

SQL Queries

1. Select all the row where user rated the movie with rating > 3 but less than 4

The screenshot shows the DBeaver 21.3.5 interface. On the left, the Database Navigator displays the schema structure for 'dataanalyticsbootcamp'. The 'ratings_small' table is selected, showing columns: id, user_id, movie_id, rating, timestamp. The main SQL editor contains the query: `select * from ratings_small where rating > 3 and rating < 4`. The Results panel shows the output of the query, displaying 200 rows of data. The first row is highlighted.

id	user_id	movie_id	rating	timestamp
1	1	1,339	3.5	1,260,759,125
2	3	247	3.5	1,298,861,637
3	3	736	3.5	1,298,932,787
4	3	1,580	3.5	1,298,922,089
5	3	2,702	3.5	1,298,861,796
6	3	2,762	3.5	1,298,922,057
7	3	5,669	3.5	1,298,862,672
8	3	8,622	3.5	1,298,861,650
9	3	27,369	3.5	1,298,862,555

2. Selects all the rows where userid 1 rated the movie after timestamp 1260759203

The screenshot shows the DBeaver 21.3.5 interface. The SQL editor contains the query: `select * from ratings_small where user_id = 1 or movie_id = 1260759203 or timestamp = 1260759203`. The Results panel shows the output of the query, displaying 20 rows of data. The first row is highlighted.

id	user_id	movie_id	rating	timestamp
1	1	31	2.5	1,260,759,144
2	1	1,029	3	1,260,759,179
3	1	1,061	3	1,260,759,182
4	1	1,129	2	1,260,759,185
5	1	1,172	4	1,260,759,205
6	1	1,263	2	1,260,759,151
7	1	1,287	2	1,260,759,187
8	1	1,293	2	1,260,759,148
9	1	1,339	3.5	1,260,759,125

3. Select all userid who rated movie 3671 with greater than 2.5 rating

The screenshot shows the DBeaver 21.3.5 interface. The Database Navigator on the left displays the 'dataanalyticsbootcamp' database with a 'public' schema containing several tables. The 'ratings_small' table is highlighted. The SQL editor in the center contains the following query:

```
--select * from ratings_small where rating > 3 and rating < 4
--select * from ratings_small where userid = 1 or movieid = 1260759203 or timestamp = 1260759203
select userid from ratings_small where movieid = 3671 and rating > 2.5
```

The query results are displayed in a grid below the editor:

userid
1
23
30
56
73
75
76
77
83

The status bar at the bottom indicates that 57 rows were fetched in 41ms on March 04, 00:36:09.

4. Find the value of the lowest rating in the ratings table

The screenshot shows the DBeaver 21.3.5 interface. The Database Navigator on the left displays the 'dataanalyticsbootcamp' database with a 'public' schema containing several tables. The 'ratings_small' table is highlighted. The SQL editor in the center contains the following query:

```
--select * from ratings_small where rating > 3 and rating < 4
--select * from ratings_small where userid = 1 or movieid = 1260759203 or timestamp = 1260759203
--select userid from ratings_small where movieid = 3671 and rating > 2.5
select min(rating) from ratings
```

The query results are displayed in a grid below the editor:

min
0.5

The status bar at the bottom indicates that 1 row was fetched in 9.73s on March 04, 00:43:54.

5. Find the average value of rating column in the ratings table

The screenshot shows the DBeaver 21.3.5 interface. The left sidebar displays the database schema with tables like `jon_table`, `leyla_table`, `links`, `links_small`, `mira_table`, `ratings`, `ratings_small`, `saitejachava_table`, `sayokhat_table`, `student_info`, and `suhayb_table`. The main editor shows a SQL script with the following queries:

```
--select * from ratings_small where rating > 3 and rating < 4
--select * from ratings_small where userid = 1 or movieid = 1260759203 or timestamp = 1260759203
--select userid from ratings_small where movieid = 3671 and rating > 2.5
--select min(rating) from ratings
--select * from ratings_small where rating = 1 or rating = 2 or rating = 3 or rating = 4 or rating = 5
--select * from ratings_small where rating in (1,2,3,4,5)
select avg(rating) from ratings
```

The results pane shows a single row with the average rating: 3.528186633610175.

