



Instituto Tecnológico de Reynosa

Ingeniería Mecatrónica

Materia

Programación básica

Nombre

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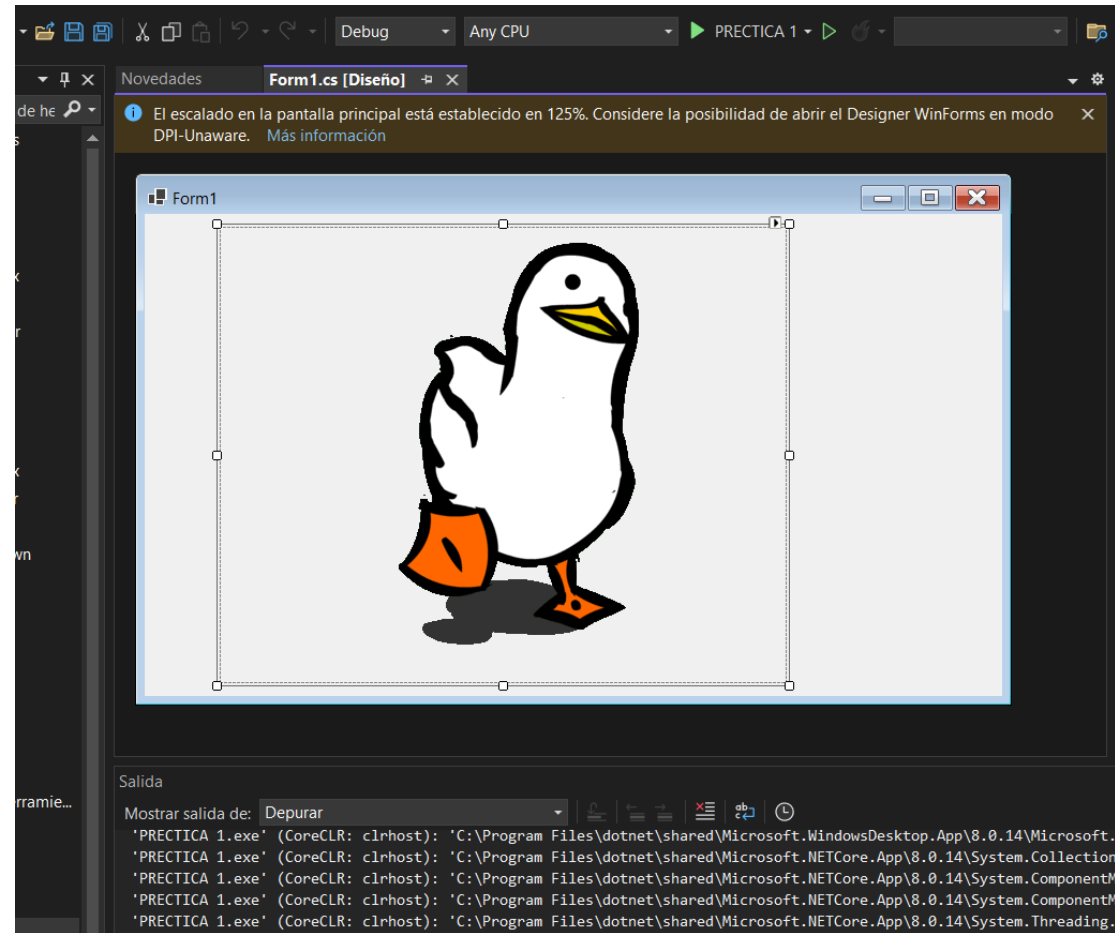
Semestre: Grupo:3B

Profesor:

Miriam Puente Jiménez

Fecha de entrega:

ARCHIVO 1 PRACTICA 1



ARCHIVO 1 PRACTICA 2

1 referencia

```
private void button2_Click(object sender, EventArgs e)
{
    Application.Exit();
}
```

1 referencia

```
private void button1_Click(object sender, EventArgs e)
{
    int a, b, c, d;
    a = int.Parse(textBox1.Text);
    b = int.Parse(textBox2.Text);
    c = int.Parse(textBox3.Text);
    d = int.Parse(textBox4.Text);
    label5.Text = d.ToString();
    label6.Text = c.ToString();
    label7.Text = b.ToString();
    label8.Text = a.ToString();
}
```

ESCRIBE UN NUMERO

ESCRIBE UN NUMERO

ESCRIBE UN NUMERO

ESCRIBE UN NUMERO

INVERTIR

SALIR

15 12 20 8

ARCHIVO 1 PRACTICA 3

The image displays a Visual Studio IDE with two panes. The left pane shows the source code for `PRACTICA_3.Form1`, and the right pane shows the visual representation of the `Form1` window.

Source Code (Left Pane):

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

    1 referencia
    private void button1_Click(object sender, EventArgs e)
    {
        int num1 = Int32.Parse(textBox1.Text);
        int num2 = Int32.Parse(textBox2.Text);
        int sum = num1 + num2;
        label3.Text = "sum = " + sum;
    }
}
```

Form View (Right Pane):

The `Form1` window contains two text boxes for input, a label for the result, and a button.

Label	Value
PRIMER NUMERO	20
SEGUNDO NUMERO	25
sum =	45

A blue button labeled **SUMAR** is located at the bottom right of the form.

ARCHIVO 1 PRACTICA 4

WinFormsApp4.Form1 button1_Click(object sender, EventArgs e)

1 referencia

