Assignment - 1 Data Studio & BigQuery

Create a data visualisation in looker studio that should be connected to BigQuery where the data should be manipulated using SQL (will be verified during the interview call).

The Data in the [g-sheet](#) contains the details of the reservations during Feb, 2024 for 3 hotels (column tag = hotel) is the raw data for this assignment.

Find the attached dashboard PDF which is the expected output (try to replicate it). Your dashboard should answer the following question.

1. What is the Occupancy (% of rooms sold for a desired period), ADR (average daily rate per day) and RevPAR (revenue per available room) for Feb, 2024. These are the primary KPIs.
2. What Travel Agency and Country should I concentrate on marketing by hotel (analyse the reservations by travel agency & Country).
3. Find the anticipation (when can we expect the reservations for a night in Feb 2024 to be created) for every day in Feb

Clue:

- To find the number of rooms sold per day use the arrival and departure dates.
- There can be more than 1 row for a reservation, consider only the latest version (take the latest updated date).
- Anticipation can be calculated using the difference between arrival and created dates.
- The Dashboard should have a date filter and a hotel filter (use column tag as hotel).
- Total Rooms Available for VSE = 48, HAC = 35 and LTH = 72.

Assignment - 2 Python

Create a table in Bigquery by extracting data from a given JSON using python (you can complete this in Google Colab).

The table should contain the list of columns with proper formatting. List of required columns:
1. Created Date
2. Completion Date
3. Demanded by
4. Category
5. Priority
6. Status
7. Name of the ticket
8. Description
9. **Project ID**

Once you are done👏🎉

Please give us edit access (satha@hoteloversight.com & pooja.deswal@hoteloversight.com) to the Looker Studio dashboard for Assignment 1 and could present your logic during our call.
Please do not hesitate to use your own creative logic while creating the BigQuery output table for Assignment 1.

For Assignment 2 you can push the data to a table in Bigquery and share the Colab file to satha@hoteloversight.com & pooja.deswal@hoteloversight.com so that we can check and compare it before our call.

NOTE
Complete this assignment and send it back to us so we can review it. We will get back to you in the next couple of days to update you with the interview process.
All the best.