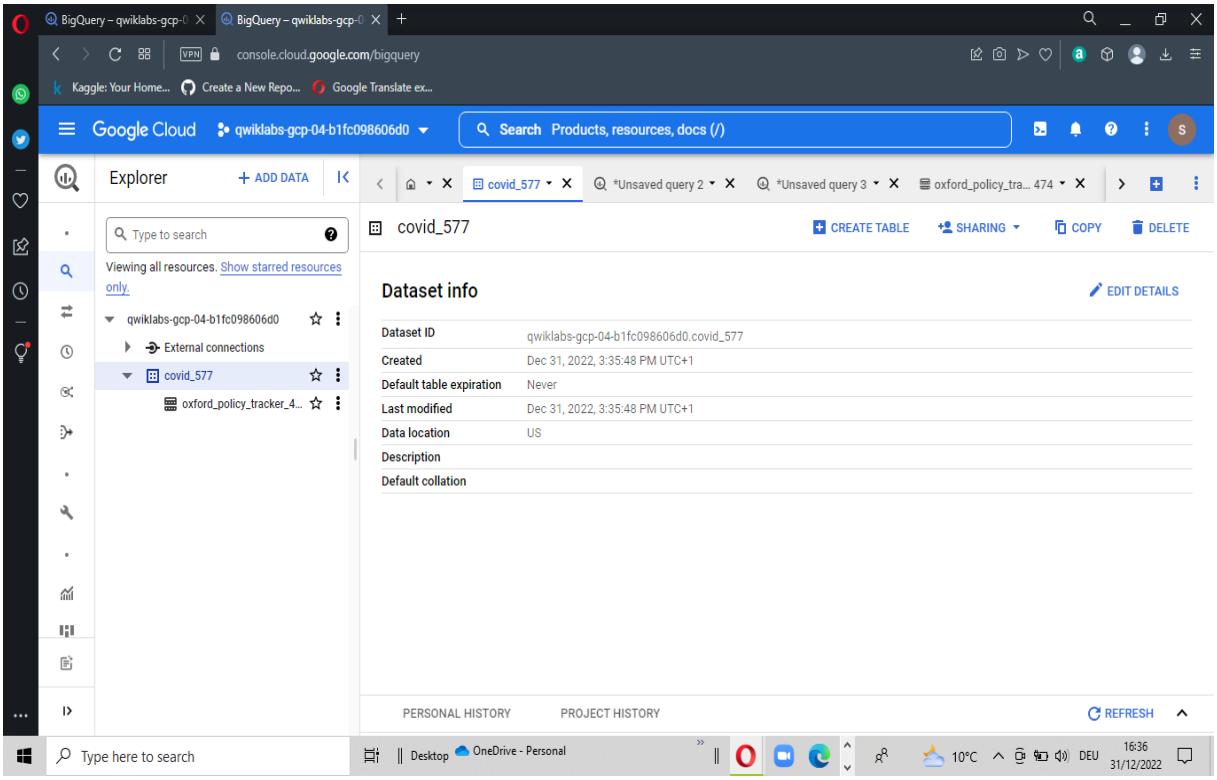
Build and Optimize Data Warehouses with BigQuery: Challenge Lab

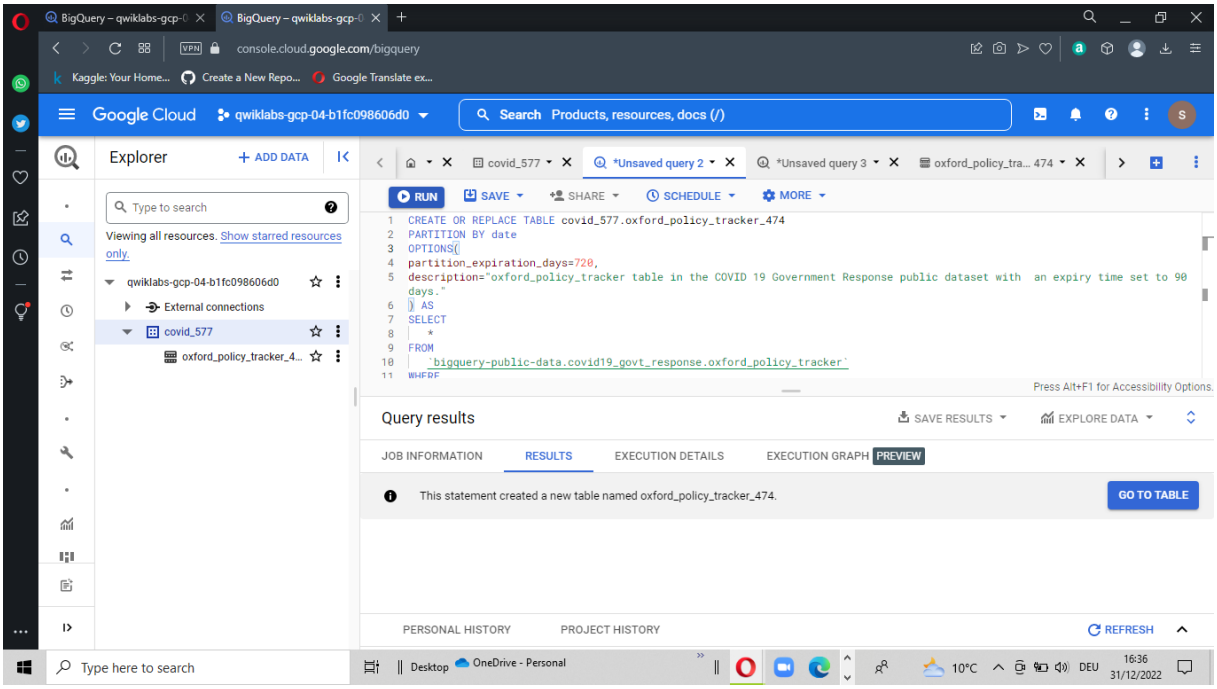
Task 1. Create a table partitioned by date

