

AKASH SINGH

19BCS007

CSE

DBMS LAB ASSIGNMENT 5

Q-1.....

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The 'Object Explorer' on the left shows the 'Hospital' database. The 'SQL Query1.sql' window contains the following query:

```
USE Hospital
SELECT * FROM T1_Room
WHERE room_no <= 100 (SELECT room_no
FROM T1_Room
WHERE room_id < 10)
```

The 'Results' pane shows the following data:

room_id	room_no	room_type	patient_id	doctor_id	entrydate
1	101	general	1	5	NULL
2	102	general	2	4	NULL
3	103	ac	3	3	NULL
4	104	ac	4	2	NULL
5	105	ac single bed	5	1	NULL
6	106	general	1	5	NULL
7	107	general	2	4	NULL
8	108	ac	3	3	NULL
9	109	general	1	5	NULL
10	107	general	2	4	NULL

The status bar at the bottom indicates 'Query executed successfully'.

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The 'Object Explorer' on the left shows the 'Hospital' database. The 'SQL Query2.sql' window contains the following query:

```
USE Hospital
SELECT * FROM T1_Doctor
WHERE doctor_id <= 100 (SELECT doctor_id
FROM T1_Doctor
WHERE doctor_address = 'UP')
```

The 'Results' pane shows the following data:

doctor_id	doctor_name	doctor_phone	doctor_address	doctor_specialization
1	Arjun	123456789	UP	ENT
2	Ram	123456789	Varanasi	MBBS
3	Arun	123456789	Chennai	ENT
4	Arun	123456789	Chennai	Liver

The status bar at the bottom indicates 'Query executed successfully'.

SQLQuery1.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (52)) - Microsoft SQL Server Management Studio

Object Explorer: Hospital > Databases > Hospital > Tables > T1_Room

```

USE Hospital
SELECT * FROM T1_Room
WHERE room_id < ANY (SELECT room_id
FROM T1_Room
WHERE room_type = 'general')

```

Results (16 rows):

room_id	room_no	room_type	patient_id	doctor_id	entrydate
1	101	general	1	5	NULL
2	102	general	2	4	NULL
3	103	ac	3	3	NULL
4	104	ac	4	2	NULL
5	105	ac single bed	5	1	NULL
6	106	general	1	5	NULL
7	107	general	2	4	NULL
8	108	ac	3	3	NULL
9	109	ac	4	2	NULL
10	110	ac single bed	5	1	NULL
11	111	general	1	5	NULL
12	112	general	2	4	NULL
13	113	ac	3	3	NULL
14	114	ac	4	2	NULL
15	115	ac single bed	5	1	NULL
16	108	general	1	5	NULL

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 16 rows

SQLQuery1.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (53)) - Microsoft SQL Server Management Studio

Object Explorer: Hospital > Databases > Hospital > Tables > T1_Room

```

USE Hospital
SELECT * FROM T1_Room
WHERE room_no < ALL (SELECT room_no
FROM T1_Room
WHERE room_id < 10)

```

Results (9 rows):

room_id	room_no	room_type	patient_id	doctor_id	entrydate
1	110	ac single bed	5	1	NULL
2	111	general	1	5	NULL
3	112	general	2	4	NULL
4	113	ac	3	3	NULL
5	114	ac	4	2	NULL
6	115	ac single bed	5	1	NULL
7	116	ac	3	3	NULL
8	117	ac	4	2	NULL
9	118	ac single bed	5	1	NULL

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 9 rows

SQLQuery1.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (57)) - Microsoft SQL Server Management Studio

