

Ex No. 3	PAYSLIP GENERATION
Date: 22/07/2019	

Aim:

* To develop a Java application for the generation of Payslip for the Employee, Programmer, Professor, Assistant Professor, Associate Professor.

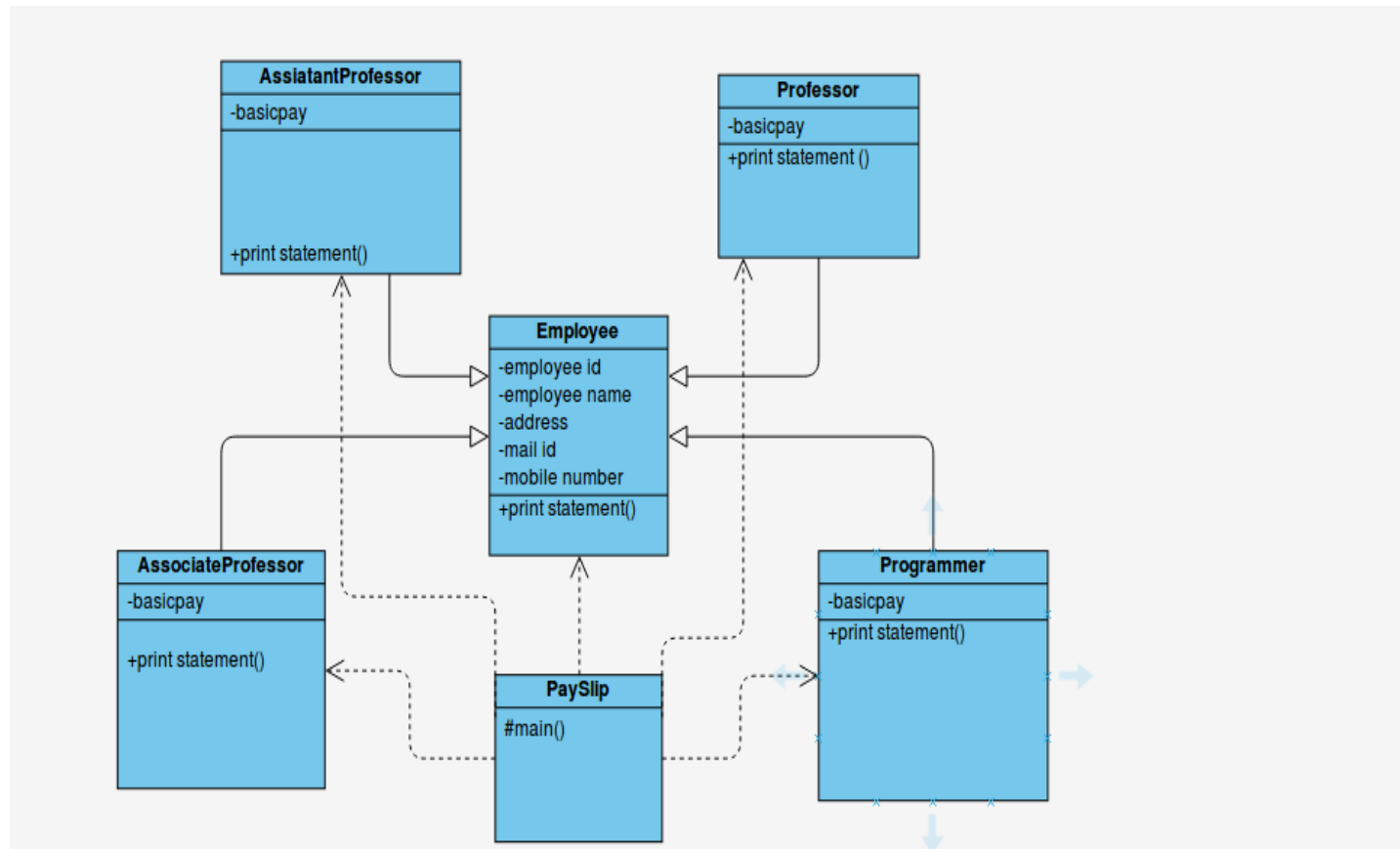
Requirements:

*Develop a java console application to create a package payroll to create the class employee with Employee name, Employee ID, Address, Email id, Mobile number as data members.

