**LAB 01**

01. using System;

```csharp
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);
```

```csharp
            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();
```

```csharp
        // 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
```

```csharp
{
    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: " +
```

```csharp
            sum);
            }
            else
            {
                Console.WriteLine("Invalid input. Please enter valid numeric values.");
            }

            Console.ReadKey();
        }
    }
}
```

04.using System;

```csharp
namespace SalaryAfterTaxConsoleApp
{
    class Program
    {
        static void Main(string[] args)
        {
```

```csharp
        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)
```

```csharp
{
    // 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();
        }
    }
}
```