

```

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

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