**Calculadora**

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 WindowsFormsApplication1

{

public partial class Calculadora : Form

{

double primero;

double segundo;

string operador;

public Calculadora()

{

InitializeComponent();

}

Clases.ClsSuma obj = new Clases.ClsSuma();

Clases.ClsResta obj2 = new Clases.ClsResta();

Clases.ClsMultiplicacion obj3 = new Clases.ClsMultiplicacion();

Clases.ClsDivision obj4 = new Clases.ClsDivision();

private void button2\_Click(object sender, EventArgs e)

{

}

private void button4\_Click(object sender, EventArgs e)

{

}

private void txbScreen\_TextChanged(object sender, EventArgs e)

{

}

private void button16\_Click(object sender, EventArgs e)

{

}

private void Form1\_Load(object sender, EventArgs e)

{

}

private void btnN0\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "0";

}

private void btnN1\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "1";

}

private void btnN2\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "2";

}

private void btnN3\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "3";

}

private void btnN4\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "4";

}

private void btnN5\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "5";

}

private void btnN6\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "6";

}

private void btnN7\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "7";

}

private void btnN8\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "8";

}

private void btnN9\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + "9";

}

private void btnPunto\_Click(object sender, EventArgs e)

{

tbxScreen.Text = tbxScreen.Text + ".";

}

private void btnSuma\_Click(object sender, EventArgs e)

{

operador = "+";

primero = double.Parse(tbxScreen.Text);

tbxScreen.Clear();

}

private void btnResta\_Click(object sender, EventArgs e)

{

operador = "-";

primero = double.Parse(tbxScreen.Text);

tbxScreen.Clear();

}

private void btnMultiplicacion\_Click(object sender, EventArgs e)

{

operador = "\*";

primero = double.Parse(tbxScreen.Text);

tbxScreen.Clear();

}

private void btnDivision\_Click(object sender, EventArgs e)

{

operador = "/";

primero = double.Parse(tbxScreen.Text);

tbxScreen.Clear();

}

private void btnLimpiar\_Click(object sender, EventArgs e)

{

tbxScreen.Clear();

}

private void btnBorrar\_Click(object sender, EventArgs e)

{

if (tbxScreen.Text.Length == 1)

tbxScreen.Text = "";

else

tbxScreen.Text = tbxScreen.Text.Substring(0, tbxScreen.Text.Length - 1);

}

private void btnIgual\_Click(object sender, EventArgs e)

{

segundo = double.Parse(tbxScreen.Text);

double Sum;

double Res;

double Mul;

double Div;

switch(operador)

{

case "+":

Sum = obj.Sumar((primero), (segundo));

tbxScreen.Text = Sum.ToString();

break;

case "-":

Res = obj2.Restar((primero), (segundo));

tbxScreen.Text = Res.ToString();

break;

case "\*":

Mul = obj3.Multiplicar((primero), (segundo));

tbxScreen.Text = Mul.ToString();

break;

case "/":

Div = obj4.Dividir((primero), (segundo));

tbxScreen.Text = Div.ToString();

break;

}

}

}

}

**Diseños del programa**

namespace WindowsFormsApplication1

{

partial class Calculadora

{

/// <summary>

/// Variable del diseñador necesaria.

/// </summary>

private System.ComponentModel.IContainer components = null;

/// <summary>

/// Limpiar los recursos que se estén usando.

/// </summary>

/// <param name="disposing">true si los recursos administrados se deben desechar; false en caso contrario.</param>

protected override void Dispose(bool disposing)

{

if (disposing && (components != null))

{

components.Dispose();

}

base.Dispose(disposing);

}

#region Código generado por el Diseñador de Windows Forms

/// <summary>

/// Método necesario para admitir el Diseñador. No se puede modificar

/// el contenido de este método con el editor de código.

/// </summary>

private void InitializeComponent()

{

this.btnSuma = new System.Windows.Forms.Button();

this.btnResta = new System.Windows.Forms.Button();

this.btnMultiplicacion = new System.Windows.Forms.Button();

this.btnN9 = new System.Windows.Forms.Button();

this.btnN8 = new System.Windows.Forms.Button();

this.btnN7 = new System.Windows.Forms.Button();

this.btnN6 = new System.Windows.Forms.Button();

this.btnN5 = new System.Windows.Forms.Button();

this.btnN4 = new System.Windows.Forms.Button();

this.btnN3 = new System.Windows.Forms.Button();

this.btnN2 = new System.Windows.Forms.Button();

this.btnN1 = new System.Windows.Forms.Button();

this.btnBorrar = new System.Windows.Forms.Button();

this.btnLimpiar = new System.Windows.Forms.Button();

this.btnDivision = new System.Windows.Forms.Button();

this.btnN0 = new System.Windows.Forms.Button();

this.btnPunto = new System.Windows.Forms.Button();

this.tbxScreen = new System.Windows.Forms.TextBox();

this.btnIgual = new System.Windows.Forms.Button();

this.SuspendLayout();

