```csharp
namespace MainData
{
    interface InOutMilk //Nhập và xuất thông tin ra màn hình
    {
        void Input(string MilkName = "", string ProductionDate = "01/01/2022",
                    string ExpiredDate = "01/01/2023", int Quantity = 0);
        void Output(string MilkName = "", string ProductionDate = "01/01/2022",
                    string ExpiredDate = "01/01/2023", int Quantity = 0);
    }

    [MilkMoreInfo("Sua bo", "Con bo cuoi")]
    [MilkMoreInfo("TH True Milk", "Rony")]

    class Milk: InOutMilk
    {
        private string MilkName = "Not Assigned";
        private string MilkID = "MILK01012022";
        private DateTime ProductionDate;
        private DateTime ExpiredDate;
        private int Quantity;

        public Milk(string MilkName="Not Assigned", string ProductionDate = "01/03/2016",
                    string ExpiredDate = "01/03/2017", int Quantity = 0)
        {
```

```csharp
        public Milk(string MilkName="Not Assigned", string ProductionDate = "01/03/2016",
                    string ExpiredDate = "01/03/2017", int Quantity = 0)
        {
            this.MilkName = MilkName;
            this.ProductionDate = DateTime.ParseExact(ProductionDate, "dd/MM/yyyy", CultureInfo.InvariantCulture);
            this.ExpiredDate = DateTime.ParseExact(ExpiredDate, "dd/MM/yyyy", CultureInfo.InvariantCulture);
            this.Quantity = Quantity;
            this.MilkID = String.Format("MILK{0}", this.ProductionDate.ToString("ddMMyyyy"));
        }

        public string ValMilkName
        {
            get { return MilkName; }
            set { MilkName = value; }
        }

        public string ValMilkID
        {
            get { return MilkID; }
            set { MilkID = value; }
        }

        public string ValProductionDate
        {
            get { return ProductionDate.ToString("dd/MM/yyyy"); }
```

Output

Show output from: Debug

'Lab02.exe' (CLR v4.0.30319: DefaultDomain): Loaded 'C:\Windows\Microsoft.Net\assembly\GAC_32\mscorlib\v4.0_4.0.0.0__b77a5c561934e089\mscorlib.dll'. Skipped loading symbols. Module is optimized and the debugge
'Lab02.exe' (CLR v4.0.30319: DefaultDomain): Loaded 'D:\Source code\C#\Lab02\Lab02\bin\Debug\Lab02.exe'. Symbols loaded.
The program '[14988] Lab02.exe' has exited with code -1073741510 (0xc000013a).

```csharp
        public string ValProductionDate
        {
            get { return ProductionDate.ToString("dd/MM/yyyy"); }

            set
            {
                ProductionDate = DateTime.ParseExact(value, "dd/MM/yyyy", CultureInfo.InvariantCulture);
                MilkID = String.Format("MILK{0}", this.ProductionDate.ToString("ddMMyyyy"));
            }
        }

        public string ValExpiredDate
        {
            get { return ExpiredDate.ToString("dd/MM/yyyy"); }
            set { ExpiredDate = DateTime.ParseExact(value, "dd/MM/yyyy", CultureInfo.InvariantCulture); }
        }

        public int ValQuantity
        {
            get { return Quantity; }
            set { Quantity = value; }
        }

        public void Input(string MilkName = "", string ProductionDate = "01/01/2022",
                          string ExpiredDate = "01/01/2023", int Quantity = 0)
```

```csharp
        public void Input(string MilkName = "", string ProductionDate = "01/01/2022",
                          string ExpiredDate = "01/01/2023", int Quantity = 0)
        {
            Console.WriteLine("\nInput Milkname: ");
            ValMilkName = Console.ReadLine();
            Console.WriteLine("Input ProductionDate: ");
            ValProductionDate = Console.ReadLine();
            Console.WriteLine("Input ExpiredDate: ");
            ValExpiredDate = Console.ReadLine();
            Console.WriteLine("Input Quantity: ");
            string q = Console.ReadLine();
            ValQuantity = int.Parse(q);
        }

        public void Output(string MilkName = "", string ProductionDate = "01/01/2022",
                          string ExpiredDate = "01/01/2023", int Quantity = 0)
        {
            Console.WriteLine("\nThong tin Milk vua nhap:");
            Console.WriteLine("\t MilkID = {0}, MilkName = {1}", ValMilkID, ValMilkName);
            Console.WriteLine("\t ProductionDate = {0}, ExpiredDate = {1}", ValProductionDate, ValExpiredDate);
            Console.WriteLine("\t Quantity = {0} boxes", ValQuantity);
        }
    }
}
```

