

```
1 using System;
2 using System.Collections.Generic;
3
4 namespace HospitalManagementSystem
5 {
6     public class Patient : Person
7     {
8         private List<IObserver> _observers = new List<IObserver>();
9
10        public Patient(string name, DateTime dob, string contact, string[] ➤
            symptoms):base(name, contact, dob)
11        {
12            Symptoms = symptoms;
13        }
14
15        public string[] Symptoms
16        {
17            get;
18            set;
19        }
20
21        public void AttachObserver(IObserver observer)
22        {
23            if (!_observers.Contains(observer))
24            {
25                _observers.Add(observer);
26            }
27        }
28
29        public void DetachObserver(IObserver observer)
30        {
31            if (_observers.Contains(observer))
32            {
33                _observers.Remove(observer);
34            }
35        }
36
37        public void Notify()
38        {
39            foreach (var observer in _observers)
40            {
41                observer.Update(this); // Passing the patient data to the ➤
42                observers
43            }
44        }
45    }
46
```