

# SQL ASSIGNMENT ON GOOGLE BIGQUERY

## DATASET 1: AUSTIN BIKESHARE STATIONS

```
1 ---Q1: The list of bikeshare_stations that are currently active
2 SELECT Distinct(name) as Station FROM `bigquery-public-data.austin_bikeshare.bikeshare_stations` where
   status='active'
```

Press Alt+F1 for Accessibility Options.

Query results [SAVE RESULTS](#) [EXPLORE DATA](#)

JOB INFORMATION **RESULTS** CHART PREVIEW JSON EXECUTION DETAILS EXECUTION GRAPH

Row	Station
1	East 2nd & Pedernales
2	Rosewood & Angelina
3	Rosewood & Chicon
4	11th & Salina

Results per page: 50 1 - 50 of 78

Number of St... [RUN](#) [SAVE QUERY](#) [SHARE](#) [SCHEDULE](#) [MORE](#) [Query completed](#)

```
1 ---Q2: To identify the number of active stations under each power_type
2 SELECT power_type,COUNT(power_type) as Number_Stations FROM `bigquery-public-data.austin_bikeshare.
   bikeshare_stations` where status='active' GROUP BY power_type
```

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Query results [SAVE RESULTS](#) [EXPLORE DATA](#)

JOB INFORMATION **RESULTS** CHART PREVIEW JSON EXECUTION DETAILS EXECUTION GRAPH

Row	power_type	Number_Stations
1	solar	76
2	non-metered	2

Number of St... ▶ RUN 📄 SAVE QUERY 👤 SHARE 🕒 SCHEDULE ⚙️ MORE ✅ Query complete

```

1 ---Q3: To find the number of active stations with 13 or more docks
2 SELECT COUNT(*) as Number_Stations FROM `bigquery-public-data.austin_bikeshare.bikeshare_stations` where
   status='active' AND number_of_docks>=13

```

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Query results 📄 SAVE RESULTS 📊 EXPLORE DATA

JOB INFORMATION **RESULTS** CHART **PREVIEW** JSON EXECUTION DETAILS EXECUTION GRAPH

Row	Number_Stations
1	55

Number of St... ▶ RUN 📄 SAVE QUERY 👤 SHARE 🕒 SCHEDULE ⚙️ MORE ✅ Query complete

```

1 ---Q4: To determine the number of stations and the average number of docks under each property_type
2 SELECT property_type, COUNT(*) as Number_Stations, AVG(number_of_docks) as Average_No_Docks FROM
   `bigquery-public-data.austin_bikeshare.bikeshare_stations` where status='active' GROUP BY property_type

```

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Query results 📄 SAVE RESULTS 📊 EXPLORE DATA

JOB INFORMATION **RESULTS** CHART **PREVIEW** JSON EXECUTION DETAILS EXECUTION GRAPH

Row	property_type	Number_Stations	Average_No_Docks
1	nonmetered_parking	8	13.5
2	paid_parking	17	13.23529411764...
3	parkland	6	13.66666666666...
4	sidewalk	28	13.60714285714...
5	undetermined_parking	19	13.52631578947...

No: of Active Stations ▶ RUN 📄 SAVE QUERY 👤 SHARE 🕒 SCHEDULE ⚙️ MORE ✅ Query complete

```

1 ---Q5: To determine the number of Active Stations
2 SELECT COUNT(DISTINCT(name)) as Number_ActiveStations FROM `bigquery-public-data.austin_bikeshare.
   bikeshare_stations` where status='active'

```

Press Alt+F1 for Accessibility Options

Query results 📄 SAVE RESULTS 📊 EXPLORE DATA

JOB INFORMATION **RESULTS** CHART **PREVIEW** JSON EXECUTION DETAILS EXECUTION GRAPH

Row	Number_ActiveStations
1	78

## DATSET 2&3: COVID19\_aha Hospital Beds & COVID19\_aha Staffing

Top ten counti... RUN SAVE QUERY SHARE SCHEDULE MORE Query completed

```
1 ---Q6: To find the top ten counties based on the total number of personnel
2 SELECT DISTINCT(H.county_fips_code), H.county_name, S.total_personnel_ft
3 FROM `bigquery-public-data.covid19_aha.hospital_beds` H
4 LEFT JOIN `bigquery-public-data.covid19_aha.staffing` S
5 ON H.county_fips_code = S.county_fips_code
6 ORDER BY S.total_personnel_ft DESC LIMIT 10
```

Press Alt+F1 for Accessibility Options.

