EXPT: 3

DATE:23/07/2019

JAVA APPLICATION TO GENERATE PAY SLIP

AIM:

To develop a java application to generate a payslip for the employees with their net and gross salary.

REQUIREMENTS:

- To create a super class Employee with data members as,

  emp_name , emp_id , address , mail_id , molibe_no.

- To inherit the super class Employee in the subclasses ,

  Programmer ,AssistantProfessor ,AssociateProfessor , Professor.

- To create 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 as Staff club fund.

- Hence to generate the Payslip of Employee with their gross and net salary.

ALGORITHM:

STEP 1: Create a package payroll containing the classes Payslip, Employee, Programmer, AssiatantProfessor, AssociateProfessor, Professor.

STEP 2: Under the class Employee declare suitable attributes containing two constructors, one without parameter and other with parameter,print the required data.

STEP 3: The class Employee is considered as the superclass for Programmer ,AssistantProfessor ,AssociateProfessor,Professor.

STEP 4: Under the class Programmer, inherit the superclass so that it acts as a subclass of Employee, add Basicpay as new attribute to it.
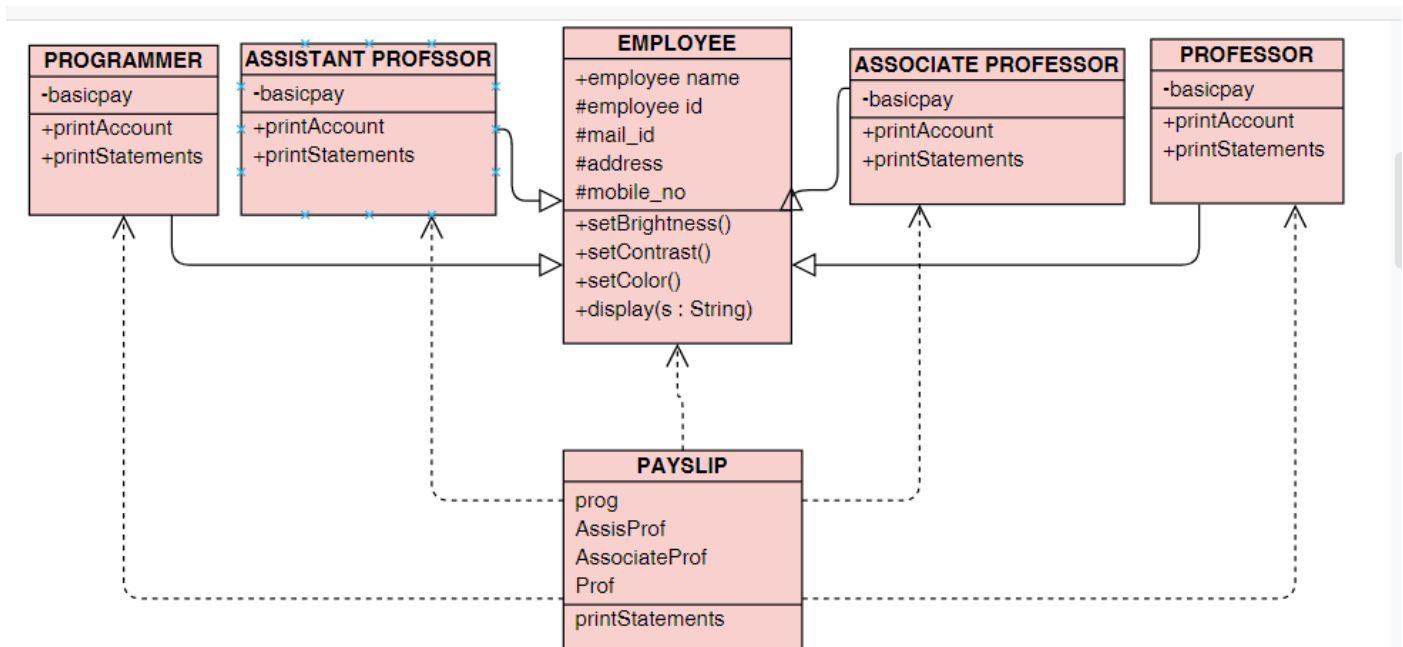
STEP 5: Under the class AssistantProfessor, inherit the superclass so that it acts as a subclass of Employee, add Basicpay as new attribute to it.

