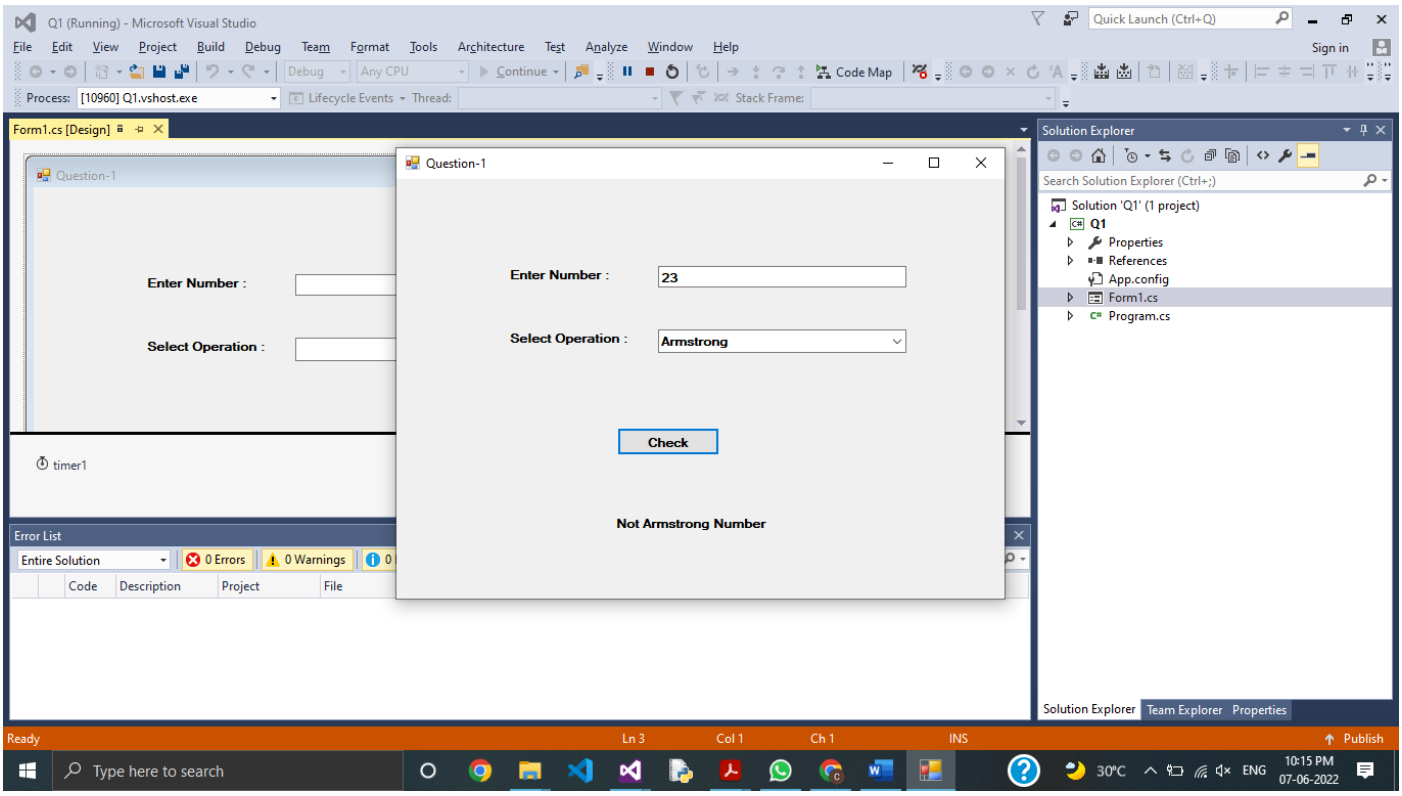
.Net Practical (207) – Assignment-1

/*

1) Take a text box , combo box, button and label, take input of the number and select the operation to be performed from combo box [prime, Armstrong, palindrome] and display the answer on label.

***/**



```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q1
{
    public partial class frmQ1 : Form
    {
        public frmQ1()
        {
            InitializeComponent();
        }

        private void btnCheck_Click(object sender, EventArgs e)
        {
            if(txtNum.Text == "")
            {
                MessageBox.Show("Please Enter any Positive Number To Check.",
"Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
                lblAns.Text = "";
            }
            else
            {
                int num = 0;
                if (check_num())
                {
                    num = Convert.ToInt32(txtNum.Text);
                }
                else
                {
                    MessageBox.Show("Please Enter any Positive Numbers Only..",
"Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
                    return;
                }
                String op = cmbOp.Text;
                bool ans = true;
                if (op == "Prime")
                {
                    for (int i = 2; i < num; i++)
                    {
                        if (num % i == 0)
                        {
                            ans = false;
                        }
                    }
                    if (ans == true)
                    {
                        lblAns.Text = "Prime Number";
                    }
                    else
                    {
                        lblAns.Text = "Not Prime Number";
                    }
```

```
            }
            else if (op == "Armstrong")
            {
                int n1 = num;
                int rem, sum = 0;
                while (n1 > 0)
                {
                    rem = n1 % 10;
                    sum = sum + (rem * rem * rem);
                    n1 = n1 / 10;
                }
                if (num == sum)
                {
                    ans = true;
                }
                else
                {
                    ans = false;
                }
                if (ans == true)
                {
                    lblAns.Text = "Armstrong Number";
                }
                else
                {
                    lblAns.Text = "Not Armstrong Number";
                }
            }
            else if (op == "Palindrome")
            {
                int n1 = num, n2 = 0;
                int rem;
                while (n1 > 0)
                {
                    rem = n1 % 10;
                    n2 = (n2 * 10) + rem;
                    n1 = n1 / 10;
                }
                if (n2 == num)
                {
                    ans = true;
                }
                else
                {
                    ans = false;
                }
                if (ans == true)
                {
                    lblAns.Text = "Palindorme Number";
                }
                else
                {
                    lblAns.Text = "Not Palindorme Number";
                }
            }
            else
            {
                MessageBox.Show("Please Select Any Operation.", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
```