Object Explorer: Hospital > Databases > Hospital > Tables > T1_Room

```

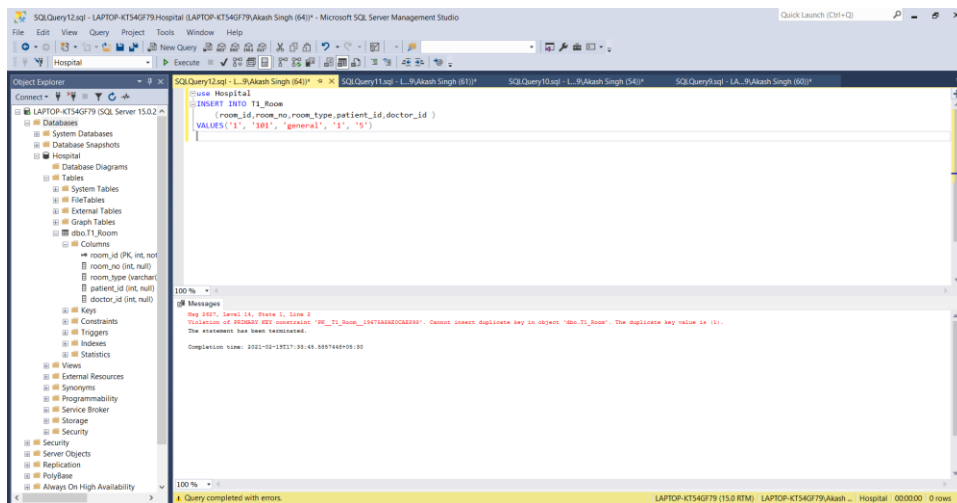
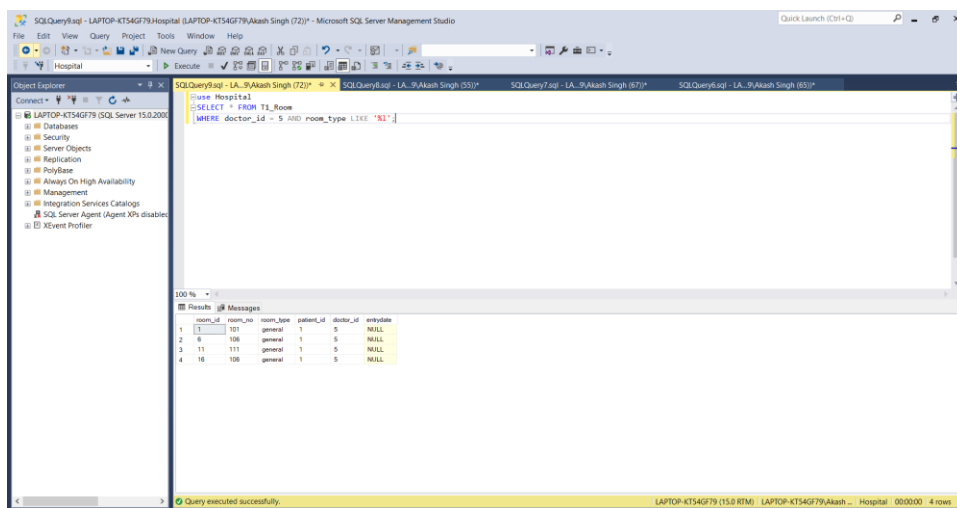
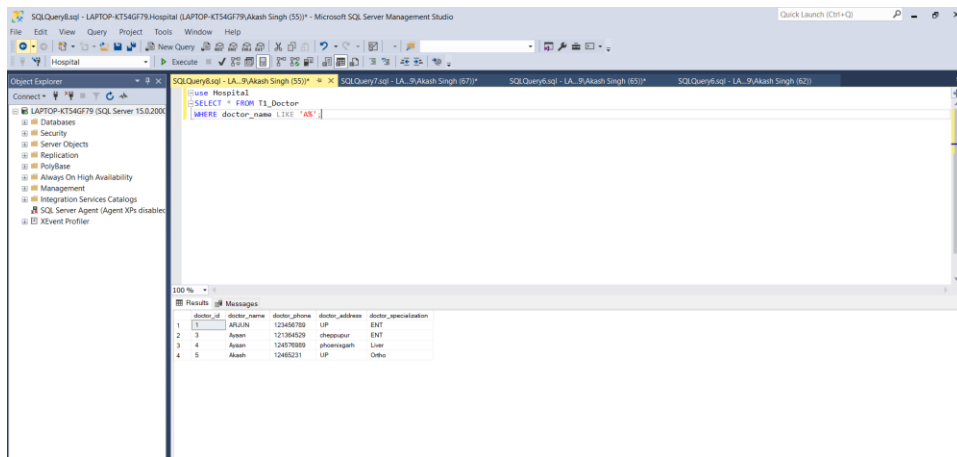
USE Hospital
SELECT * FROM T1_Room
WHERE room_id > ALL (SELECT room_id
FROM T1_Room
WHERE room_type = 'general')

```

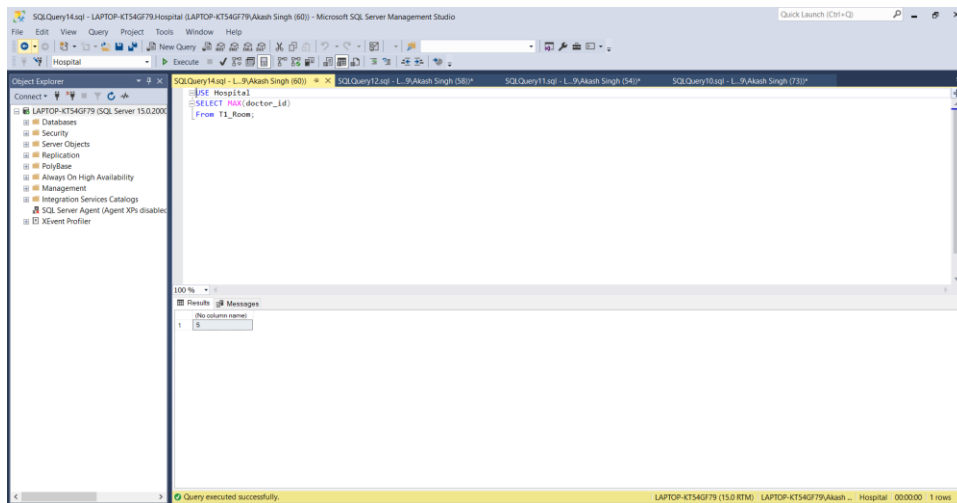
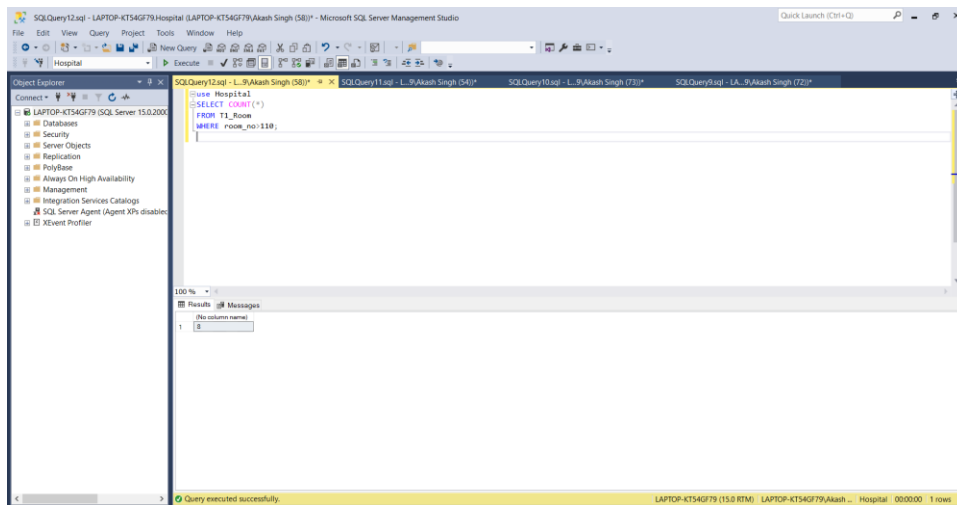
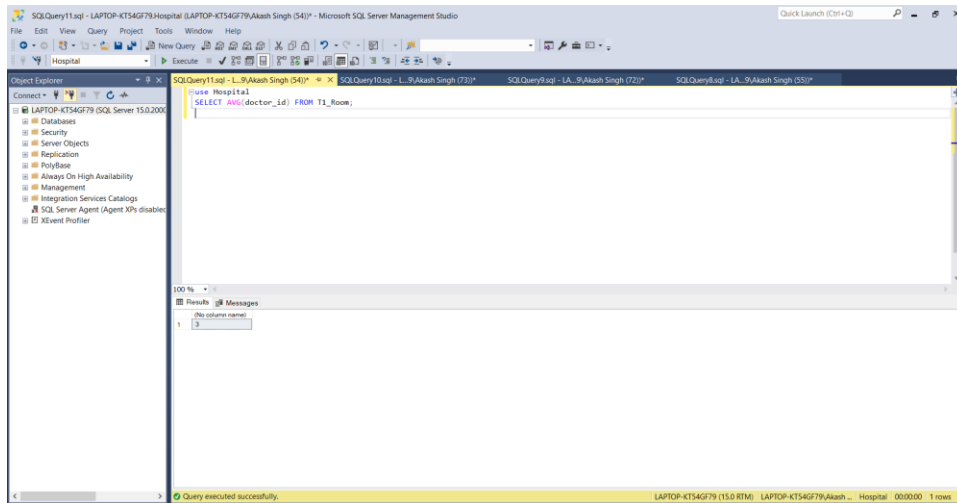
Results (3 rows):

