

SQL JOINS Cheat Sheet

1. INNER JOIN

- Returns only the matching rows from both tables.

Syntax:

```
sql
CopyEdit
SELECT A.*, B.*
FROM TableA A
INNER JOIN TableB B ON A.id = B.id;
```

2. LEFT JOIN (or LEFT OUTER JOIN)

- Returns all rows from the left table and only matching rows from the right table. If no match, returns NULL.

Syntax:

```
sql
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SELECT A.*, B.*
FROM TableA A
LEFT JOIN TableB B ON A.id = B.id;
```

3. RIGHT JOIN (or RIGHT OUTER JOIN)

- Returns all rows from the right table and only matching rows from the left table. If no match, returns NULL.

Syntax:

```
sql
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SELECT A.*, B.*
FROM TableA A
RIGHT JOIN TableB B ON A.id = B.id;
```

4. FULL JOIN (or FULL OUTER JOIN)

- Returns all rows when there is a match in either table. If there is no match, NULLs are returned for the missing side.

Syntax:

```
sql
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```

```
SELECT A.*, B.*  
FROM TableA A  
FULL JOIN TableB B ON A.id = B.id;
```

5. CROSS JOIN

- Returns the Cartesian product of both tables (every row from A joins with every row from B).

Syntax:

```
sql  
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SELECT A.*, B.*  
FROM TableA A  
CROSS JOIN TableB B;
```

6. SELF JOIN

- A table joins with itself (useful for hierarchical or comparative queries).

Syntax:

```
sql  
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SELECT A.*, B.*  
FROM TableA A  
INNER JOIN TableA B ON A.id = B.manager_id;
```