//

// btnSuma

//

this.btnSuma.BackColor = System.Drawing.SystemColors.ActiveBorder;

this.btnSuma.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnSuma.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnSuma.Location = new System.Drawing.Point(12, 78);

this.btnSuma.Name = "btnSuma";

this.btnSuma.Size = new System.Drawing.Size(61, 49);

this.btnSuma.TabIndex = 0;

this.btnSuma.Text = "+";

this.btnSuma.UseVisualStyleBackColor = false;

this.btnSuma.Click += new System.EventHandler(this.btnSuma\_Click);

//

// btnResta

//

this.btnResta.BackColor = System.Drawing.SystemColors.ActiveBorder;

this.btnResta.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnResta.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnResta.Location = new System.Drawing.Point(79, 78);

this.btnResta.Name = "btnResta";

this.btnResta.Size = new System.Drawing.Size(61, 49);

this.btnResta.TabIndex = 1;

this.btnResta.Text = "-";

this.btnResta.UseVisualStyleBackColor = false;

this.btnResta.Click += new System.EventHandler(this.btnResta\_Click);

//

// btnMultiplicacion

//

this.btnMultiplicacion.BackColor = System.Drawing.SystemColors.ActiveBorder;

this.btnMultiplicacion.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnMultiplicacion.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnMultiplicacion.Location = new System.Drawing.Point(146, 78);

this.btnMultiplicacion.Name = "btnMultiplicacion";

this.btnMultiplicacion.Size = new System.Drawing.Size(61, 49);

this.btnMultiplicacion.TabIndex = 2;

this.btnMultiplicacion.Text = "\*";

this.btnMultiplicacion.UseVisualStyleBackColor = false;

this.btnMultiplicacion.Click += new System.EventHandler(this.btnMultiplicacion\_Click);

//

// btnN9

//

this.btnN9.BackColor = System.Drawing.Color.DimGray;

this.btnN9.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN9.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN9.Location = new System.Drawing.Point(146, 133);

this.btnN9.Name = "btnN9";

this.btnN9.Size = new System.Drawing.Size(61, 49);

this.btnN9.TabIndex = 5;

this.btnN9.Text = "9";

this.btnN9.UseVisualStyleBackColor = false;

this.btnN9.Click += new System.EventHandler(this.btnN9\_Click);

//

// btnN8

//

this.btnN8.BackColor = System.Drawing.Color.DimGray;

this.btnN8.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN8.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN8.Location = new System.Drawing.Point(79, 133);

this.btnN8.Name = "btnN8";

this.btnN8.Size = new System.Drawing.Size(61, 49);

this.btnN8.TabIndex = 4;

this.btnN8.Text = "8";

this.btnN8.UseVisualStyleBackColor = false;

this.btnN8.Click += new System.EventHandler(this.btnN8\_Click);

//

// btnN7

//

this.btnN7.BackColor = System.Drawing.Color.DimGray;

this.btnN7.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN7.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN7.Location = new System.Drawing.Point(12, 133);

this.btnN7.Name = "btnN7";

this.btnN7.Size = new System.Drawing.Size(61, 49);

this.btnN7.TabIndex = 3;

this.btnN7.Text = "7";

this.btnN7.UseVisualStyleBackColor = false;

this.btnN7.Click += new System.EventHandler(this.btnN7\_Click);

//

// btnN6

//

this.btnN6.BackColor = System.Drawing.Color.DimGray;

this.btnN6.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN6.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN6.Location = new System.Drawing.Point(146, 188);

this.btnN6.Name = "btnN6";

this.btnN6.Size = new System.Drawing.Size(61, 49);

this.btnN6.TabIndex = 8;

this.btnN6.Text = "6";

this.btnN6.UseVisualStyleBackColor = false;

this.btnN6.Click += new System.EventHandler(this.btnN6\_Click);

//

// btnN5

//

this.btnN5.BackColor = System.Drawing.Color.DimGray;

this.btnN5.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN5.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN5.Location = new System.Drawing.Point(79, 188);

this.btnN5.Name = "btnN5";

this.btnN5.Size = new System.Drawing.Size(61, 49);

this.btnN5.TabIndex = 7;

this.btnN5.Text = "5";

this.btnN5.UseVisualStyleBackColor = false;

this.btnN5.Click += new System.EventHandler(this.btnN5\_Click);

