

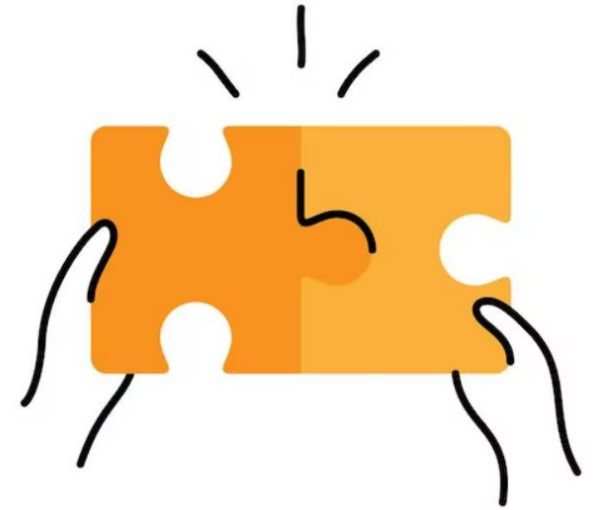
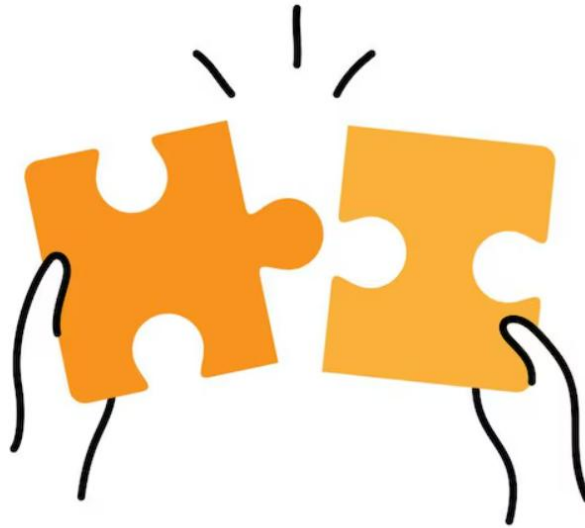
SESSION WILL BE DIVIDED INTO

1. What is a JOIN?
2. Concept of JOINS in SQL?
3. Types of JOINS in SQL
4. Syntax of JOIN
5. Exploring each JOIN type
6. Advance JOINS
7. Interview Questions

SECTION 1

What Is A Join?

What is a JOIN?



SECTION 2

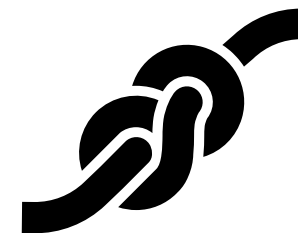
Concept Of Join In SQL

Understanding Joins

- Joins are used in SQL to combine rows from two or more tables based on a related column between them.
- They are essential when querying data from multiple tables.
- In simple terms, join operation in SQL is used when we want to combine two or more than two tables based on some conditions on a related column between them.