```
public Form1()
{
    InitializeComponent();
}
```

1 referencia

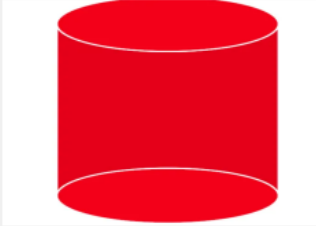
```
private void button1_Click(object sender, EventArgs e)
{
    double Radius, Height;
    double BaseArea, LateralArea, TotalArea;
    double Volume;
    Radius = double.Parse(textBox1.Text);
    Height = double.Parse(textBox2.Text);
    BaseArea = Radius * Radius * Math.PI;
    LateralArea = 2 * Math.PI * Radius * Height;
    TotalArea = 2 * Math.PI * Radius * (Height + Radius);
    Volume = Math.PI * Radius * Height;

    textBox3.Text = BaseArea.ToString("0.##");
    textBox4.Text = LateralArea.ToString("0.##");
    textBox5.Text = TotalArea.ToString("0.##");
    textBox6.Text = Volume.ToString("0.##");
}
```

Form1

INTRODUCE LAS DIMENSIONES DEL CILINDRO

RADIO	<input type="text" value="20"/>
ALTURA	<input type="text" value="15"/>
<input type="button" value="CALCULAR"/> <input type="button" value="BORRAR"/> <input type="button" value="SALIR"/>	
BASE AREA	<input type="text" value="1256.64"/>
LATERAL AREA	<input type="text" value="1884.96"/>
TOTAL AREA	<input type="text" value="4398.23"/>
VOLUMEN	<input type="text" value="942.48"/>



Sesión de diagnóstico: 38 segundos

ARCHIVO 1 PRACTICA 5

The image shows a Visual Studio IDE with two windows. The left window, titled 'orm1.cs [Diseño]', displays the source code for a C# application. The code is as follows:

```
namespace practica4
{
    3 referencias
    public partial class Form1 : Form
    {
        1 referencia
        public Form1()
        {
            InitializeComponent();
        }

        1 referencia
        private void button1_Click(object sender, EventArgs e)
        {
            float valor1 = float.Parse(textBox1.Text);
            float valor2 = float.Parse(textBox2.Text);
            float valor3 = valor1 * valor2 / 2;
            textBox3.Text = valor3.ToString();
        }
    }
}
```

The right window, titled 'Form1', shows the visual design of the application. It features a light gray background with the title 'AREA DEL TRIANGULO' at the top right. Below the title, there are three labels with corresponding text boxes: 'BASE' with a value of '5', 'ALTURA' with a value of '5', and 'AREA' with a value of '12.5'. At the bottom right, there is a blue button labeled 'RESOLVER'.

ARCHIVO 1 PRACTICA 6

The image shows a Visual Studio IDE with a C# code file named `AR_1_PRACTICA_6.Form1`. The code implements three event handlers for a temperature conversion application. The first handler, `button1_Click_1`, converts Fahrenheit to Celsius. The second handler, `button2_Click_1`, converts Celsius to Fahrenheit. The third handler, `button3_Click_1`, resets the input and result fields.

```
}

1 referencia
private void button1_Click_1(object sender, EventArgs e)
{
    double v1, farh1;
    v1 = double.Parse(valor.Text);
    farh1 = v1 * (9.0 / 5.0) + 32;
    Resultado.Text = farh1.ToString();
    etiqueta.Text = " Fahrenheit";
}

1 referencia
private void button2_Click_1(object sender, EventArgs e)
{
    double v1, cent1;
    v1 = double.Parse(valor.Text);
    cent1 = (v1 - 32) * (5.0 / 9.0);
    Resultado.Text = cent1.ToString();
    etiqueta.Text = " Centigrados";
}

