Question 3

```sql
-- qn.3.1
CREATE TABLE Patient(
    PatientID    INT AUTO_INCREMENT NOT NULL,
    PatientName VARCHAR(50) NOT NULL,
    PatientSurname VARCHAR(50) NOT NULL,
    PatientDOB  DATE NOT NULL,
    PRIMARY KEY (PatientID)
);

-- qn.3.2
CREATE TABLE Doctor(
    DoctorID     INT AUTO_INCREMENT NOT NULL,
    DoctorName   VARCHAR(50) NOT NULL,
    DoctorSurname   VARCHAR(50) NOT NULL,
    PRIMARY KEY(DoctorID)
);

-- qn.3.3
CREATE TABLE Appointments(
    AppointmentID    INT AUTO_INCREMENT NOT NULL,
    PatientID    INT NOT NULL,
    DoctorID     INT NOT NULL,
    AppointmentDate DATE NOT NULL,
    AppointmentTime TIME NOT NULL,
    AppointmentDuration INT NOT NULL,
    PRIMARY KEY (AppointmentID),
    FOREIGN KEY (PatientID) REFERENCES Patient(PatientID),
    FOREIGN KEY (DoctorID) REFERENCES Doctor(DoctorID)
);

-- qn 3.4
INSERT INTO Patient(PatientID, PatientName, PatientSurname, PatientDOB)
VALUES  (1, "Debbie", "Theart", "1980-03-17"),
        (2, "Thomas", "Duncan", "1976-08-12");
INSERT INTO Doctor(DoctorID, DoctorName, DoctorSurname)
VALUES  (1, "Zintle", "Nukani"),
        (2, "Ravi", "Maharaj");
INSERT INTO Appointments(AppointmentID, AppointmentDate, AppointmentTime, AppointmentDuration, DoctorI
VALUES  (1, "2025-01-15", "9:00", 15, 2, 1),
        (2, "2025-01-18", "15:00", 30, 2, 2),
        (3, "2025-01-20", "10:00", 15, 1, 1),
        (4, "2025-01-21", "11:00", 15, 2, 1);
```

	PatientID	PatientName	PatientSurname	PatientDOB
▶	1	Debbie	Theart	1980-03-17
	2	Thomas	Duncan	1976-08-12
*	NULL	NULL	NULL	NULL

	DoctorID	DoctorName	DoctorSurname
▶	1	Zintle	Nukani
	2	Ravi	Maharaj
*	NULL	NULL	NULL

	AppointmentID	PatientID	DoctorID	AppointmentDate	AppointmentTime	AppointmentDuration
▶	1	1	2	2025-01-15	09:00:00	15
	2	2	2	2025-01-18	15:00:00	30
	3	1	1	2025-01-20	10:00:00	15
	4	1	2	2025-01-21	11:00:00	15
*	NULL	NULL	NULL	NULL	NULL	NULL

```sql
-- qn.3.5
SELECT * FROM Appointments
WHERE AppointmentDate BETWEEN "2025-01-16" AND "2025-01-20";
```

	AppointmentID	PatientID	DoctorID	AppointmentDate	AppointmentTime	AppointmentDuration
▶	2	2	2	2025-01-18	15:00:00	30
	3	1	1	2025-01-20	10:00:00	15
*	NULL	NULL	NULL	NULL	NULL	NULL

```sql
-- qn.3.6
SELECT PatientName, PatientSurname, COUNT(a.PatientID) AS Visits
FROM Patient p
INNER JOIN Appointments a ON p.PatientID = a.PatientID
GROUP BY
    p.PatientID,
    PatientName,
    PatientSurname;
```

	PatientName	PatientSurname	Visits
▶	Debbie	Theart	3
	Thomas	Duncan	1

```sql
-- qn.3.7
CREATE VIEW v AS
SELECT PatientName, PatientSurname FROM Patient p
INNER JOIN Appointments a ON p.PatientID = a.PatientID
WHERE a.DoctorID = 2
GROUP BY
PatientName, PatientSurname
ORDER BY PatientSurname ASC;
```

	PatientName	PatientSurname
▶	Thomas	Duncan
	Debbie	Theart