/////Program1////

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace CSharp260716\_E1

{

class MyClass

{

public int num;

public MyClass()

{

Console.WriteLine("Constructor has been called");

}

~MyClass()

{

Console.WriteLine("Destructor has been called");

}

public void Show1()

{

Console.WriteLine("Number is " + num);

}

/\*protected override void Finalize(Object ob1)

{

}\*/

}

class YourClass

{

public int num;

public void Show2()

{

Console.WriteLine("Number is " + num);

}

}

class TestClass

{

static void Main(string[] args)

{

MyClass ob1 = new MyClass();

MyClass ob2 = new MyClass();

YourClass ob3 = new YourClass();

ob1.num = 10;

ob2.num = 20;

ob3.num = 30;

ob1.Show1();

ob2.Show1();

ob3.Show2();

if (ob1.Equals(ob2))

{

Console.WriteLine("Both objects values are same");

}

else

{

Console.WriteLine("Both objects values are not same");

}

Console.WriteLine();

Console.WriteLine("Hash Code : " + ob1.GetHashCode());

Console.WriteLine();

Console.WriteLine("Type : " + ob1.GetType());

Console.WriteLine();

MyClass ob4;

ob4 = ob1;

if (ReferenceEquals(ob1, ob4))

{

Console.WriteLine("Both objects Reference are Equals");

}

else

{

Console.WriteLine("Both objects Reference are not Equals");

}

Console.WriteLine();

Console.WriteLine("String : " + ob1.ToString());

Console.ReadLine();

}

}

}

/////Program2////

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace CSharp260716\_E2

{

class BoxingDemo

{

static void Main(string[] args)

{

int x;

x = 10;

object obj;

Console.WriteLine("value of x = " + x);

//Boxing

obj = x;

Console.WriteLine("value of obj = " + obj);

int y;

//Unboxing with type casting

y = (int)obj;

Console.WriteLine("value of y = " + y);

Console.ReadLine();

}

}

}

/////Program3////

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace CSharp260716\_E3

{

class BoxingDemo

{

static void Main(string[] args)

{

int x;

x = 10;

Console.WriteLine("How is x " + x);

//x is automattically boxed when passed to Sqr()

x = BoxingDemo.Sqr(x);

Console.WriteLine("Here is a x squared: " + x);

Console.ReadLine();

}

static int Sqr(object o)

{

return (int)o \* (int)o;

}

}

}

/////Program4////

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace CSharp260716\_E4

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine(10.ToString());

Console.ReadLine();

}

}

}

/////Program5////

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace CSharp260716\_E5

{

class Program

{

static void Main(string[] args)

{

object[] ga = new object[10];

//Stores int

for (int i = 0; i < 3; i++)

ga[i] = i;

//Stores double

for (int i = 3; i < 6; i++)

ga[i] = (double) i/2;

//Store two strings., a bool, and a char

ga[6] = "Hello";

ga[7] = true;

ga[8] = 'k';

ga[9] = "End";

//Stores double

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

Console.WriteLine("ga[" + i + "]" + " " + ga[i]);

Console.ReadLine();

}

}

}