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OneNote for Windows 10

Nitish Singh

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Shapes

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DSMP 2022-23

Database...

SQL DDL...

SQL Joins

New Secti...

SQL Subq...

+ Add sect...

What is a Subquery

Types of Subqueries

Where can subqueries be u...

Independent Subquery - Sc...

Independent Subquery - Ro...

Independent Subquery - Tab...

Correlated Subquery

Usage with SELECT

Usage with FROM

Usage with HAVING

Subquery in INSERT

Subquery in UPDATE

Subquery in DELETE

+ Add page

Independent Subquery - Scalar Subquery

22 February 2023 14:28

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...

1. Find the movie with highest profit(vs order by)

2. Find how many movies have a rating > the avg of all the movie ratings(Find the count of above average movies)

3. Find the highest rated movie of 2000

4. Find the highest rated movie among all movies whose number of votes are > the dataset avg votes



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies

Limit to 1000 rows

```
2
3 • SELECT * FROM movies
4 WHERE (gross - budget) = (SELECT MAX(gross - budget)
5 FROM movies);
6
7 • SELECT * FROM movies
8 ORDER BY (gross - budget) DESC LIMIT 1
```

Result Grid

| | name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross | company | runtime |
|---|---------|--------|-------|------|-----------------------------------|-------|-----------|---------------|---------------|-------------------|---------------|-----------|-------------|-----------------------|---------|
| ▶ | Titanic | PG-13 | Drama | 1997 | December 19, 1997 (United States) | 7.8 | 1100000.0 | James Cameron | James Cameron | Leonardo DiCaprio | United States | 200000000 | 2201647264. | Twentieth Century Fox | 194.0 |

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)


Object Info Session

movies 4 x

Output

Action Output

| # | Time | Action | Message |
|-------|----------|--|---|
| ✓ 328 | 20:22:24 | SELECT * FROM sql_cx_live.movies LIMIT 0, 1000 | 1000 row(s) returned |
| ✓ 329 | 20:23:45 | USE sql_cx_live | 0 row(s) affected |
| ✗ 330 | 20:24:18 | SELECT * FROM movies WHERE (gross - budget) = (SELECT MAX(gross - profit) FROM movies) LIMIT 0, 1000 | Error Code: 1054. Unknown column 'profit' in 'field list' |
| ✓ 331 | 20:24:28 | SELECT * FROM movies WHERE (gross - budget) = (SELECT MAX(gross - budget) FROM movies) LIMIT 0, 1... | 1 row(s) returned |
| ✓ 332 | 20:25:27 | SELECT * FROM movies ORDER BY (gross - budget) DESC LIMIT 0, 1000 | 1000 row(s) returned |
| ✓ 333 | 20:25:34 | SELECT * FROM movies ORDER BY (gross - budget) DESC LIMIT 1 | 1 row(s) returned |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- campusx
- flipkart
- ipl
- maang
- mydb
- phpmyadmin
- sample
- sql_cx_live
 - Tables
 - class
 - groups
 - loyal_users
 - membership
 - movies
 - person1
 - person2
 - students
 - titanic
 - users
 - Views
 - Stored Procedures
 - Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

movies

Limit to 1000 rows

```
6
7 • SELECT * FROM movies
8 ORDER BY (gross - budget) DESC LIMIT 1;
9
10 • SELECT * FROM movies
11 WHERE score > (SELECT AVG(score)
12 FROM movies)
```

Result Grid


| | name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross |
|--|-------------------------------|--------|-----------|------|----------------------------------|-------|---------|----------------------|-------------------|--------------------|----------------|---------|----------|
| | The French Lieutenant's Woman | R | Drama | 1981 | October 16, 1981 (United States) | 7.0 | 13000.0 | Karel Reisz | John Fowles | Meryl Streep | United Kingdom | 0 | 26890068 |
| | The Great Muppet Caper | G | Adventure | 1981 | June 26, 1981 (United States) | 7.2 | 14000.0 | Jim Henson | Tom Patchett | Jim Henson | United Kingdom | 0 | 3120625 |
| | Nighthawks | R | Action | 1981 | April 10, 1981 (United States) | 6.4 | 18000.0 | Bruce Malmuth | David Shaber | Sylvester Stallone | United States | 5000000 | 19905358 |
| | Eye of the Needle | R | Romance | 1981 | July 24, 1981 (United States) | 7.1 | 9900.0 | Richard Marquand | Ken Follett | Donald Sutherl... | United Kingdom | 0 | 1758363 |
| | Prince of the City | R | Crime | 1981 | August 26, 1981 (United States) | 7.5 | 7600.0 | Sidney Lumet | Jay Presson Allen | Treat Williams | United States | 8600000 | 8124257 |
| | Divs | R | Music | 1981 | April 23, 1982 (United States) | 7.2 | 12000.0 | Jean-Jacques Beineix | Daniel Odier | W | | | |
| | Fort Apache the Bronx | R | Crime | 1981 | February 6, 1981 (United States) | 6.7 | 5800.0 | Daniel Petrie | Heywood Gould | P | | | |

movies 5 x

Output

Action Output

| # | Time | Action | Message |
|-----|----------|--|---|
| 330 | 20:24:18 | SELECT * FROM movies WHERE (gross - budget) = (SELECT MAX(gross - profit) FROM movies) LIMIT 0, 1000 | Error Code: 1054. Unknown column 'profit' in 'field list' |
| 331 | 20:24:28 | SELECT * FROM movies WHERE (gross - budget) = (SELECT MAX(gross - budget) FROM movies) LIMIT 0, 1... | 1 row(s) returned |
| 332 | 20:25:27 | SELECT * FROM movies ORDER BY (gross - budget) DESC LIMIT 0, 1000 | 1000 row(s) returned |
| 333 | 20:25:34 | SELECT * FROM movies ORDER BY (gross - budget) DESC LIMIT 1 | 1 row(s) returned |
| 334 | 20:30:17 | SELECT AVG(score) FROM movies LIMIT 0, 1000 | 1 row(s) returned |
| 335 | 20:30:56 | SELECT * FROM movies WHERE score > (SELECT AVG(score) FROM movies) LIMIT 0, 1000 | 1000 row(s) returned |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies

SCHEMAS

Filter objects

- campusx
- flipkart
- ipl
- maang
- mydb
- phpmyadmin
- sample
- sql_cx_live
 - Tables
 - class
 - groups
 - loyal_users
 - membership
 - movies
 - person1
 - person2
 - students
 - titanic
 - users
 - Views
 - Stored Procedures
 - Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

```
11 WHERE score > (SELECT AVG(score)
12 FROM movies);
13
14 • SELECT * FROM movies
15 WHERE year = 2000 AND score = (SELECT MAX(score)
16 FROM movies
17 WHERE year = 2000)
```

Result Grid


| name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross | company | runtime |
|-----------|--------|--------|------|-----------------------------|-------|-----------|--------------|----------------|---------------|---------------|-----------|-------------|---------------------|---------|
| Gladiator | R | Action | 2000 | May 5, 2000 (United States) | 8.5 | 1400000.0 | Ridley Scott | David Franzoni | Russell Crowe | United States | 103000000 | 465380802.0 | Dreamworks Pictures | 155.0 |

movies 9 x

Output

Action Output

| # | Time | Action | Message |
|-----|----------|---|----------------------|
| 333 | 20:25:34 | SELECT * FROM movies ORDER BY (gross - budget) DESC LIMIT 1 | 1 row(s) returned |
| 334 | 20:30:17 | SELECT AVG(score) FROM movies LIMIT 0, 1000 | 1 row(s) returned |
| 335 | 20:30:56 | SELECT * FROM movies WHERE score > (SELECT AVG(score) FROM movies) LIMIT 0, 1000 | 1000 row(s) returned |
| 336 | 20:31:13 | SELECT COUNT(*) FROM movies WHERE score > (SELECT AVG(score) FROM movies) LIMIT 0, 1000 | 1 row(s) returned |
| 337 | 20:32:25 | SELECT MAX(score) FROM movies WHERE year = 2000 LIMIT 0, 1000 | 1 row(s) returned |
| 338 | 20:33:09 | SELECT * FROM movies WHERE year = 2000 AND score = (SELECT MAX(score) FROM movies WHERE ye... | 1 row(s) returned |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

