OBJECTIVES

The objectives of analyzing this dataset could include understanding patient demographics and medical conditions, identifying prevalent medical conditions and associated treatments, assessing hospital performance, analyzing billing patterns, and potentially deriving insights to improve healthcare services, resource allocation, and patient care. It helps organizations harness the power of data, enabling them to make decisions, optimize processes, and gain a competitive edge.

QUESTIONS

1. Counting Total Record in Database.
2. Finding maximum age of patient admitted.
3. Calculating Maximum Count of patients on basis of total patients hospitalized with respect to age.
4. Most preffered Insurance Provide by Patients Hospatilized.
5. Finding out most preffered Hospital .
6. Ranking Age on the number of patients Hospitalized .
7. Finding Rank, Maximum number of medicines recommended to patients based on Medical Condition pertaining to them.
8 Calculate number of blood types of patients which lies between age 20 to 45.
9. Find how many of patient are Universal Blood Donor and Universal Blood reciever.
10. Finding Billing Amount of patients admitted and number of days spent in respective hospital.

The table schema:-

Name	text
Age	int
Gender	text
Blood Type	text
Medical Condition	text
Date of Admission	text
Doctor	text
Hospital	text
Insurance Provider	text
Billing Amount	double
Room Number	int
Admission Type	text
Discharge Date	text
Medication	text
Test Results	text

1. Counting Total Record in Database

Query

```
select count(*) from healthcare;
```

Output

	count(*)
▶	2999

Result Grid | Filter Rows:

2.Finding maximum age of patient admitted.

Query

```sql
select max(age) as Maximum_Age from Healthcare;
```
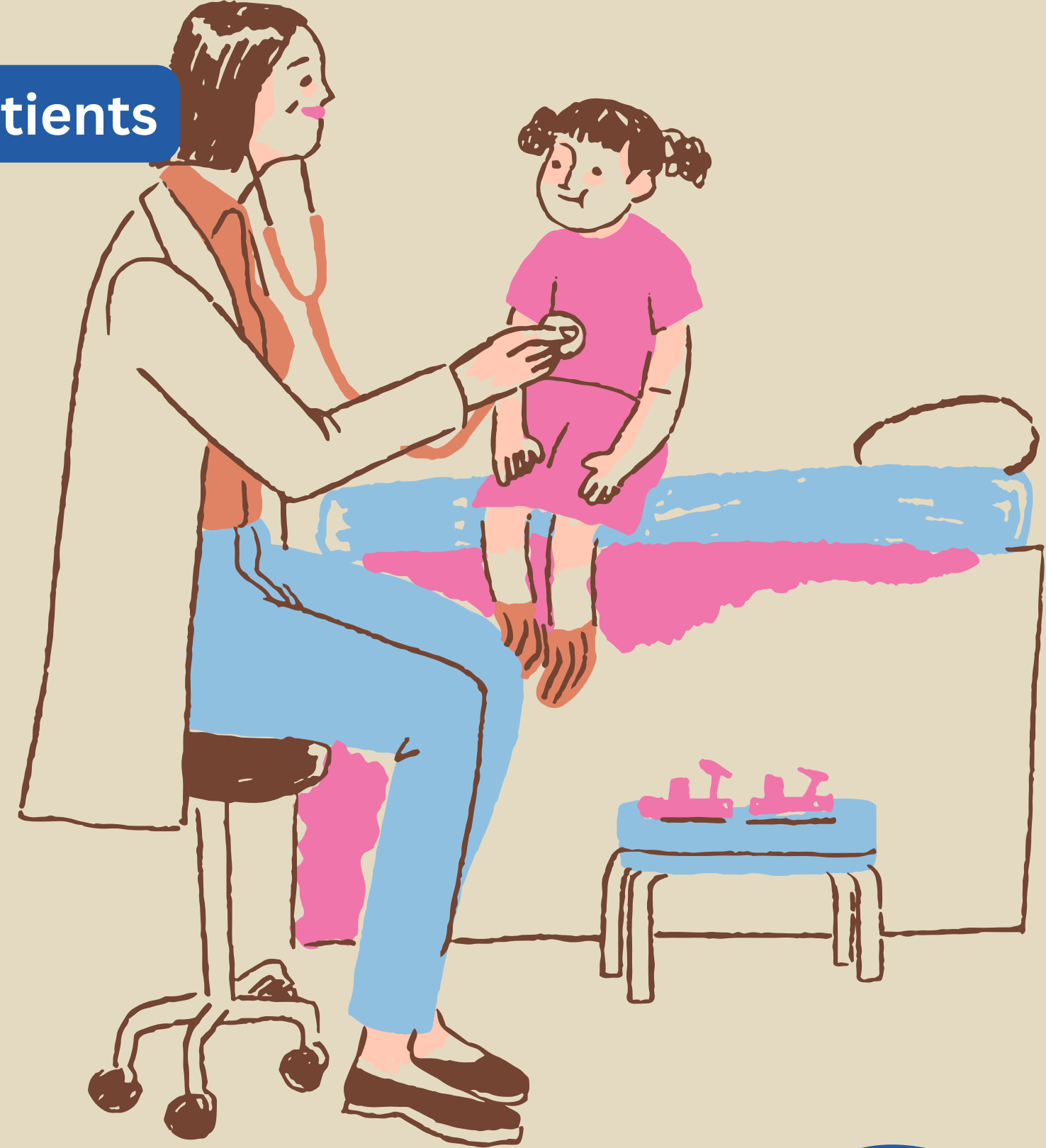
Output

