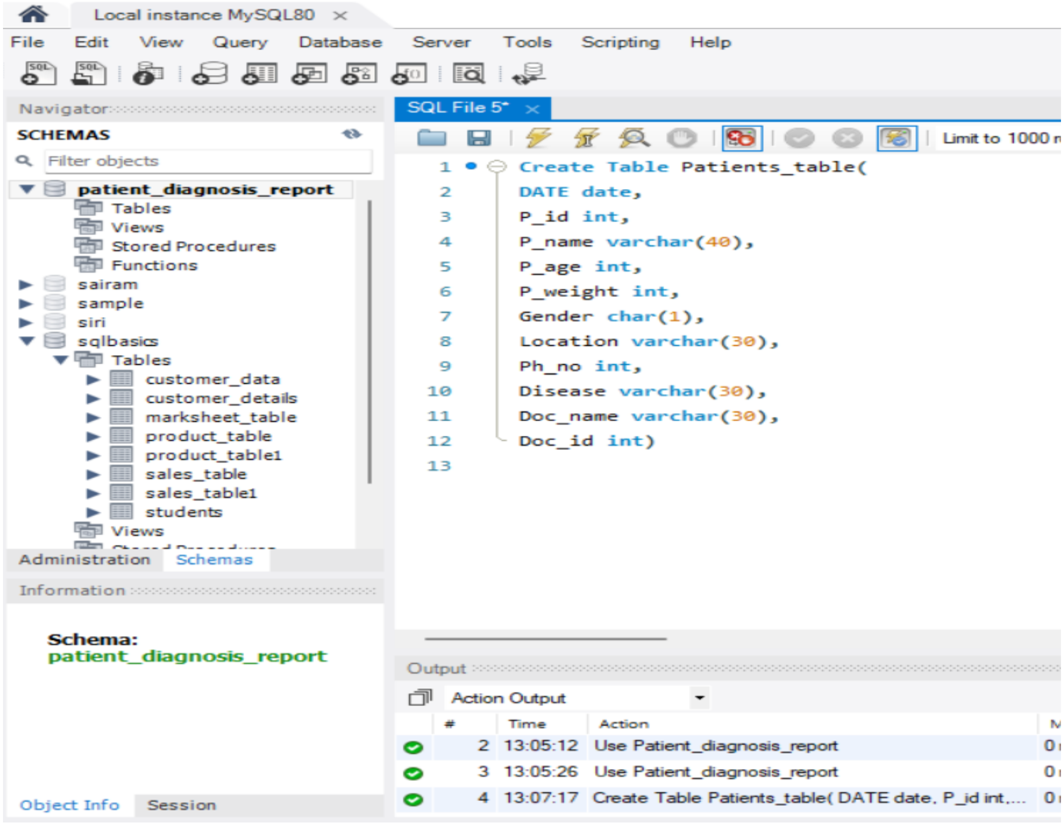
Practice Project 7.12: Patient Diagnosis Report

Course 4: SQL Training

Task:

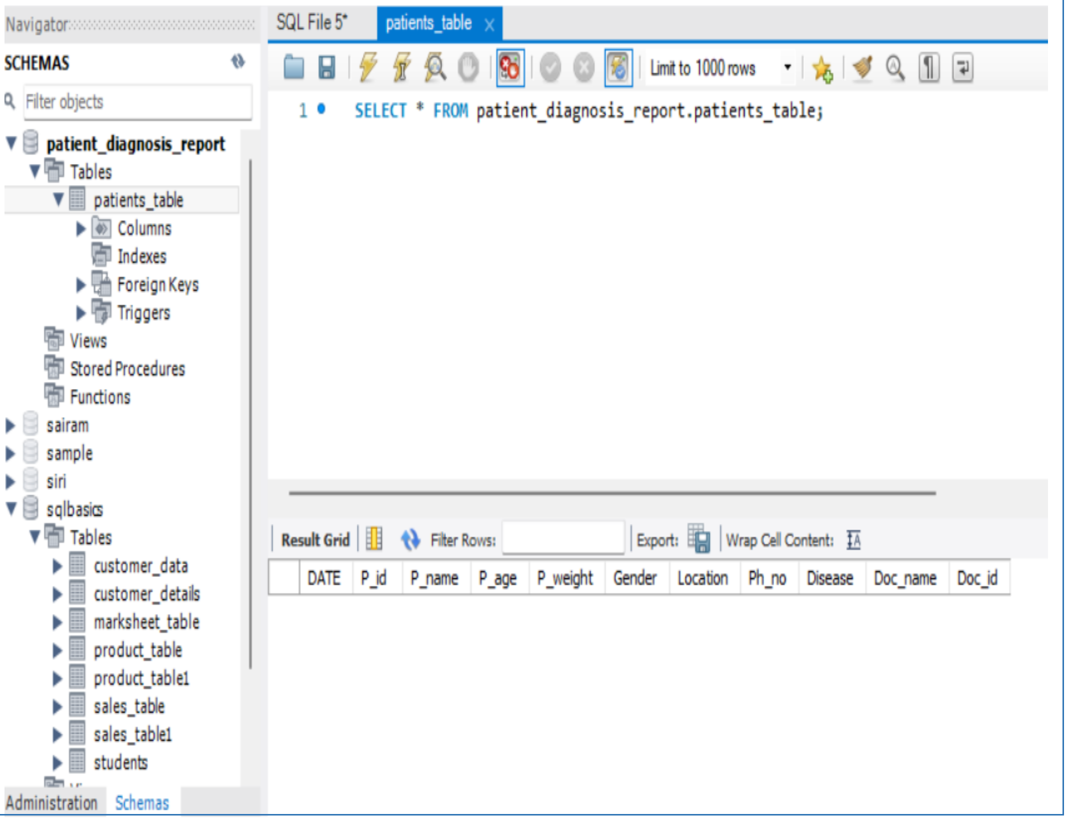
1. Write a query to create a patients table with the fields such as date, patient id, patient name, age, weight, gender, location, phone number, disease, doctor name, and doctor id.



```
Create Table Patients_table(
DATE date,
P_id int,
P_name varchar(40),
P_age int,
P_weight int,
Gender char(1),
Location varchar(30),
Ph_no int,
Disease varchar(30),
Doc_name varchar(30),
Doc_id int)
```