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Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

movies

Limit to 1000 rows

```
17 WHERE year = 2000);
18
19 • SELECT * FROM movies
20 WHERE score = (SELECT MAX(score) FROM movies
21 WHERE votes > (SELECT AVG(votes)
22 FROM movies))
23
```

Result Grid

| | name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross | company | runtime |
|---|--------------------------|--------|-------|------|----------------------------------|----------------------------------|-------|--------------|-------------|---------------|----------|------------|---------------------------|---------|---------|
| ▶ | The Shawshank Redemption | R | Drama | 1994 | October 14, 1994 (United States) | October 14, 1994 (United States) | about | Stephen King | Tim Robbins | United States | 25000000 | 28817291.0 | Castle Rock Entertainment | 142.0 | |

movies 13 x

Output

Action Output

| # | Time | Action | Message |
|-------|----------|---|---------------------|
| ✓ 337 | 20:32:25 | SELECT MAX(score) FROM movies WHERE year = 2000 LIMIT 0, 1000 | 1 row(s) returned |
| ✓ 338 | 20:33:09 | SELECT * FROM movies WHERE year = 2000 AND score = (SELECT MAX(score) FROM movies WHERE ye... | 1 row(s) returned |
| ✓ 339 | 20:34:51 | SELECT AVG(votes) FROM movies LIMIT 0, 1000 | 1 row(s) returned |
| ✓ 340 | 20:35:33 | SELECT * FROM movies WHERE votes > (SELECT AVG(votes) FROM movies) LIMIT 0, 1000 | 855 row(s) returned |
| ✓ 341 | 20:35:51 | SELECT MAX(score) FROM movies WHERE votes > (SELECT AVG(votes) FROM movies) LIMIT 0, 1000 | 1 row(s) returned |
| ✓ 342 | 20:36:38 | SELECT * FROM movies WHERE score = (SELECT MAX(score) FROM movies WHERE votes > (SELECT AV... | 1 row(s) returned |



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OneNote for Windows 10

Nitish Singh

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Shapes

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DSMP 2022-23

Database...

SQL DDL...

SQL Joins

New Secti...

SQL Subq...

What is a Subquery

Types of Subqueries

Where can subqueries be u...

Independent Subquery - Sc...

Independent Subquery - Ro...

Independent Subquery - Tab...

Correlated Subquery

Usage with SELECT

Usage with FROM

Usage with HAVING

Subquery in INSERT

Subquery in UPDATE

Subquery in DELETE

+ Add sect...

+ Add page

Independent Subquery - Row Subquery(One Col Multi Rows)


22 February 2023 14:29

✎ B A A° ☰ ☑ ...

1. Find all users who never ordered

2. Find all the movies made by top 3 directors(in terms of total gross income)

3. Find all movies of all those actors whose filmography's avg rating > 8.5(take 25000 votes as cutoff)



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

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- sql_ox_live
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato**
 - Tables
 - delivery_partner
 - food
 - loyal_users
 - menu
 - order_details
 - orders
 - restaurants
 - users
 - Views
 - Stored Procedures
 - Functions

movies users orders order_details food menu **delivery_partner**

Limit to 1000 rows

```
1 USE zomato;
2
3 • SELECT * FROM users
4 WHERE user_id NOT IN (SELECT DISTINCT(user_id)
5                        FROM orders)
6
```

Result Grid

| | user_id | name | email | password |
|---|---------|---------|-------------------|----------|
| ▶ | 6 | Anupama | anupama@gmail.com | 46rdw2 |
| | 7 | Rishabh | Rishabh@gmail.com | 4sw123 |

users 4 x

Output

Action Output


| # | Time | Action | Message |
|---|--------------|---|---|
| ✖ | 350 20:41:34 | USE zomato SELECT user_id FROM zomato | Error Code: 1064. You have an error in your SQL syntax; check t |
| ✔ | 351 20:41:38 | USE zomato | 0 row(s) affected |
| ✖ | 352 20:41:42 | SELECT user_id FROM zomato LIMIT 0, 1000 | Error Code: 1146. Table 'zomato.zomato' doesn't exist |
| ✔ | 353 20:41:48 | SELECT user_id FROM orders LIMIT 0, 1000 | 25 row(s) returned |
| ✔ | 354 20:42:05 | SELECT DISTINCT(user_id) FROM orders LIMIT 0, 1000 | 5 row(s) returned |
| ✔ | 355 20:43:01 | SELECT * FROM users WHERE user_id NOT IN (SELECT DISTINCT(user_id) FROM orders) LIMIT 0, 1000 | 2 row(s) returned |

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

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- zomato

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

```
22 FROM movies));
23
24 • SELECT * FROM movies
25 WHERE director IN (SELECT director
26                     FROM movies
27                     GROUP BY director
28                     ORDER BY SUM(gross) DESC
29                     LIMIT 3)
30
31
32
33
```

Output

Action Output

| # | Time | Action | Message |
|-------|----------|--|--|
| ✓ 357 | 20:44:24 | USE sql_cx_live | 0 row(s) affected |
| ✓ 358 | 20:44:55 | SELECT director,SUM(gross) FROM movies GROUP BY director LIMIT 0, 1000 | 1000 row(s) returned |
| ✓ 359 | 20:45:12 | SELECT director,SUM(gross) FROM movies GROUP BY director ORDER BY SUM(gross) DESC LIMIT 0, 1000 | 1000 row(s) returned |
| ✓ 360 | 20:45:23 | SELECT director,SUM(gross) FROM movies GROUP BY director ORDER BY SUM(gross) DESC LIMIT 3 | 3 row(s) returned |
| ✓ 361 | 20:45:34 | SELECT director FROM movies GROUP BY director ORDER BY SUM(gross) DESC LIMIT 3 | 3 row(s) returned |
| ✗ 362 | 20:46:40 | SELECT * FROM movies WHERE director IN (SELECT director FROM movies GROUP BY director ORDER B... | Error Code: 1235. This version of MariaDB doesn't yet support 'L |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

Filter objects

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 - Views
 - Stored Procedures
 - Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Limit to 1000 rows

```
24 WITH top_directors AS (SELECT director
25 FROM movies
26 GROUP BY director
27 ORDER BY SUM(gross) DESC
28 LIMIT 3)
29 SELECT * FROM movies
30 WHERE director IN (SELECT * FROM top_directors)
```

