

```
using System;
using System.Globalization;

public class Car
{
    public string Brand { get; set; }
    public string Model { get; set; }
    public int Year { get; set; }
    public decimal Price { get; private set; }
    private string chassisNumber;

    public Car(string brand, string model, int
year, decimal price, string chassisNum)
    {
        Brand = brand;
        Model = model;
        Year = year;
        Price = price;
        chassisNumber = chassisNum;
    }

    public void DisplayCarInfo()
    {

        Console.WriteLine($" -----
-");
        Console.WriteLine($"Manufacturer:
{Brand}");
        Console.WriteLine($"Model: {Model}");
        Console.WriteLine($"Year: {Year}");
        Console.WriteLine($"Original Price:
{Price.ToString("C",
CultureInfo.GetCultureInfo("en-US"))}");
        Console.WriteLine($" -----
-");
    }

    public decimal CalculateDiscount(double
percent)
    {
        if (percent >= 0 && percent <= 100)
        {
            decimal discountFactor = (decimal)
(1 - (percent / 100.0));
            decimal newPrice = Price *
discountFactor;

            Console.WriteLine($"(Discount
{percent}%), New Price:
{newPrice.ToString("C",
CultureInfo.GetCultureInfo("en-US"))}");
            return newPrice;
        }
        else
        {
            Console.WriteLine("X Invalid
discount percentage.");
            return Price;
        }
    }

    public string GetChassisNumber()
    {
        return chassisNumber;
    }
}
```

```
class Program
{
    static void Main(string[] args)
    {
        Car car1 = new Car("Toyota", "Camry",
                           2023, 25000.00m, "ABC12345");
        Car car2 = new Car("Honda", "Accord",
                           2022, 22000.50m, "DEF67890");
        Car car3 = new Car("BMW", "X5",
                           2024, 65000.00m, "GHI11223");

        Console.WriteLine("==> Car Inventory
                           ==>");

        car1.DisplayCarInfo();
        Console.WriteLine($"Chassis Number
                           (Private): {car1.GetChassisNumber()}");

        car2.DisplayCarInfo();

        car3.DisplayCarInfo();

        Console.WriteLine("\n==> Applying
                           Discounts ==>");

        Console.Write($"Price after discount
                           for {car1.Brand} {car1.Model}: ");
        car1.CalculateDiscount(10.5);

        Console.Write($"Price after discount
                           for {car3.Brand} {car3.Model}: ");
        car3.CalculateDiscount(5.0);
    }
}
```