

INTCDE21ID008

STAGE-3

916483 - Naveen S

Day 4 - Windows Forms, Windows Service

Hands-On 1:

Windows Form Application

Form1.cs

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

namespace winformapp1
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void textBox1_TextChanged(object sender, EventArgs e)
        {
        }

        private void button1_Click(object sender, EventArgs e)
        {
            string input1= textBox1.Text;
            string input2 = textBox2.Text;

            if (!Regex.IsMatch(input1, @"\d+$") || !Regex.IsMatch(input2, @"\d+$"))
            {
                MessageBox.Show("enter a number");
            }

            if (radioButton1.Checked)
            {
                MessageBox.Show((int.Parse(input1) + int.Parse(input2)).ToString());
            }
        }
    }
}
```

```

        else if (radioButton2.Checked)
        {
            MessageBox.Show((int.Parse(input1) - int.Parse(input2)).ToString());
        }
        else if (radioButton3.Checked)
        {
            MessageBox.Show((int.Parse(input1) * int.Parse(input2)).ToString());
        }
        else if (radioButton4.Checked)
        {
            MessageBox.Show((int.Parse(input1) / int.Parse(input2)).ToString());
        }
        else
        {
            MessageBox.Show("Select a Option");
        }
    }
}

```

Form1.Designer.cs

```

namespace winformapp1
{
    partial class Form1
    {
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }

        private void InitializeComponent()
        {
            this.textBox1 = new System.Windows.Forms.TextBox();
            this.textBox2 = new System.Windows.Forms.TextBox();
            this.radioButton1 = new System.Windows.Forms.RadioButton();
            this.radioButton2 = new System.Windows.Forms.RadioButton();
            this.radioButton3 = new System.Windows.Forms.RadioButton();
            this.radioButton4 = new System.Windows.Forms.RadioButton();
            this.button1 = new System.Windows.Forms.Button();
            this.SuspendLayout();

            this.textBox1.Location = new System.Drawing.Point(163, 92);
            this.textBox1.Name = "textBox1";
            this.textBox1.Size = new System.Drawing.Size(125, 27);
            this.textBox1.TabIndex = 0;
            this.textBox1.TextChanged += new
System.EventHandler(this.textBox1_TextChanged);
            this.textBox2.Location = new System.Drawing.Point(482, 92);
            this.textBox2.Name = "textBox2";

```

```

this.textBox2.Size = new System.Drawing.Size(125, 27);
this.textBox2.TabIndex = 1;
this.radioButton1.AutoSize = true;
this.radioButton1.Location = new System.Drawing.Point(74, 267);
this.radioButton1.Name = "radioButton1";
this.radioButton1.Size = new System.Drawing.Size(88, 24);
this.radioButton1.TabIndex = 2;
this.radioButton1.TabStop = true;
this.radioButton1.Text = "Addition";
this.radioButton1.UseVisualStyleBackColor = true;
this.radioButton2.AutoSize = true;
this.radioButton2.Location = new System.Drawing.Point(264, 267);
this.radioButton2.Name = "radioButton2";
this.radioButton2.Size = new System.Drawing.Size(106, 24);
this.radioButton2.TabIndex = 3;
this.radioButton2.TabStop = true;
this.radioButton2.Text = "Subtraction";
this.radioButton2.UseVisualStyleBackColor = true;
this.radioButton3.AutoSize = true;
this.radioButton3.Location = new System.Drawing.Point(460, 267);
this.radioButton3.Name = "radioButton3";
this.radioButton3.Size = new System.Drawing.Size(122, 24);
this.radioButton3.TabIndex = 4;
this.radioButton3.TabStop = true;
this.radioButton3.Text = "Multiplication";
this.radioButton3.UseVisualStyleBackColor = true;
this.radioButton4.AutoSize = true;
this.radioButton4.Location = new System.Drawing.Point(643, 267);
this.radioButton4.Name = "radioButton4";
this.radioButton4.Size = new System.Drawing.Size(79, 24);
this.radioButton4.TabIndex = 5;
this.radioButton4.TabStop = true;
this.radioButton4.Text = "Divison";
this.radioButton4.UseVisualStyleBackColor = true;
this.button1.Location = new System.Drawing.Point(363, 352);
this.button1.Name = "button1";
this.button1.Size = new System.Drawing.Size(94, 29);
this.button1.TabIndex = 6;
this.button1.Text = "Calculate";
this.button1.UseVisualStyleBackColor = true;
this.button1.Click += new System.EventHandler(this.button1_Click);
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 20F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(800, 450);
this.Controls.Add(this.button1);
this.Controls.Add(this.radioButton4);
this.Controls.Add(this.radioButton3);
this.Controls.Add(this.radioButton2);
this.Controls.Add(this.radioButton1);
this.Controls.Add(this.textBox2);
this.Controls.Add(this.textBox1);
this.Name = "Form1";
this.Text = "Form1";
this.ResumeLayout(false);
this.PerformLayout();

```

