



/*

* Created by SharpDevelop.

* User: Fabry UwU

* Date: 29/10/2025

* Time: 12:54 p. m.

*/

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*/

using System;

using System.Collections.Generic;

```
using System.Drawing;
using System.Windows.Forms;
```

```
namespace examen
```

```
{
    /// <summary>
    /// Description of MainForm.
    /// </summary>
    public partial class MainForm : Form
    {
        int contador=0;
        public MainForm()
        {
            //
            // The InitializeComponent() call is required for Windows Forms designer support.
            //
            InitializeComponent();

            //
            // TODO: Add constructor code after the InitializeComponent() call.
            //
        }
    }
}
```

```
//usuario debe ser Admin y contra 123
```

```
void TxtusuarioTextChanged(object sender, EventArgs e)
{

```

```
}
```

```
void TxtcontraTextChanged(object sender, EventArgs e)
{

```

```
}
```

```
void BtnentrarClick(object sender, EventArgs e)
{

```

```
    if (txtusuario.Text == "Admin" && txtcontra.Text == "123")
    {
        Form1 f = new Form1();
        f.Show();
        this.Hide();
    }
}
```

```

    }

    else

    {
        contador = contador +1;
        MessageBox.Show("Usuario o contra incorrectos");
        if (contador>=3)

        {
            MessageBox.Show("Usuario o contra incorrectos");
            Application.Exit();

        }
    }
}

void MainFormLoad(object sender, EventArgs e)
{

}
}
}

```

```

/*
 * Created by SharpDevelop.
 * User: Fabry UwU
 * Date: 29/10/2025
 * Time: 12:59 p. m.
 */
using System;
using System.Drawing;
using System.Windows.Forms;

```

```

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

```

```
void OcultarCampos()
```

```
{  
    lbl1.Visible = false;  
    lbl2.Visible = false;  
    txt1.Visible = false;  
    txt2.Visible = false;  
    lblresultado.Visible = false;  
    btncalcular.Visible = false;  
    btnlimpiar.Visible = false;  
}
```

```
void Mostrar1(string etiqueta)
```

```
{  
    OcultarCampos();  
    lbl1.Text = etiqueta;  
    lbl1.Visible = true;  
    txt1.Visible = true;  
    lblresultado.Visible = true;  
    btncalcular.Visible = true;  
    btnlimpiar.Visible = true;  
}
```

```
void Mostrar2(string etiqueta1, string etiqueta2)
```

```
{  
    OcultarCampos();  
    lbl1.Text = etiqueta1;  
    lbl1.Visible = true;  
    txt1.Visible = true;  
    lbl2.Text = etiqueta2;  
    lbl2.Visible = true;  
    txt2.Visible = true;  
    lblresultado.Visible = true;  
    btncalcular.Visible = true;  
    btnlimpiar.Visible = true;  
}
```

```
void SalirToolStripMenuItemClick(object sender, EventArgs e)
```

```
{  
    if (MessageBox.Show("¿Seguro que desea salir?", "Confirmación",  
        MessageBoxButtons.YesNo, MessageBoxIcon.Question) == DialogResult.Yes)  
    {  
        Application.Exit();  
    }  
}
```

```

}

void KilometrosAMillasToolStripMenuItemClick(object sender, EventArgs e)
{
    Mostrar1("Kilómetros:");
    btncalcular.Tag = "km_millas";
}

void KilogramosALibrasToolStripMenuItemClick(object sender, EventArgs e)
{
    Mostrar1("Kilogramos:");
    btncalcular.Tag = "kg_libras";
}

void CelsiusAFahrenheitToolStripMenuItemClick(object sender, EventArgs e)
{
    Mostrar1("Celsius:");
    btncalcular.Tag = "celsius_fahrenheit";
}

void SegundosAHorasToolStripMenuItemClick(object sender, EventArgs e)
{
    Mostrar1("Segundos:");
    btncalcular.Tag = "segundos_horas";
}

void FactorialToolStripMenuItemClick(object sender, EventArgs e)
{
    Mostrar1("Número:");
    btncalcular.Tag = "factorial";
}

void FibonacciToolStripMenuItemClick(object sender, EventArgs e)
{
    Mostrar1("Cantidad:");
    btncalcular.Tag = "fibonacci";
}

void CuadradoToolStripMenuItemClick(object sender, EventArgs e)
{
    Mostrar1("Lado:");
    btncalcular.Tag = "area_cuadrado";
    pictureBox1.Image=Image.FromFile("cuadrado.png");
}

