

Sql Theory Questions

1. Name three types of join used in SQL and describe briefly how it works?

- i INNER JOIN- This type of join return rows in a table when there is a match in both given tables
- ii.LEFT JOIN-This join returns all rows from the left table,even if there are no matches in the right table
- iii.RIGHT JOIN-This join returns all rows from right table.even if there are no matches in the left table

2. What is the difference between a NULL value, a 0 value and a blank value in SQL?

- Null value means the is no value at all in the record
- 0 value means the original value in a record itself is 0
- Blank value means there is a value for a given record and this value is empty

3. What is the difference between HAVING and WHERE

Where is used to filter from the table with based on specified condition whereas Having is used to filter from the groups based on condition

4. How do you sort data in SQL

We sort data in SQL by using a "Order By" and specify wether to sort in descending or ascending order after the specified columnn for example (SELECT * FROM employees ORDER BY age DESC)

5. Whats the difference between a table, a view and a stored procedure

- Table contains data defined in a form of row and columns
- View is a defined queries based on tables or other views.
- stored Procedue can contain various logic, like simple returning data like a view

6. What would you use to loop through records in a SQL statement?

By usingf a Cursor we can easily iterate thour different records

7. How would you define a decimal versus a whole number in SQL?

I think a decimal can contain digits other than zero to the right of its decimal point but whole numbers cannot.

8. What is a stored procedure?

Stored procedure is a set of SQL statements with an assigned name ,that can be saved to be reused over and over again.

9. **What is Auto Increment?**

Auto increment is the feature that can be applied to the field so that it can automatically generate whenever new record is inserted and this feature is often applied to primary key.

10. How to select unique records from a table?

We use a distinct keyword for example `SELECT DISTINCT age,client_name FROM employee`

11. What notation would you use to query elements stored in a JSON object?

Dot notation

12. Which operator is used in query for pattern matching?

=Like Operator for example `SELECT * FROM employee WHERE employee_name like 'john%'`