```

}

```

```

        #endregion

        private System.Windows.Forms.TextBox textBox1;
        private System.Windows.Forms.TextBox textBox2;
        // private System.Windows.Forms.RadioButton addition;
        private System.Windows.Forms.RadioButton radioButton1;
        private System.Windows.Forms.RadioButton radioButton2;
        private System.Windows.Forms.RadioButton radioButton3;
        private System.Windows.Forms.RadioButton radioButton4;
        private System.Windows.Forms.Button button1;
    }
}

```

Program.cs

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace winformapp1
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        [STAThread]
        static void Main()
        {
            Application.SetHighDpiMode(HighDpiMode.SystemAware);
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new Form1());
        }
    }
}

```

OUTPUT:

Form1

20

3

☒ Addition ☐ Subtraction ☐ Multi ☐ Divison

23

OK

Calculate

Form1

20

3

☐ Addition ☒ Subtraction ☐ Multi ☐ Divison

17

OK

Calculate

Form1

20

3

☐ Addition ☐ Subtraction ☒ Multi ☐ Divison

60

OK

Calculate

Form1

20

3

☐ Addition ☐ Subtraction ☐ Multi ☐ Divison

6

OK

Calculate

Windows Form Application

Form1.cs

Form1.cs

```
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 WinForm
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            OpenFileDialog openFileDialog1 = new OpenFileDialog
            {
                InitialDirectory = @"E:\",
                Filter = "image(*.jpg) | *.jpg"
            };

            if (openFileDialog1.ShowDialog() == DialogResult.OK)
            {
                picture.SizeMode = PictureBoxSizeMode.StretchImage;
                picture.Image = new Bitmap(openFileDialog1.FileName);
            }

            private void pictureBox1_Click(object sender, EventArgs e)
            {
            }
        }
    }
}
```

Form1.Designer.cs

```
namespace winform
{
    partial class Form1
    {
        /// <summary>
        /// Required designer variable.

```

```

/// </summary>
private System.ComponentModel.IContainer components = null;

/// <summary>
/// Clean up any resources being used.
/// </summary>
/// <param name="disposing">true if managed resources should be disposed;
otherwise, false.</param>
protected override void Dispose(bool disposing)
{
    if (disposing && (components != null))
    {
        components.Dispose();
    }
    base.Dispose(disposing);
}

#region Windows Form Designer generated code

/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
private void InitializeComponent()
{
    this.button1 = new System.Windows.Forms.Button();
    this.openFileDialog1 = new System.Windows.Forms.OpenFileDialog();
    this.picture = new System.Windows.Forms.PictureBox();
    ((System.ComponentModel.ISupportInitialize)(this.picture)).BeginInit();
    this.SuspendLayout();
    //
    // button1
    //
    this.button1.Location = new System.Drawing.Point(362, 368);
    this.button1.Name = "button1";
    this.button1.Size = new System.Drawing.Size(94, 29);
    this.button1.TabIndex = 0;
    this.button1.Text = "button1";
    this.button1.UseVisualStyleBackColor = true;
    this.button1.Click += new System.EventHandler(this.button1_Click);
    //
    // openFileDialog1
    //
    this.openFileDialog1.FileName = "openFileDialog1";
    //
    // picture
    //
    this.picture.Location = new System.Drawing.Point(55, 12);
    this.picture.Name = "picture";
    this.picture.Size = new System.Drawing.Size(733, 333);
    this.picture.TabIndex = 1;
    this.picture.TabStop = false;
    this.picture.Click += new System.EventHandler(this.pictureBox1_Click);
    //
    // Form1
    //
    this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 20F);
    this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

```



```

        this.ClientSize = new System.Drawing.Size(800, 450);
        this.Controls.Add(this.picture);
        this.Controls.Add(this.button1);
        this.Name = "Form1";
        this.Text = "Form1";
        ((System.ComponentModel.ISupportInitialize)(this.picture)).EndInit();
        this.ResumeLayout(false);

    }

    #endregion
    private System.Windows.Forms.Button button1;
    private System.Windows.Forms.OpenFileDialog openFileDialog1;
    private System.Windows.Forms.PictureBox picture;
}
}