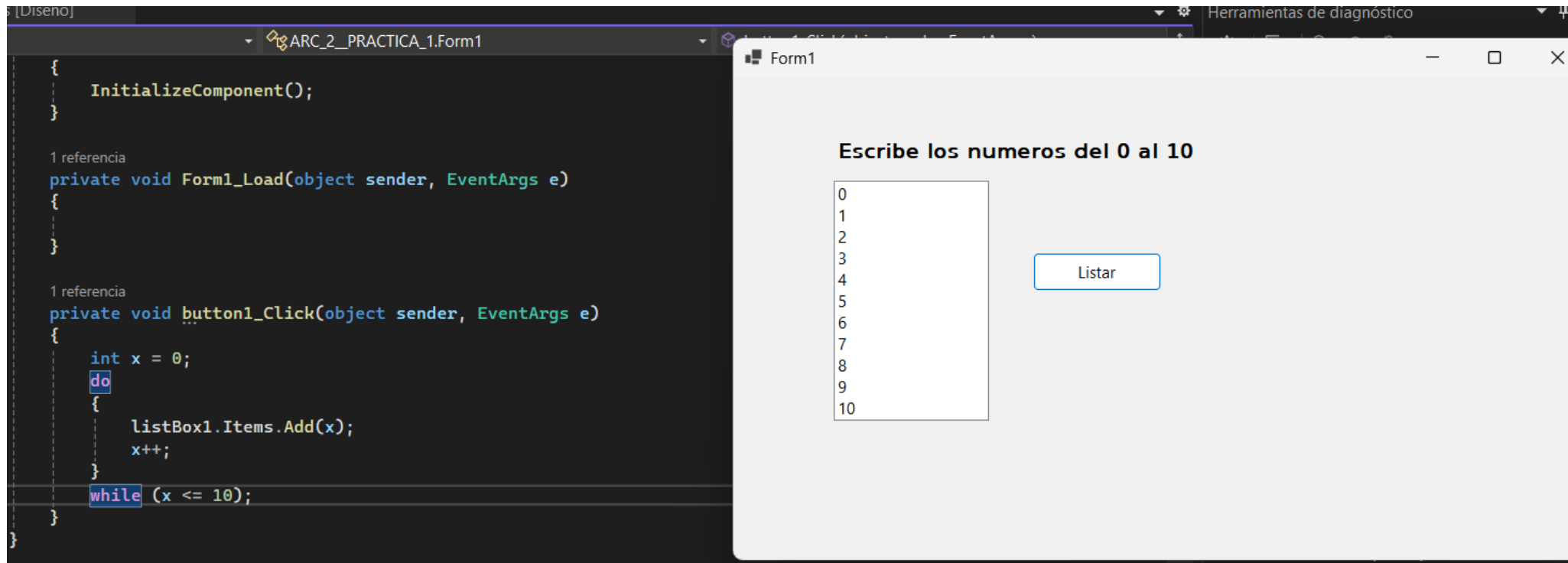
1 referencia
private void button3_Click_1(object sender, EventArgs e)
{
    valor.Text = " ";
    Resultado.Text = " ";
}
```

Overlaid on the code is a preview of the application window titled `Form1`. The window has a light gray background and contains the following elements:

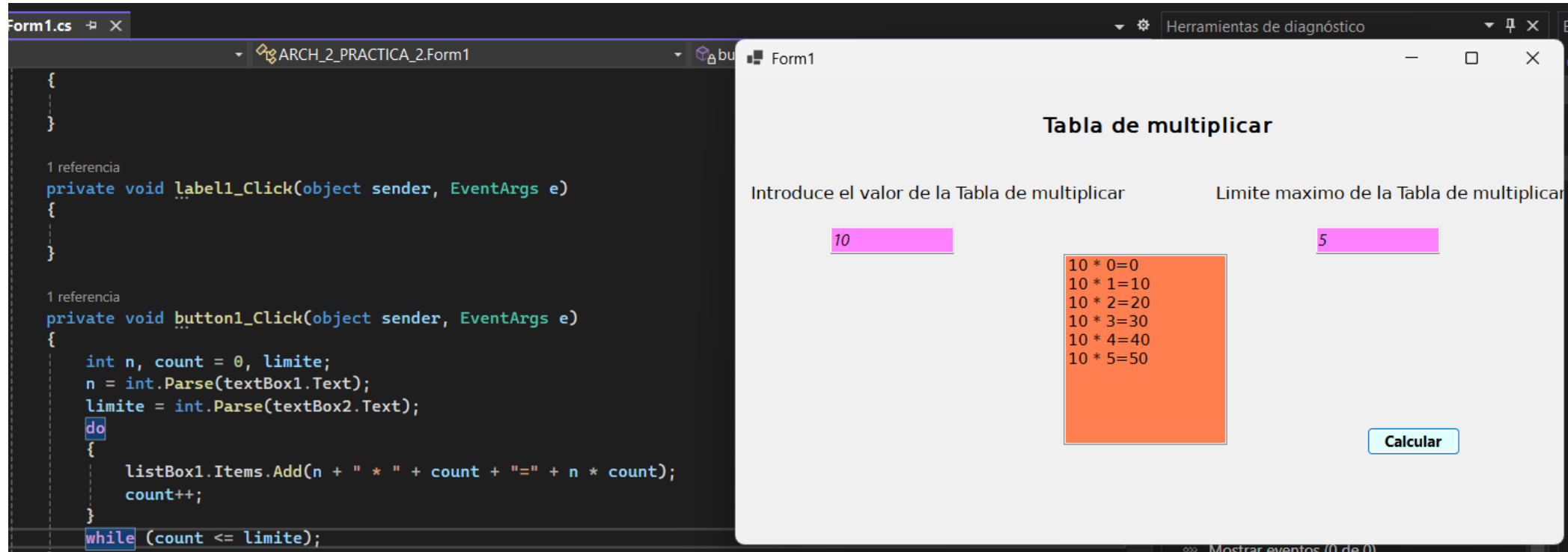
- Datos:** A label `Ingresa el valor:` followed by a text box containing the value `90`.
- Opciones de conversion:** Three buttons labeled `FAHRENHEI`, `CENTIGRADO` (which is highlighted with a blue border), and `BORRAR`.
- Resultado en grados:** A label `Equivalente en grados:` followed by a text box containing the value `32.222222` and the text `Centigrados`.

At the bottom right of the IDE, a status bar shows a diagnostic session time of `2:27 minutos` and two buttons: `Ver contadores de rendimiento` and `Uso de memoria`.

