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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.Threading;
using System.Windows.Forms;

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

        private void dToolStripMenuItem_Click(object sender, EventArgs e)
        {
            double[,] x = new double[5, 5];
            Graphics gg = CreateGraphics();
            SolidBrush sb = new SolidBrush(Color.BlueViolet);
            Point O = new Point(150, 350);
            DrawAxes(0, 100, "Rows", "avg");
            Application.DoEvents();
            Thread.Sleep(200);
            Random rnd = new Random();
            for (int i = 0; i < x.GetLength(0); i++)
            {
                for (int j = 0; j < x.GetLength(1); j++)
                {
                    x[i, j] = rnd.Next(100);
                }
            }
            DataTable dt = new DataTable();
            dt.Columns.Add("Average");
            for (int j = 0; j < x.GetLength(1); j++)
            {
                dt.Columns.Add(j.ToString());
            }
            DataRow dr;
            double sum = 0;
            double[] avg = new double[5];
            for (int i = 0; i < x.GetLength(0); i++)
            {
                sum = 0;
                dr = dt.NewRow();
                for (int j = 0; j < x.GetLength(1); j++)
                {
                    dr[j + 1] = x[i, j];
                    sum = sum + x[i, j];
                }
                dt.Rows.Add(dr);
                avg[i] = sum / x.GetLength(1);
                dr[0] = avg[i];
            }
        }
    }
}

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        dataGridView1.DataSource = dt;
        Application.DoEvents();
        Thread.Sleep(200);
    }
    for (int i = 0; i < x.GetLength(0); i++)
    {
        gg.FillEllipse(sb, O.X + (float)i * 5, O.Y - (float)avg[i] * 5, 5, 5);
    }
}
private void DrawAxes(Point O, int intercept, String xint, String yint)
{
    Point p1 = new Point(O.X - intercept, O.Y);
    Point p2 = new Point(O.X + intercept, O.Y);
    Point p3 = new Point(O.X, O.Y - intercept);
    Point p4 = new Point(O.X, O.Y + intercept);
    Graphics gg = CreateGraphics();
    Pen pp = new Pen(Color.CornflowerBlue);
    SolidBrush sb = new SolidBrush(Color.Black);
    gg.DrawLine(pp, p1, p2);
    gg.DrawLine(pp, p3, p4);
    Font f = new Font("Arial", 12);
    gg.DrawString(xint, f, sb, O.X + 40, O.Y + 5);
    gg.DrawString(yint, f, sb, O.X - 40, O.Y - 50);
}
}
}

```

