

```

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 RadioActiveDecay
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();

            private void button1_Click(object sender, EventArgs e)
            {
                double[] N = new double[500];
                double[] t = new double[500];
                N[0] = 100;
                double T=0.5, dt=0.01;
                for (int i = 0; i < N.Length - 1; i++)
                {
                    N[i + 1] = N[i] - (N[i] / T) * dt;
                    t[i + 1] = t[i] + dt;
                }
                Graphics gg = CreateGraphics();
                SolidBrush sb = new SolidBrush(Color.DarkOrange);
                for (int i = 0; i < N.Length; i++)
                {
                    gg.FillEllipse(sb, 200+(float)t[i]*50, 250-(float)N[i]*5, 5, 5);
                }
            }
        }
    }
}

```