STEP 6: Under the class AssociateProfessor, inherit the superclass so that it acts as a subclass of Employee, add Basicpay as new attribute to it.

STEP 7: Under the class Professor, inherit the superclass so that it acts as a subclass of Employee, add Basicpay as new attribute to it.

STEP 8: Under the Payslip class pass the constructor arguments and print the required result.

CLASS DIAGRAM:

PROGRAM:

//**PROGRAM TO GENERATE PAYSLIP **//

//**DEVELOPED BY HARIHARAN**//

```
package PAYROLL;
public class PaySlip
{
public static void main(String[]args)
{
Programmer Prog;
AssistantProfessor AssisProf;
```

```java
AssociateProfessor AssocProf;
Professor Prof;
Prog=new
Programmer("hari",100000,"chennai","abc@gmail.com",(long) 200000,15000);
AssisProf=new
AssistantProfessor("xxx",200000,"coimbatore","def@gmail.com",(long) 300000,25000);
AssocProf=new
AssociateProfessor("yyy",300000,"kaniyakumari","ghi@gmail.com",(long) 400000,35000);
Prof=new Professor("zzz",400000,"erode","jkl@gmail.com",(long) 500000,45000);
Prog.printStatements();
AssisProf.printStatements();
AssocProf.printStatements();
Prof.printStatements();
}
}
package PAYROLL;
public class Employee
{
protected String emp_name;
protected int emp_id;
protected String address;
protected String mail_id;
protected Long mobile_no;
public Employee()
{
emp_name="abc";
emp_id=100001;
address="no address";
mail_id="unavailable";
mobile_no=9000000000l;
}
public Employee(String n,int id,String ad,String mail,Long mob)
{
emp_name=n;
emp_id=id;
address=ad;
mail_id=mail;
mobile_no=mob;
}
public void printAccount()
{
System.out.println("\nemployee's NAME :"+emp_name);
System.out.println("employee's ID :"+emp_id);
System.out.println("employee's ADDRESS :"+address);
System.out.println("employee's E-MAIL ID :"+mail_id);
System.out.println("employee's MOBILE NO. :"+mobile_no);
}
}
```

```
package PAYROLL;
public class Programmer extends Employee
{
private double basicpay;
public Programmer()
{
basicpay=0;
}
public Programmer(String n,int id,String ad,String mail,Long mob,int bp)
{
super(n,id,ad,mail,mob);
basicpay=bp;
}
public void printAccount()
{
super.printAccount();
System.out.println("BASIC PAY:"+basicpay);
}
public void printStatements()
{
double da;
double hra;
double pf;
double staff;
double gross;
double net;
printAccount();
da=basicpay*0.97;
hra=basicpay*0.1;
pf=basicpay*0.12;
staff=basicpay*0.001;
gross=da+hra+pf+staff;
net=gross-pf-staff;
System.out.println("employee's DA:"+da);
System.out.println("employee's HRA :"+hra);
System.out.println("employee's PF :"+pf);
System.out.println("employee's STAFF CLUBFUND :"+staff);
System.out.println("employee's GROSS SALARY :"+gross);
System.out.println("employee's NET SALARY:"+net);
}
}
package PAYROLL;
public class AssistantProfessor extends Employee
{
private double basicpay;
public AssistantProfessor()
{
basicpay=0;
```

```java
}
public AssistantProfessor(String n,int id,String ad,String mail,Long mob,int bp)
{
super(n,id,ad,mail,mob);
basicpay=bp;
}
public void printAccount()
{
super.printAccount();
System.out.println("BASIC PAY:"+basicpay);
}
public void printStatements()
{
double da;
double hra;
double pf;
double staff;
double gross;
double net;
printAccount();
da=basicpay*0.97;
hra=basicpay*0.1;
pf=basicpay*0.12;
staff=basicpay*0.001;
gross=da+hra+pf+staff;
net=gross-pf-staff;
System.out.println("employee's DA:"+da);
System.out.println("employee's HRA :"+hra);
System.out.println("employee's PF :"+pf);
System.out.println("employee's STAFF CLUBFUND :"+staff);
System.out.println("employee's GROSS SALARY :"+gross);
System.out.println("employee's NET SALARY:"+net);
}
}
package PAYROLL;
public class AssociateProfessor extends Employee
{
private double basicpay;
public AssociateProfessor()
{
basicpay=0;
}
public AssociateProfessor(String n,int id,String ad,String mail,Long mob,int bp)
{
super(n,id,ad,mail,mob);
basicpay=bp;
}
public void printAccount()
```

```java
{
super.printAccount();
System.out.println("BASIC PAY:"+basicpay);
}
public void printStatements()
{
double da;
double hra;
double pf;
double staff;
double gross;
double net;
printAccount();
da=basicpay*0.97;
hra=basicpay*0.1;
pf=basicpay*0.12;
staff=basicpay*0.001;
gross=da+hra+pf+staff;
net=gross-pf-staff;
System.out.println("employee's DA:"+da);
System.out.println("employee's HRA :"+hra);
System.out.println("employee's PF :"+pf);
System.out.println("employee's STAFF CLUBFUND :"+staff);
System.out.println("employee's GROSS SALARY :"+gross);
System.out.println("employee's NET SALARY:"+net);
}
}
package PAYROLL;
public class Professor extends Employee
{
private double basicpay;
public Professor()
{
basicpay=0;
}
public Professor(String n,int id,String ad,String mail,Long mob,int bp)
{
super(n,id,ad,mail,mob);
basicpay=bp;
}
public void printAccount()
{
super.printAccount();
System.out.println("BASIC PAY:"+basicpay);
}
public void printStatements()
{
double da;
```

```java
double hra;
double pf;
double staff;
double gross;
double net;
printAccount();
da=basicpay*0.97;
hra=basicpay*0.1;
pf=basicpay*0.12;
staff=basicpay*0.001;
gross=da+hra+pf+staff;
net=gross-pf-staff;
System.out.println("employee's DA:"+da);
System.out.println("employee's HRA :"+hra);
System.out.println("employee's PF :"+pf);
System.out.println("employee's STAFF CLUBFUND :"+staff);
System.out.println("employee's GROSS SALARY :"+gross);
System.out.println("employee's NET SALARY:"+net);
}
}
```

