

SQL: Advanced Commands

Home Assignment for Submission

Practice Exercises — Advanced SQL Commands

Topics mentioned

Advanced SQL Commands:

- ✓ Timestamps and extracts
- ✓ Mathematical functions and operators
- ✓ String functions and operators
- ✓ Other advanced SQL functions and commands

Task description

Polish your skills on using the advanced SQL commands taught thus far by answering several types of questions in this task.



What you need to do

General Instruction:

- 1 Use the DVD rental [dataset](#) to address the objective/s for all the items.
- 2 For **item #1**, write the syntactically correct SQL statement for the provided output.
- 3 For **item #2**, support your answer with a brief explanation and provide the correct SQL statement that will make the syntax valid.
- 4 For **item #3**, provide the syntactically correct SQL statement and the expected output that satisfies the objective/s.

Tasks:

- 1 Provide the SQL syntax for the output below:

	title_description
	text
1	Chamber Italian-A Fateful Reflection of a Moose And a Husband who must Overcome a Monkey in Nigeria
2	Grosse Wonderful-A Epic Drama of a Cat And a Explorer who must Redeem a Moose in Australia
3	Airport Pollock-A Epic Tale of a Moose And a Girl who must Confront a Monkey in Ancient India
4	Bright Encounters-A Fateful Yarn of a Lumberjack And a Feminist who must Conquer a Student in A Jet Boat
5	Academy Dinosaur-A Epic Drama of a Feminist And a Mad Scientist who must Battle a Teacher in The Canadian Rockies
6	Ace Goldfinger-A Astounding Epistle of a Database Administrator And a Explorer who must Find a Car in Ancient China
7	Adaptation Holes-A Astounding Reflection of a Lumberjack And a Car who must Sink a Lumberjack in A Baloon Factory
8	Affair Prejudice-A Fanciful Documentary of a Frisbee And a Lumberjack who must Chase a Monkey in A Shark Tank
9	African Egg-A Fast-Paced Documentary of a Pastry Chef And a Dentist who must Pursue a Forensic Psychologist in The Gulf of Mexico
10	Agent Truman-A Intrepid Panorama of a Robot And a Boy who must Escape a Sumo Wrestler in Ancient China
11	Airplane Sierra-A Touching Saga of a Hunter And a Butler who must Discover a Butler in A Jet Boat
12	Alabama Devil-A Thoughtful Panorama of a Database Administrator And a Mad Scientist who must Outgun a Mad Scientist in A Jet Boat
13	Aladdin Calendar-A Action-Packed Tale of a Man And a Lumberjack who must Reach a Feminist in Ancient China
14	Alamo Videotape-A Boring Epistle of a Butler And a Cat who must Fight a Pastry Chef in A MySQL Convention
15	Alaska Phantom-A Fanciful Saga of a Hunter And a Pastry Chef who must Vanquish a Boy in Australia
16	Date Speed-A Touching Saga of a Composer And a Moose who must Discover a Dentist in A MySQL Convention
17	Ali Forever-A Action-Packed Drama of a Dentist And a Crocodile who must Battle a Feminist in The Canadian Rockies
18	Alice Fantasia-A Emotional Drama of a A Shark And a Database Administrator who must Vanquish a Pioneer in Soviet Georgia
19	Alien Center-A Brilliant Drama of a Cat And a Mad Scientist who must Battle a Feminist in A MySQL Convention
20	Alley Evolution-A Fast-Paced Drama of a Robot And a Composer who must Battle a Astronaut in New Orleans

- 2 Why would these SQL syntaxes fail?

```

a
SELECT title,rental_rate,
CASE
    WHEN rental_rate > 2 THEN 'Expensive'
    WHEN rental_rate = 2 THEN 'Average'
    WHEN rental_rate < 2 THEN 'Cheap'
FROM film
    
```

- 3 Answer the following business scenario questions.

- a The store supervisor wants to check the performance of two staff members by checking all the payments they processed. The supervisor established a **quota of 25,000** for all the payments processed by the staff and would like to see a report showing the total payment amount processed by each staff member and a column saying whether they met or did not meet the quota. Provide the SQL syntax to come up with the expected output below:

	staff_id	sum	quota_rating
	smallint	numeric	text
1	1	30252.12	Quota Met
2	2	31059.92	Quota Met

- b You were tasked to provide a list of film ratings wherein the average length of all the films categorized in those specific ratings are lower than the average length of all the films in the film table. Provide the SQL syntax and output.

Tips and hints

- ✓ Check out the supporting materials for references on using the advanced SQL commands and functions taught in M3 so far.

Completion criteria

Use this checklist before assigning the hometask to check if everything is done.

- For #1, you need to provide the SQL syntax to be able to come up with the provided expected output.
- For #2, simply point out why the SQL syntax would fail and provide the right syntax.
- For #3A, provide the correct syntax based on the business situation and the given output.
- For #3B, provide the correct syntax and output based on the business case scenario.