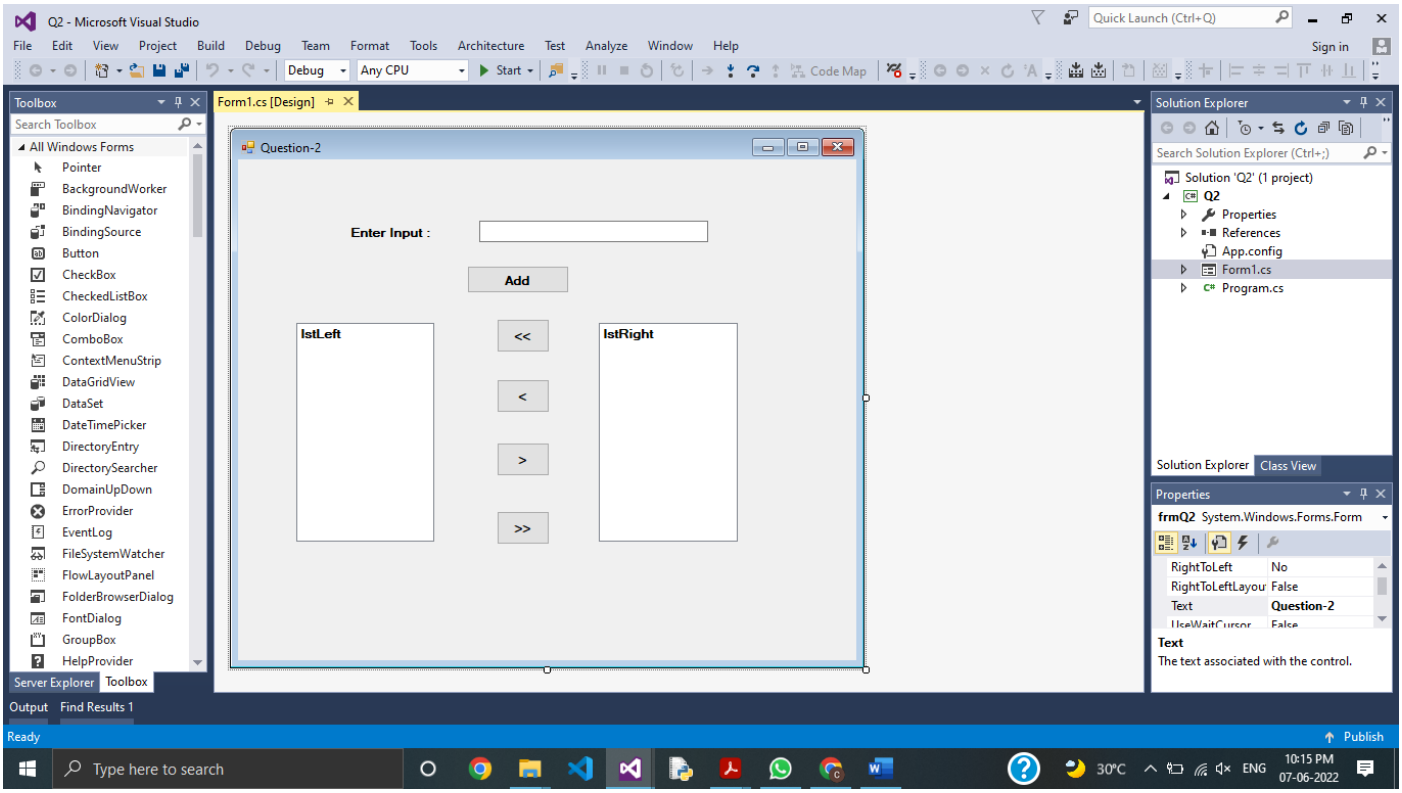
```
                lblAns.Text = "";
            }
        }

    }

    private void txtNum_TextChanged(object sender, EventArgs e)
    {
        if(txtNum.Text == "")
        {
            lblAns.Text = "";
        }
    }

    private bool check_num()
    {

        int x = 0;
        if (Int32.TryParse(txtNum.Text, out x))
        {
            return true;
        }
        else
        {
            return false;
        }
    }

}
}
```

/*

2) Take a text box, buttons and list boxes, text input in text box should be added to list box 1

and given the set of buttons to shuffle the content between two list boxes.

*/



```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q2
{
    public partial class frmQ2 : Form
    {
        public frmQ2()
        {
            InitializeComponent();
        }

        private void btnAdd_Click(object sender, EventArgs e)
        {
            String input = txtInput.Text;
            if(input == "")
            {
                MessageBox.Show("Please Enter Input in TextBox..", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                lblAns.Text = "";
            }
            else
            {
                lstLeft.Items.Add(input);
                lblAns.Text = "Item Added to Left ListBox..";
            }
        }

        private void btnAllLeft_Click(object sender, EventArgs e)
        {
            if(lstRight.Items.Count == 0)
            {
                MessageBox.Show("There is No Items in Right ListBox..", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                lblAns.Text = "";
            }
            else
            {
                foreach (object s in lstRight.Items)
                {
                    if (!(s.Equals("")))
                    {
                        lstLeft.Items.Add(s.ToString());
                    }
                }
                lstRight.Items.Clear();
                lblAns.Text = "All Items Added from Right to Left ListBox..";
            }

        }

        private void btnAllRight_Click(object sender, EventArgs e)
```

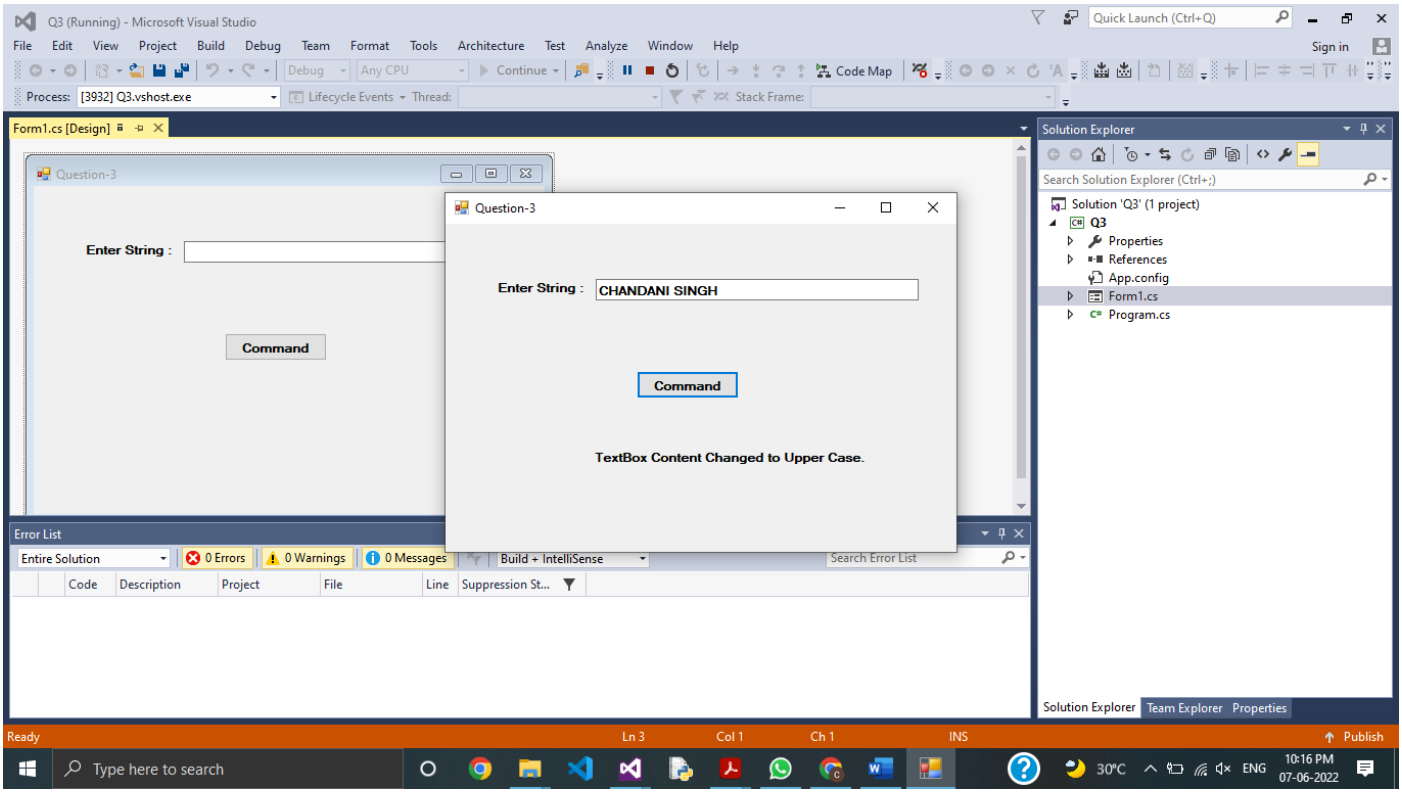
```
        {
            if (lstLeft.Items.Count == 0)
            {
                MessageBox.Show("There is No Items in Left ListBox..", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                lblAns.Text = "";
            }
            else
            {
                foreach (object s in lstLeft.Items)
                {
                    if (!(s.Equals("")))
                    {
                        lstRight.Items.Add(s.ToString());
                    }

                }
                lstLeft.Items.Clear();
                lblAns.Text = "All Items Added from Left to Right ListBox..";
            }
        }

        private void btnLeft_Click(object sender, EventArgs e)
        {
            if (lstRight.Items.Count == 0)
            {
                MessageBox.Show("There is No Items in Right ListBox..", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                lblAns.Text = "";
            }
            else
            {
                String s = lstRight.GetItemText(lstRight.SelectedItem);
                if (!(s.Equals("")))
                {
                    lstLeft.Items.Add(s);
                    lstRight.Items.Remove(s);
                    lblAns.Text = "Selected Item Added from Right to Left ListBox..";
                }
                else
                {
                    MessageBox.Show("There is No Slected Items in Right
ListBox..Please Select Item from Right ListBox..", "Warning", MessageBoxButtons.OK,
MessageBoxIcon.Warning);
                    lblAns.Text = "";
                }
            }
        }

        private void btnRight_Click(object sender, EventArgs e)
        {
            if (lstLeft.Items.Count == 0)
            {
                MessageBox.Show("There is No Items in Left ListBox..", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                lblAns.Text = "";
            }
            else
            {
```

```
                String s = lstLeft.GetItemText(lstLeft.SelectedItem);
                if (!(s.Equals("")))
                {
                    lstRight.Items.Add(s);
                    lstLeft.Items.Remove(s);
                    lblAns.Text = "Selected Item Added from Left to Right ListBox..";
                }
                else
                {
                    MessageBox.Show("There is No Slected Items in Left ListBox..Please
Select Item from Left ListBox..", "Warning", MessageBoxButtons.OK,
MessageBoxIcon.Warning);
                    lblAns.Text = "";
                }
            }
        }

        private void txtInput_TextChanged(object sender, EventArgs e)
        {
            lblAns.Text = "";
        }
    }
}
```