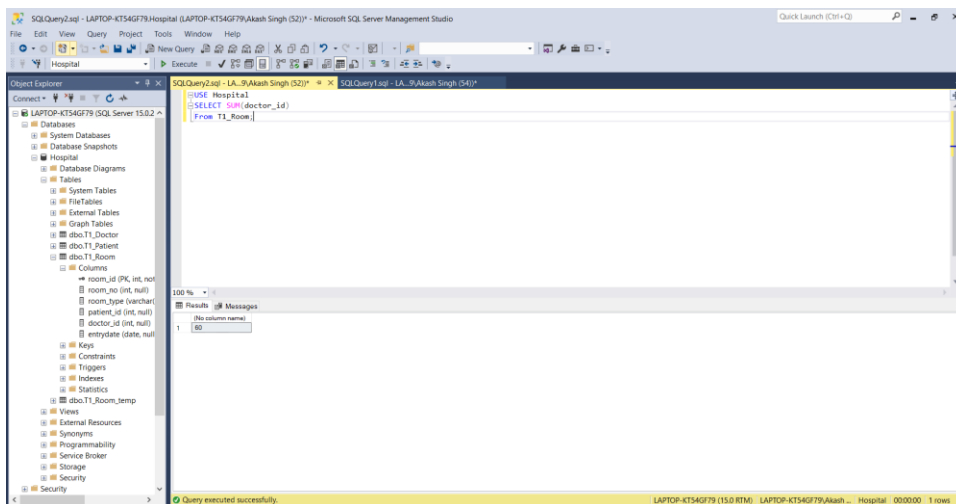
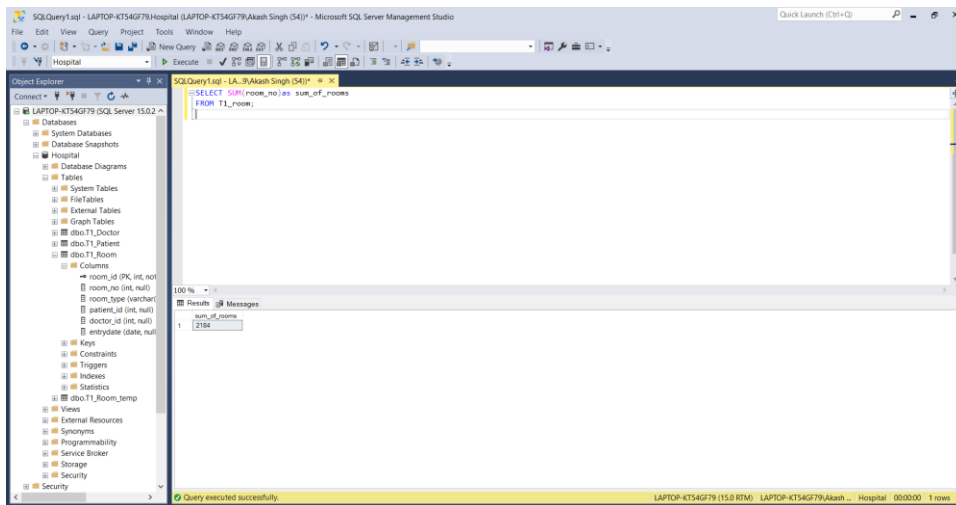
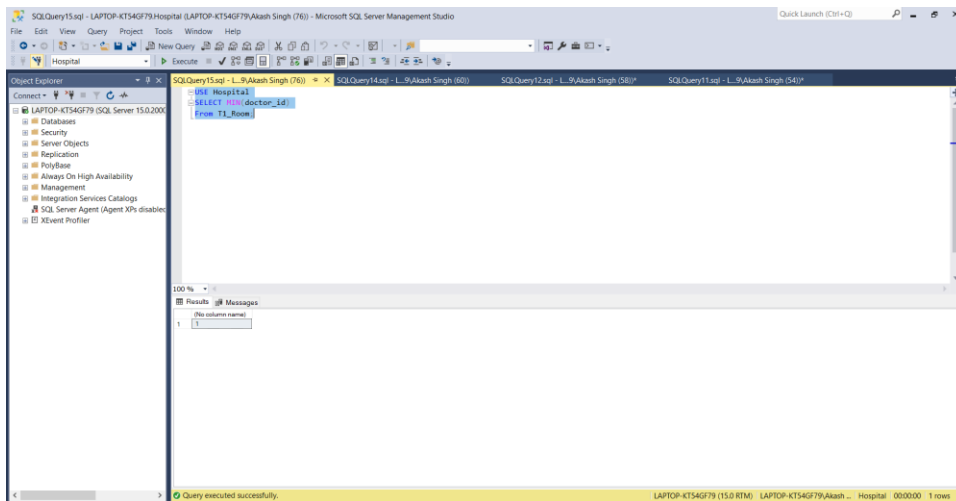
room_id	room_no	room_type	patient_id	doctor_id	entrydate
1	116	ac	3	3	NULL
2	117	ac	4	2	NULL
3	118	ac single bed	5	1	NULL

