

## Answer on Question#38562- Programming, C#

1. Task 2: Create a class Person with member data name, ID, constructor, destructor and member function display.  
Create a class Student\_info, which inherits class Person, in which member data for faculty number, group and faculty are added. The class contains a constructor, member functions for accessing the data, for change of ID and for displaying the data.  
Add Class Student\_marks, which inherits class Student\_info and contains marks in 3 subjects, constructor, member function show () to display the marks and member function av() to calculate the average grade.

### Solution.

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

namespace ConsoleApplication2
{
    class Program
    {
        static void Main(string[] args)
        {
            Person prs = new Person(Convert.ToInt32(Console.ReadLine()),
Console.ReadLine());
            prs.Show();
            Console.Read();
        }
    }

    public class Person
    {
        protected string Name;
        protected int ID;

        public Person(int id, string name)
        {
            ID = id; Name = name;
        }

        ~Person()
        {
        }

        public void Show()
        {
            Console.WriteLine("\nID: {0}\nName: {1}", ID, Name);
        }
    }

    public class Student_info : Person
    {

```

```

private List<int> facultyNum;
private List<int> group;

public Student_info(int id, string name,int fNum, int gNum):base( id, name)
{
    facultyNum.Add(fNum);
    group.Add(gNum);
}

~Student_info()
{
}

public void changeData(int id)
{
    ID = id;
}

public void Show()
{
    Console.WriteLine("ID: {0},\nFaculty number: {1},\nGroup: {2}", ID, facultyNum,
group);
}

}

public class Student_marks : Student_info
{
    private int mark_1;
    private int mark_2;
    private int mark_3;
    private int avmarks;

    public Student_marks(int id, string name,int fNum, int gNum, int m_1, int m_2, int
m_3) : base(id, name,fNum, gNum)
    {
        mark_1 = m_1;
        mark_2 = m_2;
        mark_3 = m_3;
    }

    public int av()
    {
        avmarks = (mark_1 + mark_2 + mark_3) / 3;

        return avmarks;
    }

    public void Show()
    {
        Console.WriteLine("Marks: 1) {0},2) {1},3) {2} and average: {3}", mark_1,
mark_2, mark_3, avmarks);
    }
}
}

```

```
file:///D:/Projects/ConsoleApplication2/ConsoleApplication2/bin/Debug/ConsoleApplication2.EXE
123123
Signal
ID: 123123
Name: Signal
-
```