

1.

```
1 •  use hospital;
2 •  SELECT * FROM t1_Room
3   WHERE room_no < ANY (SELECT room_no
4                           FROM t1_Room
5                           WHERE room_id < 7
6                         );
```

The screenshot shows a MySQL query results grid. The grid has a header row with columns: room\_id, room\_no, room\_type, patient\_id, and doctor\_id. Below the header, there are three data rows. The first row contains values: 1, 101, ICU, 2, 3. The second row contains values: 2, 201, ICU, 1, 1. The third row contains values: NULL, NULL, NULL, NULL, NULL. The grid includes standard navigation buttons like back, forward, and search, along with an 'Edit' button.

|   | room_id | room_no | room_type | patient_id | doctor_id |
|---|---------|---------|-----------|------------|-----------|
| ▶ | 1       | 101     | ICU       | 2          | 3         |
|   | 2       | 201     | ICU       | 1          | 1         |
| * | NULL    | NULL    | NULL      | NULL       | NULL      |

```
1 •  use Hospital;
2 •  SELECT * FROM t1_Room
3 •      WHERE room_id < ANY (SELECT room_id
4 •                      FROM T1_Room
5 •                      WHERE room_type = 'ICU'
6 •                  );
```

Result Grid | Filter Rows: | Edit:

|   | room_id | room_no | room_type | patient_id | doctor_id |
|---|---------|---------|-----------|------------|-----------|
| ▶ | 1       | 101     | ICU       | 2          | 3         |
| * | NULL    | NULL    | NULL      | NULL       | NULL      |

| | | | | | Limit to 1000 rows |

```
1 •  use Hospital;
2 •  SELECT * FROM t1_Doctor
3 •      WHERE doctor_id < ANY (SELECT doctor_id
4 •                      FROM t1_Doctor
5 •                      WHERE doctor_address = 'Mumbai'
6 •                  );
```



Limit to 1000 rows

```
1 • use hospital;
2 • SELECT * FROM t1_Room
3   WHERE room_no > ALL (SELECT room_no
4                           FROM t1_Room
5                           WHERE room_id < 4
6 );

```



Result Grid



Filter Rows:

Edit:



|   | room_id | room_no | room_type         | patient_id | doctor_id |
|---|---------|---------|-------------------|------------|-----------|
| ▶ | 4       | 301     | Operation Theatre | 3          | 2         |
| * | NULL    | NULL    | NULL              | NULL       | NULL      |

```
1 • use hospital;
2 • SELECT * FROM t1_Room
3 • WHERE room_id <> ALL (SELECT room_id
4 •                     FROM t1_Room
5 •                     WHERE room_type = 'ICU'
6 • );

```

<

Result Grid | Filter Rows: | Edit: |

|   | room_id | room_no | room_type         | patient_id | doctor_id |
|---|---------|---------|-------------------|------------|-----------|
| ▶ | 4       | 301     | Operation Theatre | 3          | 2         |
| * | NULL    | NULL    | NULL              | NULL       | NULL      |

```
1 •  use hospital;
2 •  SELECT * FROM t1_Doctor
3 •  WHERE doctor_id <> ALL (SELECT doctor_id
4 •          FROM t1_Doctor
5 •          WHERE doctor_specializatoion = 'Eyes'
6 •      );
```

Result Grid | Filter Rows: | Edit: | Export/Import:

|   | doctor_id | doctor_name | doctor_phone | doctor_address | doctor_specializatoion |
|---|-----------|-------------|--------------|----------------|------------------------|
| ▶ | 3         | Gourab      | 1947264956   | Kolkata        | Nose                   |
| ▶ | 2         | Nihar       | 8359235634   | Mumbai         | Ears                   |
| * | NULL      | NULL        | NULL         | NULL           | NULL                   |

The screenshot shows a MySQL Workbench interface. At the top, there is a toolbar with various icons for file operations, search, and navigation. Below the toolbar, the SQL editor contains the following code:

```
1 • use hospital;
2 • select name from t1_patient
3 where name like 'a%';
```

At the bottom, the Result Grid displays the query results:

|   | name  |
|---|-------|
| ▶ | ayaan |

The 'Result Grid' tab is selected, and there is a 'Filter Rows:' input field.

