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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.Windows.Forms;

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

            private void integersToolStripMenuItem_Click(object sender, EventArgs e)
            {
                int[,] x = new int[5, 5];
                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(); // any non-negative integer
                        //x[i, j] = rnd.Next(100); //(0-99) non negative integer
                        x[i, j] = rnd.Next(40,100); //(40-99) non negative integer
                    }
                }
                DataTable dt = new DataTable();
                for (int i = 0; i < x.GetLength(1); i++)
                {
                    dt.Columns.Add();
                }
                DataRow dr;
                for (int i = 0; i < x.GetLength(0); i++)
                {
                    dr = dt.NewRow();
                    for (int j = 0; j < x.GetLength(1); j++)
                    {
                        dr[j] = x[i, j];
                    }
                    dt.Rows.Add(dr);
                }
                dataGridView1.DataSource = dt;
            }

            private void doubleToolStripMenuItem_Click(object sender, EventArgs e)
            {
                double[,] x = new double[5, 5];
                Random rnd = new Random(2); //passing a seed value
                for (int i = 0; i < x.GetLength(0); i++)
                {
                    for (int j = 0; j < x.GetLength(1); j++)

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        {
            x[i, j] = rnd.NextDouble();
        }
    }

    DataTable dt = new DataTable();
    for (int i = 0; i < x.GetLength(1); i++)
    {
        dt.Columns.Add(i.ToString());
    }
    DataRow dr;
    for (int i = 0; i < x.GetLength(0); i++)
    {
        dr = dt.NewRow();
        for (int j = 0; j < x.GetLength(1); j++)
        {
            dr[j] = x[i, j];
        }
        dt.Rows.Add(dr);
    }
    dataGridView1.DataSource = dt;
}

//Display double values between 5 to 20
private void doubleRangeToolStripMenuItem_Click(object sender, EventArgs e)
{
    double[,] x = new double[5, 5];
    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.NextDouble() + rnd.Next(5, 20);
        }
    }
    DataTable dt = new DataTable();
    for (int i = 0; i < x.GetLength(1); i++)
    {
        dt.Columns.Add(i.ToString());
    }
    DataRow dr;
    for (int i = 0; i < x.GetLength(0); i++)
    {
        dr = dt.NewRow();
        for (int j = 0; j < x.GetLength(1); j++)
        {
            dr[j] = x[i, j];
        }
        dt.Rows.Add(dr);
    }
    dataGridView1.DataSource = dt;
}
}
}

```

Form1

Random

	0	1	2	3	4
▶	8.7175169176038	15.45076238012...	6.197053121494...	16.28725349916...	12.96762578886...
	18.78496373900...	12.00363664142...	9.914447821171...	14.97058627659...	19.47519239758...
	16.30866483007...	18.32607404670...	14.99829342635...	5.881767457296...	5.932088760161...
	9.767312089338...	18.43195901458...	11.636007030325	6.116300803197...	17.95662018747...
	11.25364248000...	12.78059518420...	11.96522160012...	10.02810747596...	17.691856286345
*					