Text

Description automatically generated

using System;

Console.WriteLine

("Welcome to figure calculator, choose one of the menu options by typing the options 1, 2, or 3 \n" +

"1. Area of a circle \n" +

"2. Area of a rectangle \n" +

"3. Surface area of a cylinder \n");

int Shape\_Option;

double Solution;

Shape\_Option = int.Parse(Console.ReadLine());

Console.WriteLine("");

if (Shape\_Option == 1)

{

double Circle\_Radius;

Console.WriteLine("Type the radius of your circle");

Circle\_Radius = double.Parse(Console.ReadLine());

double Radius\_Power = Math.Pow(Circle\_Radius, 2);

Solution = Radius\_Power \* Math.PI;

Console.WriteLine("\nThe area of a circle with radius " + Circle\_Radius + " is approximately: " + Math.Round(Solution, 3));

}

else if (Shape\_Option == 2)

{

double Length, Witdh;

Console.Write("Type the lenght of your rectangle: ");

Length = double.Parse(Console.ReadLine());

Console.Write("\nType the witdh of your rectangle: ");

Witdh = double.Parse(Console.ReadLine());

Solution = Length \* Witdh;

Console.Write("The area of a rectangle with those dimensions is: " + Math.Round(Solution, 3));

}

else if (Shape\_Option == 3)

{

double Height, Cylinder\_Radius;

Console.Write("Please input the height of your cylinder: ");

Height = double.Parse(Console.ReadLine());

Console.Write("Please input the area of your cylinder: ");

Cylinder\_Radius = double.Parse(Console.ReadLine());

double Radius\_Power = Math.Pow(Cylinder\_Radius, 2);

Solution = ( 2 \* Math.PI \* Cylinder\_Radius \* Height ) + ( 2 \* Math.PI \* Radius\_Power );

Console.Write("The area of a cylinder with those dimensions is approximately: " + Math.Round(Solution, 3));

}

else

{

Console.WriteLine("Thats not one of the menu options");

}

Console.WriteLine("");

Graphical user interface, text

Description automatically generated

int grade;

Console.WriteLine("Welcome to the numerical grade to alphabetical grade convertor\n");

bool validation = int.TryParse(Console.ReadLine(), out grade);

if (!validation)

{

Console.WriteLine("\nOnly numerical values are valid");

}

else if (validation)

{

if (grade >= 0 && grade <= 100)

{

Console.WriteLine("");

switch (grade)

{

case >=90:

Console.WriteLine("A");

break;

case >= 80:

Console.WriteLine("B");

break;

case >= 70:

Console.WriteLine("C");

break;

case >= 60:

Console.WriteLine("D");

break;

case < 60:

Console.WriteLine("F");

break;

default:

break;

}

}

else

{

Console.WriteLine("Valid grades go from 0-100");

}

}

Graphical user interface, application

Description automatically generated

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 HW\_3\_1.\_3

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

private void label1\_Click(object sender, EventArgs e)

{

}

private void label2\_Click(object sender, EventArgs e)

{

}

private void textBox1\_TextChanged(object sender, EventArgs e)

{

}

private void Profits\_Btn\_Click(object sender, EventArgs e)

{

double sales, profit\_ratio, profit;

string str\_num1 = Input\_Box.Text;

bool valid1 = Double.TryParse(str\_num1, out sales);

if (valid1)

{

sales = Double.Parse(Input\_Box.Text);

if (sales <= 1000)

{

profit\_ratio = 3;

profit = sales \* profit\_ratio / 100;

Sales\_Box.Text = Convert.ToString(sales);

Profit\_Ratio\_Box.Text = Convert.ToString(profit\_ratio + "%");

Profit\_Box.Text = Convert.ToString(Math.Round(profit, 2));

}

else if (sales > 1000 && sales <= 5000)

{

profit\_ratio = 3.5;

profit = sales \* profit\_ratio / 100;

Sales\_Box.Text = Convert.ToString(sales);

Profit\_Ratio\_Box.Text = Convert.ToString(profit\_ratio + "%");

Profit\_Box.Text = Convert.ToString(Math.Round(profit, 2));

}

else if (sales > 5000 && sales <= 10000)

{

profit\_ratio = 4;

profit = sales \* profit\_ratio / 100;

Sales\_Box.Text = Convert.ToString(sales);

Profit\_Ratio\_Box.Text = Convert.ToString(profit\_ratio + "%");

Profit\_Box.Text = Convert.ToString(Math.Round(profit,2));

}

else

{

profit\_ratio = 4.5;

profit = sales \* profit\_ratio / 100;

Sales\_Box.Text = Convert.ToString(sales);

Profit\_Ratio\_Box.Text = Convert.ToString(profit\_ratio + "%");

Profit\_Box.Text = Convert.ToString(Math.Round(profit,2));

}

}

else

{

MessageBox.Show("Only positive input");

}

}

}

}