-- -- STEP 02: CREATE A FACT TABLE (CONTAINST THE DIMENSIONS AND METRICS)

-- create or replace table still-minutia-435613-h7.mid\_term1.tlc\_data as (

-- select 'taxi' as type ,extract(year from tpep\_pickup\_datetime) as year, extract(quarter from

-- tpep\_pickup\_datetime) as quarter, trip\_distance as distance,PULocationID,DOLocationID

-- from still-minutia-435613-h7.mid\_term1.taxi\_2023

-- union all

-- select 'taxi' as type ,extract(year from tpep\_pickup\_datetime) as year, extract(quarter from tpep\_pickup\_datetime) as quarter, trip\_distance as distance,PULocationID,DOLocationID

-- from still-minutia-435613-h7.mid\_term1.taxi\_2024

-- union all

-- select case when hvfhs\_license\_num='HV0005' then 'Lyft' when hvfhs\_license\_num='HV0003' then 'Uber' end as type , extract(year from pickup\_datetime) as year, extract(quarter from pickup\_datetime) as quarter, trip\_miles as distance,PULocationID,DOLocationID

-- from still-minutia-435613-h7.mid\_term1.hv\_2023

-- union all

-- select case when hvfhs\_license\_num='HV0005' then 'Lyft' when hvfhs\_license\_num='HV0003' then 'Uber' end as type , extract(year from pickup\_datetime) as year, extract(quarter from pickup\_datetime) as quarter, trip\_miles as distance,PULocationID,DOLocationID

-- from still-minutia-435613-h7.mid\_term1.hv\_2024);

-- create or replace table still-minutia-435613-h7.mid\_term1.tlc\_data as (

-- select \* from still-minutia-435613-h7.mid\_term1.hv\_2023)

-- ;

-- create or replace table `still-minutia-435613-h7.mid\_term1.tlc\_data` as (

-- select \* from `still-minutia-435613-h7.mid\_term1.hv\_2023`)

-- -- STEP 03: CREATE A FACT AGGREGATED TABLE (CONTAINST THE DIMENSIONS AND METRICS)

-- create or replace table `still-minutia-435613-h7.mid\_term1.tlc\_metrics\_agg` as (

-- select type, year, quarter, count(\*) as trips, round(avg(distance),2) as avg\_distance from `still-minutia-435613-h7.mid\_term1.tlc\_data`

-- where year in (2023, 2024) and quarter in (1,2)

-- group by type, year, quarter);

-- STEP 1: CREATE THE `tlc\_metrics` TABLE

-- CREATE OR REPLACE TABLE `still-minutia-435613-h7.mid\_term1.tlc\_metrics` AS (

-- -- Data from 2023 taxi trips

-- SELECT

-- EXTRACT(YEAR FROM tpep\_pickup\_datetime) AS year,

-- EXTRACT(MONTH FROM tpep\_pickup\_datetime) AS month,

-- PULocationID,

-- DOLocationID,

-- trip\_distance AS distance

-- FROM `still-minutia-435613-h7.mid\_term1.taxi\_2023\*`

-- WHERE EXTRACT(YEAR FROM tpep\_pickup\_datetime) = 2023

-- AND EXTRACT(MONTH FROM tpep\_pickup\_datetime) IN (4, 5, 6)

-- UNION ALL

-- -- Data from 2024 taxi trips

-- SELECT

-- EXTRACT(YEAR FROM tpep\_pickup\_datetime) AS year,

-- EXTRACT(MONTH FROM tpep\_pickup\_datetime) AS month,

-- PULocationID,

-- DOLocationID,

-- trip\_distance AS distance

-- FROM `still-minutia-435613-h7.mid\_term1.taxi\_2024\*`

-- WHERE EXTRACT(YEAR FROM tpep\_pickup\_datetime) = 2024

-- AND EXTRACT(MONTH FROM tpep\_pickup\_datetime) IN (4, 5, 6)

-- UNION ALL

-- -- Data from 2023 high-volume for-hire service trips (Uber/Lyft)

-- SELECT

-- EXTRACT(YEAR FROM Pickup\_datetime) AS year,

-- EXTRACT(MONTH FROM Pickup\_datetime) AS month,

-- PULocationID,

-- DOLocationID,

-- trip\_miles AS distance

-- FROM `still-minutia-435613-h7.mid\_term1.hv\_2023\*`

-- WHERE EXTRACT(YEAR FROM Pickup\_datetime) = 2023

-- AND EXTRACT(MONTH FROM Pickup\_datetime) IN (4, 5, 6)