//

// btnN4

//

this.btnN4.BackColor = System.Drawing.Color.DimGray;

this.btnN4.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN4.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN4.Location = new System.Drawing.Point(12, 188);

this.btnN4.Name = "btnN4";

this.btnN4.Size = new System.Drawing.Size(61, 49);

this.btnN4.TabIndex = 6;

this.btnN4.Text = "4";

this.btnN4.UseVisualStyleBackColor = false;

this.btnN4.Click += new System.EventHandler(this.btnN4\_Click);

//

// btnN3

//

this.btnN3.BackColor = System.Drawing.Color.DimGray;

this.btnN3.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN3.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN3.Location = new System.Drawing.Point(146, 243);

this.btnN3.Name = "btnN3";

this.btnN3.Size = new System.Drawing.Size(61, 49);

this.btnN3.TabIndex = 11;

this.btnN3.Text = "3";

this.btnN3.UseVisualStyleBackColor = false;

this.btnN3.Click += new System.EventHandler(this.btnN3\_Click);

//

// btnN2

//

this.btnN2.BackColor = System.Drawing.Color.DimGray;

this.btnN2.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN2.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN2.Location = new System.Drawing.Point(79, 243);

this.btnN2.Name = "btnN2";

this.btnN2.Size = new System.Drawing.Size(61, 49);

this.btnN2.TabIndex = 10;

this.btnN2.Text = "2";

this.btnN2.UseVisualStyleBackColor = false;

this.btnN2.Click += new System.EventHandler(this.btnN2\_Click);

//

// btnN1

//

this.btnN1.BackColor = System.Drawing.Color.DimGray;

this.btnN1.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN1.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN1.Location = new System.Drawing.Point(12, 243);

this.btnN1.Name = "btnN1";

this.btnN1.Size = new System.Drawing.Size(61, 49);

this.btnN1.TabIndex = 9;

this.btnN1.Text = "1";

this.btnN1.UseVisualStyleBackColor = false;

this.btnN1.Click += new System.EventHandler(this.btnN1\_Click);

//

// btnBorrar

//

this.btnBorrar.BackColor = System.Drawing.Color.IndianRed;

this.btnBorrar.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnBorrar.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnBorrar.Location = new System.Drawing.Point(213, 188);

this.btnBorrar.Name = "btnBorrar";

this.btnBorrar.Size = new System.Drawing.Size(61, 49);

this.btnBorrar.TabIndex = 14;

this.btnBorrar.Text = "←";

this.btnBorrar.UseVisualStyleBackColor = false;

this.btnBorrar.Click += new System.EventHandler(this.btnBorrar\_Click);

//

// btnLimpiar

//

this.btnLimpiar.BackColor = System.Drawing.Color.IndianRed;

this.btnLimpiar.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnLimpiar.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnLimpiar.Location = new System.Drawing.Point(213, 133);

this.btnLimpiar.Name = "btnLimpiar";

this.btnLimpiar.Size = new System.Drawing.Size(61, 49);

this.btnLimpiar.TabIndex = 13;

this.btnLimpiar.Text = "CE";

this.btnLimpiar.UseVisualStyleBackColor = false;

this.btnLimpiar.Click += new System.EventHandler(this.btnLimpiar\_Click);

//

// btnDivision

//

this.btnDivision.BackColor = System.Drawing.SystemColors.ActiveBorder;

this.btnDivision.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnDivision.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnDivision.Location = new System.Drawing.Point(213, 78);

this.btnDivision.Name = "btnDivision";

this.btnDivision.Size = new System.Drawing.Size(61, 49);

this.btnDivision.TabIndex = 12;

this.btnDivision.Text = "/";

this.btnDivision.UseVisualStyleBackColor = false;

this.btnDivision.Click += new System.EventHandler(this.btnDivision\_Click);

//

// btnN0

//

this.btnN0.BackColor = System.Drawing.Color.DimGray;

this.btnN0.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnN0.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnN0.Location = new System.Drawing.Point(12, 298);

this.btnN0.Name = "btnN0";

this.btnN0.Size = new System.Drawing.Size(128, 43);

this.btnN0.TabIndex = 16;

this.btnN0.Text = "0";

this.btnN0.UseVisualStyleBackColor = false;

this.btnN0.Click += new System.EventHandler(this.btnN0\_Click);

//

// btnPunto

//

this.btnPunto.BackColor = System.Drawing.Color.DimGray;

this.btnPunto.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnPunto.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnPunto.Location = new System.Drawing.Point(146, 298);

this.btnPunto.Name = "btnPunto";

this.btnPunto.Size = new System.Drawing.Size(61, 43);

this.btnPunto.TabIndex = 17;

this.btnPunto.Text = ".";

this.btnPunto.UseVisualStyleBackColor = false;

this.btnPunto.Click += new System.EventHandler(this.btnPunto\_Click);