Result Grid

| | name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross |
|---|---|--------|-----------|------|----------------------------------|-------|-----------|------------------|------------------|-----------------------|----------------|----------|--------|
| ▶ | Indiana Jones and the Raiders of the Lost Ark | PG | Action | 1981 | June 12, 1981 (United States) | 8.4 | 905000.0 | Steven Spielberg | Lawrence Kasdan | Harrison Ford | United States | 18000000 | 389925 |
| | E.T. the Extra-Terrestrial | PG | Family | 1982 | June 11, 1982 (United States) | 7.8 | 381000.0 | Steven Spielberg | Melissa Mathison | Henry Thomas | United States | 10500000 | 792910 |
| | The Terminator | R | Action | 1984 | October 26, 1984 (United States) | 8.0 | 812000.0 | James Cameron | James Cameron | Arnold Schwarzenegger | United Kingdom | 6400000 | 783712 |
| | Indiana Jones and the Temple of Doom | PG | Action | 1984 | May 23, 1984 (United States) | 7.5 | 459000.0 | Steven Spielberg | Willard Huyck | Harrison Ford | United States | 28000000 | 333107 |
| | Romancing the Stone | PG | Action | 1984 | March 30, 1984 (United States) | 6.9 | 86000.0 | Robert Zemeckis | Diane Thomas | Michael Douglas | Mexico | 10000000 | 865722 |
| | Back to the Future | PG | Adventure | 1985 | July 3, 1985 (United States) | 8.5 | 1100000.0 | Robert Zemeckis | Robert Zemeckis | Michael | | | |
| | The Color Purple | PG-13 | Drama | 1985 | February 7, 1986 (United States) | 7.8 | 81000.0 | Steven Spielberg | Menno Meyjes | Danny | | | |

Result 18 x

Output

Action Output


| # | Time | Action | Message |
|-----|----------|--|--|
| 358 | 20:44:55 | SELECT director,SUM(gross) FROM movies GROUP BY director LIMIT 0, 1000 | 1000 row(s) returned |
| 359 | 20:45:12 | SELECT director,SUM(gross) FROM movies GROUP BY director ORDER BY SUM(gross) DESC LIMIT 0, 1000 | 1000 row(s) returned |
| 360 | 20:45:23 | SELECT director,SUM(gross) FROM movies GROUP BY director ORDER BY SUM(gross) DESC LIMIT 3 | 3 row(s) returned |
| 361 | 20:45:34 | SELECT director FROM movies GROUP BY director ORDER BY SUM(gross) DESC LIMIT 3 | 3 row(s) returned |
| 362 | 20:46:40 | SELECT * FROM movies WHERE director IN (SELECT director FROM movies GROUP BY director ORDER B... | Error Code: 1235. This version of MariaDB doesn't yet support L... |
| 363 | 20:48:12 | WITH top_directors AS (SELECT director FROM movies GROUP BY director ORDER BY SUM(gross) DESC L... | 30 row(s) returned |

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

Filter objects

- campusx
- flipkart
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 - person1
 - person2
 - students
 - titanic
 - users
 - Views
 - Stored Procedures
 - Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Limit to 1000 rows

```
30 WHERE director IN (SELECT * FROM top_directors);
31
32 • SELECT * FROM movies
33 WHERE star IN (SELECT star FROM movies
34 WHERE votes > 25000
35 GROUP BY star
36 HAVING AVG(score) > 8.5)
37
```

Result Grid

| | name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross |
|---|-----------------------------|--------|-----------|------|----------------------------------|-------|---------|-----------------|-----------------|-----------------|---------------|----------|------------|
| ▶ | Johnny Stecchino | R | Comedy | 1991 | October 24, 1991 (Italy) | 7.2 | 10000.0 | Roberto Benigni | Roberto Benigni | Roberto Benigni | Italy | 0 | 626057.0 |
| | The Adventures of Huck Finn | PG | Adventure | 1993 | April 2, 1993 (United States) | 6.2 | 8000.0 | Stephen Sommers | Mark Twain | Elijah Wood | United States | 6500000 | 24103594.0 |
| | Son of the Pink Panther | PG | Comedy | 1993 | August 27, 1993 (United States) | 3.9 | 5000.0 | Blake Edwards | Maurice Richlin | Roberto Benigni | Italy | 25000000 | 2438031.0 |
| | North | PG | Adventure | 1994 | July 22, 1994 (United States) | 4.5 | 13000.0 | Rob Reiner | Alan Zweibel | Elijah | | | |
| | The War | PG-13 | Drama | 1994 | November 4, 1994 (United States) | 6.8 | 12000.0 | Jon Avnet | Kathy McWorter | Elijah | | | |

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

movies 27 x

Output

Action Output

| # | Time | Action | Message |
|-----|----------|--|-------------------|
| 367 | 20:52:25 | SELECT star,AVG(score) FROM movies WHERE votes > 25000 GROUP BY star HAVING AVG(score) > 8.5 LI... | 3 row(s) returned |
| 368 | 20:52:46 | SELECT star FROM movies WHERE votes > 25000 GROUP BY star HAVING AVG(score) > 8.5 LIMIT 0, 1000 | 3 row(s) returned |
| 369 | 20:53:13 | SELECT * FROM movies WHERE star IN (SELECT star FROM movies WHERE votes > 25000 GROUP BY st... | 8 row(s) returned |
| 370 | 20:53:34 | SELECT * FROM movies WHERE star IN (SELECT star FROM movies WHERE votes > 25000 GROUP BY st... | 5 row(s) returned |
| 371 | 20:53:40 | SELECT * FROM movies WHERE star IN (SELECT star FROM movies WHERE votes > 25000 GROUP BY st... | 3 row(s) returned |
| 372 | 20:54:12 | SELECT * FROM movies WHERE star IN (SELECT star FROM movies WHERE votes > 25000 GROUP BY st... | 8 row(s) returned |

14:29

- | year | Profit |
|------|--------|
| 1980 | 20M → |
| 1981 | 16M ← |
- ← → many



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

Filter objects

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- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Limit to 1000 rows

```
36 HAVING AVG(score) > 8.5);
37
38 • SELECT * FROM movies
39 WHERE (year,gross-budget) IN (SELECT year,MAX(gross - budget)
40                                FROM movies
41                                GROUP BY year)
42
43
```

Result Grid

| | name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross |
|---|--|--------|--------|------|-------------------------------|-------|-----------|------------------|------------------|---------------|---------------|----------|-------------|
| ▶ | Star Wars: Episode V - The Empire Strikes Back | PG | Action | 1980 | June 20, 1980 (United States) | 8.7 | 1200000.0 | Irvin Kershner | Leigh Brackett | Mark Hamill | United States | 18000000 | 538375067.0 |
| | Indiana Jones and the Raiders of the Lost Ark | PG | Action | 1981 | June 12, 1981 (United States) | 8.4 | 905000.0 | Steven Spielberg | Lawrence Kasdan | Harrison Ford | United States | 18000000 | 389925971.0 |
| | E.T. the Extra-Terrestrial | PG | Family | 1982 | June 11, 1982 (United States) | 7.8 | 381000.0 | Steven Spielberg | Melissa Mathison | Henry Thomas | United States | 10500000 | 792910554.0 |
| | Star Wars: Episode VI - Return of the Jedi | PG | Action | 1983 | May 25, 1983 (United States) | 8.3 | 973000.0 | Richard Marquand | Lawrence Kasdan | Mark | | | |
| | Indiana Jones and the Temple of Doom | PG | Action | 1984 | May 23, 1984 (United States) | 7.5 | 459000.0 | Steven Spielberg | Willard Huyck | Harri | | | |

