using System;

using System.Collections.Generic;

namespace ConsoleApp3

{

//class Base

//{

// public virtual void Show()

// {

// Console.WriteLine("i am base");

// }

//}

//class Derived : Base

//{

// public override void Show()

// {

// Console.WriteLine("i am derived");

// }

//}

//internal class Program

//{

// static void Main(string[] args)

// {

// Base b=new Derived();

// b.Show();

// }

//}

//class HDD

//{

//}

//class Student

//{

// public HDD Disc { get; set; }

// public Student()

// {

// Disc = new HDD();

// }

//}

#region Custom Exception Class

// class PaymentException : ApplicationException

// {

// public PaymentException(decimal money, string errorMessage, DateTime paymentDate)

// {

// Money = money;

// ErrorMessage = errorMessage;

// PaymentDate = paymentDate;

// }

// public decimal Money { get; set; }

// public string ErrorMessage { get; set; }

// public DateTime PaymentDate { get; set; }

// public override string Message => $@"

//Money : {Money}

//Payment Date : {PaymentDate.ToLongDateString()}/{PaymentDate.ToLongTimeString()}

//Error Message : {ErrorMessage}

//";

// }

// public class Program

// {

// static void Pay(decimal money)

// {

// if (money <= 0)

// {

// throw new PaymentException(money,

// "You do not have enought money" ,DateTime.Now);

// //throw new Exception("Yo do not have enought money");

// }

// else

// {

// Console.WriteLine("Payment done");

// }

// }

// static void Main(string[] args)

// {

// //Console.WriteLine(Math.Sqrt(-144));

// try

// {

// Pay(-1000);

// }

// catch (Exception ex)

// {

// Console.WriteLine(ex.Message);

// }

// }

// }

#endregion

#region Simple Interfaces

//class TV

//{

// public int Channels { get; set; }

// public string Name { get; set; }

//}

//class Radio

//{

// public int Channels { get; set; }

// public string Name { get; set; }

// public string DJ { get; set; }

//}

//public interface ISmart

//{

// void ConnectWiFi();//abstract

// void DisconnectWiFi();

//}

//class SmartTv : TV, ISmart

//{

// public void ConnectWiFi()

// {

// Console.WriteLine("We connected to Smart Tv wifi");

// }

// public void DisconnectWiFi()

// {

// Console.WriteLine("We disconnected to Smart Tv wifi");

// }

//}

//class SmartRadio : Radio, ISmart

//{

// public void ConnectWiFi()

// {

// Console.WriteLine("We connected to Smart Radio wifi");

// }

// public void DisconnectWiFi()

// {

// Console.WriteLine("We disconnected to Smart Radio wifi");

// }

//}

//public class Program

//{

// public static void Connect(ISmart smart)

// {

// smart.ConnectWiFi();

// Console.WriteLine("SUCCESSFULLY");

// }

// static void Main(string[] args)

// {

// //ISmart smart = new SmartRadio();

// //smart.ConnectWiFi();

// //while (true)

// //{

// //string code = Console.ReadLine();

// //if (code == "1")

// //{

// // Connect(new SmartTv());

// //}

// //else if(code == "2")

// //{

// // Connect(new SmartRadio());

// //}

// //}

// //List<ISmart> smartdevices = new List<ISmart>();

// //smartdevices.Add(new SmartTv());

// //smartdevices.Add(new SmartRadio());

// //foreach (var item in smartdevices)

// //{

// // item.ConnectWiFi();

// // item.DisconnectWiFi();

// //}

// }

//}

#endregion

#region Example 2 for Interfaces

abstract class Human

{

public string Name { get; set; }

public string Surname { get; set; }

public DateTime BirthDate { get; set; }

public override string ToString()

{

return $"{Name} {Surname} {BirthDate.ToLongDateString()}";

}

}

abstract class Employee : Human

{

public string Position { get; set; }

public decimal Salary { get; set; }

public override string ToString()

{

return $"{base.ToString()} {Position} {Salary}";

}

}

interface IManager

{

void Organize();

void Control();

void MakeBudget();

}

interface IWorker

{

void Work();

bool IsWorking { get; set; }

}

class Director : Employee, IManager

{

public void Control()

{

Console.WriteLine("I am BOSS , i will control you");

}

public void MakeBudget()

{

Console.WriteLine("Pul yoxdu , maash gelen ay olacaq");

}

public void Organize()

{

Console.WriteLine("i organise best work");

}

}

class Seller : Employee, IWorker

{

public bool IsWorking { get; set; }

public void Work()

{

Console.WriteLine("5 i 1 manat");

}

}

class Cashier : Employee, IWorker

{

public bool IsWorking { get; set; }

public void Work()

{

Console.WriteLine("o biri kassa boshdu");

}

}

public class Program

{

static void Main(string[] args)

{

//Director director = new Director

//{

// BirthDate = DateTime.Now,

// Name = "Mike",

// Surname = "Mike ",

// Position = "Developer",

// Salary = 10500

//};

//director.Organize();

//director.Control();

//director.MakeBudget();

//IManager director = new Director

//{

// BirthDate = DateTime.Now,

// Name = "Mike",

// Surname = "Mike ",

// Position = "Developer",

// Salary = 10500

//};

//director.Organize();

//director.Control();

//director.MakeBudget();

//List<IWorker> workers=new List<IWorker>();

//workers.Add(new Seller());

//workers.Add(new Cashier());

//foreach (var worker in workers)

//{

// worker.Work();

// Console.WriteLine(worker.IsWorking);

// if(worker is Seller s)

// {

// Console.WriteLine(s.Salary);

// }

// else if(worker is Cashier c)

// {

// Console.WriteLine(c.Salary);

// }

//}

/\*

Car id,model,vendor,speed,

ToReactFirstStageSeconds() abstract 60 km/hour

ToReactSecondStageSeconds() abstract 100 km/hour

Mercedes

RetroMercedes PlayRetroMusic

SportMercedes

UseTurbo

UseTurboPlus

BMW

RetroBMW PlayRetroMusic

SportBmw

UseTurbo

UseTurboPlus

\*/

}

}

#endregion

}