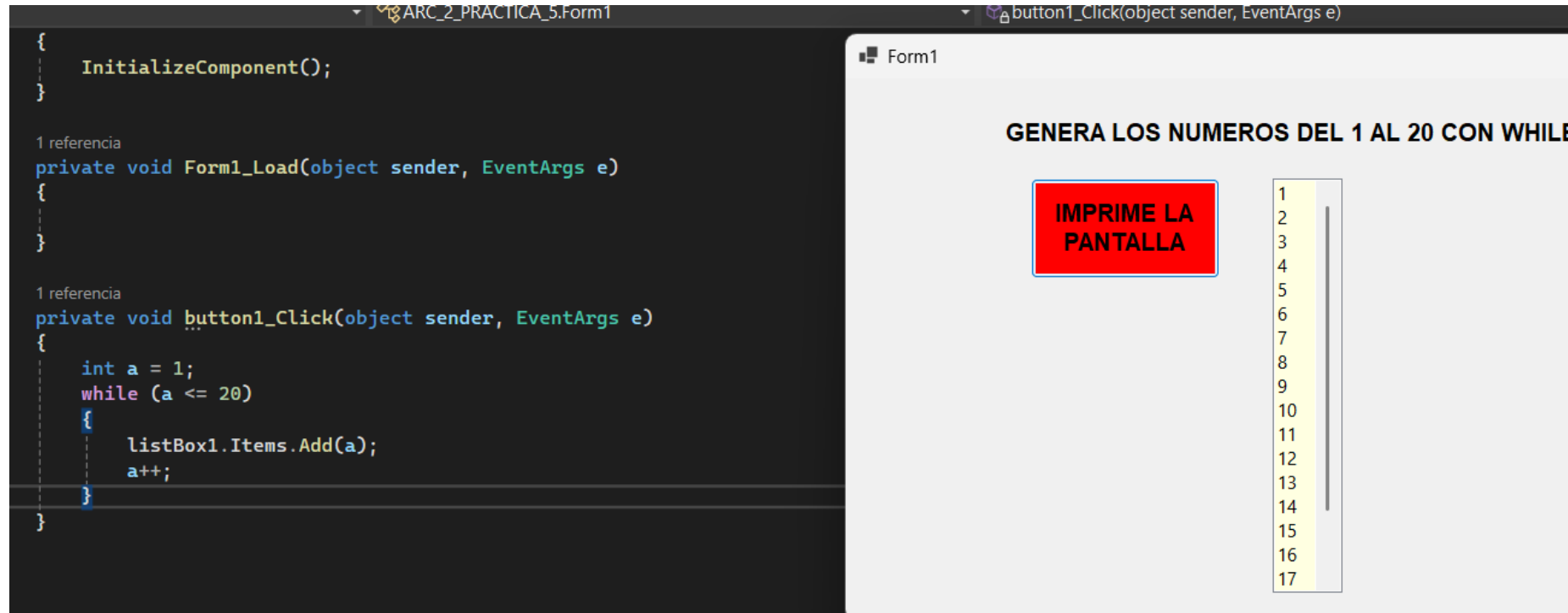
ARCHIVO 2 PRACTICA 1



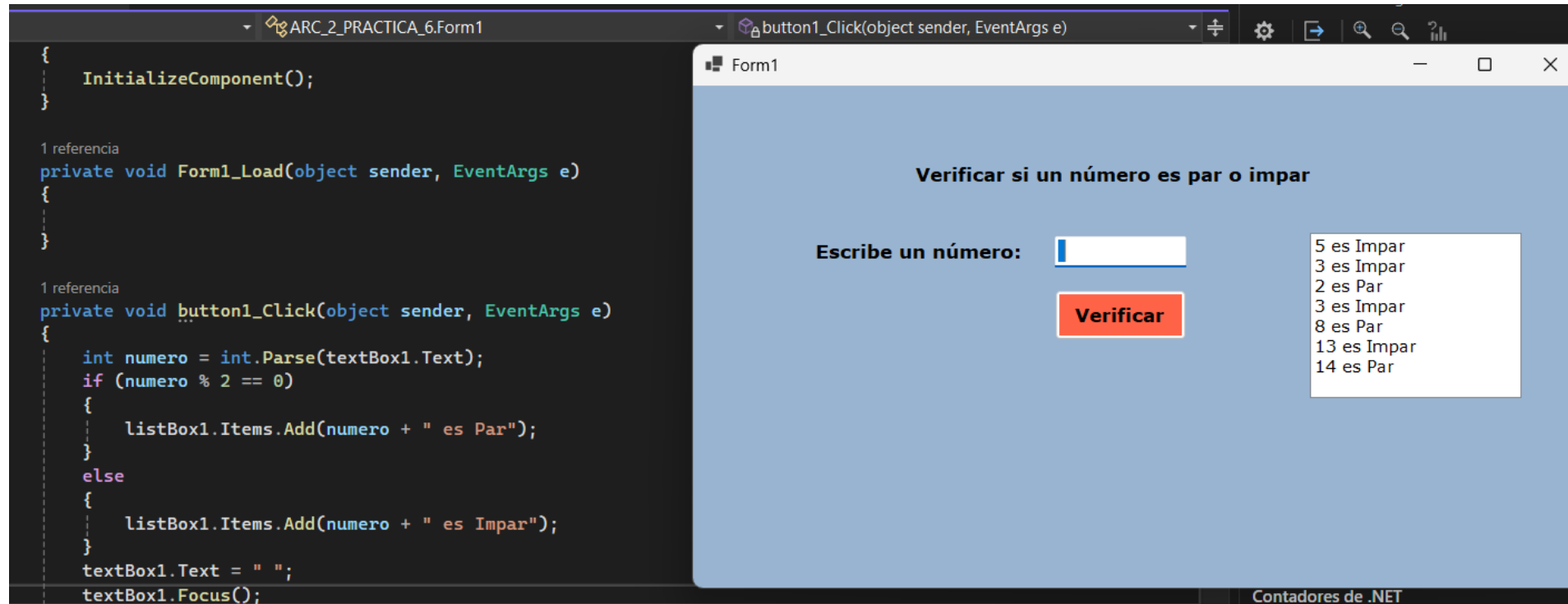
ARCHIVO 2 PRACTICA 2



ARCHIVO 2 PRACTICA 5



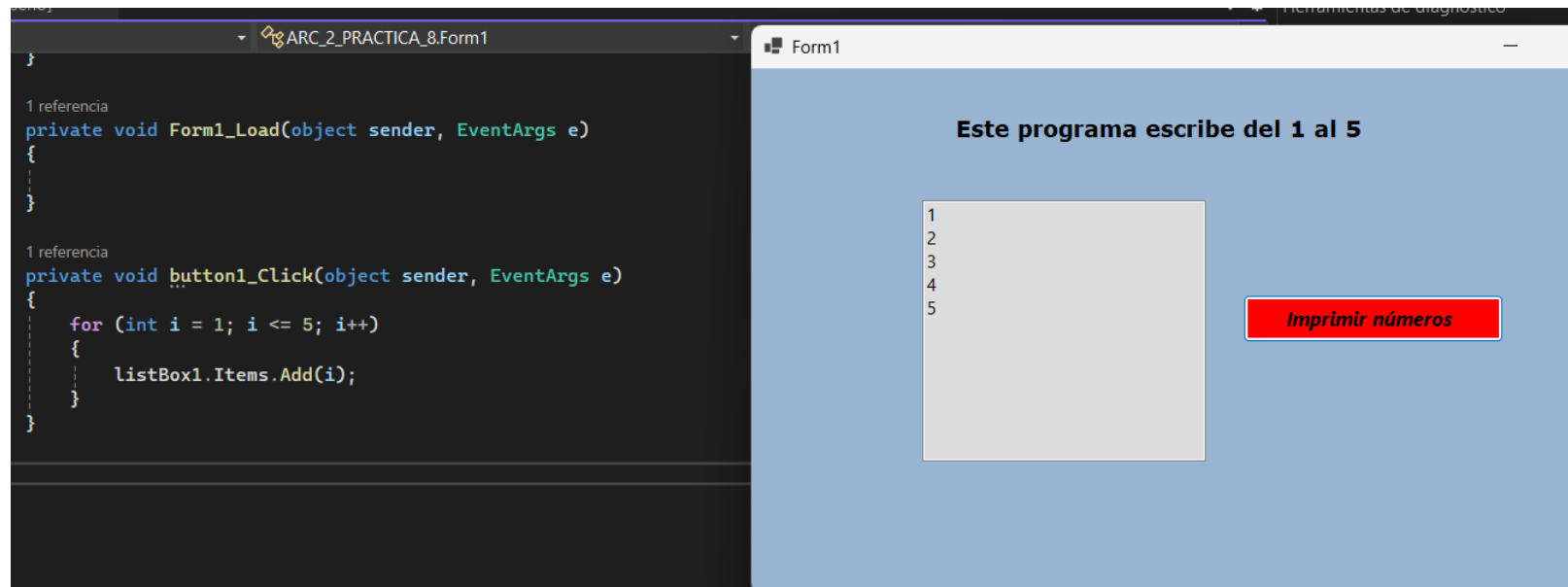
ARCHIVO 2 PRACTICA 6



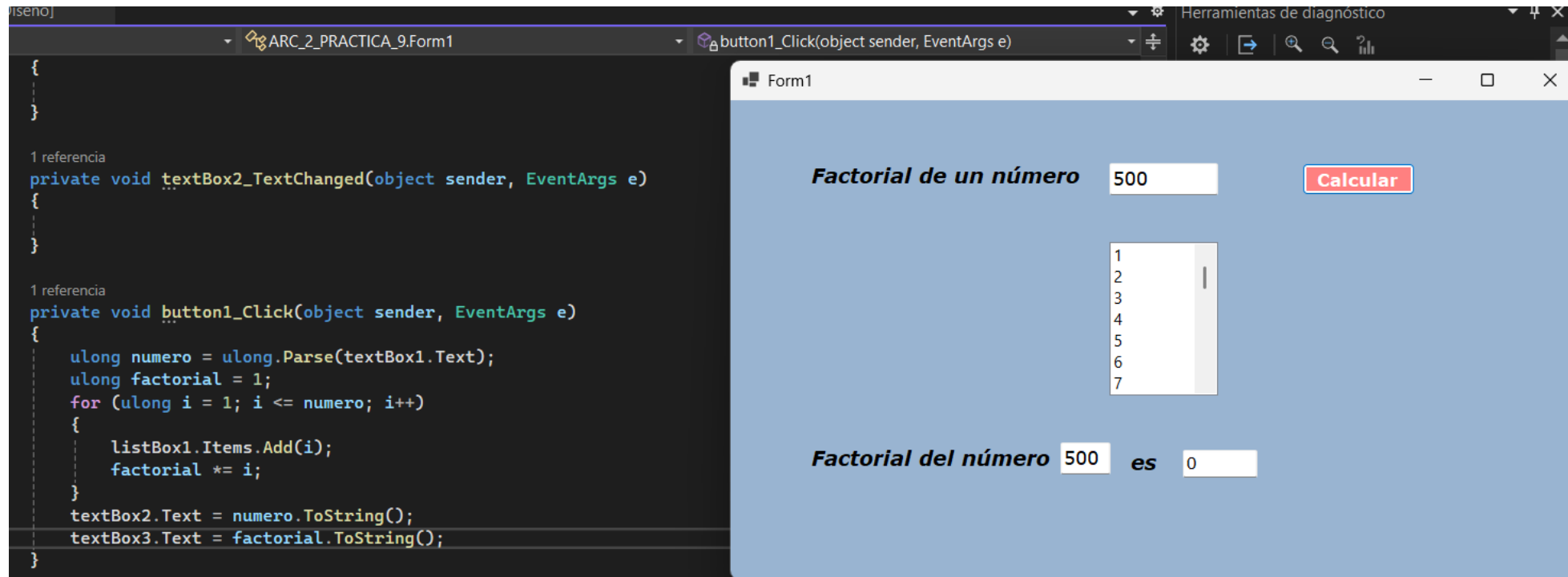
ARCHIVO 2 PRACTICA 7



ARCHIVO 2 PRACTICA 8



ARCHIVO 2 PRACTICA 9



ARCHIVO 2 PRACTICA 10

The image shows a screenshot of a C# application. On the left, the code editor displays the `button1_Click` event handler, which calculates the values of x , x^2 , x^3 , and $z = x^2 + x^3$ for x from 1 to 50. On the right, the application window titled "Form1" displays the results in four columns: x , x^2 , x^3 , and z . A red button labeled "Calcular Valores" is at the bottom.