Query results SAVE RESULTS EXPLORE DATA

JOB INFORMATION **RESULTS** CHART **PREVIEW** JSON EXECUTION DETAILS EXECUTION GRAPH

Row	county_fips_code	county_name	total_personnel_ft
1	06037	Los Angeles County	136701
2	17031	Cook County	104886
3	36061	New York County	102051
4	48201	Harris County	90541
5	25025	Suffolk County	68508
6	39035	Cuyahoga County	59041
7	42101	Philadelphia County	56780
8	04013	Maricopa County	55463
9	06073	San Diego County	45885

Counties wher... RUN SAVE QUERY SHARE SCHEDULE MORE Query completed

```
1 ---Q7: To list the counties where registered nurses are greater than or equal to the number of hospital beds
  available (so that each bed has at least 1 nurse)
2 SELECT H.county_name, H.total_hospital_beds, S.registered_nurses_pt
3 FROM `bigquery-public-data.covid19_aha.hospital_beds` H
4 LEFT JOIN `bigquery-public-data.covid19_aha.staffing` S
5 ON H.county_fips_code = S.county_fips_code
6 where S.registered_nurses_pt>=H.total_hospital_beds
```

Press Alt+F1 for Accessibility Options.

Query results SAVE RESULTS EXPLORE DATA

JOB INFORMATION **RESULTS** CHART **PREVIEW** JSON EXECUTION DETAILS EXECUTION GRAPH

Row	county_name	total_hospital_beds	registered_nurses_pt
1	Snohomish County	831	1058
2	Essex County	1514	1609
3	Middlesex County	3558	4443
4	Monterey County	740	831
5	New Hanover County	757	848
6	Contra Costa County	1484	2658
7	Cumberland County	1046	1106

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Top 20 states ... RUN SAVE QUERY SHARE SCHEDULE MORE Query completed

```
1 ---Q8: To list the top 20 states based on the number of physicians and dentists
2 SELECT H.state_name, SUM(S.physicians_and_dentists_ft) as total_physicians_dentists
3 FROM `bigquery-public-data.covid19_aha.hospital_beds` H
4 LEFT JOIN `bigquery-public-data.covid19_aha.staffing` S
5 ON H.county_fips_code = S.county_fips_code
6 GROUP BY H.state_name
7 ORDER BY SUM(S.physicians_and_dentists_ft) DESC LIMIT 20
```

Press Alt+F1 for Accessibility Options.

Query results SAVE RESULTS EXPLORE DATA

JOB INFORMATION RESULTS CHART PREVIEW JSON EXECUTION DETAILS EXECUTION GRAPH

Row	state_name	total_physicians_den
1	Ohio	16917
2	New York	15978
3	California	15400
4	Texas	11678
5	Pennsylvania	9261
6	Massachusetts	8637
7	Illinois	7887

Results per page: 50 1 - 20 of 20

COUNTIES WHERE... RUN SAVE QUERY SHARE SCHEDULE MORE Query completed

```
1 ---Q9: To display the counties where the number of pediatric staff equals or exceeds the number of available
2 beds given that they have pediatric intensive care beds.
3 SELECT H.county_name, H.pediatric_intensive_care_beds, S.pediatric_intensive_care_fte
4 FROM `bigquery-public-data.covid19_aha.hospital_beds` H
5 LEFT JOIN `bigquery-public-data.covid19_aha.staffing` S
6 ON H.county_fips_code = S.county_fips_code
7 where H.pediatric_intensive_care_beds>0 AND S.pediatric_intensive_care_fte>=H.pediatric_intensive_care_beds
8 order by H.pediatric_intensive_care_beds desc
```

Press Alt+F1 for Accessibility Options.

Query results SAVE RESULTS EXPLORE DATA

JOB INFORMATION RESULTS CHART PREVIEW JSON EXECUTION DETAILS EXECUTION GRAPH

Row	county_name	pediatric_intensive_c	pediatric_intensive_c
1	Hillsborough County	42	42
2	Jefferson County	24	26
3	East Baton Rouge Parish	14	18
4	Wake County	10	13
5	Kalamazoo County	8	9
6	Riverside County	8	11
7	Cumberland County	7	7
8	Denver County	4	4

Top 10 states ...		FROM	SAVE QUERY	SHARE	SCHEDULE	MORE	Query complete
<pre> 1  ---Q 10: Top 10 states based on the total number of hospital beds 2  SELECT state_name as State, SUM(total_hospital_beds) as Hospital_Beds 3  FROM `bigquery-public-data.covid19_aha.hospital_beds` 4  GROUP BY state_name 5  ORDER BY SUM(total_hospital_beds) DESC LIMIT 10 </pre>							
Query results		SAVE RESULTS		EXPLORE DATA			
JOB INFORMATION		RESULTS	CHART	PREVIEW	JSON	EXECUTION DETAILS	EXECUTION GRAPH
Row	State	Hospital_Beds					
1	California	85276					
2	Texas	75271					
3	New York	61631					
4	Florida	60269					
5	Pennsylvania	41571					
6	Ohio	36920					
7	Illinois	35445					
8	Georgia	28778					
9	Michigan	28300					
10	New Jersey	25966					

### Link for queries

<https://console.cloud.google.com/bigquery?sq=1090795580417:314a4887a0a7485fb6451b8461268c62>

<https://console.cloud.google.com/bigquery?sq=1090795580417:5e4cc9766bb74d07b8791a0a2796cc42>

<https://console.cloud.google.com/bigquery?sq=1090795580417:44d394a952f449ad9d72be5b695742f1>

<https://console.cloud.google.com/bigquery?sq=1090795580417:57b703d15dbf4c9aabb8dd7b7667bb9c>

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