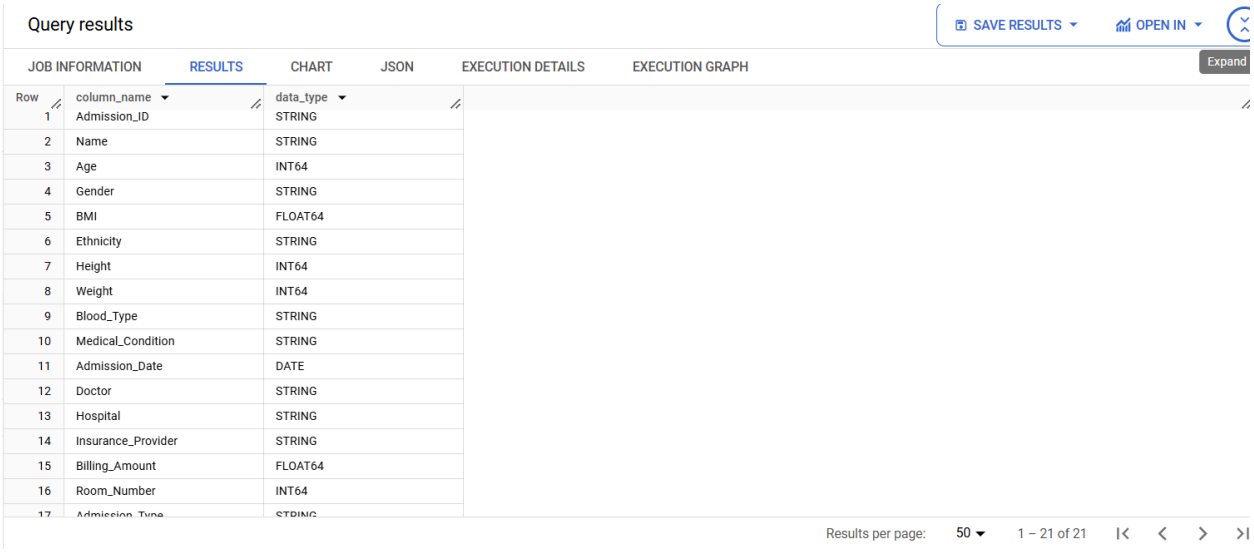
```sql
select column_name, data_type
from `apollo_hospital.INFORMATION_SCHEMA.COLUMNS`
```



Row	column_name	data_type
1	Admission_ID	STRING
2	Name	STRING
3	Age	INT64
4	Gender	STRING
5	BMI	FLOAT64
6	Ethnicity	STRING
7	Height	INT64
8	Weight	INT64
9	Blood_Type	STRING
10	Medical_Condition	STRING
11	Admission_Date	DATE
12	Doctor	STRING
13	Hospital	STRING
14	Insurance_Provider	STRING
15	Billing_Amount	FLOAT64
16	Room_Number	INT64
17	Admission_Type	STRING


```sql
1 Identify the top 3 preferred insurance providers among patients.
select Insurance_Provider, count(*) toal_nbs
from `apollo_hospital.hospital`
group by Insurance_Provider
order by 2 desc
limit 3
```

Row	Insurance_Provider	toal_nbs
1	Cigna	8122
2	Medicare	8118
3	Blue Cross	8078

```sql
2 What are the most common medical conditions among patients aged 60 and above?
select Medical_Condition, count(*) total_nbs
from `apollo_hospital.hospital`
where Age >=60
group by Medical_Condition
order by 1 desc
```

Query results

SAVE RESULTS | OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	Medical_Condition	total_nbs
1	Obesity	2505
2	Hypertension	2561
3	Diabetes	2620
4	Cancer	2558
5	Asthma	2570
6	Arthritis	2612

3. Determine the count of universal blood donors (O- patients) and recipients (AB+ patients) within the patient population.

```
select case when Blood_Type = 'AB+' then 'Universal Blood Receipts'
                 else 'Universal Blood Donors' end as  Blood_Type,
                  count(*) total_counts,
from `apollo_hospital.hospital`
where Blood_Type in ('O-' , 'AB+')
group by Blood_Type
```

Query results

SAVE RESULTS | OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	Blood_Type	total_counts
1	Universal Blood Receipts	5101
2	Universal Blood Donors	5018

