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//Lab 3
//CIS 199-01
//Due 2/11/2024
//By R2409

//Program displays a form that calculates diameter,
//surface area, and volume based on the radius the user inputs

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 Lab3
{
    public partial class Lab3 : Form
    {
        public Lab3()
        {
            InitializeComponent();

            //calcBtn_Click handles the clicks from the button and
            //calculates the diameter, surface area, and volume
            private void calcBtn_Click(object sender, EventArgs e)
            {
                double diameter, surfaceArea, volume; //Values as floating-point

                double radiusOfSphere; //Value as s floating-point number

                radiusOfSphere = double.Parse(radiusTxt.Text); //Parse value insert

                diameter = 2.0 * radiusOfSphere; //The diameter of the sphere using 2.0 multiplying the
                                                    radius
                surfaceArea = 4.0 * Math.PI * Math.Pow(radiusOfSphere, 2); //The surface area of the sphere
                                                    //using 4.0 multiplied by PI
                                                    //squared
                volume = 4.0 / 3.0 * Math.PI * Math.Pow(radiusOfSphere, 3); //The volume of the sphere
                                                    //using 4.0 divided by 3.0
                                                    //multiplied by PI cubed

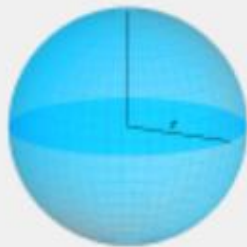
                outputDiaLbl.Text = $"{diameter:F}"; //Displays output or diameter with a precision
                                                    //specifier
                outputSurfLbl.Text = $"{surfaceArea:F}"; //Displays output or surface area with a precision
                                                    //specifier
                outputVolLbl.Text = $"{volume:F}"; //Displays output or volume with a precision specifier
            }

            //Loads and displays the form
            private void Lab3_Load(object sender, EventArgs e)
            {
            }
        }
    }
}

```



Lab 3



Radius of sphere:

Calculate

Diameter

Surface Area

Volume

