

SQL queries on Snowflake

Number of Trips per Rainy Day

Write a query and display your results that shows the number of trips per day when the weather is rainy

```
1 select weather as conditions
2     ,DAY(starttime) AS day
3     ,count(*) as num_trips
4 from citibike.public.trips
5 left outer join json_weather_data_view
6     on date_trunc('hour', observation_time) = date_trunc('hour', starttime)
7 where conditions is not null AND conditions = 'Rain'
8 group by 1,2
9 order by 2;
```

Results Data Preview

← Open History

✓ Query ID SQL 324ms 31 rows

Filter result...



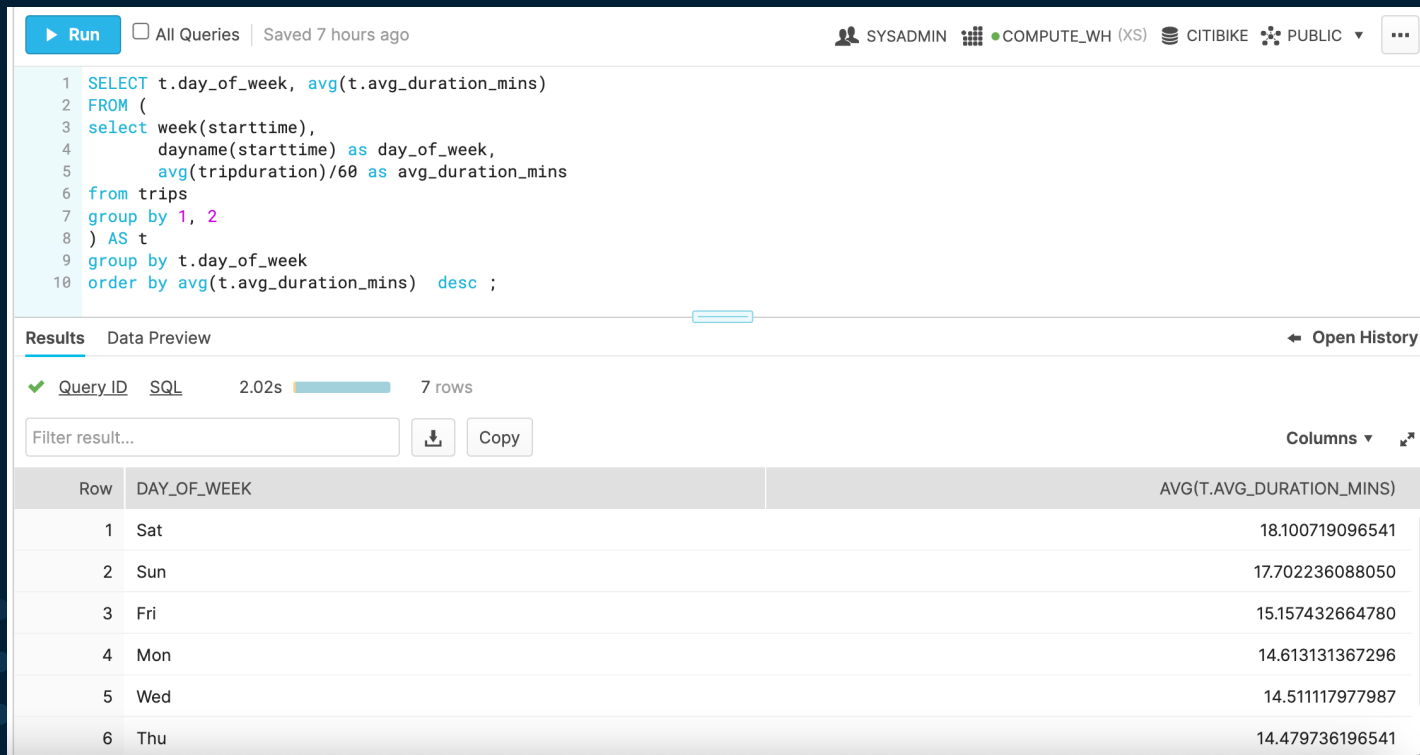
Copy

Columns ▾ ↗

Row	CONDITIONS	DAY	NUM_TRIPS
1	Rain	1	112251
2	Rain	2	87670
3	Rain	3	155729
4	Rain	4	122548
5	Rain	5	133704
6	Rain	6	152586
7	Rain	7	116044
8	Rain	8	73226