Maximum_Age
85

3. Calculating Maximum Count of patients on basis of total patients hospitalized with respect to age.

Query

```sql
select Age, count(Age) as Total From healthcare
group by Age
order by Total Desc , Age Desc;
```

Output

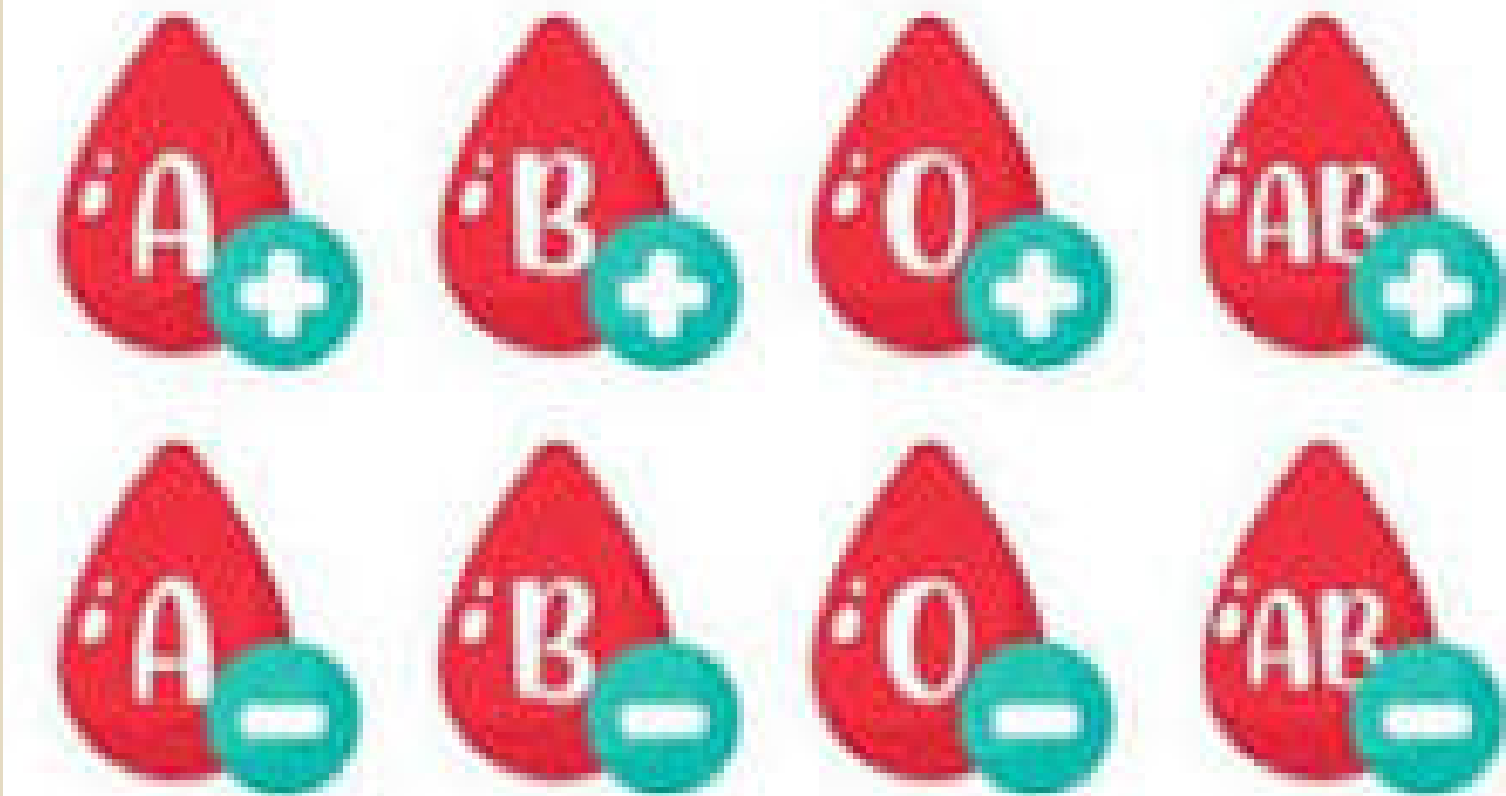| Age	Total
51	54
20	54
18	54
79	53
59	53
38	53
37	53
36	53

