```csharp
1  namespace HospitalManagementSystem
2  {
3      public class Cardiologist : Doctor
4      {
5          public Cardiologist(string name, string contact, DateTime dob,
               string workingHours, string experience):base(name, contact, dob,
               workingHours, experience)
6          {
7          }
8
9
10         public override void Diagnose()
11         {
12             Console.WriteLine($"{Name} (Cardiologist) is diagnosing a heart
                   condition.");
13         }
14
15         public override void ProvideTreatment()
16         {
17             Console.WriteLine($"{Name} (Cardiologist) is providing heart
                   treatment.");
18         }
19     }
20 }
21
```