The screenshot shows a MySQL Workbench interface. At the top, there is a toolbar with various icons: folder, file, lightning bolt, wrench, magnifying glass, circular arrow, red circle, checkmark, and close. Below the toolbar, a query window displays the following SQL code:

```
1 • use hospital;
2 • select name from t1_patient
3 where name like '%b';
```

Below the query window, the status bar shows the message "1 row(s) affected". Underneath the status bar, there is a "Result Grid" section. It includes a "Result Grid" tab, a refresh icon, and a "Filter Rows:" input field. The result grid itself contains one row with the following data:

|   | name   |
|---|--------|
| ▶ | Gourab |

The screenshot shows the MySQL Workbench interface. At the top, there is a toolbar with various icons for file operations, search, and database management. Below the toolbar, the SQL editor contains the following code:

```
1 • use hospital;
2 select name from t1_patient
3 where name like '%Nihar';
```

At the bottom, the Result Grid displays the query results:

| name  |
|-------|
| Nihar |

2.

```
1 • use Hospital;  
2 • SELECT AVG(doctor_id) FROM t1_room;  
3
```

| Result Grid |                | Filter Rows: | Export:  |
|-------------|----------------|--------------|----------|
|             | AVG(doctor_id) |              | ▶ 2.0000 |

```
1 • use Hospital;
2 • SELECT COUNT(*)
3   FROM t1_Room
4 WHERE room_no>101;
5
```

The screenshot shows a MySQL Workbench interface. At the top, there is a query editor window containing the provided SQL code. Below it is a results window titled "Result Grid". The results grid displays a single row of data:

|   | COUNT(*) |
|---|----------|
| ▶ | 2        |

```
1 • |use hospital;
2 • |SELECT SUM(t1_amount)
3 |FROM t1_bill;
4
```

The screenshot shows a MySQL Workbench interface. At the top, there is a toolbar with various icons. Below the toolbar is a text area containing the SQL query shown above. Underneath the query is a results grid titled "Result Grid". The grid has two columns: the first column contains a downward arrow icon, and the second column contains the value "140000". There are also icons for sorting and filtering the results.

|   | SUM(t1_amount) |
|---|----------------|
| ▶ | 140000         |

```
1 • |use hospital;
2 • |SELECT MIN(t1_amount)
3 |FROM t1_bill;
4
```

< [Result Grid] Filter Rows: [ ]

|   | MIN(t1_amount) |
|---|----------------|
| ▶ | 10000          |

```
1 • use hospital;  
2 • SELECT MAX(t1_amount)  
3   FROM t1_bill;  
4
```

The screenshot shows a MySQL Workbench interface. At the top, there is a toolbar with various icons. Below the toolbar is a status bar with the text "Result Grid | Filter Rows: [ ]". The main area is a "Result Grid" containing a single row of data. The row has two columns: the first column is empty and contains a right-pointing arrow icon; the second column is labeled "MAX(t1\_amount)" and contains the value "100000".

|   | MAX(t1_amount) |
|---|----------------|
| ▶ | 100000         |

3.

```
1 • |use hospital;
2 • select name from t1_patient
3 where patient_id<3 order by name ASC;
4
```

|   |         |
|---|---------|
|   | name    |
| ▶ | ayaan   |
|   | sanchit |

```
1 • use hospital;
2 • select * from t1_room
3 where room_id<4 order by doctor_id desc
4
```

<

Result Grid | Filter Rows: | Edit:

|   | room_id | room_no | room_type | patient_id | doctor_id |
|---|---------|---------|-----------|------------|-----------|
| ▶ | 1       | 101     | ICU       | 2          | 3         |
|   | 2       | 201     | ICU       | 1          | 1         |
| * | NULL    | NULL    | NULL      | NULL       | NULL      |

```
1 •  use hospital;
2 •  select * from t1_room
3     having room_id > 2;
4
```

