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| **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:**

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**PROGRAM:**

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

…………………………………Employee………………………………………….

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\*/

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……………………………….

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\*/

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……………………………….

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\*/

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…………………………………………..

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\*/

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……………………………………….

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\*/

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…………………………….

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\*/

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",1111111111l);

prog1=new Programmer("Sanjay",1002,"chennai","sanjay@gmail.com",2222222222l,10000);

astp1=new AssistantProfessor("AvinashRaja",1003,"chennai","avi@gmail.com",3333333333l,10000);

asop1=new AssociateProfessor("Lokesh",1004,"chennai","loki@gmail.com",4444444444l,20000);

pro1=new Professor("karthikeyan",1005,"chennai","kathik@gmail.com",5555555555l,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.