

聚合函数

聚合函数 (aggregate function) 把许多行变成一个汇总 (summary) 值。用 ROUND(x, 2) 把平均值整理一下。

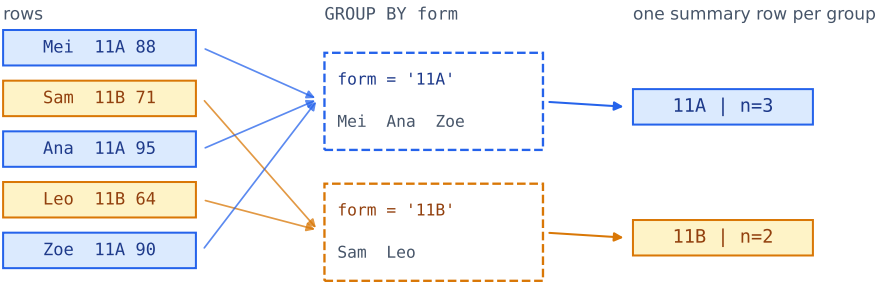
Table with 2 columns: 函数, 结果. Rows include COUNT(*), SUM(col), AVG(col), and MIN(col) / MAX(col) with their respective results.

SQL code snippet: CREATE TABLE student (id INTEGER, name TEXT, form TEXT, score INTEGER); INSERT INTO student VALUES ... SELECT COUNT(*), ROUND(AVG(score), 2), MAX(score) FROM student;

GROUP BY 与 HAVING

GROUP BY 为每个组 (group) 生成一个汇总行。HAVING 用来筛选这些组 —— 它像 WHERE, 但在分组之后才运行。

SQL code snippet: CREATE TABLE student (id INTEGER, name TEXT, form TEXT, score INTEGER); INSERT INTO student VALUES ... SELECT form, COUNT(*) AS n, ROUND(AVG(score), 2) AS avg_score FROM student GROUP BY form HAVING COUNT(*) > 1;



SQL · GROUP BY collapses rows into groups; HAVING filters the groups

GROUP BY 把行按值收进各自的组; 每组产出一行汇总

无论你按什么顺序书写,SQL 总是按同一个固定顺序运行查询的各个子句:

Table with 2 columns: 步骤, 子句. Rows 1-6 detailing the SQL query execution order: FROM, WHERE, GROUP BY, HAVING, SELECT, ORDER BY/LIMIT.

常见错误

- 除非普通列出现在 GROUP BY 中, 否则不能和聚合函数并列选择。
- 用 WHERE 筛选行 (分组前), 用 HAVING 筛选组 (分组后)。
- COUNT(*) 统计行数;COUNT(col) 会跳过该列的 NULL。