



## Oracle SQL Operators for WHERE Clauses

Use this Quick Reference Guide to determine what operators to use in the Where clause of your query.

Operator	Meaning
=	Equals <b>Example:</b> <ul style="list-style-type: none"> <li>WHERE dwfnd_rf_fund_cds.fund_type_cd = 'RE'</li> </ul>
<	Less than <b>Example:</b> <ul style="list-style-type: none"> <li>WHERE dwgl_posted_je_lines.budget_amt &lt; 50</li> </ul>
>	Greater than <b>Example:</b> <ul style="list-style-type: none"> <li>WHERE dwpcd_pcard_je_detail_lines.actual_amt &gt; 250</li> </ul>
<=	Less than or equal to <b>Example:</b> <ul style="list-style-type: none"> <li>WHERE dwhrs_rf_account_attrs.authorized_root_cd &lt;= '09999'</li> </ul>
>=	Greater than or equal to <b>Example:</b> <ul style="list-style-type: none"> <li>WHERE dwprl_payment_distrs.earnings_hours &gt;= 40.5</li> </ul>
<>	Not equal to <b>Example:</b> <ul style="list-style-type: none"> <li>WHERE dwfnd_rf_object_cds.object_cd &lt;&gt; dwfnd_rf_object_cds.object_reclass_internal_sales</li> </ul>
BETWEEN low AND high	Greater than or equal to the low value and less than or equal to the high value <b>Example:</b> <ul style="list-style-type: none"> <li>WHERE dwfnd_rf_org_cds.org_cd BETWEEN dwfnd_rf_parent_org_defs.child_org_cd_low AND dwfnd_rf_parent_org_defs.child_org_cd_high</li> </ul>

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Operator	Meaning
<p>EXISTS (subquery)</p>	<p>At least one row is present in the subquery</p> <p><b>Example:</b></p> <ul style="list-style-type: none"> <li>SELECT org_cd FROM dwfnd_rf_org_cds a WHERE EXISTS (SELECT 1 FROM dwfnd_rf_indir_cost_recov_cds b WHERE a.org_cd = b.mega_org_cd_or_star)</li> </ul>
<p>IN (list or subquery)</p>	<p>Equals one of the values in the list</p> <p><b>Example:</b></p> <ul style="list-style-type: none"> <li>WHERE dwgl_rf_code_combinations.object_type IN ('R','E')</li> </ul>
<p>LIKE pattern</p>	<p>Matches the pattern</p> <p><b>Note:</b> In a pattern, the underscore character (_) means any one character and the percent character (%) means any group of characters or no character. The optional ESCAPE clause is used to identify a character which causes the immediately following character to be interpreted literally instead of being interpreted as a pattern-matching character.</p> <p><b>Example</b> (finds values FY98_TEST_BUDGET and FY99_TEST_BUDGET):</p> <ul style="list-style-type: none"> <li>WHERE dwgl_posted_je_lines.gl_budget_name LIKE 'FY9_\_TEST%' ESCAPE '\'</li> </ul>
<p>NOT BETWEEN low AND high</p>	<p>Less than the low value or greater than the high value</p> <p><b>Example:</b></p> <ul style="list-style-type: none"> <li>WHERE dwfnd_rf_subactivity_cds.subactivity_cd NOT BETWEEN '0200' AND '0207'</li> </ul>
<p>NOT EXISTS (subquery)</p>	<p>No rows are present in the subquery</p> <p><b>Example:</b></p> <ul style="list-style-type: none"> <li>SELECT univ_id_no FROM dwgl_posted_je_lines a WHERE NOT EXISTS (SELECT 1 FROM dwhr_people b WHERE a.univ_id_no = b.univ_id_no)</li> </ul>
<p>NOT IN (list or subquery)</p>	<p>Does not equal any of the values in the list</p> <p><b>Example:</b></p> <ul style="list-style-type: none"> <li>WHERE dwgl_rf_code_combinations.object_type NOT IN ('A','L')</li> </ul>

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Operator	Meaning
NOT LIKE pattern	<p>Does not match the pattern</p> <p><b>Example:</b></p> <ul style="list-style-type: none"> <li>WHERE dwpcd_pcard_transactions.pcard_merchant_name NOT LIKE '%STAPLES%'</li> </ul>
IS	<p>Used only with NULL as the value</p> <p><b>Note:</b> No columns in HDW views are null.</p>
IS NOT	<p>Used only with NULL as the value</p> <p><b>Note:</b> No columns in HDW views are null.</p>
= ALL (list or subquery)	<p>Equal to every value in the list</p> <p><b>Note:</b> If the list has at least two values, this test will fail.</p> <p><b>Example</b> (finds purchase orders where all distributions are coded to the same object code):</p> <ul style="list-style-type: none"> <li>SELECT po_doc_no FROM dwpo_po_distrs a WHERE po_distr_object_cd = ALL (SELECT po_distr_object_cd FROM dwpo_po_distrs b WHERE a.po_doc_no = b.po_doc_no)</li> </ul>
!= ALL (list or subquery)	<p>Does not equal even one of the values in the list</p> <p><b>Note:</b> This is identical to the NOT IN operator.</p>
< ALL (list or subquery)	<p>Less than all of the values in the list</p> <p><b>Example</b> (finds vendors with which the university did less PCard business in October of 1999 [FY2000] than in prior months):</p> <ul style="list-style-type: none"> <li>SELECT pcard_merchant_name FROM dwpcd_pcard_sums a WHERE transaction_fy = 2000 AND transaction_month = 10 AND SUM(pcard_tot_amt) &lt; ALL (SELECT SUM(pcard_tot_amt) FROM dwpcd_pcard_sums b WHERE (b.transaction_fy &lt; a.transaction_fy OR b.transaction_fy = a.transaction_fy AND b.transaction_month &lt; a.transaction_month) AND a.pcard_merchant_name = b.pcard_merchant_name GROUP BY transaction_fy, transaction_month)</li> </ul>

