using System; //class person

namespace Student

{

public class Person

{

protected int age;

protected string name;

public Person()

{

}

public Person(int age, string name)

{

this.age = age;

this.name = name;

}

public int Age { get {return age; } set { if(value>0 && value<200) age = value; } }

public string Name { get => name; set => name = value; }

public virtual void DisplayPerson()

{

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

Console.WriteLine("Age: " + age);

}

public virtual void Input()

{

Console.Write("Enter name: ");

Name = Console.ReadLine();

Console.Write("Enter age: ");

Age = int.Parse(Console.ReadLine());

}

public override string ToString()

{

return "Person [ " + name + ", " + age + "]";

}

}

}

using System; //class student

namespace Student

{

class Student : Person

{

private double gpa;

public Student()

{

}

public Student(int age, string name) : base(age, name)

{

}

public Student(double gpa, int age, string name) :base(age,name)

{

this.gpa = gpa;

}

internal double Gpa { get { return gpa; } set { if(value>=0 && value<=10) gpa = value; } }

public override void DisplayPerson()

{

base.DisplayPerson();

Console.WriteLine("GPA: {0:F2}",gpa);

}

public override void Input()

{

base.Input();

Console.Write("Enter GPA: ");

Gpa = double.Parse(Console.ReadLine());

}

public override string ToString()

{

return "Student [ " + name + ", " + age +", "+gpa+"]";

}

}

}

using System; //class program

namespace Student

{

class Program

{

static void Main(string[] args)

{

Person person = new Person();

person.Name = "Huong"; //call set method

person.Age = -5;

Console.WriteLine("Age: "+ person.Age);//call get method

//input person information

Console.WriteLine("\n------ Input Person Information ------");

person.Input();

Console.WriteLine("\n------ Person Information ------");

person.DisplayPerson();

Student student = new Student();

//input student information

Console.WriteLine("\n------ Input Student Information ------");

student.Input();

Console.WriteLine("\n------ Student Information ------");

student.DisplayPerson();

Console.ReadLine();

}

}

}