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| EX-03 | APPLICATION FOR PAY SLIP GENERATION |
| DATE | |

AIM: To develop a java console application to find the gross and net salary using inheritance.

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.

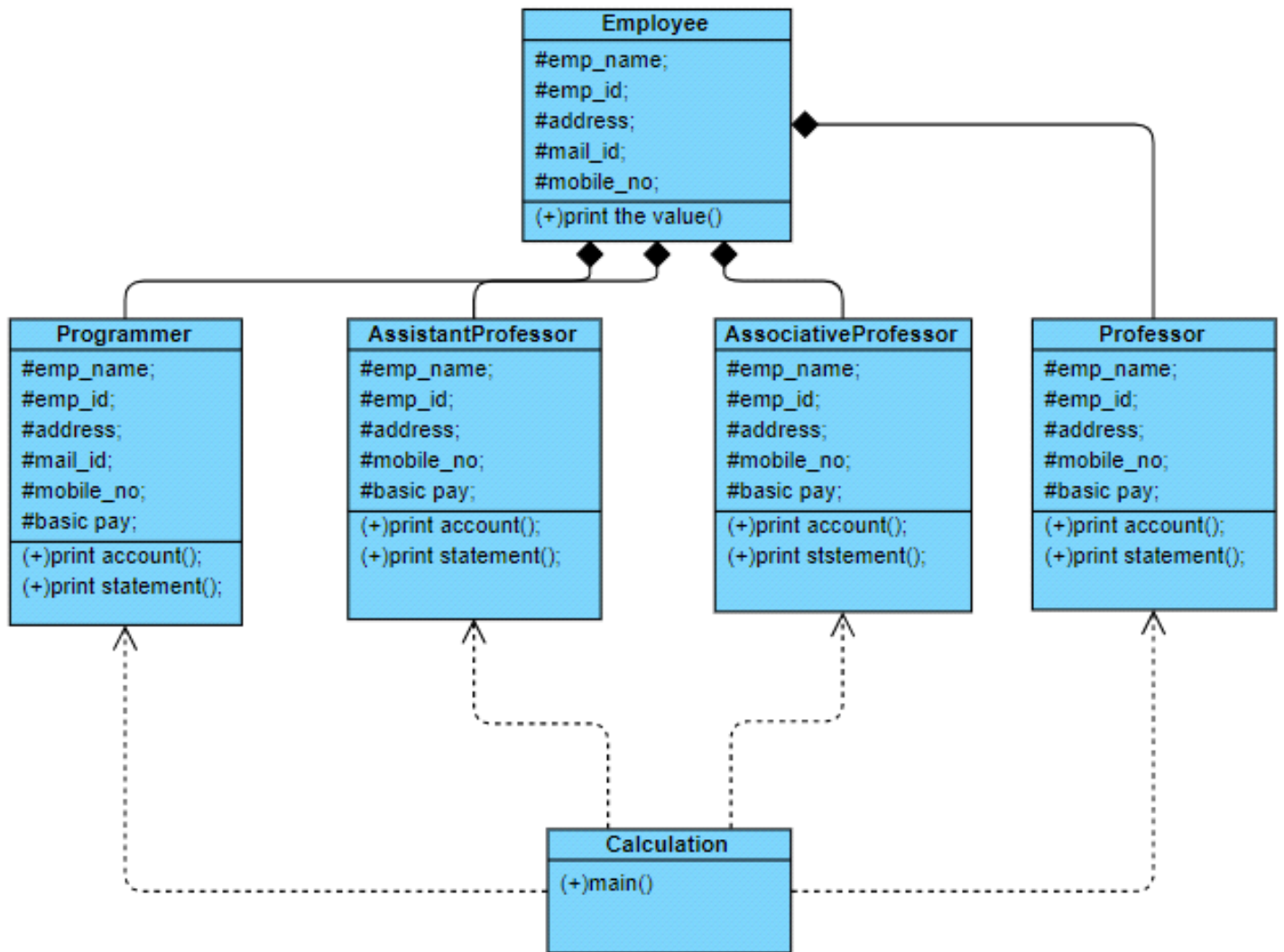
Inherit the classes as programmer,assistantprofessor,associativeprofessor,professor.add the basic pay as data member for these classes.

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

CLASS DIAGRAM:



PROGRAM:

```

/**
 * program to represent employee details
 * @author tharun
 * tharun50@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 tharun
 * tharun50@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 tharun
 * tharun50@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 tharun
 * tharun50@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 tharun
 * tharun50@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
 * author@ tharun
 * tharun50@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",90000000001,60000);
Asspro=new
AssistantProfessor("mahesh",17001301,"Chennai","account@gmail.com",70000000001,70000);
Asopro=new
AssociativeProfessor("mahalakshmi",17001302,"Chennai","account@gmail.com",40000000001
,80000);
prof=new
Professor("nithin",17001303,"chennai","account@gmail.com",20000000001,100000);
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:9000000000
 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:70000000001
 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:nithinEmployee 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 inheritance classes.