Average Trip Duration by Day of Week

Write a query and display your results that shows the average duration of trips (in minutes) by day of week



The screenshot shows a SQL query editor interface. At the top, there's a 'Run' button and a status bar indicating 'All Queries' and 'Saved 7 hours ago'. The user is 'SYSADMIN' and the database is 'CITIBIKE'. The query is as follows:

```
1 SELECT t.day_of_week, avg(t.avg_duration_mins)
2 FROM (
3 select week(starttime),
4        dayname(starttime) as day_of_week,
5        avg(tripduration)/60 as avg_duration_mins
6 from trips
7 group by 1, 2
8 ) AS t
9 group by t.day_of_week
10 order by avg(t.avg_duration_mins) desc ;
```

Below the query, the 'Results' tab is active, showing a 'Data Preview' of 7 rows. The query took 2.02s to execute. There are buttons for 'Filter result...', 'Download', and 'Copy'. The results are displayed in a table with columns 'Row', 'DAY_OF_WEEK', and 'AVG(T.AVG_DURATION_MINS)'.

Row	DAY_OF_WEEK	AVG(T.AVG_DURATION_MINS)
1	Sat	18.100719096541
2	Sun	17.702236088050
3	Fri	15.157432664780
4	Mon	14.613131367296
5	Wed	14.511117977987
6	Thu	14.479736196541

Average Duration by Day In Good Weather

Write a query and display your results that shows the average duration of trips (in minutes) by day of week when the weather is “Clear”

▶ Run

☐ All Queries | Saved 1 minute ago

SYSADMIN COMPUTE_WH (XS) WEATHER PUBLIC

```
1 SELECT t.day_of_week, t.conditions, avg(t.avg_duration_mins)
2 FROM (
3   select week(starttime) as week,
4          dayname(starttime) as day_of_week,
5          weather as conditions,
6          avg(tripduration)/60 as avg_duration_mins
7 from citibike.public.trips
8 left outer join json_weather_data_view as w
9   on date_trunc('hour', observation_time) = date_trunc('hour', starttime)
10 where conditions = 'Clear' AND conditions is not null
11 group by 1,2,3 ) AS t
12 group by 1,2 order by 3 desc;
```

Results | Data Preview

↶ Open History

✓ Query ID | SQL

49ms

7 rows

Filter result...

Copy

Columns ▾

Row	DAY_OF_WEEK	CONDITIONS	AVG(T.AVG_DURATION_MINS)
1	Sat	Clear	18.173112221875
2	Sun	Clear	17.814547750355
3	Fri	Clear	15.424463210000
4	Mon	Clear	15.405710453876
5	Thu	Clear	14.579248927174

Average Duration by Day In Bad Weather

Write a query and display your results that shows the average duration of trips (in minutes) by day of week when the weather is “Snow” and the maximum temp was less than -10

▶ Run

☐ All Queries | Saved 3 minutes ago

SYSADMIN COMPUTE_WH (XS) WEATHER PUBLIC

```
1 SELECT t.day_of_week, t.conditions, avg(t.avg_duration_mins)
2 FROM (
3 select week(starttime) as week,
4        dayname(starttime) as day_of_week,
5        weather as conditions,
6        avg(tripduration)/60 as avg_duration_mins
7 from citibike.public.trips
8 left outer join json_weather_data_view
9   on date_trunc('hour', observation_time) = date_trunc('hour', starttime)
10 where conditions = 'Snow' AND TEMP_MAX < -10 AND conditions is not null
11 group by 1,2,3 ) AS t
12 group by 1,2 order by 3 desc;
```

Results | Data Preview

↔ Open History

✓ Query ID | SQL | 32ms | 7 rows

Filter result... Copy

Columns

Row	DAY_OF_WEEK	CONDITIONS	AVG(T.AVG_DURATION_MINS)
1	Mon	Snow	27.355980975000
2	Sat	Snow	16.989602350000
3	Fri	Snow	12.535539916667
4	Tue	Snow	11.735909475000
5	Wed	Snow	11.564365250000