/*

3) Take a text box control and a command button. The text typed in the text box should be converted to upper case on clicking the command button.

*/

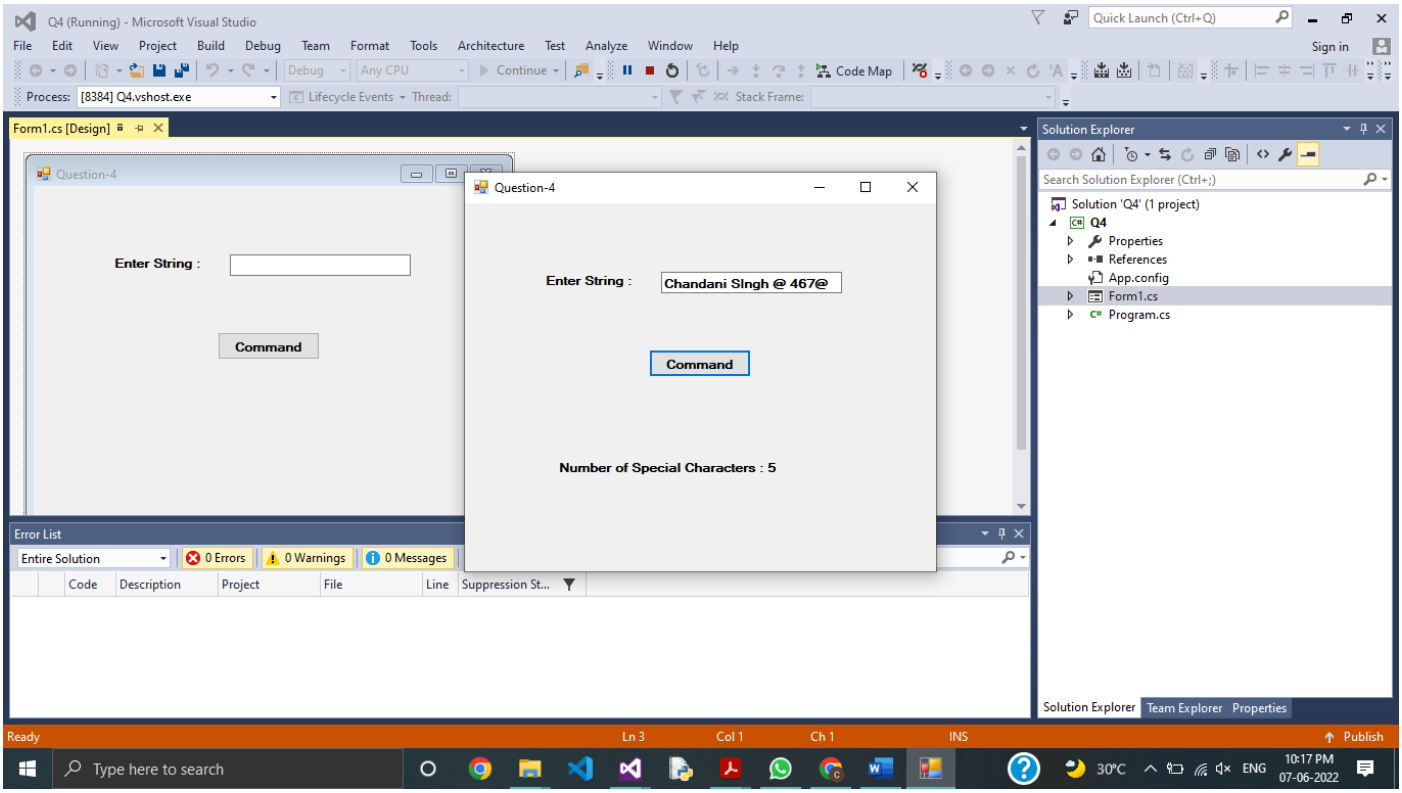


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q3
{
    public partial class frmQ3 : Form
    {
        public frmQ3()
        {
            InitializeComponent();

        }

        private void btnCmd_Click(object sender, EventArgs e)
        {
            if (txtEnter.Text == "")
            {
                MessageBox.Show("Please Enter any Input...then Click command Button to
see effect..", "Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
            }
            else
            {
                txtEnter.Text = txtEnter.Text.ToUpper();
                lblAns.Text = "TextBox Content Changed to Upper Case.";
            }