Result Grid | Filter Rows:  | Edit:

|   | room_id | room_no | room_type         | patient_id | doctor_id |
|---|---------|---------|-------------------|------------|-----------|
| ▶ | 4       | 301     | Operation Theatre | 3          | 2         |
| * | NULL    | NULL    | NULL              | NULL       | NULL      |

```
1 •   use hospital;
2 •   select * from t1_patient
3     having doctor_id > 2;
4
```



```
1 •  use hospital;
2 •  select * from t1_patient
3   group by name;
4
```

Result Grid | Filter Rows:  Edit: Export/Import:

|   | patient_id | name    | phone      | address       | disease | doctor_id | room_id |
|---|------------|---------|------------|---------------|---------|-----------|---------|
| ▶ | 2          | ayaan   | 9247394038 | ayaans house  | aids    | 1         | 1       |
|   | 4          | Gourab  | 8247394038 | gourabs house | piles   | 4         | 4       |
|   | 3          | Nihar   | 9247326338 | nihars house  | hiv     | 3         | 2       |
| * | 1          | sanchit | 9873849394 | sanchit       | sanchit | 2         | 3       |
|   | HULL       | NULL    | NULL       | NULL          | NULL    | NULL      | NULL    |

```
1 •  use hospital;
2 •  select * from t1_doctor
3      where doctor_id > 1
4      group by doctor_name;
5
```

| Result Grid    Filter Rows: <input type="text"/> Edit:     Export/Import: |           |             |              |                |                        |
|---|-----------|-------------|--------------|----------------|------------------------|
|   | doctor_id | doctor_name | doctor_phone | doctor_address | doctor_specializatoion |
| ▶   | 3         | Gourab      | 1947264956   | Kolkata        | Nose                   |
|   | 2         | Nihar       | 8359235634   | Mumbai         | Ears                   |
| *   | NULL      | NULL        | NULL         | NULL           | NULL                   |

4.

```
1 • | use hospital;
2 • | SELECT AVG(t1_amount) FROM t1_bill
3 | GROUP BY payment_type
4 | HAVING payment_type='card';
5
```

```
1 • | use hospital;
2 • | SELECT count(patient_id) FROM t1_patient
3 | GROUP BY disease
4 | HAVING disease='aids';
5
```

| Result Grid |                   | Filter Rows: | Export: | Wr |
|-------------|-------------------|--------------|---------|----|
|             | count(patient_id) |              |         |    |
| ▶           | 1                 |              |         |    |

```
1 •  use hospital;
2 •  SELECT max(t1_amount) FROM t1_bill
3   GROUP BY payment_type
4   HAVING payment_type='cash';
5
```

< | Result Grid | Filter Rows: [ ] | Export:

|   | max(t1_amount) |
|---|----------------|
| ▶ | 10000          |

```
1 •  use hospital;
2 •  SELECT min(t1_amount) FROM t1_bill
3     GROUP BY payment_type
4     HAVING payment_type='card';
5
```

< [ ]

| Result Grid | | Filter Rows:  | Export

|   | min(t1_amount) |
|---|----------------|
| ▶ | 10000          |

```
1 • use hospital;
2 • SELECT sum(t1_amount) FROM t1_bill
3   group by payment_type
4   having payment_type='card';
5
```

Result Grid | Filter Rows:  Export: Wrap Cell Content:

|   | sum(t1_amount) |
|---|----------------|
| ▶ | 130000         |

5.

t1\_patient

```
1 •  use hospital;
2 •  select name,patient_id from t1_patient
3   group by name,patient_id having patient_id<4 order by name asc;
4
```

<

Result Grid | Filter Rows:  Edit: Export/Import:

|   | name    | patient_id |
|---|---------|------------|
| ▶ | ayaan   | 2          |
|   | Nihar   | 3          |
|   | sanchit | 1          |
| * | NULL    | NULL       |

```
1 •  use hospital;
2 •  select room_id,room_type,room_no from T1_room
3   group by room_id,room_type having room_type='ICU' order by room_id desc;
4
```