//

// tbxScreen

//

this.tbxScreen.BackColor = System.Drawing.Color.FromArgb(((int)(((byte)(192)))), ((int)(((byte)(192)))), ((int)(((byte)(255)))));

this.tbxScreen.BorderStyle = System.Windows.Forms.BorderStyle.FixedSingle;

this.tbxScreen.Font = new System.Drawing.Font("Perpetua Titling MT", 26.25F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.tbxScreen.Location = new System.Drawing.Point(12, 12);

this.tbxScreen.Name = "tbxScreen";

this.tbxScreen.ReadOnly = true;

this.tbxScreen.Size = new System.Drawing.Size(262, 50);

this.tbxScreen.TabIndex = 18;

this.tbxScreen.TextAlign = System.Windows.Forms.HorizontalAlignment.Right;

this.tbxScreen.TextChanged += new System.EventHandler(this.txbScreen\_TextChanged);

//

// btnIgual

//

this.btnIgual.BackColor = System.Drawing.Color.DimGray;

this.btnIgual.FlatStyle = System.Windows.Forms.FlatStyle.Popup;

this.btnIgual.Font = new System.Drawing.Font("Verdana", 14.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));

this.btnIgual.Location = new System.Drawing.Point(213, 243);

this.btnIgual.Name = "btnIgual";

this.btnIgual.Size = new System.Drawing.Size(61, 98);

this.btnIgual.TabIndex = 19;

this.btnIgual.Text = "=";

this.btnIgual.UseVisualStyleBackColor = false;

this.btnIgual.Click += new System.EventHandler(this.btnIgual\_Click);

//

// Calculadora

//

this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

this.ClientSize = new System.Drawing.Size(293, 356);

this.Controls.Add(this.btnIgual);

this.Controls.Add(this.tbxScreen);

this.Controls.Add(this.btnPunto);

this.Controls.Add(this.btnN0);

this.Controls.Add(this.btnBorrar);

this.Controls.Add(this.btnLimpiar);

this.Controls.Add(this.btnDivision);

this.Controls.Add(this.btnN3);

this.Controls.Add(this.btnN2);

this.Controls.Add(this.btnN1);

this.Controls.Add(this.btnN6);

this.Controls.Add(this.btnN5);

this.Controls.Add(this.btnN4);

this.Controls.Add(this.btnN9);

this.Controls.Add(this.btnN8);

this.Controls.Add(this.btnN7);

this.Controls.Add(this.btnMultiplicacion);

this.Controls.Add(this.btnResta);

this.Controls.Add(this.btnSuma);

this.Name = "Calculadora";

this.Text = "CalculadoraJR";

this.Load += new System.EventHandler(this.Form1\_Load);

this.ResumeLayout(false);

this.PerformLayout();

}

#endregion

private System.Windows.Forms.Button btnSuma;

private System.Windows.Forms.Button btnResta;

private System.Windows.Forms.Button btnMultiplicacion;

private System.Windows.Forms.Button btnN9;

private System.Windows.Forms.Button btnN8;

private System.Windows.Forms.Button btnN7;

private System.Windows.Forms.Button btnN6;

private System.Windows.Forms.Button btnN5;

private System.Windows.Forms.Button btnN4;

private System.Windows.Forms.Button btnN3;

private System.Windows.Forms.Button btnN2;

private System.Windows.Forms.Button btnN1;

private System.Windows.Forms.Button btnBorrar;

private System.Windows.Forms.Button btnLimpiar;

private System.Windows.Forms.Button btnDivision;

private System.Windows.Forms.Button btnN0;

private System.Windows.Forms.Button btnPunto;

private System.Windows.Forms.TextBox tbxScreen;

private System.Windows.Forms.Button btnIgual;

}

}

**Clases utilizadas.**

**SUMA**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading. Tasks;

namespace WindowsFormsApplication1.Clases

{

class ClsSuma

{

public double Sumar(double N1, double N2)

{

double S;

S = N1 + N2;

return S;

}

}

}

**RESTA**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace WindowsFormsApplication1.Clases

{

class ClsResta

{

public double Restar(double N1, double N2)

{

double R;

R = N1 - N2;

return R;

}

}

}

**MULTIPLICACION**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace WindowsFormsApplication1.Clases

{

class ClsMultiplicacion

{

public double Multiplicar(double N1, double N2)

{

double M;

M = N1 \* N2;

return M;

}

}

}

**DIVISION**

using System;

using System.Collections. Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace WindowsFormsApplication1.Clases

{

class ClsDivision

{

public double Dividir(double N1, double N2)

{

double D;

D = N1 / N2;

return D;

}

}

}

