Assignment 3

Source code

using System;

using System.Collections.Generic;

using System.Linq;

using System.Net.Http;

using System.Text;

using System.Threading.Tasks;

using static System.Console;

namespace lab3

{

internal class Program

{

static void Main(string[] args)

{

Write("Enter # of exercise(3,5,7): ");

int a = Convert.ToInt32(ReadLine());

WriteLine("");

switch (a)

{

case 3:

Exercise3();

break;

case 5:

Exercise5();

break;

case 7:

Exercise7();

break;

default:

WriteLine("Wrong input");

break;

}

ReadKey();

}

public static void Exercise3()

{

double height, width;

Write("Input height of a rectangle: ");

height = Convert.ToDouble(ReadLine());

Write("Input width of a rectangle: ");

width = Convert.ToDouble(ReadLine());

getArea(height, width);

getPerimeter(height, width);

}

public static void getArea(double h, double w) {

display(h\*w);

}

public static void getPerimeter(double h, double w) {

display(-1, (2 \* (h + w)));

}

public static void display(double area = -1, double perimeter = -1) {

if (area != -1)

WriteLine("Area of a rectangle: " + area);

if (perimeter != -1)

WriteLine("Perimeter of a rectangle: " + perimeter);

}

public static void Exercise5()

{

double fahrenheit, celsius;

Write("Input temperature in Fahrenheit: ");

fahrenheit = Convert.ToDouble(ReadLine());

celsius = (double)5 / 9 \* (fahrenheit - 32);

WriteLine("Temperature in Fahrenheit: " + fahrenheit);

WriteLine("Temperature in Celsius: {0:N1}", celsius);

}

public static void Exercise7()

{

double bill;

Console.Write("Enter the bill amount: ");

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

tip(bill);

}

public static void tip(double bill)

{

double tax, total, tip\_15, tip\_20;

tax = bill \* 0.09;

total = bill + tax;

tip\_15 = total \* 0.15;

tip\_20 = total \* 0.20;

output(total, total + tip\_15, total + tip\_20);

}

public static void output(double total,double tip15, double tip20)

{

WriteLine("Your total prior a tip: {0:N2}", total);

WriteLine("15% tips: {0:N2}", (tip15 - total));

WriteLine("20% tips: {0:N2}", (tip20 - total));

WriteLine("Your total amount after 15% tips: {0:N2}", tip15);

WriteLine("Your total amount after 20% tips: {0:N2}", tip20);

}

}

}

Outputs

3)

Text

Description automatically generated

5)

Text

Description automatically generated

Text

Description automatically generated

7)

Text

Description automatically generated