1. **Develop a C# .NET Console Application to demonstrate the conditional statements.**

```
using System;
using System.Collections;

namespace ConsoleApplication12
{
class Program
{
static void Main(string[] args)
{
int choice, a=0,b=0;
while(true)
{
Console.WriteLine("");
Console.WriteLine("Demonstration of conditional statements");
Console.WriteLine("Enter choice");
Console.WriteLine("1. Simple if");
Console.WriteLine("2. If else");
Console.WriteLine("3. If else if");
Console.WriteLine("Switch: program is implemented using switch");
Console.WriteLine("4. exit");

choice = Convert.ToInt32(Console.ReadLine()); ;

if(choice > 0 && choice <4)
{
Console.WriteLine("Enter two numbers");
a = Convert.ToInt32(Console.ReadLine());
b = Convert.ToInt32(Console.ReadLine());
}
// switch statement
switch (choice)
```

```csharp
{
case 1:
// simple if
if (a == b)
Console.WriteLine("Both are equal");
break;

case 2:
// if else
if (a == b)
Console.WriteLine("Both are equal");
else
Console.WriteLine("Both are not equal");
break;

case 3:
// if else if
if (a > b)
Console.WriteLine("{0} is greater than {1}", a, b);
else if( a<b)
Console.WriteLine("{0} is less than {1}", a, b);
else
Console.WriteLine("Both {0} and {1} are equal", a, b);
break;

case 4:
goto exit;
break;

default:
Console.WriteLine("Invalid choice");
break;
}
}
```
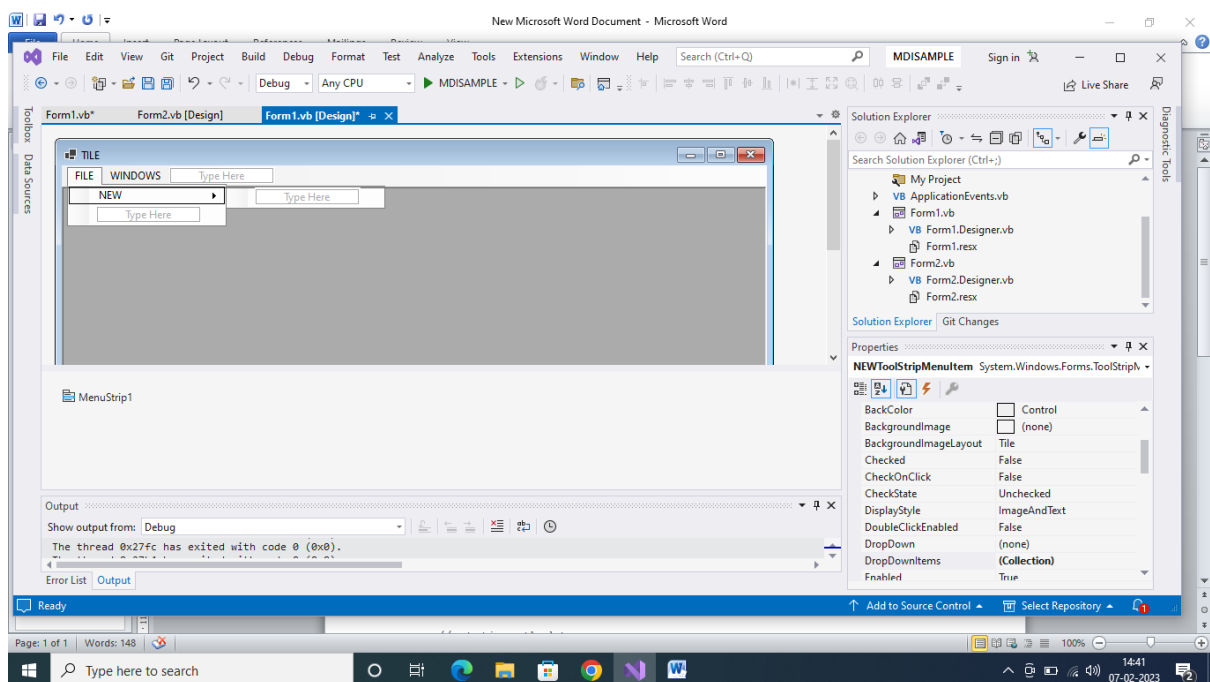
exit:

