Day 3

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Date : 22/08/2024

Program 1:
IOpenable.cs

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

namespace GenericInterface
{
    public interface IOpenable
    {
      string OpenSesame();
    }

    public class TressureBox : IOpenable
    {
       public string OpenSesame()
        {
            return "Congratulations,Here is your lucky win";
        }
    }
    public class Parachute : IOpenable
    {
        public string OpenSesame()
        {
            return "Have a thrilling experience flying in the air";
        }
```

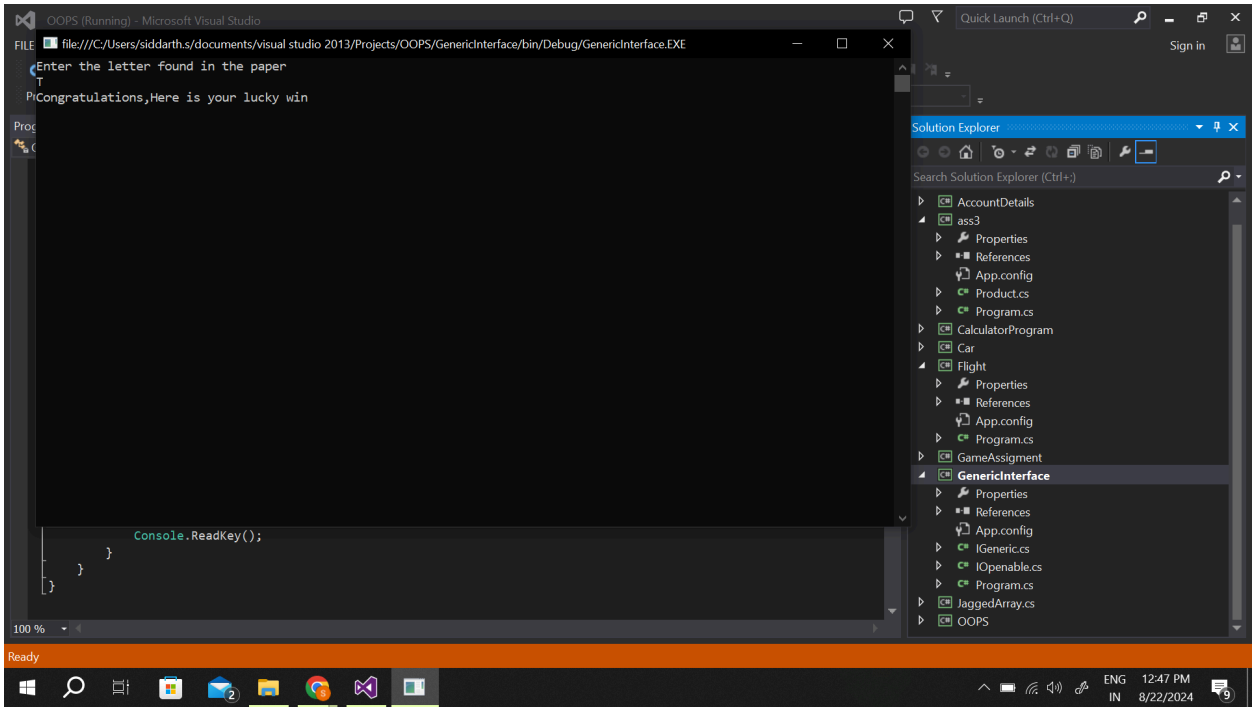
```
    }

