

Database SQL Language Reference

Logical Conditions

A logical condition combines the results of two component conditions to produce a single result based on them or to invert the result of a single condition. Table 7-4 (#BABDGHHB) lists logical conditions.

Table 7-4 Logical Conditions

Type of Condition	Operation	Examples
NOT	Returns TRUE if the following condition is FALSE. Returns FALSE if it is TRUE. If it is UNKNOWN, then it remains UNKNOWN.	<pre>SELECT * FROM employees WHERE NOT (job_id IS NULL) ORDER BY employee_id; SELECT * FROM employees WHERE NOT (salary BETWEEN 1000 AND 2000) ORDER BY employee_id;</pre>
AND	Returns TRUE if both component conditions are TRUE. Returns FALSE if either is FALSE. Otherwise returns UNKNOWN.	<pre>SELECT * FROM employees WHERE job_id = 'PU_CLERK' AND department_id = 30 ORDER BY employee_id;</pre>
OR	Returns TRUE if either component condition is TRUE. Returns FALSE if both are FALSE. Otherwise returns UNKNOWN.	<pre>SELECT * FROM employees WHERE job_id = 'PU_CLERK' OR department_id = 10 ORDER BY employee_id;</pre>

Table 7-5 (#g1068986) shows the result of applying the NOT condition to an expression.

Table 7-5 NOT Truth Table

--	TRUE	FALSE	UNKNOWN
NOT	FALSE	TRUE	UNKNOWN

Table 7-6 (#g1068810) shows the results of combining the AND condition to two expressions.

Table 7-6 AND Truth Table

AND	TRUE	FALSE	UNKNOWN
TRUE	TRUE	FALSE	UNKNOWN
FALSE	FALSE	FALSE	FALSE
UNKNOWN	UNKNOWN	FALSE	UNKNOWN

For example, in the WHERE clause of the following SELECT statement, the AND logical condition is used to ensure that only those hired before 2004 and earning more than \$2500 a month are returned:

```
SELECT * FROM employees WHERE hire_date < TO_DATE('01-JAN-2004', 'DD-MON-YYYY') AND
salary > 2500 ORDER BY employee_id;
```

Table 7-7 (#g1068834) shows the results of applying OR to two expressions.

Table 7-7 OR Truth Table

OR	TRUE	FALSE	UNKNOWN
TRUE	TRUE	TRUE	TRUE
FALSE	TRUE	FALSE	UNKNOWN
UNKNOWN	TRUE	UNKNOWN	UNKNOWN

For example, the following query returns employees who have a 40% commission rate or a salary greater than \$20,000:

```
SELECT employee_id FROM employees WHERE commission_pct = .4 OR salary > 20000 ORDER BY
employee_id;
```

Page 317 of 522

< X https://docs.oracle.com/cd/E11882_01/server.112/e41084/conditions00305.htm



[About Oracle \(http://www.oracle.com/corporate/index.html\)](http://www.oracle.com/corporate/index.html) |
 [Contact Us \(http://www.oracle.com/us/corporate/contact/index.html\)](http://www.oracle.com/us/corporate/contact/index.html) |
 [Legal Notices \(http://www.oracle.com/us/legal/index.html\)](http://www.oracle.com/us/legal/index.html) |
 [Terms of Use \(http://www.oracle.com/us/legal/terms/index.html\)](http://www.oracle.com/us/legal/terms/index.html) |
 [Your Privacy Rights \(http://www.oracle.com/us/legal/privacy/index.html\)](http://www.oracle.com/us/legal/privacy/index.html)

Copyright © 2016, Oracle and/or its affiliates. All rights reserved.