Schema: patient_diagnosis_report

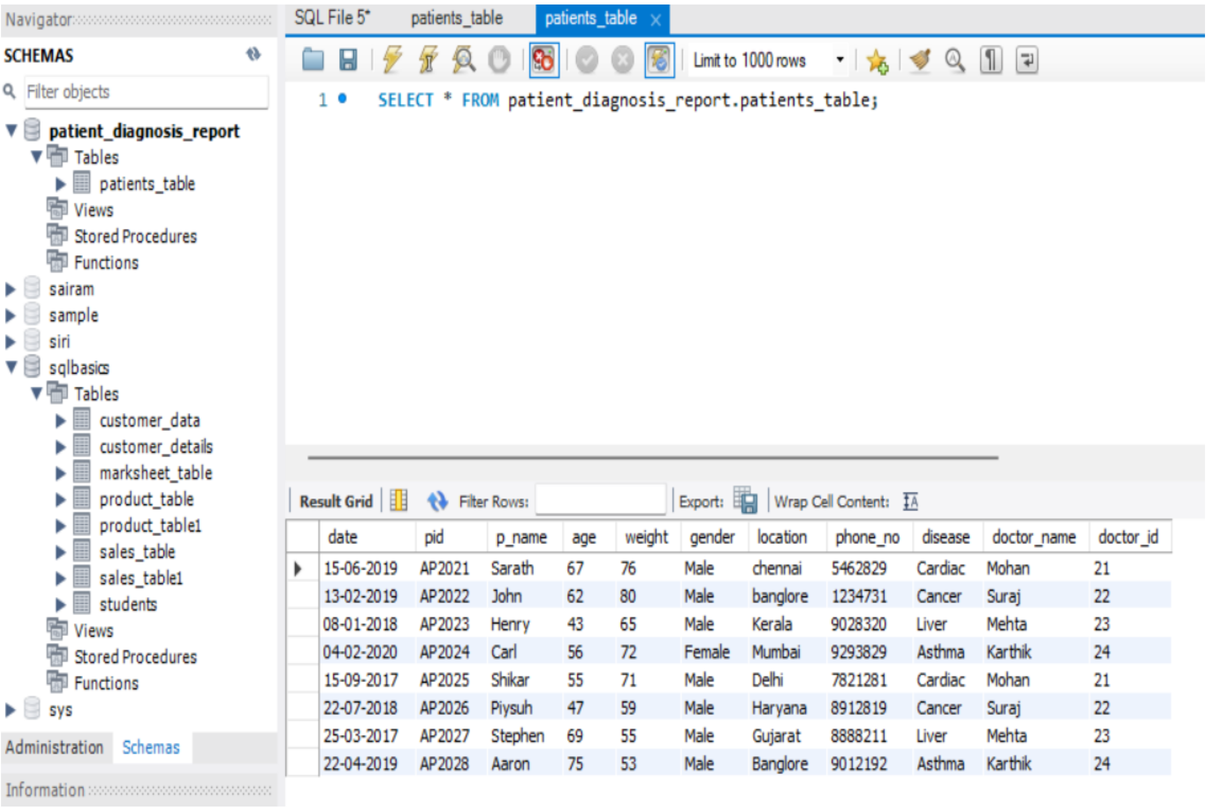
```
#   Time      Action
2   13:05:12  Use Patient_diagnosis_report
3   13:05:26  Use Patient_diagnosis_report
4   13:07:17  Create Table Patients_table( DATE date, P_id int,...
```



```
SELECT * FROM patient_diagnosis_report.patients_table;
```

DATE	P_id	P_name	P_age	P_weight	Gender	Location	Ph_no	Disease	Doc_name	Doc_id

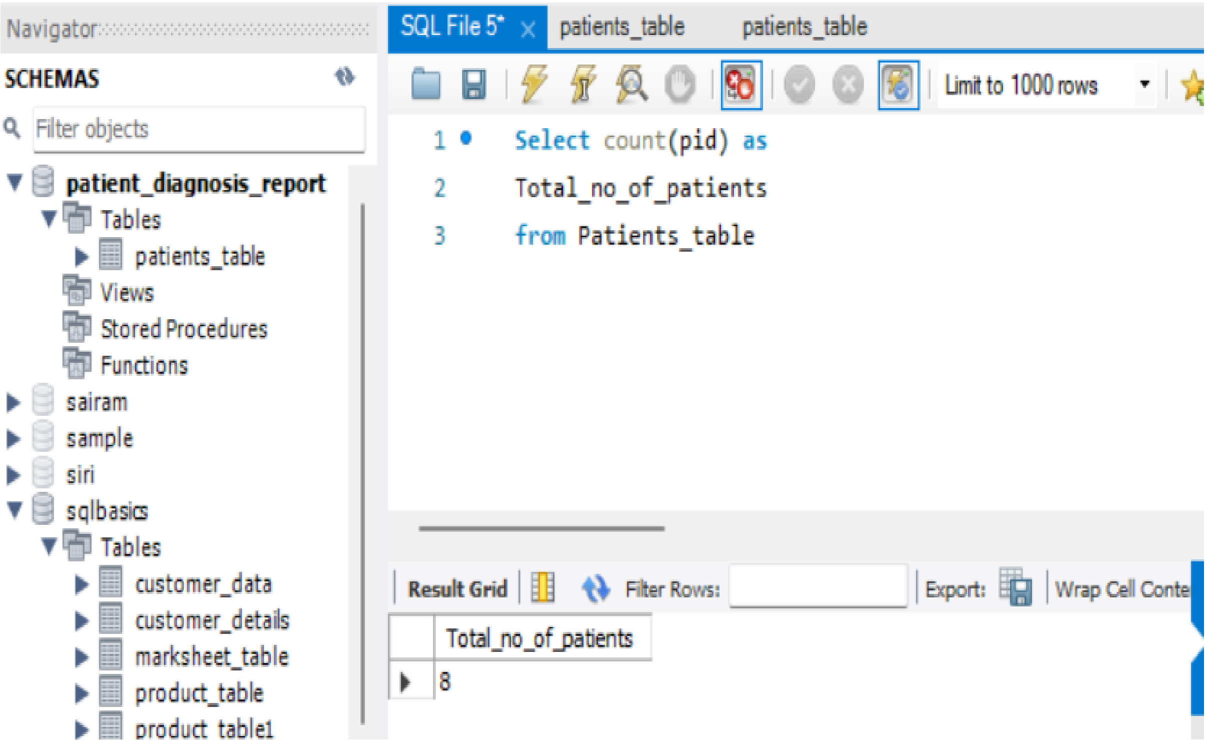
2. Write a query to **insert** values into the **Patients table**.



```
SELECT * FROM patient_diagnosis_report.patients_table;
```

date	pid	p_name	age	weight	gender	location	phone_no	disease	doctor_name	doctor_id
15-06-2019	AP2021	Sarath	67	76	Male	chennai	5462829	Cardiac	Mohan	21
13-02-2019	AP2022	John	62	80	Male	banglore	1234731	Cancer	Suraj	22
08-01-2018	AP2023	Henry	43	65	Male	Kerala	9028320	Liver	Mehta	23
04-02-2020	AP2024	Carl	56	72	Female	Mumbai	9293829	Asthma	Karthik	24
15-09-2017	AP2025	Shikar	55	71	Male	Delhi	7821281	Cardiac	Mohan	21
22-07-2018	AP2026	Piysuh	47	59	Male	Haryana	8912819	Cancer	Suraj	22
25-03-2017	AP2027	Stephen	69	55	Male	Gujarat	8888211	Liver	Mehta	23
22-04-2019	AP2028	Aaron	75	53	Male	Banglore	9012192	Asthma	Karthik	24