        }

        private void txtEnter_TextChanged(object sender, EventArgs e)
        {
            lblAns.Text = "";
        }
    }
}
```

/*

4) Take a text box control, label and a command button, on click of the button find no of special characters in text box input.

*/

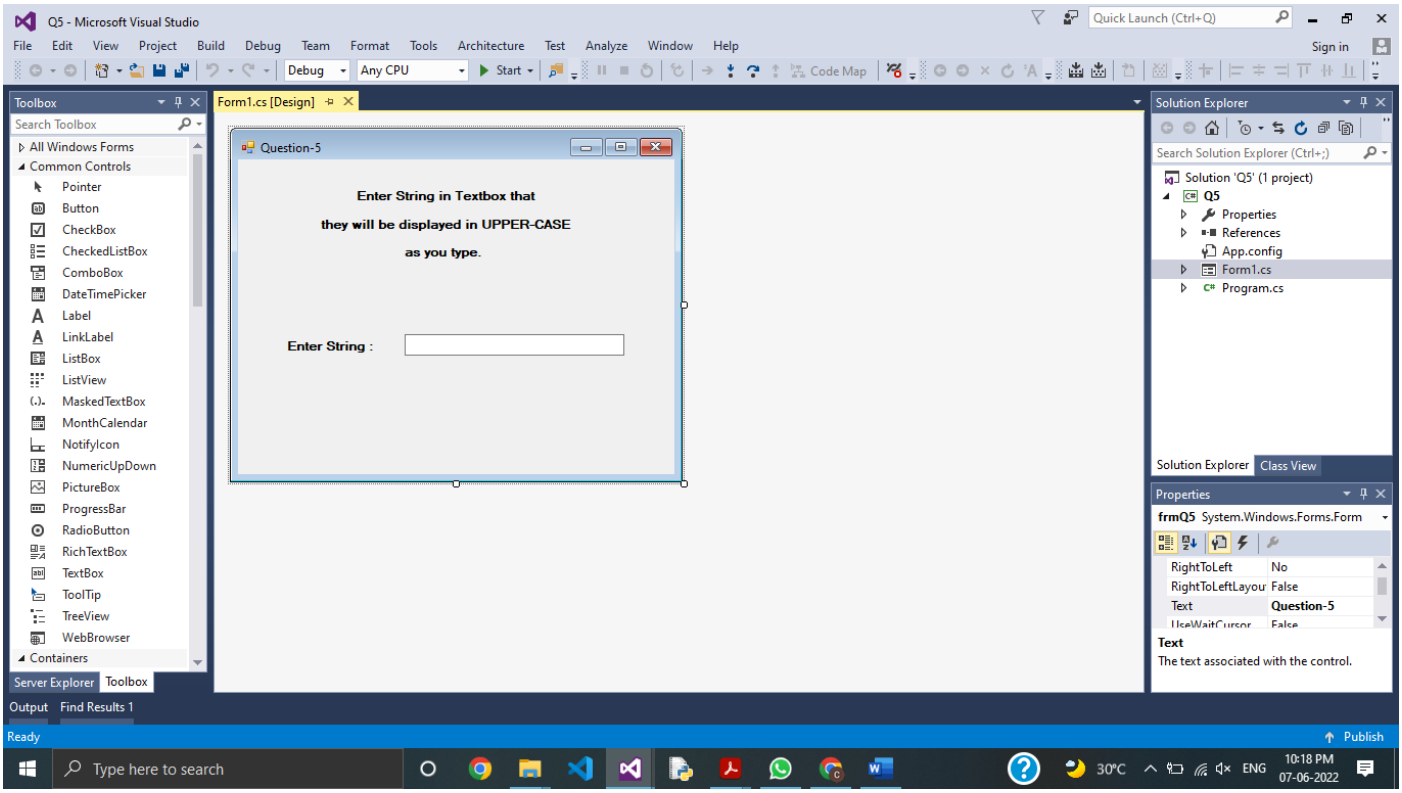


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q4
{
    public partial class frmQ4 : Form
    {
        public frmQ4()
        {
            InitializeComponent();
        }

        private void btnCmd_Click(object sender, EventArgs e)
        {
            if(txtEnter.Text == "")
            {
                MessageBox.Show("Please Enter String into TextBox..that Program can
count number of Special Characters..", "Warning", MessageBoxButtons.OK,
MessageBoxIcon.Warning);
                return;
            }
            else
            {
                String str = txtEnter.Text;
                int count = str.Count(c => !char.IsLetterOrDigit(c));
                lblAns.Text = "Number of Special Characters : " + count;
            }

        }

        private void txtEnter_TextChanged(object sender, EventArgs e)
        {
            lblAns.Text = "";
        }
    }
}
```

/*

5) Take a text box. The text typed in the text box should get converted to upper case as and when the characters are being typed.

*/

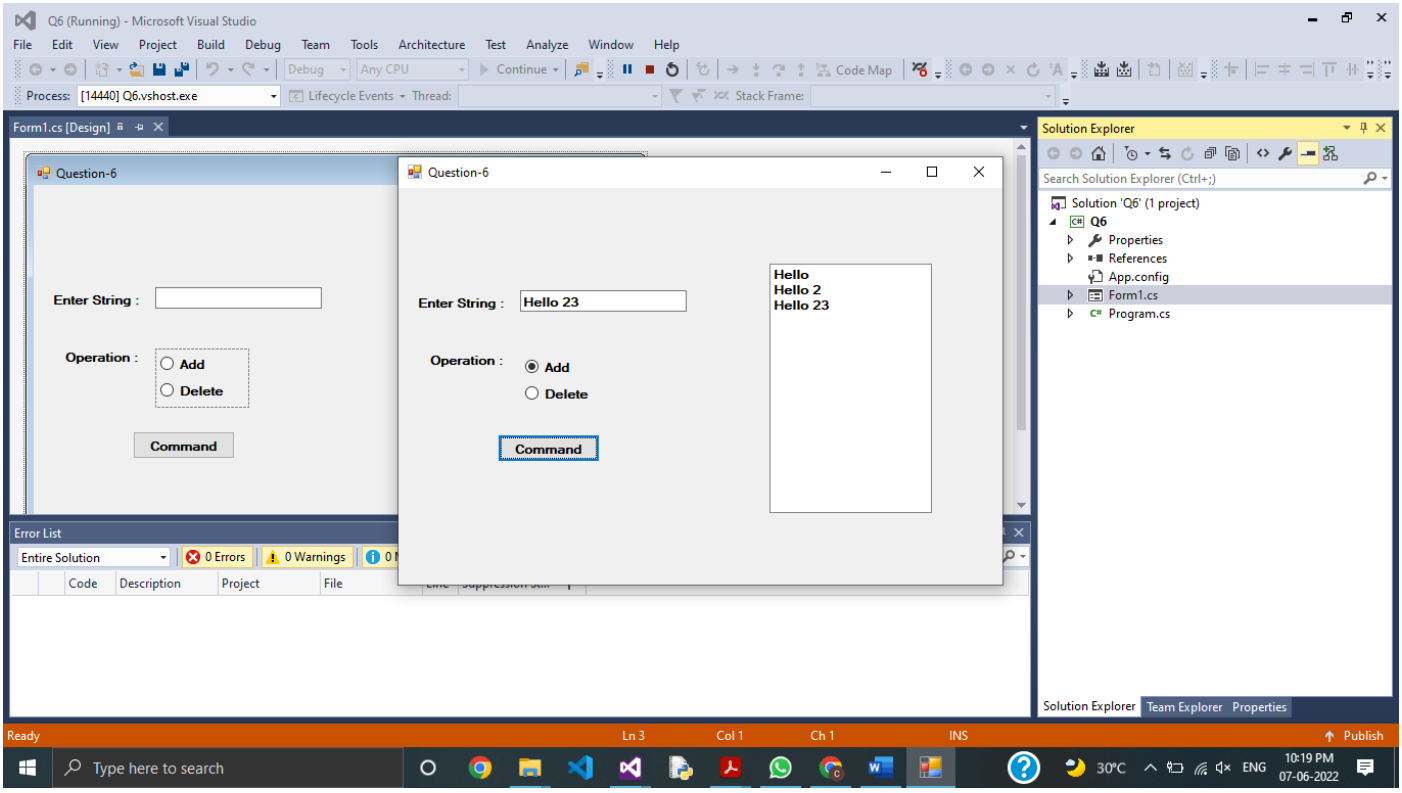


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q5
{
    public partial class frmQ5 : Form
    {
        public frmQ5()
        {
            InitializeComponent();
        }