Results per page: 50 | 1 – 2 of 2

4. How many patients fall into different BMI categories (underweight, normal weight, overweight, obese)?

```
with cte as
(select  case  WHEN BMI < 20 THEN 'Underweight'
                 WHEN BMI >= 20 AND BMI < 25 THEN 'Normal weight'
                  WHEN BMI >= 25 AND BMI < 30 THEN 'Overweight'
                ELSE 'Obese'
    END AS Weight_Status,

           count(*) total
```

```
from `apollo_hospital.hospital`
group by BMI)

select Weight_Status, count(*) total_counts
from cte
group by Weight_Status
```

Query results

SAVE RESULTS | OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	Weight_Status	total_counts
1	Underweight	488
2	Normal weight	500
3	Overweight	500
4	Obese	2487

Results per page: 50 | 1 – 4 of 4

#6. Which ethnic group exhibits the highest susceptibility to cancer?

```
select Ethnicity, count(*) total_counts
from `apollo_hospital.hospital`

where Medical_Condition = 'Cancer'
group by Ethnicity
order by total_counts desc
```

Query results

SAVE RESULTS | OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	Ethnicity	total_counts
1	Caucasian	5333
2	African American	777
3	Hispanic	391
4	Asian	113
5	Native American	74

Results per page: 50 | 1 – 5 of 5

#7. Identify the most commonly prescribed medications for each medical condition.

```
select Medical_Condition, Medication,  count(*) prescribed_medication
from `apollo_hospital.hospital`
group by Medical_Condition, 2
order by 3 desc
```

Query results

SAVE RESULTS | OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	Medical_Condition	Medication	prescribed_medicati
1	Cancer	Lipitor	1417
2	Diabetes	Lipitor	1401
3	Diabetes	Ibuprofen	1388
4	Arthritis	Aspirin	1382
5	Arthritis	Penicillin	1378

Results per page: 50 | 1 – 30 of 30

#8. Identify doctors who have treated more than 10 patients.

```
select Doctor, count(distinct Name) total_patients
from `apollo_hospital.hospital`
group by Doctor
having count(distinct Name)>10
order by 2 desc
```

Query results

SAVE RESULTS | OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	Doctor	total_patients
1	John Smith	18
2	Michael Williams	17
3	Michael Smith	15
4	David Smith	15
5	Elizabeth Smith	14
6	Matthew Smith	14
7	Michael Brown	13
8	Michael Johnson	13
9	Jennifer Johnson	13
10	Robert Smith	13

Results per page: 50 | 1 – 19 of 19

#9. List medical conditions that have an average hospitalization period greater than 15 days and where the maximum billing amount exceeds $25,000.

```sql
select Medical_Condition, avg(Days_Hospitalised) avg_hospitalised,
max(Billing_Amount) max_billing_amount
from `apollo_hospital.hospital`
group by Medical_Condition
having avg(Days_Hospitalised) > 15 and max(Billing_Amount) > 25000
order by 2,3 desc
```

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	Medical_Condition	avg_hospitalised	max_billing_amount
1	Diabetes	15.38596233078...	52211.85
2	Obesity	15.49073097211...	51501.65
3	Hypertension	15.51227912548...	52764.28
4	Cancer	15.51839114832...	52373.03
5	Arthritis	15.58334555050...	52170.04
6	Asthma	15.65966450052...	52181.84

Results per page: 50 1 – 6 of 6

#10. Find hospitals where the average billing amount exceeds the overall average billing amount by at least 50%.

```sql
select Hospital, avg(Billing_Amount) avg_billing_amount
from `apollo_hospital.hospital`
group by Hospital
having avg(Billing_Amount) > 0.5 * avg(Billing_Amount)
order by 2 desc
```

Query results SAVE RESULTS OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

