EXP NO: 3

DATE:23/7/19

JAVA APPLICATION TO GENERATE PAY SLIP

AIM:

To develope a java application in order to generate a pay slip for the employee with their gross and net salary.

Requirement:

Create a package payroll. Develop a java application with Employee class with emp_name, emp_id, address, mail_id,mobile_no as members. Inherit the classes, Programmer, Assistant Professor, Associate Professor 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 staff club fund. Generate pay slips for the employees with their gross and net salary.

Alogorithm:

Step1: create class employee with reqired attributes members function and constructor in package payroll .

Step2: create class programmer inherit employee with requird attributes , methods in package payroll.

Step3: create class assistant professor, associate professor and professor inheriting from class employee with reqired attributes,methods and constructor in package payroll.

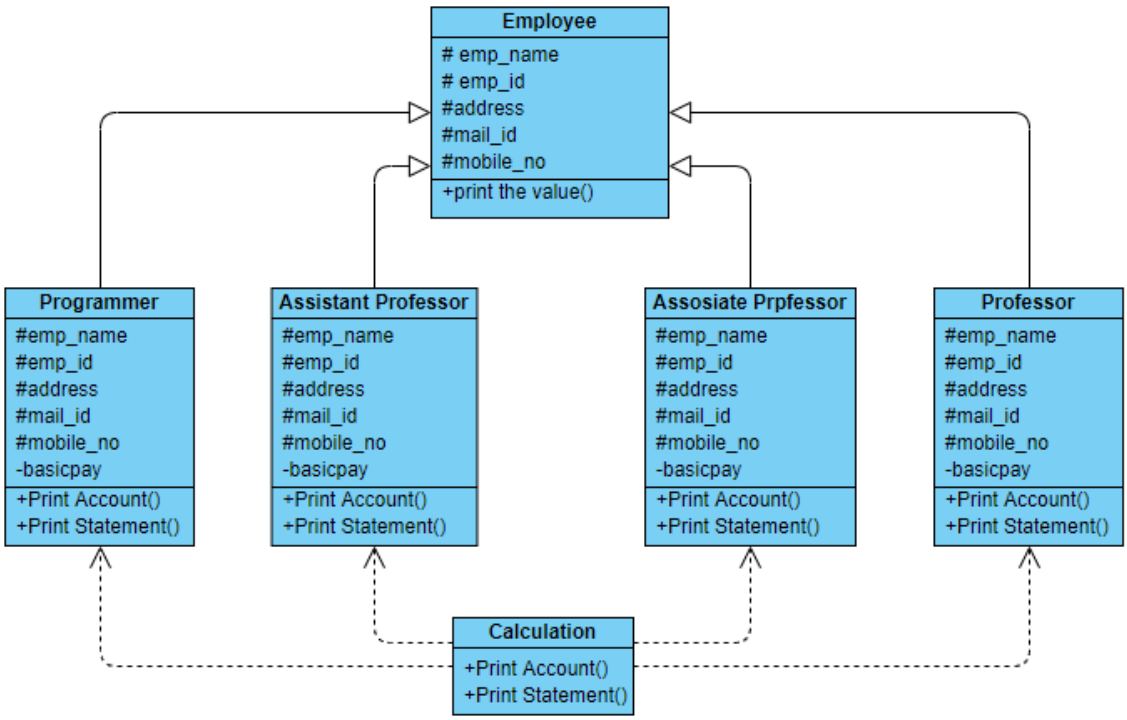
Step4: create class payslip with static main function.

Step5: create object for employee,programmer,assistant professor,associate professor and professor.

Step6: initialise object with value passed through constructor .

Step7: display the data.

Class Diagram:



PROGRAM

ASSITANT PROFESSOR .JAVA

```
/***
 * developed by lokesh j
* gmail lokeshwarn2000@gmail.com
 */
package payroll;
public class Assistantprofessor extends Employee {
private double Basic_pay;
public Assistantprofessor()
{
 Basic_pay=0;
}
public Assistantprofessor (String n,long id,String ad,String mail,long num,double bp)
```

```
{
        super(n,id,ad,mail,num);
        Basic_pay=bp;
}
public void printEmployee()
{
        super.printEmployee();
        double
DA,HRA,PF,STAFFCLUBFUND,GROSSSALARY,NETSALARY,DEDUCTION;
        DA=0.97*Basic_pay;
        HRA=0.1*Basic_pay;
        PF=0.12*Basic_pay;
        STAFFCLUBFUND=0.1*Basic_pay;
        DEDUCTION=PF+STAFFCLUBFUND;
        GROSSSALARY=+Basic_pay+DA+HRA;
        NETSALARY=GROSSSALARY-DEDUCTION;
        System.out.println("Basic_pay:"+Basic_pay);
        System.out.println("GROSSSALARY:"+GROSSSALARY);
        System.out.println("NETSALARY:"+NETSALARY);
}}
```

ASSOCIATE PROFESSOR.JAVA

```
/***
 * developed by lokesh j
 * gmail lokeshwarn2000@gmail.com
 */
package payroll;
public class Associateprofessor extends Employee {
private double Basic_pay;
public Associateprofessor()
{
```

```
 Basic_pay=0;
}
public Associateprofessor (String n,long id,String ad,String mail,long num,double bp)
{
        super(n,id,ad,mail,num);
        Basic_pay=bp;
}
public void printEmployee()
{
        super.printEmployee();
        double
DA,HRA,PF,STAFFCLUBFUND,GROSSSALARY,NETSALARY,DEDUCTION;
        DA=0.97*Basic_pay;
        HRA=0.1*Basic_pay;
        PF=0.12*Basic_pay;
        STAFFCLUBFUND=0.1*Basic_pay;
        DEDUCTION=PF+STAFFCLUBFUND;
        GROSSSALARY=+Basic_pay+DA+HRA;
        NETSALARY=GROSSSALARY-DEDUCTION;
        System.out.println("Basic_pay:"+Basic_pay);
        System.out.println("GROSSSALARY:"+GROSSSALARY);
        System.out.println("NETSALARY:"+NETSALARY);
}}
```