        private void txtEnter_TextChanged(object sender, EventArgs e)
        {
           // txtEnter.Text = txtEnter.Text.ToUpper();
            txtEnter.CharacterCasing = CharacterCasing.Upper;
        }
    }
}
```

/*

6) Take a ListBox , TextBox and a Command Button and RadioButton. The radio buttons are Add and Delete. The Text entered should be added or deleted from the list box as per the selection in the Radio Button.

*/



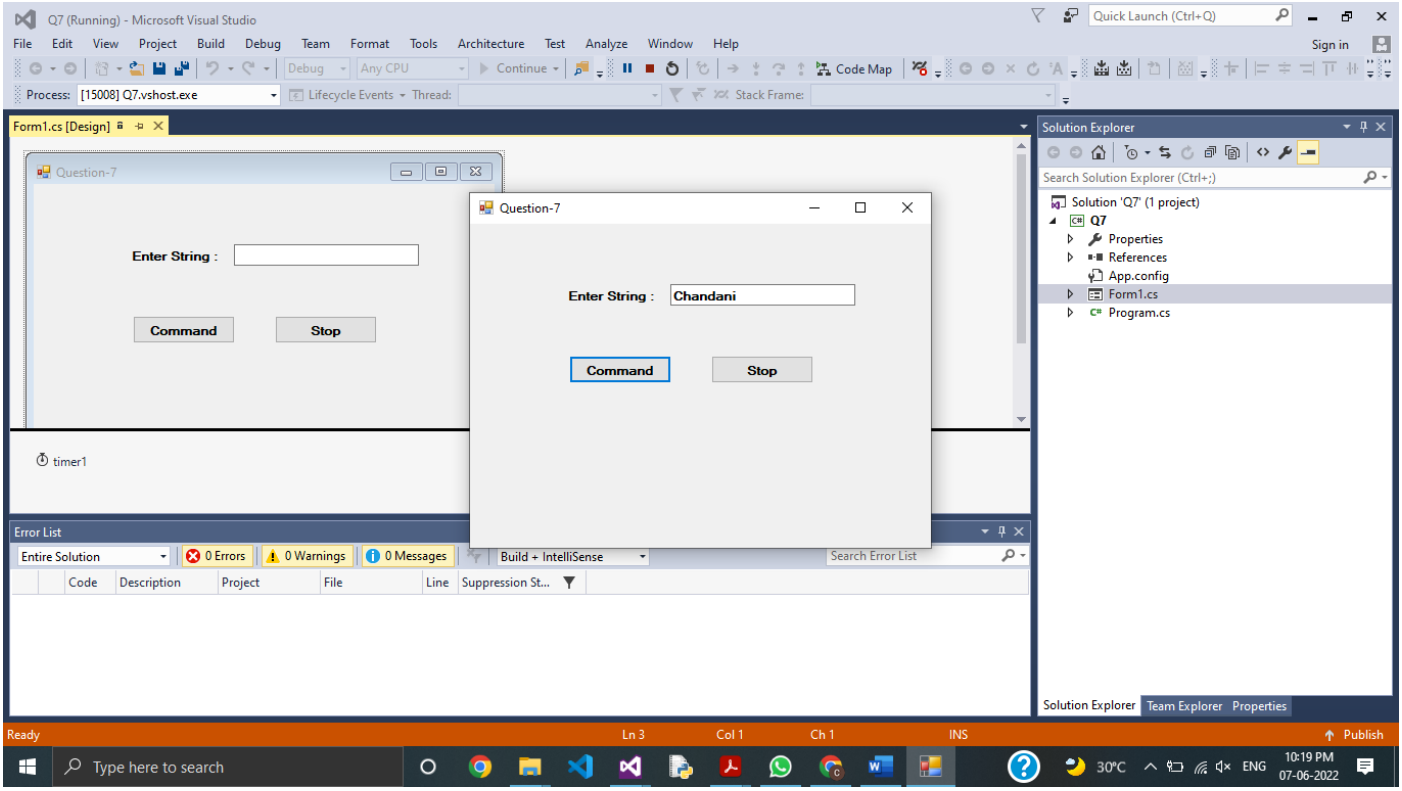
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q6
{
    public partial class frmQ6 : Form
    {
        public frmQ6()
        {
            InitializeComponent();
        }

        private void btnCmd_Click(object sender, EventArgs e)
        {
            if(txtEnter.Text == "")
            {
                MessageBox.Show("Please Enter any String to Perform Operation on
it..", "Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
            }
            else
            {
                String s = txtEnter.Text;
                if (rdbAdd.Checked == true)
                {
                    if (!lstAns.Items.Contains(s))
                    {
                        lstAns.Items.Add(s);
                    }
                    else
                    {
                        MessageBox.Show("Entered Item is Already Exists in
ListBox...", "Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
                    }
                }
                else if (rdbDelete.Checked == true)
                {
                    if (!lstAns.Items.Contains(s))
                    {
                        MessageBox.Show("Entered Item is Not Exists in ListBox...",
"Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
                    }
                    else
                    {
                        lstAns.Items.Remove(s);
                    }
                }
                else
                {
                    MessageBox.Show("Please Select Any one Operation to perform..",
"Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
                }
            }
```

```
        }

    }
}
```

/*

7) Use a timer control , a text box and a command button to blink the text in the textbox.

*/



```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q7
{
    public partial class frmQ7 : Form
    {
        String str;
        public frmQ7()
        {
            InitializeComponent();
        }

        private void btnCmd_Click(object sender, EventArgs e)
        {
            if(txtEnter.Text == "")
            {
                MessageBox.Show("Please Enter Something into TextBox...Then Click
Command Button to Blink Text..", "Warning", MessageBoxButtons.OK,
MessageBoxIcon.Warning);
            }
            else
            {
               // lblAns.Text = txtEnter.Text;
                str = txtEnter.Text;
                timer1.Enabled = true;
                timer1.Start();
            }
        }

        private void timer1_Tick(object sender, EventArgs e)
        {
           // lblAns.Visible = !lblAns.Visible;
            if (txtEnter.Text == "")
            {
                txtEnter.Text = str;
            }
            else
            {
                txtEnter.Text = "";
            }
        }

        private void btnStop_Click(object sender, EventArgs e)
        {
            if(timer1.Enabled == false)
            {
                MessageBox.Show("Blinking is not Started yet..Please enter Command
Button to Start Blinking Text..", "Warning", MessageBoxButtons.OK,
MessageBoxIcon.Warning);
            }
            else
```

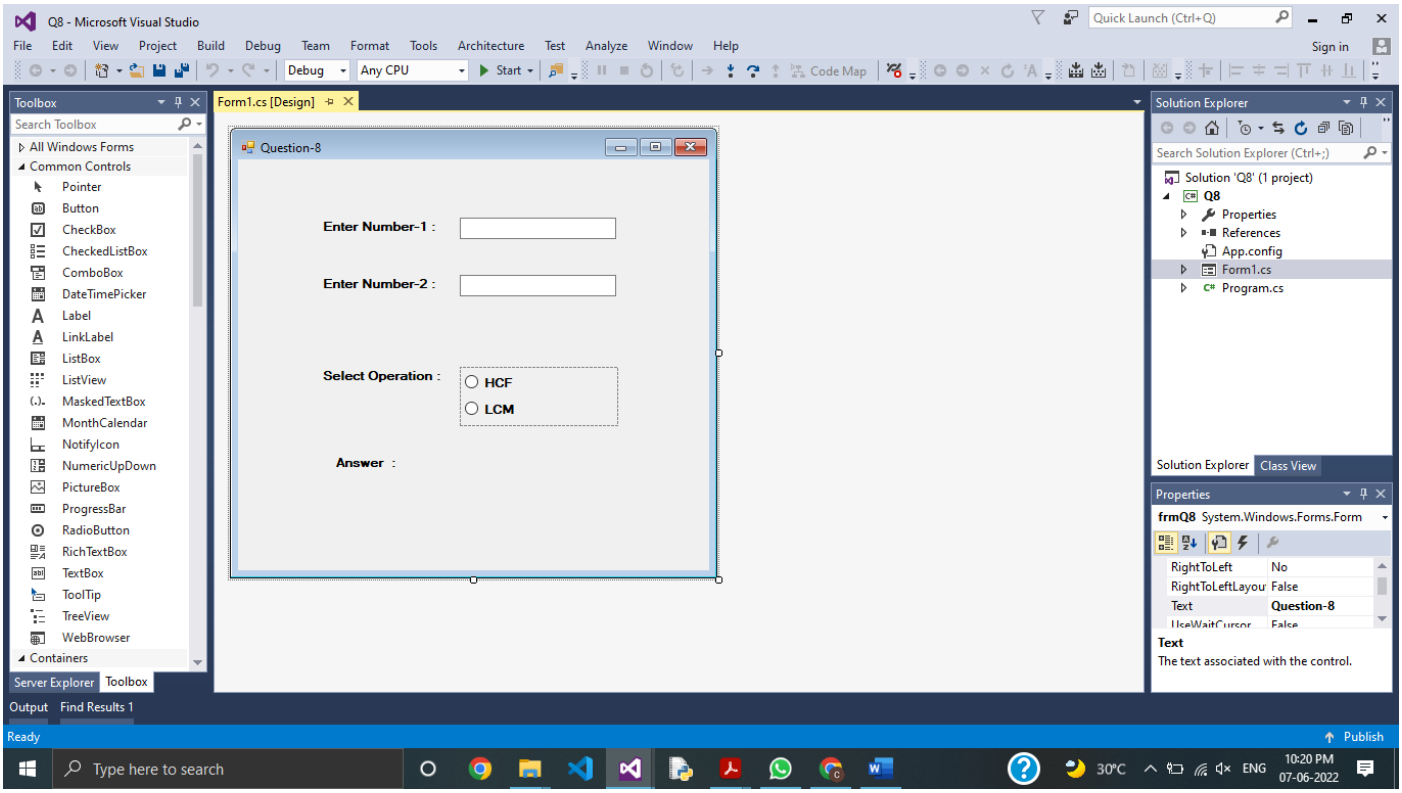
```
            {
                timer1.Enabled = false;
                txtEnter.Text = str;
              //  lblAns.Text = str;
            }
        }
    }
}
```

