**Practice project**

***OOPS:***

**Source code:**

**Program.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Rainbow

{

internal class Program

{

static void Main(string[] args)

{

student s=new student();

s.getdetails();

s.displaydetails();

Teacher t=new Teacher();

t.getdetails();

t.displaydetails();

subject ss = new subject();

ss.getdetails();

ss.displaydetails();

Console.ReadLine();

}

}

}

Student.cs:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Rainbow

{

internal class student

{

private string Name;

public string name

{

get { return Name; }

set { Name = value; }

}

private int std;

public int Standard

{

get { return std; }

set { std = value; }

}

private string section;

public string Section

{

get { return section; }

set { section = value; }

}

public void getdetails()

{

Console.WriteLine("Student details:");

Console.WriteLine("-----------------------------");

Console.WriteLine("Enter name of the student:");

this.name = Console.ReadLine();

Console.WriteLine("Enter class:");

this.std = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter section:");

this.section = Console.ReadLine();

Console.WriteLine("-----------------------------");

}

public void displaydetails()

{

Console.WriteLine("Details:");

Console.WriteLine("-----------------------------");

Console.WriteLine("Student name:" + name);

Console.WriteLine("class:" + std);

Console.WriteLine("Section:" + section);

Console.WriteLine("-----------------------------");

}

}

}

Teacher.cs:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Rainbow

{

internal class Teacher

{

private string Name;

public string name

{

get { return Name; }

set { Name = value; }

}

private int std;

public int Standard

{

get { return std; }

set { std = value; }

}

private string section;

public string Section

{

get { return section; }

set { section = value; }

}

private string sub;

public string Subject

{

get { return sub; }

set { sub = value; }

}

public void getdetails()

{

Console.WriteLine("Teacher details:");

Console.WriteLine("-----------------------------");

Console.WriteLine("Enter name of the teacher:");

this.name = Console.ReadLine();

Console.WriteLine("Enter class:");

this.std = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter section:");

this.section = Console.ReadLine();

Console.WriteLine("Enter subject name taken by teacher:");

this.sub = Console.ReadLine();

Console.WriteLine("-----------------------------");

}

public void displaydetails()

{

Console.WriteLine("Details:");

Console.WriteLine("-----------------------------");

Console.WriteLine("Teacher name:" + name);

Console.WriteLine("class:"+std);

Console.WriteLine("Section:"+section);

Console.WriteLine("Subject taken by teacher:" +sub);

Console.WriteLine("-----------------------------");

}

}

}

Subject.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Rainbow

{

internal class subject

{

private string Name;

public string name

{

get { return Name; }

set { Name = value; }

}

private int code;

public int subcode

{

get { return code; }

set { code = value; }

}

private string Teacher;

public string T

{

get { return Teacher; }

set { Teacher = value; }

}

private List<Teacher> l;

public List<Teacher> t

{

get { return l; }

set { l = value; }

}

private List<student> s;

public List<student> stud

{

get { return s; }

set { s = value; }

}

public void getdetails()

{

Console.WriteLine("Subject details:");

Console.WriteLine("-----------------------------");

Console.WriteLine("Enter name of subject:");

this.name=Console.ReadLine();

Console.WriteLine("Enter subject code:");

this.subcode=Convert.ToInt32(Console.ReadLine());

Console.WriteLine("-----------------------------");

}

public void displaydetails()

{

Console.WriteLine("Details of Subjects:");

Console.WriteLine("-----------------------------");

Console.WriteLine( "Subject name:"+name);

Console.WriteLine("Subject code:"+subcode);

Console.WriteLine("-----------------------------");

}

}

}