1

2

3

4

5

6

7

8

SQL
ORDER OF EXECUTION

In SQL - the "order of execution" is the order in which clauses within a query are evaluated.

This is often different to the order that the query is written in.

Understanding this order can be useful when looking to debug & optimise queries

1
2
3
4
5
6
7
8

FROM

Points to the table where the required data is stored

1

2 ▶

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JOIN + ON

Obtains the matching records based upon shared column(s) when the required data lives in multiple tables

1

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WHERE

Filters the requested source data at a row level. Does not allow column aliases or aggregate functions to be applied

1

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3

4 ▶

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GROUP BY

Groups rows with the same values together. Often used with aggregate functions. Column aliases are allowed

1

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HAVING

Applies conditions and/or filters after aggregation takes place. Does not allow column aliases

1

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▶

7

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SELECT

+ WINDOW FUNCTIONS

Select specfies the columns to be returned. Window functions look at values from a set of rows (the window) and based on this, return a value for each row

1

2

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ORDER BY

Sorts the resulting rows after filtering & aggregation. Column aliases are allowed

LIMIT / FETCH

Limits the number of rows that are returned by the query

1
2
3
4
5
6
7
8 ▶

1. ▶ **FROM**

2. ▶ **JOIN + ON**

3. ▶ **WHERE**

4. ▶ **GROUP BY**

5. ▶ **HAVING**

6. ▶ **SELECT + WINDOW FUNCTIONS**

7. ▶ **ORDER BY**

8. ▶ **LIMIT / FETCH**

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