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 3 rows

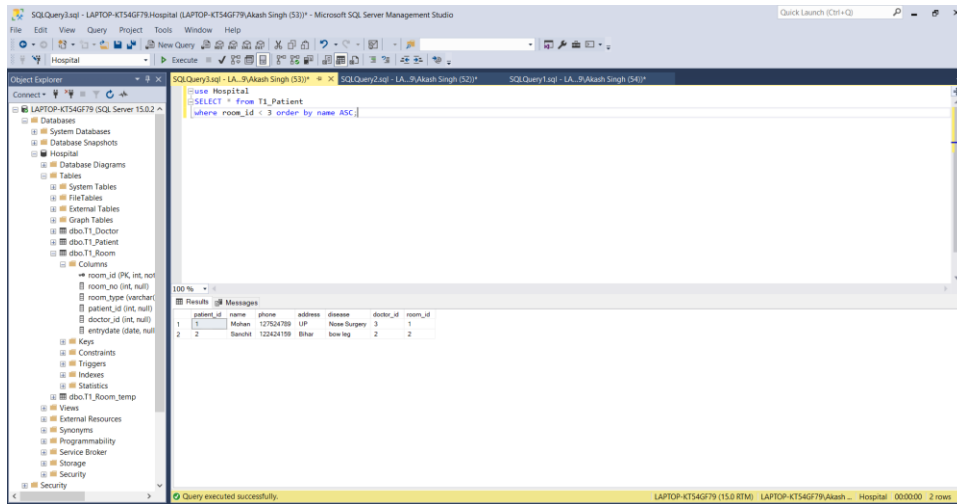


Q.2.....





Q.3



SQLQuery18.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (53)) - Microsoft SQL Server Management Studio

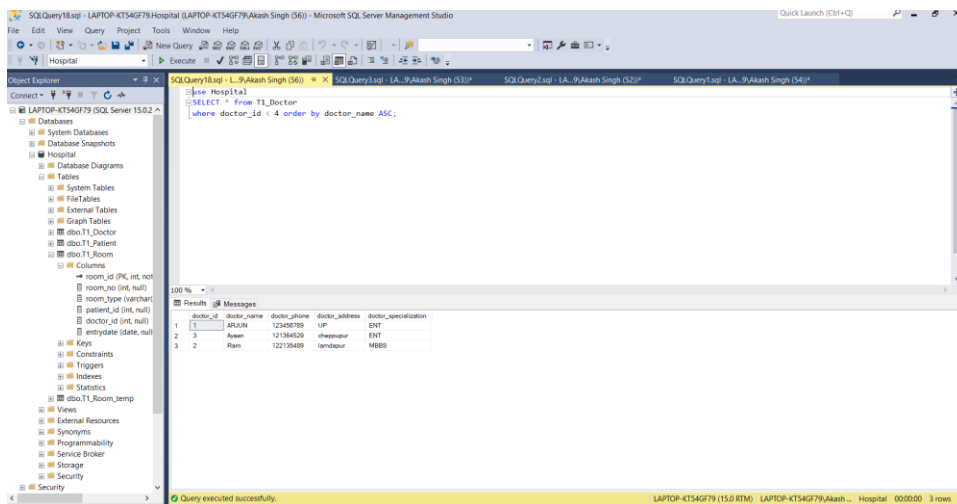
Object Explorer: Hospital > Tables > dbo.T1_Patient

```
USE Hospital
SELECT * FROM T1_Patient
WHERE room_id < 3 ORDER BY name ASC;
```

Results:

patient_id	name	phone	address	disease	doctor_id	room_id
1	Mahan	127524789	UP	New Surgery	3	1
2	Bharat	123242189	Bihar	New leg	2	2

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 2 rows



SQLQuery18.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (56)) - Microsoft SQL Server Management Studio

