**Class: Person**

+ name: string  
+ age: int  
+ contact: string  
+ displayInfo(): void

**Class: Patient : Person**

+ patientId: int  
+ disease: string  
+ admitDate: string  
+ dischargeDate: string  
+ admit(): void  
+ discharge(): void

**Class: Doctor : Person**

+ specialization: string  
+ doctorId: int  
+ treatPatient(): void

**Class: Room**

+ roomNumber: int  
+ type: string  
+ isOccupied: bool  
+ showRoomInfo(): void

**Class: Hospital**

+ patients[100]: Patient  
+ doctors[50]: Doctor  
+ rooms[50]: Room  
+ admitPatient(): void  
+ dischargePatient(): void  
+ assignDoctor(): void  
+ showAllRecords(): void