1. Create a new dataset `covid_577` and create a table `oxford_policy_tracker_474` in that dataset partitioned by date, with an expiry of 720 days. The table should initially use the schema defined for the oxford_policy_tracker table in the COVID 19 Government Response public dataset .
2. You must also populate the table with the data from the source table for all countries except the United Kingdom (GBR), Brazil (BRA), Canada (CAN) and the United States (USA).

Solution 1.1:



Solution 1.2:

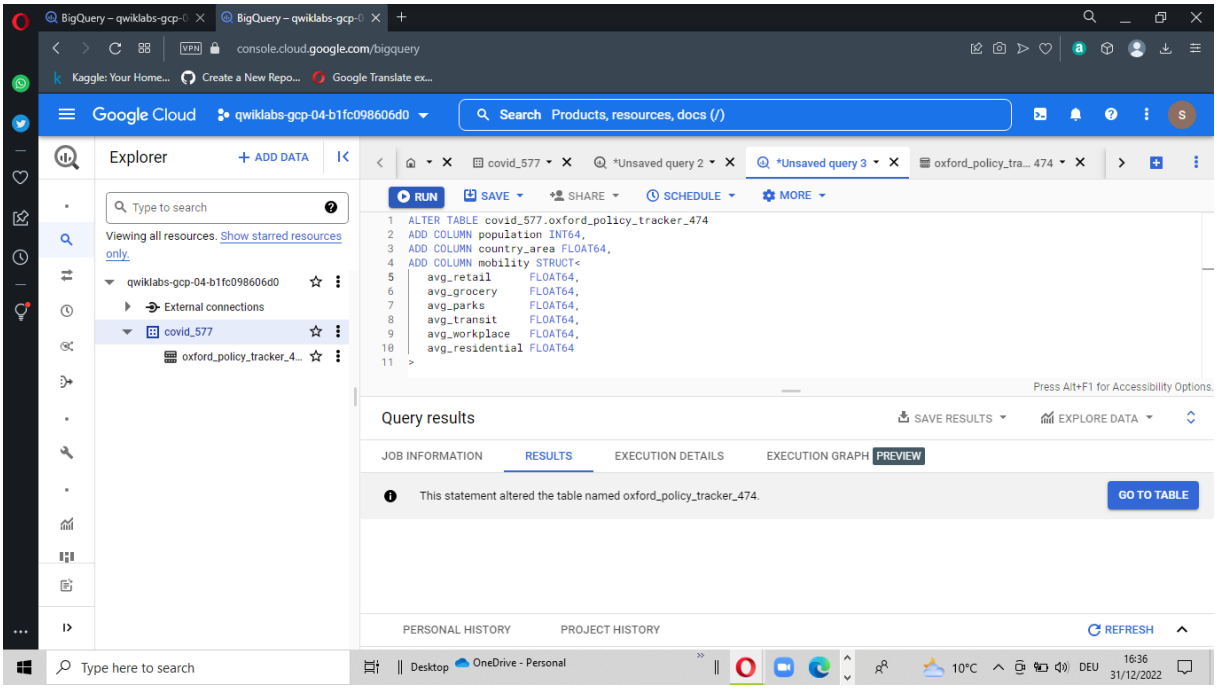


Task 2. Add new columns to your table

- Update your table to add new columns to your table with the appropriate data types to ensure alignment with the specification provided to you:

New Column Name	**SQL Data Type**
population	INTEGER
country_area	FLOAT
mobility	RECORD
mobility.avg_retail	FLOAT
mobility.avg_grocery	FLOAT
mobility.avg_parks	FLOAT
mobility.avg_transit	FLOAT
mobility.avg_workplace	FLOAT
mobility.avg_residential	FLOAT

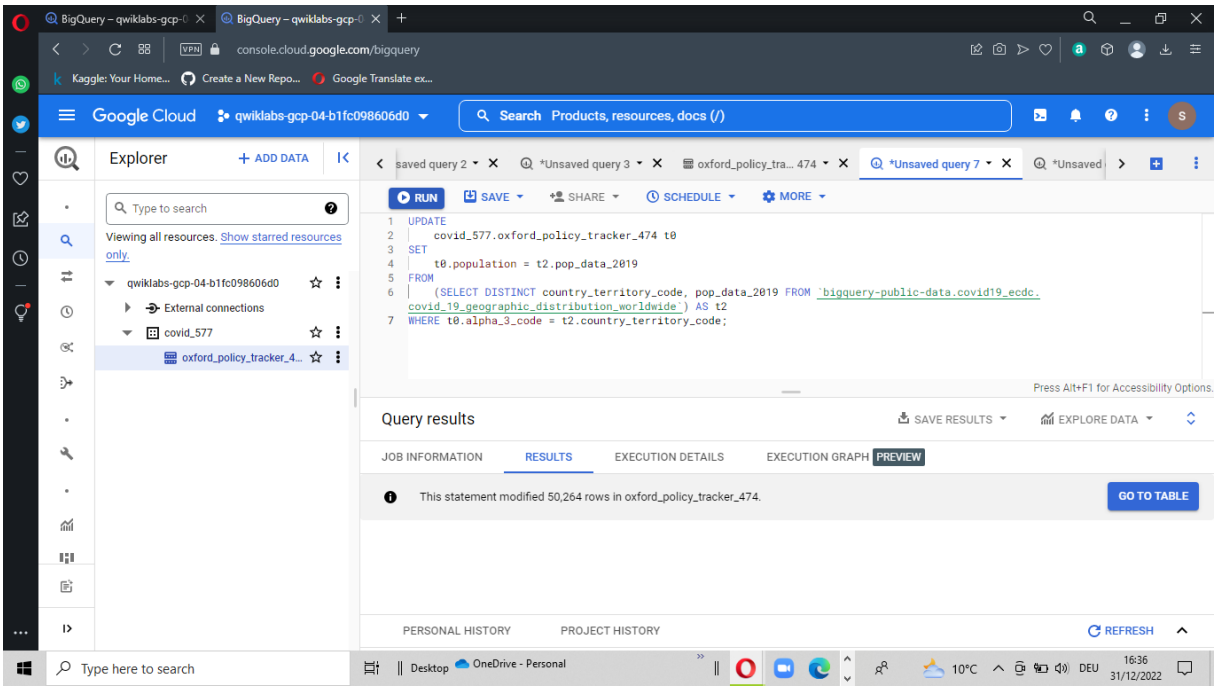
Solution:



Task 3. Add country population data to the population column

- Add the country population data to the population column in your table with covid_19_geographic_distribution_worldwide table data from the European Center for Disease Control COVID 19 public dataset table.

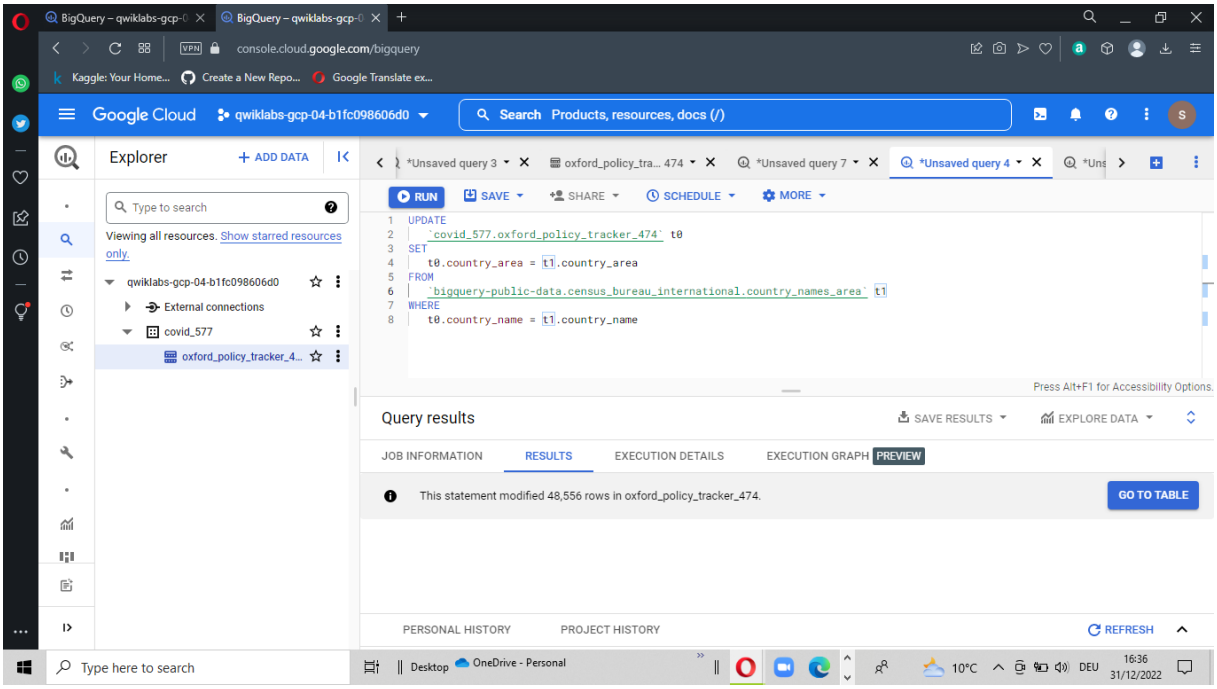
Solution:



Task 4. Add country area data to the country_area column

- Add the country area data to the country_area column in your table with country_names_area table data from the Census Bureau International public dataset.

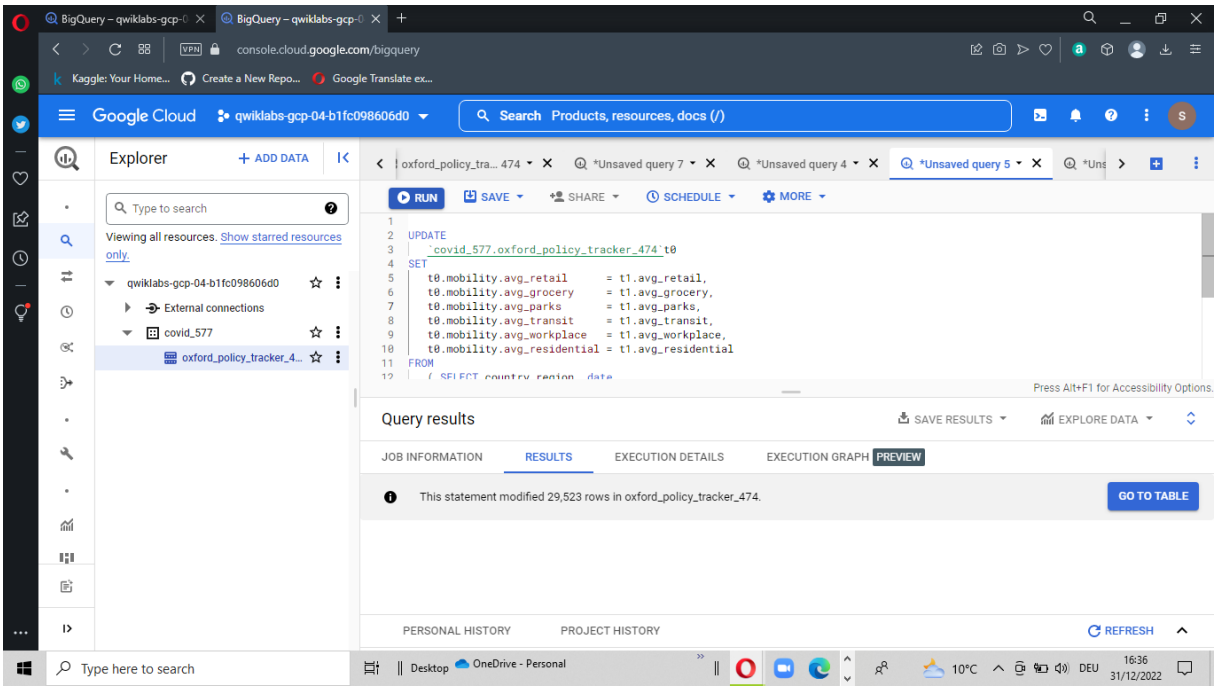
Solution:



Task 5. Populate the mobility record data

- Populate the mobility record in your table with data from the Google COVID 19 Mobility public dataset .

Solution:



Task 6. Query missing data in population & country_area columns

- Run a query to find the missing countries in the population and country_area data. The query should list countries that do not have any population data and countries that do not have country area information, ordered by country name. If a country has neither population or country area it must appear twice.

Solution: