ACCOLITE UNIVERSITY, 17 JULY 2020

NoSQL Basics/Fundamentals

Task Submission

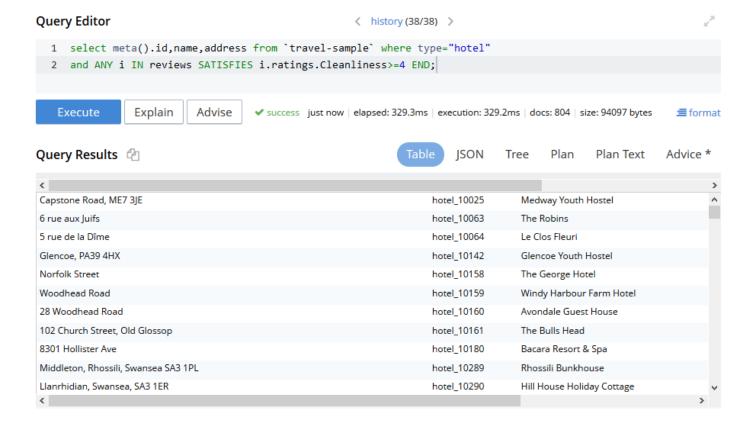
By: Ayush Malik

1. Find all hotels with ratings for Cleanliness>=4

Query 1

This query displays the document id, name and address of each hotel which has at-least one review in which the rating of Cleanliness>=4. Hotels which have no reviews are not included in this list.

select meta().id,name,address from `travel-sample` where type='hotel' and
ANY i IN reviews SATISFIES i.ratings.Cleanliness>=4 END;



2. Find the highest airport in each country.

Query 2

This query displays each country's name, the name of the highest airport in that country and its corresponding altitude.

```
select country,
(array i.airportname for i in array_agg({"alt": geo.alt, airportname})
when i.alt = altitude end) as highest_airport_name, altitude
from `travel-sample`
where type = "airport"
group by country
letting altitude = max(geo.alt);
Query Editor
                                                  < history (35/35) >
1 select country,
  2 (array i.airportname for i in array_agg({"alt": geo.alt, airportname})
  3 when i.alt = altitude end) as highest_airport_name, altitude
  4 from `travel-sample`
  5 where type = "airport"
  6 group by country
  7 letting altitude = max(geo.alt);
               Explain
                         Advise

✓ success just now | elapsed: 359.6ms | execution: 359.5ms | docs: 3 | size: 439 bytes

                                                                                                     Query Results 🖆
                                                                   JSON
                                                                         Tree
                                                                                Plan
                                                                                         Plan Text
                                                                                                    Advice
811
          United Kingdom
                          Shaftesbury-Compton Abbas Aerodrome
6588
          France
                          Courchevel Airport
9078
          United States
                          Telluride
```

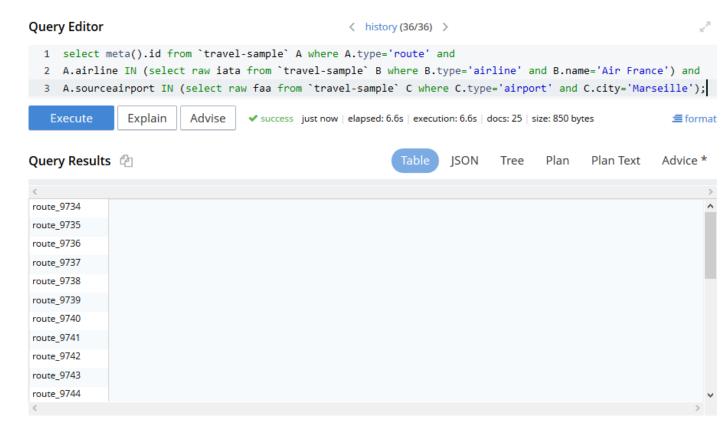
3. Find all routes operated by Air France from the city of Marseille. (use field faa)

I have written 2 queries for the given problem.

Query 3.1

This query assumes that 'iata' is a candidate key for every airline and uses 'airline' field in routes as a reference to 'iata' field in airlines.

```
select meta().id from `travel-sample` A where A.type='route' and
A.airline IN (select raw iata from `travel-sample` B where
B.type='airline' and B.name='Air France') and
A.sourceairport IN (select raw faa from `travel-sample` C where
C.type='airport' and C.city='Marseille');
```



Query 3.2

This query uses 'airlineid' field in routes as a reference to the document ids of airlines.

```
select meta().id from `travel-sample` A where A.type='route' and
A.airlineid IN (select raw meta().id from `travel-sample` B where
B.type='airline' and B.name='Air France') and
A.sourceairport IN (select raw faa from `travel-sample` C where
C.type='airport' and C.city='Marseille');
```

