**LAB 01**

01. using System;

namespace NameAndBatchConsoleApp

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter your name:");

string name = Console.ReadLine();

Console.WriteLine("Enter your batch:");

string batch = Console.ReadLine();

Console.WriteLine("\nYou entered:");

Console.WriteLine("Name: " + name);

Console.WriteLine("Batch: " + batch);

Console.ReadKey();

}

}

}

02.using System;

namespace CircleAreaConsoleApp

{

class Program

{

static void Main(string[] args)

{

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

string radiusInput = Console.ReadLine();

// Parse the input string to a double

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

{

// Check if the radius is non-negative

if (radius >= 0)

{

// Calculate the area of the circle using the formula: Area = π \* r^2

double area = Math.PI \* Math.Pow(radius, 2);

Console.WriteLine("The area of the circle with radius " + radius + " is: " + area);

}

else

{

Console.WriteLine("Invalid input. The radius must be a non-negative

number.");

}

}

else

{

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

}

Console.ReadKey();

}

}

}

03.using System;

namespace SummationConsoleApp

{

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();

// Parse the input strings to doubles

if (double.TryParse(input1, out double number1) && double.TryParse(input2, out double number2))

{

double sum = number1 + number2;

Console.WriteLine("The sum of " + number1 + " and " + number2 + " is: " +

sum);

}

else

{

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

}

Console.ReadKey();

}

}

}

04.using System;

namespace SalaryAfterTaxConsoleApp

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter the salary of the employee:");

string salaryInput = Console.ReadLine();

Console.WriteLine("Enter the tax rate (in decimal form, e.g., 0.2 for 20% tax rate):");

string taxRateInput = Console.ReadLine();

// Parse the input strings to doubles

if (double.TryParse(salaryInput, out double salary) && double.TryParse(taxRateInput, out double taxRate))

{

// Check if the salary and tax rate are non-negative

if (salary >= 0 && taxRate >= 0 && taxRate <= 1)

{

// Calculate the salary after tax

double salaryAfterTax = salary \* (1 - taxRate);

Console.WriteLine("Salary after tax: " + salaryAfterTax);

}

else

{

Console.WriteLine("Invalid input. Both the salary and tax rate must be non-negative numbers.");

}

}

else

{

Console.WriteLine("Invalid input. Please enter valid numeric values for salary and tax rate.");

}

Console.ReadKey();

}

}

}