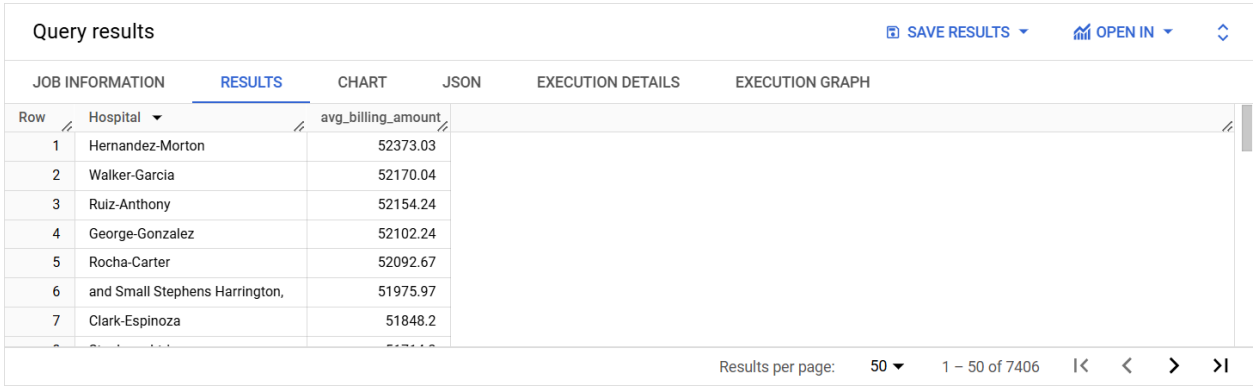
Row	Hospital	avg_billing_amount
1	Hernandez-Morton	52373.03
2	Walker-Garcia	52170.04
3	Ruiz-Anthony	52154.24
4	George-Gonzalez	52102.24

Results per page: 50 1 – 50 of 32734

#11. Find hospitals where the average billing amount exceeds the overall average billing amount by at least 50%.

```sql
select Hospital, avg(Billing_Amount) avg_billing_amount
from `apollo_hospital.hospital`
group by Hospital
```

```
having avg(Billing_Amount) > (select 1.5 * avg(Billing_Amount) from
`apollo_hospital.hospital`)
order by 2 desc
```



Query results

SAVE RESULTS | OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

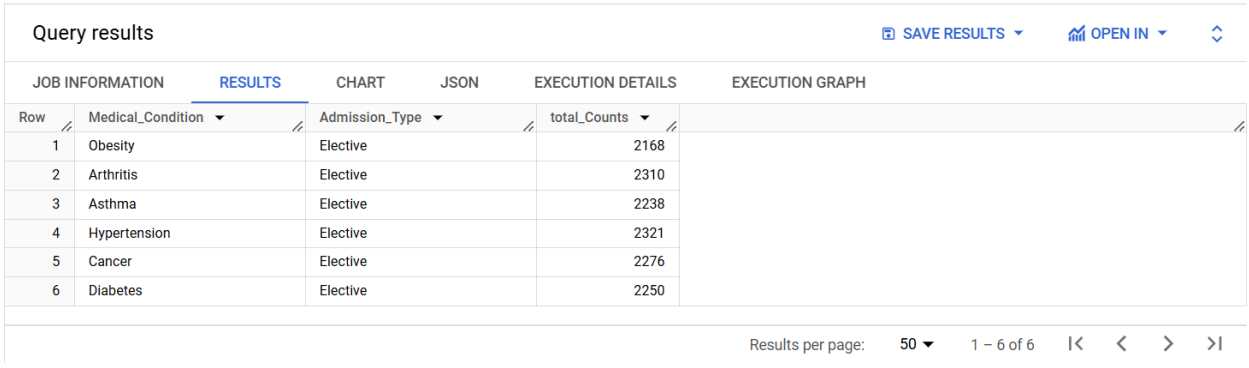
Row	Hospital	avg_billing_amount
1	Hernandez-Morton	52373.03
2	Walker-Garcia	52170.04
3	Ruiz-Anthony	52154.24
4	George-Gonzalez	52102.24
5	Rocha-Carter	52092.67
6	and Small Stephens Harrington,	51975.97
7	Clark-Espinoza	51848.2

Results per page: 50 | 1 – 50 of 7406

#12. Calculate the total billing amount for emergency and elective admissions for each medical condition. Show only those medical conditions where emergency billing is less than elective billing.

```
select Medical_Condition, Admission_Type, count(*) total_Counts
from `apollo_hospital.hospital`
where Admission_Type in ('Emergency' , 'Elective')
group by Medical_Condition, Admission_Type
having sum(case when Admission_Type    = 'Emergency' then Billing_Amount else 0 end) <

       sum(case when Admission_Type    = 'Elective' then Billing_Amount else  0  end)
```



Query results

SAVE RESULTS | OPEN IN

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	Medical_Condition	Admission_Type	total_Counts
1	Obesity	Elective	2168
2	Arthritis	Elective	2310
3	Asthma	Elective	2238
4	Hypertension	Elective	2321
5	Cancer	Elective	2276
6	Diabetes	Elective	2250

Results per page: 50 | 1 – 6 of 6