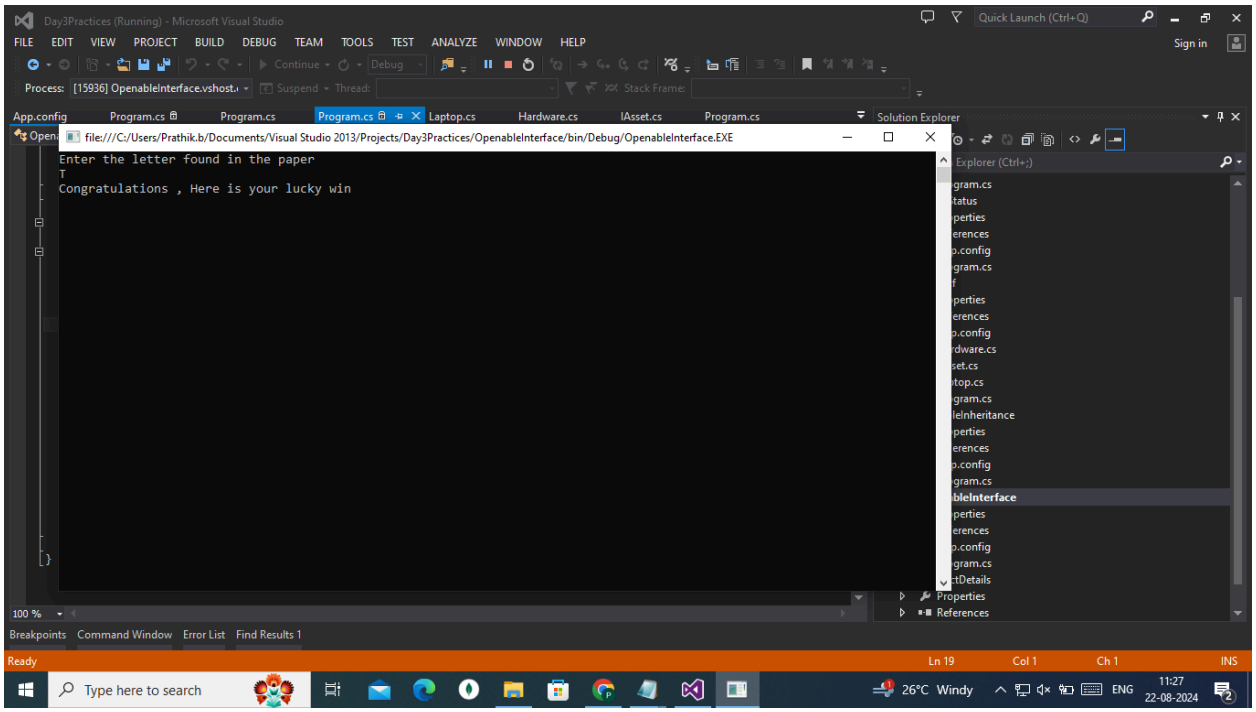
Date : 21-08-2024

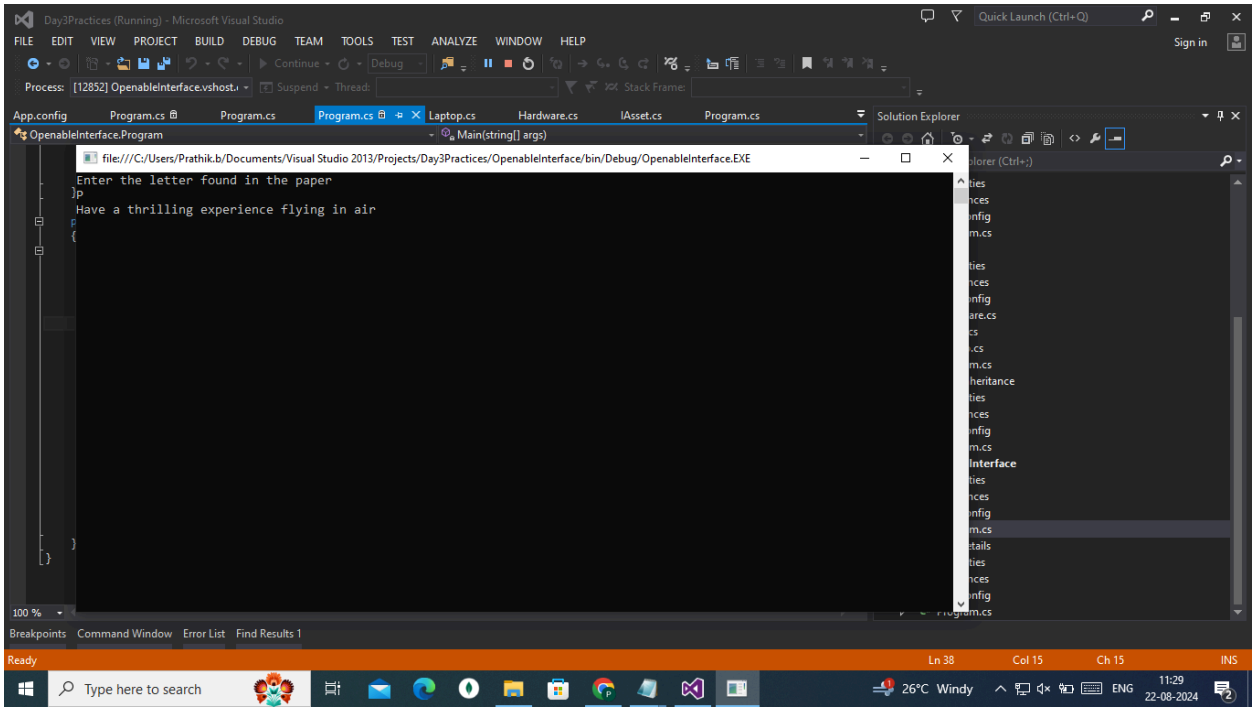
1.
Code :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace OpenableInterface
{

    interface IOpenable
    {
        string OpenSesame();
    }

    class TreasureBox : IOpenable
    {
        public string OpenSesame()
        {
            return "Congratulations , Here is your lucky win";
        }
    }

    class Parachute : IOpenable
    {
        public string OpenSesame()
        {
            return "Have a thrilling experience flying in air";
        }
    }

