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**OOP Assignment**

**(Polymorphism)**

**Object: Solve the following problem using polymorphism:**

1. **A teacher behaves with student**
2. **A student behaves with teacher**

**Program:**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Polymorphism

{

public class teacher\_teacher

{

public virtual void behave()

{

Console.WriteLine("\nFormal behave");

}

public virtual void marks()

{

Console.WriteLine("\nHe gives marks to student");

}

public virtual void subject(string sub)

{

Console.WriteLine("\nHe teachers " + sub + " to students ");

}

public virtual void lesson()

{

Console.WriteLine("\nHe gives lesson to students");

}

}

class teacher\_student:teacher\_teacher

{

public override void behave()

{

Console.WriteLine("\n Informal behave");

}

public override void marks()

{

Console.WriteLine("\nHe takes marks from teacher");

}

public override void subject(string sub2)

{

Console.WriteLine("\n He learn " + sub2 + " from teacher");

}

public override void lesson()

{

Console.WriteLine("\nHe takes lesson from the teacher");

}

}

class Program

{

static void Main(string[] args)

{

string sub = "English", sub2 = "Maths";

teacher\_teacher obj1 = new teacher\_teacher();

teacher\_student obj2 = new teacher\_student();

Console.WriteLine("\n\t\t Behave as a teacher");

obj1.behave();

obj1.marks();

obj1.subject(sub);

obj1.lesson();

Console.WriteLine("\n\t\t Behave as a student");

obj2.behave();

obj2.marks();

obj2.subject(sub2);

obj2.lesson();

Console.ReadKey();

}

}

}

