

بسم الله الرحمن الرحيم

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البرنامج رقم 1

Form1		Form1	
20	العدد الاول	8	العدد الاول
/	العملية	+	العملية
2	العدد الثاني	10	العدد الثاني
-	العملية	*	العملية
7	العدد الثالث	7	العدد الثالث
3	النتج	78	النتج
اغلق	حساب	اغلق	حساب



```
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 HW3
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void Form1_Load(object sender, EventArgs e)
        {
            txtResult.ReadOnly = true;
        }

        private double PerformOperation(double num1, double num2, string operation)
        {
            switch(operation)
            {
                case "+":
                    return num1 + num2;
                case "-":
                    return num1 - num2;
                case "*":
                    return num1 * num2;
                case "/":
                    return num2 != 0 ? num1 / num2 : double.NaN;
                default:
                    return double.NaN; // عملية غير معروفة
            }
        }
    }
}
```

```

private void button1_Click(object sender, EventArgs e)
{
    double number1, number2, number3;
    string operation1 = txtOperation1.Text;
    string operation2 = txtOperation2.Text;
    double intermediateResult;
    double finalResult;

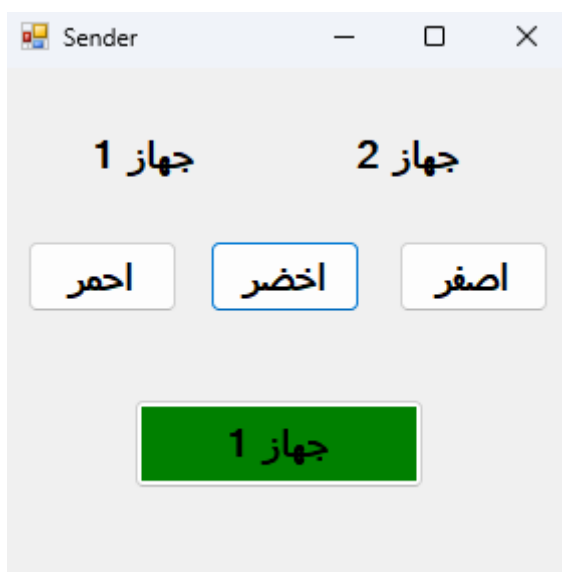
    if (double.TryParse(txtNumber1.Text, out number1) &&
        double.TryParse(txtNumber2.Text, out number2) &&
        double.TryParse(txtNumber3.Text, out number3))
    {
        if (operation1 == "*" || operation1 == "/")
        {
            intermediateResult = PerformOperation(number1, number2, operation1);
            finalResult = PerformOperation(intermediateResult, number3, operation2);
        }
        else if (operation2 == "*" || operation2 == "/")
        {
            intermediateResult = PerformOperation(number2, number3, operation2);
            finalResult = PerformOperation(number1, intermediateResult, operation1);
        }
        else
        {
            intermediateResult = PerformOperation(number1, number2, operation1);
            finalResult = PerformOperation(intermediateResult, number3, operation2);
        }

        if (double.IsNaN(finalResult))
        {
            MessageBox.Show("حدث خطأ في العملية الحسابية.");
        }
        else
        {
            txtResult.Text = finalResult.ToString();
        }
    }
    else
    {
        MessageBox.Show("يرجى إدخال قيم صحيحة.");
    }
}

private void button2_Click(object sender, EventArgs e)
{
    this.Close();
}
}

```

البرنامج رقم 2



```

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 HW3
{
    public partial class Sender : Form
    {
        public Sender()
        {
            InitializeComponent();
        }

        private void traingForSender(object sender, EventArgs e)
        {
            Button buttonSender = sender as Button;
            Label labelSender = sender as Label;

            if (sender is Button)
            {
                if (buttonSender == btnYellow)
                {
                    btnchack.BackColor = Color.Yellow;
                }
                else if (buttonSender == btnRed)
                {
                    btnchack.BackColor = Color.Red;
                }
                else
                {
                    btnchack.BackColor = Color.Green;
                }
            }
            else if (sender is Label)
            {
                if (labelSender.Text == "جهاز 1")
                {
                    btnchack.Text = device1.Text;
                }
                else
                {
                    btnchack.Text = device2.Text;
                }
            }
        }
    }
}

```

البرنامج رقم 3

Form3

العدد الاول	العملية الحسابية	العدد الثاني	نتاج العملية
78	-	9	702
<div>+</div> <div>-</div> <div>*</div> <div>/</div>			
مسح		اغلاق	



```
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 HW3
{
    public partial class Form3 : Form
    {
        double x, y, z;
        public Form3()
        {
            InitializeComponent();
        }

        private void Form3_Load(object sender, EventArgs e)
        {
            txtr.ReadOnly = true;
            listBox1.Items.Add("+");
            listBox1.Items.Add("-");
            listBox1.Items.Add("*");
            listBox1.Items.Add("/");
        }
    }
}
```

```
private void Calculation()
{
    try
    {
        x = Convert.ToDouble(txt1.Text);
    }
    catch (Exception)
    {
        MessageBox.Show("العدد الأول غير صالح", "تحذير", MessageBoxButtons.OK, MessageBoxIcon.
Hand);
        txt1.Text = "";
        txt1.Focus();
        return;
    }

    try
    {
        y = Convert.ToDouble(txt2.Text);
    }
    catch (Exception)
    {
        MessageBox.Show("العدد الثاني غير صالح", "تحذير", MessageBoxButtons.OK,
MessageBoxIcon.Hand);
        txt2.Text = "";
        txt2.Focus();
        return;
    }

    bool f = true;
    switch (listBox1.SelectedIndex)
    {
        default:
            break;
        case 0:
            z = x + y;
            break;
        case 1:
            z = x - y;
            break;
        case 2:
            z = x * y;
            break;
        case 3:
            if (y != 0)
            {
                z = x / y;
            }
            else
            {
                MessageBox.Show("لا يمكن القسمة على صفر", "تحذير", MessageBoxButtons.OK, MessageBoxIcon.Hand);
                f = false;
                txtr.Text = null;
            }
            break;
    }

    if (f)
    {
        txtr.Text = z.ToString();
    }
}
```



```
private void Button1_Click(object sender, EventArgs e)
{
    this.Close();
}

private void label2_Click(object sender, EventArgs e)
{
}

private void listBox1_SelectedIndexChanged(object sender, EventArgs e)
{
    Calculation();
}

private void Button2_Click(object sender, EventArgs e)
{
    txtn1.Text = txtn2.Text = txtr.Text = null;
}

}
```


البرنامج رقم 4

Form4

ادخل العدد

9

45 المجموع

362880 المضروب

3 الجذر



```
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 HW3
{
    public partial class Form4 : Form
    {
        double x,y;
        public Form4()
        {
            InitializeComponent();
        }
        private void button2_Click(object sender, EventArgs e)
        {
            y = 1;
            x = Convert.ToDouble(textBox1.Text);
            for(int i = 2; i <= x; i++)
            {
                y *= i;
            }
            label3.Text = y.ToString();
        }

        private void button3_Click(object sender, EventArgs e)
        {
            x = Convert.ToDouble(textBox1.Text);
            y = Math.Sqrt(x);
            label4.Text = y.ToString();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            y= 0;
            x = Convert.ToDouble(textBox1.Text);
            for(int i = 1; i <= x; i++)
            {
                y += i;
            }
            label2.Text = y.ToString();
        }
    }
}
```