/*

8) Take two TextBoxes ,RadioButton & a Label. Calculate the HCF and LCM of the numbers

and diplay the result in the Label as per choice from the RadioButton.

*/



```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q8
{
    public partial class frmQ8 : Form
    {
        public frmQ8()
        {
            InitializeComponent();
        }

        int N1, N2;

        private void rdbHCF_CheckedChanged(object sender, EventArgs e)
        {
            if(rdbHCF.Checked == true)
            {
                if (!check_txt())
                {
                    MessageBox.Show("Please Enter Number-1 and Number-2 ", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                    return;
                }
                if (!check_num())
                {
                    MessageBox.Show("Please Enter Numbers Only.. ", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                    return;
                }
                int temp, Num1 = N1, Num2 = N2;
                while (Num2 != 0)
                {
                    temp = Num2;
                    Num2 = Num1 % Num2;
                    Num1 = temp;
                }
                int GCD = Num1;
                int LCM = (N1 * N2) / GCD;
                lblAns.Text = GCD.ToString();
            }
        }

        private void rdbLCM_CheckedChanged(object sender, EventArgs e)
        {
            if(rdbLCM.Checked == true)
            {
                if (!check_txt())
                {
                    MessageBox.Show("Please Enter Number-1 and Number-2 ", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                    return;
```

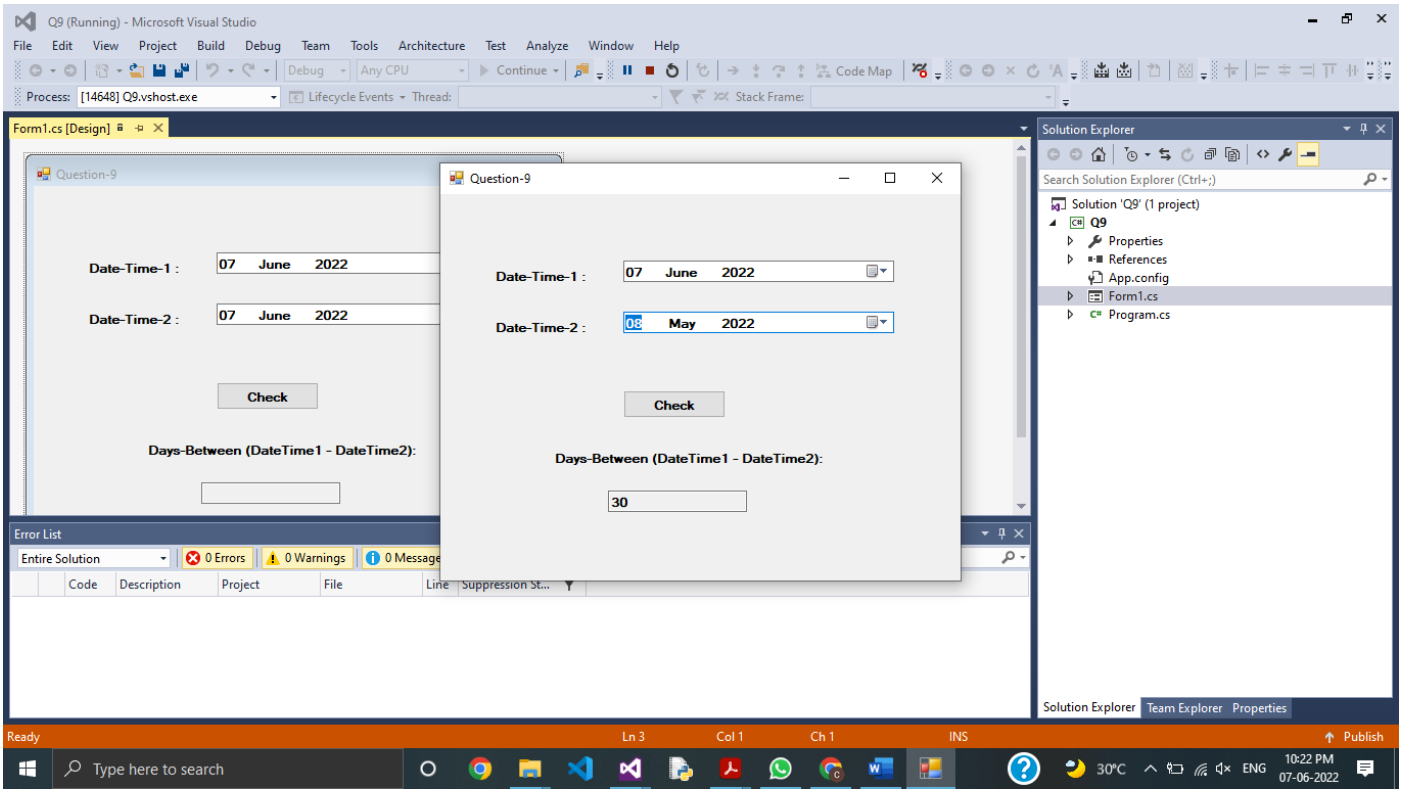
```
            }
            if (!check_num())
            {
                MessageBox.Show("Please Enter Numbers Only.. ", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                return;
            }
            int temp, Num1 = N1, Num2 = N2;
            while (Num2 != 0)
            {
                temp = Num2;
                Num2 = Num1 % Num2;
                Num1 = temp;
            }
            int GCD = Num1;
            int LCM = (N1 * N2) / GCD;
            lblAns.Text = LCM.ToString();
        }
    }


    private bool check_txt()
    {
        if (txtNum1.Text != "")
        {
            if (txtNum2.Text != "")
            {
                return true;
            }
            else
            {
                return false;
            }
        }
        else
        {
            return false;
        }

    }

    private bool check_num()
    {
        int x = 0;
        if (Int32.TryParse(txtNum1.Text, out x))
        {
            N1 = Convert.ToInt32(txtNum1.Text);
            if (Int32.TryParse(txtNum2.Text, out x))
            {
                N2 = Convert.ToInt32(txtNum2.Text);
                return true;
            }
            else
            {
                return false;
            }
        }
        else
        {
```

```
                return false;
            }
        }

        private void txtNum2_TextChanged(object sender, EventArgs e)
        {
            lblAns.Text = "";
            rdbLCM.Checked = false;
            rdbHCF.Checked = false;
        }

        private void txtNum1_TextChanged(object sender, EventArgs e)
        {
            lblAns.Text = "";
            rdbLCM.Checked = false;
            rdbHCF.Checked = false;
        }

    }
}
```

/*

9) Take two DateTimePicker controls and a text box, the days between two dates should be displayed in text box.