Result Grid | Filter Rows:  Edit: Export/Import: Wrap Cell Content:

|   | room_id | room_type | room_no |
|---|---------|-----------|---------|
| ▶ | 2       | ICU       | 201     |
| ▶ | 1       | ICU       | 101     |
| * | NUL     | NUL       | NUL     |

```
1 •  use hospital;
2 •  select doctor_name,doctor_specializatoion from t1_doctor
3   group by doctor_name,doctor_specializatoion having doctor_specializatoion='Eyes' order by doctor_name de:
4
```

Result Grid | Filter Rows:  Export: Wrap Cell Content: Result Grid

|   | doctor_name | doctor_specializatoion |
|---|-------------|------------------------|
| ▶ | Sanchit     | Eyes                   |

6.

```
1 •  use hospital;
2 •  select patient_id from t1_patient
3   where patient_id not in (
4     select patient_id from t1_room);
5
6
```

< [ ]

Result Grid | Filter Rows: [ ] | Edit: [ ]

|   | patient_id |
|---|------------|
| ▶ | 4          |
| * | NULL       |

```
1 •  use hospital;
2 •  select * from t1_room
3   where not exists(select patient_id from t1_patient
4   where patient_id <2 and t1_room.patient_id=t1_patient.patient_id);
5
```

<

Result Grid | Filter Rows: | Edit: | Export/Import: |

|   | room_id | room_no | room_type         | patient_id | doctor_id |
|---|---------|---------|-------------------|------------|-----------|
| ▶ | 1       | 101     | ICU               | 2          | 3         |
|   | 4       | 301     | Operation Theatre | 3          | 2         |
| * | NULL    | NULL    | NULL              | NULL       | NULL      |

```
1 •   use hospital;
2 •   select * from t1_room
3   where exists(select patient_id from t1_patient
4     where patient_id <3 and t1_room.patient_id=t1_patient.patient_id)
5
```

Result Grid | Filter Rows: | Edit: | Export/Import:

|   | room_id | room_no | room_type | patient_id | doctor_id |
|---|---------|---------|-----------|------------|-----------|
| ▶ | 1       | 101     | ICU       | 2          | 3         |
|   | 2       | 201     | ICU       | 1          | 1         |
| * | NUL     | NUL     | NUL       | NUL        | NUL       |

```
1 • use hospital;
2 • select doctor_id from t1_patient
3 where doctor_id in (select doctor_id from t1_doctor);
4
```

| Result Grid |           | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|-----------|--------------|---------|--------------------|
|             | doctor_id |              |         |                    |
| ▶           | 2         |              |         |                    |
|             | 1         |              |         |                    |
|             | 3         |              |         |                    |

7.

```
1 • use hospital;
2 • select t1_room.doctor_id,t1_patient.patient_id
3   from t1_room
4   inner join t1_patient on t1_room.patient_id=t1_patient.patient_id
5
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

|   | doctor_id | patient_id |
|---|-----------|------------|
| ▶ | 3         | 2          |
|   | 1         | 1          |
|   | 2         | 3          |

```
1 • select t1_room.patient_id,t1_patient.name
2   from T1_room
3   inner join t1_patient on t1_room.room_type='ICU' AND t1_room.patient_id=t1_patient.patient_id
4
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

|   | patient_id | name    |
|---|------------|---------|
| ▶ | 2          | ayaan   |
|   | 1          | sanchit |

```
1 • select t1_nurse.assigned_patient_id,t1_patient.disease  
2   from t1_nurse  
3   inner join t1_patient on t1_nurse.nurse_id>2 AND t1_nurse.assigned_patient_id=t1_patient.patient_id  
4
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

|   | assigned_patient_id | disease |
|---|---------------------|---------|
| ▶ | 3                   | hiv     |
|   | 4                   | piles   |