Grid	123 avg
1	3.5281866336

Value: 3.528186633610175

1 row(s) fetched - 10.506s, on Mar 04, 01:21:19

6. Find all the rows where rating is either 1 or 2 or 3 or 4 or 5

The screenshot shows the DBeaver 21.3.5 interface. The left sidebar displays the database schema. The main editor shows a SQL script with the following queries:

```
--select * from ratings_small where rating > 3 and rating < 4
--select * from ratings_small where userid = 1 or movieid = 1260759203 or timestamp = 1260759203
--select userid from ratings_small where movieid = 3671 and rating > 2.5
--select min(rating) from ratings
select * from ratings_small where rating = 1 or rating = 2 or rating = 3 or rating = 4 or rating = 5
```

The results pane shows 200 rows of data with columns: `userid`, `movieid`, `rating`, and `timestamp`.

Grid	123 userid	123 movieid	123 rating	123 timestamp
1	1	1,029	3	1,260,759,179
2	1	1,061	3	1,260,759,182
3	1	1,129	2	1,260,759,185
4	1	1,172	4	1,260,759,205
5	1	1,263	2	1,260,759,151
6	1	1,287	2	1,260,759,187
7	1	1,293	2	1,260,759,148
8	1	1,343	2	1,260,759,131
9	1	1,405	1	1,260,759,203

200 row(s) fetched - 77ms (5ms fetch), on Mar 04, 01:07:19

a. There are two different ways to solve this (Please refer to video lecture if you aren't aware)

The screenshot shows the DBeaver 21.3.5 interface. The left sidebar displays the database structure for 'dataanalyticsbootcamp', including tables like 'jon_table', 'leyla_table', 'links', 'links_small', 'mira_table', 'ratings', 'ratings_small', 'saitejachava_table', 'sayokhat_table', 'student_info', and 'suhayb_table'. The main editor shows a SQL script with several queries. The active query is:

```
select * from ratings_small where rating = 1 or rating = 2 or rating = 3 or rating = 4 or rating = 5
select * from ratings_small where rating in (1,2,3,4,5)
```

The results pane shows 200 rows fetched. The first row is highlighted:

123 user_id	123 movie_id	123 rating	123 timestamp
1	1,029	3	1,260,759,179

7. Count the number of rows whose rating is greater than 3
a.

The screenshot shows the DBeaver 21.3.5 interface. The left sidebar displays the database structure for 'dataanalyticsbootcamp', including tables like 'jon_table', 'leyla_table', 'links', 'links_small', 'mira_table', 'ratings', 'ratings_small', 'saitejachava_table', 'sayokhat_table', 'student_info', and 'suhayb_table'. The main editor shows a SQL script with several queries. The active query is:

```
select count(rating) from ratings_small where rating > 3
```

The results pane shows 1 row fetched. The first row is highlighted:

123 count
62,106

b.

The screenshot shows the DBeaver 21.3.5 interface. On the left, the Database Navigator displays the 'dataanalyticsbootcamp' database with a 'public' schema containing several tables. The 'ratings_small' table is highlighted. The main SQL editor contains a script with multiple queries, and the last query, `select count(*) from ratings_small where rating > 3`, is selected. Below the editor, the 'Results' panel shows the execution of this query, displaying a single row with a count of 62,106. The status bar at the bottom indicates '1 row(s) fetched - 42ms, on Mar 04, 13:02:30'.

count(*)
62,106

8. Sum the rating column for rows whose rating is greater than 4

The screenshot shows the DBeaver 21.3.5 interface with the same database structure. The SQL editor now contains a different query: `select sum(rating) from ratings_small where rating > 4`. The 'Results' panel shows the execution of this query, displaying a single row with a sum of 110,228.5. The status bar at the bottom indicates '1 row(s) fetched - 80ms, on Mar 04, 13:18:07'.

sum(rating)
110,228.5