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

movies 29 x

Output

Action Output

| # | Time | Action | Message |
|-------|----------|---|--------------------|
| ✓ 369 | 20:53:13 | SELECT * FROM movies WHERE star IN (SELECT star FROM movies WHERE votes > 25000 GROUP BY st... | 8 row(s) returned |
| ✓ 370 | 20:53:34 | SELECT * FROM movies WHERE star IN (SELECT star FROM movies WHERE votes > 25000 GROUP BY st... | 5 row(s) returned |
| ✓ 371 | 20:53:40 | SELECT * FROM movies WHERE star IN (SELECT star FROM movies WHERE votes > 25000 GROUP BY st... | 3 row(s) returned |
| ✓ 372 | 20:54:12 | SELECT * FROM movies WHERE star IN (SELECT star FROM movies WHERE votes > 25000 GROUP BY st... | 8 row(s) returned |
| ✓ 373 | 21:00:47 | SELECT year,MAX(gross - budget) FROM movies GROUP BY year LIMIT 0, 1000 | 22 row(s) returned |
| ✓ 374 | 21:03:12 | SELECT * FROM movies WHERE (year,gross-budget) IN (SELECT year,MAX(gross - budget) FROM movies G... | 22 row(s) returned |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

Filter objects

- campusx
- flipkart
- ipl
- maang
- mydb
- phpmyadmin
- sample
- sql_cx_live
 - Tables
 - class
 - groups
 - loyal_users
 - membership
 - movies
 - person1
 - person2
 - students
 - titanic
 - users
 - Views
 - Stored Procedures
 - Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Limit to 1000 rows

```
41 GROUP BY year);
42
43 • SELECT * FROM movies
44 WHERE (genre,score) IN (SELECT genre,MAX(score)
45 FROM movies
46 WHERE votes > 25000
47 GROUP BY genre)
48 AND votes > 25000
```

Result Grid

| | name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross | company |
|---|----------------------------|--------|-----------|------|-----------------------------------|-------|-----------|------------------|------------------|----------------|---------------|----------|-------------|-------------------|
| ▶ | The Thing | R | Horror | 1982 | June 25, 1982 (United States) | 8.1 | 382000.0 | John Carpenter | Bill Lancaster | Kurt Russell | United States | 15000000 | 19632053.0 | Universal Picture |
| | E.T. the Extra-Terrestrial | PG | Family | 1982 | June 11, 1982 (United States) | 7.6 | 381000.0 | Steven Spielberg | Melissa Mathison | Henry Thomas | United States | 10500000 | 792910554.0 | Universal Picture |
| | Starman | PG | Romance | 1984 | December 14, 1984 (United States) | 7.0 | 44000.0 | John Carpenter | Bruce A. Evans | Jeff Bridges | United States | 22000000 | 28744356.0 | Columbia Picture |
| | Back to the Future | PG | Adventure | 1985 | July 3, 1985 (United States) | 8.5 | 1100000.0 | Robert Zemeckis | Robert Zemeckis | Michael J. Fox | Unit | | | |
| | Schindler's List | R | Biography | 1993 | February 4, 1994 (United States) | 8.9 | 1200000.0 | Steven Spielberg | Thomas Keneally | Liam Neeson | Unit | | | |

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

movies 33 x

Output

Action Output

| # | Time | Action | Message |
|-------|----------|---|--------------------|
| ✓ 373 | 21:00:47 | SELECT year,MAX(gross - budget) FROM movies GROUP BY year LIMIT 0, 1000 | 22 row(s) returned |
| ✓ 374 | 21:03:12 | SELECT * FROM movies WHERE (year,gross-budget) IN (SELECT year,MAX(gross - budget) FROM movies G... | 22 row(s) returned |
| ✓ 375 | 21:05:18 | SELECT genre,MAX(score) FROM movies GROUP BY genre LIMIT 0, 1000 | 17 row(s) returned |
| ✓ 376 | 21:05:36 | SELECT genre,MAX(score) FROM movies WHERE votes > 25000 GROUP BY genre LIMIT 0, 1000 | 12 row(s) returned |
| ✓ 377 | 21:06:25 | SELECT * FROM movies WHERE (genre,score) IN (SELECT genre,MAX(score) FROM movies WHERE votes ... | 13 row(s) returned |
| ✓ 378 | 21:07:16 | SELECT * FROM movies WHERE (genre,score) IN (SELECT genre,MAX(score) FROM movies WHERE votes ... | 12 row(s) returned |

MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

Filter objects

- campusx
- flipkart
- ipl
- maang
- mydb
- phpmyadmin
- sample
- sql_cx_live
 - Tables
 - class
 - groups
 - loyal_users
 - membership
 - movies
 - person1
 - person2
 - students
 - titanic
 - users
 - Views
 - Stored Procedures
 - Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Limit to 1000 rows

```
51 SELECT star,director,MAX(gross)
52 FROM movies
53 GROUP BY star,director
54 ORDER BY SUM(gross) DESC LIMIT 5
55 )
56
57 SELECT * FROM movies
58 WHERE (star,director,gross) IN (SELECT * FROM top_duos)
```

Result Grid

| | name | rating | genre | year | released | score | votes | director | writer | star | country | budget | gross | company |
|---|------------------------------------|--------|-----------|------|-----------------------------------|-------|-----------|------------------|------------------|-------------------|---------------|----------|-------------|-------------|
| ▶ | Indiana Jones and the Last Crusade | PG-13 | Action | 1989 | May 24, 1989 (United States) | 8.2 | 707000.0 | Steven Spielberg | Saffron Boam | Harrison Ford | United States | 48000000 | 474171806.0 | Paramount |
| | Lethal Weapon 3 | R | Action | 1992 | May 15, 1992 (United States) | 6.7 | 160000.0 | Richard Donner | Steven Spielberg | Mel Gibson | United States | 35000000 | 321731527.0 | Warner Bros |
| | Forrest Gump | PG-13 | Drama | 1994 | July 6, 1994 (United States) | 8.8 | 1900000.0 | Robert Zemeckis | Winston Groom | Tom Hanks | United States | 55000000 | 678226133.0 | Paramount |
| | The Lion King | G | Animation | 1994 | June 24, 1994 (United States) | 8.5 | 970000.0 | Roger Allers | Irene Mecchi | Matthew Broderick | | | | |
| | Titanic | PG-13 | Drama | 1997 | December 19, 1997 (United States) | 7.8 | 1100000.0 | James Cameron | James Cameron | Leonardo DiCaprio | | | | |

Result 37 x

Output

Action Output


| # | Time | Action | Message |
|-----|----------|---|----------------------|
| 377 | 21:06:25 | SELECT * FROM movies WHERE (genre,score) IN (SELECT genre,MAX(score) FROM movies WHERE votes ... | 13 row(s) returned |
| 378 | 21:07:16 | SELECT * FROM movies WHERE (genre,score) IN (SELECT genre,MAX(score) FROM movies WHERE votes ... | 12 row(s) returned |
| 379 | 21:10:27 | SELECT star,director,SUM(gross),MAX(gross) FROM movies GROUP BY star,director LIMIT 0, 1000 | 1000 row(s) returned |
| 380 | 21:10:43 | SELECT star,director,SUM(gross),MAX(gross) FROM movies GROUP BY star,director ORDER BY SUM(gross) ... | 5 row(s) returned |
| 381 | 21:11:07 | SELECT star,director,MAX(gross) FROM movies GROUP BY star,director ORDER BY SUM(gross) DESC LIM... | 5 row(s) returned |
| 382 | 21:12:19 | WITH top_duos AS (SELECT star,director,MAX(gross) FROM movies GROUP BY star,director ORDER BY SU... | 5 row(s) returned |

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session



22 February 2023 14:29

- 

MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

campusx

flipkart

ipl

maang

mydb

phpmyadmin

sample

sql_cx_live

Tables

class

groups

loyal_users

membership

movies

person1

person2

students

titanic

users

Views

Stored Procedures

Functions

sql_tasks

swiggy

temp_db

test

tinder

zomato

Administration Schemas

movies

users

orders

order_details

food

menu

delivery_partner

Limit to 1000 rows

59

60 • SELECT * FROM movies;