*/

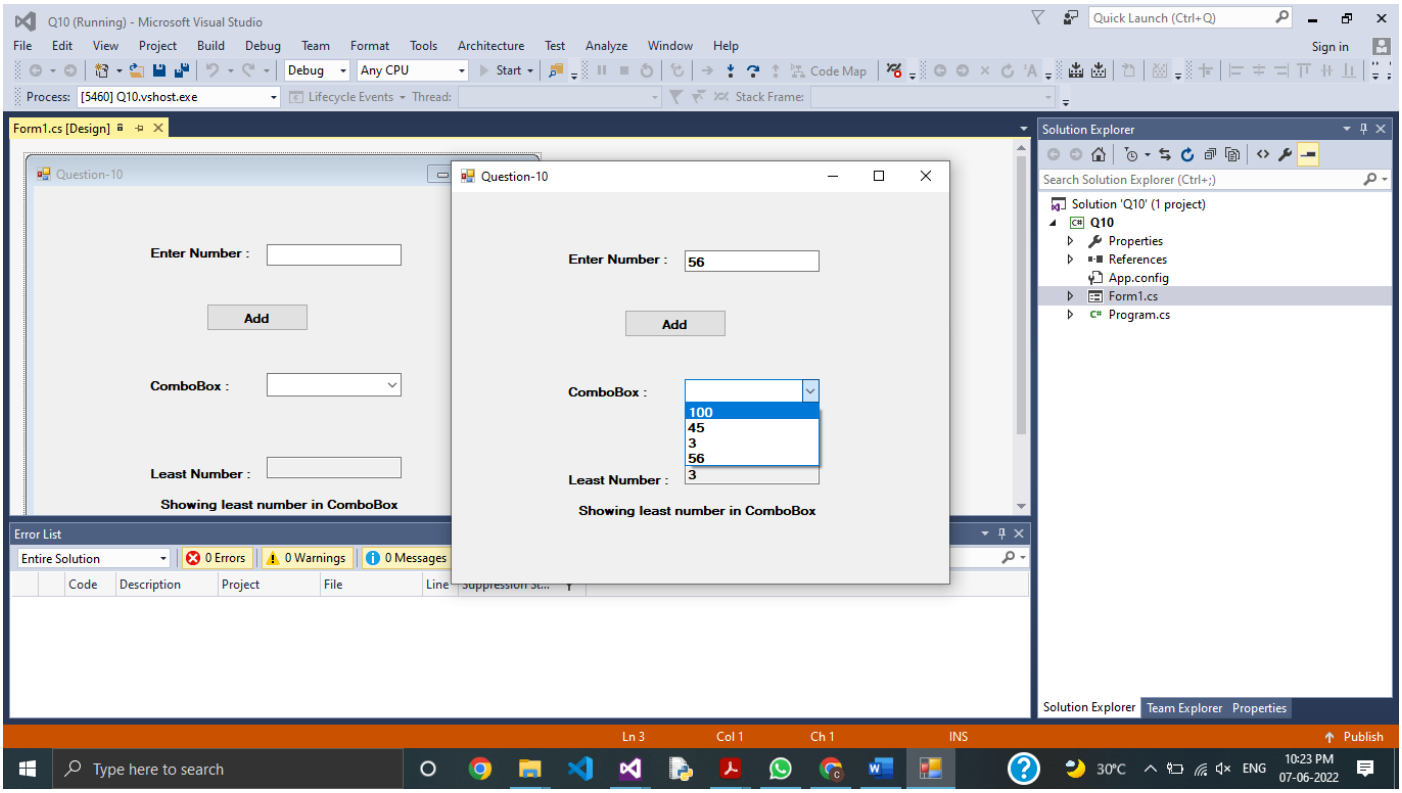


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q9
{
    public partial class frmQ9 : Form
    {
        public frmQ9()
        {
            InitializeComponent();
        }

        private void btnCheck_Click(object sender, EventArgs e)
        {
            check_days();
        }

        private void check_days()
        {
            DateTime dt1, dt2;
            dt1 = Convert.ToDateTime(dtp1.Text);
            dt2 = Convert.ToDateTime(dpt2.Text);
            txtDayBetween.Text = (dt1 - dt2).TotalDays.ToString();
          //  MessageBox.Show("DaysBetween (Time1 - Time2) is "+ txtDayBetween.Text,
"Success", MessageBoxButtons.OK, MessageBoxIcon.Information);
        }

        private void dtp1_ValueChanged(object sender, EventArgs e)
        {
            check_days();
        }

        private void dtp2_ValueChanged(object sender, EventArgs e)
        {
            check_days();
        }

    }
}
```

/*

10) Take a combobox and enter values in it. The textbox should instantly display the least value within the combo box.

*/

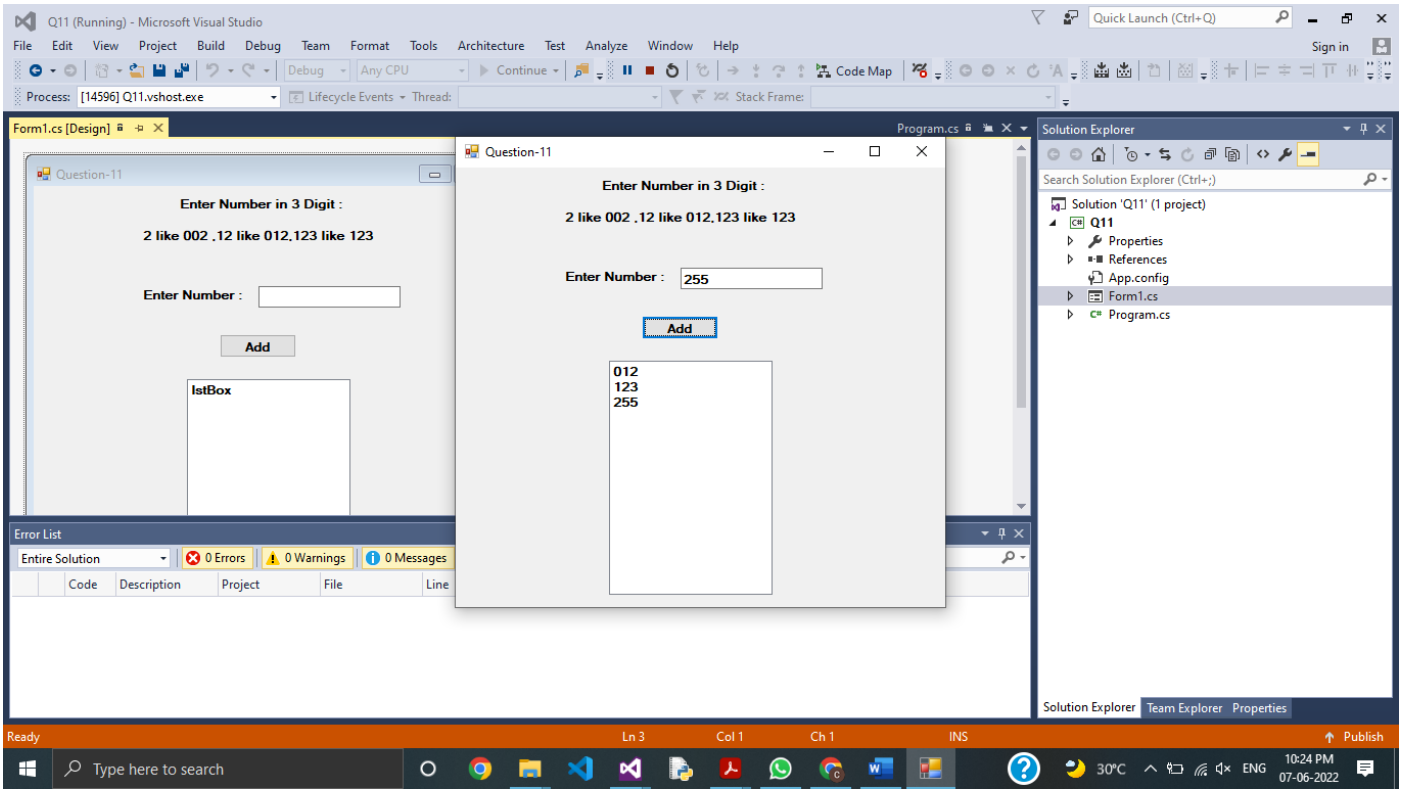


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q10
{
    public partial class frmQ10 : Form
    {
        public frmQ10()
        {
            InitializeComponent();
            sort_item();
        }

        private void btnAdd_Click(object sender, EventArgs e)
        {
            if(txtEnter.Text == "")
            {
                MessageBox.Show("Please First Enter Number into TextBox...",
"Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
            }
            else
            {
                int x = 0;
                if (Int32.TryParse(txtEnter.Text, out x))
                {
                    cmbNum.Items.Add(txtEnter.Text);
                    sort_item();
                }
                else
                {
                    MessageBox.Show("Please Enter Numbers Only..", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                }
            }
        }

        private void sort_item()
        {
            int min = Int32.MaxValue;
            foreach (object k in cmbNum.Items)
            {
                int i = Convert.ToInt32(k);
                if (i < min)
                {
                    min = i;
                }
            }
            txtLeastNum.Text = min.ToString();
        }
    }
}
```

