**FILTER**

SELECT

ROUND (100.0 \*

COUNT (case\_id) FILTER (

WHERE call\_category IS NULL OR call\_category = 'n/a')

/ COUNT (case\_id), 1) AS uncategorised\_call\_pct

FROM callers;

**Don’t do integer division.**

Dividing by **100.0** instead of **100** serves a specific purpose in SQL calculations involving percentages. The key benefit of dividing by **100.0** is to ensure that the division operation is performed as a floating-point operation rather than an integer operation. This distinction has implications for the accuracy and precision of the resulting calculations.

When you divide by **100**, the division is performed using integer division rules, which means any decimal portion of the result is truncated. On the other hand, when you divide by **100.0**, you are explicitly indicating that you want to perform floating-point division, preserving decimal values in the result.

Here's a simple example to illustrate the difference:

SELECT 5 / 100; -- Result: 0

SELECT 5 / 100.0; -- Result: 0.05

In the first case (**5 / 100**), the division is performed as integer division, and the result is truncated to **0**. In the second case (**5 / 100.0**), the division is performed as floating-point division, and the result includes the decimal portion (**0.05**).