using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Windows.Forms;

namespace WindowsFormsApplication1

{

public partial class frmMatrices : Form

{

#region ATRIBUTOS

int Columna = 0;

int Fila = 0;

double s, prom;

#endregion ATRIBUTOS

#region CONSTRUCTORES

public frmMatrices()

{

InitializeComponent();

}

#endregion CONSTRUCTORES

#region METODOS

//===========================================================

public void ActivarGrilla()

{

Columna = 0;

Fila = 0;

if (int.TryParse(txtColumna.Text, out Columna))

{

if (int.TryParse(txtFila.Text, out Fila))

{

dgvMatriz1.Visible = true;

dgvMatriz1.ColumnCount = Columna;

dgvMatriz1.RowCount = Fila;

for (int i = 0; i < Fila; i++)

//for (int i = Fila - 1; i >= 0; i--)

{

dgvMatriz1.Rows[i].HeaderCell.Value= (i + 1).ToString();

dgvMatriz1.Rows[i].Height = 30;

//for (int j = Columna - 1; j >= 0; j--)

for (int j = 0; j < Columna; j++)

{

dgvMatriz1.Columns[j].HeaderText = (j + 1).ToString();

dgvMatriz1.Columns[j].Width = 30;

//---poner valor por defecto

dgvMatriz1[j, i].Value = 1;

}

}

}

}

}

public void ProcesarSumar()

{

// aca define la matriz de acuerdo al tamaño de la grilla

double[,] M = new double[dgvMatriz1.Rows.Count, dgvMatriz1.Columns.Count];

// aca carga la matriz desde la grilla

int col = Columna - 1;

int fil = Fila - 1;

for (int i = 0; i < Fila; i++)

{

for (int j = 0; j < Columna; j++)

{

M[i, j] = Convert.ToDouble(dgvMatriz1[j, i].Value);

}

}

//calcula suma y promedio

s = 0;

prom = 0;

for (int i = 0; i < Fila; i++)

for (int j = 0; j < Columna; j++)

s = s + M[i, j];

prom = s / (Columna \* Fila);

textBox1.Text = Convert.ToString(s);

textBox2.Text = Convert.ToString(prom);

}

#endregion METODOS

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

{

Close();

}

private void btnSalir\_Click\_1(object sender, EventArgs e)

{

this.Close();

}

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

{

ProcesarSumar();

}

private void btn\_crearGrilla\_Click(object sender, EventArgs e)

{

ActivarGrilla();

}

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

{

}

}

}