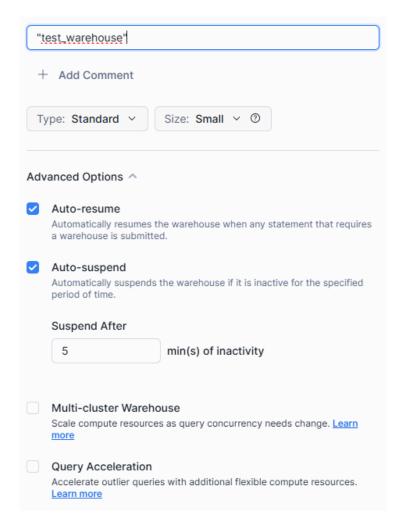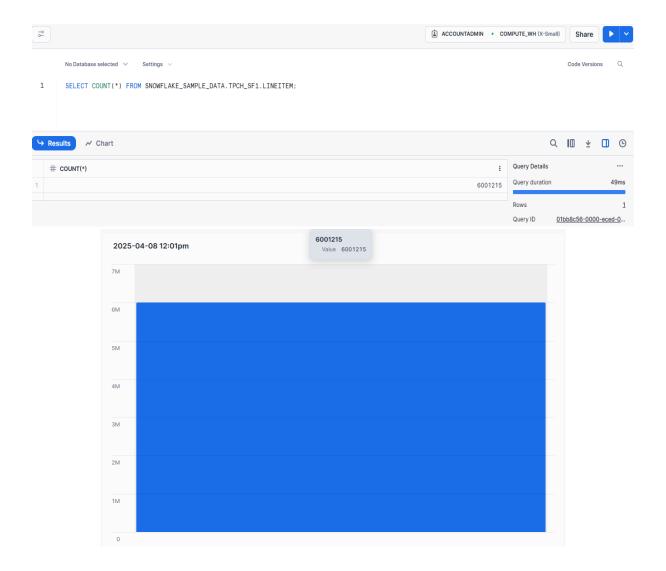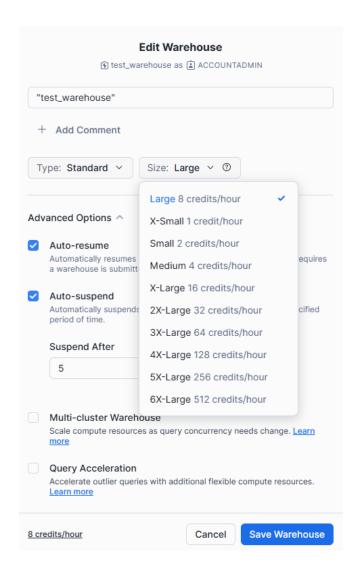# *Assignment –3*

- Create a Warehouse:

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;*

ACCOUNTADMIN • COMPUTE_WH (X-Small)   Share   ▶ ∨

No Database selected ∨   Settings ∨   Code Versions   🔍

```
1   SELECT COUNT(*) FROM SNOWFLAKE_SAMPLE_DATA.TPCH_SF1.LINEITEM;
```

↳ Results   ∿ Chart   🔍 ⫼ ⤓ ▢ 🕐

# COUNT(*)	⋮
1	6001215

Query Details   ⋯

Query duration   49ms

Rows   1

Query ID   01bb8c56-0000-eced-0...

2025-04-08 12:01pm

6001215
Value 6001215

7M

6M

5M

4M

3M

2M

1M

0
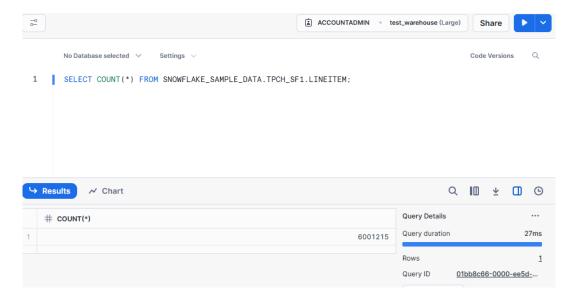
2. Increase the warehouse size:
   o In the Warehouses tab, find your warehouse.
   o Click Edit and change the size to a larger tier (e.g., Medium or Large).
   o Re-run the same query.

Edit Warehouse

⚡ test_warehouse as ⚏ ACCOUNTADMIN

"test_warehouse"

＋ Add Comment

Type: Standard ⌄   Size: Large ⌄ ⓘ

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	

Advanced Options ⌃

☑ Auto-resume
Automatically resumes   equires
a warehouse is submitt

☑ Auto-suspend
Automatically suspends   cified
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

8 credits/hour   Cancel   **Save Warehouse**

3. Observe the differences:
   o Note query execution times for small vs. larger warehouses.
   o Monitor how quickly the results are returned with scaling.

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.