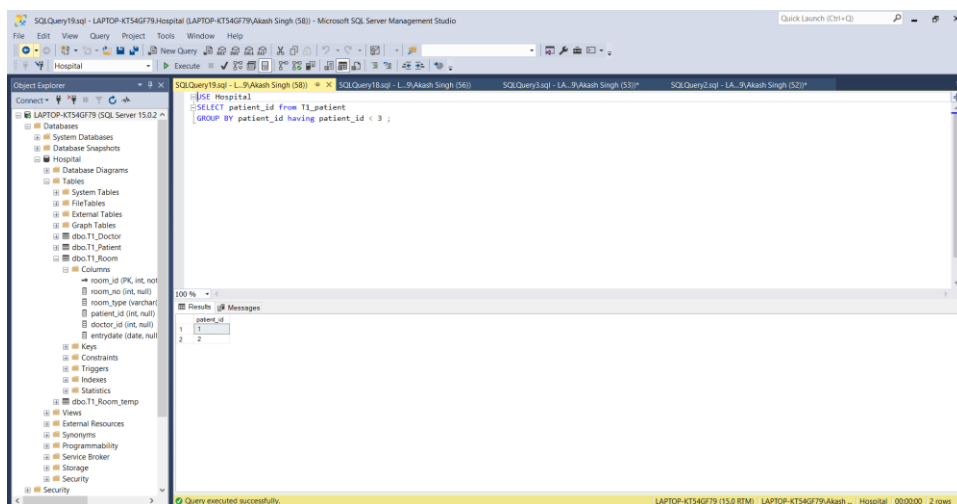
Object Explorer: Hospital > Tables > dbo.T1_Doctor

```
USE Hospital
SELECT * FROM T1_Doctor
WHERE doctor_id < 4 ORDER BY doctor_name ASC;
```

Results:

doctor_id	doctor_name	doctor_phone	doctor_address	doctor_specialization
1	Akash	123456789	UP	ENT
2	Ayan	121364529	Chhappur	ENT
3	Ram	122135489	lamhapur	MBBS

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 3 rows



SQLQuery18.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (58)) - Microsoft SQL Server Management Studio

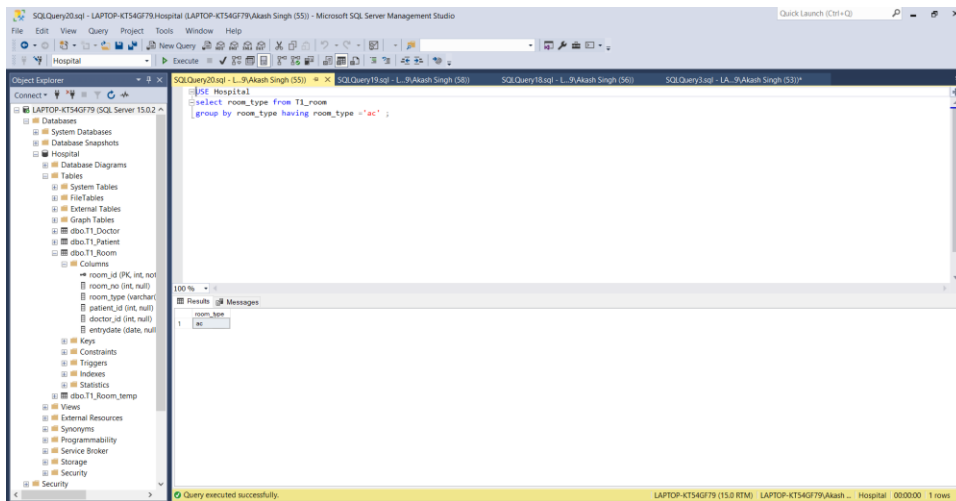
Object Explorer: Hospital > Tables > dbo.T1_Patient

```
USE Hospital
SELECT patient_id FROM T1_Patient
GROUP BY patient_id HAVING patient_id < 3;
```

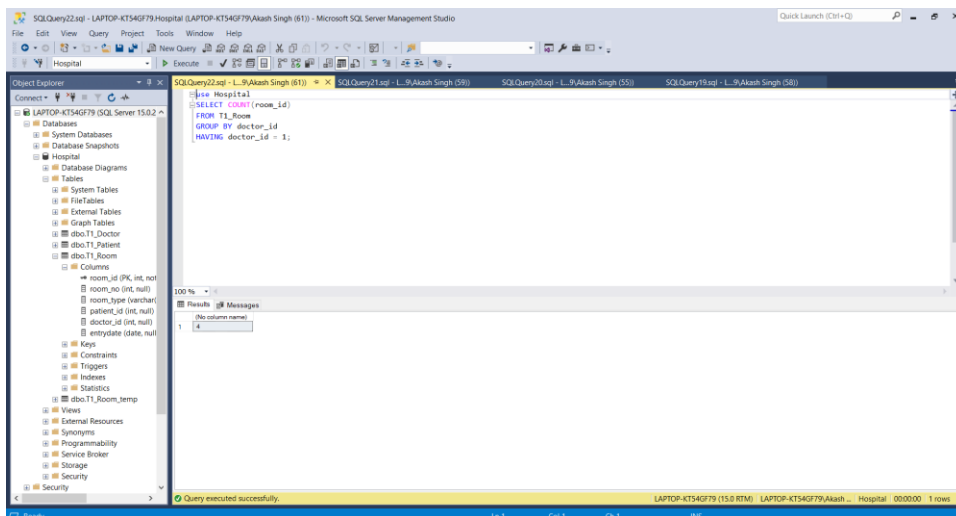
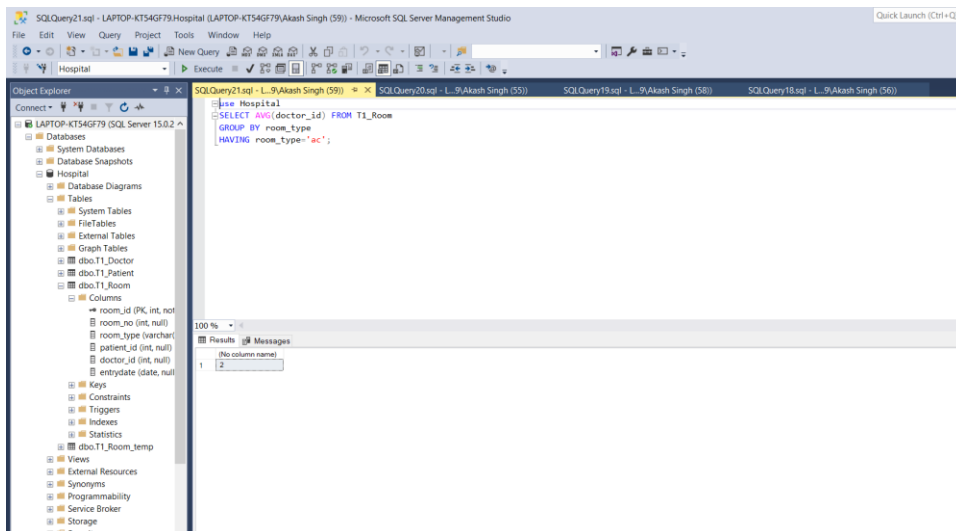
Results:

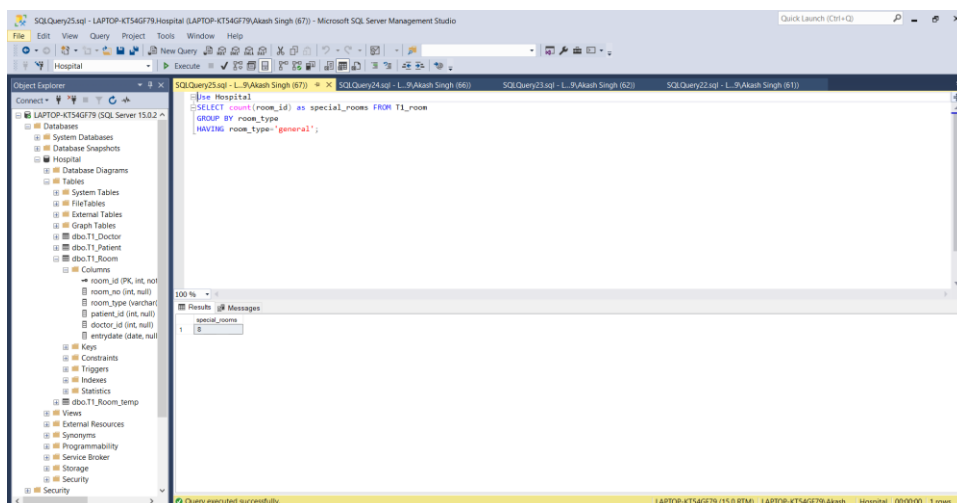
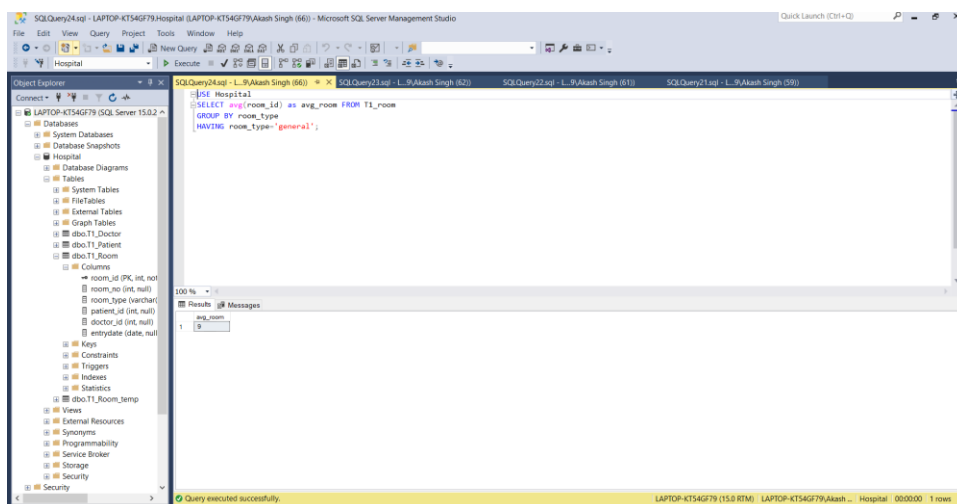
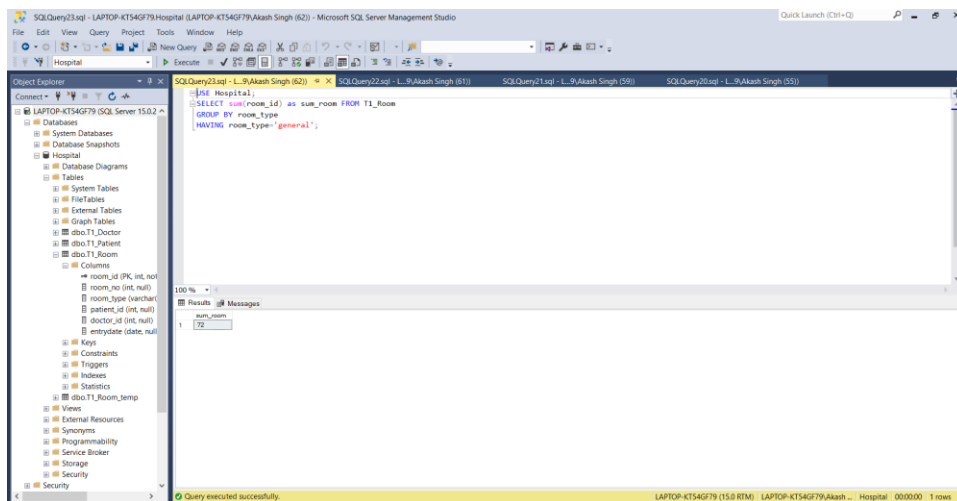
patient_id
1
2

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 2 rows



Q.4.....