61

62 • SELECT * FROM movies m1

63 WHERE score > (SELECT AVG(score) FROM movies m2 WHERE m2.genre = m1.genre)

64

65

66

67

68

69

70

71

Information

Table: movies

Columns:

name varchar(72)

rating varchar(9)

genre varchar(9)

year int(4)

released varchar(45)

score decimal(2,1)

votes decimal(8,1)

Object Info Session

Output

Action Output

| # | Time | Action | Message |
|-----|----------|---|---|
| 380 | 21:10:43 | SELECT star,director,SUM(gross),MAX(gross) FROM movies GROUP BY star,director ORDER BY SUM(gross) ... | 5 row(s) returned |
| 381 | 21:11:07 | SELECT star,director,MAX(gross) FROM movies GROUP BY star,director ORDER BY SUM(gross) DESC LIM... | 5 row(s) returned |
| 382 | 21:12:19 | WITH top_duos AS (SELECT star,director,MAX(gross) FROM movies GROUP BY star,director ORDER BY SU... | 5 row(s) returned |
| 383 | 21:16:13 | SELECT * FROM movies LIMIT 0, 1000 | 1000 row(s) returned |
| 384 | 21:20:20 | SELECT * FROM movies m1 WHERE score > (SELECT AVG(score) FROM movies m2 WHERE m2.genre = m... | 1000 row(s) returned |
| 385 | 21:20:51 | SELECT AVG(score) FROM movies m2 WHERE m2.genre = m1.genre LIMIT 0, 1000 | Error Code: 1054. Unknown column 'm1.genre' in 'where clause' |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

Filter objects

- campusx
- flipkart
- ipl
- maang
- mydb
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 - titanic
 - users
 - Views
 - Stored Procedures
 - Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

```
5 FROM orders);
6
7 WITH fav_food AS (
8     SELECT t2.user_id,name,f_name,COUNT(*) AS 'frequency' FROM users t1
9     JOIN orders t2 ON t1.user_id = t2.user_id
10    JOIN order_details t3 ON t2.order_id = t3.order_id
11    JOIN food t4 ON t3.f_id = t4.f_id
12    GROUP BY t2.user_id,t3.f_id
```

Result Grid


| user_id | name | f_name | frequency |
|---------|----------|-----------------|-----------|
| 1 | Nitish | Non-veg Pizza | 1 |
| 1 | Nitish | Choco Lava cake | 5 |
| 1 | Nitish | Chicken Wings | 1 |
| 1 | Nitish | Rice Meal | 2 |
| 1 | Nitish | Roti meal | 1 |
| 2 | Khushboo | Non-veg Pizza | 1 |

Result 13 x

Output

Action Output

| # | Time | Action | Message |
|-----|----------|---|--------------------|
| 389 | 21:29:01 | SELECT * FROM users t1 JOIN orders t2 ON t1.user_id = t2.user_id JOIN order_details t3 ON t2.order_id = t3... | 50 row(s) returned |
| 390 | 21:29:13 | SELECT name,f_name FROM users t1 JOIN orders t2 ON t1.user_id = t2.user_id JOIN order_details t3 ON t2.o... | 50 row(s) returned |
| 391 | 21:30:29 | SELECT name,f_name,COUNT(*) FROM users t1 JOIN orders t2 ON t1.user_id = t2.user_id JOIN order_details... | 25 row(s) returned |
| 392 | 21:31:40 | WITH fav_food AS (SELECT name,f_name,COUNT(*) FROM users t1 JOIN orders t2 ON t1.user_id = t2.user_... | 25 row(s) returned |
| 393 | 21:32:02 | WITH fav_food AS (SELECT name,f_name,COUNT(*) AS frequency' FROM users t1 JOIN orders t2 ON t1.us... | 25 row(s) returned |
| 394 | 21:32:13 | WITH fav_food AS (SELECT t2.user_id,name,f_name,COUNT(*) AS frequency' FROM users t1 JOIN orders t... | 25 row(s) returned |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

Filter objects

- campusx
- flipkart
- ipl
- maang
- mydb
- phpmyadmin
- sample
- sql_ox_live
 - Tables
 - class
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 - titanic
 - users
 - Views
 - Stored Procedures
 - Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

```
8 SELECT t2.user_id,name,f_name,COUNT(*) AS 'frequency' FROM users t1
9 JOIN orders t2 ON t1.user_id = t2.user_id
10 JOIN order_details t3 ON t2.order_id = t3.order_id
11 JOIN food t4 ON t3.f_id = t4.f_id
12 GROUP BY t2.user_id,t3.f_id
13 )
14 SELECT * FROM fav_food f1
15 WHERE frequency = (SELECT MAX(frequency))
```

Result Grid

| | user_id | name | f_name | frequency |
|---|----------|------------------|--------|-----------|
| 1 | Nitish | Choco Lava cake | 5 | |
| 2 | Khushboo | Choco Lava cake | 3 | |
| 3 | Vartika | Chicken Wings | 3 | |
| 4 | Ankit | Schezwan Noodles | 3 | |
| 4 | Ankit | Veg Manchurian | 3 | |
| 5 | Neha | Choco Lava cake | 5 | |

Result 14 x

Output

Action Output

| # | Time | Action | Message |
|-----|----------|---|--|
| 391 | 21:30:29 | SELECT name,f_name,COUNT(*) FROM users t1 JOIN orders t2 ON t1.user_id = t2.user_id JOIN order_details... | 25 row(s) returned |
| 392 | 21:31:40 | WITH fav_food AS (SELECT name,f_name,COUNT(*) FROM users t1 JOIN orders t2 ON t1.user_id = t2.user_... | 25 row(s) returned |
| 393 | 21:32:02 | WITH fav_food AS (SELECT name,f_name,COUNT(*) AS frequency' FROM users t1 JOIN orders t2 ON t1.us... | 25 row(s) returned |
| 394 | 21:32:13 | WITH fav_food AS (SELECT t2.user_id,name,f_name,COUNT(*) AS frequency' FROM users t1 JOIN orders t... | 25 row(s) returned |
| 395 | 21:34:18 | WITH fav_food AS (SELECT t2.user_id,name,f_name,COUNT(*) AS frequency' FROM users t1 JOIN orders t... | Error Code: 1054. Unknown column 'frequency' in 'field list' |
| 396 | 21:34:28 | WITH fav_food AS (SELECT t2.user_id,name,f_name,COUNT(*) AS frequency' FROM users t1 JOIN orders t... | 6 row(s) returned |










































← →

OneNote for Windows 10

Nitish Singh

— □ ×

Home Insert Draw View Help



Shapes Ink to Shape Ink to Text

DSMP 2022-23

Database...

SQL DDL...

SQL Joins

New Secti...

SQL Subq...

What is a Subquery

Types of Subqueries

Where can subqueries be u...

Independent Subquery - Sc...

Independent Subquery - Ro...

Independent Subquery - Ta...

Correlated Subquery

Usage with SELECT

Usage with FROM

Usage with HAVING

Subquery in INSERT

Subquery in UPDATE

Subquery in DELETE

+ Add sect...

+ Add page

Usage with SELECT

22 February 2023 14:29


1. Get the percentage of votes for each movie compared to the total number of votes.

2. Display all movie names ,genre, score and avg(score) of genre

-> Why this is inefficient?

