

**ROWNUM**

## Using ROWNUM in Oracle

ROWNUM is a pseudocolumn in Oracle that assigns a unique sequential number to each row returned by a query, starting from 1.

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### Key Properties of ROWNUM:

- It is not a real column in the table, but rather generated at runtime.
  - It is assigned before the ORDER BY clause is applied.
  - It's commonly used to limit the number of rows returned.
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### EXAMPLE 1: GET THE FIRST 10 ROWS

```
SELECT *  
FROM employees  
WHERE ROWNUM <= 10;
```

- This query returns the first 10 rows from the employees table.


### WARNING: ROWNUM = 10 DOESN'T WORK

```
SELECT *  
FROM employees  
WHERE ROWNUM = 10;
```

This query will return no rows.

**Why?** Because Oracle assigns ROWNUM sequentially as rows are fetched — it never reaches ROWNUM = 10 unless it has already selected the first 9 rows, but the condition blocks that.

### **SOLUTION 1: USE A SUBQUERY WITH ROWNUM**



```
SELECT *  
FROM (  
    SELECT e.*, ROWNUM AS rn  
    FROM employees e  
)  
WHERE rn = 5;
```

### **SOLUTION 2: USE OFFSET AND FETCH (ORACLE 12C+)**



```
SELECT *  
FROM employees  
OFFSET 4 ROWS FETCH NEXT 1 ROW ONLY;
```