Algorithm:

- Step 1: Declare a package payroll.
- Step 2: Declare the super class Employee.
- Step 3: Declare the sub classes Programmer, Professor, Assistant Professor, AssociateProfessor and PaySlip.
- Step 4: Declare a constant and add the data member
- Step 5: Inherit the subclasses from the superclass and add the data member basic pay.
- Step 6: Calculate the gross salary and net salary based on the data members
- Step 7: Display the payslip bill.

Class Diagram:



Program:

```
/*
 * this program is used to generate PaySlip
 * developed by D. Sarathi Raj
 * sarathiraj852000@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="noname";
        emp_id=100001;
        address="not given";
        mail_id="not given";
        mobile_no=800000001;
    }

    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:");//taking all
the inputs from the user
        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 employee 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("EMail:"+mail_id);
        System.out.println("Mobile:"+mobile_no);

    }

}

package PAYROLL;

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 print()
    {
        System.out.println("basic amount credited:"+basic_pay);
    }

    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);
    }
}


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=(97.0/100.0)*basic_pay;
        hra=(10.0/100.0)*basic_pay;
        pf=(12.0/100.0)*basic_pay;
        staff_club=(0.1/100.0)*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);
    }
}

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=(97.0/100.0)*basic_pay;
        hra=(10/100.0)*basic_pay;
        pf=(12.0/100.0)*basic_pay;
        staff_club=(0.1/100.0)*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);

    }
}

package PAYROLL;

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 calculation()
    {
        da=(97.0/100.0)*basic_pay;
        hra=(10.0/100.0)*basic_pay;
        pf=(12.0/100.0)*basic_pay;
        staff_club=(0.1/100.0)*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);

    }
}

package PAYROLL;

public class salarycredited {
    public static void main(String[] args) {
        Employee emp;
        Programmer prog;
        AssistantProfessor ass1;
        AssociateProfessor ass2;
        Professor pro;

        emp=new
Employee("employee",300001,"Chennai","account@gmail.com",900000000011);
        prog=new
Programmer("programmer",300001,"Chennai","account@gmail.com",9000000000
11,10000);
        ass1=new
AssistantProfessor("asspro",300001,"Chennai","account@gmail.com",90000
000011,10000);
        ass2=new
AssociateProfessor("assopro",600001,"Chennai","account@gmail.com",7000
0000011,20000);
        pro=new
Professor("professor",800001,"Chennai","account@gmail.com",400000000011
,40000);

        emp.printAccount();
        prog.calculation();
        ass1.calculation();
        ass2.calculation();
        pro.calculation();
        prog.printStatement();
        ass1.printStatement();
        ass2.printStatement();
        pro.printStatement();
    }
}

```

Output:

```
Name:employee
Account ID:300001
Address:Chennai
EMail:account@gmail.com
Mobile:9000000001
Name:programmer
Account ID:300001
Address:Chennai
EMail:account@gmail.com
Mobile:9000000001
Employee Basic salary :10000.0
Employee Gross salary :11910.0
Employee Net salary :10700.0
Name:asspro
Account ID:300001
Address:Chennai
EMail:account@gmail.com
Mobile:9000000001
Employee Basic salary :10000.0
Employee Gross salary :11910.0
Employee Net salary :10700.0
Name:assopro
Account ID:600001
Address:Chennai
EMail:account@gmail.com
Mobile:7000000001
Employee Basic salary :20000.0
Employee Gross salary :23820.0
Employee Net salary :21400.0
Name:professor
Account ID:800001
Address:Chennai
EMail:account@gmail.com
Mobile:4000000001
Employee Basic salary :40000.0
Employee Gross salary :47640.0
Employee Net salary :42800.0
```

Result:

* Thus the java application for the generation of payslip is created and executed successfully.

