

Joins and Relationships (31-38)

33

31, What are joins in SQL? Why are they used?

Joins in SQL are used to combine rows from two or more tables based on a related column between them usually a foreign key in one table and primary key in another

They are used for

- To retrieve data
- To avoid data duplication
- To form meaningful results

32, What is difference between INNER JOIN and LEFT JOIN?

INNER JOIN :- Return rows where there is a match in both tables

LEFT JOIN :- Return all rows from the left table and matched rows from the right

33, Explain RIGHT JOIN and give use case?

- All rows from the right table
- Matching rows from the left table

Syntax :-

SELECT Columns

FROM left tables

RIGHT JOIN RIGHT table

ON left-table . Common - Column = right-table .

Common - Column ;

34, What is FULL OUTER JOIN? Is it supported in MySQL?

- All rows from both tables
- matches where possible

NO MySQL does not support FULL OUTER JOIN

35, What is self join? how and why would you use it?

31,

- A self join is a regular join where a table is joined with itself
- It is used to compare rows within the same table, typically with aliases
- useful for hierarchical relationship, like finding an employee's manager from an employee table.

36, Write a query using a self join to find employees who report to the same Manager.

Query

SELECT

E1. Name AS Employee1

E2. Name AS Employee2

E1. Manager - ID

FROM Employees E1

JOIN Employees E2 ON E1. Manager - ID = E2. Manager - ID

WHERE E1. Emp - ID < E2. Emp - ID;

37, what is purpose of using aliases in joins especially in self joins?

1. clarity:- aliases make it easier to distinguish between multiple references to the same or different tables.
- 2, self joins.

In self join, you're using the same table twice. aliases help treat each instance as a separate entity.

3, Simplified Queries

using that aliases make queries short, cleaner and more readable.

38, what is difference between an equi join and non-equij join?

Equi Join:-

1. uses the equality operator (=) to match columns.
- 2, retrieves rows with equal values in joined columns.

Non - Equi join

1. uses in Equality operator like $>$, $<$, \leq , \geq , BETWEEN
2. Returns row based on Range or non-Equal Comparison