4. Calculate number of blood types of patients which lies betwwen age 20 to 45

Query

```sql
SELECT Age,  'Blood_type', COUNT(distinct'Blood_Type') as Count_Blood_Type
FROM healthcare
WHERE AGE BETWEEN 20 AND 45
GROUP BY 1,2
ORDER BY 'Blood_Type' DESC;
```

Output

	Age	Blood_type	Count_Blood_Type
▶	20	Blood_type	1
	21	Blood_type	1
	22	Blood_type	1
	23	Blood_type	1
	24	Blood_type	1
	25	Blood_type	1
	26	Blood_type	1
	27	Blood_type	1

Result Grid | Filter Rows:

5. Finding out most preffered Hospital

Query

```
select "Hostpital", count("Hospital") As Total from healthcare
group by "Hostpital"
order by Total Desc;
```

Output

	Hostpital	Total
▶	Hostpital	2999

6. Ranking Age on the number of patients Hospitalized

Query

```sql
SELECT AGE, COUNT(AGE) As Total,
dense_RANK() OVER(ORDER BY COUNT(AGE) DESC, age DESC) as Ranking_Admitted
from Healthcare
group by age
HAVING Total > Avg(age);
```

Output

	AGE	Total	Ranking_Admitted
▶	51	54	1
	20	54	2
	18	54	3
	38	53	4
	37	53	5
	36	53	6
	35	52	7
	42	48	8

7.Finding Rank, Maximum number of medicines recommended to patients based on Medical Condition pertaining to them.

Query

```sql
SELECT "Medical_Condition", Medication,
COUNT(medication) as Total_Medications_to_Patients,
RANK() OVER(PARTITION BY "Medical_Condition" ORDER BY COUNT(medication) DESC) as Rank_Medicine
FROM Healthcare
GROUP BY 1,2
ORDER BY 1;
```

Output

	Medical_Condition	Medication	Total_Medications_to_Patients	Rank_Medicine
▶	Medical_Condition	Penicillin	626	1
	Medical_Condition	Lipitor	616	2
	Medical_Condition	Paracetamol	597	3
	Medical_Condition	Ibuprofen	582	4
	Medical_Condition	Aspirin	578	5

8. Most preffered Insurance Provide by Patients Hospatilized.

Query

```sql
SELECT "Insurance_Provider", COUNT("Insurance_Provider") AS Patient_count
from healthcare
group by "Insurance_Provider"
order by Patient_count Desc;
```

Output

Insurance_Provider	Patient_count
Insurance_Provider	2999

Query

```sql
SELECT DISTINCT (SELECT Count('Blood_Type') FROM healthcare
WHERE 'Blood_Type' IN ('O-')) AS Universal_Blood_Donor,
(SELECT Count('Blood_Type') FROM healthcare
WHERE 'Blood_Type'  IN ('AB+')) as Universal_Blood_reciever
FROM healthcare;
```

