**Question 1 of 1**

Create a `Prescription` Class with Comparison Methods  
- Task: Implement a class `Prescription` that represents  
a prescription with properties `PrescriptionID` and `Dosage` (in milligrams).  
Implement the following methods:  
`Equals`, `NotEquals`, `GreaterThan`,  
`GreaterThanEquals`, `LessThan`, and `LessThanEquals`  
to compare the dosage between two prescriptions.  
- Requirements:  
- Implement the `Equals(Prescription other)` method to check  
if two prescriptions have the same dosage.  
- Implement the `NotEquals(Prescription other)` method to check  
if two prescriptions have different dosages.  
- Implement the `GreaterThan(Prescription other)` method to check  
if one prescription has a higher dosage than another.  
- Implement the `GreaterThanEquals(Prescription other)` method to check  
if one prescription has a higher or equal dosage compared to another.  
- Implement the `LessThan(Prescription other)` method to check  
if one prescription has a lower dosage than another.  
- Implement the `LessThanEquals(Prescription other)` method to check  
if one prescription has a lower or equal dosage compared to another.  
- Example:  
```csharp  
Prescription pres1 = new Prescription("RX001", 500);  
Prescription pres2 = new Prescription("RX002", 400);  
  
Console.WriteLine(pres1.Equals(pres2)); // Output: False  
Console.WriteLine(pres1.GreaterThan(pres2)); // Output: True  
Console.WriteLine(pres1.LessThanEquals(pres2)); // Output: False  
```

**C# CODE**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace SampleTest

{

public class Prescription

{

public string PrescriptionID { get; set; }

public int Dosage { get; set; }

public Prescription(string prescriptionID, int dosage)

{

PrescriptionID = prescriptionID;

Dosage = dosage;

}

public bool Equals(Prescription other)

{

return this.Dosage == other.Dosage;

}

public bool NotEquals(Prescription other)

{

return this.Dosage != other.Dosage;

}

public bool GreaterThan(Prescription other)

{

return this.Dosage > other.Dosage;

}

public bool GreaterThanEquals(Prescription other)

{

return this.Dosage >= other.Dosage;

}

public bool LessThan(Prescription other)

{

return this.Dosage < other.Dosage;

}

public bool LessThanEquals(Prescription other)

{

return this.Dosage <= other.Dosage;

}

}

internal class ProgramTest

{

static void Main(string[] args)

{

Prescription prescrip1 = new Prescription("RX001", 500);

Prescription prescrip2 = new Prescription("RX002", 400);

Console.Write($"Prescription1 dosage {prescrip1.Dosage} equals to Prescription2 Dosage {prescrip2.Dosage} is : ");

Console.WriteLine(prescrip1.Equals(prescrip2));

Console.Write($"Prescription1 dosage {prescrip1.Dosage} GreaterThan Prescription2 Dosage {prescrip2.Dosage} is : ");

Console.WriteLine(prescrip1.GreaterThan(prescrip2));

Console.Write($"Prescription1 dosage {prescrip1.Dosage} LessThan or Equals to Prescription2 Dosage {prescrip2.Dosage} is : ");

Console.WriteLine(prescrip1.LessThanEquals(prescrip2));

Console.Write($"Prescription1 dosage {prescrip1.Dosage} Not Equals To Prescription2 Dosage {prescrip2.Dosage} is : ");

Console.WriteLine(prescrip1.NotEquals(prescrip2));

Console.Write($"Prescription1 dosage {prescrip1.Dosage} LessThan Prescription2 Dosage {prescrip2.Dosage} is : ");

Console.WriteLine(prescrip1.LessThan(prescrip2));

}

}

}

**OUTPUT**