/*

11) Take a textbox and listbox, numbers are entered in textbox, after every number enter in text box , number will be added in listbox , note that listbox must be a sorted list.

*/



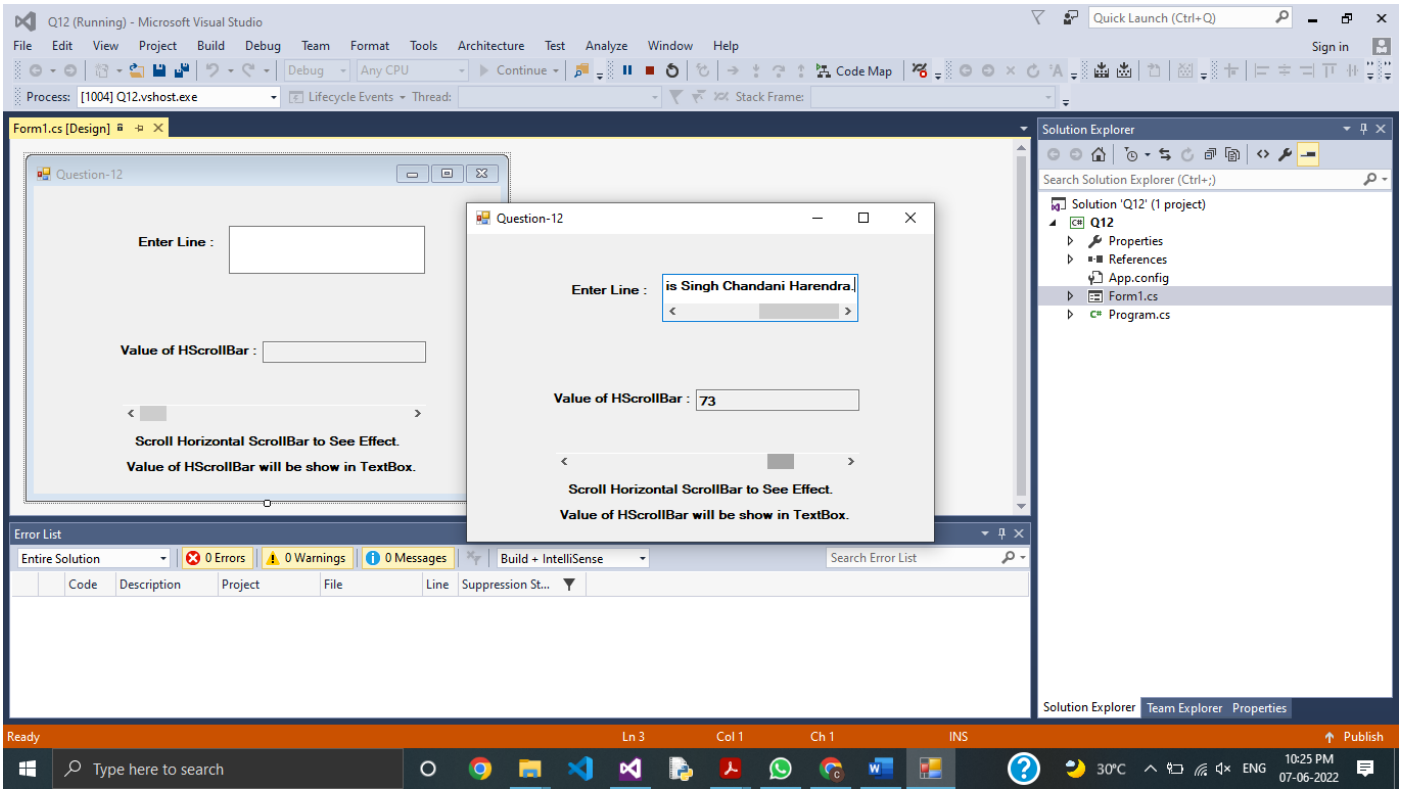
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q11
{
    public partial class frmQ11 : Form
    {
        public frmQ11()
        {
            InitializeComponent();
        }

        private void txtEnter_TextChanged(object sender, EventArgs e)
        {
            if (txtEnter.Text.Length > 3)
            {
                MessageBox.Show("Please Enter Number in 3 digit Only....\nExample:- 2
like 002 ,12 like 012,123 like 123 ", "Warning", MessageBoxButtons.OK,
MessageBoxIcon.Warning);
            }
            /*
            for (int i = 0; i < lstBox.Items.Count; i++)
            {
                for (int j = 0; j < (lstBox.Items.Count) - i - 1; j++)
                {
                    int a = Convert.ToInt32(lstBox.Items[j]);
                    int b = Convert.ToInt32(lstBox.Items[j + 1]);
                    if (a < b)
                    {
                        int temp = a;
                        a = b;
                        b = temp;
                    }
                }
            }
            */
        }

        private void btnAdd_Click(object sender, EventArgs e)
        {
            int x = 0;
            if (Int32.TryParse(txtEnter.Text, out x))
            {
                if (txtEnter.Text.Length == 3)
                {
                    if (!lstBox.Items.Contains(txtEnter.Text))
                    {
                        lstBox.Items.Add(txtEnter.Text);
                    }
                    else
                    {
```

```
                        MessageBox.Show("Item is Already Exists in ListBox.. ",
"Warning", MessageBoxButtons.OK, MessageBoxIcon.Warning);
                    }
                }
                else if (txtEnter.Text.Length > 3)
                {
                    MessageBox.Show("Please Enter Number in 3 digit
Only....\nExample:- 2 like 002 ,12 like 012,123 like 123 ", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                }
            }
            else
            {
                MessageBox.Show("Please Enter Numbers Only..", "Warning",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
            }

            lstBox.Sorted = true;
        }
    }
}
```

/*

12) Take a horizontal scroll bar and a text box. As and when the bar is moved the corresponding value should be displayed in the text box.

*/



```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Q12
{
    public partial class frmQ12 : Form
    {
        public frmQ12()
        {
            InitializeComponent();
            txtEnter.ScrollBars = ScrollBars.Horizontal;
            txtEnter.WordWrap = false;
            txtEnter.Multiline = true;

        }

        private void hScrollBar1_Scroll(object sender, ScrollEventArgs e)
        {
            txtValue.Text = hScrollBar1.Value.ToString();
        }
    }
}
```