(0.1/100)*basic_pay;
gross_salary=da+hra+pf+staff_club;
net_salary=gross_salary-(pf+staff_club);
}
public void printstatement()
{
super.printaccount();
System.out.println("Employee basic salary:"+basic_pay);
System.out.println("Employee gross salary:"+gross_salary);
System.out.println("Employee net salary:"+net_salary);
```

}}

……AssociateProfessor……

```
/*created by kaarthikeyan
 * email:gk81299@gmail.com
 *
 */
package payroll;
import java.util.Scanner;

public class AssociateProfessor extends Employee{
private double basic_pay;
public double da;
public double hra;
public double pf;
public double staff_club;
public double gross_salary;
public double net_salary;
public AssociateProfessor()
{
basic_pay=0;
}
public AssociateProfessor(String n,long id,String ad,String mail,long mo,long bp)
{
super(n,id,ad,mail,mo);
basic_pay=bp;
}public void read1()
{
Scanner sc=new Scanner(System.in);
System.out.println("enter the basic salary");
```

```
emp_name=sc.next();
}
public void calculation()
{
da=(97.0/100)*basic_pay;
hra=(10.0/100)*basic_pay;
pf=(12.0/100)*basic_pay;
staff_club=(0.1/100)*basic_pay;
gross_salary=da+hra+pf+staff_club;
net_salary=gross_salary-(pf+staff_club);
}
public void printstatement()
{
super.printaccount();
System.out.println("Employee basic salary:"+basic_pay);
System.out.println("Employee gross salary:"+gross_salary);
System.out.println("Employee net salary:"+net_salary);
}}
```

……Professor……..

```
/*created by kaarthikeyan
 * email:gk81299@gmail.com
 *
 */
package payroll;
import java.util.Scanner;

public class Professor extends Employee{
        private double basic_pay;
```

```
        public double da;
        public double hra;
        public double pf;
        public double staff_club;
        public double gross_salary;
        public double net_salary;
public Professor()
{
        basic_pay=0;
}
public Professor(String n,long id,String ad,String mail,long mo,long bp)
{
        super(n,id,ad,mail,mo);
        basic_pay=bp;
}
public void read1()
{
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the basic salary");
        emp_name=sc.next();
}
public void calculation()
{
        da=(97.0/100)*basic_pay;
        hra=(10.0/100)*basic_pay;
        pf=(12.0/100)*basic_pay;
        staff_club=(0.1/100)*basic_pay;
        gross_salary=da+hra+pf+staff_club;
```

```
        net_salary=gross_salary-(pf+staff_club);
}
public void printstatement()
{
super.printaccount();
System.out.println("Employee basic salary:"+basic_pay);
System.out.println("Employee gross salary:"+gross_salary);
System.out.println("Employee net salary:"+net_salary);
}}
```

……Programmer……

```
/*created by kaarthikeyan
 * email:gk81299@gmail.com
 *
 */
package payroll;
import java.util.Scanner;

        public class Programmer extends Employee {
                private double basic_pay;
                public double da;
                public double hra;
                public double pf;
                public double staff_club;
                public double gross_salary;
                public double net_salary;
        public Programmer()
        {
                basic_pay=0;
```

```
	}
	public Programmer(String n,long id,String ad,String mail,long mo,long bp)
	{
		super(n,id,ad,mail,mo);
		basic_pay=bp;
	}public void read1()
	{
		Scanner sc=new Scanner(System.in);
		System.out.println("enter the basic salary");
		emp_name=sc.next();
	}
	public void calculation()
	{
		da=(97.0/100)*basic_pay;
		hra=(10.0/100)*basic_pay;
		pf=(12.0/100)*basic_pay;
		staff_club=(0.1/100)*basic_pay;
		gross_salary=da+hra+pf+staff_club;
		net_salary=gross_salary-(pf+staff_club);
	}
	public void printstatement()
	{
	super.printaccount();
	System.out.println("Employee basic salary:"+basic_pay);
	System.out.println("Employee gross salary:"+gross_salary);
	System.out.println("Employee net salary:"+net_salary);

}
}
```

……CalculationofPayroll…….

```
/*created by kaarthikeyan
 * email:gk81299@gmail.com
 *
 */
package payroll;
public class CalculationofPayroll {

	public static void main(String[] args) {
		{
			Employee emp1;
			Programmer prog1;
			AssistantProfessor astp1;
			AssociateProfessor asop1;
			Professor pro1;

			emp1=new
Employee("Name",1001,"chennai","name@gmail.com",11111111111l);
			prog1=new
Programmer("Sanjay",1002,"chennai","sanjay@gmail.com",2222222222l,10000);
			astp1=new
AssistantProfessor("AvinashRaja",1003,"chennai","avi@gmail.com",3333333331l,10000);
			asop1=new
AssociateProfessor("Lokesh",1004,"chennai","loki@gmail.com",4444444441l,20000);
			pro1=new
Professor("karthikeyan",1005,"chennai","kathik@gmail.com",5555555551l,40000);
			emp1.printaccount();
			prog1.calculation();
			astp1.calculation();
			asop1.calculation();
```

```
        pro1.calculation();
        prog1.printstatement();
        astp1.printstatement();
        asop1.printstatement();
        pro1.printstatement();
    }}}
```

OUTPUT:

```
name:Name
account id:1001
address:chennai
+mail:name@gmail.com
mobile:1111111111
name:Sanjay
account id:1002
address:chennai
+mail:sanjay@gmail.com
mobile:2222222222
Employee basic salary:10000.0
Employee gross salary:11910.0
Employee net salary:10700.0
name:AvinashRaja
account id:1003
address:chennai
+mail:avi@gmail.com
mobile:3333333333
Employee basic salary:10000.0
Employee gross salary:11910.0
Employee net salary:10700.0
name:Lokesh
account id:1004
address:chennai
+mail:loki@gmail.com
mobile:4444444444
Employee basic salary:20000.0
Employee gross salary:23820.0
Employee net salary:21400.0
name:karthikeyan
account id:1005
address:chennai
+mail:kathik@gmail.com
```

mobile:5555555555
Employee basic salary:40000.0
Employee gross salary:47640.0
Employee net salary:42800.0

RESULT:

Thus a java console application is developed to generate pay slips. The output is verified.