    public class Program
    {
```

```
        static void Main(string[] args)
        {
            Console.WriteLine("Enter the letter found in the paper");
            char c = Convert.ToChar(Console.ReadLine());
            if (c == 'T')
            {
                TreasureBox tb = new TreasureBox();
                Console.WriteLine(tb.OpenSesame());
            }
            else if (c == 'P')
            {
                Parachute p = new Parachute();
                Console.WriteLine(p.OpenSesame());
            }
            else
            {
                Console.WriteLine("Better Luck Next Time");
            }
            Console.ReadKey();
        }
    }
}
```

Output :


Day3Practices (Running) - Microsoft Visual Studio
file:///C:/Users/Prathik.b/Documents/Visual Studio 2013/Projects/Day3Practices/OpenableInterface/bin/Debug/OpenableInterface.EXE
Enter the letter found in the paper
T
Congratulations , Here is your lucky win


Day3Practices (Running) - Microsoft Visual Studio
file:///C:/Users/Prathik.b/Documents/Visual Studio 2013/Projects/Day3Practices/OpenableInterface/bin/Debug/OpenableInterface.EXE
Enter the letter found in the paper
P
Have a thrilling experience flying in air

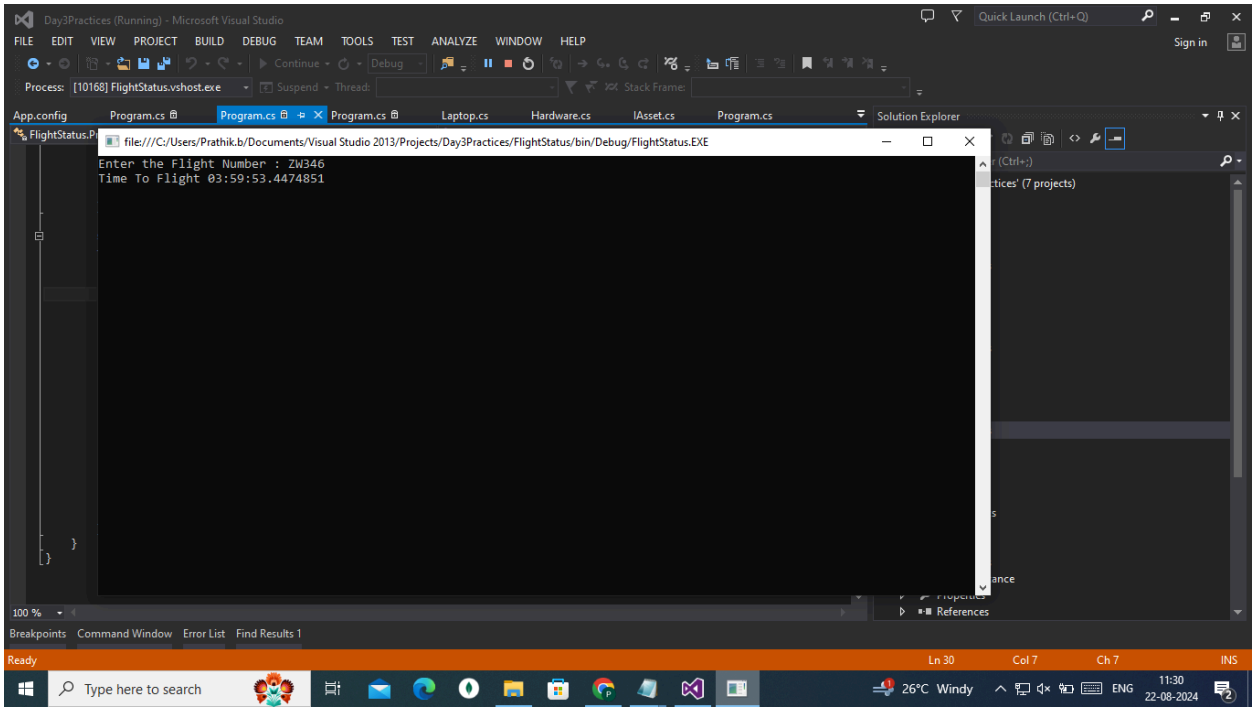
2.

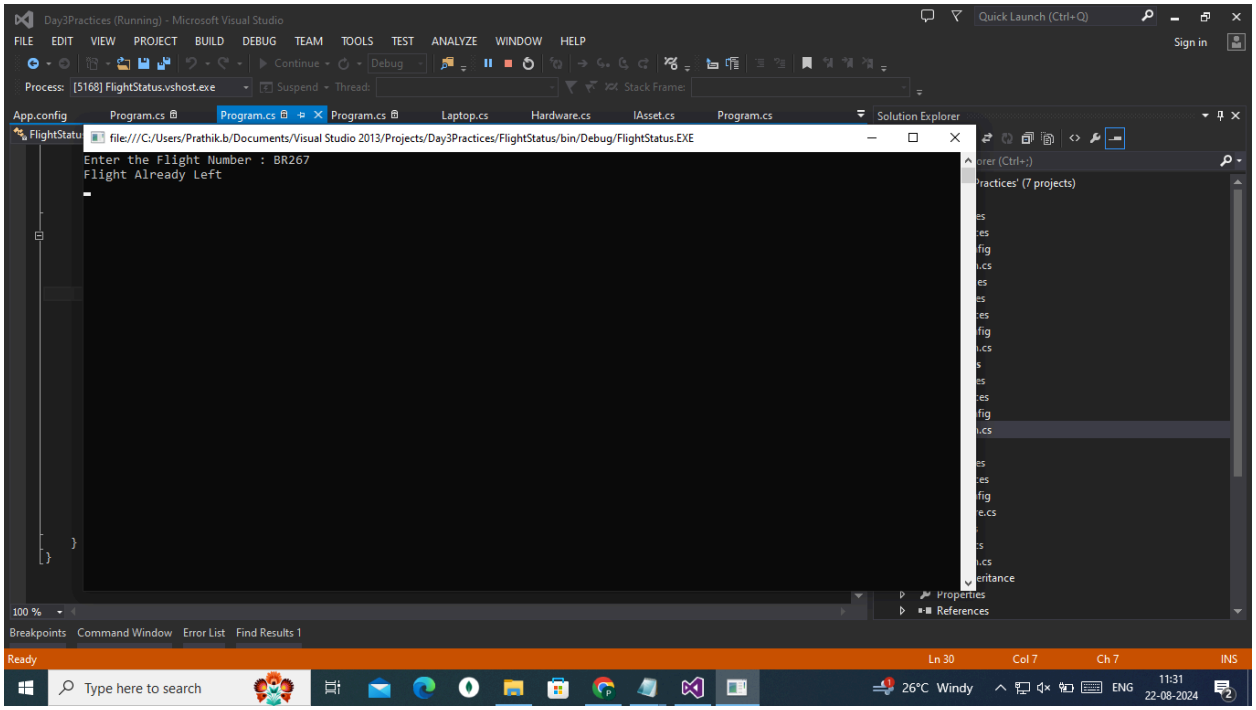
Code :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace FlightStatus
{
   class Program
   {

      static Dictionary<string, DateTime> flights = new Dictionary<string,DateTime>();


      static string FlightStatus(string Fno)
      {
         DateTime time = flights[Fno];
         if (DateTime.Now < time)
         {
            TimeSpan res = time.Subtract(DateTime.Now);
            return "Time To Flight " + res;
         }
         return "Flight Already Left";
      }

      static void Main(string[] args)
      {

         flights.Add("ZW346", Convert.ToDateTime("15:30:30"));
         flights.Add("BR267", Convert.ToDateTime("07:30:30"));
         flights.Add("IN147", Convert.ToDateTime("20:30:30"));

         Console.Write("Enter the Flight Number : ");
         string Fno = Console.ReadLine();
```

```
            if (flights.ContainsKey(Fno))
            {
                Console.WriteLine(FlightStatus(Fno));
            }
            else
            {
                Console.WriteLine("Invalid Flight Number");
            }
            Console.ReadKey();

        }
    }
}
```

