

**Don Bosco Institute of Technology, Kurla(W)**  
**Department of Electronics and Tele-Communication Engineering**  
**ECL304 - Skill Lab: C++ and Java Programming**  
**Sem III**  
**2021-22**

| Practice Problems – Employee Program |                                |
|--------------------------------------|--------------------------------|
| <b>Student Name:</b>                 | <b>Shreyas Sanjay Nanaware</b> |
| <b>Roll No:</b>                      | <b>39</b>                      |

**Question:** Write a C++ program to

**create an Employee class with data members:**

**Employee number, Employee name, Basic, DA, IT, Net Salary**

**class has 3 methods, one method to get employee details for name, ID and basic salary**

**other method to calculate net salary using formula**

**DA=1.32\*basic;**

**IT=0.30\*(basic+DA);**

**net\_sal=(basic+DA)-IT;**

**third method to print emp name, ID, net salary alongwith all salary components**

**C++ Program:**

**/\*create an Employee class with data members:**

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```
net_sal=(basic+DA)-IT;
```

third method to print emp name, ID, net salary alongwith all salary components  
\*/

```
#include<iostream> //header file containing
```

```
#include<string> //header file which helps us to use strings
```

```
using namespace std;
```

```
class Employee{ //class is created
```

```
public: //Access Specifier
```

```
int Emp_id ,DA,IT,Basic; //attributes
```

```
string Emp_name ; //attributes
```

```
float Net_Salary; //attributes
```

```
void input_details(){
```

```
//creating a method for getting employee's details
```

```
cout<<"Enter the name of the employee: \n";
```

```
cin>>Emp_name;
```

```
cout<<"\n Enter Employee ID : "<<endl;
```

```
cin>>Emp_id;
```

```
cout<<"\n Enter Employee's basic salary : Rs. ";
```

```
cin>>Basic;
```

```
cout<<"\n";
```

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}

void salary\_calculation(){ //creating a method for calculating net  
salary

DA= 1.32 \* Basic;

IT=0.30 \* (Basic + DA);

Net\_Salary=(Basic + DA)-IT;

}

void display\_details(){ //creating a method for displaying the  
employee details

cout<<"\n The details of the employees are as follows: \n";

cout<<"\n Employee name 1: "<<Emp\_name;

cout<<"\n Employee Number: "<<Emp\_id;

cout<<"\n Employee's Net Salary is Rs. "<<Net\_Salary;

cout<<"\n Employee's basic salary: Rs. "<<Basic;

cout<<"\n Employee's Dearness Allowance is Rs. "<<DA;

cout<<"\n Income tax deductions on employee's salary is Rs.  
"<<IT;

}

};

int main(){

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```
/* creating object of the class employee */  
  
Employee emp1;  
Employee emp2;  
Employee emp3;  
  
/* Calling the methods */  
  
emp1.input_details();  
emp2.input_details();  
emp3.input_details();  
  
emp1.salary_calculation();  
emp2.salary_calculation();  
emp3.salary_calculation();  
  
emp1.display_details();  
emp2.display_details();  
emp3.display_details();  
  
return 0;  
  
}
```

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Output:

 C:\Users\Shreyas\Documents\SEM 3 C++ codes\Practice problem 2.exe

Enter the name of the employee:

Shreyas

Enter Employee ID :

39

Enter Employee's basic salary : Rs. 500000

Enter the name of the employee:

Shubham

Enter Employee ID :

27

Enter Employee's basic salary : Rs. 400000

Enter the name of the employee:

Chirag

Enter Employee ID :

7

Enter Employee's basic salary : Rs. 600000

The details of the employees are as follows:

Employee name 1: Shreyas

Employee Number: 39

Employee's Net Salary is Rs. 812000

Employee's basic salary: Rs. 500000

Employee's Dearness Allowance is Rs. 660000

Income tax deductions on employee's salary is Rs. 348000

The details of the employees are as follows:

Employee name 1: Shubham

Employee Number: 27

Employee's Net Salary is Rs. 649600

Employee's basic salary: Rs. 400000

Employee's Dearness Allowance is Rs. 528000

Income tax deductions on employee's salary is Rs. 278400

The details of the employees are as follows:

Employee name 1: Chirag

Employee Number: 7

Employee's Net Salary is Rs. 974400

Employee's basic salary: Rs. 600000

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**Question: Write a Java program to**

