

SQL PRACTICE QUESTIONS BASED ON HOSPITAL DATA

- 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 between 100 AND 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.

Example: 'Ontario' instead of 'ON'.

```
SELECT
    Patients.first_name,
    Patients.last_name,
    Province_names.province_name
FROM patients
    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(patients_id) AS total_patients
FROM patients
WHERE YEAR(birth_date) = 2010;
```

9. Show the first_name, last_name, and height of the patient with the greatest height.

```
SELECT first_name, last_name, height
FROM patients
ORDER BY height DESC LIMIT 1 ;
```

**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_number_of_admission
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(*) 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 = '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  
  
    city = 'Hamilton' AND allergies IS NOT NULL;
```