| | Limit to 1000 rows |

```
1    # GENERAL HEALTHCARE ANALYSIS
2
3    #1. Average Billing Amount by Medical Condition
4    SELECT `Medical Condition`, ROUND(AVG(`Billing Amount`), 2) AS Average_Billing
5    FROM healthdata
6    GROUP BY `Medical Condition`
7    ORDER BY Average_Billing DESC;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Medical Condition	Average_Billing
Obesity	25804.36
Diabetes	25660.48
Asthma	25633.46
Arthritis	25511.78
Hypertension	25503.06
Cancer	25152.32

```sql
#2. Gender Distribution Across Medical Conditions
SELECT `Medical Condition`, `Gender`, COUNT(*) AS Patient_Count
FROM healthdata
GROUP BY `Medical Condition`, `Gender`
ORDER BY `Medical Condition` ASC, Patient_Count DESC;
```

Medical Condition	Gender	Patient_Count
Arthritis	Female	4642
Arthritis	Male	4576
Asthma	Male	4584
Asthma	Female	4511
Cancer	Male	4574
Cancer	Female	4566
Diabetes	Female	4609
Diabetes	Male	4607
Hypertension	Male	4582
Hypertension	Female	4569
Obesity	Male	4573
Obesity	Female	4573

```
14
15      #3. Patients Gender Distribution
16      SELECT `Gender`, COUNT(*) AS Total_Count
17      FROM healthdata
18      GROUP BY `Gender`
19      ORDER BY Total_Count DESC;
20
```

Query 1

Limit to 1000 rows

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Gender	Total_Count
Male	27496
Female	27470

```sql
21      # Create 'Length of Stay' Column
22      ALTER TABLE healthdata
23      ADD COLUMN `Length of Stay` INT;
24
25      # Disable Safe Update Mode Temporarily
26      SET SQL_SAFE_UPDATES = 0;
27
28      # Calculate and Populate 'Length of Stay' Column
29      UPDATE healthdata
30      SET `Length of Stay` = DATEDIFF(`Discharge Date`, `Date of Admission`);
31
32      # Enable Safe Update Mode
33      SET SQL_SAFE_UPDATES = 1;
```

```sql
34
35     #4. Average Length of Stay by Admission Type
36  ●  SELECT `Admission Type`, ROUND(AVG(`Length of Stay`), 2) AS Average_Stay_Days
37     FROM healthdata
38     GROUP BY `Admission Type`
39     ORDER BY Average_Stay_Days DESC;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Admission Type	Average_Stay_Days
Emergency	15.58
Elective	15.51
Urgent	15.40

```
40
41     #5. Average Length of Stay by Medical Condition
42 •   SELECT `Medical Condition`, ROUND(AVG(`Length of Stay`), 2) AS Average_Stay_Days
43     FROM healthdata
44     GROUP BY `Medical Condition`
45     ORDER BY Average_Stay_Days DESC;
```

Medical Condition	Average_Stay_Days
Asthma	15.68
Cancer	15.50
Arthritis	15.50
Obesity	15.45
Hypertension	15.44
Diabetes	15.43

```sql
47    #6. Top Ten Hospital by Total Billing Amount
48  • SELECT `Hospital`, ROUND(SUM(`Billing Amount`), 2) AS Total_Billing
49    FROM healthdata
50    GROUP BY `Hospital`
51    ORDER BY Total_Billing DESC
52    LIMIT 10;
```

Hospital	Total_Billing
Johnson PLC	1081477.32
LLC Smith	1030189.88
Smith PLC	1029424.47
Ltd Smith	1003365.53
Smith Ltd	970035.87
Johnson Inc	934310.71
Group Smith	902975.79
Inc Brown	877961.33
LLC Johnson	816438.38
Smith Group	806631.29

```
53
54      #7. Most Common Medication for Each Medical Condition
55    •  ⊖ WITH RankedMedications AS (
56         SELECT `Medical Condition`, `Medication`, COUNT(*) AS Prescription_Count, ROW_NUMBER()
57      ⊖  OVER (PARTITION BY `Medical Condition`
58      └  ORDER BY COUNT(*) DESC) AS rn
59         FROM healthdata
60      └  GROUP BY `Medical Condition`, `Medication`)
61         SELECT `Medical Condition`, `Medication`, Prescription_Count
62         FROM RankedMedications
63         WHERE rn = 1;
```

Result Grid | Filter Rows: _____ | Export: | Wrap Cell Content:

Medical Condition	Medication	Prescription_Count
Arthritis	Aspirin	1901
Asthma	Paracetamol	1870
Cancer	Lipitor	1904
Diabetes	Lipitor	1875
Hypertension	Ibuprofen	1874
Obesity	Penicillin	1872

```sql
      #8. Test Result Distribution by Medication
      SELECT `Medication`, `Test Results`, COUNT(*) AS Result_Count
      FROM healthdata
      GROUP BY `Medication`, `Test Results`
      ORDER BY `Medication` ASC, Result_Count DESC;
```

Medication	Test Results	Result_Count
Aspirin	Abnormal	3700
Aspirin	Normal	3696
Aspirin	Inconclusive	3588
Ibuprofen	Abnormal	3711
Ibuprofen	Normal	3699
Ibuprofen	Inconclusive	3613
Lipitor	Inconclusive	3720
Lipitor	Abnormal	3670
Lipitor	Normal	3648
Paracetamol	Abnormal	3695
Paracetamol	Inconclusive	3646
Paracetamol	Normal	3624
Penicillin	Normal	3664
Penicillin	Abnormal	3661
Penicillin	Inconclusive	3631

```sql
71    #9. Top Five Doctors With Highest Average Billing
72  • SELECT `Doctor`, ROUND(AVG(`Billing Amount`), 2) AS Average_Billing
73    FROM healthdata
74    GROUP BY `Doctor`
75    ORDER BY Average_Billing DESC
76    LIMIT 5;
```

Doctor	Average_Billing
Kathleen Griffin	52764.28
Dr. Joseph Gordon	52373.03
Taylor Novak	52271.66
Robert Hartman	52181.84
Brian Riley	52170.04

```sql
77
78    #10. Monthly Admission Trend in Last Tewlve Months
79 ●  SELECT DATE_FORMAT(`Date of Admission`, '%Y-%m') AS Month, Count(*) AS Admissions
80    FROM healthdata
81    WHERE `Date of Admission` >= DATE_SUB((SELECT MAX(`Date of Admission`) FROM healthdata), INTERVAL 12 MONTH)
82    GROUP BY Month
83    ORDER BY Month DESC
84    LIMIT 12;
```

Month	Admissions
2024-05	212
2024-04	941
2024-03	902
2024-02	869
2024-01	903
2023-12	916
2023-11	873
2023-10	884
2023-09	913
2023-08	962
2023-07	913
2023-06	953

```sql
85
86      #11. Insurance Providers With Highest Total Billing
87 •    SELECT `Insurance Provider`, ROUND(SUM(`Billing Amount`), 2) AS Total_Billing
88      FROM healthdata
89      GROUP BY `Insurance Provider`
90      ORDER BY Total_Billing DESC;
```

Insurance Provider	Total_Billing
Cigna	284334099.12
Medicare	282911026.34
Blue Cross	280409100.53
UnitedHealthcare	279915371.16
Aetna	276498740.74