

04 – Syntax basics

SQL has an easy-to-understand syntax for querying databases

- The order of SQL keywords matters as noted below (e.g. `select` before `from`; `from` before `where`; etc.)

Keyword	Action
<code>select</code>	field(s)
<code>from</code>	table(s)
<code>where</code>	filter is/is not
<code>group by</code>	field(s)
<code>order by</code>	field(s) ⁽¹⁾

(1) Sorts data in ascending (*asc*) or descending (*desc*) order

	shape	color	cost
1	square	red	9
2	triangle	blue	5
3	triangle	red	1
4	triangle	green	3
5	square	blue	7
6	circle	green	8
7	circle	red	10
8	square	red	13
9	circle	red	16
10	triangle	red	12
11	square	green	6
12	circle	blue	2

`select 1;`

	(No column name)
1	1

`select s.shape
from shapes s
where s.shape = 'triangle';`

	shape
1	triangle
2	triangle
3	triangle
4	triangle

`select s.shape
from shapes s
group by s.shape
order by s.shape desc;`

	shape
1	triangle
2	square
3	circle

`select s.shape
from shapes s
group by s.shape;`

	shape
1	circle
2	square
3	triangle

`select s.shape
from shapes s
order by s.shape desc
group by s.shape;`

Incorrect syntax near the keyword 'group'.

`group by` comes before `order by`

	shape
1	square
2	square
3	triangle
4	circle
5	triangle
6	triangle
7	circle
8	square
9	circle
10	circle
11	square
12	triangle