```

```
}
```

```
void RectanguloToolStripMenuItemClick(object sender, EventArgs e)
```

```
{
```

```
    Mostrar2("Base:", "Altura:");
```

```
    btn calcular.Tag = "area_rectangulo";
```

```
    pictureBox1.Image=Image.FromFile("rectangulo.png");
```

```
}
```

```
void TrianguloToolStripMenuItemClick(object sender, EventArgs e)
```

```
{
```

```
    Mostrar2("Base:", "Altura:");
```

```
    btn calcular.Tag = "area_triangulo";
```

```
    pictureBox1.Image=Image.FromFile("triangulo.jpg");
```

```
}
```

```
void CircunferenciaToolStripMenuItemClick(object sender, EventArgs e)
```

```
{
```

```
    Mostrar1("Radio:");
```

```
    btn calcular.Tag = "perimetro_circunferencia";
```

```
    pictureBox1.Image=Image.FromFile("circulo.png");
```

```
}
```

```
void TrapezioToolStripMenuItemClick(object sender, EventArgs e)
```

```
{
```

```
    Mostrar2("Base Mayor:", "Base Menor:");
```

```
    btn calcular.Tag = "area_trapezio";
```

```
    pictureBox1.Image=Image.FromFile("trapezio.png");
```

```
}
```

```
void EsferaToolStripMenuItemClick(object sender, EventArgs e)
```

```
{
```

```
    Mostrar1("Radio:");
```

```
    btn calcular.Tag = "volumen_esfera";
```

```
    pictureBox1.Image=Image.FromFile("esfera.png");
```

```
}
```

```
void CuboToolStripMenuItemClick(object sender, EventArgs e)
```

```
{
```

```
    Mostrar1("Lado:");
```

```
    btn calcular.Tag = "volumen_cubo";
```

```
    pictureBox1.Image=Image.FromFile("circulo.jpg");
```

```
}
```

```

void BtncalcularClick(object sender, EventArgs e)
{
    try
    {
        string operacion = btncalcular.Tag.ToString();

        if (operacion == "km_millas")
        {
            double km = Convert.ToDouble(txt1.Text);
            double millas = km * 0.621371;
            lblresultado.Text = "Resultado: " + millas.ToString("F2") + " millas";
        }
        else if (operacion == "kg_libras")
        {
            double kg = Convert.ToDouble(txt1.Text);
            double libras = kg * 2.20462;
            lblresultado.Text = "Resultado: " + libras.ToString("F2") + " libras";
        }
        else if (operacion == "celsius_fahrenheit")
        {
            double c = Convert.ToDouble(txt1.Text);
            double f = (c * 9 / 5) + 32;
            lblresultado.Text = "Resultado: " + f.ToString("F2") + " °F";
        }
        else if (operacion == "segundos_horas")
        {
            double segundos = Convert.ToDouble(txt1.Text);
            double horas = segundos / 3600;
            lblresultado.Text = "Resultado: " + horas.ToString("F2") + " horas";
        }
        else if (operacion == "factorial")
        {
            int n = Convert.ToInt32(txt1.Text);
            if (n < 0)
            {
                MessageBox.Show("El factorial no existe para números negativos");
                return;
            }
            long factorial = 1;
            for (int i = 1; i <= n; i++)
            {
                factorial = factorial * i;
            }
            lblresultado.Text = "Resultado: " + factorial.ToString();
        }
    }
}

```

```

}
else if (operacion == "fibonacci")
{
    int cantidad = Convert.ToInt32(txt1.Text);
    if (cantidad <= 0)
    {
        MessageBox.Show("Ingresa un número positivo");
        return;
    }
    string serie = "";
    int a = 0, b = 1;
    for (int i = 0; i < cantidad; i++)
    {
        serie += a + ", ";
        int temp = a + b;
        a = b;
        b = temp;
    }
    lblresultado.Text = "Serie: " + serie;
}
else if (operacion == "area_cuadrado")
{
    double lado = Convert.ToDouble(txt1.Text);
    double area = lado * lado;
    lblresultado.Text = "Área: " + area.ToString("F2");
}
else if (operacion == "area_rectangulo")
{
    double baseR = Convert.ToDouble(txt1.Text);
    double alturaR = Convert.ToDouble(txt2.Text);
    double area = baseR * alturaR;
    lblresultado.Text = "Área: " + area.ToString("F2");
}
else if (operacion == "area_triangulo")
{
    double baseT = Convert.ToDouble(txt1.Text);
    double alturaT = Convert.ToDouble(txt2.Text);
    double area = (baseT * alturaT) / 2;
    lblresultado.Text = "Área: " + area.ToString("F2");
}
else if (operacion == "perimetro_circunferencia")
{
    double radio = Convert.ToDouble(txt1.Text);
    double perimetro = 2 * Math.PI * radio;

```



```

        lblresultado.Text = "Perímetro: " + perimetro.ToString("F2");
    }
    else if (operacion == "area_trapecio")
    {
        double baseMayor = Convert.ToDouble(txt1.Text);
        double baseMenor = Convert.ToDouble(txt2.Text);
        // Necesitarías altura pero solo tienes 2 textbox
        MessageBox.Show("Necesitas también la altura del trapecio");
    }
    else if (operacion == "volumen_esfera")
    {
        double radio = Convert.ToDouble(txt1.Text);
        double volumen = (4.0 / 3.0) * Math.PI * radio * radio * radio;
        lblresultado.Text = "Volumen: " + volumen.ToString("F2");
    }
    else if (operacion == "volumen_cubo")
    {
        double lado = Convert.ToDouble(txt1.Text);
        double volumen = lado * lado * lado;
        lblresultado.Text = "Volumen: " + volumen.ToString("F2");
    }
}
catch
{
    MessageBox.Show("NO");
}
}

void BtnlimpiarClick(object sender, EventArgs e)
{
    txt1.Text = "";
    txt2.Text = "";
    lblresultado.Text = "Resultado:";
}

void AcercaDeToolStripMenuItemClick(object sender, EventArgs e)
{
    Form2 g = new Form2();
    g.Show();
}
}
}

```

```

/*
 * Created by SharpDevelop.
 * User: Fabry UwU
 * Date: 29/10/2025
 * Time: 02:29 p. m.
 *
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 */
using System;
using System.Drawing;
using System.Windows.Forms;

namespace examen
{
    /// <summary>
    /// Description of Form2.
    /// </summary>
    public partial class Form2 : Form
    {
        public Form2()
        {
            //
            // The InitializeComponent() call is required for Windows Forms designer support.
            //
            InitializeComponent();

            //
            // TODO: Add constructor code after the InitializeComponent() call.
            //
        }

        void Button1Click(object sender, EventArgs e)
        {
            this.Hide();
        }
    }
}

```