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
```

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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();
        }
    }
}
```