

# PRCE-001 Medical Data History

## Problem Statement

Task 1:-Pull docker image with sql environment

Task 2: Perform the Problem Queries:

1. Show first name, last name, and gender of patients whose gender is 'M'
2. Show first name and last name of patients who do not have allergies.
3. Show first name of patients that start with the letter 'C'
4. Show first name and last name of patients that weight within the range of 100 to 120 (inclusive)
5. Update the patients table for the allergies column. If the patient's allergies is null then replace it with 'NKA'
6. Show first name and last name concatenated into one column to show their full name.
7. Show first name, last name, and the full province name of each patient.
8. Show how many patients have a birth\_date with 2010 as the birth year.
9. Show the first\_name, last\_name, and height of the patient with the greatest height.
10. Show all columns for patients who have one of the following patient\_ids: 1,45,534,879,1000
11. Show the total number of admissions
12. Show all the columns from admissions where the patient was admitted and discharged on the same day.
13. Show the total number of admissions for patient\_id 579.

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

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

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

17. Show unique first names from the patients table which only occurs once in the list.

For example, if two or more people are named 'John' in the first\_name column then don't include their name in the output list. If only 1 person is named 'Leo' then include them in the output. Tip: HAVING clause was added to SQL because the WHERE keyword cannot be used with aggregate functions.

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

19. Show patient\_id, first\_name, last\_name from patients whose diagnosis is 'Dementia'. Primary diagnosis is stored in the admissions table.

20. Display every patient's first\_name. Order the list by the length of each name and then by alphabetically.

21. Show the total number of male patients and the total number of female patients in the patients table. Display the two results in the same row.

22. Show the total number of male patients and the total number of female patients in the patients table. Display the two results in the same row.

23. Show patient\_id, diagnosis from admissions. Find patients admitted multiple times for the same diagnosis.

24. Show the city and the total number of patients in the city. Order from most to least patients and then by city name ascending.

25. Show first name, last name and role of every person that is either patient or doctor. The roles are either "Patient" or "Doctor"

26. Show all allergies ordered by popularity. Remove NULL values from the query.

27. Show all patient's first\_name, last\_name, and birth\_date who were born in the 1970s decade. Sort the list starting from the earliest birth\_date.

28. We want to display each patient's full name in a single column. Their last\_name in all upper letters must appear first, then first\_name in all lower case letters. Separate the last\_name and first\_name with a comma. Order the list by the first\_name in descending order EX: SMITH,jane

29. Show the province\_id(s), sum of height; where the total sum of its patient's height is greater than or equal to 7,000.

30. Show the difference between the largest weight and smallest weight for patients with the last name 'Maroni'

31. Show all of the days of the month (1-31) and how many admission\_dates occurred on that day. Sort by the day with most admissions to least admissions.

32. Show all of the patients grouped into weight groups. Show the total number of patients in each weight group. Order the list by the weight group descending. e.g. if they weigh 100 to 109 they are placed in the 100 weight group, 110-119 = 110 weight group, etc.

33. Show patient\_id, weight, height, isObese from the patients table. Display isObese as a boolean 0 or 1. Obese is defined as  $\text{weight(kg)} / (\text{height(m)})$ . Weight is in units kg. Height is in units cm.

34. Show patient\_id, first\_name, last\_name, and attending doctor's specialty. Show only the patients who has a diagnosis as 'Epilepsy' and the doctor's first name is 'Lisa'. Check patients, admissions, and doctors tables for required information.

35. All patients who have gone through admissions, can see their medical documents on our site. Those patients are given a temporary password after their first admission. Show the patient\_id and temp\_password.

The password must be the following, in order:

- patient\_id
- the numerical length of patient's last\_name
- year of patient's birth\_date

## SQL Link:

DB Name: **project\_medical\_data\_history**

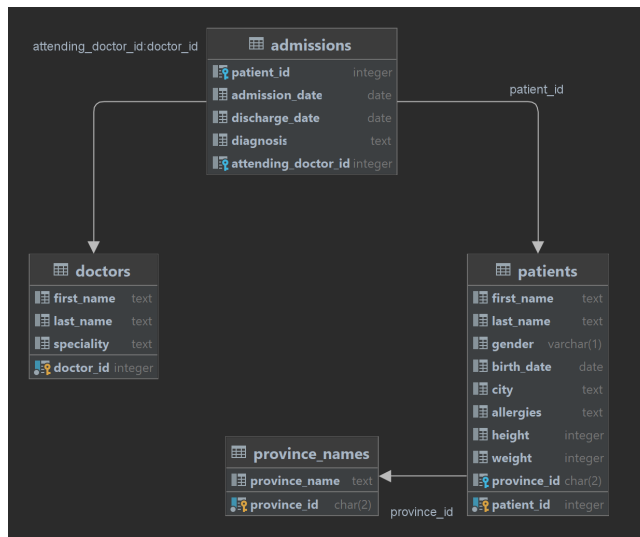
Host: 18.136.157.135

Domain Name: [projects.datamites.com](https://projects.datamites.com)

Username: **dm\_team4**

Password: **DM!\$!Team!47@4!23&**

## SQL Schema:



## Report on Challenges faced :

Create a report which should include challenges you faced working on this project.

## Submission Procedure:

Send Dockerfile for sql image environment and send the word document of sql commands.