

## Topic – OOPS, Collection & User Defined Exception

Start new Project as Class Library. Name it as HRLib

Create Employee Class

Employee

    Name - property

    Address – property

Define Constructor with parameter (2 Parameter)

Define abstract method CalculateSalary

Write sub class ConfirmEmployee. Derived from Employee

Variables / Properties

    Basic

    Designation

Define parameterized constructor (4 arguments)

Calculate salary and this method cannot be “override” by child class

If Basic >= 30000

    Hra – 30% of basic

    Conv – 30 % of basic

    PF – 10% of basic

If Basic >= 20000

    Hra – 20% of basic

    Conv – 20 % of basic

    PF – 10% of basic

Else

    Hra – 10% of basic

    Conv – 10 % of basic

    PF – 10% of basic

NetSalary = basic + Hra + Conv - pf

Define Trainee class. Derived from Employee

Properties

No of Days

Rate per day

Define parameterized constructor (4 parameters)

CalculateSalary – NoOfDays \* Rate

**Override ToString() method in all classes**

**Create Empno as a int property which is auto generated unique value (means you will not take this value from the user but program internally generate and assign unique value)**

Exception Handling

Keep check that for Confirm Employee minimum basic is Rs. 5000 through User Defined Exception

Create Console Application. Name it as HRAPP

Create single generic collection object

Write menu driven program.

1. Display All Employees
2. Insert Confirm Employee
3. Insert Trainee
- 4. Delete Employee**
- 5. Display Employee by No**

**Insert** - Accept value from the user and insert record

**Delete Employee** - Take Empno from the user and if exist delete the record else display proper message

**Display Employee by No** – Take Empno from the user and display employee detail if exist else display proper error message

Run the program till user wish.

```
c:\training\mcx\OOPSAssignmentHR\HRAPP\bin\Debug\HRAPP.exe
1 Display All employee
2 Insert Confirm Employee
3 Insert Trainee Employee
```

```
c:\training\mcx\OOPSAssignmentHR\HRAPP\bin\Debug\HRAPP.exe
1 Display All employee
2 Insert Confirm Employee
3 Insert Trainee Employee
2
Enter Name
bhavana
Enter Address
mumbai
Enter Desig
manager
Enter Basic sal > 5000
100000
Do you want to continue Y / N
```

```
c:\training\mcx\OOPSAssignmentHR\HRAPP\bin\Debug\HRAPP.exe
2
Enter Name
bhavana
Enter Address
mumbai
Enter Desig
manager
Enter Basic sal > 5000
100000
Do you want to continue Y / N
y
1 Display All employee
2 Insert Confirm Employee
3 Insert Trainee Employee
3
Enter Name
vishal
Enter Address
pune
Enter No of days
25
Enter rate
1000
Do you want to continue Y / N
```

```
c:\training\mcx\OOPSAssignmentHR\HRAPP\bin\Debug\HRAPP.exe
3 Insert Trainee Employee
3
Enter Name
vishal
Enter Address
pune
Enter No of days
25
Enter rate
1000
Do you want to continue Y / N
y
1 Display All employee
2 Insert Confirm Employee
3 Insert Trainee Employee
1
EmpName = bhavana, Addres = mumbai Designame = manager Basic = 100000
NetSalary = 150000

EmpName = vishal, Addres = pune No of Days = 25 Rate = 1000
NetSalary = 25000

-----
Do you want to continue Y / N
```

```
c:\training\mcx\OOPSAssignmentHR\HRAPP\bin\Debug\HRAPP.exe
3 Insert Trainee Employee
3
Enter Name
vishal
Enter Address
pune
Enter No of days
25
Enter rate
1000
Do you want to continue Y / N
y
1 Display All employee
2 Insert Confirm Employee
3 Insert Trainee Employee
1
EmpName = bhavana, Address = mumbai Designname = manager Basic = 100000
NetSalary = 150000
EmpName = vishal, Address = pune No of Days = 25 Rate = 1000
NetSalary = 25000
-----
Do you want to continue Y / N
n
```

Exception Handling for minimum basic 5000

```
c:\training\mcx\OOPSAssignmentHR\HRAPP\bin\Debug\HRAPP.exe
1 Display All employee
2 Insert Confirm Employee
3 Insert Trainee Employee
2
Enter Name
bhavana
Enter Address
mumbai
Enter Desig
manager
Enter Basic sal > 5000
3000
Minimum basic 5000
Do you want to continue Y / N
-
```