Employees Table

Id	Name	Loc
1	Raj	India
2	James	US
3	Brian	US



Organization Table

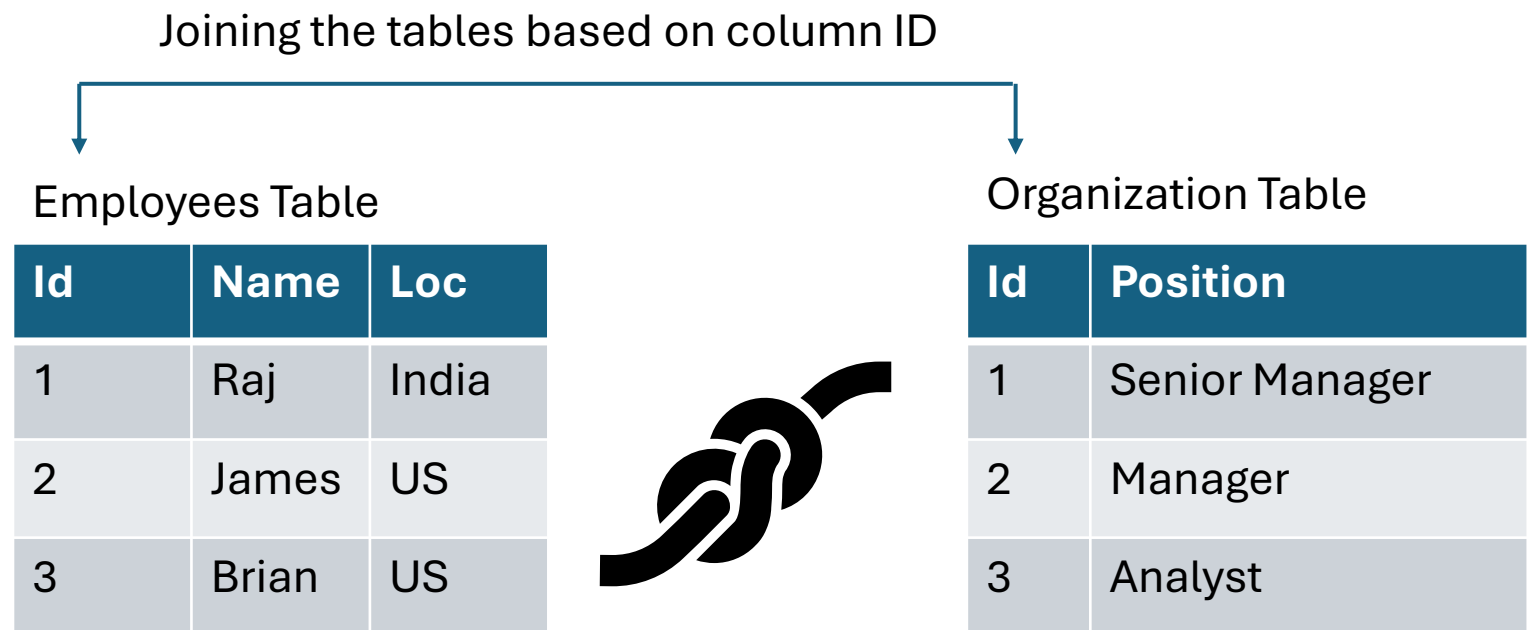
Id	Position
1	Senior Manager
2	Manager
3	Analyst

SECTION 2

Concept Of Join In SQL

Understanding Joins

- Now, Suppose you want to write a query which returns us the result of all the employees who are senior manager.
- In such case, we can use the concept of joins.



SECTION 2

Concept Of Join In SQL

Understanding Joins

- Now, Suppose you want to write a query which returns us the result of all the employees who are senior manager.
- In such case, we can use the concept of joins.

Joining the tables based on column ID



Id	Name	Loc	Position
1	Raj	India	Senior Manager

SECTION 2

Types Of JOIN Operation

Different types of Joins

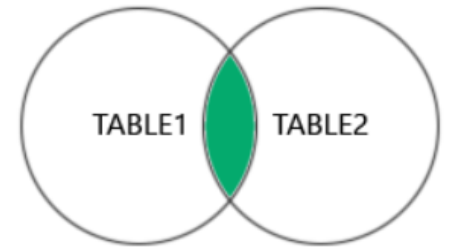
- INNER JOIN
- LEFT JOIN OR LEFT OUTER JOIN
- RIGHT JOIN OR RIGHT OUTER JOIN
- FULL JOIN OR FULL OUTER JOIN
- SELF JOIN (NOT DIFFERENT)

SECTION 2

Types Of JOIN Operation

Different types of Joins

- INNER JOIN

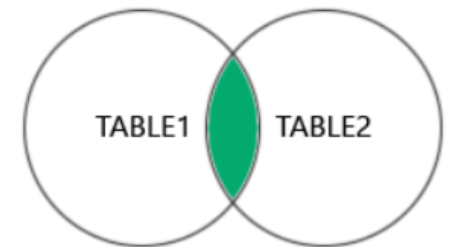


SECTION 2

Types Of JOIN Operation

Different types of Joins

- INNER JOIN
 - Find the list of all customers who have placed at least one order.
 - Find the total amount of all orders placed by each customer.
 - Find the details of orders placed by customers from the USA.