Output

Show output from: Debug

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Error List   Output

Ready   Ln 124   Col 10   Ch 10   INS   Add to Source Control

```csharp
            }
        }
    }

namespace Attribute
{
    [AttributeUsage(AttributeTargets.All, AllowMultiple = true)]
    public class MilkMoreInfo : System.Attribute
    {
        public string Manufacturer { get; set; }
        public string CompanyName { get; set; }

        public MilkMoreInfo(string Manufacturer = "", string CompanyName = "")
        {
            this.Manufacturer = Manufacturer;
            this.CompanyName = CompanyName;
        }
    }
}
```

Output

Show output from: Debug

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```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Globalization;
using System.Runtime.InteropServices;
using MainData;
using Attribute;

/*
Họ và tên: Trịnh Ngọc Hiến
MSSV: 19110315
BT:Lab02
*/

delegate void MilkDisplay(string MilkName = "", string ProductionDate = "01/01/2022",
                          string ExpiredDate = "01/01/2023", int Quantity = 0);

namespace Lab02
{
    class Program
    {
        static void Main(string[] args)
        {
```

Output

Show output from: Debug

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```csharp
        static void Main(string[] args)
        {
            Milk milk = new Milk();
            milk.ValMilkName = "Vinamilk";
            milk.ValProductionDate = "01/03/2016";
            milk.ValExpiredDate = "01/03/2017";
            milk.ValQuantity = 200;

            Console.WriteLine("Thong tin Milk la: ");
            Console.WriteLine("\t MilkID = {0}, MilkName = {1}", milk.ValMilkID, milk.ValMilkName);
            Console.WriteLine("\t ProductionDate = {0}, ExpiredDate = {1}", milk.ValProductionDate, milk.ValExpiredDate);
            Console.WriteLine("\t Quantity = {0} boxes", milk.ValQuantity);

            Type type = typeof(Milk);
            string OutputMessage = "\nThong Tin Them Cua Milk:";
            Console.WriteLine(OutputMessage);
            foreach (Object attributes in type.GetCustomAttributes(false))
            {
                MilkMoreInfo cinfo = (MilkMoreInfo)attributes;
                if (cinfo != null)
                {
                    OutputMessage = String.Format("\n\t Manufacturer = {0} \n", cinfo.Manufacturer);
                    OutputMessage += String.Format("\t CompanyName = {0}", cinfo.CompanyName);
                    Console.WriteLine(OutputMessage);
                }
            }
```

Output

Show output from: Debug

'Lab02.exe' (CLR v4.0.30319: DefaultDomain): Loaded 'C:\Windows\Microsoft.Net\assembly\GAC_32\mscorlib\v4.0_4.0.0.0__b77a5c561934e089\mscorlib.dll'. Skipped loading symbols. Module is optimized and the debugge
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The program '[14988] Lab02.exe' has exited with code -1073741510 (0xc000013a).

```csharp
            Type type = typeof(Milk);
            string OutputMessage = "\nThong Tin Them Cua Milk:";
            Console.WriteLine(OutputMessage);
            foreach (Object attributes in type.GetCustomAttributes(false))
            {
                MilkMoreInfo cinfo = (MilkMoreInfo)attributes;
                if (cinfo != null)
                {
                    OutputMessage = String.Format("\n\t Manufacturer = {0} \n", cinfo.Manufacturer);
                    OutputMessage += String.Format("\t CompanyName = {0}",cinfo.CompanyName);
                    Console.WriteLine(OutputMessage);
                }
            }

            MilkDisplay action1 = new MilkDisplay(milk.Input);
            MilkDisplay action2 = new MilkDisplay(milk.Output);

            action1.Invoke();
            action2.Invoke();

            Console.ReadLine();
        }
    }
}
```

Output

```
Thong tin Milk la:
        MilkID = MILK01032016, MilkName = Vinamilk
        ProductionDate = 01/03/2016, ExpiredDate = 01/03/2017
        Quantity = 200 boxes

Thong Tin Them Cua Milk:

        Manufacturer = Sua bo
        CompanyName = Con bo cuoi

        Manufacturer = TH True Milk
        CompanyName = Rony

Input Milkname:
bavi
Input ProductionDate:
23/10/2022
Input ExpiredDate:
25/10/2023
Input Quantity:
300

Thong tin Milk vua nhap:
        MilkID = MILK23102022, MilkName = bavi
        ProductionDate = 23/10/2022, ExpiredDate = 25/10/2023
        Quantity = 300 boxes
```