

Data Analytics With SQL



Joins

- With join, we can query data from two (or multiple) tables based on a related column which is present in both the tables.
- While performing a join, we need to specify the shared column and the condition on which we want to join tables
- You can use JOINS in the SELECT, UPDATE and DELETE statements to join multiple tables.

Types of Joins



- Inner Join or Simple Join
- Left Outer Join or Left Join
- Right outer join or Right Join
- Full outer join or Full Join

- ClassDetails -
 - It stores which class is assigned to which teacher like class id and teacher id
- TeacherDetails -
 - It stores the details of each teacher like ID of teacher, teacher's name and the subject id which is taught by the teacher
- SubjectDetails -
 - This table stores the details of each subject like subject id, name of subject and total number of students which are admitted in individual subject.

Types of Joins

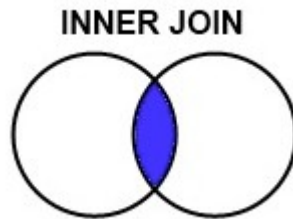


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Inner Join



- This will only return rows when there is at least one row in both tables that match the specified join condition.
- Syntax -
 - *SELECT table1.col1, table2.col2,*
FROM table_name1
INNER JOIN table_name2
ON
table1.column_name = table2.column_name;



- Syntax -

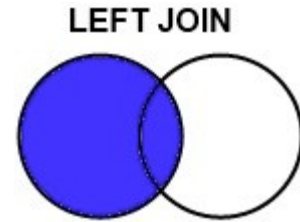
```
( SELECT table_1.col1, table_2.col2, ....  
FROM table_1  
INNER JOIN table_2  
ON  
table_1.column_name = table_2.column_name )  
INNER JOIN table_3  
ON  
table_2.column_name = table_3.column_name
```


Left Outer Join

Left Outer Join (LeH Join)



- It returns all rows from the left table specified and only those rows from the other table where the join condition is matched.
- Syntax -
 - *SELECT table_1.col1, table_2.col2,*
FROM table_1
LEFT JOIN table_2
ON
table_1.column_name = table_2.column_name;



Right Outer Join (Right Join)



- It returns all rows from the right table specified and only those rows from the left table where the join condition is matched.
- Syntax -
 - *SELECT table_1.col1, table_2.col2,*
FROM table_1
RIGHT JOIN table_2
ON
table_1.column_name = table_2.column_name;

