**Set Operators in SQL:**

SQL provides several set operators that allow you to combine, compare, and manipulate result sets. Here are the common set operators:

**1. UNION:**

* Combines and returns distinct values from multiple SELECT statements.

**2. UNION ALL:**

* Combines and returns all values from multiple SELECT statements, including duplicates.

**3. INTERSECT:**

* Returns the common rows between two result sets, excluding duplicates.

**4. EXCEPT (or MINUS):**

* Returns the rows that are unique to the first result set and not present in the second result set.

**5. INNER JOIN:**

* Combines rows from two or more tables based on a related column between them.

**6. OUTER JOIN (or LEFT JOIN, RIGHT JOIN, FULL OUTER JOIN):**

* Retrieves matching rows from both tables and includes unmatched rows from one or both tables.

**Considerations:**

* **Performance:** **UNION ALL** is generally faster than **UNION** because it doesn't involve the additional step of removing duplicates.
* **Distinct Values:** If you want to eliminate duplicate values, use **UNION**. If duplicates are acceptable or you want to include them, use **UNION ALL**.
* **Syntax Consistency:** Both **UNION** and **UNION ALL** require that the number and data types of the columns in the SELECT statements must be the same.
* **Use Cases:** Use **UNION** when you want to combine distinct values, such as merging data from two similar tables. Use **UNION ALL** when you want to combine all values, including duplicates.

In summary, the choice between **UNION** and **UNION ALL** depends on whether you want to include or exclude duplicate values in the combined result set. Additionally, SQL provides other set operators for various purposes, including finding common values, excluding specific values, and joining tables based on specified conditions.

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