```
1 referencia
private void button1_Click(object sender, EventArgs e)
{
    int i, cua, cub, zeta;
    for (i = 1; i <= 50; i++)
    {
        cua = i * i;
        cub = i * i * i;
        zeta = cua + cub;
        listBox1.Items.Add(i);
        listBox2.Items.Add(cua);
        listBox3.Items.Add(cub);
        listBox4.Items.Add(zeta);
    }
}

1 referencia
private void label1_Click(object sender, EventArgs e)
{
}
```

Form1

$z = x^2 + x^3$

x	x^2	x^3	z
1	1	1	2
2	4	8	12
3	9	27	36
4	16	64	80
5	25	125	150
6	36	216	252
7	49	343	392

Calcular Valores

ARCHIVO 2 PRACTICA 11

The screenshot shows a Visual Studio IDE with a C# project named 'ARC_2_PRACTICA_11'. The code in 'Form1.cs' defines two methods: `button1_Click` using a `for` loop and `button2_Click` using a `while` loop. Both loops calculate the function $f(x) = \frac{x}{1 + x^2}$ for x from 0 to 10. The Windows Form 'Form1' displays the formula and two list boxes for x and $f(x)$. The x list box contains values from 0 to 8, and the $f(x)$ list box contains the corresponding function values. Four red buttons are visible: 'for', 'while', 'do...while', and 'Salir'.

```
private void button1_Click(object sender, EventArgs e)
{
    for (int x = 0; x < 10; x++)
    {
        listBox1.Items.Add(x);
        double fx = x / (1.0 + x * x);
        listBox2.Items.Add(fx);
    }
}

1 referencia
private void button2_Click(object sender, EventArgs e)
{
    int x1 = 1;
    while (x1 <= 10)
    {
        listBox1.Items.Add(x1);
        double fx = x1 / (1.0 + x1 * x1);
        listBox2.Items.Add(fx);
        x1++;
    }
}

