**26994**

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**Lab 02**

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

using System;

class Program

{

static void Main(string[] args)

{

bool shouldExit = false;

while (!shouldExit)

{

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

string input1 = Console.ReadLine();

if (!int.TryParse(input1, out int num1))

{

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

continue;

}

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

string input2 = Console.ReadLine();

if (!int.TryParse(input2, out int num2))

{

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

continue;

}

int sum = num1 + num2;

Console.WriteLine("The sum of {0} and {1} is {2}.", num1, num2, sum);

Console.WriteLine("Do you want to perform another calculation? (Y/N)");

string answer = Console.ReadLine();

shouldExit = (answer.Trim().ToUpper() != "Y");

}

Console.WriteLine("Press any key to exit.");

Console.ReadKey();

}

}

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Description automatically generated

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

using System;

class Program

{

static void Main(string[] args)

{

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

string input1 = Console.ReadLine();

if (!double.TryParse(input1, out double num1))

{

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

Console.ReadKey();

return;

}

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

string input2 = Console.ReadLine();

if (!double.TryParse(input2, out double num2))

{

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

Console.ReadKey();

return;

}

double sum = num1 + num2;

double difference = num1 - num2;

double product = num1 \* num2;

if (num2 == 0)

{

Console.WriteLine("Cannot divide by zero. Please enter a non-zero second number for the quotient.");

}

else

{

double quotient = num1 / num2;

Console.WriteLine("Sum:\t\t{0}", sum);

Console.WriteLine("Difference:\t{0}", difference);

Console.WriteLine("Product:\t{0}", product);

Console.WriteLine("Quotient:\t{0}", quotient);

}

Console.WriteLine("Press any key to exit.");

Console.ReadKey();

}

}

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

using System;

class Program

{

static void Main(string[] args)

{

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

string input = Console.ReadLine();

double radius = double.Parse(input);

double pi = Math.PI;

double area = pi \* radius \* radius;

double circumference = 2 \* pi \* radius;

Console.WriteLine("Area:\t\t{0}", area);

Console.WriteLine("Circumference:\t{0}", circumference);

Console.WriteLine("Press any key to exit.");

Console.ReadKey();

}

}

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

using System;

class Program

{

static void Main(string[] args)

{

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

string input = Console.ReadLine();

int num = int.Parse(input);

if (num % 2 == 0)

{

Console.WriteLine("{0} is even.", num);

}

else

{

Console.WriteLine("{0} is odd.", num);

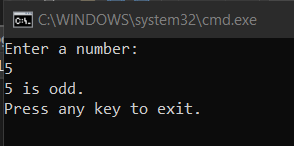
}

Console.WriteLine("Press any key to exit.");

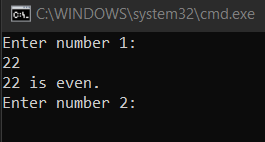
Console.ReadKey();

}

}



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



using System;

class Program

{

static void Main(string[] args)

{

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

{

Console.WriteLine("Enter number {0}:", i);

string input = Console.ReadLine();

int num = int.Parse(input);

if (num % 2 == 0)

{

Console.WriteLine("{0} is even.", num);

}

else

{

Console.WriteLine("{0} is odd.", num);

}

}

Console.WriteLine("Press any key to exit.");

Console.ReadKey();

}

}