20 + 20

name | percent of votes



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner

SCHEMAS

Filter objects

- campusx
 - flipkart
 - ipl
 - maang
 - mydb
 - phpmyadmin
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 - titanic
 - users
 - Views
 - Stored Procedures
 - Functions
 - sql_tasks
 - swiggy
 - temp_db
 - test
 - tinder
 - zomato

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

Limit to 1000 rows

```
64
65 • SELECT name, (votes/(SELECT SUM(votes) FROM movies))*100 FROM movies;
66
67 • SELECT name,genre,score,
68   (SELECT AVG(score) FROM movies m2 WHERE m2.genre = m1.genre)
69   FROM movies m1
70
71
```

Result Grid

| name | genre | score | (SELECT AVG(score) FROM movies m2 WHERE m2.genre = m1.genre) |
|--|-----------|-------|--|
| The Shining | Drama | 8.4 | 6.67361 |
| The Blue Lagoon | Adventure | 5.8 | 6.15195 |
| Star Wars: Episode V - The Empire Strikes Back | Action | 8.7 | 6.01497 |
| Airplane! | Comedy | 7.7 | 6.17941 |
| Caddyshack | Comedy | 7.3 | 6.17941 |

Result 46 x

Output

Action Output

| # | Time | Action | Message |
|-----|----------|--|----------------------|
| 399 | 21:40:01 | SELECT name, (votes/(SELECT SUM(votes) FROM movies))*0.1 FROM movies LIMIT 0, 1000 | 1000 row(s) returned |
| 400 | 21:40:10 | SELECT name, (votes/(SELECT SUM(votes) FROM movies))*100 FROM movies LIMIT 0, 1000 | 1000 row(s) returned |
| 401 | 21:41:31 | SELECT name,genre,score FROM movies LIMIT 0, 1000 | 1000 row(s) returned |
| 402 | 21:42:21 | SELECT name,genre,score,(SELECT AVG(genre) FROM movies m2 WHERE m2.genre = m1.genre) FROM m... | 1000 row(s) returned |
| 403 | 21:43:02 | SELECT name,genre,score,(SELECT AVG(genre) FROM movies m2 WHERE m2.genre = m1.genre) FROM m... | 1000 row(s) returned |
| 404 | 21:43:22 | SELECT name,genre,score,(SELECT AVG(score) FROM movies m2 WHERE m2.genre = m1.genre) FROM m... | 1000 row(s) returned |



22 February 2023 14:30

1. Display average rating of all the restaurants



MySQL Workbench

campusx - Warning - not supp...

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

moviesusersordersorder_detailsoodmenu

delivery_partnerrestaurants

SCHEMAS

Filter objects

classgroupsloyal_usersmembershipmoviesperson1person2studentstitanicusers

ViewsStored ProceduresFunctions

sql_tasksswiggytemp_dbtesttinder

zomato

Tables

delivery_partnerfoodloyal_usersmenuorder_detailsoordersrestaurantsusers

Limit to 1000 rows

FROM fav_food f2

WHERE f2.user_id = f1.user_id);

19 • SELECT r_name,avg_rating

20 FROM (SELECT r_id,AVG(restaurant_rating) AS 'avg_rating'

21 FROM orders

22 GROUP BY r_id) t1 JOIN restaurants t2

23 ON t1.r_id = t2.r_id

Result Grid

Filter Rows:

Export:Wrap Cell Content:

| r_name | avg_rating |
|------------|--------------------|
| dominos | 1.6666666666666667 |
| kfc | 2.2 |
| box8 | 4.666666666666667 |
| Dosa Plaza | 3.6666666666666665 |
| China Town | 3.6666666666666665 |

AdministrationSchemas

Information

Table: movies

Columns:

namevarchar(72)

ratingvarchar(9)

genrevarchar(9)

yearint(4)

releasedvarchar(45)

scoredecimal(2,1)

votesdecimal(8,1)


Object InfoSession

Result 16

Output

Action Output

| # | Time | Action | Message |
|-----|----------|---|----------------------|
| 403 | 21:43:02 | SELECT name,genre,score, (SELECT AVG(genre) FROM movies m2 WHERE m2.genre = m1.genre) FROM m... | 1000 row(s) returned |
| 404 | 21:43:22 | SELECT name,genre,score, (SELECT AVG(score) FROM movies m2 WHERE m2.genre = m1.genre) FROM m... | 1000 row(s) returned |
| 405 | 21:44:36 | USE zomato | 0 row(s) affected |
| 406 | 21:44:46 | SELECT * FROM zomato.restaurants LIMIT 0, 1000 | 5 row(s) returned |
| 407 | 21:46:47 | SELECT r_id,AVG(restaurant_rating) FROM orders GROUP BY r_id LIMIT 0, 1000 | 5 row(s) returned |
| 408 | 21:48:00 | SELECT r_name,avg_rating FROM (SELECT r_id,AVG(restaurant_rating) AS 'avg_rating' FROM orders GROU... | 5 row(s) returned |



22 February 2023 14:30

1. Find genres having avg score > avg score of all the movies



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner restaurants

SCHEMAS

Filter objects

- class
- groups
- loyal_users
- membership
- movies
- person1
- person2
- students
- titanic
- users
- Views
- Stored Procedures
- Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato
- Tables
 - delivery_partner
 - food
 - loyal_users
 - menu
 - order_details
 - orders
 - restaurants
 - users

```
69 FROM movies m1;
70
71 • SELECT genre,AVG(score)
72 FROM movies
73 GROUP BY genre
74 HAVING AVG(score) > (SELECT AVG(score) FROM movies)
75
76
```

Result Grid

| genre | AVG(score) |
|---------|------------|
| Family | 6.55000 |
| History | 8.30000 |
| Music | 7.20000 |
| Mystery | 6.50000 |
| Romance | 6.40000 |

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

Result 48 x

Output

Action Output

| # | Time | Action | Message |
|-------|----------|---|--|
| ✓ 408 | 21:48:00 | SELECT r_name,avg_rating FROM (SELECT r_id,AVG(restaurant_rating) AS 'avg_rating' FROM orders GROU... | 5 row(s) returned |
| ✗ 409 | 21:50:08 | SELECT genre,AVG(score) FROM movies GROUP BY genres LIMIT 0, 1000 | Error Code: 1146. Table 'zomato.movies' doesn't exist |
| ✓ 410 | 21:50:15 | USE sql_cx_live | 0 row(s) affected |
| ✗ 411 | 21:50:18 | SELECT genre,AVG(score) FROM movies GROUP BY genres LIMIT 0, 1000 | Error Code: 1054. Unknown column 'genres' in 'group statement' |
| ✓ 412 | 21:50:23 | SELECT genre,AVG(score) FROM movies GROUP BY genre LIMIT 0, 1000 | 17 row(s) returned |
| ✓ 413 | 21:51:05 | SELECT genre,AVG(score) FROM movies GROUP BY genre HAVING AVG(score) > (SELECT AVG(score) FR... | 9 row(s) returned |



22 February 2023 14:30

Populate a already created `loyal_customers` table with records of only those customers who have ordered food more than 3 times.