Output :





3.

Code :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ProductDetails
{

    class Product
    {
        public string _productName { get; set; }
        public string _serialNumber { get; set; }
        public DateTime _purchaseDate { get; set; }
        public double _cost { get; set; }

        public Product(string PName, string SNumber, DateTime PDate,double cost)
        {
```

```
        _productName = PName;
        _serialNumber = SNumber;
        _purchaseDate = PDate;
        _cost = cost;
        }

        public override string ToString()
        {
            return String.Format("{0,-15}{1,-15}{2,-15}{3,-15}",
                            _productName,
                            _serialNumber,
                            _purchaseDate.ToString("dd-MM-yyyy"),
                            _cost);
        }
    }

    class Program
    {
        static void Main(string[] args)
        {
            List<Product> list = new List<Product>();

            list.Add(new
Product("Bottle","SN7543456",Convert.ToDateTime("22-08-2024"),200.00));
            list.Add(new Product("Lunch Box", "SN9874821",
Convert.ToDateTime("22-08-2024"), 150.00));
            list.Add(new Product("Towel", "SN7253178", Convert.ToDateTime("22-08-2024"),
75.00));

            Console.WriteLine(String.Format("{0,-15}{1,-15}{2,-15}{3,-15}", "Product Name",
            "Serial Number", "Purchase Date", "Purchase Cost"));

            foreach (var li in list)
            {
                Console.WriteLine(li.ToString());
            }
```

```
            Console.ReadKey();

        }
    }
}
```

Output :