DBStructure

```
1
2    CREATE DATABASE HOSPITALMANAGEMENTSYSTEM;
3
4
5    CREATE TABLE PATIENTS(
6          ID SERIAL PRIMARY KEY ,
7          Name VARCHAR(100) NOT NULL ,
8          AGE INT NOT NULL ,
9          Gender VARCHAR(15) NOT NULL);
10
11
12
13   CREATE TABLE DOCTORS(
14          ID SERIAL PRIMARY KEY ,
15          Name VARCHAR(255) NOT NULL ,
16          Specialization VARCHAR(100) NOT NULL)
17
18
19   CREATE TABLE APPOINTMENTS(
20          ID SERIAL PRIMARY KEY ,
21          PatientID INT NOT NULL ,
22          DoctorID INT NOT NULL ,
23          AppointmentDate DATE NOT NULL ,
24          FOREIGN KEY (PatientID) REFERENCES Patient(ID),
25          FOREIGN KEY (DoctorID) REFERENCES Doctor(ID) );
26
27
28
29
30   ## INVOICE TABLE STRUCTURE
31
32
33   CREATE SEQUENCE INVOICE_ID_SEQUENCE START WITH 2315;
34
35   CREATE TABLE INVOICE (
36          InvoiceID INT PRIMARY KEY DEFAULT NEXTVAL('INVOICE_ID_SEQUENCE'),
37          AppointmentID INT NOT NULL,
38          PaymentMethod VARCHAR(100) NOT NULL DEFAULT 'CASH',
39          Amount DECIMAL(10,2) NOT NULL,
40          TransactionDate DATE NOT NULL DEFAULT CURRENT_DATE,
41          FOREIGN KEY (AppointmentID) REFERENCES APPOINTMENTS(ID)
42   );
43
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```

```sql
## QUERY TO GET DETAILS REQUIRED FOR PRINTING THE INVOICE

   SELECT
       PATIENTS.ID AS PatientID,
       PATIENTS.Name AS PatientName,
                   PATIENTS.Age,
       PATIENTS.Gender,
       INVOICE.InvoiceID,
       INVOICE.PaymentMethod,
       INVOICE.TransactionDate,
        DOCTORS.Name AS DoctorName,
       DOCTORS.Specialization,
       APPOINTMENTS.ID AS AppointmentID,
       APPOINTMENTS.AppointmentDate,
       INVOICE.Amount,
       Invoice.Discount
   FROM
       PATIENTS PATIENTS
   JOIN
       APPOINTMENTS APPOINTMENTS ON PATIENTS.ID = APPOINTMENTS.PatientID
   JOIN
       DOCTORS DOCTORS ON APPOINTMENTS.DoctorID = DOCTORS.ID
   JOIN
       INVOICE INVOICE ON APPOINTMENTS.ID = INVOICE.AppointmentID
   WHERE
       APPOINTMENTS.ID = ?


## QUERY TO GET APPOINTMENTS LIST

   SELECT
       APPOINTMENTS.ID AS AppointmentID,
       PATIENTS.Name AS PatientName,
       DOCTORS.Name AS DoctorName,
       APPOINTMENTS.AppointmentDate
   FROM
       APPOINTMENTS
   JOIN
       PATIENTS ON APPOINTMENTS.PatientID = PATIENTS.ID
   JOIN
        DOCTORS ON APPOINTMENTS.DoctorID = DOCTORS.ID


## QUERY TO GET TOTAL PAYMENT AMOUNT

   SELECT
       DOCTORS.Specialization
   FROM
       APPOINTMENTS
   JOIN
       DOCTORS ON APPOINTMENTS.DoctorID = DOCTORS.ID
   WHERE APPOINTMENTS.ID = 3;
```