}
```

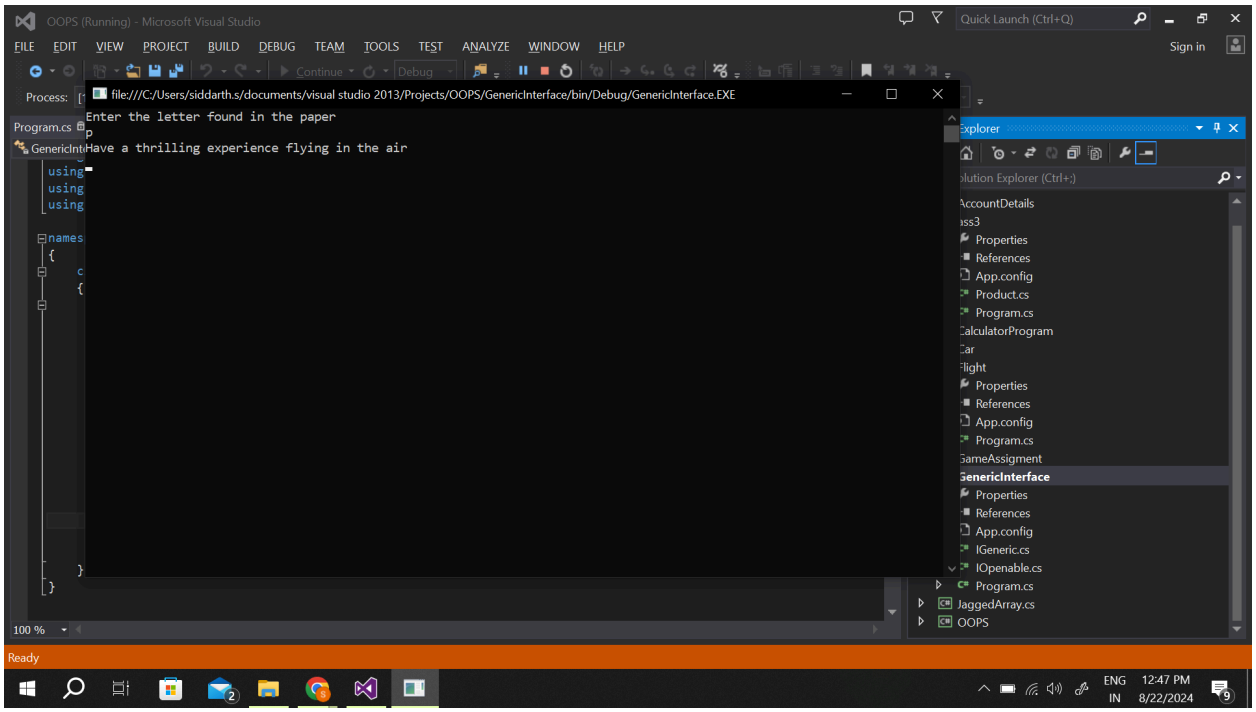
Program.cs:

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

namespace GenericInterface
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter the letter found in the paper");
            string letter = Console.ReadLine();
            if (letter.ToUpper().Equals("T"))
            {
                TressureBox tb = new TressureBox();
                Console.WriteLine(tb.OpenSesame());
            }
            else if (letter.ToUpper().Equals("P"))
            {
                Parachute ph = new Parachute();
                Console.WriteLine(ph.OpenSesame());
            }
            Console.ReadKey();
        }
    }
```

}

Output:


OOPS (Running) - Microsoft Visual Studio
file:///C:/Users/siddarth.s/documents/visual studio 2013/Projects/OOPS/GenericInterface/bin/Debug/GenericInterface.EXE
Enter the letter found in the paper
T
Congratulations,Here is your lucky win
Console.ReadKey();
Solution Explorer
Search Solution Explorer (Ctrl+;)
AccountDetails
ass3
Properties
References
App.config
Product.cs
Program.cs
CalculatorProgram
Car
Flight
Properties
References
App.config
Program.cs
GameAssigment
GenericInterface
Properties
References
App.config
IGeneric.cs
IOpenable.cs
Program.cs
JaggedArray.cs
OOPS
Ready

