

Q1

LAB15-01.24L-0583 - dbo.Patient Q1.sql - LAB15-01.24L-0583 (sa (77))

```
-- Q1
CREATE TABLE Patient(
    PatientID int IDENTITY(1,1) PRIMARY KEY,
    Name varchar(15) NOT NULL,
    Age int,
    CHECK (Age>5),
    Gender varchar(5),
    Address varchar(20),
    Disease varchar(10),
    DoctorID varchar(15)
)
```

214 %

Messages

Commands completed successfully.

Completion time: 2026-02-13T10:46:20.6411025+05:00

Q2

```
Q1.sql - LAB15-01.24L-0583 (sa (77)) ➔ X
Age int,
CHECK (Age>5),
Gender varchar(5),
Address varchar(20),
Disease varchar(10),
DoctorID varchar(15)
)

-- Q2
ALTER TABLE Patient
ALTER COLUMN Gender char;

214 %
Messages
Commands completed successfully.

Completion time: 2026-02-13T10:46:49.5323731+05:00
```

Q3

```
Q1.sql - LAB15-01.24L-0583 (sa (77))  ✎ X
ALTER COLUMN Gender char;

-- Q3
CREATE TABLE Doctor(
    DoctorID int IDENTITY(1,1) PRIMARY KEY,
    Name varchar (15) NOT NULL,
    Age int,
    CHECK (Age>18),
    Gender char,
    Address varchar(20)
)

214 %  Messages
Commands completed successfully.

Completion time: 2026-02-13T10:47:26.6471327+05:00
```

LAB15-01.24L-0583 - dbo.Doctor		LAB15-01.24L-0583 - dbo.Patient		Q1.sql - LAB15-01.24L-0583	
	DoctorID	Name	Age	Gender	Address
*	NULL	NULL	NULL	NULL	NULL

Q4 (The comment in the screenshot said Q3 but it is Q4. The SQL file is updated)

```
LAB15-01.24L-0583 - dbo.Doctor Q1.sql - LAB15-01.24L-0583 (sa (77))*
Age int,
CHECK (Age>18),
Gender char,
Address varchar(20)
)

-- Q3
ALTER TABLE Doctor
ADD DrSpecialization varchar(20)

214 % < >
Messages
Commands completed successfully.

Completion time: 2026-02-13T10:51:47.7350151+05:00
```

	DoctorID	Name	Age	Gender	Address	DrSpecialization
**	NULL	NULL	NULL	NULL	NULL	NULL

Q5 (The comment in the screenshot said Q4 but it is Q5. The SQL file is updated)

```
LAB15-01.24L-0583 - dbo.Patient    LAB15-01.24L-0583 - dbo.Doctor    Q1.sql - LAB15-01.24L-0583 (sa (77)) ↗ X
ALTER TABLE Doctor
ADD DrSpecialization varchar(20)

-- Q4
ALTER TABLE Patient
ALTER COLUMN DoctorID int;

ALTER TABLE Patient
ADD CONSTRAINT FK_DoctorID
FOREIGN KEY (DoctorID)
REFERENCES Doctor(DoctorID);

214 %  Messages
Commands completed successfully.

Completion time: 2026-02-13T11:09:13.7497791+05:00
```

Q6

```
LAB15-01.24L-0583 - dbo.Patient    LAB15-01.24L-0583 - dbo.Doctor    Q1.sql - LAB15-01.24L-0583 (sa (77)) ↗ X
REFERENCES Doctor(DoctorID);

-- Q6
CREATE TABLE LabTest(
LabID int IDENTITY(1,1) PRIMARY KEY,
LabNo varchar(10) UNIQUE,
TestDate date DEFAULT GETDATE(),
TestAmount float,
PatientID int REFERENCES Patient(PatientID),
DoctorID int REFERENCES Doctor(DoctorID)
)

214 %  Messages
Commands completed successfully.
```

Completion time: 2026-02-13T11:15:42.8412541+05:00

	LabID	LabNo	TestDate	TestAmount	PatientID	DoctorID
*	NULL	NULL	NULL	NULL	NULL	NULL

Q7

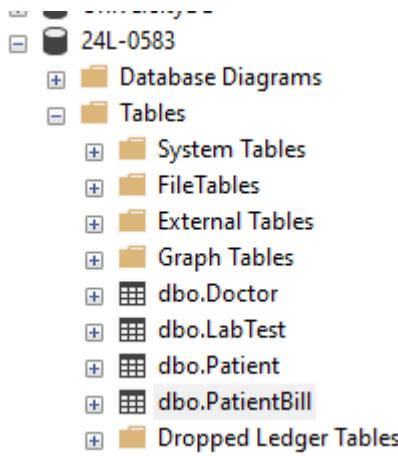
```
LAB15-01.24L-0583 - dbo.LabTest Q1.sql - LAB15-01.24L-0583 (sa (77)) ↗ X
DOCTOR_ID REFERENCES DOCTOR (DOCTOR_ID)
)
-- Q7
CREATE TABLE PatientBill(
    BillID int IDENTITY(1,1) PRIMARY KEY,
    BillDate date DEFAULT GETDATE(),
    Amount varchar(20),
    PatientID int REFERENCES Patient(PatientID),
    DoctorID int REFERENCES Doctor(DoctorID)
)
214 % < Messages
Commands completed successfully.

Completion time: 2026-02-13T11:18:25.8901068+05:00
```