1 referencia
```

Form1

$$f(x) = \frac{x}{1 + x^2}$$

x	f(x)
0	0
1	0.5
2	0.4
3	0.3
4	0.23529411764
5	0.19230769230
6	0.16216216216
7	0.14
8	0.12307692307

for

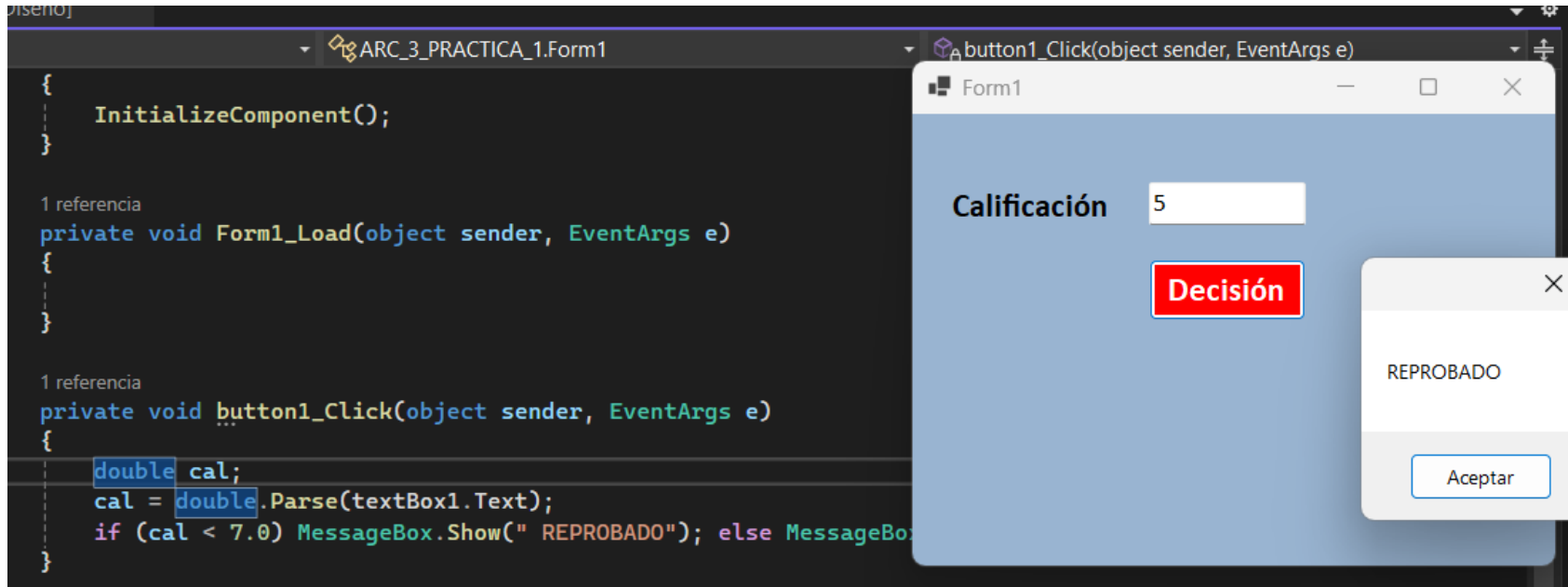
while

do...while

