﻿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 Calculator

{

public partial class Form1 : Form

{

string input = string.Empty; //to read the input when clicked string Op1 = string.Empty; //First operand

string Op2 = string.Empty;

string Op1 = string.Empty; //First operand

double res = 0.0; //Final result

char Operator;

public Form1()

{

InitializeComponent();

}

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

{

}

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

{

this.textBox1.Text = string.Empty;

input = input + "1";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "2";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "3";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "4";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "5";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "6";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "7";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "8";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "9";

this.textBox1.Text += input;

}

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

{

this.textBox1.Text = string.Empty;

input = input + "0";

this.textBox1.Text += input;

}

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

{

Op1 = input;

Operator = '+';

input = string.Empty;

}

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

{

Op1 = input;

Operator = '-';

input = string.Empty;

}

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

{

Op1 = input;

Operator = '\*';

input = string.Empty;

}

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

{

Op1 = input;

Operator = '/';

input = string.Empty;

}

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

{

Op2 = input;

double num1, num2;

double.TryParse(Op1, out num1);

double.TryParse(Op2, out num2);

if (Operator == '+')

{

res = num1 + num2;

this.textBox1.Text = res.ToString();

}

else if (Operator == '-')

{

res = num1 - num2;

this.textBox1.Text = res.ToString();

}

else if (Operator == '\*')

{

res = num1 \* num2;

this.textBox1.Text = res.ToString();

}

else if (Operator == '/')

{

if (num2 != 0)

{

res = num1 / num2;

textBox1.Text = res.ToString();

}

else

{

textBox1.Text = "DIV/Zero!";

}

}

else if (Operator == 's')

{

if (num2 >= 0)

{

res = Math.Sqrt(num1);

this.textBox1.Text = res.ToString();

}

else

{

this.textBox1.Text = "Negetive no.!";

}

}

else if (Operator == 'c')

{

res = Math.Log(num1);

this.textBox1.Text = res.ToString();

}

else if (Operator == 'e')

{

res = Math.Exp(num1);

this.textBox1.Text = res.ToString();

}

else if (Operator == 'p')

{

res = Math.Pow(num1,num2);

this.textBox1.Text = res.ToString();

}

input = string.Empty;

}

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

{

Op1 = input;

Operator = 's';

input = string.Empty;

}

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

{

Op1 = input;

Operator = 'c';

input = string.Empty;

}

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

{

Op1 = input;

Operator = 'e';

input = string.Empty;

}

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

{

Op1 = input;

Operator = 'p';

input = string.Empty;

}

}

}