using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day3Demos

{

class Student

{

int rn;

string name;

string batchCode;

int marks;

static string manager;

// Default Constructor

public Student() { }

// Parameterized Constructor

public Student(int x)

{

rn = x;

Console.WriteLine("Enter Name");

name = Console.ReadLine();

Console.WriteLine("Enter Batch Code");

batchCode = Console.ReadLine();

Console.WriteLine("Enter Marks");

marks = Convert.ToByte(Console.ReadLine());

}

// Parameterized Constructor

public Student(int x, string y)

{

rn = x;

name = y;

Console.WriteLine("Enter Batch Code");

batchCode = Console.ReadLine();

Console.WriteLine("Enter Marks");

marks = Convert.ToByte(Console.ReadLine());

}

// Fully Parameterized Constructor

public Student(int x, string y, string z, int a)

{

rn = x;

name = y;

batchCode = z;

marks = a;

}

// Copy Constructor

public Student(Student obj)

{

Console.WriteLine("Enter RollNo");

rn = Convert.ToByte(Console.ReadLine());

name = obj.name;

marks = obj.marks;

batchCode = obj.batchCode;

}

// Static Constructor

static Student()

{

manager = "XYZ";

}

public static void DisplayManagerName()

{

Console.WriteLine("Manager is " + manager);

}

public void GetDetails()

{

Console.WriteLine("Enter RollNo");

rn = Convert.ToByte(Console.ReadLine());

Console.WriteLine("Enter Name");

name = Console.ReadLine();

Console.WriteLine("Enter Batch Code");

batchCode = Console.ReadLine();

Console.WriteLine("Enter Marks");

marks = Convert.ToByte(Console.ReadLine());

}

public void DisplayDetails()

{

Console.WriteLine("RollNo is " + rn);

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

Console.WriteLine("Batch Code is " + batchCode);

Console.WriteLine("Marks are " + marks);

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class Program

{

static void Main()

{

Day3Demos.Student.DisplayManagerName();

Console.WriteLine("Studnet1");

Day3Demos.Student student1 = new Day3Demos.Student();// Here Def const will be called

student1.GetDetails();

student1.DisplayDetails();

Console.WriteLine("Studnet2, Here we are passing rn to the obejct");

Day3Demos.Student student2 = new Day3Demos.Student(2);// Here Para const will be called

//student2.GetDetails();

student2.DisplayDetails();

Console.WriteLine("Studnet2, Here we are passing rn & name to the obejct");

Day3Demos.Student student3 = new Day3Demos.Student(3,"Ajay"); // Here Para const will be called

student3.DisplayDetails();

Console.WriteLine("Studnet2, Here we are every value to the obejct");

Day3Demos.Student student4 = new Day3Demos.Student(4, "Ajay", "B001", 90);

// Here Para const will be called;

student4.DisplayDetails();

Console.WriteLine("Studnet2, Here we are passing student4 object to new obejct");

Day3Demos.Student student5 = new Day3Demos.Student(student4); // Here Copy Const will be calledr

student5.DisplayDetails();

//Console.Read();

}

}

Hierarchial Inheitance

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day3Demos

{

class Employee

{

int id;

string name;

string address;

public void GetDetails() {

Console.WriteLine("ENter ID");

id = Convert.ToByte(Console.ReadLine());

Console.WriteLine("ENter Name");

name = Console.ReadLine();

Console.WriteLine("ENter Address");

address= Console.ReadLine();

}

public void DisplayDetails()

{

Console.WriteLine("Employee ID " + id);

Console.WriteLine("Name " + name);

Console.WriteLine("Address is " + address);

}

}

class FullTimeEmployee : Employee

{

string manager;

string department;

public void GetFullTimeEmployeeDetails()

{

Console.WriteLine("Enter Manager Name");

manager = Console.ReadLine();

Console.WriteLine("Enter Department Name");

department = Console.ReadLine();

}

public void DisplayFullTimeEmployeeDetails()

{

Console.WriteLine("Department is " + department);

Console.WriteLine("Manager Name is" + manager);

}

}

class PartTimeEmployee : Employee

{

string duration;

public void GetPartimeEmployeeDetails()

