

# Patient Diagnosis Report

## Description

The data analyst of a hospital wants to store the patient diagnosis reports with the details of the doctors and the patients for good medical practice and continuity of care.

### Objective:

The database design helps to retrieve, update, and modify the patient's details to keep track of the patient's health care routine.

- Write a query to create a **patients table** with the fields such as date, patient id, patient name, age, weight, gender, location, phone number, disease, doctor name, and doctor id.

create table patients

```
(  
    visiting_date date not null,  
    patient_id int not null,  
    patient_name varchar(45) not null,  
    Age int not null,  
    Weight int not null,  
    gender varchar(45) not null,  
    location varchar(45) not null,  
    phone_no int not null,  
    disease varchar(45) not null,  
    doctor_name varchar(45) not null,  
    doctor_id varchar(45) not null  
);
```

- Write a query to **insert** values into the **patients table**.

insert into patients

(visiting\_date,patient\_id,patient\_name,age,weight,gender,location,phone\_no,disease,doctor\_name,doctor\_id) values

("2019-06-05","AP2021","Sarath","67","76","Male","chennai",70212559,"cardiac","Mohan","21");

insert into patients

(visiting\_date,patient\_id,patient\_name,age,weight,gender,location,phone\_no,disease,doctor\_name,doctor\_id) values

("2019-02-13","AP2022","John","62","80","Male","banglore",70278959,"cancer","Suraj","22");

insert into patients

(visiting\_date,patient\_id,patient\_name,age,weight,gender,location,phone\_no,disease,doctor\_name,doctor\_id) values

("2018-01-18","AP2023","Henry","43","65","Male","Kerala",70123559,"Liver","Mehta","23");

insert into patients

(visiting\_date,patient\_id,patient\_name,age,weight,gender,location,phone\_no,disease,doctor\_name,doctor\_id) values

("2020-04-02","AP2024","Carl","56","72","Female","Mumbai",79874569,"Asthama","Kartik","24");

insert into patients

(visiting\_date,patient\_id,patient\_name,age,weight,gender,location,phone\_no,disease,doctor\_name,doctor\_id) values

("2017-09-15","AP2025","Shikar","55","71","Male","Delhi",77212588,"cardiac","Mohan","21");

insert into patients

(visiting\_date,patient\_id,patient\_name,age,weight,gender,location,phone\_no,disease,doctor\_name,doctor\_id) values

("2018-07-22","AP2026","Piyush","47","59","Male","Haryana",88882559,"cancer","Suraj","22");

insert into patients

(visiting\_date,patient\_id,patient\_name,age,weight,gender,location,phone\_no,disease,doctor\_name,doctor\_id) values

("2017-03-25","AP2027","Stephen","69","55","Male","Gujrat",70218888,"Liver","Mehta","23");

insert into patients

(visiting\_date,patient\_id,patient\_name,age,weight,gender,location,phone\_no,disease,doctor\_name,doctor\_id) values

("2019-04-22","AP2028","Aaron","75","53","Male","Banglore",22212559,"Asthama","Kartik","24");

visiting_date	patient_id	patient_name	age	weight	gender	location	phone_no	disease	doctor_name	doctor_id
2019-06-05	AP2021	Sarath	67	76	Male	chennai	70212559	cardiac	Mohan	21
2019-02-13	AP2022	John	62	80	Male	banglore	70278959	cancer	Suraj	22
2018-01-18	AP2023	Henry	43	65	Male	Kerala	70123559	Liver	Mehta	23
2020-04-02	AP2024	Carl	56	72	Female	Mumbai	79874569	Asthama	Kartik	24
2017-09-15	AP2025	Shikar	55	71	Male	Delhi	77212588	cardiac	Mohan	21
2018-07-22	AP2026	Piyush	47	59	Male	Haryana	88882559	cancer	Suraj	22
2017-03-25	AP2027	Stephen	69	55	Male	Gujrat	70218888	Liver	Mehta	23
2019-04-22	AP2028	Aaron	75	53	Male	Banglore	22212559	Asthama	Kartik	24



- Write a query to display the **total number of patients** in the table.

```
select count(*) As Total_Patients from Patients;
```

Total_Patients
8





- Write a query to display the patient id, patient name, gender, and disease of the patient whose **age is maximum**.

```
select patient_id, Patient_name, gender, disease, max(age) AS Max_age from patients;
```

- Write a query to display patient id and patient name with the **current date**.


```
select patient_id, Patient_name, now() as CurrentDate from Patients;
```

Result Grid




Filter Rows:

Export:



Wrap Cell Content:




	patient_id	Patient_name	CurrentDate
▶	AP2021	Sarath	2024-02-23 19:33:59
	AP2022	John	2024-02-23 19:33:59
	AP2023	Henry	2024-02-23 19:33:59
	AP2024	Carl	2024-02-23 19:33:59
	AP2025	Shikar	2024-02-23 19:33:59
	AP2026	Piyush	2024-02-23 19:33:59
	AP2027	Stephen	2024-02-23 19:33:59
	AP2028	Aaron	2024-02-23 19:33:59




- Write a query to display the **old patient's name** and **new patient's name** in **uppercase**.

```
select patient_name,ucase(patient_name) as Upper_case from Patients;
```


Result Grid






Filter Rows:

Export:



Wrap Cell Content:



	patient_name	Upper_case
▶	Sarath	SARATH
	John	JOHN
	Henry	HENRY
	Carl	CARL
	Shikar	SHIKAR
	Piyush	PIYUSH
	Stephen	STEPHEN
	Aaron	AARON



- Write a query to display the patient's name along with the **length of their name**.

```
select patient_name,length(patient_name) as Lengthofname from Patients;
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	patient_name	Lengthofname			
▶	Sarath	6			
	John	4			
	Henry	5			
	Carl	4			
	Shikar	6			
	Piyush	6			
	Stephen	7			
	Aaron	5			



- Write a query to display the patient's name, and the **gender** of the patient must be mentioned as **M or F**.

```
select patient_name,mid(gender,1,1) as Gender from Patients;
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	patient_name	Gender			
▶	Sarath	M			
	John	M			
	Henry	M			
	Carl	F			
	Shikar	M			
	Piyush	M			
	Stephen	M			
	Aaron	M			



- Write a query to **combine the names of the patient** and the doctor in a new column.

```
select patient_name, doctor_name, concat(patient_name,"-",doctor_name) from Patients;
```

Result Grid			
		Filter Rows:	
		Export:	
		Wrap Cell Content:	
	patient_name	doctor_name	concat(patient_name,"-",doctor_name)
▶	Sarath	Mohan	Sarath-Mohan
	John	Suraj	John-Suraj
	Henry	Mehta	Henry-Mehta
	Carl	Kartik	Carl-Kartik
	Shikar	Mohan	Shikar-Mohan
	Piyush	Suraj	Piyush-Suraj
	Stephen	Mehta	Stephen-Mehta
	Aaron	Kartik	Aaron-Kartik





- Write a query to display the patients' age along with the **logarithmic value** (base 10) of their age.

```
select patient_name,age,log10(age) as Log10_age from Patients;
```

Result Grid			
		Filter Rows:	
		Export:	
		Wrap Cell Content:	
	patient_name	age	Log10_age
▶	Sarath	67	1.8260748027008264
	John	62	1.792391689498254
	Henry	43	1.6334684555795864
	Carl	56	1.7481880270062005
	Shikar	55	1.7403626894942439
	Piyush	47	1.6720978579357175
	Stephen	69	1.8388490907372552
	Aaron	75	1.8750612633917

- Write a query to **extract the year** from the given date in a separate column.





```
select visiting_date,year(visiting_date) as Year from Patients;
```

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

	visiting_date	Year
▶	2019-06-05	2019
	2019-02-13	2019
	2018-01-18	2018
	2020-04-02	2020
	2017-09-15	2017
	2018-07-22	2018
	2017-03-25	2017
	2019-04-22	2019

- Write a query to return **NULL** if the **patient's name and doctor's name are similar** else return the **patient's name**.

```
select nullif(patient_name,doctor_name) from Patients;
```

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

	nullif(patient_name,doctor_name)
▶	Sarath
	John
	Henry
	Carl
	Shikar
	Piyush
	Stephen
	Aaron

- Write a query to return **Yes** if the **patient's age is greater than 40** else return **No**.

```
select age, IF(age>40,'Yes','No') As Agegreater from Patients;
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	age	Agegreater			
▶	67	Yes			
	62	Yes			
	43	Yes			
	56	Yes			
	55	Yes			
	47	Yes			
	69	Yes			
	75	Yes			

- Write a query to display the **doctor's duplicate name** from the table.

select doctor\_name, count(\*) Occurances from patients group by doctor\_name having count(\*)>1;

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	doctor_name	Occurances			
▶	Mohan	2			
	Suraj	2			
	Mehta	2			
	Kartik	2			

**Project submitted by -Mayur Nivadekar**