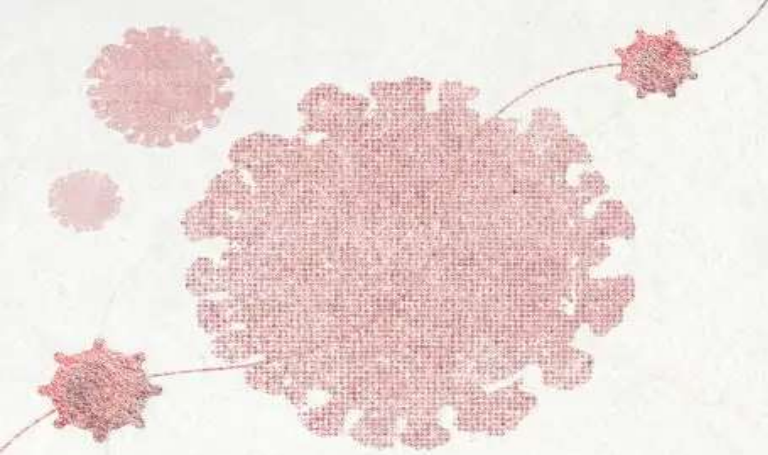# COVID-19 Analysis

1-Find the number of Corona patients who faced shortness of breath.

```sql
1   SELECT COUNT(*) AS Number_of_Corona_Patients_With_Shortness_Of_Breath
2   FROM covid_data
3   WHERE Corona = 'Positive'
4   and Shortness_of_breath ='True'
```

Number_of_Corona_Patients_With_Shortness_Of
1164

2-Find the number of negative corona patients who have a fever and sore throat.

```sql
1   select count(*) as negative_patient_having_fever_and_sore_thorat
2   from covid_data
3   where Corona = 'Negative'
4   and Fever = 'True'
5   and Sore_throat='True'
6
```

negative_patient_having_fever_and_sore_thorat
121

3-Group the data by month and rank the number of positive cases..

```
1 ●     SELECT
2       MONTHNAME(Test_date) AS Month,
3       COUNT(*) AS PositiveCases,
4       RANK() OVER (ORDER BY COUNT(*) DESC) AS Ranking
5       FROM covid_data
6       WHERE Corona = 'Positive'
7       GROUP BY Month;
8
```

Month	PositiveCases	Ranking
April	8881	1
March	5848	2

4-Find the female negative corona patients who faced cough and headache

```sql
1   select count(*) as Female_Negative_Corona_Patients_With_Cough_And_Headache
2   from covid_data
3   where corona = "Negative"
4   and  Sex = 'Female'
5   and Cough_symptoms = "True"
6   and Headache = "True"
7
```

Female_Negative_Corona_Patients_With_Cough_
32

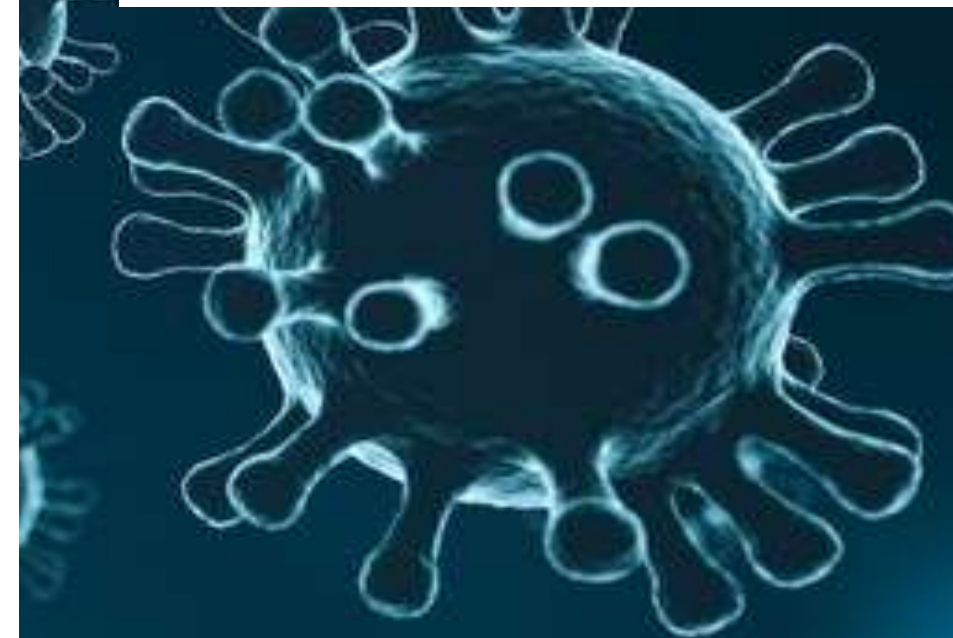**5-How many elderly corona patients have faced breathing problems?**

```sql
1   SELECT COUNT(*) AS Elderly_Patients_With_Breathing_Problems
2   FROM covid_data
3   WHERE Corona = 'Positive'
4   AND Age_60_above = 'Yes'
5   AND Shortness_of_breath = 'true';
6
```

