

.NET Assignment – 2

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Q2). Create a Class Employee with the following specifications

Properties

string Name -> no blank names should be allowed

int EmpNo -> must be readonly and autogenerated

decimal Basic -> must be between some range short

DeptNo -> must be > 0

Methods

decimal GetNetSalary() -> returns calculated net salary (Use any formula to get net salary based on Basic salary)

Create constructors to accept initial values for Employee obj

Employee o1 = new Employee("Amol",123465, 10);

Employee o2 = new Employee("Amol",123465);

Employee o3 = new Employee("Amol");

Employee o4 = new Employee();

EmpNo must be autogenerated ... i.e. first object should automatically get EmpNo 1 second object should automatically get EmpNo 2 third object should automatically get EmpNo 3 ...and so on...

Test Cases

Employee o1 = new Employee()

Employee o2 = new Employee() Employee

o3 = new Employee()

cw(o1.EmpNo) cw(o2.EmpNo)

cw(o3.EmpNo)

cw(o3.EmpNo) cw(o2.EmpNo)

cw(o1.EmpNo)

```
namespace AssignmentQ2
{
    internal class Program
    {
        static void Main(string[] args)
        {
            // calling static property
            Employee.Name = "Prajwal";
        }
    }
}
```

```

        Console.WriteLine("Employee Name: " + Employee.Name);

        Employee e1 = new Employee();

        e1.Basic = 7500;
        Console.WriteLine("Basic: " + e1.Basic);

        e1.DeptNo = 10;
        Console.WriteLine("Department No: " + e1.DeptNo);

        //Calling Method
        Console.WriteLine("Net Salary: " + e1.GetNetSalary());

        //Calling Constructor
        Employee o1 = new Employee();
        Employee o2 = new Employee();
        Employee o3 = new Employee();
        Console.WriteLine("EmpNo: " + o1.EmpNo);
        Console.WriteLine("EmpNo: " + o2.EmpNo);
        Console.WriteLine("EmpNo: " + o3.EmpNo);

        Console.WriteLine("EmpNo: " + o3.EmpNo);
        Console.WriteLine("EmpNo: " + o2.EmpNo);
        Console.WriteLine("EmpNo: " + o1.EmpNo);
    }
}

public class Employee
{
    //fields
    private static string name;
    private decimal basic;
    private short deptno;
    private int empNo;
    private string empname;
    private decimal netsalary;
    private static int lastEmpNo = 0;

    //Properties
    public static string Name
    {
        set
        {
            if (string.IsNullOrEmpty(value))
                Console.WriteLine("Empty String Not allowed");
            else
                name = value;
        }

        get
        {
            return name;
        }
    }

    //Properties
    public decimal Basic
    {
        set
        {
            if ((value > 5000) && (value < 10000))
                basic = value;
        }
    }
}

```

```

        else
            Console.WriteLine("Value not in the given range");
    }

    get { return basic; }
}

//Properties
public short DeptNo
{
    set
    {
        if (value > 0)
            deptno = value;
        else
            Console.WriteLine("Department no must be > 0");
    }

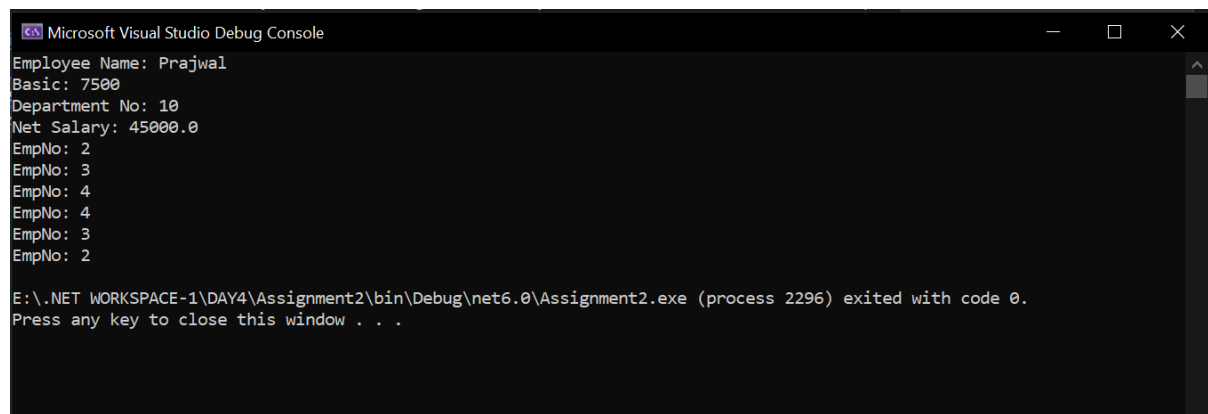
    get { return deptno; }
}

//Method
public decimal GetNetSalary()
{
    netsalary = basic * 12 * (decimal)0.5;
    return netsalary;
}

//Properties
public int EmpNo
{
    get;
}

//Create constructors to accept initial values for Employee obj
public Employee(string empname = "noname", decimal Basic = 7500, short
DeptNo = 10)
{
    this.EmpNo = ++lastEmpNo;
    this.Basic = Basic;
    this.DeptNo = DeptNo;
    this.empname = empname;
}
}
}

```



```

Microsoft Visual Studio Debug Console
Employee Name: Prajwal
Basic: 7500
Department No: 10
Net Salary: 45000.0
EmpNo: 2
EmpNo: 3
EmpNo: 4
EmpNo: 4
EmpNo: 3
EmpNo: 2

E:\.NET WORKSPACE-1\DAY4\Assignment2\bin\Debug\net6.0\Assignment2.exe (process 2296) exited with code 0.
Press any key to close this window . . .

```