```

Program.cs

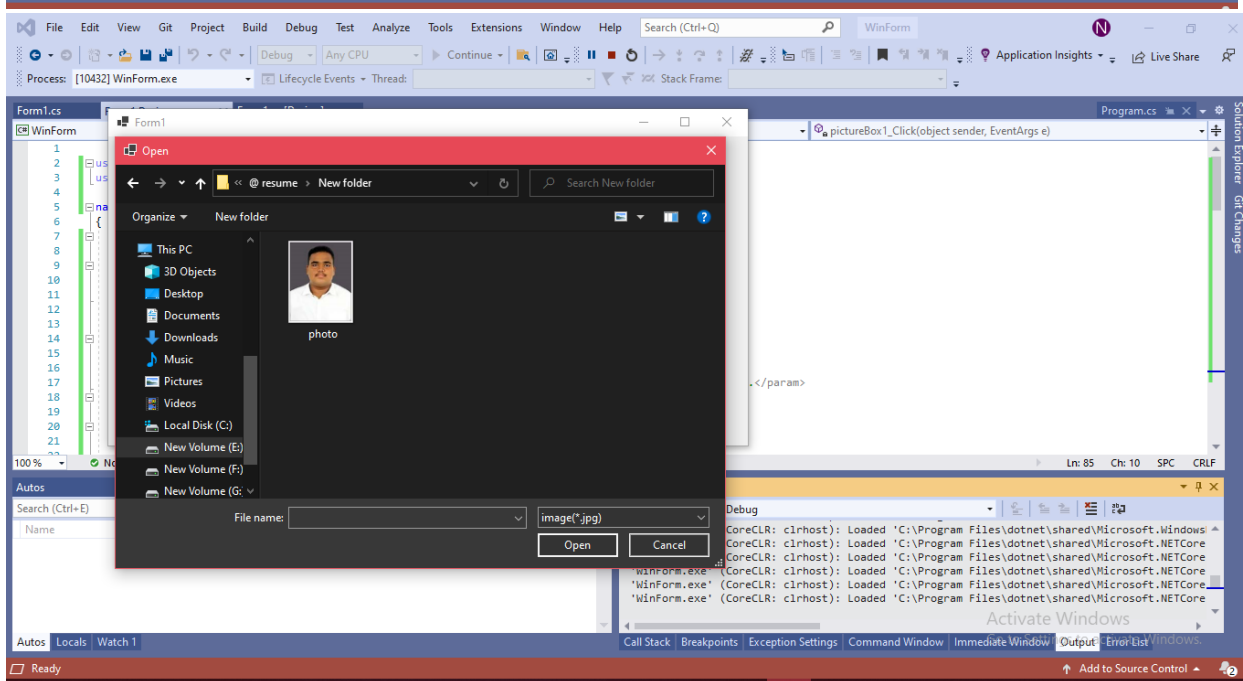
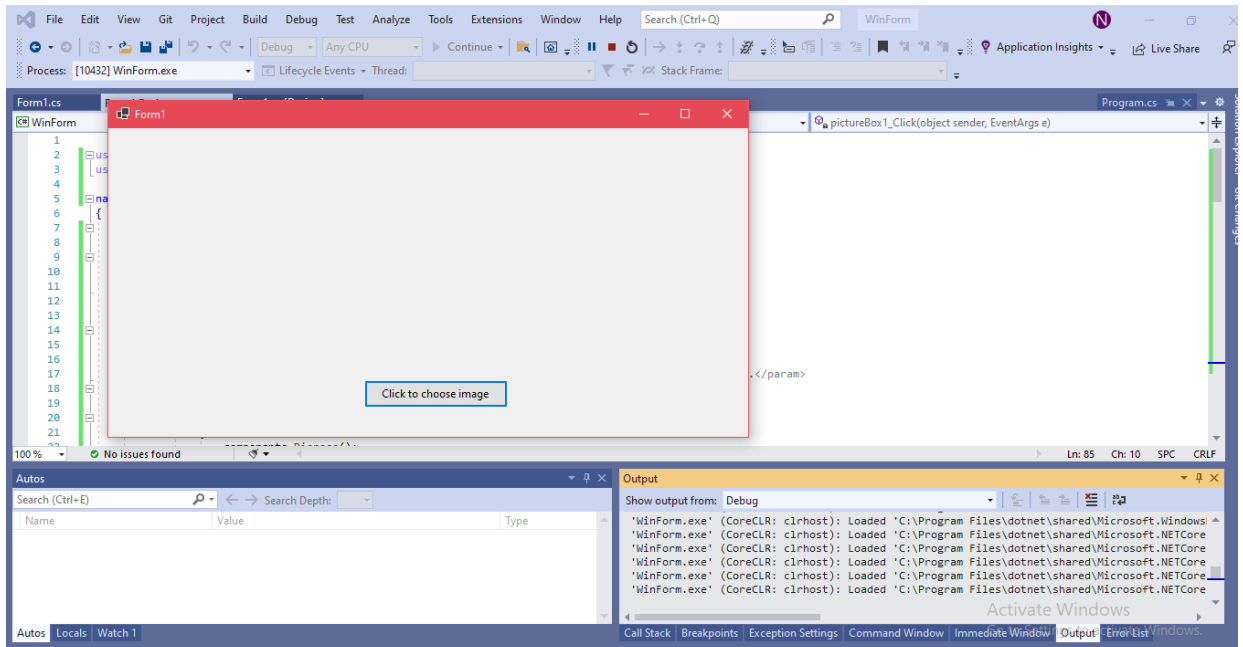
```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;
using System.Windows.Forms;


namespace winformapp1
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        [STAThread]
        static void Main()
        {
            Application.SetHighDpiMode(HighDpiMode.SystemAware);
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new Form1());
        }
    }
}

```

OUTPUT:



Form1



Click to choose image