-- UNION ALL

-- -- Data from 2024 high-volume for-hire service trips (Uber/Lyft)

-- SELECT

-- EXTRACT(YEAR FROM Pickup\_datetime) AS year,

-- EXTRACT(MONTH FROM Pickup\_datetime) AS month,

-- PULocationID,

-- DOLocationID,

-- trip\_miles AS distance

-- FROM `still-minutia-435613-h7.mid\_term1.hv\_2024\*`

-- WHERE EXTRACT(YEAR FROM Pickup\_datetime) = 2024

-- AND EXTRACT(MONTH FROM Pickup\_datetime) IN (4, 5, 6)

-- );

-- STEP 2: CREATE THE `tlc\_metrics\_agg` TABLE

-- CREATE OR REPLACE TABLE `still-minutia-435613-h7.mid\_term1.tlc\_metrics\_agg1` AS

-- SELECT

-- year,

-- month,

-- COUNT(\*) AS trips,

-- ROUND(AVG(distance), 2) AS avg\_distance

-- FROM

-- `still-minutia-435613-h7.mid\_term1.tlc\_metrics`

-- GROUP BY

-- year, month;

-- -- View the aggregated results

-- SELECT \*

-- FROM `still-minutia-435613-h7.mid\_term1.tlc\_metrics\_agg1`;

-- STEP 04: CREATE AN OUTCOME TABLE

-- SELECT

-- PULocationID,DOLocationID,

-- AVG(distance) AS AvgDistance

-- FROM `still-minutia-435613-h7.mid\_term1.tlc\_metrics`

-- GROUP BY PULocationID, DOLocationID

-- ORDER BY AvgDistance DESC

-- LIMIT 10

-- SELECT

-- PULocationID,

-- COUNT(\*) AS total\_trips

-- FROM `still-minutia-435613-h7.mid\_term1.tlc\_metrics`

-- GROUP BY PULocationID

-- ORDER BY total\_trips DESC

-- LIMIT 10;

-- select \* from `still-minutia-435613-h7.mid\_term1.taxi\_lookup`

-- SELECT

-- PULocationID,DOLocationID, AVG(distance) AS AvgDistance

-- FROM

-- "still-minutia-435613-h7.mid\_term1.tlc\_metrics'

-- GROUP BY PULocationID, DOLocationID

-- ORDER BY AvgDistance DESC

-- LIMIT 10;

-- SELECT

-- DOLocationID,

-- COUNT(\*) AS total\_trips

-- FROM `still-minutia-435613-h7.mid\_term1.tlc\_metrics`

-- GROUP BY DOLocationID

-- ORDER BY total\_trips DESC

-- LIMIT 10;

-- SELECT

-- CONCAT(PULocationID, '-', DOLocationID) AS pickup\_dropoff,

-- COUNT(\*) AS total\_trips

-- FROM `still-minutia-435613-h7.mid\_term1.tlc\_metrics`

-- GROUP BY pickup\_dropoff

-- ORDER BY total\_trips DESC

-- LIMIT 10;

-- SELECT

-- PULocationID,

-- ROUND(AVG(distance), 2) AS avg\_distance

-- FROM `still-minutia-435613-h7.mid\_term1.tlc\_metrics`

-- GROUP BY PULocationID

-- ORDER BY avg\_distance DESC

-- LIMIT 10;

-- SELECT

-- DOLocationID,

-- ROUND(AVG(distance), 2) AS avg\_distance

-- FROM `still-minutia-435613-h7.mid\_term1.tlc\_metrics`

-- GROUP BY DOLocationID

-- ORDER BY avg\_distance DESC

-- LIMIT 10;

-- SELECT

-- CONCAT(PULocationID, '-', DOLocationID) AS pickup\_dropoff,

-- ROUND(AVG(distance), 2) AS avg\_distance

-- FROM `still-minutia-435613-h7.mid\_term1.tlc\_metrics`

-- GROUP BY pickup\_dropoff

-- ORDER BY avg\_distance DESC

-- LIMIT 10;

-- -- View the aggregated results

-- SELECT \*

-- FROM still-minutia-435613-h7.mid\_term1.tlc\_metrics\_agg1;

-- STEP 04: CREATE AN OUTCOME TABLE

SELECT

PULocationID,DOLocationID,

AVG(distance) AS AvgDistance

FROM still-minutia-435613-h7.mid\_term1.tlc\_metrics

GROUP BY PULocationID, DOLocationID

ORDER BY AvgDistance DESC

LIMIT 10