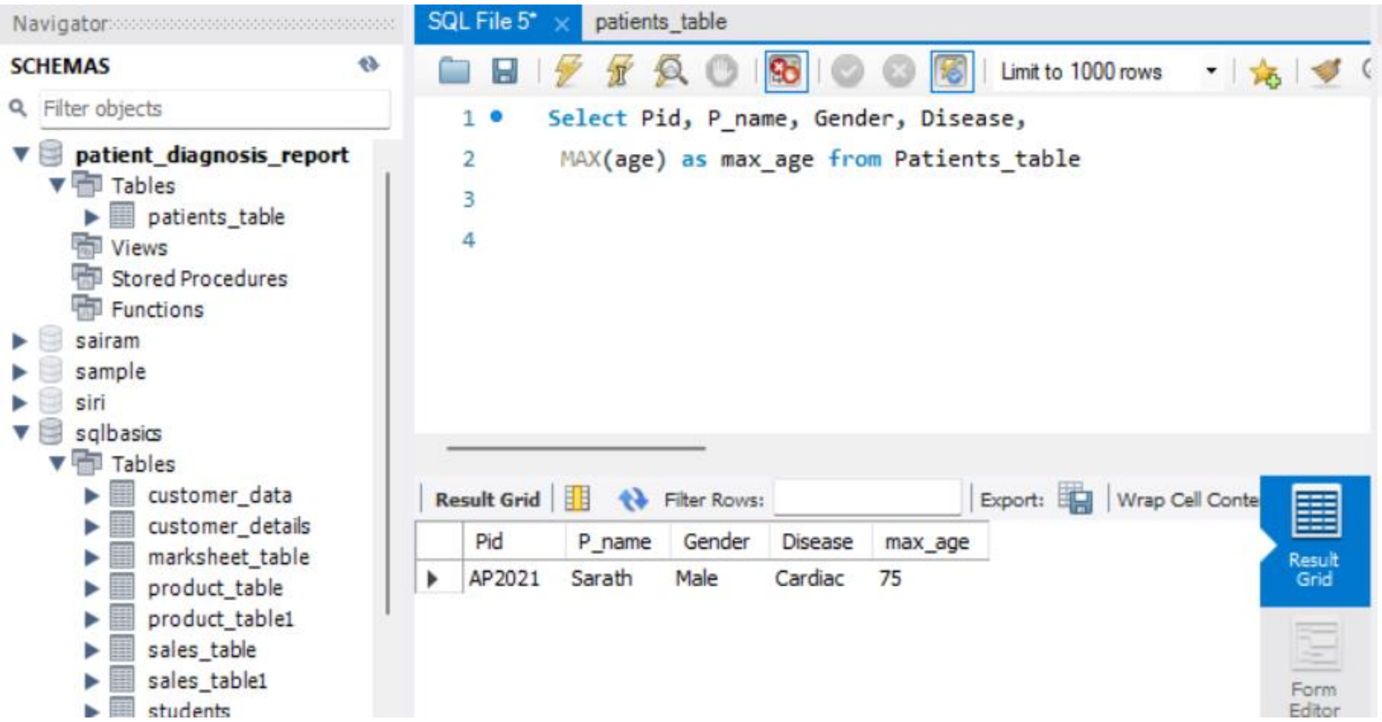
3. Write a query to display the **total number of patients** in the table.



```
Select count(pid) as
Total_no_of_patients
from Patients_table
```

Total_no_of_patients
8

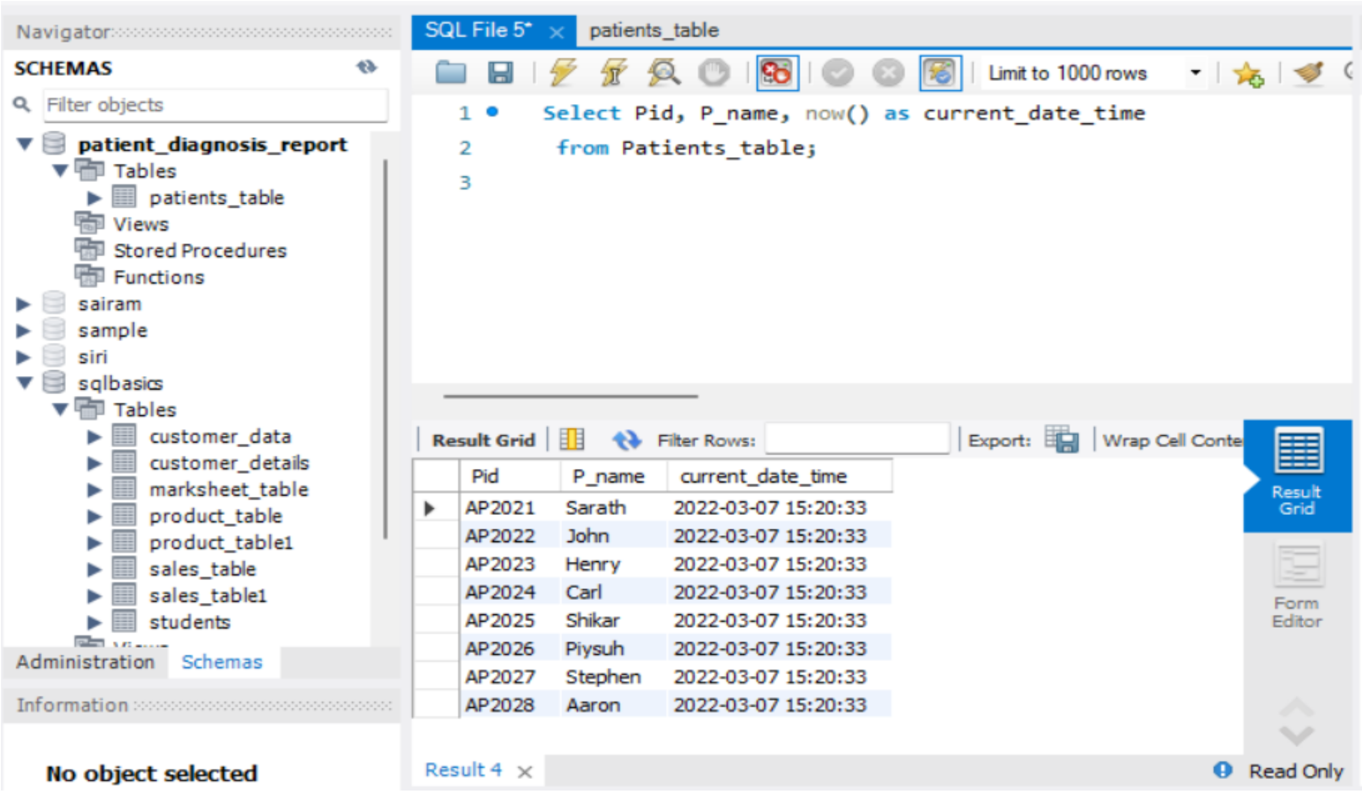
4. Write a query to display the patient id, patient name, gender, and disease of the patient whose **age is maximum**.



```
Select Pid, P_name, Gender, Disease,
 MAX(age) as max_age from Patients_table
```

Pid	P_name	Gender	Disease	max_age
AP2021	Sarath	Male	Cardiac	75

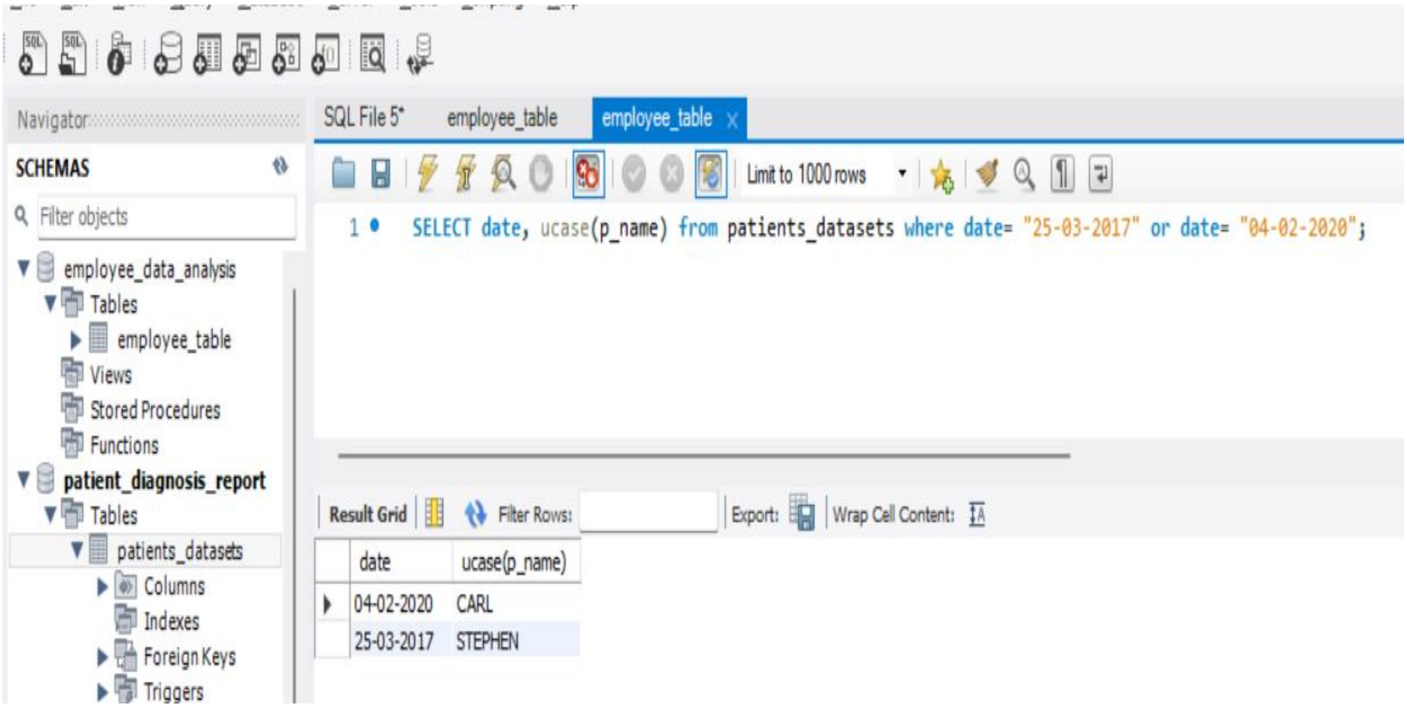
5. Write a query to display patient id and patient name with the **current date**.



```
Select Pid, P_name, now() as current_date_time
 from Patients_table;
```

Pid	P_name	current_date_time
AP2021	Sarath	2022-03-07 15:20:33
AP2022	John	2022-03-07 15:20:33
AP2023	Henry	2022-03-07 15:20:33
AP2024	Carl	2022-03-07 15:20:33
AP2025	Shikar	2022-03-07 15:20:33
AP2026	Piysuh	2022-03-07 15:20:33
AP2027	Stephen	2022-03-07 15:20:33
AP2028	Aaron	2022-03-07 15:20:33

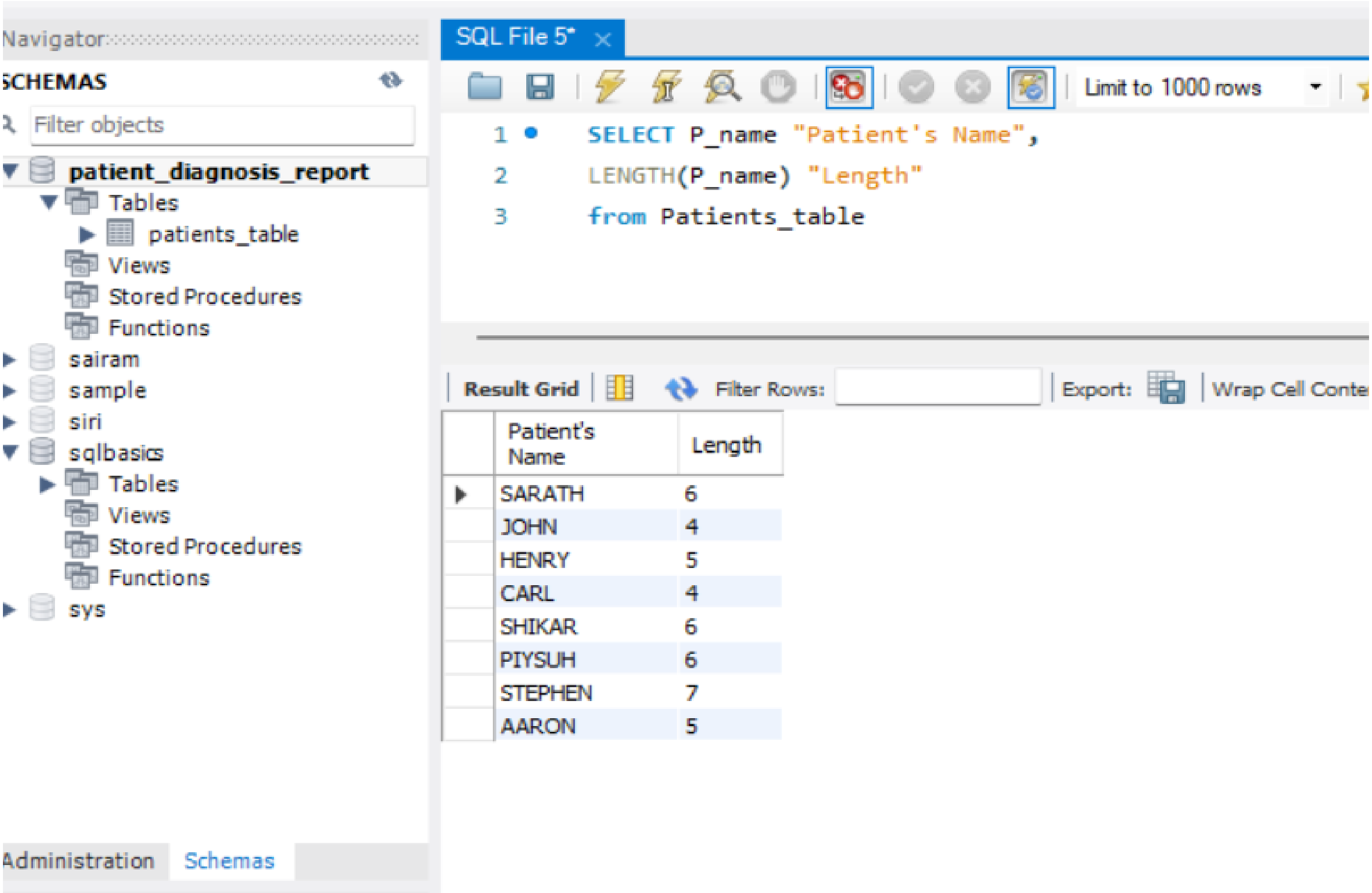
6. Write a query to display the **old patient's name** and **new patient's name** in **uppercase**.



```sql
SELECT date, ucase(p_name) from patients_datasets where date= "25-03-2017" or date= "04-02-2020";
```