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner restaurants **loyal_users**

SCHEMAS

Filter objects

- membership
- movies
- person1
- person2
- students
- titanic
- users
- Views
- Stored Procedures
- Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato**
 - Tables
 - delivery_partner
 - food
 - loyal_users
 - menu
 - order_details
 - orders
 - restaurants
 - users
 - Views
 - Stored Procedures
 - Functions

Limit to 1000 rows

```
1 • SELECT * FROM zomato.loyal_users;
2 • USE zomato;
3
4 • INSERT INTO loyal_users
5   (user_id,name)
6   SELECT t1.user_id,name
7   FROM orders t1
8   JOIN users t2 ON t1.user_id = t2.user_id
9   GROUP BY user_id
10  HAVING COUNT(*) > 3
11
```

Administration Schemas

Information

Table: **movies**

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

Output

Action Output

| # | Time | Action | Message |
|-------|----------|--|---|
| ✓ 418 | 21:56:22 | SELECT user_id,COUNT(*) FROM orders GROUP BY user_id LIMIT 0, 1000 | 5 row(s) returned |
| ✗ 419 | 21:57:03 | SELECT user_id,name,COUNT(*) FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY user_id | Error Code: 1052. Column 'user_id' in field list is ambiguous |
| ✓ 420 | 21:57:13 | SELECT t1.user_id,name,COUNT(*) FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY user_id | 5 row(s) returned |
| ✓ 421 | 21:57:28 | SELECT t1.user_id,name,COUNT(*) FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY user_id | 5 row(s) returned |
| ✓ 422 | 21:57:35 | SELECT t1.user_id,name FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY user_id HAVING COUNT(*) > 3 | 5 row(s) returned |
| ✓ 423 | 21:58:26 | INSERT INTO loyal_users (user_id,name) SELECT t1.user_id,name FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY user_id HAVING COUNT(*) > 3 | 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0 |



MySQL Workbench

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FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

membership

movies

person1

person2

students

titanic

users

Views

Stored Procedures

Functions

sql_tasks

swiggy

temp_db

test

tinder

zomato

Tables

delivery_partner

food

loyal_users

menu

order_details

orders

restaurants

users

Views

Stored Procedures

Functions

movies

users

orders

order_details

food

menu

delivery_partner

restaurants

loyal_users

loyal_users

1 • SELECT * FROM zomato.loyal_users;

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

| | user_id | name | money |
|-----|---------|----------|-------|
| ▶ 1 | | Nitish | NULL |
| 2 | | Khushboo | NULL |
| 3 | | Vartika | NULL |
| 4 | | Ankit | NULL |
| 5 | | Neha | NULL |
| • | NULL | NULL | NULL |

Administration

Schemas

Information

Table: movies

Columns:

name varchar(72)

rating varchar(9)

genre varchar(9)

year int(4)

released varchar(45)

score decimal(2,1)

votes decimal(8,1)

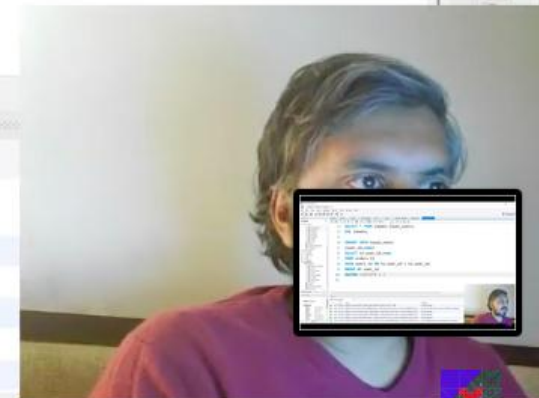
Object Info

Session

Output

Action Output

| # | Time | Action | Message |
|-------|----------|--|---|
| ✖ 419 | 21:57:03 | SELECT user_id,name,COUNT(*) FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY user_id... | Error Code: 1052. Column 'user_id' in field list is ambiguous |
| ✔ 420 | 21:57:13 | SELECT t1.user_id,name,COUNT(*) FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY us... | 5 row(s) returned |
| ✔ 421 | 21:57:28 | SELECT t1.user_id,name,COUNT(*) FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY us... | 5 row(s) returned |
| ✔ 422 | 21:57:35 | SELECT t1.user_id,name FROM orders t1 JOIN users t2 ON t1.user_id = t2.user_id GROUP BY user_id HAVI... | 5 row(s) returned |
| ✔ 423 | 21:58:26 | INSERT INTO loyal_users (user_id,name) SELECT t1.user_id,name FROM orders t1 JOIN users t2 ON t1.user... | 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0 |
| ✔ 424 | 21:58:33 | SELECT * FROM zomato.loyal_users LIMIT 0, 1000 | 5 row(s) returned |



22 February 2023 14:31



22 February 2023 14:31

Delete all the customers record who have never ordered.

1



MySQL Workbench

campusx - Warning - not supp...

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

membership

movies

person1

person2

students

titanic

users

Views

Stored Procedures

Functions

sql_tasks

swiggy

temp_db

test

tinder

zomato

Tables

delivery_partner

food

loyal_users

menu

order_details

orders

restaurants

users

Views

Stored Procedures

Functions

movies

users

orders

order_details

food

menu

delivery_partner

restaurants

loyal_users

loyal_users

1 • SELECT * FROM zomato.users;

Result Grid

Filter Rows

Export

Wrap Cell Contents

| | user_id | name | email | password |
|---|---------|----------|--------------------|----------|
| ▶ | 1 | Nitish | nitish@gmail.com | p252h |
| | 2 | Khushboo | khushboo@gmail.com | hxn9b |
| | 3 | Vartika | varnika@gmail.com | 9hu7j |
| | 4 | Ankit | ankit@gmail.com | lkko3 |
| | 5 | Neha | neha@gmail.com | 3i7qm |
| | 6 | Anupama | anupama@gmail.com | 46rdw2 |
| | 7 | Rishabh | rishabh@gmail.com | 4sw123 |

users 1 ×

Output

Action Output

| # | Time | Action | Message |
|---|--------------|--|---|
| ✓ | 428 22:03:42 | SELECT SUM(amount)*0.1 FROM orders GROUP BY user_id LIMIT 0, 1000 | 5 row(s) returned |
| ✓ | 429 22:03:51 | SELECT * FROM zomato.loyal_users LIMIT 0, 1000 | 5 row(s) returned |
| ✓ | 430 22:03:51 | USE zomato | 0 row(s) affected |
| ✗ | 431 22:03:51 | INSERT INTO loyal_users (user_id,name) SELECT t1.user_id,name FROM orders t1 JOIN users t2 ON t1.user... | Error Code: 1062. Duplicate entry '1' for key 'PRIMARY' |
| ✗ | 432 22:04:43 | UPDATE loyal_users SET money = (SELECT SUM(amount)*0.1 FROM orders GROUP BY user_id) | Error Code: 1242. Subquery returns more than 1 row |
| ✓ | 433 22:07:00 | SELECT user_id FROM users WHERE user_id NOT IN (SELECT DISTINCT(user_id) FROM orders) LIMIT 0, 1... | 2 row(s) returned |

Table: movies

Columns:

name varchar(72)

rating varchar(9)

genre varchar(9)

year int(4)

released varchar(45)

score decimal(2,1)


votes decimal(8,1)

Object Info

Session

Result Grid

Form Editor



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner restaurants loyal_users loyal_users

SCHEMAS

Filter objects

- membership
- movies
- person1
- person2
- students
- titanic
- users
- Views
- Stored Procedures
- Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato
 - Tables
 - delivery_partner
 - food
 - loyal_users
 - menu
 - order_details
 - orders
 - restaurants
 - users
 - Views
 - Stored Procedures
 - Functions

Limit to 1000 rows

```
20 FROM (SELECT r_id,AVG(restaurant_rating) AS 'avg_rating'
21       FROM orders
22       GROUP BY r_id) t1 JOIN restaurants t2
23       ON t1.r_id = t2.r_id;
24
25
26 • DELETE FROM users
27 WHERE user_id IN (SELECT user_id FROM users
28 WHERE user_id NOT IN (SELECT DISTINCT(user_id) FROM orders))
29
30
31
```

