Assignment 13

Person Class data

Person.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assignment13

{

public abstract class Person

{

public String Name { get; set; }

public Person()

{

Name = string.Empty;

}

public Person(string name)

{

Name = name;

}

public string getName()

{

return Name;

}

public void setName(string name)

{

Name = name;

}

public abstract bool isOutstanding();

}

}

Professor.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assignment13

{

public class Professor : Person

{

public int bookPublished { get; set; }

public Professor()

: base()

{

}

public Professor(string name, int bookPublished)

: base(name)

{

this.bookPublished = bookPublished;

}

public void print()

{

Console.WriteLine(Name + " of the Professor who Published " + bookPublished + " books");

}

public override bool isOutstanding()

{

bool Result = false;

if (bookPublished >= 4)

{

Result = true;

}

else

Result = false;

return Result;

}

}

}

Student.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assignment13

{

public class Student : Person

{

double Percentage;

public Student()

: base()

{

}

public Student(string name, double Percentage)

: base(name)

{

this.Percentage = Percentage;

}

public void display()

{

Console.WriteLine(Name + " of the Student who got " + Percentage + " Percentage");

}

public override bool isOutstanding()

{

bool Result = false;

if (Percentage >= 85)

{

Result = true;

}

else

Result = false;

return Result;

}

}

}

Program.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assignment13

{

class Program

{

static void Main(string[] args)

{

Person[] person = new Person[5];

person[0] = new Professor("Manoj", 6);

person[1] = new Professor("Kumar", 4);

person[2] = new Professor("Mani", 2);

person[3] = new Student("Raja", 89);

person[4] = new Student("Prabhu", 83);

for (int i = 0; i < person.Length; i++)

{

if (person[i].GetType().Name.Equals("Student"))

{

if ((person[i] as Student).isOutstanding())

{

(person[i] as Student).display();

}

}

if (person[i].GetType().Name.Equals("Professor"))

{

if ((person[i] as Professor).isOutstanding())

{

(person[i] as Professor).print();

}

}

}

Console.ReadKey();

}

}

}

Output