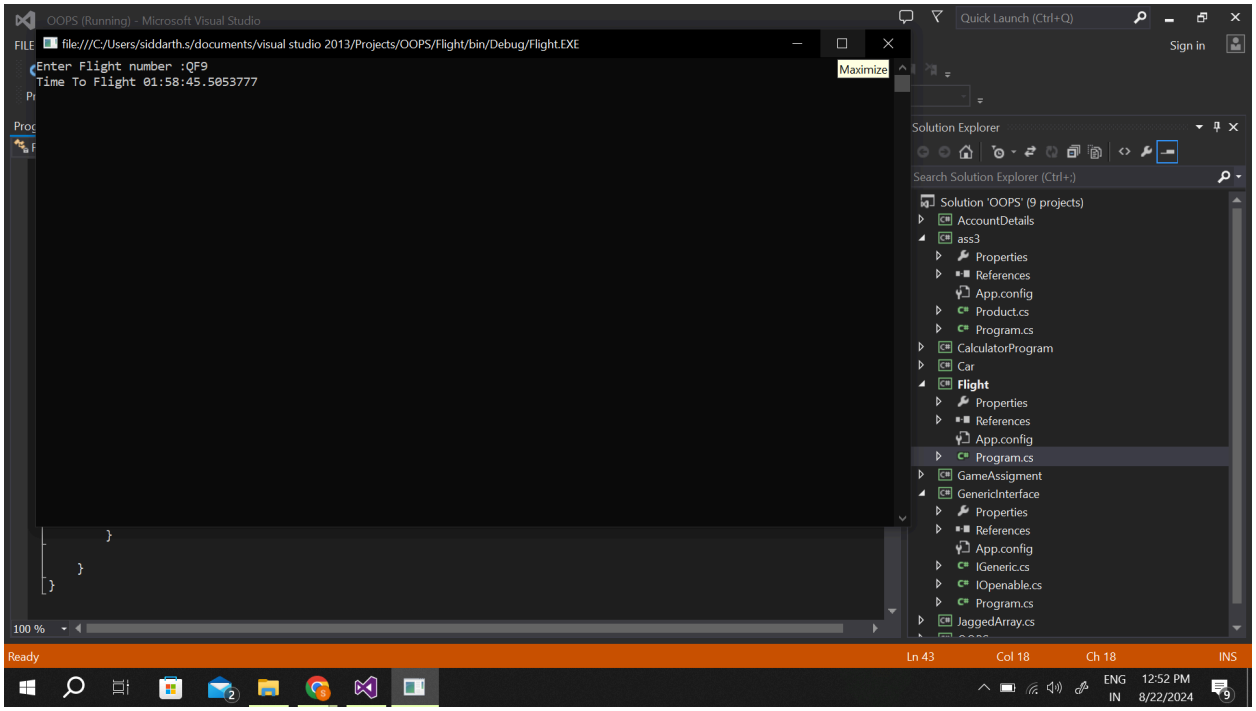

OOPS (Running) - Microsoft Visual Studio
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST ANALYZE WINDOW HELP
file:///C:/Users/siddarth.s/documents/visual studio 2013/Projects/OOPS/GenericInterface/bin/Debug/GenericInterface.EXE
Enter the letter found in the paper
P
Have a thrilling experience flying in the air
Solution Explorer
Ready

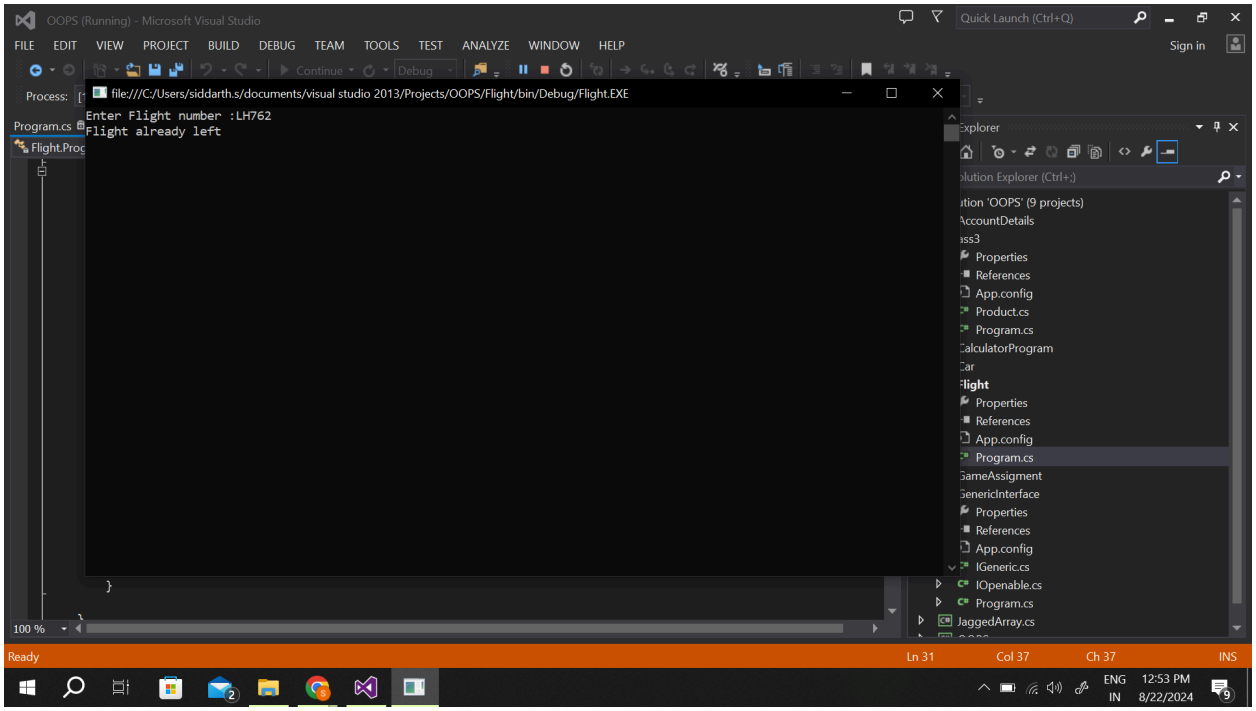
Program 2:

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

namespace Flight
{
   class Program
   {

    Dictionary<string, DateTime> flightDetails = new Dictionary<string,
DateTime>();

       static void Main(string[] args)
       {

           Console.Write("Enter Flight number :");
           string fnum = Console.ReadLine();
           Console.WriteLine(flightSatus(fnum));
           Console.ReadKey();

       }
       public static string flightSatus(string flightNo)
       {
           Dictionary<string, DateTime> flightDetails = new
Dictionary<string, DateTime>();
           flightDetails.Add("ZW346",Convert.ToDateTime("16:30:17"));
           flightDetails.Add("AI101", Convert.ToDateTime("08:15:00"));
```

```
            flightDetails.Add("EK530", Convert.ToDateTime("12:45:30"));
            flightDetails.Add("BA202", Convert.ToDateTime("17:20:15"));
            flightDetails.Add("SQ318", Convert.ToDateTime("22:55:45"));
            flightDetails.Add("LH762", Convert.ToDateTime("06:10:05"));
            flightDetails.Add("AF226", Convert.ToDateTime("19:30:25"));
            flightDetails.Add("QF9", Convert.ToDateTime("14:50:50"));
            flightDetails.Add("QR571", Convert.ToDateTime("23:40:10"));

            if (flightDetails.ContainsKey(flightNo))
            {
                DateTime check = flightDetails[flightNo];

                if (check > DateTime.Now)
                {
                    return ("Time To Flight " + (check - DateTime.Now));
                }
                else return ("Flight already left");
            }
            else return "Invalid Flight number";

        }

    }
}
```

Output:


OOPS (Running) - Microsoft Visual Studio
file:///C:/Users/siddarth.s/documents/visual studio 2013/Projects/OOPS/Flight/bin/Debug/Flight.EXE
Enter Flight number :QF9
Time To Flight 01:58:45.5053777
Maximize
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'OOPS' (9 projects)
AccountDetails
ass3
Properties
References
App.config
Product.cs
Program.cs
CalculatorProgram
Car
Flight
Properties
References
App.config
Program.cs
GameAssigment
GenericInterface
Properties
References
App.config
IGeneric.cs
IOpenable.cs
Program.cs
JaggedArray.cs
Ready
Ln 43
Col 18
Ch 18
INS
ENG
IN
12:52 PM
8/22/2024


OOPS (Running) - Microsoft Visual Studio
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST ANALYZE WINDOW HELP
file:///C:/Users/siddarth.s/documents/visual studio 2013/Projects/OOPS/Flight/bin/Debug/Flight.EXE
Enter Flight number :LH762
Flight already left
Solution Explorer
Solution 'OOPS' (9 projects)
AccountDetails
Properties
References
App.config
Product.cs
Program.cs
Car
Flight
Properties
References
App.config
Program.cs
GameAssigment
GenericInterface
Properties
References
App.config
IGeneric.cs
IOpenable.cs
Program.cs
JaggedArray.cs
Ready
Ln 31
Col 37
Ch 37
INS
ENG
IN
12:53 PM
8/22/2024

Program 3:
Product.cs

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

namespace ass3
{
   class Product
   {
      string _productName ;
      string _serialNumber ;
      DateTime _purchaseDate;
      double _cost;

      public Product(string _productName, string _serialNumber,
DateTime _purchaseDate, double _cost)
      {
         this._productName = _productName;
         this._serialNumber = _serialNumber;
         this._purchaseDate = _purchaseDate;
         this._cost = _cost;

      }

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

```
        }
    }
}
```

Program.cs

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

namespace ass3
{
    class Program
    {
        static void Main(string[] args)
        {
            List<Product> list = new List<Product>();
            list.Add(new Product("Phone", "1234ph",
Convert.ToDateTime("05-30-2020"), 20000.20));
            list.Add(new Product("Car", "1t34ph",
Convert.ToDateTime("05-30-2020"), 550000.20));
            list.Add(new Product("Bike", "124ph",
Convert.ToDateTime("05-30-2020"), 220000.20));
            list.Add(new Product("PS5", "1234h",
Convert.ToDateTime("05-30-2020"), 20000.20));
```

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

            foreach (Product p in list)
            {
                Console.WriteLine(p.ToString());
            }
            Console.ReadKey();
        }
    }
}
```

Output: