

## SQL : Inner Joins

### 1. Introduction to Joins

#### What are Joins?

In SQL, a JOIN clause is used to combine rows from two or more tables based on a related column between them. Joins are crucial for querying data spread across multiple tables.

#### Types of Joins

- **INNER JOIN:** Returns records that have matching values in both tables.
- **LEFT JOIN (or LEFT OUTER JOIN):** Returns all records from the left table, and the matched records from the right table.
- **RIGHT JOIN (or RIGHT OUTER JOIN):** Returns all records from the right table, and the matched records from the left table.
- **FULL JOIN (or FULL OUTER JOIN):** Returns all records when there is a match in either left or right table.

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### 2. What is an INNER JOIN?

An INNER JOIN is the most common type of join in SQL. It returns rows when there is at least one match in both tables. When performing an INNER JOIN, only the rows with matching values in both tables are included in the result set.

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### 3. Basic Syntax of INNER JOIN

The basic syntax for an INNER JOIN is as follows:

```
SELECT columns
FROM table1
INNER JOIN table2
ON table1.column = table2.column;
```

- **SELECT columns:** Specifies the columns to be included in the result set.