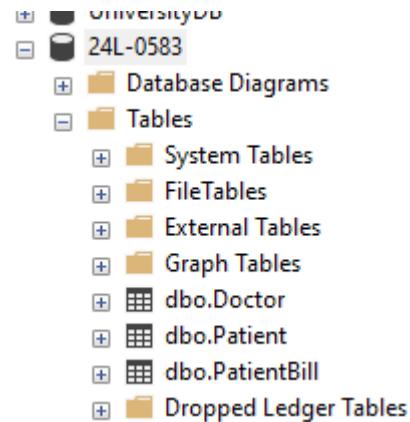
LAB15-01.24L-0583 - dbo.PatientBill ↗ X LAB15-01.24L-0583 - dbo.LabTest Q1.sql - LAB15-01.24L-0583 (sa (77))					
	BillID	BillDate	Amount	PatientID	DoctorID
**	NULL	NULL	NULL	NULL	NULL

Q8

Before:



After:



Query:

```
CREATE TABLE PatientBill (BillID int IDENTITY(1,1) PRIMARY KEY,  
BillDate date DEFAULT GETDATE(),  
Amount varchar(20),  
PatientID int REFERENCES Patient(PatientID),  
DoctorID int REFERENCES Doctor(DoctorID)  
)  
  
-- Q8  
DROP TABLE LabTest;
```

214 %

Messages

Commands completed successfully.

Completion time: 2026-02-13T11:20:33.3584104+05:00

Q10

```
LAB15-01.24L-0583 - dbo.Patient LAB15-01.24L-0583 - dbo.Doctor Q1.sql - LAB15-01.24L-0583 (sa (77)) ×
('Shaheer', 20, 'M', 'Peshawar', 'Radiology');

-- Q10
INSERT INTO Patient (Name, Age, Gender, Address, Disease, DoctorID)
VALUES
('Momin', 25, 'M', 'Karachi', 'Flu', 1),
('Saood', 30, 'M', 'Lahore', 'Fever', 2),
('Dawar', 20, 'M', 'Islamabad', 'Cough', 3),
('Abdullah', 15, 'M', 'Peshawar', 'Allergy', 4);

214 % ▾
Messages

(4 rows affected)

Completion time: 2026-02-13T11:31:20.3449527+05:00
```

Q11

```
LAB15-01.24L-0583 - dbo.Patient LAB15-01.24L-0583 - dbo.Doctor Q1.sql - LAB15-01.24L-0583 (sa (77)) ↗ ×
('Saood', 30, 'M', 'Lahore', 'Fever', 2),
('Dawar', 20, 'M', 'Islamabad', 'Cough', 3),
('Abdullah', 15, 'M', 'Peshawar', 'Allergy', 4);

-- Q11
INSERT INTO PatientBill (Amount, PatientID, DoctorID)
VALUES
('1500', 1, 1), -- Bill for Momin with Doctor Asjad
('2000', 2, 2); -- Bill for Saood with Doctor Ali

214 % < Messages
(2 rows affected)

Completion time: 2026-02-13T11:32:57.7827760+05:00
```

LAB15-01.24L-0583 - dbo.PatientBill		LAB15-01.24L-0583 - dbo.Patient		LAB15-01.24L-0583 - dbo.Doctor	
	BillID	BillDate	Amount	PatientID	DoctorID
▶	1	2026-02-13	1500	1	1
	2	2026-02-13	2000	2	2
*	NULL	NULL	NULL	NULL	NULL

Q12 (Displayed all records as well as the patient bills more than 100)

```
LAB15-01.24L-0583 - dbo.PatientBill Q1.sql - LAB15-01.24L-0583 (sa (77))  x
('2000', 2, 2); -- Bill for Saood with Doctor Ali

-- Q12
SELECT *
FROM Doctor

SELECT *
FROM Patient

SELECT *
FROM PatientBill
WHERE Amount > 100;
```

195 %

Results Messages

	DoctorID	Name	Age	Gender	Address	DrSpecialization
1	1	Asjad	19	M	Karachi	Neuro Surgeon
2	2	Ali	19	M	Lahore	General Physician
3	3	Rehan	19	M	Islamabad	Cardio
4	4	Shaeer	20	M	Peshawar	Radiology

	PatientID	Name	Age	Gender	Address	Disease	DoctorID
1	1	Momin	25	M	Karachi	Flu	1
2	2	Saood	30	M	Lahore	Fever	2
3	3	Dawar	20	M	Islamabad	Cough	3
4	4	Abdullah	15	M	Peshawar	Allergy	4

	BillID	BillDate	Amount	PatientID	DoctorID
1	1	2026-02-13	1500	1	1
2	2	2026-02-13	2000	2	2

Q13

```
LAB15-01.24L-0583 - dbo.PatientBill Q1.sql - LAB15-01.24L-0583 (sa (77)) ×
SELECT *
FROM Patient

SELECT *
FROM PatientBill
WHERE Amount > 100;

-- Q13
DELETE FROM PatientBill;

195 % < essages

(2 rows affected)

Completion time: 2026-02-13T11:41:53.1841884+05:00
```

LAB15-01.24L-0583 - dbo.PatientBill × Q1.sql - LAB15-01.24L-0583 (sa (77))					
	BillID	BillDate	Amount	PatientID	DoctorID
*	NULL	NULL	NULL	NULL	NULL

Q14

Before:

Query:

```
-- Q13
DELETE FROM PatientBill;

-- Q14
DELETE FROM Patient
WHERE Name = 'Dawar';

(1 row affected)

Completion time: 2026-02-13T11:44:00.9838665+05:00
```

After:

Q15

Before:

Query:

```
-- Q14
DELETE FROM Patient
WHERE Name = 'Dawar';

-- Q15
UPDATE Patient
SET Disease = 'Covid'
WHERE Disease = 'Flu';

(1 row affected)

Completion time: 2026-02-13T11:46:52.9970069+05:00
```

After: