

## SQL Problems

(<https://www.sql-practice.com/>)

- 1. Show first name, last name, and gender of patients whose gender is 'M'**

```
SELECT first_name,last_name,gender FROM patients
where gender = "M";
```

- 2. Show first name and last name of patients who does not have allergies. (null)**

```
SELECT first_name,last_name FROM patients
where allergies is Null;
```

- 3. Show first name of patients that start with the letter 'C'**

```
SELECT first_name FROM patients
where first_name like "C%";
```

- 4. Show first name and last name of patients that weight within the range of 100 to 120 (inclusive)**

```
SELECT first_name,last_name FROM patients
where weight>=100 and weight<=120;
```

- 5. Update the patients table for the allergies column. If the patient's allergies is null then replace it with 'NKA'**

```
Update patients
SET allergies = "NKA"
where allergies is null;
```

**6. Show first name and last name concatenated into one column to show their full name**

```
Select concat(first_name," ",last_name) as full_name from patients
```

**7. Show first name, last name, and the full province name of each patient.**

```
SELECT first_name, last_name, province_name  
FROM patients left JOIN province_names ON  
province_names.province_id =patients.province_id;
```

**8. Show how many patients have a birth\_date with 2010 as the birth year.**

```
Select Count(first_name) as total_patients from patients  
where birth_date between "2010-01-01" and "2010-12-31";
```

**9. Show the first\_name, last\_name, and height of the patient with the greatest height.**

```
Select first_name,last_name,Max(height) from patients;
```

**10. Show all columns for patients who have one of the following patient\_ids:**

**1,45,534,879,1000.**

```
select * from patients  
where patient_id in (1,45,534, 879,1000);
```

**11. Show the total number of admissions.**

```
select count(patient_id) as total_admissions from admissions
```

**12. Show all the columns from admissions where the patient was admitted and discharged on the same day.**

```
select * from admissions  
  
where admission_date = discharge_date;
```

**13. Show the patient id and the total number of admissions for patient\_id 579.**

```
Select patient_id, count(patient_id) as total_admissions from admissions  
  
where patient_id = 579 ;
```

**14. Based on the cities that our patients live in, show unique cities that are in province\_id 'NS'.**

```
select distinct city as unique_cities from patients  
  
where province_id like "%NS";
```

**15. Write a query to find the first\_name, last name and birth date of patients who has height greater than 160 and weight greater than 70.**

```
select first_name,last_name,birth_date from patients  
  
where height>160 and weight>70;
```

**16. Write a query to find list of patients first\_name, last\_name, and allergies where allergies are not null and are from the city of 'Hamilton'.**

```
select first_name,last_name,allergies from patients  
  
where allergies is not null and city = "Hamilton";
```

**17. Show unique birth years from patients and order them by ascending.**

```
select Distinct (year(birth_date)) as birth_year from patients  
  
group by Year(birth_date);
```

**18. Show patient\_id and first\_name from patients where their first\_name start and ends with 's' and is at least 6 characters long.**

```
select patient_id, first_name from patients  
  
where first_name like 'S%____%s';
```

**19. Show patient\_id, first\_name, last\_name from patients whose diagnosis is 'Dementia'.**

```
Select patients.patient_id, first_name, last_name from patients join admissions on  
admissions.patient_id = patients.patient_id where diagnosis = 'Dementia';
```

**20. Display every patient's first\_name.**

Order the list by the length of each name and then by alphabetically.

```
Select first_name from patients
```

```
Order by len(first_name),first_name;
```