{

Console.WriteLine("Enter Duration");

duration = Console.ReadLine();

}

public void DisplayPartimeEmployeeDetails()

{

Console.WriteLine("Duration is " + duration);

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day3Demos

{

class ProgramMain

{

static void Main()

{

Console.WriteLine("Employee");

Employee employee = new Employee();

employee.GetDetails();

employee.DisplayDetails();

Console.WriteLine("FullTimeEmployee");

FullTimeEmployee full = new FullTimeEmployee();

full.GetDetails();

full.GetFullTimeEmployeeDetails();

full.DisplayDetails();

full.DisplayFullTimeEmployeeDetails();

Console.WriteLine("PartTimeEmployee");

PartTimeEmployee part = new PartTimeEmployee();

part.GetDetails();

part.GetPartimeEmployeeDetails();

part.DisplayDetails();

part.DisplayPartimeEmployeeDetails();

}

}

}

Method Overriding

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day3Demos

{

class Employee

{

int id;

string name;

string address;

public void GetDetails() {

Console.WriteLine("ENter ID");

id = Convert.ToByte(Console.ReadLine());

Console.WriteLine("ENter Name");

name = Console.ReadLine();

Console.WriteLine("ENter Address");

address= Console.ReadLine();

}

public void DisplayDetails()

{

Console.WriteLine("Employee ID " + id);

Console.WriteLine("Name " + name);

Console.WriteLine("Address is " + address);

}

}

class FullTimeEmployee : Employee

{

string manager;

string department;

public void GetDetails()

{

Console.WriteLine("Enter Manager Name");

manager = Console.ReadLine();

Console.WriteLine("Enter Department Name");

department = Console.ReadLine();

}

public void DisplayDetails()

{

Console.WriteLine("Department is " + department);

Console.WriteLine("Manager Name is" + manager);

}

}

class PartTimeEmployee : Employee

{

string duration;

public void GetDetails()

{

Console.WriteLine("Enter Duration");

duration = Console.ReadLine();

}

public void DisplayDetails()

{

Console.WriteLine("Duration is " + duration);

}

}

}

-----------------------------------------------------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day3Demos

{

class Employee

{

int id;

string name;

string address;

public void GetDetails() {

Console.WriteLine("ENter ID");

id = Convert.ToByte(Console.ReadLine());

Console.WriteLine("ENter Name");

name = Console.ReadLine();

Console.WriteLine("ENter Address");

address= Console.ReadLine();

}

public void DisplayDetails()

{

Console.WriteLine("Employee ID " + id);

Console.WriteLine("Name " + name);

Console.WriteLine("Address is " + address);

}

}

class FullTimeEmployee : Employee

{

string manager;

string department;

public void GetDetails()

{

base.GetDetails();

Console.WriteLine("Enter Manager Name");

manager = Console.ReadLine();

Console.WriteLine("Enter Department Name");

department = Console.ReadLine();

}

public void DisplayDetails()

{

base.DisplayDetails();

Console.WriteLine("Department is " + department);

Console.WriteLine("Manager Name is" + manager);

}

}

class PartTimeEmployee : Employee

{

string duration;

public void GetDetails()

{

base.GetDetails();

Console.WriteLine("Enter Duration");

duration = Console.ReadLine();

}

public void DisplayDetails()

{

base.DisplayDetails();

Console.WriteLine("Duration is " + duration);

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day3Demos

{

class ProgramMain

{

static void Main()

{

Console.WriteLine("Employee");

Employee employee = new Employee();

employee.GetDetails();

employee.DisplayDetails();

Console.WriteLine("FullTimeEmployee");

FullTimeEmployee full = new FullTimeEmployee();

full.GetDetails();

//full.GetFullTimeEmployeeDetails();

full.DisplayDetails();

//full.DisplayFullTimeEmployeeDetails();

Console.WriteLine("PartTimeEmployee");

PartTimeEmployee part = new PartTimeEmployee();

part.GetDetails();

// part.GetPartimeEmployeeDetails();

part.DisplayDetails();

//part.DisplayPartimeEmployeeDetails();

}

}

}