Administration Schemas

Information

Table: movies

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

Output

Action Output

| # | Time | Action | Message |
|-------|----------|--|---|
| ✓ 429 | 22:03:51 | SELECT * FROM zomato.loyal_users LIMIT 0, 1000 | 5 row(s) returned |
| ✓ 430 | 22:03:51 | USE zomato | 0 row(s) affected |
| ✗ 431 | 22:03:51 | INSERT INTO loyal_users (user_id,name) SELECT t1.user_id,name FROM orders t1 JOIN users t2 ON t1.user... | Error Code: 1062. Duplicate entry '1' for key 'PRIMARY' |
| ✗ 432 | 22:04:43 | UPDATE loyal_users SET money = (SELECT SUM(amount)*0.1 FROM orders GROUP BY user_id) | Error Code: 1242. Subquery returns more than 1 row |
| ✓ 433 | 22:07:00 | SELECT user_id FROM users WHERE user_id NOT IN (SELECT DISTINCT(user_id) FROM orders) LIMIT 0, 1... | 2 row(s) returned |
| ✓ 434 | 22:07:58 | DELETE FROM users WHERE user_id IN (SELECT user_id FROM users WHERE user_id NOT IN (SELECT ... | 2 row(s) affected |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator

Filter objects

membership

movies

person1

person2

students

titanic

users

Views

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sql_tasks

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Tables

delivery_partner

food

loyal_users

menu

order_details

orders

restaurants

users

Views

Stored Procedures

Functions

Administration

Schemas

Information

Table: movies

Columns:

name varchar(72)

rating varchar(9)

genre varchar(9)

year int(4)

released varchar(45)

score decimal(2,1)

votes decimal(8,1)

Object Info

Session

movies

users

orders

order_details

food

menu

delivery_partner

restaurants

loyal_users

loyal_users

users

Limit to 1000 rows

1 • SELECT * FROM zomato.users;

Result Grid

Filter Rows:

Export:

Wrap Cell Contents: 1A

| | user_id | name | email | password |
|-----|----------|--------------------|-------|----------|
| ▶ 1 | Nitish | nitish@gmail.com | p252h | |
| 2 | Khushboo | khushboo@gmail.com | hxm9b | |
| 3 | Vartika | vartika@gmail.com | 9hu7j | |
| 4 | Ankit | ankit@gmail.com | lkko3 | |
| 5 | Neha | neha@gmail.com | 3i7qm | |

users 1 x

Output

Action Output

| # | Time | Action | Message |
|-------|----------|--|---|
| ✓ 430 | 22:03:51 | USE zomato | 0 row(s) affected |
| ✗ 431 | 22:03:51 | INSERT INTO loyal_users (user_id,name) SELECT t1.user_id,name FROM orders t1 JOIN users t2 ON t1.user... | Error Code: 1062. Duplicate entry '1' for key 'PRIMARY' |
| ✗ 432 | 22:04:43 | UPDATE loyal_users SET money = (SELECT SUM(amount)*0.1 FROM orders GROUP BY user_id) | Error Code: 1242. Subquery returns more than 1 row |
| ✓ 433 | 22:07:00 | SELECT user_id FROM users WHERE user_id NOT IN (SELECT DISTINCT(user_id) FROM orders) LIMIT 0, 1... | 2 row(s) returned |
| ✓ 434 | 22:07:58 | DELETE FROM users WHERE user_id IN (SELECT user_id FROM users WHERE user_id NOT IN (SELECT ... | 2 row(s) affected |
| ✓ 435 | 22:08:02 | SELECT * FROM zomato.users LIMIT 0, 1000 | 5 row(s) returned |



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: movies users orders order_details food menu delivery_partner restaurants **loyal_users** loyal_users users loyal_users

SCHEMAS

Filter objects

- membership
- movies
- person1
- person2
- students
- titanic
- users
- Views
- Stored Procedures
- Functions
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato
 - Tables
 - delivery_partner
 - food
 - loyal_users
 - menu
 - order_details
 - orders
 - restaurants
 - users
 - Views
 - Stored Procedures
 - Functions

Administration Schemas

Information

Table: **movies**

Columns:

- name varchar(72)
- rating varchar(9)
- genre varchar(9)
- year int(4)
- released varchar(45)
- score decimal(2,1)
- votes decimal(8,1)

Object Info Session

```
7 FROM orders t1
8 JOIN users t2 ON t1.user_id = t2.user_id
9 GROUP BY user_id
10 HAVING COUNT(*) > 3;
11
12 • UPDATE loyal_users
13 SET money = (SELECT SUM(amount)*0.1
14 FROM orders
15 WHERE orders.user_id = loyal_users.user_id)
16
17
18
19
```

Output

Action Output

| # | Time | Action | Message |
|-------|----------|---|--|
| ✓ 433 | 22:07:00 | SELECT user_id FROM users WHERE user_id NOT IN (SELECT DISTINCT(user_id) FROM orders) LIMIT 0, 1... | 2 row(s) returned |
| ✓ 434 | 22:07:58 | DELETE FROM users WHERE user_id IN (SELECT user_id FROM users WHERE user_id NOT IN (SELECT ... | 2 row(s) affected |
| ✓ 435 | 22:08:02 | SELECT * FROM zomato.users LIMIT 0, 1000 | 5 row(s) returned |
| ✓ 436 | 22:11:56 | UPDATE loyal_users SET money = (SELECT SUM(amount) FROM orders WHERE orders.user_id = loy... | 5 row(s) affected Rows matched: 5 Changed: 5 Warnings: 0 |
| ✓ 437 | 22:12:01 | SELECT * FROM zomato.loyal_users LIMIT 0, 1000 | 5 row(s) returned |
| ✓ 438 | 22:12:19 | UPDATE loyal_users SET money = (SELECT SUM(amount)*0.1 FROM orders WHERE orders.user_id ... | 5 row(s) affected Rows matched: 5 Changed: 5 Warnings: 0 |



MySQL Workbench

campusx - Warning - not supp...

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

Filter objects

membership

movies

person1

person2

students

titanic

users

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restaurants

users

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Functions

movies

users

orders

order_details

food

menu

delivery_partner

restaurants

loyal_users

loyal_users

users

loyal_users

loyal_users

Limit to 1000 rows

1 • SELECT * FROM zomato.loyal_users;

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

| | user_id | name | money |
|---|---------|----------|-------|
| ▶ | 1 | Nitish | 167 |
| | 2 | Khushboo | 267 |
| | 3 | Vartika | 132 |
| | 4 | Ankit | 180 |
| | 5 | Neha | 304 |
| | | | 304 |

loyal_users 1 ×

Administration

Schemas

Information

Table: movies

Columns:

name

rating

genre

year

released

score

votes

Object Info

Session

Output

Action Output

| # | Time | Action | Message |
|-------|----------|--|--|
| ✓ 434 | 22:07:58 | DELETE FROM users WHERE user_id IN (SELECT user_id FROM users WHERE user_id NOT IN (SELECT ... | 2 row(s) affected |
| ✓ 435 | 22:08:02 | SELECT * FROM zomato.users LIMIT 0, 1000 | 5 row(s) returned |
| ✓ 436 | 22:11:56 | UPDATE loyal_users SET money = (SELECT SUM(amount) FROM orders WHERE orders.user_id = loy... | 5 row(s) affected Rows matched: 5 Changed: 5 Warnings: 0 |
| ✓ 437 | 22:12:01 | SELECT * FROM zomato.loyal_users LIMIT 0, 1000 | 5 row(s) returned |
| ✓ 438 | 22:12:19 | UPDATE loyal_users SET money = (SELECT SUM(amount)*0.1 FROM orders WHERE orders.user_id ... | 5 row(s) affected Rows matched: 5 Changed: 5 Warnings: 0 |
| ✓ 439 | 22:12:24 | SELECT * FROM zomato.loyal_users LIMIT 0, 1000 | 5 row(s) returned |