**/\*Roll no: 02**

**Program name: write a program for implicit casting. \*/**

**Code:**

using System;

namespace imp

{

class implicit

{

static void Main()

{

int x=143;

double z=x;

System.Console.WriteLine(x);

}

}

}

**Output:**

E:\Sahil>csc impl.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>implicit

143

**/\*Roll no: 02**

**Program name: write a program for explicit casting. \*/**

**Code:**

using System;

namespace exp

{

class expl

{

static void Main()

{

double d=4444.1234;

int i;

i=(int)d;

System.Console.WriteLine(i);

}

}

}

**Output:**

E:\Sahil>csc expl.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>expl

4444

**/\*Roll no: 02**

**Program name: write a program for pass by value. \*/**

**Code:**

using System;

namespace pass

{

class passval

{

static void SquareInt(int x)

{

x\*=x;

Console.WriteLine("The value inside the method:{0}",x);

}

static void Main()

{

int n=10;

System.Console.WriteLine("The value before calling method:{0}",n);

SquareInt(n);

System.Console.WriteLine("The value after calling method:{0}",n);

}

}

}

**Output:**

E:\Sahil>csc passval.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>passval

The value before calling method:10

The value inside the method:100

The value after calling method:10

**\*/Roll no: 02**

**Program name:write a program for pass by reference. /\***

**Code:**

using System;

namespace pass

{

class passref

{

static void SquareInt(ref int x)

{

x\*=x;

Console.WriteLine("The value inside the method:{0}",x);

}

static void Main()

{

int n=5;

System.Console.WriteLine("The value before calling method:{0}",n);

SquareInt(ref n);

System.Console.WriteLine("The value after calling method:{0}",n);

}

}

}

**Output:**

E:\Sahil>csc passref.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>passref

The value before calling method:5

The value inside the method:25

The value after calling method:25

**/\*Roll no: 02**

**Program name: write a program for out parameter. \*/**

**Code:**

using System;

namespace outp

{

class parameter1

{

static void Main(string []args)

{

int a=5,b=10,c=15;

int s,p;

sumprod(a,b,c,out s,out p);

Console.WriteLine("sum={0} product={1}",s,p);

}

static void sumprod(int x,int y,int z,out int ss,out int pp)

{

ss=x+y+z;

pp=x\*y\*z;

}

}

}

**Output:**

E:\Sahil>csc parameter1.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>parameter1

sum=30 product=750

**/\*Roll no: 02**

**Program name: write a program for input array and print the element & sum of**

**element.\*/**

**Code:**

using System;

namespace hello

{

class sumele

{

static void Main(string[] args)

{

int i,sum=0;

int []marks;

float avg;

marks= new int[30];

for(i=0;i<=2;i++)

{

Console.WriteLine("enter marks");

marks[i]=Convert.ToInt32(Console.ReadLine());

sum = sum + marks[i];

}

avg=sum/3;

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

Console.WriteLine("Array elements={0}",marks[i]);

Console.WriteLine("Sum={0}", sum);

Console.WriteLine("Average={0}", avg);

}

}

}

**Output:**

E:\Sahil>csc sumele.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>sumele

enter marks

90

enter marks

90

enter marks

90

Array elements=90

Array elements=90

Array elements=90

Sum=270

Average=90

**/\*Roll no: 02**

**Program name:write a program for boxing. \*/**

**Code:**

using System;

namespace box

{

class boxing

{

static void Main()

{

int i=143;

object o=i;

i=341;

Console.WriteLine("The value type value={0}",i);

Console.WriteLine("The object type value={0}",o);

}

}

}

**Output:**

E:\Sahil>csc boxing.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>boxing

The value type value=341

The object type value=143

**\*/Roll no:3002**

**Program name: write a program for unboxing. /\***

**Code:**

using System;

namespace box

{

class unboxing

{

static void Main()

{

int i=143;

object o=i;

int j=(int)o;

Console.WriteLine("The value type value={0}",j);

Console.WriteLine("The object type value={0}",o);

}

}

}

**Output:**

E:\Sahil>csc unboxing.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>unboxing

The value type value=0

The object type value=143

**/\*Roll no: 02**

**Program name: write a program for partial class. \*/**

**Code:**

1. **Program.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

public partial class Class1

{

public int add(int a, int b)

{

return a + b;

}

}

}

1. **CodeFile1.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

public partial class Class1

{

public int sub(int a, int b)

{

return a - b;

}

public static void Main()

{

Class1 c1 = new Class1();

int a = c1.add(4, 4);

int b = c1.sub(8, 4);

Console.WriteLine("Add=" + a);

Console.WriteLine("Sub=" + b);

Console.ReadKey();

}

}

}

**OUTPUT :**

Add=8

Sub=4

**\*/Roll no: 02**

**Program name: write a program for passing array to function./\***

**Code:**

using System;

namespace Array

{

class funarrary

{

double getAverage(int[] arr, int size)

{

int i;

double avg;

int sum = 0;

for (i = 0; i < size; ++i)

{

sum += arr[i];

}

avg = (double)sum / size;

return avg;

}

static void Main(string[] args)

{

funarrary app = new funarrary();

int [] balance = new int[]{1000, 2, 3, 17, 50};

double avg;

avg = app.getAverage(balance, 5 ) ;

Console.WriteLine( "Average value is: {0} ", avg );

Console.ReadKey();

}

}

}

**Output:**

E:\Sahil>csc funarrary.cs

Microsoft (R) Visual C# 2008 Compiler version 3.5.21022.8

for Microsoft (R) .NET Framework version 3.5

Copyright (C) Microsoft Corporation. All rights reserved.

E:\Sahil>funarrary

Average value is: 214.4