date	ucase(p_name)
04-02-2020	CARL
25-03-2017	STEPHEN

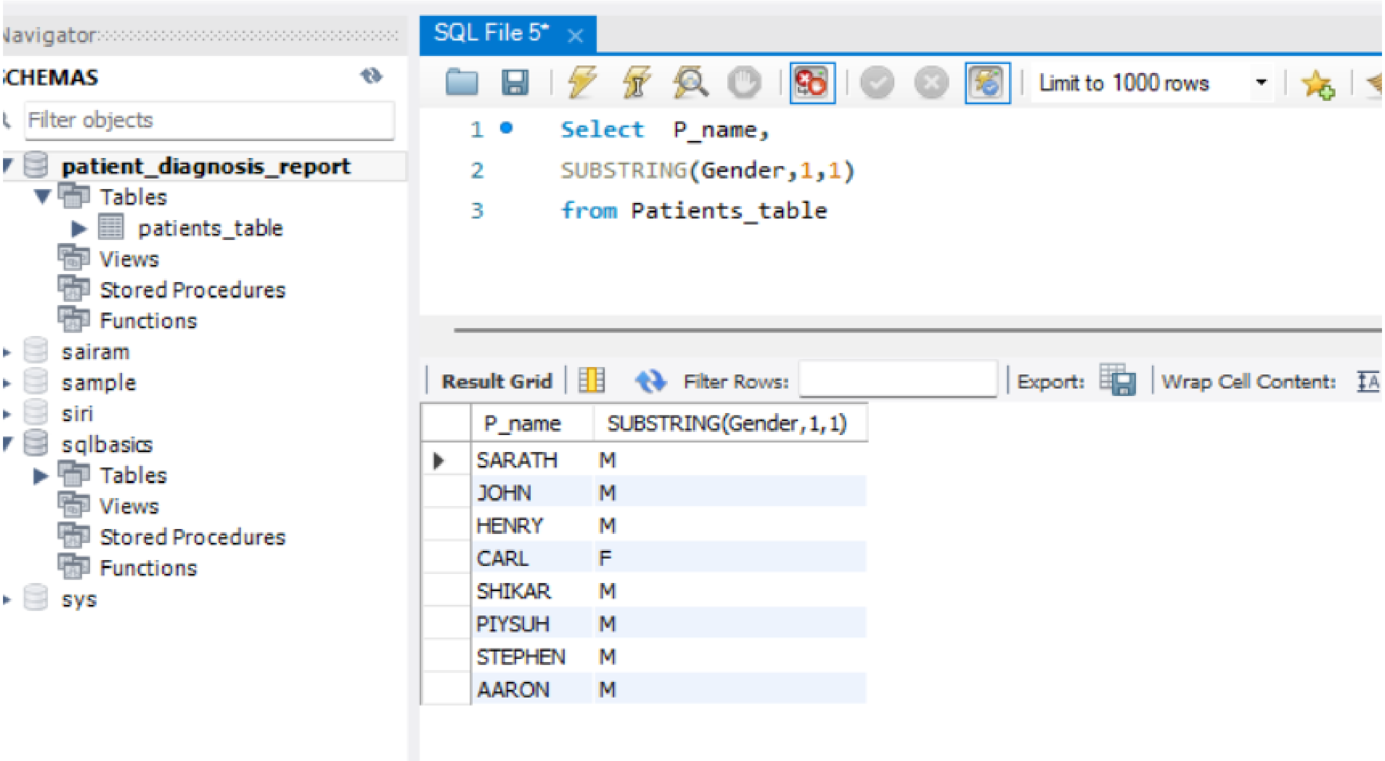
7. Write a query to display the patient's name along with the **length of their name.**



```sql
SELECT P_name "Patient's Name",
LENGTH(P_name) "Length"
from Patients_table
```

Patient's Name	Length
SARATH	6
JOHN	4
HENRY	5
CARL	4
SHIKAR	6
PIYSUH	6
STEPHEN	7
AARON	5

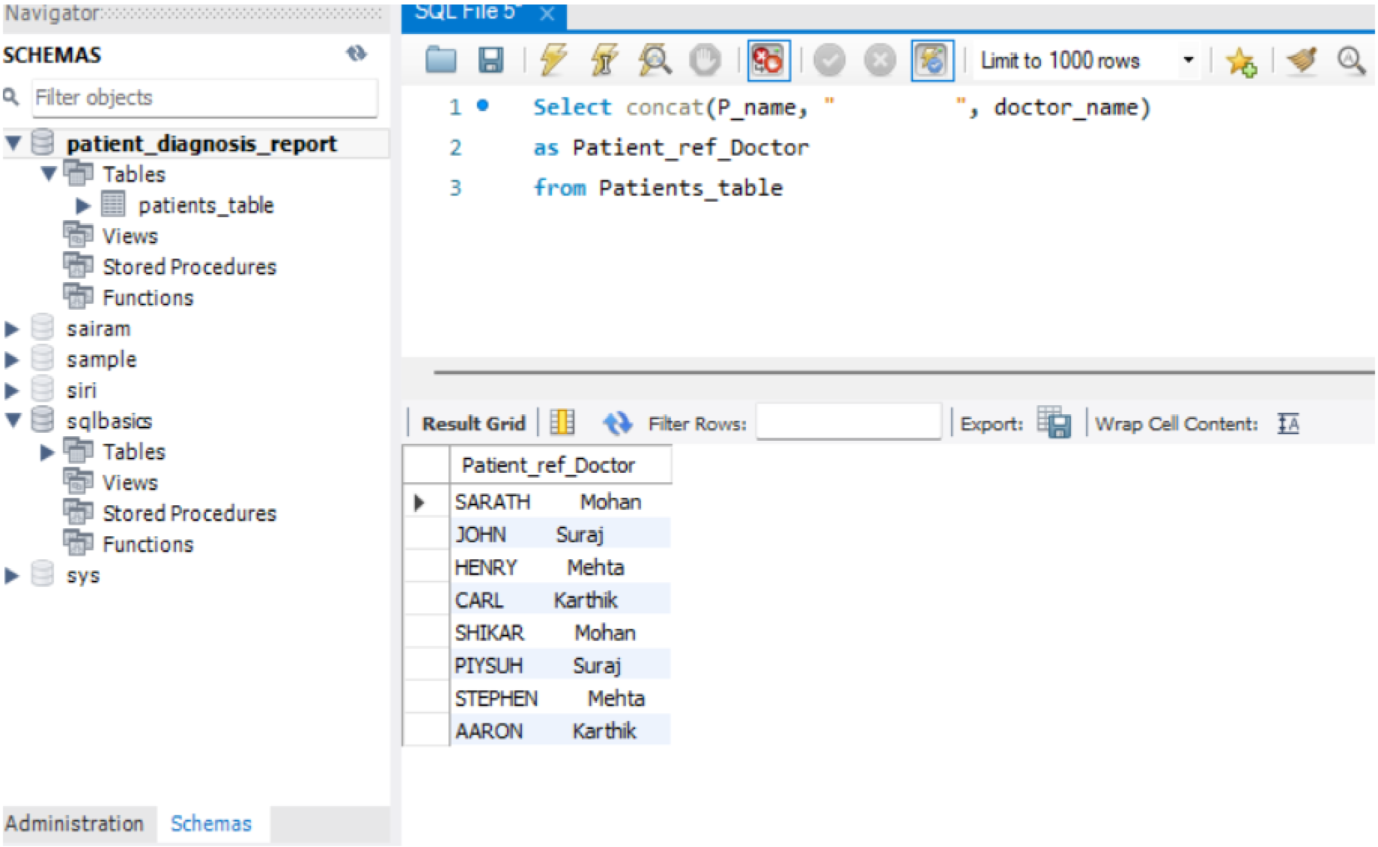
8. Write a query to display the patient’s name, and the **gender** of the patient must be mentioned as **M or F**.



```sql
Select  P_name,
SUBSTRING(Gender,1,1)
from Patients_table
```

