SQL Intermediate Commands

Home Assignment for Submission

Practice Exercises — Intermediate SQL Commands

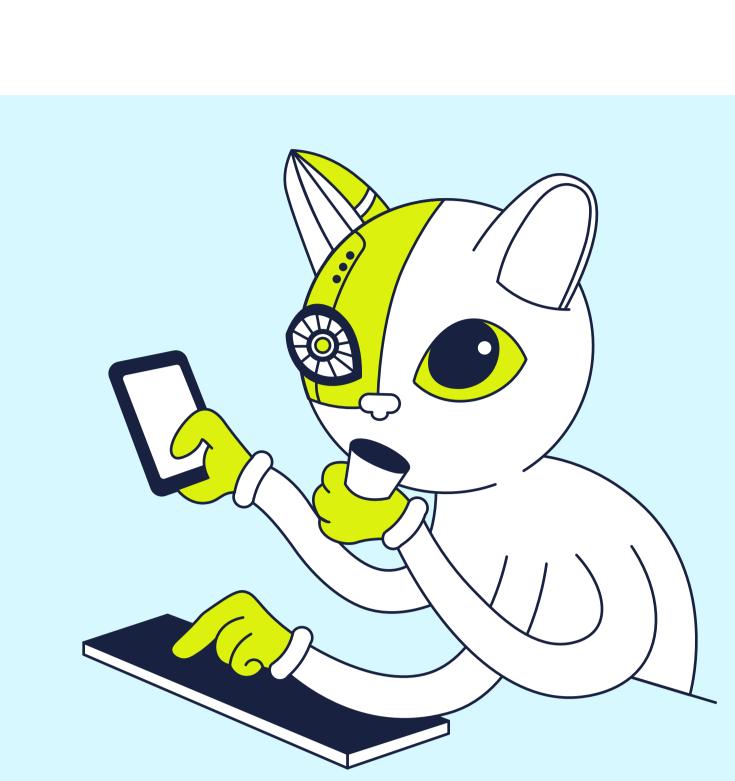
Topics mentioned

Intermediate SQL Commands:

- Aggregate Functions
- **GROUP BY**
- HAVING, AS
- INNER JOIN, OUTER JOIN

Task description

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



What you need to do

General Instructions:

- For item #1, import this dataset to SQL, and address the objective/s for each item. Save the Excel sheet as '.csv' file.
- For item #2:
 - Provide a brief explanation to support your answer for each item.
 - Provide the SQL statement that will make the syntax valid and the expected data output for each.
- For item #3, provide the SQL statement and the expected data output that satisfies the objectives.

Tasks:

- Using the DVD rental dataset, provide the SQL code and the output for this query criterion. Provide an Excel sheet report of the total sum of payments made by each
 - customer in the payments table. Present it in ascending order. There should be four columns: `customer_id`, `first_name`, `last_name`, and 'sum'.

You will need to join the `customer` & `payment` tables. You will be using an aggregate function, JOIN and ORDER BY,

Hints:

- in this query.
- Remember that when joining two tables with the same column names, if you put the column name alone (i.e., `customer_id`), it will error out because it is ambiguous. You will have to put the
- table name and column name (i.e., `customer.customer_id`) There is a pgAdmin function for you to be able to extract/ download your query as a '.csv' file.
- Why would these SQL syntaxes fail?

Provide the SQL syntax and output of customer IDs having an average

last_name,

SUM(amount)

FROM payment

GROUP BY customer_id

SELECT

payment amount of less than 3.

district FROM customer **INNER JOIN** address **ON** address_id = address_id **SELECT** customer_id,

first_name,

HAVING amount > 100 Answer the following business scenario questions. Provide the SQL code and the output. One of the criteria for a customer to become part of the customer loyalty program is that they need to have an accumulated payment made to the DVD rental store of at least \$200 or more. As a data analyst, you need to

least \$200 or more.

customer_id , first_name

provide a list of customer IDs with a total accumulated payment of at

Tips and hints For item #1, the expected query output is shown below:

, last_name

, sum

	[PK] integer	character varying (45)	character varying (45)	numeric
1	1	Mary	Smith	114.7
2	2	Patricia	Johnson	123.74
3	3	Linda	Williams	130.76
4	4	Barbara	Jones	81.78
5	5	Elizabeth	Brown	134.65
6	6	Jennifer	Davis	84.75
7	7	Maria	Miller	130.72
8	8	Susan	Wilson	85.77
9	9	Margaret	Moore	78.8
10	10	Dorothy	Taylor	94.76

is done.

Completion criteria Use this checklist before assigning the hometask to check if everything

For 1A, you need to provide an Excel sheet (.CSV	file)
for your answer.		

- ☐ For 2A, provide the SQL syntax and the output. ☐ For finding errors in SQL (2A and 2B), provide
- an explanation why the SQL syntax would error out. ☐ For 3A, provide the SQL code and output.