EMPLOYEE.JAVA

```
package payroll;

public class Employee {
protected String Emp_names;
protected long Emp_id;
protected String address;
protected String mail_id;
protected long mobile_no;

public Employee()
{
```

```
		Emp_names ="avinash";
		Emp_id =1500125;
		address ="not given";
		mail_id="not given";
		mobile_no =9445223556l;
	}

	public Employee(String n,long id,String ad,String mail,long num)
	{
		Emp_names =n;
		Emp_id =id;
		address=ad;
		mail_id=mail;
		mobile_no=num;
	}

	public void printEmployee()
	{
	 System.out.println("name:"+Emp_names);
	  System.out.println("id:"+Emp_id);
	 System.out.println("address:"+address);
	System.out.println("email:"+mail_id);
	System.out.println("mobile:"+mobile_no);
	}}
```

PROFESSOR.JAVA

```
/***
 * developed by lokesh j
 * gmail lokeshwarn2000@gmail.com
 */
package payroll;

public class Professor extends Employee {
	private double Basic_pay;
	public Professor()
	{
	 Basic_pay=0;
	}
	public Professor (String n,long id,String ad,String mail,long num,double bp)
	{
		super(n,id,ad,mail,num);
		Basic_pay=bp;
	}
	public void printEmployee()
	{
		super.printEmployee();
		double
	DA,HRA,PF,STAFFCLUBFUND,GROSSSALARY,NETSALARY,DEDUCTION;
		DA=0.97*Basic_pay;
		HRA=0.1*Basic_pay;
```

```
        PF=0.12*Basic_pay;
        STAFFCLUBFUND=0.1*Basic_pay;
        DEDUCTION=PF+STAFFCLUBFUND;
        GROSSSALARY=+Basic_pay+DA+HRA;
        NETSALARY=GROSSSALARY-DEDUCTION;
        System.out.println("Basic_pay:"+Basic_pay);
        System.out.println("GROSSSALARY:"+GROSSSALARY);
        System.out.println("NETSALARY:"+NETSALARY);
}}
```

PROGRAMMER.JAVA

```
/***
 * developed by lokesh j
* gmail lokeshwarn2000@gmail.com
*/
package payroll;

public class Programmer extends Employee {
private double Basic_pay;
public Programmer()
{
 Basic_pay=0;
}
public Programmer (String n,long id,String ad,String mail,long num,double bp)
{
        super(n,id,ad,mail,num);
        Basic_pay=bp;
}
public void printEmployee()
{
        super.printEmployee();
        double
DA,HRA,PF,STAFFCLUBFUND,GROSSSALARY,NETSALARY,DEDUCTION;
        DA=0.97*Basic_pay;
        HRA=0.1*Basic_pay;
        PF=0.12*Basic_pay;
        STAFFCLUBFUND=0.1*Basic_pay;
        DEDUCTION=PF+STAFFCLUBFUND;
        GROSSSALARY=+Basic_pay+DA+HRA;
        NETSALARY=GROSSSALARY-DEDUCTION;
        System.out.println("Basic_pay:"+Basic_pay);
        System.out.println("GROSSSALARY:"+GROSSSALARY);
        System.out.println("NETSALARY:"+NETSALARY);
}}
```

CALCULATION.JAVA

```
        /***
 * developed by lokesh j
 * gmail lokeshwarn2000@gmail.com
 */
package payroll;
import payroll.Assistantprofessor;
import payroll.Associateprofessor;
import payroll.Employee;
import payroll.Professor;
import payroll.Programmer;
public class Calculation
{
        public static void main(String[]args) {
                Employee emp1;
                Assistantprofessor asp1;
                Associateprofessor ap1;
                Professor p1;
                Programmer pro1;
emp1=new Employee("lokesh",4001,"chennai","lk@gmail.com",924518268936l);
        asp1=new
Assistantprofessor("avinash",4553,"chennai","avi@gmail.com",995426131469l,5000.00);
        ap1=new
Associateprofessor("gk",5004,"chennai","gk@gmail.com",98754623122l,7000.00);
        p1=new Professor("agnal",7893,"chennai","ag@gmail.com",984512847l,9000.00);
        pro1=new
Programmer("ak",5542,"chennai","ak@gmail.com",664452221l,10000.00);
        emp1.printEmployee();
        asp1.printEmployee();
        ap1.printEmployee();
        p1.printEmployee();
        }}
```

OUTPUT

```
name:lokesh

      id:4001
      address:chennai
      email:lk@gmail.com
      mobile:924518268936
name:avinash

      id:4553
      address:chennai
      email:avi@gmail.com
      mobile:995426131469
      Basic_pay:5000.0
      GROSSSALARY:10350.0
      NETSALARY:9250.0
name:gk

      id:5004
      address:chennai
      email:gk@gmail.com
      mobile:98754623122
      Basic_pay:7000.0
      GROSSSALARY:14490.0
      NETSALARY:12950.0
name:agnal

      id:7893
      address:chennai
      email:ag@gmail.com
      mobile:984512847
      Basic_pay:9000.0
      GROSSSALARY:18630.0
      NETSALARY:16650.0
```

RESULT

Thus the java console application for calculating the payment statement is verified with output