Elderly_Patients_With_Breathing_Problems
263

```sql
SELECT 'Fever' AS Symptom,
SUM(CASE WHEN Fever = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
FROM covid_data
WHERE `Corona` = 'Positive'
UNION ALL
SELECT 'Cough' AS Symptom,
SUM(CASE WHEN Cough_symptoms = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
FROM covid_data
WHERE `Corona` = 'Positive'
UNION ALL
SELECT 'Sore throat' AS Symptom,
SUM(CASE WHEN Sore_throat = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
FROM covid_data
WHERE `Corona` = 'Positive'
UNION ALL
SELECT 'Shortness of breath' AS Symptom,
SUM(CASE WHEN Shortness_of_breath = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
FROM covid_data
WHERE `Corona` = 'Positive'
UNION ALL
SELECT 'Headache' AS Symptom,
SUM(CASE WHEN Headache = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
FROM covid_data
WHERE `Corona` = 'Positive'
ORDER BY Symptom_Count DESC
LIMIT 3;
```

Symptom	Symptom_Count
Cough	6584
Fever	5559
Headache	2235

```sql
1 •    SELECT  'Fever' AS Symptom,
2      SUM(CASE WHEN Fever = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
3      FROM covid_data
4      WHERE `Corona` = 'Negative'
5      UNION ALL
6      SELECT 'Cough' AS Symptom,
7      SUM(CASE WHEN Cough_symptoms = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
8      FROM covid_data
9      WHERE `Corona` = 'Negative'
10     UNION ALL
11     SELECT 'Sore throat' AS Symptom,
12     SUM(CASE WHEN Sore_throat = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
13     FROM covid_data
14     WHERE `Corona` = 'Negative'
15     UNION ALL
16     SELECT 'Shortness of breath' AS Symptom,
17     SUM(CASE WHEN Shortness_of_breath = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
18     FROM covid_data
19     WHERE `Corona` = 'Negative'
20     UNION ALL
21     SELECT 'Headache' AS Symptom,
22     SUM(CASE WHEN Headache = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
23     FROM covid_data
24     WHERE `Corona` = 'Negative'
25     ORDER BY Symptom_Count
26     LIMIT 1
27
```

Symptom	Symptom_Count
Headache	148

```sql
1  ● SELECT 'Fever' AS Symptom,
2    SUM(CASE WHEN Fever = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
3    FROM covid_data
4    WHERE `Corona` = 'Positive' AND `Sex` = 'male' AND `Known_contact` = 'Abroad'
5    UNION ALL
6    SELECT 'Cough' AS Symptom,
7    SUM(CASE WHEN Cough_symptoms = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
8    FROM covid_data
9    WHERE `Corona` = 'Positive' AND `Sex` = 'male' AND `Known_contact` = 'Abroad'
10   UNION ALL
11   SELECT
12   'Sore throat' AS Symptom,
13   SUM(CASE WHEN Sore_throat = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
14   FROM covid_data
15   WHERE `Corona` = 'Positive' AND `Sex` = 'male' AND `Known_contact` = 'Abroad'
16   UNION ALL
17   SELECT
18   'Shortness of breath' AS Symptom,
19   SUM(CASE WHEN Shortness_of_breath = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
20   FROM covid_data
21   WHERE `Corona` = 'Positive' AND `Sex` = 'male' AND `Known_contact` = 'Abroad'
22   UNION ALL
23   SELECT
24   'Headache' AS Symptom,
25   SUM(CASE WHEN Headache = 'true' THEN 1 ELSE 0 END) AS Symptom_Count
26   FROM covid_data
27   WHERE `Corona` = 'Positive' AND `Sex` = 'male' AND `Known_contact` = 'Abroad'
28   ORDER BY Symptom_Count DESC
29   LIMIT 1;
```

Symptom	Symptom_Count
Cough	532