Day 6 :Daily Tasks

Domain : C#

Program.cs

```
using Basic_Programs;

StudentMarks studentMarks = new StudentMarks(100, "Yogesh","Erode",100,90,85);

Console.WriteLine(studentMarks.Rno);
Console.WriteLine(studentMarks.Name);
Console.WriteLine(studentMarks.Address);
Console.WriteLine("Total : " + studentMarks.CalculateTotal());
Console.WriteLine("Average: " + studentMarks.CalculateAverage());
```

(StudentDetails.cs)

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Basic_Programs
{
    internal class StudentDetails
    {
        private int rno;
        private string? name, address;
        public StudentDetails(int rno = 0, string? name = null, string? address = null)
        {
            this.rno = rno;
            this.name = name;
            this.address = address;
        }

        public int Rno { get => rno; set => rno = value; }
        public string? Name { get => name; set => name = value; }
        public string? Address { get => address; set => address = value; }
    }

}
```

(Studentmarks.cs)

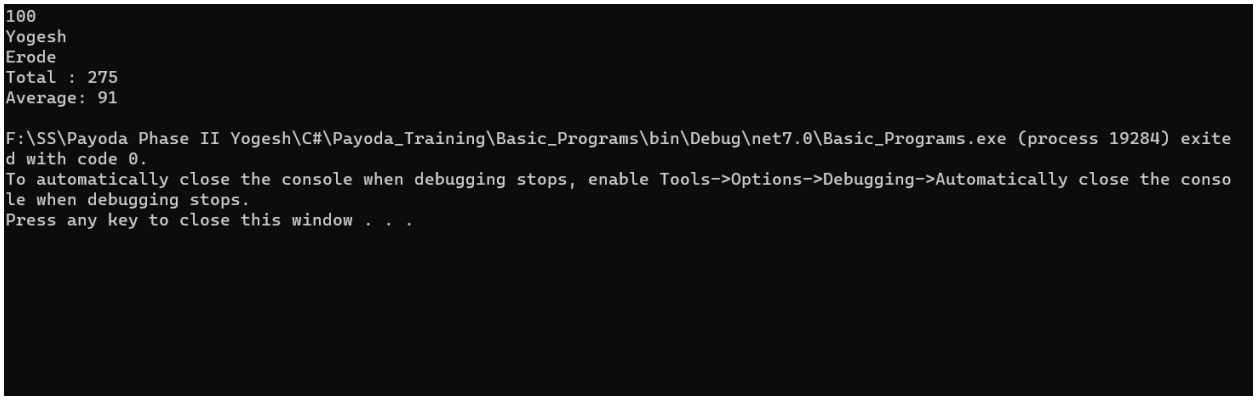
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Basic_Programs
{
   internal class StudentMarks : StudentDetails
   {
      private int m1, m2, m3;

      public StudentMarks(int rno, string name,string address, int m1, int m2, int
m3):base(rno,name,address)
      {
         this.m1 = m1;
         this.m2 = m2;
         this.m3 = m3;
      }

      public int M1 { get => m1; set => m1 = value; }
      public int M2 { get => m2; set => m2 = value; }
      public int M3 { get => m3; set => m3 = value; }

      public int CalculateTotal()
      {
         return M1 + M2 + M3;
      }
      public double CalculateAverage()
      {
         return (M1+M2 + M3)/3;
      }
   }
}
```



