**EVEN NUMBERS**

**Hospital Management System**

**Background**

In healthcare facilities, managing patient records, doctor schedules, and appointments is crucial for providing quality care. A Hospital Management System (HMS) is needed to streamline the management of patients, doctors, and appointments effectively.

**Objectives decisease**

The objective of this project is to develop a Hospital Management System that allows the hospital to manage its patients and doctors efficiently. The system should support the following functionalities:

1. **Patient Management**:
   * Register new patients with their ID, name, age, disease, and contact number.
   * Display patient details.
2. **Doctor Management**:
   * Register new doctors with their ID, name, age, specialization, and availability.
   * Display doctor details.
3. **Appointment Management**:
   * Schedule appointments for patients with doctors by providing the appointment ID, patient ID, doctor ID, date, and time.
   * Display all scheduled appointments, including patient and doctor details.

**Requirements**

1. **Classes**:
   * **Person Class**: A base class representing a person with attributes like id, name, and age.
   * **Patient Class**: Inherits from the Person class and represents a patient with additional attributes like disease and contactNo.
   * **Doctor Class**: Inherits from the Person class and represents a doctor with additional attributes like specialization and availability.
   * **Appointment Class**: Represents an appointment with attributes such as appointmentID, Patient, Doctor, date, and time. It should display appointment details.
   * **Hospital Class**: Manages collections of Patient, Doctor, and Appointment objects. It should allow adding patients and doctors, scheduling appointments, and displaying all appointments.
2. **Functionality**:
   * The system should allow the user to add patients and doctors to the hospital's records.
   * The user should be able to schedule appointments for patients with doctors.
   * The system should display all scheduled appointments, including details of the patients and doctors involved.
3. **Constraints**:
   * The hospital can manage a maximum of 10 patients, 10 doctors, and 10 appointments at a time.
   * The system should handle cases where an invalid patient or doctor ID is entered when scheduling an appointment.

**User Interaction**

The system should interact with the user through a console interface, allowing them to perform the following actions:

* Add patients and doctors to the hospital's records.
* Schedule appointments for patients with doctors.
* Display all scheduled appointments.

Create a base class Account (Acc\_Holder\_Name, Acc\_Holder\_Contact\_No).

Derive a two classes as Saving\_Account(S\_Acc\_No., Balance) and

Current\_Account( C\_Acc\_No., Balance) from Account.

Write a C++ menu driven program to perform following functions :

Accept the details for n account holders.

Display the details of n account holders by adding interest

amount where interest rate for Saving account is 5% of balance and

interest rate for Current account is 1.5% of balance.