Console.WriteLine("");

}

}

}

2. Demonstrate MDI Application using vb.net

Form1.vb [design]

Form1.vb

```
Public Class Form1
    Private f2integer As Integer = 0
    Private Sub NEWToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
NEWToolStripMenuItem.Click
        Dim f2 As New Form2()
        f2.MdiParent = Me
        f2integer = f2integer + 1
        f2.Text = "new" & f2integer
        f2.Show()
```
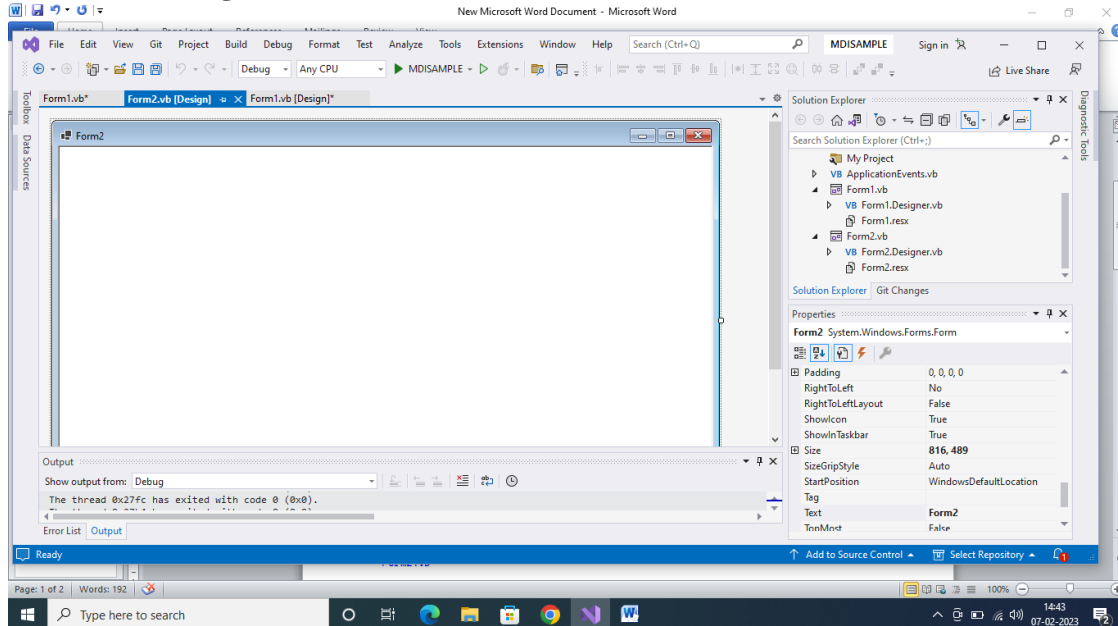
```
    End Sub
End Class
```

Form2.vb [Design]

3. Demonstrate Multithreading programming in C#.NET

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading;
using System.Threading.Tasks;

namespace ConsoleApp10
{
internal class Program
{
public static void method1()
{

// It prints numbers from 0 to 10
```

```csharp
for (int I = 0; I <= 10; I++)
{
Console.WriteLine("Method1 is : {0}", I);

// When the value of I is equal to 5 then
// this method sleeps for 6 seconds
if (I == 5)
{
Thread.Sleep(6000);
}
}
}

// static method two
public static void method2()
{
// It prints numbers from 0 to 10
for (int J = 0; J <= 10; J++)
{
Console.WriteLine("Method2 is : {0}", J);
}
}

// Main Method
static public void Main()
{

// Creating and initializing threads
Thread thr1 = new Thread(method1);
Thread thr2 = new Thread(method2);
thr1.Start();
thr2.Start();
}
}
```

}