

1. **Left Join vs Right Join**
2. **On clause Vs using clause**
3. **Natural Join vs Inner Join**
4. **Inner Join vs Left Join**

1. Left Join vs Right Join

- **Left Join:** Retrieves all rows from the left table and only the matching rows from the right table. If there's no match, the columns from the right table will show NULL.
- **Right Join:** Retrieves all rows from the right table and only the matching rows from the left table. If there's no match, the columns from the left table will show NULL.

Difference:

- Left Join prioritizes the left table; unmatched rows from the left table are included.
 - Right Join prioritizes the right table; unmatched rows from the right table are included.
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2. ON Clause vs USING Clause

- **ON Clause:** Used to specify a custom condition for the join. It is flexible and can be used when the column names differ or when you need to define a complex condition.
- **USING Clause:** Simplifies joins when the columns being compared have the same name in both tables. It automatically matches rows based on these columns.

Difference:

- The ON clause is more versatile and can handle varied column names or complex conditions.
 - The USING clause is simpler but works only when column names are identical.
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3. Natural Join vs Inner Join

- **Natural Join:** Automatically joins tables based on columns with the same name in both tables. No explicit condition is required. This can sometimes lead to unintended matches if there are multiple columns with the same name.
- **Inner Join:** Requires an explicit condition to join tables, giving precise control over which columns to match.

Difference:

- Natural Join relies on implicit column matching.
 - Inner Join requires explicit conditions, making it more precise and predictable.
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4. Inner Join vs Left Join

- **Inner Join:** Retrieves only the rows that have matching values in both tables. Unmatched rows are excluded.
- **Left Join:** Retrieves all rows from the left table and only the matching rows from the right table. If there's no match, the columns from the right table will show NULL.

Difference:

- Inner Join includes only matched rows.
- Left Join includes all rows from the left table, whether or not there is a match in the right table.