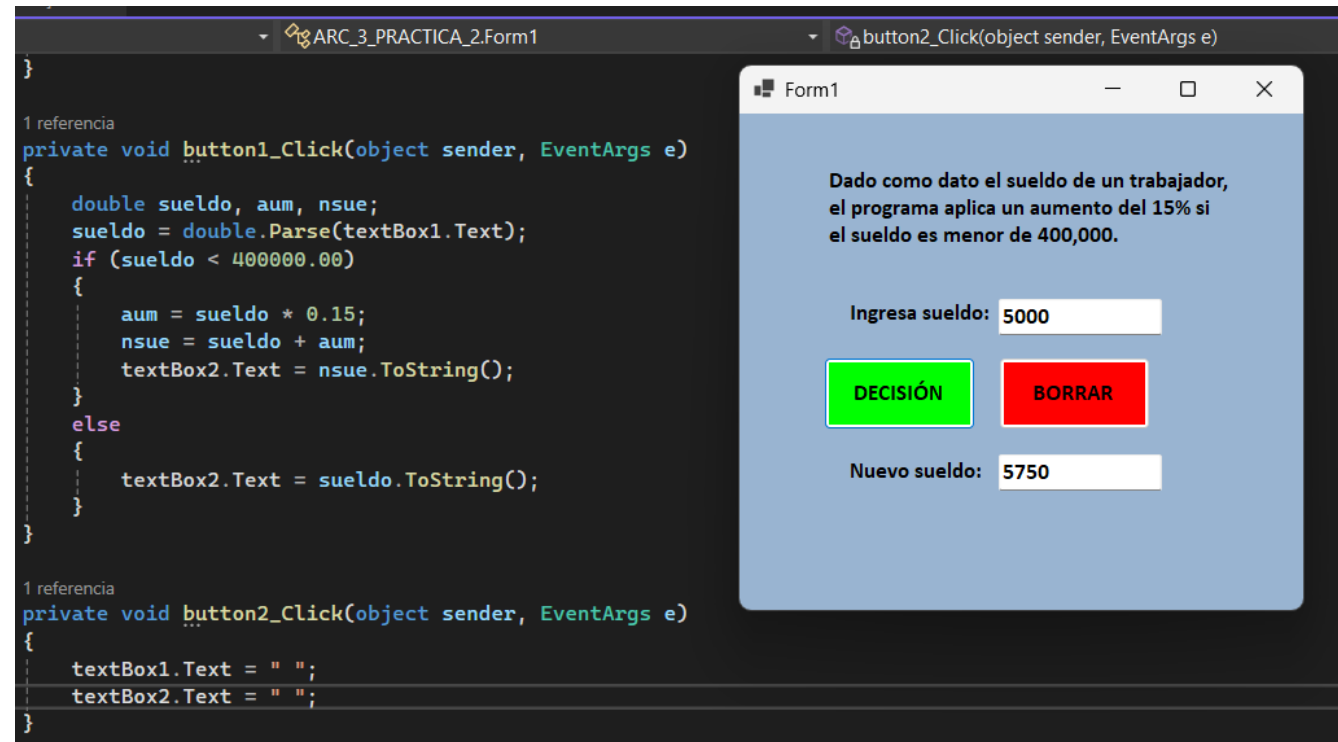
Salir

Contadores de .NET

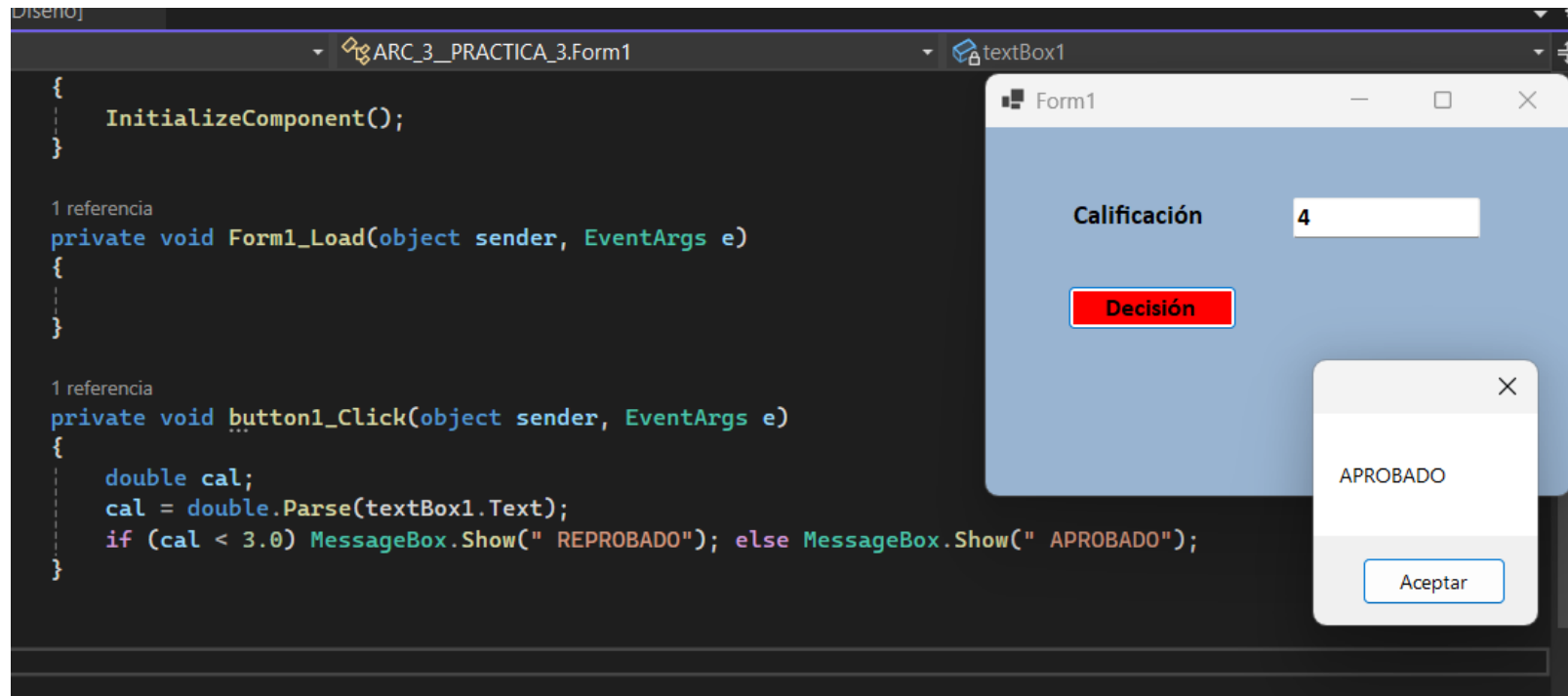
ARCHIVO 3 PRACTICA 1



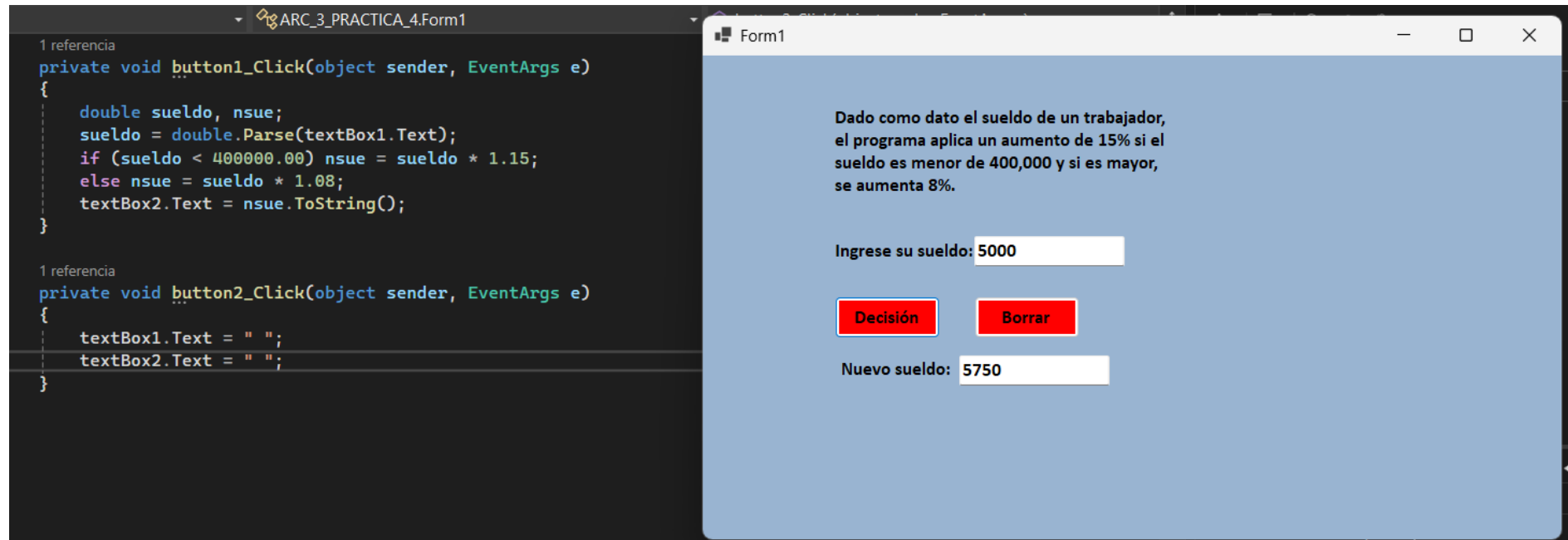
ARCHIVO 3 PRACTICA 2



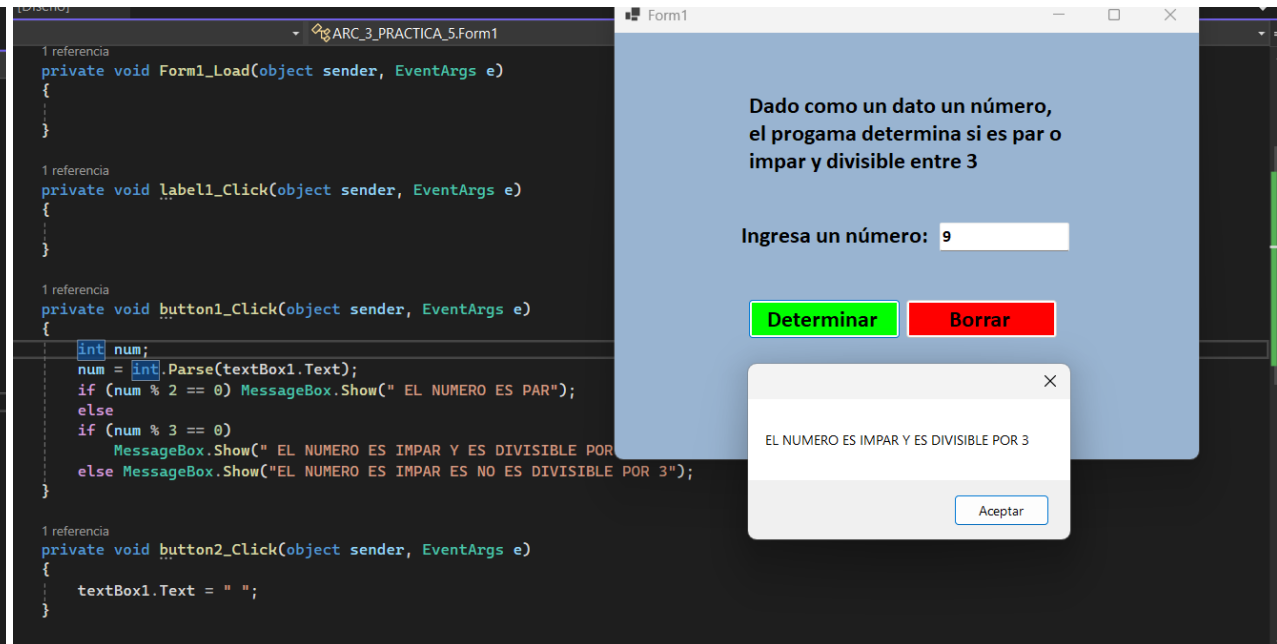
