Why ROWNUM = 1 Returns a Result but ROWNUM = 2 Does Not in Oracle Database

In Oracle Database, ROWNUM is a **pseudocolumn** that assigns a sequential number to rows **as they are retrieved**, not after the query result set is fully generated.

How Oracle Processes ROWNUM

Oracle assigns ROWNUM values **before** applying the WHERE clause conditions. The numbering starts at 1 for the first row returned by the query.

Case 2: ROWNUM = 2

Oracle retrieves the first row and assigns ROWNUM = 1.

The condition ROWNUM = 2 is not satisfied, so the row is discarded.

Oracle does not proceed to assign ROWNUM = 2 to the next row because the first row did not pass the condition.

As a result, no rows are returned.

So

1. ROWNUM is assigned **before filtering**, not after.
2. ROWNUM = 1 works because it matches the first row retrieved.
3. ROWNUM = 2 fails because Oracle never assigns that value directly.
4. Using a subquery is the **correct and recommended solution**.