	P_name	SUBSTRING(Gender,1,1)
▶	SARATH	M
	JOHN	M
	HENRY	M
	CARL	F
	SHIKAR	M
	PIYSUH	M
	STEPHEN	M
	AARON	M

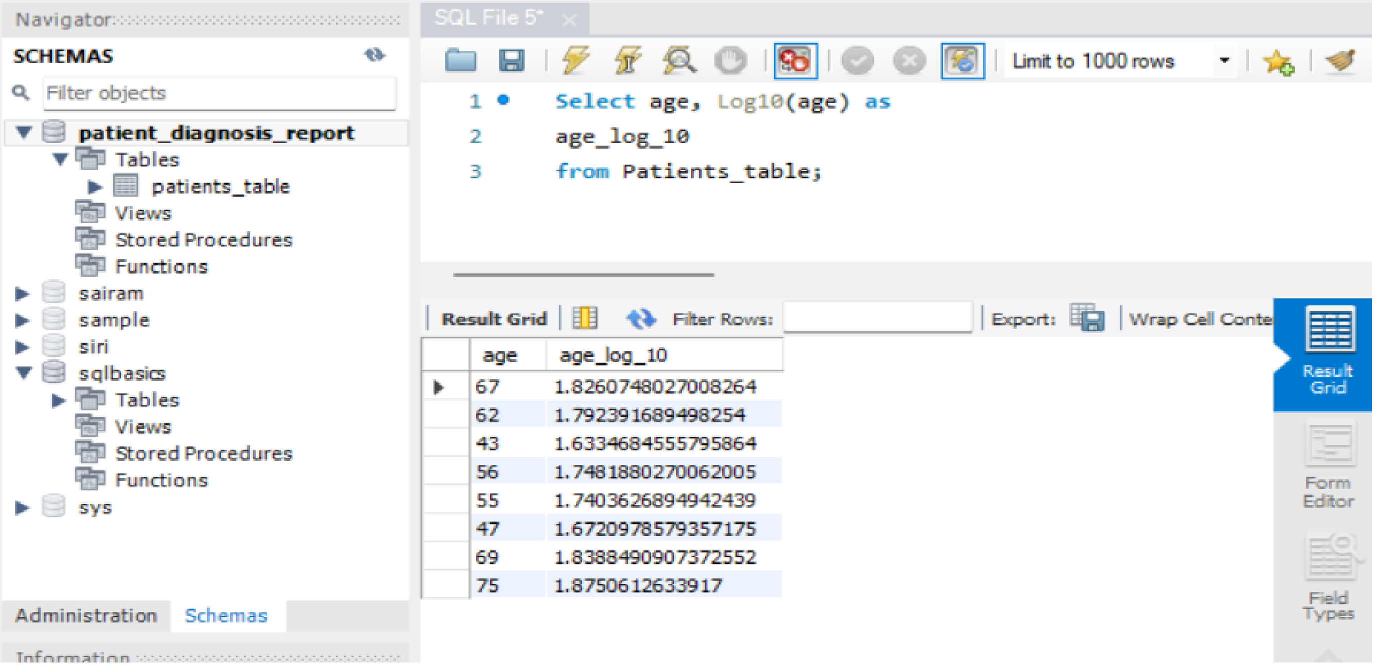
9. Write a query to **combine the names of the patient** and the doctor in a new column.



```sql
Select concat(P_name, "          ", doctor_name)
as Patient_ref_Doctor
from Patients_table
```

	Patient_ref_Doctor
▶	SARATH Mohan
	JOHN Suraj
	HENRY Mehta
	CARL Karthik
	SHIKAR Mohan
	PIYSUH Suraj
	STEPHEN Mehta
	AARON Karthik