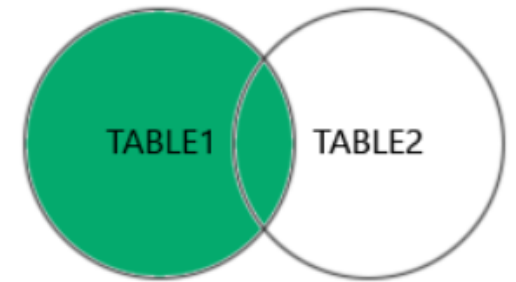


SECTION 2

Types Of JOIN Operation

Different types of Joins

- LEFT JOIN OR LEFT OUTER JOIN

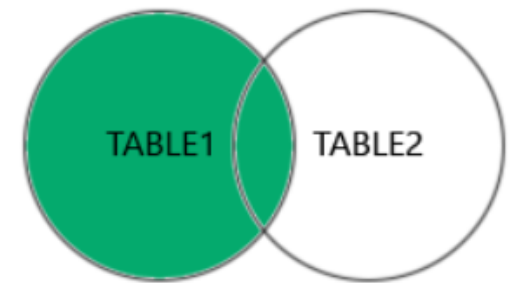


SECTION 2

Types Of JOIN Operation

Different types of Joins

- LEFT JOIN OR LEFT OUTER JOIN
 - Find the list of all customers who have placed at least one order.
 - Find the total number of orders for each customer from USA, including customers who haven't placed any orders. Sort the customers based on the count of their orders in ASC.
 - Retrieve a list of all customers and the number of their orders, but show only those who have placed fewer than two orders or no orders at all.

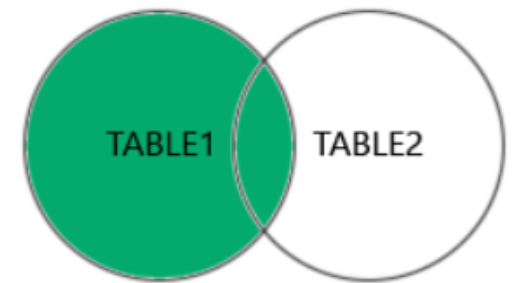


SECTION 2

Types Of JOIN Operation

Different types of Joins

- LEFT JOIN OR LEFT OUTER JOIN
 - Write a SQL query to retrieve all customers from the USA and UK. The query should display the sum of the total order amount for each customer. If a customer has no orders or the total order amount is NULL, display 'No Orders'. Otherwise, display the sum of the orders amount.

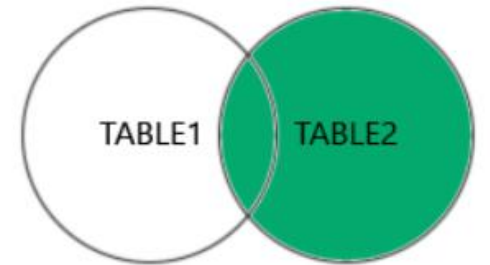


SECTION 2

Types Of JOIN Operation

Different types of Joins

- RIGHT JOIN OR RIGHT OUTER JOIN

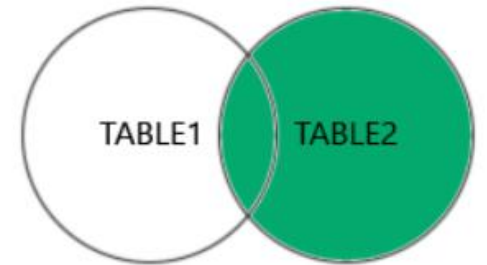


SECTION 2

Types Of JOIN Operation

Different types of Joins

- RIGHT JOIN OR RIGHT OUTER JOIN
 - Find the list of all customers who have placed at least one order.
 - Find the total number of orders for each customer from USA, including customers who haven't placed any orders. Sort the customers based on the count of their orders in ASC.
 - Retrieve a list of all customers and the number of their orders, but show only those who have placed fewer than two orders or no orders at all.



SECTION 2

Types Of JOIN Operation

Different types of Joins

- FULL JOIN OR FULL OUTER JOIN
 - List all students and the courses they are enrolled in, including students who are not enrolled in any course and courses that have no students.