Q.5.....

SQLQuery1.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (60)) - Microsoft SQL Server Management Studio

```

use Hospital
select name,patient_id from T1_patient
group by name,patient_id having patient_id < 5 order by name asc

use Hospital
select room_id,room_type from T1_room
group by room_id,room_type having room_type='general'

use Hospital
select doctor_name,doctor_specialization from T1_doctor
group by doctor_name,doctor_specialization having doctor_specialization='ENT' order by doctor_name desc

```

100 %

Results Messages

name	patient_id
Asham	4
Sumit	3
Mohan	1
Ravish	2

room_id	room_type
1	general
2	general
3	general
4	general
5	general
6	general
7	general
8	general

doctor_name	doctor_specialization
Asham	ENT
AtulK	ENT

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 14 rows

Q.6.....

SQLQuery1.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (64)) - Microsoft SQL Server Management Studio

```

use Hospital
select patient_id from T1_patient
except
select patient_id from T1_room

select * from T1_room
where not exists(select patient_id from T1_patient where patient_id < 5 and
T1_room.patient_id=T1_patient.patient_id)

select * from T1_room
where not exists(select patient_id from T1_patient where patient_id < 5 and
T1_room.patient_id=T1_patient.patient_id)

select doctor_id from T1_room
union
select doctor_id from T1_doctor

select doctor_id from T1_room
intersect
select doctor_id from T1_doctor

```

100 %

Results Messages

patient_id
11

room_id	room_no	room_type	patient_id	doctor_id	entrydate
1	101	general	1	5	NULL
2	102	general	2	4	NULL
3	103	ac	3	3	NULL
4	104	ac	4	2	NULL
5	105	general	1	5	NULL
6	106	general	2	4	NULL
7	107	general	3	3	NULL
8	108	ac	4	2	NULL
9	109	ac	4	2	NULL

room_id	room_no	room_type	patient_id	doctor_id	entrydate
1	10	ac single bed	5	1	NULL
2	10	ac single bed	5	1	NULL
3	10	ac single bed	5	1	NULL
4	20	ac single bed	5	1	NULL

doctor_id
1
2
3
4
5

doctor_id
1
2
3
4
5

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 31 rows

SQLQuery1.sql - LAPTOP-KT54GF79\Hospital (LAPTOP-KT54GF79\Akash Singh (64)) - Microsoft SQL Server Management Studio

```

use Hospital
select patient_id from T1_patient
except
select patient_id from T1_room

select * from T1_room
where not exists(select patient_id from T1_patient where patient_id < 5 and
T1_room.patient_id=T1_patient.patient_id)

select * from T1_room
where not exists(select patient_id from T1_patient where patient_id < 5 and
T1_room.patient_id=T1_patient.patient_id)

select doctor_id from T1_room
union
select doctor_id from T1_doctor

select doctor_id from T1_room
intersect
select doctor_id from T1_doctor

```

100 %

Results Messages

patient_id
11

room_id	room_no	room_type	patient_id	doctor_id	entrydate
1	101	general	1	5	NULL
2	102	general	2	4	NULL
3	103	ac	3	3	NULL
4	104	ac	4	2	NULL
5	105	general	1	5	NULL
6	106	general	2	4	NULL
7	107	general	3	3	NULL
8	108	ac	4	2	NULL
9	109	ac	4	2	NULL

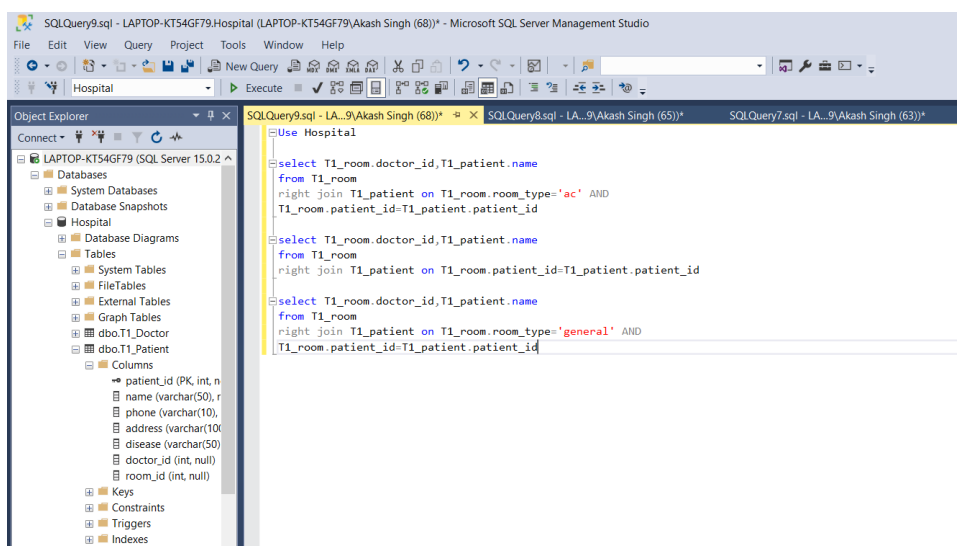
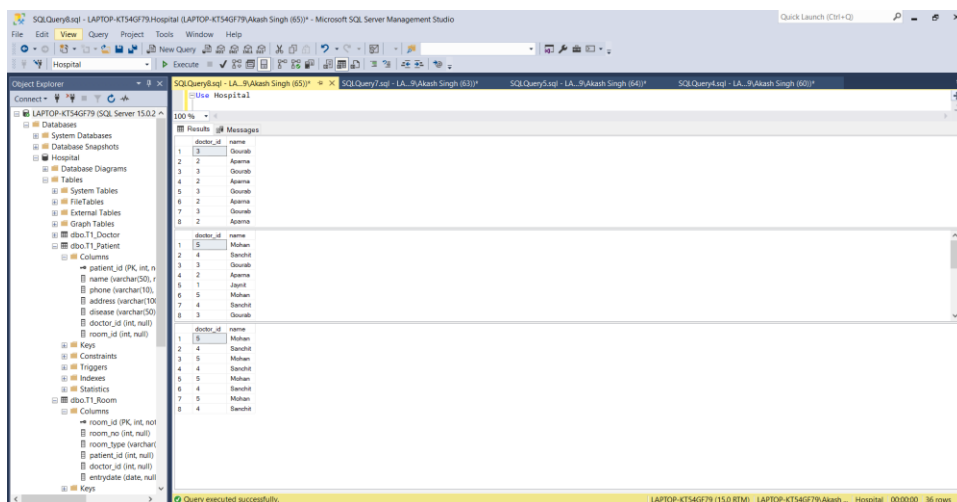
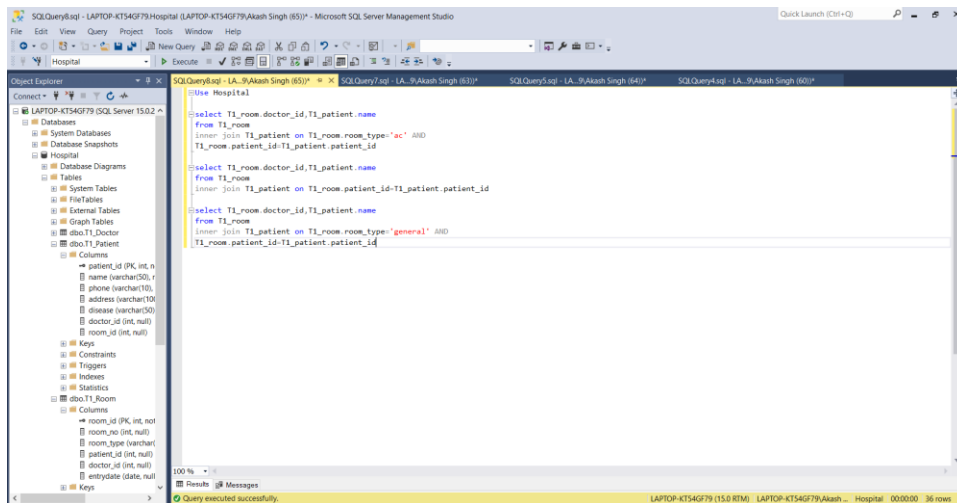
room_id	room_no	room_type	patient_id	doctor_id	entrydate
1	10	ac single bed	5	1	NULL
2	10	ac single bed	5	1	NULL
3	10	ac single bed	5	1	NULL
4	20	ac single bed	5	1	NULL

doctor_id
1
2
3
4
5

doctor_id
1
2
3
4
5

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM) LAPTOP-KT54GF79\Akash ... Hospital 00:00:00 31 rows

Q.7.....



SQLQuery8.sql - LAPTOP-KT54GF79.Hospital (LAPTOP-KT54GF79\Akash Singh (88)) - Microsoft SQL Server Management Studio

Object Explorer: LAPTOP-KT54GF79 (SQL Server 15.0.2) > Databases > Hospital > Tables > dbo.T1_Patient

Query: SQLQuery8.sql - LA...9\Akash Singh (88) *

```

SELECT
    doctor_id, name
FROM
    T1_Doctor

```

Results: 100% | Messages

doctor_id	name
1	NULL
2	NULL
3	Gourab
4	3
5	3
6	3
7	2
8	2

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM): LAPTOP-KT54GF79\Akash... Hospital: 00:00:00 43 rows

SQLQuery10.sql - LAPTOP-KT54GF79.Hospital (LAPTOP-KT54GF79\Akash Singh (89)) - Microsoft SQL Server Management Studio

Object Explorer: LAPTOP-KT54GF79 (SQL Server 15.0.2) > Databases > Hospital > Tables > dbo.T1_Room

Query: SQLQuery10.sql - LA...9\Akash Singh (89) *

```

USE Hospital

--select T1_room.doctor_id,T1_patient.name
--from T1_room
--left join T1_patient on T1_room.room_type='ac' AND
--T1_room.patient_id=T1_patient.patient_id

--select T1_room.doctor_id,T1_patient.name
--from T1_room
--left join T1_patient on T1_room.patient_id=T1_patient.patient_id

--select T1_room.doctor_id,T1_patient.name
--from T1_room
--left join T1_patient on T1_room.room_type='general' AND
--T1_room.patient_id=T1_patient.patient_id

```

Results: 100% | Messages

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM): LAPTOP-KT54GF79\Akash... Hospital: 00:00:00 60 rows

SQLQuery10.sql - LAPTOP-KT54GF79.Hospital (LAPTOP-KT54GF79\Akash Singh (69)) - Microsoft SQL Server Management Studio

Object Explorer: LAPTOP-KT54GF79 (SQL Server 15.0.2) > Databases > Hospital > Tables > dbo.T1_Room

Query: SQLQuery10.sql - L...9\Akash Singh (69) *

```

SELECT
    doctor_id, name
FROM
    T1_Doctor

```

Results: 100% | Messages

doctor_id	name
1	5
2	4
3	3
4	2
5	1
6	5
7	4
8	3

Query executed successfully. LAPTOP-KT54GF79 (15.0 RTM): LAPTOP-KT54GF79\Akash... Hospital: 00:00:00 60 rows

Q.8.....

