Lab-3

1.

Code :-

```
using System;

namespace Program
{
    class MainClass
    {
        public static void Main(string[] args)
        {


            Console.WriteLine("Please Enter Numerator : ");
            int num = int.Parse(Console.ReadLine() ?? throw new Exception());

            Console.Write("Please Enter Denominator : ");
            int deno = int.Parse(Console.ReadLine() ?? throw new Exception());

            int q = num / deno;
            int r = num % deno;
            double f = (float)num / (float)deno;

            //For Rounding double digits
            f = Math.Round(f, 2);


            Console.WriteLine($"Intger division result : {q} with remainder {r}");
            Console.WriteLine($"Floating point division result : {f}");
            Console.WriteLine($"The result of mixed fraction : {q} {r}/{deno}");



        }
    }

}
```

Output :-

```
kali@kaliman:~/Documents/LAB WORK  SEM VI/.NET LAB/Lab-3/Q1$ dotnet run
Please Enter Numerator :
34
Please Enter Denominator : 37
Intger division result : 0 with remainder 34
Floating point division result : 0.92
The result of mixed fraction : 0 34/37
kali@kaliman:~/Documents/LAB WORK  SEM VI/.NET LAB/Lab-3/Q1$
```

2.

Code :-

```
using System;

namespace Program
{
    class StringManipulation
    {

        public static void Main(String[] args)
        {

            //length of string
            Console.WriteLine("1. Enter any String : - ");
            string str = Console.ReadLine() ?? throw new Exception();

            int len = str.Length;
            Console.WriteLine($"The length of string {str} is {len} .");

            //find type of sentence
            Console.WriteLine("2. Enter Sentence :- ");
            string sentence = Console.ReadLine() ?? throw new Exception();
            StringManipulation.checkSentence(sentence);

            //first and last name
            Console.WriteLine("3. Enter Your Full Name : ");
            string name = Console.ReadLine() ?? throw new Exception();

            int space = name.IndexOf(" ");

            string fname = name.Substring(0, space);
            string lname = name.Substring(space);

            Console.WriteLine($"{lname} , {fname}");
        }

        public static void checkSentence(string s)
        {

            if (s.EndsWith("."))
                Console.WriteLine("Above Sentence Is Declarative ");

            else if (s.EndsWith("?"))
                Console.WriteLine("Above Sentence Is Interogatory ");

            else if (s.EndsWith("!"))
                Console.WriteLine("Above Sentence Is Exclaimatory ");

            else
                Console.WriteLine("Above Sentence Is Something else ");
```

```
        }

    }

}
```

Output:-

```
kali@kaliman:~/Documents/LAB WORK  SEM VI/.NET LAB/Lab-3/Q2$ dotnet run
1. Enter any String : -
Smit Shah
The length of string Smit Shah is 9 .
2. Enter Sentence :-
My Name Is Smit Shah.
Above Sentence Is Declarative
3. Enter Your Full Name :
Smit Shah
 Shah , Smit
kali@kaliman:~/Documents/LAB WORK  SEM VI/.NET LAB/Lab-3/Q2$
```

3.

Code:-

```
using System;

namespace Enumeration
{
    public enum Days
    {
        None = 0b_0000_0000, // 0

        Monday = 0b_0000_0001, // 1

        Tuesday = 0b_0000_0010, // 2

        Wednesday = 0b_0000_0100, // 4

        Thursday = 0b_0000_1000, // 8

        Friday = 0b_0001_0000, // 16

        Saturday = 0b_0010_0000, // 32

        Sunday = 0b_0100_0000, // 64

        Weekend = Saturday | Sunday
    }
    public class Enum
    {
```

```
        public static void Main(String[] arg)
        {


            Days meetingDays = Days.Monday | Days.Wednesday | Days.Friday;

            Console.WriteLine(meetingDays);

            // Output:

            // Monday, Wednesday, Friday

            Days workingFromHomeDays = Days.Thursday | Days.Friday;

            Console.WriteLine($"Join a meeting by phone on {meetingDays &
workingFromHomeDays}");

            // Output:

            // Join a meeting by phone on Friday

            bool isMeetingOnTuesday = (meetingDays & Days.Tuesday) == Days.Tuesday;

            Console.WriteLine($"Is there a meeting on Tuesday: {isMeetingOnTuesday}");

            // Output:

            // Is there a meeting on Tuesday: False

            var a = (Days)37;

            Console.WriteLine(a);


        }
    }
}
```

Output :-

```
kali@kaliman:~/Documents/LAB WORK  SEM VI/.NET LAB/Lab-3/Q3$ dotnet run
21
Join a meeting by phone on Friday
Is there a meeting on Tuesday: False
37
kali@kaliman:~/Documents/LAB WORK  SEM VI/.NET LAB/Lab-3/Q3$
```