Question 5:

Aim:

      The aim of this program is to gather and display detailed information about a patient using a Patient class. The program collects input from the user and then displays the collected information.

PROGRAM:

```csharp
using System;

class Patient
{
    // Data members to store patient information
    public string Name { get; set; }
    public DateTime DateOfAdmission { get; set; }
    public int Age { get; set; }
    public string Disease { get; set; }
    public DateTime DateOfDischarge { get; set; }
    public double TotalBillsPaid { get; set; }

    // Method to get patient details
    public void GetPatientInfo()
    {
        Console.Write("Enter patient name: ");
        Name = Console.ReadLine();

        Console.Write("Enter date of admission (yyyy-mm-dd): ");
        DateOfAdmission = DateTime.Parse(Console.ReadLine());

        Console.Write("Enter age of patient: ");
        Age = int.Parse(Console.ReadLine());

        Console.Write("Enter disease: ");
        Disease = Console.ReadLine();

        Console.Write("Enter date of discharge (yyyy-mm-dd): ");
        DateOfDischarge = DateTime.Parse(Console.ReadLine());

        Console.Write("Enter total bills paid: ");
        TotalBillsPaid = double.Parse(Console.ReadLine());
    }

    // Method to display patient details
    public void DisplayPatientInfo()
    {
        Console.WriteLine("\n--- Patient Details ---");
        Console.WriteLine($"Name: {Name}");
        Console.WriteLine($"Date of Admission:
{DateOfAdmission.ToShortDateString()}");
        Console.WriteLine($"Age: {Age}");
        Console.WriteLine($"Disease: {Disease}");
```

```
        Console.WriteLine($"Date of Discharge:
{DateOfDischarge.ToShortDateString()}");
        Console.WriteLine($"Total Bills Paid: {TotalBillsPaid:C}");
    }
}

class Hospital
{
    static void Main(string[] args)
    {
        // Create an instance of the Patient class
        Patient patient = new Patient();

        // Call the method to get patient information
        patient.GetPatientInfo();

        // Call the method to display patient information
        patient.DisplayPatientInfo();
    }
}
```

Input:

```
Enter patient name: John Doe
Enter date of admission (yyyy-mm-dd): 2023-08-15
Enter age of patient: 45
Enter disease: Hypertension
Enter date of discharge (yyyy-mm-dd): 2023-09-01
Enter total bills paid: 1500.75
```

Output:

```
--- Patient Details ---
Name: John Doe
Date of Admission: 08/15/2023
Age: 45
Disease: Hypertension
Date of Discharge: 09/01/2023
Total Bills Paid: $1,500.75
```

```
31          Console.Write( Enter total bills paid:  );
32          TotalBillsPaid = double.Parse(Console.ReadLine());
33      }
34
35      // Method to display patient details
36      public void DisplayPatientInfo()
37      {
38          Console.WriteLine("\n--- Patient Details ---");
39          Console.WriteLine($"Name: {Name}");
40          Console.WriteLine($"Date of Admission: {DateOfAdmission
                .ToShortDateString()}");
41          Console.WriteLine($"Age: {Age}");
42          Console.WriteLine($"Disease: {Disease}");
43          Console.WriteLine($"Date of Discharge: {DateOfDischarge
                .ToShortDateString()}");
44          Console.WriteLine($"Total Bills Paid: {TotalBillsPaid:C}");
45      }
46  }
47
48  class Hospital
49  {
50      static void Main(string[] args)
51      {
52          // Create an instance of the Patient class
53          Patient patient = new Patient();
54
55          // Call the method to get patient information
56          patient.GetPatientInfo();
57
58          // Call the method to display patient information
59          patient.DisplayPatientInfo();
60      }
61  }
62
```

Output

```
mono /tmp/2QUA2UghBO.exe
Enter patient name: John Doe
Enter date of admission (yyyy-mm-dd): 2023-08-15
Enter age of patient: 45
Enter disease: Hypertension
Enter date of discharge (yyyy-mm-dd): 2023-09-01
Enter total bills paid:  1500.751500.75

--- Patient Details ---
Name: John Doe
Date of Admission: 08/15/2023
Age: 45
Disease: Hypertension
Date of Discharge: 09/01/2023
Total Bills Paid: ?1,500.75

=== Code Execution Successful ===
```