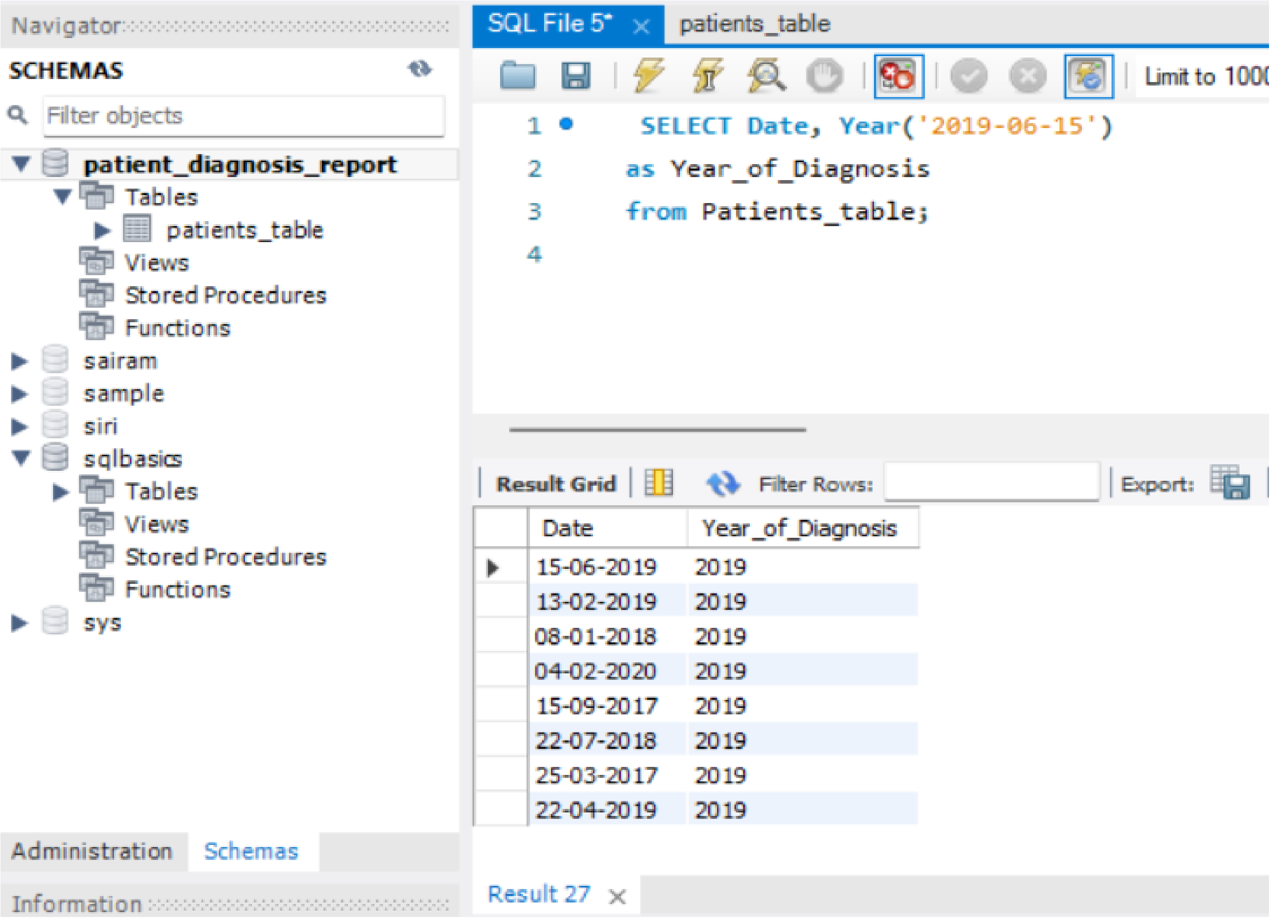
10. Write a query to display the patients' age along with the **logarithmic value** (base 10) **of their age**.



```sql
Select age, Log10(age) as
age_log_10
from Patients_table;
```

age	age_log_10
67	1.8260748027008264
62	1.792391689498254
43	1.6334684555795864
56	1.7481880270062005
55	1.7403626894942439
47	1.6720978579357175
69	1.8388490907372552
75	1.8750612633917

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

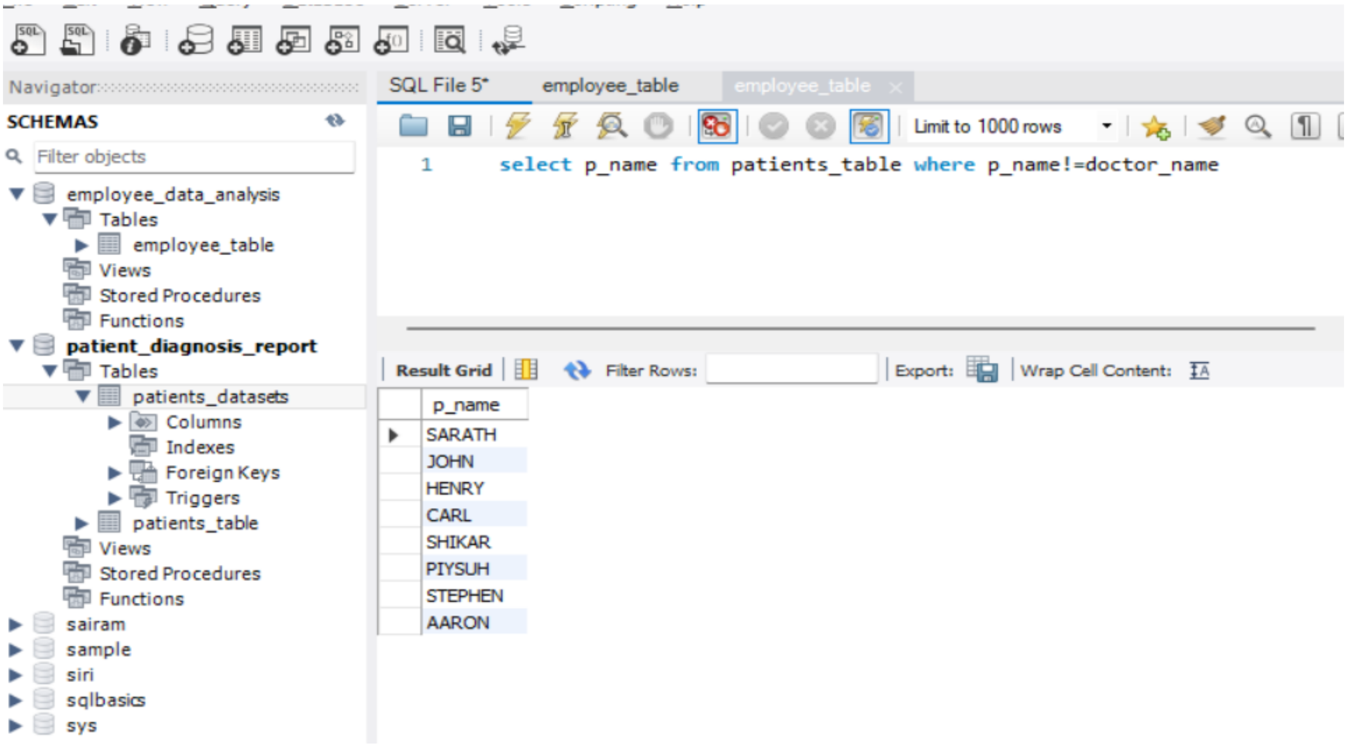


```sql
SELECT Date, Year('2019-06-15')
as Year_of_Diagnosis
from Patients_table;

```

Date	Year_of_Diagnosis
15-06-2019	2019
13-02-2019	2019
08-01-2018	2019
04-02-2020	2019
15-09-2017	2019
22-07-2018	2019
25-03-2017	2019
22-04-2019	2019

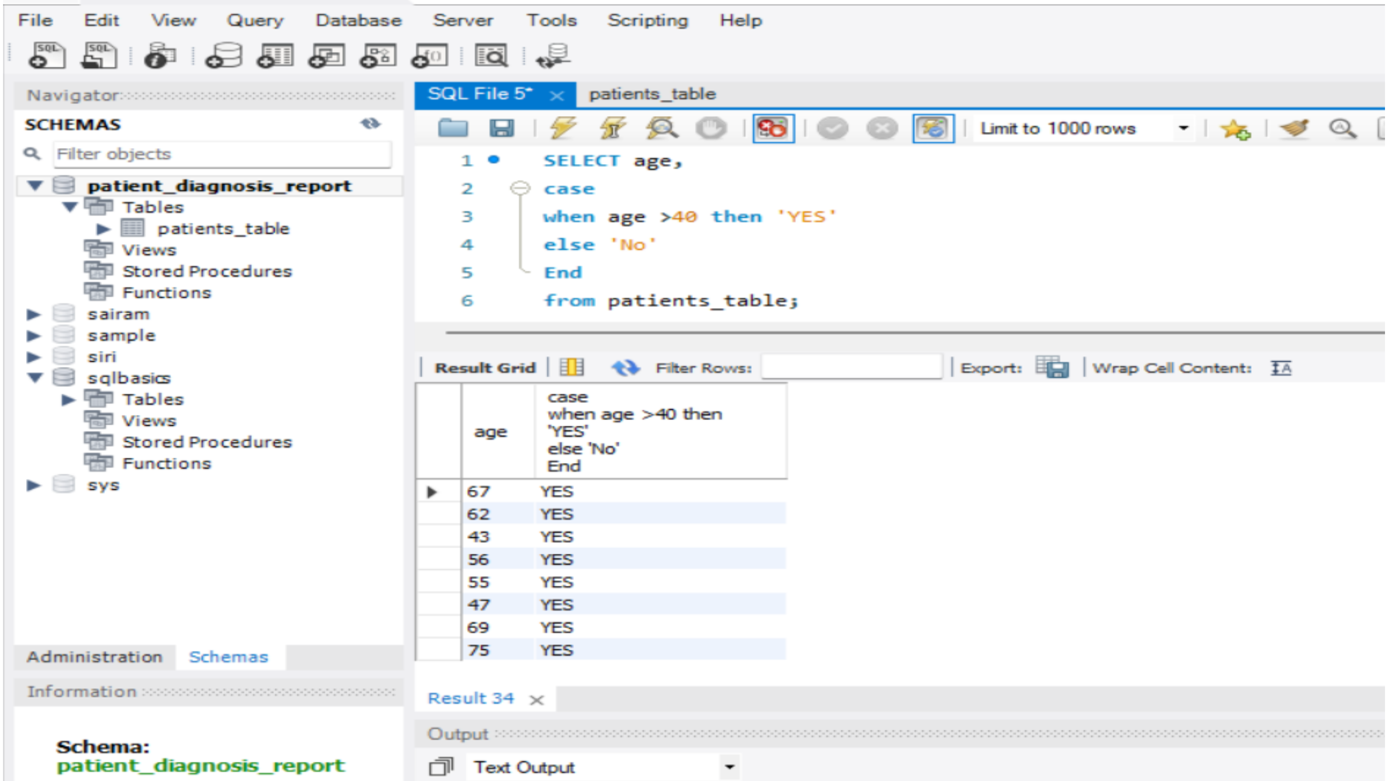
12. Write a query to return **NULL** if the **patient's name and doctor's name are similar** else return the **patient's name**.



```sql
select p_name from patients_table where p_name!=doctor_name
```

p_name
SARATH
JOHN
HENRY
CARL
SHIKAR
PIYSUH
STEPHEN
AARON

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

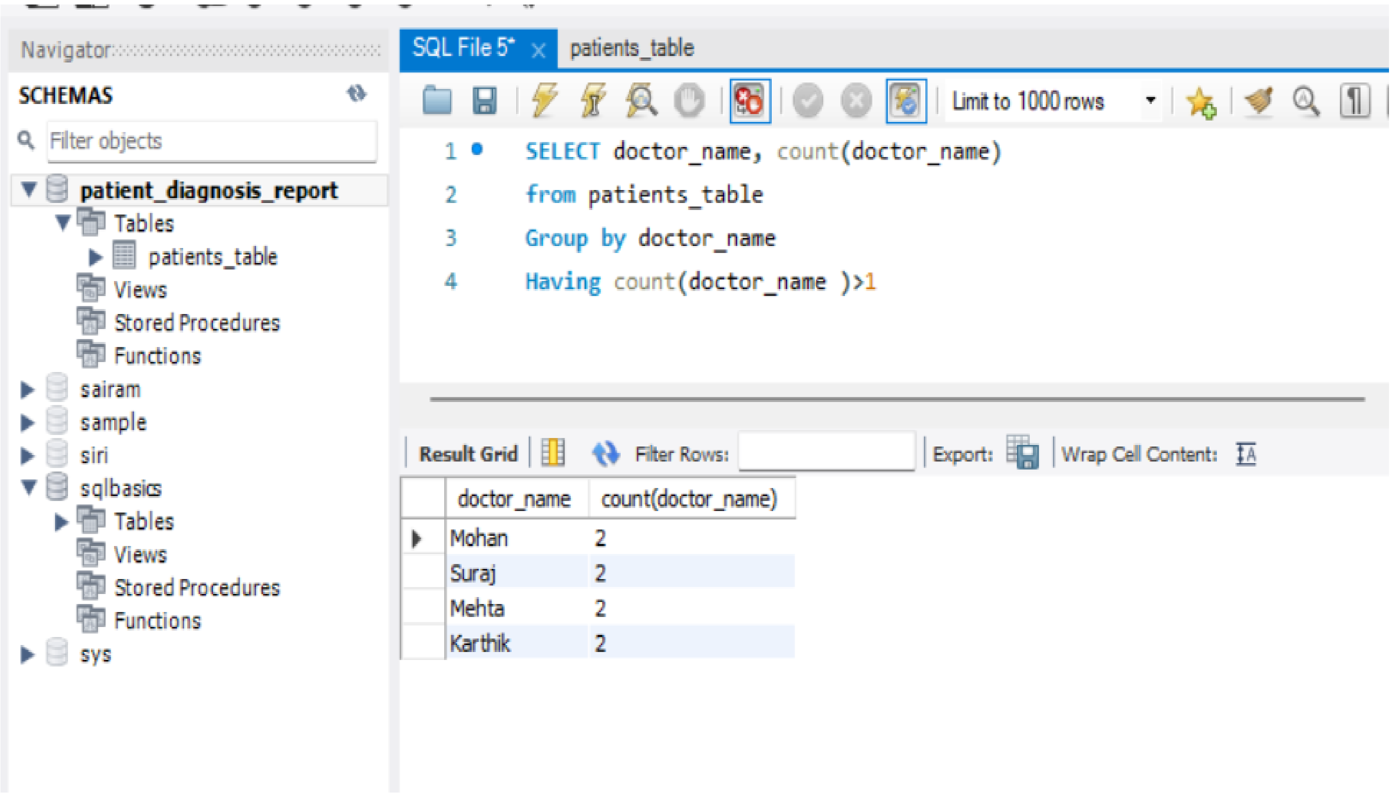


Schema: patient_diagnosis_report

```sql
SELECT age,
case
when age >40 then 'YES'
else 'No'
End
from patients_table;
```

age	case when age >40 then 'YES' else 'No' End
67	YES
62	YES
43	YES
56	YES
55	YES
47	YES
69	YES
75	YES

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



```
SELECT doctor_name, count(doctor_name)
from patients_table
Group by doctor_name
Having count(doctor_name )>1
```

doctor_name	count(doctor_name)
Mohan	2
Suraj	2
Mehta	2
Karthik	2