**create an Employee class with data members:**

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**class has 3 methods, one method to get employee details for name, ID and basic salary**

**other method to calculate net salary using formula**

**DA=1.32\*basic;**

**IT=0.30\*(basic+DA);**

**net\_sal=(basic+DA)-IT;**

**third method to print emp name, ID, net salary alongwith all salary components**

**Java Program:**

**/\*create an Employee class with data members:**

**Employee number, Employee name, Basic, DA, IT, Net Salary**

**class has 3 methods, one method to get employee details**

**for name, ID and basic salary**

**other method to calculate net salary using formula**

**DA=1.32\*basic;**

**IT=0.30\*(basic+DA);**

**net\_sal=(basic+DA)-IT;**

**third method to print emp name, ID, net salary alongwith all salary components**

**\*/**

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```
package javaprogramming2;

import java.util.Scanner;

public class Employee {

    Scanner in=new Scanner(System.in);

    int Emp_id ,Basic;    //attributes

    double DA;

    double IT;

    String Emp_name;    //attributes

    float Net_Salary;    //attributes


    void input_details(){

//creating a method for getting employee's details

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the details for the employees: \n");

        System.out.println("Enter the name of the employee: ");

        Emp_name= sc.next();

        System.out.println("Enter Employee ID : ");

        Emp_id=sc.nextInt();

        System.out.println("Enter Employee's basic salary : Rs. ");

        Basic=sc.nextInt();

        System.out.println("\n");

    }

}
```

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```
void salary_calculation(){ //creating a method for calculating net salary
    DA= 1.32 * Basic;
    IT=0.30 * (Basic + DA);
    Net_Salary=(float) ((Basic+ DA)-IT);

}

void display_details(){ //creating a method for displaying the employee
details

    System.out.println("\n The details of the employees are as follows:
\n");

    System.out.println("\n Employee name : "+Emp_name);
    System.out.println("\n Employee Number: "+Emp_id);
    System.out.println("\n Employee's Net Salary is Rs. "+Net_Salary);
    System.out.println("\n Employee's basic salary: Rs. "+Basic);
    System.out.println("\n Employee's Dearness Allowance is Rs. "+DA);
    System.out.println("\n Income tax deductions on employee's salary is
Rs. "+IT);

}
```



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```
public static void main(String[] args) {  
    /* creating object of the class employee */  
    Employee emp1= new Employee();  
    Employee emp2= new Employee();  
    Employee emp3= new Employee();  
    /* Calling the methods */  
    emp1.input_details();  
    emp2.input_details();  
    emp3.input_details();  
  
    emp1.salary_calculation();  
    emp2.salary_calculation();  
    emp3.salary_calculation();  
  
    emp1.display_details();  
    emp2.display_details();  
    emp3.display_details();  
}  
  
}
```

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**Output:**

```
<terminated> Employee [Java Application] C:\Users\Shreyas\.p2\pool\plugins\org.eclipse.justj.openjdk.hc
Enter the details for the employees:

Enter the name of the employee:
Shreyas
Enter Employee ID :
39
Enter Employee's basic salary : Rs.
500000

Enter the details for the employees:

Enter the name of the employee:
Shubham
Enter Employee ID :
27
Enter Employee's basic salary : Rs.
40000

Enter the details for the employees:

Enter the name of the employee:
Chirag
Enter Employee ID :
7
Enter Employee's basic salary : Rs.
600000
|
```

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The details of the employees are as follows:

Employee name : Shreyas

Employee Number: 39

Employee's Net Salary is Rs. 812000.0

Employee's basic salary: Rs. 500000

Employee's Dearness Allowance is Rs. 660000.0

Income tax deductions on employee's salary is Rs. 348000.0

The details of the employees are as follows:

Employee name : Shubham

Employee Number: 27

Employee's Net Salary is Rs. 64960.0

Employee's basic salary: Rs. 40000

Employee's Dearness Allowance is Rs. 52800.0

Income tax deductions on employee's salary is Rs. 27840.0

The details of the employees are as follows:

Employee name : Chirag

Employee Number: 7

Employee's Net Salary is Rs. 974400.0

Employee's basic salary: Rs. 600000

Employee's Dearness Allowance is Rs. 792000.0

Income tax deductions on employee's salary is Rs. 417600.0