OUTPUT:

```
employee's NAME : hari
employee's ID : 100000
employee's ADDRESS : chennai
employee's E-MAIL ID : abc@gmail.com
employee's MOBILE NO. : 200000
BASIC PAY: 15000.0
employee's DA: 14550.0
employee's HRA : 1500.0
employee's PF : 1800.0
employee's STAFF CLUBFUND : 15.0
employee's GROSS SALARY : 17865.0
NET SALARY: 16050.0

employee's NAME :  xxx
employee's ID : 200000
employee's ADDRESS : coimbatore
employee's E-MAIL ID : def@gmail.com
employee's MOBILE NO. : 300000
BASIC PAY:  25000.0
employee's DA:  24250.0
employee's HRA : 2500.0
employee's PF :  3000.0
employee's STAFF CLUBFUND : 25.0
employee's GROSS SALARY : 29775.0
NET SALARY: 26750.0
```

employee's NAME : yyy
employee's ID : 300000
employee's ADDRESS : kaniyakumari
employee's E-MAIL ID : ghi@gmail.com
employee's MOBILE NO. : 400000
BASIC PAY: 35000.0
employee's DA: 33950.0
employee's HRA : 3500.0
employee's PF : 4200.0
employee's STAFF CLUBFUND : 35.0
employee's GROSS SALARY : 41685.0
NET SALARY: 37450.0

employee's NAME : zzz
employee's ID : 400000
employee's ADDRESS : erode
employee's E-MAIL ID : jkl@gmail.com
employee's MOBILE NO. : 500000
BASIC PAY: 45000.0
employee's DA: 43650.0
employee's HRA : 4500.0
employee's PF : 5400.0
employee's STAFF CLUBFUND : 45.0
employee's GROSS SALARY : 53595.0
 NET SALARY: 48150.0

RESULT:

Hence a java application was created and executed to generate a payslip.

//**Hariharan.R**//