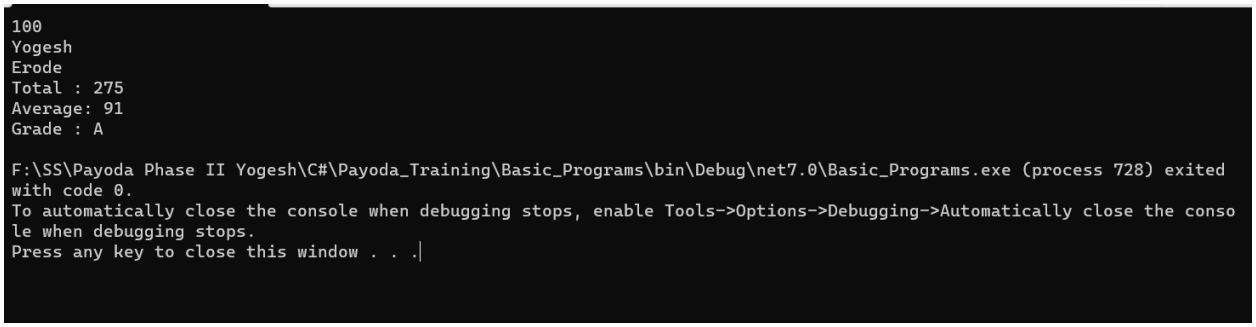
StudentGrade.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Net;
using System.Numerics;
using System.Text;
using System.Threading.Tasks;
using System.Xml.Linq;

namespace Basic_Programs
{
   internal class StudentGrade : StudentMarks
   {
      public StudentGrade(int rno, string name, string address, int m1, int m2, int m3) : base(rno,
name, address, m1, m2, m3)
      {

      }
      public char CalcualteGrade()
      {
         double average = CalculateAverage();
         if (average >= 90)
            return 'A';
         else if (average >= 80 && average < 90)
            return 'B';
         else
            return 'C';
      }
   }

}
```



StaffDetails.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Basic_Programs
{
    internal class StaffDetails
    {
        int eno;
        private string? name, address;

        public StaffDetails(int eno, string? name, string? address)
        {
            this.eno = eno;
            this.name = name;
            this.address = address;
        }

        public int Eno { get => eno; set => eno = value; }
        public string? Name { get => name; set => name = value; }
        public string? Address { get => address; set => address = value; }
    }
}
```

TeachingStaff.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Basic_Programs
{
   internal class TeachingStaff:StaffDetails
   {
      private string? dept;
      private double basic_salary;
      private readonly int _da, _hra, _cca, _pf;

      public TeachingStaff(int eno, string? name, string? address, string? dept, double
basic_salary, int da, int hra, int cca, int pf)
         :base(eno,name,address)
      {
         this.dept = dept;
         this.basic_salary = basic_salary;
         _da = da;
         _hra = hra;
         _cca = cca;
         _pf = pf;
      }

      public string? Dept { get => dept; set => dept = value; }
      public double Basic_salary { get => basic_salary; set => basic_salary = value; }

      public int Da => _da;

      public int Hra => _hra;

      public int Cca => _cca;

      public int Pf => _pf;

      public float CalculateSalary()
      {

         float allowance = (float)
            (Basic_salary * ((float)Da / 100)+
            (Basic_salary * ((float)Hra / 100))
            -  (Basic_salary * ((float)Cca / 100))
```

```
            - (Basic_salary*((float)Pf /100)));

        float ded=(float)(Basic_salary * ((float)Pf /100));
        float netsal = (float)(Basic_salary * ((double)Da / 100));
        return netsal;
      }
   }
}
```

NonTeachingStaff.cs

```
using System;
using System.Collections.Generic;
using System.Data;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Basic_Programs
{
   internal class NonTeachingStaff:StaffDetails
   {
      private double basic_salary;
      private readonly int _da, _hra, _cca, _pf;

      public NonTeachingStaff(int eno, string? name, string? address, double basic_salary, int
da, int hra, int cca, int pf) : base(eno, name, address)
      {
         this.basic_salary = basic_salary;
         _da = da;
         _hra = hra;
         _cca = cca;
         _pf = pf;

      }

      public double Basic_salary { get => basic_salary; set => basic_salary = value; }

      public int Da => _da;

      public int Hra => _hra;

      public int Cca => _cca;
```

```
        public int Pf => _pf;

        public float CalculateSalary()
        {

            float allowance = (float)
                (Basic_salary * ((float)Da / 100) +
                (Basic_salary * ((float)Hra / 100))
                - (Basic_salary * ((float)Cca / 100))
                - (Basic_salary * ((float)Pf / 100)));

            float ded = (float)(Basic_salary * ((float)Pf / 100));
            float netsal = (float)(Basic_salary +(allowance -ded));
            return netsal;
        }
    }
}
```