```sql
1   create database patients;
2   use patients;
3
4   # QUERY 1
5   create table patients_table(
6   p_date date,
7   patient_id varchar(20),
8   patient_name char,
9   age int,
10  weight float,
11  gender char,
12  location char,
13  phone_number int,
14  disease char,
15  doctor_name char,
16  doctor_id int);
17
18  # QUERY    INSERTING VALUES IN TABLE
19
20  alter table patients_table modify p_date datetime;
21  alter table patients_table modify patient_name char(100);
22  alter table patients_table modify gender char(100),modify location char(100),modify
    disease char(100),modify doctor_name char(100);
23
24  insert into patients_table (p_date,patient_id,patient_name,age,weight,gender,location,
    phone_number,disease,doctor_name,doctor_id)
25  values
26  ('2019-06-15','AP2021','Sarath','67','76','Male','chennai','5462829','Cardiac','Mohan',
    '21'),
27  ('2019-02-13','AP2022','John','62','80','Male','banglore','1234731','Cancer','Suraj','22'
    ),
28  ('2018-01-08','AP2023','Henry','43','65','Male','Kerala','9028320','Liver','Mehta','23'),
29  ('2020-02-4','AP2024','Carl','56','72','Female','Mumbai','9293829','Asthma','Karthik',
    '24'),
30  ('2017-09-15','AP2025','Shikar','55','71','Male','Delhi','7821281','Cardiac','Mohan','21'
    ),
31  ('2018-07-22','AP2026','Piysuh','47','59','Male','Haryana','8912819','Cancer','Suraj',
    '22'),
32  ('2017-03-25','AP2027','Stephen','69','55','Male','Gujarat','8888211','Liver','Mehta',
    '23'),
33  ('2019-04-22','AP2028','Aaron','75','53','Male','Banglore','9012192','Asthma','Karthik',
    '24');
34
35  select * from patients_table;
36  alter table patients_table modify p_date date;
37
38  # QUERY
39  select patient_name from patients_table
40  where  length(patient_name);
41
42  #QUERY 4
43  SELECT  patient_id, patient_name, gender,disease, MAX(age)
44  from patients_table;
45
46  # query 5
47  SELECT patient_id,patient_name,p_date from patients_table;
48
49  # Query 6
50  select patient_name as old_patient_name, upper(patient_name) as new_patient_name
51  from patients_table;
52
53  # Query 7
54  select patient_name , length(patient_name) as length_of_name from patients_table;
55
56  # QUERY 8
57  SELECT patient_name,
58  case when gender='Male' then 'M' when gender='Female' then 'F' end
59  from patients_table;
60
```

```sql
    #Query 9
    select patient_name,doctor_name, concat(patient_name,doctor_name) as new_column
    from patients_table;

    # Query 10
    select age,log10(age) as log_val
    from patients_table;

    # QUERY 11
    select *  , extract(year from p_date) as Years
    from patients_table;

    # QUERY 12
    select patient_name,doctor_name, case when patient_name=doctor_name then 'NULL' else
    patient_name end as newcol
    from patients_table;

    # QUERY 13
    select patient_name,age, case when age>50 then 'YES' else 'NO' end as OLDER
    from patients_table;

    # QUERY 14
    select doctor_name,count(*) as duplicates
    from patients_table
    group by doctor_name
    having count(*)>1;
```