

Progressive Education Society’s

**MODERN COLLEGE OF ENGINEERING, Pune -05.**

(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

**MCA Department**

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| **Class: FYMCA Div: A Semester: II** | **Course Code: MCA01554**  **Course Name: Java Programming Laboratory** | | **Batch: F1** |
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| **CO No: CO515.1** | | **Assignment No: 2** | |

**PRACTICAL SUBMISSION RECORD- A.Y. 2024-25**

**Title**: Write a Java program to calculate salary using packages. Creates a package employee and create a class Emp. Data members are name, employee id, category, basic pay, HRA, DA, net pay, provident fund, gross pay, income tax, and allowance. Calculate the values in methods. Call the methods to perform and print values.

# Code:

package employee; import java.util.Scanner; public class Emp {

String empName; int empId;

String category;

double basicPay, HRA, DA, netPay, pf, grossPay, incomeTax, allowance; Emp(int id,String name,String category,double basicpay){

empId=id; empName=name; this.category=category; basicPay=basicpay;

}

double calHra() {

if (category.equals("manager")) { HRA = 30.0 / 100 \* basicPay;

} else if (category.equals("engineer")) { HRA = 20.0 / 100 \* basicPay;

} else if (category.equals("staff")) { HRA = 10.0 / 100 \* basicPay;

}

return HRA;

}

double calDa() {

if (category.equals("manager")) { DA = 80.0 / 100 \* basicPay;

} else if (category.equals("engineer")) {

DA = 60.0 / 100 \* basicPay;

} else if (category.equals("staff")) { DA = 50.0 / 100 \* basicPay;

}

return DA;

}

double calAllowance() {

if (category.equals("manager")) { allowance = 4000;

} else if (category.equals("engineer")) { allowance = 3000;

} else if (category.equals("staff")) { allowance = 2000;

}

return allowance;

}

double calPf() {

pf = 12.0 / 100 \* basicPay; return pf;

}

double calGrossPay() {

grossPay = basicPay+ calHra() + calDa() + calAllowance(); return grossPay;

}

double calTax() {

double income = calGrossPay(); if (income < 500000) {

incomeTax = 0;

} else if (income >= 500000 && income < 1000000) { incomeTax = 10.0 / 100 \* income;

} else if (income >= 1000000) { incomeTax = 20.0 / 100 \* income;

}

return incomeTax;

}

double calNetPay() {

netPay = calGrossPay() - (calPf() + calTax()); return netPay;

}

void display() {

System.out.println("Basic Pay: " +(int) basicPay); System.out.println("HRA: " +(int) calHra()); System.out.println("DA: " + (int)calDa()); System.out.println("allowance: " + (int)calAllowance()); System.out.println("gross Pay: " + (int)calGrossPay()); System.out.println("provident fund: " + (int)calPf()); System.out.println("income tax: " + (int)calTax()); System.out.println("net Pay: " +(int) calNetPay());

}

public static void main(String[] args) { Scanner sc=new Scanner(System.in); int id;

double basicpay; String name,category;

System.out.println("Enter Emp Id"); id=sc.nextInt();

sc.nextLine(); System.out.println("Enter Emp name"); name=sc.nextLine();

System.out.println("Enter Employee category (manager/engineer/staff):"); category=sc.nextLine();

System.out.println("Enter Emp basic pay"); basicpay=sc.nextDouble();

Emp e1=new Emp(id, name, category, basicpay); e1.display();

sc.close();

}

# }Output:

