Q.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(
date DATE not null
pid varchar (20) not null,
p_name varchar(20) not null,
age int not null,
weight int not null,
gender varchar(20) not null,
location varchar(20) not null,
phone_no int not null,
disease varchar(20) not null,
doctor_name varchar(20) not null,
primary key (pid));
```

MariaDB [patient_dignosis_report]> desc patients;									
Field	Туре	Null	Key	Default	Extra				
date pid	date varchar(20)	NO NO	 PRI	NULL NULL					
p_name age	varchar(20) int(11)	NO NO		NULL NULL					
weight gender	int(11) varchar(20)	NO NO		NULL NULL					
location	varchar(20)	NO		NULL					
phone_no disease	int(11) varchar(20)	NO NO		NULL NULL					
doctor_name doctor_id	varchar(20) int(11)	NO NO		NULL NULL					
+++++++									

Q.2. Write a query to insert values into the patients table.

insert into patients

(date,pid,p_name,age,weight,gender,location,phone_no,disease,doctor_name,doctor_id)

('2023-01-01', 1, 'Rahul Deshmukh', 30, 65, 'Male', 'Mumbai', '+919876543210', 'Common Cold', 'Dr. Patil', 201),

('2023-02-02', 2, 'Priya Joshi', 25, 48, 'Female', 'Pune', '+918765432109', 'Migraine', 'Dr. Desai', 202),

('2023-05-06', 3, 'Amit Kulkarni', 40, 68, 'Male', 'Satara', '+917654321098', 'Hypertension', 'Dr. Sharma', 203),

('2023-05-10', 4, 'Anjali Mane', 32, 59, 'Female', 'Karad', '+916543210987', 'Allergy', 'Dr. Khan', 204),

('2023-7-15', 5, 'Suresh Patil', 45, 78, 'Male', 'Mumbai', '+915432109876', 'Diabetes', 'Dr. Patel', 205),

('2023-09-22', 6, 'Neha Shah', 28, 58, 'Female', 'Pune', '+914321098765', 'Fever', 'Dr. Joshi', 206),

('2023-12-07', 7, 'Vikram Gokhale', 55, 82, 'Male', 'Satara', '+913210987654', 'Arthritis', 'Dr. Mehta', 207);

MariaDB [patient_dignosis_report]> select * from patients;									
date pid p_name	age	weight	gender	location	phone_no	disease	doctor_name	doctor_id	
2023-01-01 1 Rahul Deshmuk 2023-02-02 2 Priya Joshi 2023-05-06 3 Amit Kulkarni 2023-05-10 4 Anjali Mane 2023-07-15 5 Suresh Patil 2023-09-22 6 Neha Shah 2023-12-07 7 Vikram Gokhal	25 . 40 32 45 28	65 48 68 59 78 58	Male Female Male Female Male Female Male	Mumbai Pune Satara Karad Mumbai Pune Satara	2147483647 2147483647 2147483647 2147483647 2147483647 2147483647 2147483647	Common Cold Migraine Hypertension Allergy Diabetes Fever Arthritis	Dr. Patil Dr. Desai Dr. Sharma Dr. Khan Dr. Patel Dr. Joshi Dr. Mehta	201 202 203 204 205 206 207	

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

select count(*) as total_patients from patients;

Q.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;

+	.+	+
pid p_name	gender disease	Max_age
1 Rahul Deshmukh	Male Common Cold	55
+	.+	+

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

select pid,p_name,now() as currentDate from patients;

+	+	++
pid	p_name	currentDate
+	+	++
1	Rahul Deshmukh	2024-02-26 17:48:34
2	Priya Joshi	2024-02-26 17:48:34
3	Amit Kulkarni	2024-02-26 17:48:34
4	Anjali Mane	2024-02-26 17:48:34
5	Suresh Patil	2024-02-26 17:48:34
6	Neha Shah	2024-02-26 17:48:34
7	Vikram Gokhale	2024-02-26 17:48:34
+	+	++

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

select p_name,ucase(p_name) as uppercase_newp_name from patients;

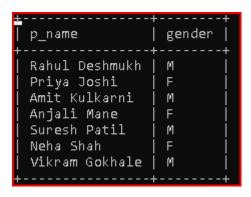
Q.7. Write a query to display the patient's name along with the length of their name.

select p_name,length(p_name)as length_of_pname from patients;

+	++
p_name	length_of_pname
Rahul Deshmukh Priya Joshi Amit Kulkarni Anjali Mane Suresh Patil Neha Shah	14 11 13 11 12 9 14

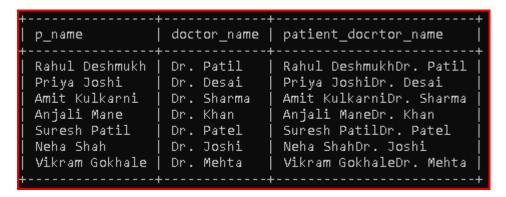
Q.8. Write a query to display the patient's name, and the gender of the patient must be mentioned as M or F.

select p_name,mid(gender,1,1) as gender from patients;



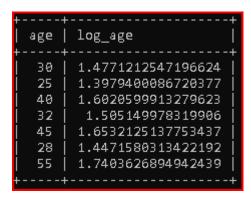
Q.9. Write a query to combine the names of the patient and the doctor in a new column.

select p_name,doctor_name,concat(p_name,doctor_name) as patient_docrtor_name from patients;



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

select age, log10(age) as log_age from patients;



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

select *, year(date) as year from patients;

date	pid	p_name	age	weight	gender	location	phone_no	disease	doctor_name	doctor_id	year
2023-01-01 2023-02-02 2023-05-06 2023-05-10 2023-07-15 2023-09-22	3 4 5	Rahul Deshmukh Priya Joshi Amit Kulkarni Anjali Mane Suresh Patil Neha Shah	30 25 40 32 45 28	48 68 59 78 58	Male Female Male Female Male Female	Satara Karad Mumbai Pune	2147483647 2147483647 2147483647 2147483647 2147483647 2147483647	Common Cold Migraine Hypertension Allergy Diabetes Fever	Dr. Patil Dr. Desai Dr. Sharma Dr. Khan Dr. Patel Dr. Joshi	201 202 203 204 205 206	2023 2023 2023 2023 2023 2023
2023-12-07	7	Vikram Gokhale	55	82	Male	Satara	2147483647	Arthritis	Dr. Mehta	207	2023

Q.12. 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(p_name,doctor_name) from patients

Q.13. 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 Agegreter40 from patients;



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

select doctor_name,count(*)accurences from patients group by doctor_name having count(*)>1;

Empty set (0.061 sec)