```
1 • select t1_bill.patient_id,t1_patient.name  
2   from t1_bill  
3   left join t1_patient on t1_bill.payment_type='card' AND t1_bill.patient_id=t1_patient.patient_id  
4
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

|   | patient_id | name    |
|---|------------|---------|
| ▶ | 2          | NULL    |
|   | 3          | Nihar   |
|   | 4          | Gourab  |
|   | 1          | sanchit |

```
1 • | select t1_room.patient_id,T1_doctor.doctor_name  
2   from t1_room  
3   left join T1_doctor on t1_room.room_type='ICU' AND t1_room.doctor_id=T1_doctor.doctor_id  
4
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

|   | patient_id | doctor_name |
|---|------------|-------------|
| ▶ | 2          | Gourab      |
|   | 1          | Sanchit     |
|   | 3          | NULL        |

```
1 • | select T1_nurse.assigned_patient_id,t1_patient.disease  
2   from T1_nurse  
3   left join t1_patient on t1_nurse.nurse_id>2 AND t1_nurse.assigned_patient_id=t1_patient.patient_id  
4
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |  Result Grid

|   | assigned_patient_id | disease |
|---|---------------------|---------|
| ▶ | 1                   | NULL    |
|   | 2                   | NULL    |
|   | 3                   | hiv     |
|   | 4                   | piles   |
|   | 5                   | NULL    |

```
1 •  select t1_bill.patient_id,t1_patient.name  
2   from t1_bill  
3   right join t1_patient on t1_bill.payment_type='card' AND t1_bill.patient_id=t1_patient.patient_id  
4
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

|   | patient_id | name    |
|---|------------|---------|
| ▶ | HULL       | ayaan   |
|   | 4          | Gourab  |
|   | 3          | Nihar   |
|   | 1          | sanchit |

```
1 •  select t1_room.patient_id,T1_doctor.doctor_name  
2   from t1_room  
3   right join T1_doctor on t1_room.room_type='ICU' AND t1_room.doctor_id=T1_doctor.doctor_id  
4
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

|   | patient_id | doctor_name |
|---|------------|-------------|
| ▶ | 2          | Gourab      |
|   | HULL       | Nihar       |
|   | 1          | Sanchit     |

```
1 • select t1_nurse.assigned_patient_id,t1_patient.disease  
2   from t1_nurse  
3   right join t1_patient on t1_nurse.nurse_id>2 AND t1_nurse.assigned_patient_id=t1_patient.patient_id  
4
```

The screenshot shows the MySQL Workbench interface. At the top, there is a toolbar with various icons. Below the toolbar, the SQL editor contains the query shown above. The results are displayed in a grid titled "Result Grid". The grid has two columns: "assigned\_patient\_id" and "disease". The data is as follows:

|   | assigned_patient_id | disease |
|---|---------------------|---------|
| ▶ | NULL                | aids    |
|   | 4                   | piles   |
|   | 3                   | hiv     |
|   | NULL                | sanchit |

8.

```
1 • select t1_bill.patient_id,t1_patient.name  
2   from t1_bill  
3   join t1_patient on t1_bill.payment_type='card' AND t1_bill.patient_id=t1_patient.patient_id  
4
```

The screenshot shows the MySQL Workbench interface. At the top, there is a toolbar with various icons. Below the toolbar, the SQL editor contains the query shown above. The results are displayed in a grid titled "Result Grid". The grid has two columns: "patient\_id" and "name". The data is as follows:

|   | patient_id | name    |
|---|------------|---------|
| ▶ | 3          | Nihar   |
|   | 4          | Gourab  |
|   | 1          | sanchit |

```
1 • select t1_room.patient_id,T1_doctor.doctor_name  
2   from t1_room  
3   join T1_doctor on t1_room.room_type='ICU' AND t1_room.doctor_id=T1_doctor.doctor_id  
4
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

|   | patient_id | doctor_name |
|---|------------|-------------|
| ▶ | 2          | Gourab      |
|   | 1          | Sanchit     |

```
1 • select T1_nurse.assigned_patient_id,t1_patient.disease  
2   from T1_nurse  
3   join t1_patient on t1_nurse.nurse_id>2 AND t1_nurse.assigned_patient_id=t1_patient.patient_id  
4
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

|   | assigned_patient_id | disease |
|---|---------------------|---------|
| ▶ | 3                   | hiv     |
|   | 4                   | piles   |