1. Write a Console Application to calculate the sum of two user input numbers.

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter the first number:");

string input1 = Console.ReadLine();

Console.WriteLine("Enter the second number:");

string input2 = Console.ReadLine();

if (double.TryParse(input1, out double num1) && double.TryParse(input2, out double num2))

{

double sum = num1 + num2;

Console.WriteLine("The sum of the two numbers is: " + sum);

}

else

{

Console.WriteLine("Invalid input. Please enter valid numbers.");

}

Console.ReadLine(); // To prevent the console from closing immediately

}

}

}

**TUTORIAL 02**

1. Write a Console Application to calculate sum, subtraction, multiplication and division of two user input numbers.

using System;

namespace BasicCalculator

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter the first number:");

string input1 = Console.ReadLine();

Console.WriteLine("Enter the second number:");

string input2 = Console.ReadLine();

if (double.TryParse(input1, out double num1) && double.TryParse(input2, out double num2))

{

double sum = num1 + num2;

double subtraction = num1 - num2;

double multiplication = num1 \* num2;

if (num2 != 0) // To handle division by zero

{

double division = num1 / num2;

Console.WriteLine("Sum: " + sum);

Console.WriteLine("Subtraction: " + subtraction);

Console.WriteLine("Multiplication: " + multiplication);

Console.WriteLine("Division: " + division);

}

else

{

Console.WriteLine("Cannot divide by zero.");

}

}

else

{

Console.WriteLine("Invalid input. Please enter valid numbers.");

}

Console.ReadLine(); // To prevent the console from closing immediately

}

}

}

3. Write a Console Application to calculate area and circumference of a circle for given radius.

using System;

namespace CircleCalculator

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter the radius of the circle:");

string radiusInput = Console.ReadLine();

if (double.TryParse(radiusInput, out double radius))

{

double area = CalculateCircleArea(radius);

double circumference = CalculateCircleCircumference(radius);

Console.WriteLine("Area of the circle: " + area);

Console.WriteLine("Circumference of the circle: " + circumference);

}

else

{

Console.WriteLine("Invalid input. Please enter a valid number for the radius.");

}

Console.ReadLine(); // To prevent the console from closing immediately

}

static double CalculateCircleArea(double radius)

{

return Math.PI \* Math.Pow(radius, 2);

}

static double CalculateCircleCircumference(double radius)

{

return 2 \* Math.PI \* radius;

}

}

}

4. Write a Console Application to check if a given number is even or odd.

namespace EvenOddChecker{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter a number:");

string input = Console.ReadLine();

if (int.TryParse(input, out int number))

{

if (IsEven(number))

{

Console.WriteLine(number + " is an even number.");

}

else

{

Console.WriteLine(number + " is an odd number.");

}

}

else

{

Console.WriteLine("Invalid input. Please enter a valid integer.");

}

Console.ReadLine(); // To prevent the console from closing immediately

}

static bool IsEven(int number)

{

return number % 2 == 0;

}

}

}

5. Upgrade the above console application which enables 10 user inputs and displays even or odd for each user input.

using System;

namespace EvenOddChecker

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter 10 numbers:");

for (int i = 1; i <= 10; i++)

{

Console.Write($"Number {i}: ");

string input = Console.ReadLine();

if (int.TryParse(input, out int number))

{

if (IsEven(number))

{

Console.WriteLine(number + " is an even number.");

}

else

{

Console.WriteLine(number + " is an odd number.");

}

}

else

{

Console.WriteLine("Invalid input. Please enter a valid integer.");

i--; // To re-enter the same number since it was invalid

}

}

Console.ReadLine(); // To prevent the console from closing immediately

}

static bool IsEven(int number)

{

return number % 2 == 0;

}

}

}