

SQL QUESTIONS

1. Hospital Database:

```
1 SELECT first_name , last_name , gender  
2 FROM patients  
3 WHERE gender = 'M'
```

Show first name, last name, and gender of patients whose gender is 'M'

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```
1 SELECT first_name , last_name  FROM patients  
2 WHERE allergies ISNULL
```

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

```
1 SELECT first_name  FROM patients  
2 WHERE first_name LIKE 'C%'
```

Show first name of patients that start with the letter 'C'

```
1 SELECT first_name , last_name FROM patients  
2 WHERE weight BETWEEN 100 AND 120
```

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

```
1 UPDATE patients  
2 SET allergies = 'NKA'  
3 WHERE allergies ISNULL
```

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

```
1 SELECT CONCAT(first_name , " " , last_name) AS full_name  
2 FROM patients
```

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

```
1 SELECT p.first_name,  
2       p.last_name,  
3       pn.province_name  
4  FROM patients p  
5 JOIN province_names pn  
6    ON p.province_id = pn.province_id;
```

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

Example: 'Ontario' instead of 'ON'

```
1 SELECT COUNT(*) AS total_patients FROM patients  
2 WHERE YEAR(birth_date) = 2010
```

Show how many patients have a birth_date with 2010 as the birth year.

```
1 SELECT first_name , last_name , MAX(height)
2 FROM patients
```

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

```
1 SELECT * FROM patients
2 WHERE patient_id IN (1,45 , 534 , 879 , 1000)
```

Show all columns for patients who have one of the following patient_ids:
1,45,534,879,1000

```
1 SELECT COUNT(*) AS total_admissions
2 FROM admissions
```

Show the total number of admissions

```
1 SELECT * FROM admissions
2 WHERE admission_date = discharge_date
```

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

```
1 SELECT patient_id , COUNT(*) AS total_admissions FROM admissions
2 WHERE patient_id = 579
```

Show the patient id and the total number of admissions for patient_id 579.

```
SELECT DISTINCT(city) FROM patients
WHERE province_id = 'NS'
```

Based on the cities that our patients live in, show unique cities that are in province_id 'NS'.

```
1 SELECT first_name , last_name , birth_date FROM patients
2 WHERE height>160 AND weight>70
```

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

```
1 SELECT first_name , last_name , allergies FROM patients
2 WHERE allergies NOTNULL AND city = 'Hamilton'
```

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'

Northwind Database:

```
1 SELECT category_name , description FROM categories  
2 ORDER BY category_name
```

Show the category_name and description from the categories table sorted by category_name.

```
1 SELECT contact_name , address , city FROM customers  
2 WHERE country NOT IN ('Germany' , 'Mexico' , 'Spain')
```

Show all the contact_name, address, city of all customers which are not from 'Germany', 'Mexico', 'Spain'

```
1 SELECT order_date , shipped_date , customer_id , freight  
2 FROM orders WHERE order_date = '2018-02-26'
```

Show order_date, shipped_date, customer_id, Freight of all orders placed on 2018 Feb 26

```
1 SELECT employee_id , order_id , customer_id , required_date , shipped_date  
2 FROM orders  
3 WHERE shipped_date>required_date
```

Show the employee_id, order_id, customer_id, required_date, shipped_date from all orders shipped later than the required date

```
1 SELECT order_id FROM orders  
2 WHERE order_id%2=0
```

Show all the even numbered Order_id from the orders table

```
1 SELECT city , company_name , contact_name FROM customers  
2 WHERE city LIKE '%L%'  
3 ORDER BY contact_name
```

Show the city, company_name, contact_name of all customers from cities which contains the letter 'L' in the city name, sorted by contact_name

```
1 SELECT company_name , contact_name , fax  
2 FROM customers  
3 WHERE fax IS NOT null
```

Show the company_name, contact_name, fax number of all customers that has a fax number. (not null)

```
1 SELECT first_name , last_name , hire_date FROM employees  
2 ORDER BY hire_date DESC LIMIT 1;
```

Show the first_name, last_name, hire_date of the most recently hired employee.

```
1 SELECT ROUND(AVG(unit_price),2)AS avg_unit_price ,  
2 SUM(units_in_stock) AS total_stock,  
3 SUM(discontinued) AS total_discontinued  
4  
5 FROM products
```

Show the average unit price rounded to 2 decimal places, the total units in stock, total discontinued products from the products table.