Output

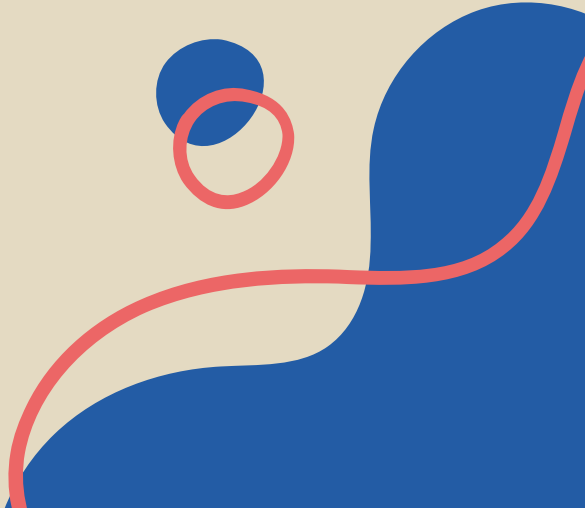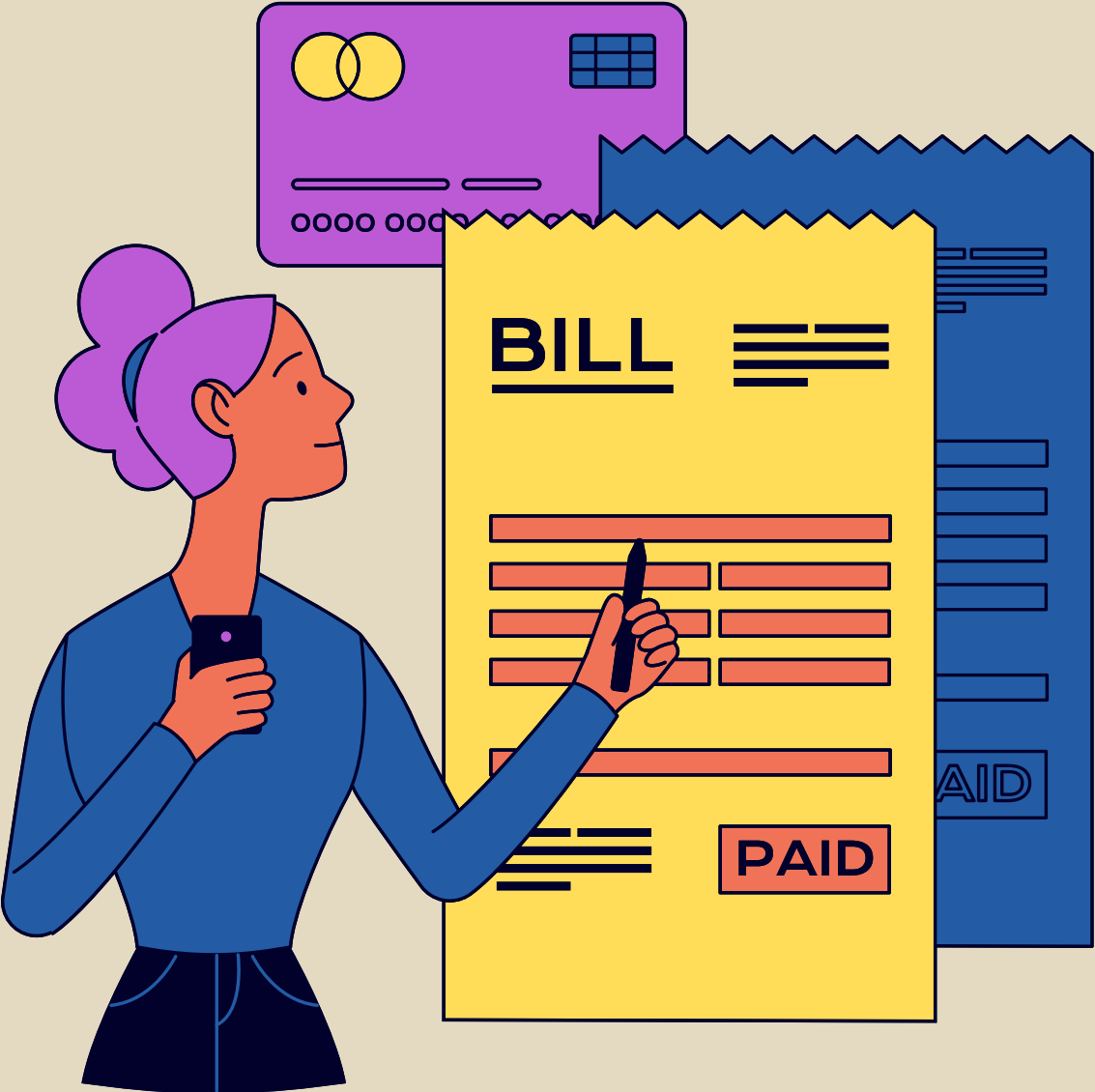| Result Grid	Filter Rows:	
	Universal_Blood_Donor	Universal_Blood_reciever
▶	0	0

10. Finding Billing Amount of patients admitted and number of days spent in respective hospital.

Query

```sql
SELECT 'Medical_Condition', Name, Hospital,
DATEDIFF('Discharge_date','Date_of_Admission') as Number_of_Days,
SUM(ROUND('Billing_Amoun',2)) OVER(Partition by Hospital ORDER BY Hospital DESC) AS Total_Amount
FROM healthcare
ORDER BY 'Medical_Condition'Desc;
```

Output

	Medical_Condition	Name	Hospital	Number_of_Days	Total_Amount
▶	Medical_Condition	Bryan Erickson	Abbott Inc	NULL	0
	Medical_Condition	Rhonda Hernandez	Abbott LLC	NULL	0
	Medical_Condition	Jessica Walter	Abbott-Jordan	NULL	0
	Medical_Condition	Colleen Mann	Abbott-Shea	NULL	0
	Medical_Condition	Joshua Benjamin	Acevedo and Sons	NULL	0
	Medical_Condition	Kimberly Boone	Acosta PLC	NULL	0
	Medical_Condition	Vanessa Landry	Acosta-Bailey	NULL	0
	Medical_Condition	Jenny Harris	Acosta-Holmes	NULL	0