

SQL PROJECT – HOSPITAL DATABASE

No.	Questions	Difficulty
1	Show first name, last name, and gender of patients whose gender is 'M'	Easy
2	Show first name and last name of patients who does not have allergies. (null)	Easy
3	Show first name of patients that start with the letter 'C'	Easy
4	Show first name and last name of patients that weight within the range of 100 to 120 (inclusive)	Easy
5	Update the patients table for the allergies column. If the patient's allergies is null then replace it with 'NKA'	Easy
6	Show first name and last name concatenated into one column to show their full name.	Easy
7	Show first name, last name, and the full province name of each patient. Example: 'Ontario' instead of 'ON'	Easy
8	Show how many patients have a birth_date with 2010 as the birth year.	Easy
9	Show the first_name, last_name, and height of the patient with the greatest height.	Easy
10	Show all columns for patients who have one of the following patient_ids: 1,45,534,879,1000	Easy
11	Show the total number of admissions	Easy
12	Show all the columns from admissions where the patient was admitted and discharged on the same day.	Easy
13	Show the patient id and the total number of admissions for patient_id 579.	Easy
14	Based on the cities that our patients live in, show unique cities that are in province_id 'NS'?	Easy
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	Easy
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'	Easy
17	Show unique birth years from patients and order them by ascending.	Medium
18	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.	Medium
19	Show patient_id and first_name from patients where their first_name start and ends with 's' and is at least 6 characters long.	Medium
20	Show patient_id, first_name, last_name from patients whos diagnosis is 'Dementia'. Primary diagnosis is stored in the admissions table.	Medium
21	Display every patient's first_name. Order the list by the length of each name and then by alphabetically	Medium
22	Show the total amount of male patients and the total amount of female patients in the patients table. Display the two results in the same row.	Medium
23	Show first and last name, allergies from patients which have allergies to either 'Penicillin' or 'Morphine'. Show results ordered ascending by allergies then by first_name then by last_name.	Medium
24	Show patient_id, diagnosis from admissions. Find patients admitted multiple times for the same diagnosis.	Medium
25	Show the city and the total number of patients in the city. Order from most to least patients and then by city name ascending.	Medium
26	Show first name, last name and role of every person that is either patient or doctor. The roles are either "Patient" or "Doctor"	Medium

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27	Show all allergies ordered by popularity. Remove 'NKA' and NULL values from query.	Medium
28	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.	Medium
29	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	Medium
30	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.	Medium
31	Show the difference between the largest weight and smallest weight for patients with the last name 'Maroni'	Medium
32	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.	Medium
33	Show the all columns for patient_id 542's most recent admission_date.	Medium
34	Show patient_id, attending_doctor_id, and diagnosis for admissions that match one of the two criteria: 1. patient_id is an odd number and attending_doctor_id is either 1, 5, or 19. 2. attending_doctor_id contains a 2 and the length of patient_id is 3 characters.	Medium
35	Show first_name, last_name, and the total number of admissions attended for each doctor. Every admission has been attended by a doctor.	Medium
36	For each doctor, display their id, full name, and the first and last admission date they attended.	Medium
37	Display the total amount of patients for each province. Order by descending.	Medium
38	For every admission, display the patient's full name, their admission diagnosis, and their doctor's full name who diagnosed their problem.	Medium
39	display the first name, last name and number of duplicate patients based on their first name and last name.	Medium
40	Display patient's full name, height in the unit feet rounded to 1 decimal, weight in the unit pounds rounded to 0 decimals, birth_date, gender non abbreviated. Convert CM to feet by dividing by 30.48. Convert KG to pounds by multiplying by 2.205.	Medium
41	Show patient_id, first_name, last_name from patients whose does not have any records in the admissions table. (Their patient_id does not exist in any admissions.patient_id rows.)	Medium
42	Show all of the patients grouped into weight groups. Show the total amount of patients in each weight group. Order the list by the weight group decending. For example, if they weight 100 to 109 they are placed in the 100 weight group, 110-119 = 110 weight group, etc.	Hard
43	Show patient_id, weight, height, isObese from the patients table. Display isObese as a boolean 0 or 1. Obese is defined as $\text{weight(kg)} / (\text{height(m)}^2) \geq 30$. weight is in units kg.	Hard

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	height is in units cm.	
44	<p>Show patient_id, first_name, last_name, and attending doctor's specialty. Show only the patients who has a diagnosis as 'Dementia' and the doctor's first name is 'Lisa'</p> <p>Check patients, admissions, and doctors tables for required information.</p>	Hard
45	<p>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.</p> <p>The password must be the following, in order:</p> <ol style="list-style-type: none"> 1. patient_id 2. the numerical length of patient's last_name 3. year of patient's birth_date 	Hard
46	<p>Each admission costs \$50 for patients without insurance, and \$10 for patients with insurance. All patients with an even patient_id have insurance.</p> <p>Give each patient a 'Yes' if they have insurance, and a 'No' if they don't have insurance. Add up the admission_total cost for each has_insurance group.</p>	Hard
47	Show the provinces that has more patients identified as 'M' than 'F'. Must only show full province_name	Hard
48	<p>We are looking for a specific patient. Pull all columns for the patient who matches the following criteria:</p> <ul style="list-style-type: none"> - First_name contains an 'r' after the first two letters. - Identifies their gender as 'F' - Born in February, May, or December - Their weight would be between 60kg and 80kg - Their patient_id is an odd number - They are from the city 'Kingston' 	Hard
49	Show the percent of patients that have 'M' as their gender. Round the answer to the nearest hundreth number and in percent form.	Hard
50	For each day display the total amount of admissions on that day. Display the amount changed from the previous date.	Hard
51	Sort the province names in ascending order in such a way that the province 'Ontario' is always on top.	Hard
52	We need a breakdown for the total amount of admissions each doctor has started each year. Show the doctor_id, doctor_full_name, specialty, year, total_admissions for that year.	Hard