ARCHIVO 3 PRACTICA 3



ARCHIVO 3 PRACTICA 4



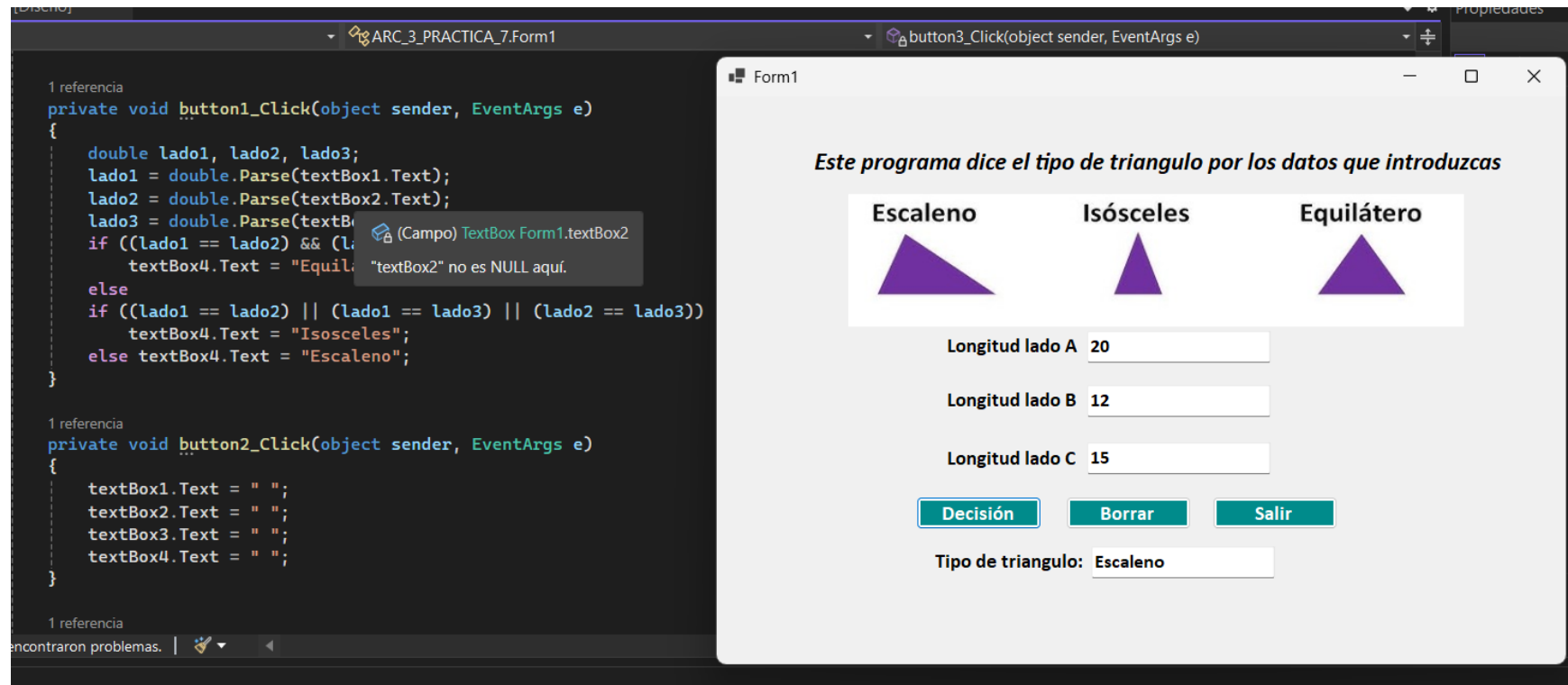
ARCHIVO 3 PRACTICA 5



ARCHIVO 3 PRACTICA 6



ARCHIVO 3 PRACTICA 7



ARCHIVO 3 PRACTICA 7



ARCHIVO 3 PRACTICA 9

