

Assignment –3

- Create a Warehouse:

"test_warehouse"

+ Add Comment

Type: Standard ▾ Size: Small ▾ ?

Advanced Options ^

☒ **Auto-resume**
Automatically resumes the warehouse when any statement that requires a warehouse is submitted.

☒ **Auto-suspend**
Automatically suspends the warehouse if it is inactive for the specified period of time.

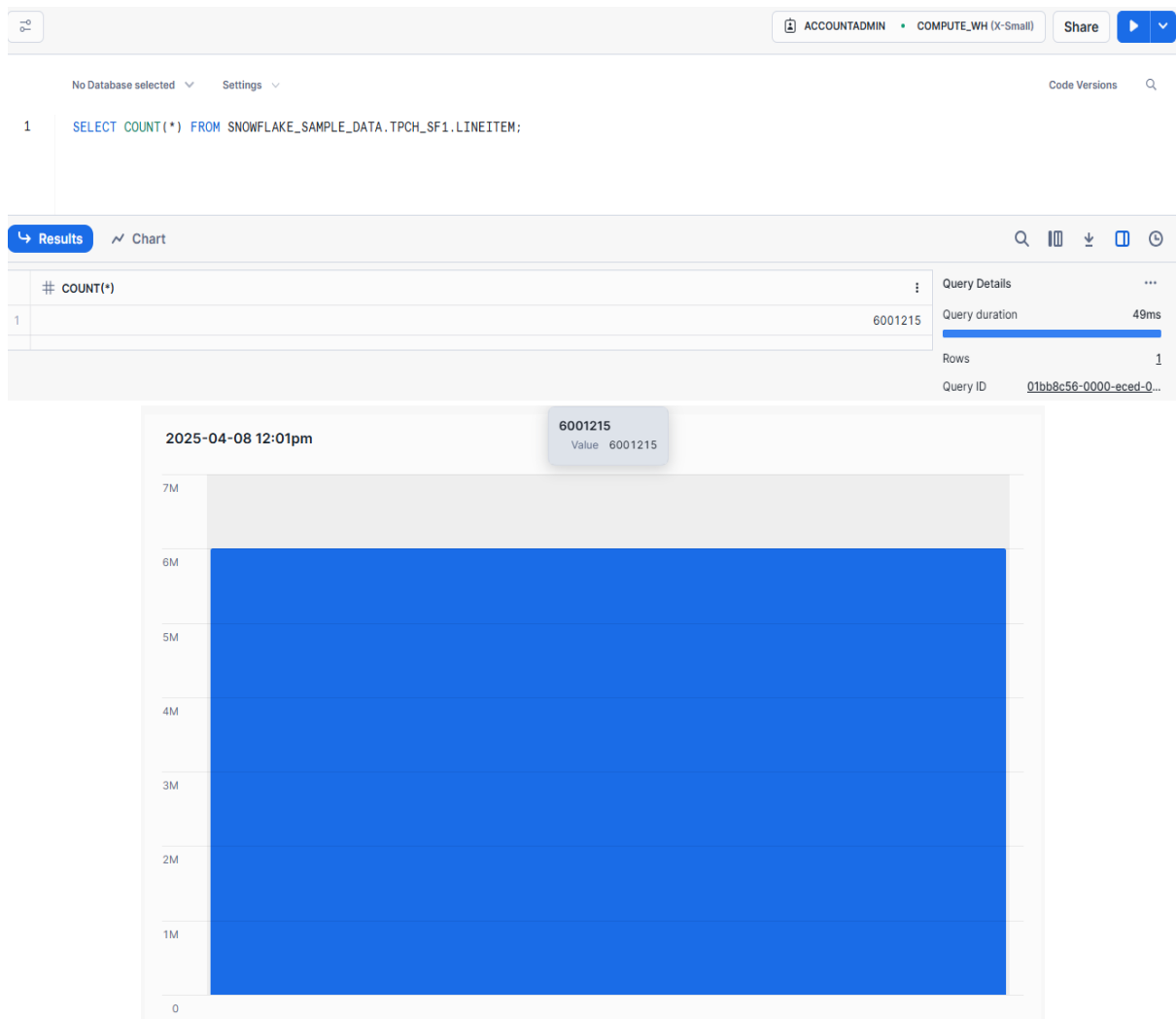
Suspend After
5 min(s) of inactivity

☐ **Multi-cluster Warehouse**
Scale compute resources as query concurrency needs change. [Learn more](#)

☐ **Query Acceleration**
Accelerate outlier queries with additional flexible compute resources. [Learn more](#)

A virtual warehouse named as “*test_warehouse*” is created with auto suspend at 5 mins and auto resume.

- Steps to Experiment with Scaling:
 1. Run a simple query using the small warehouse:
 - Example: *SELECT COUNT(*) FROM SNOWFLAKE_SAMPLE_DATA.TPCH_SF1.LINEITEM;*



2. Increase the warehouse size:

- In the Warehouses tab, find your warehouse.
- Click Edit and change the size to a larger tier (e.g., Medium or Large).
- Re-run the same query.

Edit Warehouse

test_warehouse as ACCOUNTADMIN

test_warehouse

+ Add Comment

Type: StandardSize: Large

Advanced Options

☒ Auto-resume
Automatically resumes a warehouse is submitted.

☒ Auto-suspend
Automatically suspends a warehouse after a period of time.

Suspend After
5

☐ Multi-cluster Warehouse
Scale compute resources as query concurrency needs change. [Learn more](#)

☐ Query Acceleration
Accelerate outlier queries with additional flexible compute resources. [Learn more](#)

Large 8 credits/hour ✓

X-Small 1 credit/hour

Small 2 credits/hour

Medium 4 credits/hour

X-Large 16 credits/hour

2X-Large 32 credits/hour

3X-Large 64 credits/hour

4X-Large 128 credits/hour

5X-Large 256 credits/hour

6X-Large 512 credits/hour

8 credits/hourCancelSave Warehouse

3. Observe the differences:

- Note query execution times for small vs. larger warehouses.
- Monitor how quickly the results are returned with scaling.

The screenshot displays the Snowflake web interface. At the top, the user is logged in as 'ACCOUNTADMIN' and is using the 'test_warehouse (Large)' warehouse. The query editor shows a SQL query: `SELECT COUNT(*) FROM SNOWFLAKE_SAMPLE_DATA.TPCH_SF1.LINEITEM;`. Below the query editor, the 'Results' tab is active, showing a single row with the count '6001215'. To the right of the results table, the 'Query Details' panel shows the 'Query duration' as '27ms', 'Rows' as '1', and the 'Query ID' as '01bb8c66-0000-ee5d-...'. The interface also includes a 'Share' button and a 'Code Versions' dropdown.

#	COUNT(*)
1	6001215

Query Details

- Query duration: 27ms
- Rows: 1
- Query ID: 01bb8c66-0000-ee5d-...

So for small sized warehouse the execution time was **49ms**, while for large size the time was only **27ms**, which is much faster than small sized warehouse due to provision of more compute resources which leads to faster query execution time.