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Operator	Meaning
<p>&gt; ALL (list or subquery)</p>	<p>Greater than all of the values in the list</p> <p><b>Example</b> (finds people who worked more hours in a chosen pay period and GL coding than in any previous pay period):</p> <ul style="list-style-type: none"> <li> <pre> SELECT univ_id_no FROM dwprl_payment_distrs a WHERE TRUNC(check_dt) = '12-SEP-99' AND full_coa_cd = '340.50010.6070.000001.603020.0000.00000' AND earnings_hours &gt; ANY (SELECT earnings_hours FROM dwprl_payment_distrs b WHERE b.check_dt &lt; a.check_dt AND b.full_coa_cd = a.full_coa_cd) </pre> </li> </ul>
<p>&lt;= ALL (list or subquery)</p>	<p>Less than or equal to all of the values in the list</p> <p><b>Example</b> (finds all the months in fiscal year 2001 in which the endowment unit value was no greater than the minimum for fiscal year 2000):</p> <ul style="list-style-type: none"> <li> <pre> SELECT gl_period_name FROM dwfnd_rf_monthly_rates a WHERE gl_period_fy = 2001 AND endowment_unit_value &lt;= ALL (SELECT endowment_unit_value FROM dwfnd_rf_monthly_rates b WHERE b.gl_period_fy = 2000) </pre> </li> </ul>
<p>&gt;= ALL (list or subquery)</p>	<p>Greater than or equal to all of the values in the list</p> <p><b>Example</b> (locates the sponsored accounts with the most spending in advance of receipt of formal award notification ["at risk" spending] for a chosen sponsored activity):</p> <ul style="list-style-type: none"> <li> <pre> SELECT fund_cd, activity_cd, subactivity_cd, account_advance_amt FROM dwhrs_rf_account_attrs a WHERE activity_cd = '317260' AND account_advance_amt &gt;= ALL (SELECT account_advance_amt FROM dwhrs_rf_account_attrs b WHERE a.activity_cd = b.activity_cd) </pre> </li> </ul>
<p>= ANY (list or subquery)</p>	<p>Equal to at least one value in the list</p> <p><b>Note:</b> This is identical to the IN operator.</p>

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Operator	Meaning
< ANY (list or subquery)	<p>Less than at least one value in the list</p> <p><b>Example</b> (finds all distributions for purchase orders with more than one distribution):</p> <ul style="list-style-type: none"> <li> <pre>SELECT po_doc_no, po_line_no, po_distr_no FROM dwpo_po_distrs a WHERE 1 &lt; ANY       (SELECT po_distr_no        FROM dwpo_po_distrs b        WHERE a.po_doc_no = b.po_doc_no)</pre> </li> </ul>
> ANY (list or subquery)	<p>Greater than at least one value in the list</p> <p><b>Example</b> (finds book endowment funds with more endowment income than the least endowed professorship):</p> <ul style="list-style-type: none"> <li> <pre>SELECT a.fund_cd, a.actual_cur_bal FROM dwgl_period_bals a, dwfnd_rf_fund_cds b WHERE a.fund_cd = b.fund_cd AND b.fund_cat = 'EN' AND b.fund_purpose_cd = 'BF' AND a.full_coa_cd LIKE 'T.T.M441.%.T.T.T' AND a.gl_period_name = 'JUL-1999' AND a.actual_cur_bal &gt; ANY       (SELECT c.actual_cur_bal        FROM dwgl_period_bals c, dwfnd_rf_fund_cds d        WHERE c.fund_cd = d.fund_cd        AND d.fund_cat = 'EN'        AND d.fund_purpose_cd = 'PR'        AND c.full_coa_cd LIKE 'T.T.M441.%.T.T.T'        AND c.gl_period_name = 'JUL-1999')</pre> </li> </ul>
<= ANY (list or subquery)	<p>Less than or equal to at least one value in the list</p> <p><b>Example</b> (finds all lines for purchase orders with four or more lines):</p> <ul style="list-style-type: none"> <li> <pre>SELECT po_doc_no, po_line_no FROM dwpo_po_lines a WHERE 4 &lt;= ANY       (SELECT po_line_no        FROM dwpo_po_lines b        WHERE a.po_doc_no = b.po_doc_no)</pre> </li> </ul>

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Operator	Meaning
<p>&gt;= ANY (list or subquery)</p>	<p>Greater than or equal to at least one value in the list</p> <p><b>Example</b> (finds professorship endowment funds with at least as much income as the least endowed university professorship):</p> <ul style="list-style-type: none"> <li> <pre> SELECT a.fund_cd, a.actual_cur_bal FROM dwgl_period_bals a, dwfnd_rf_fund_cds b WHERE a.fund_cd = b.fund_cd AND b.fund_cat = 'EN' AND b.fund_purpose_cd = 'PR' AND a.full_coa_cd LIKE 'T.T.M441.%.T.T.T' AND a.gl_period_name = 'JUL-1999' AND a.actual_cur_bal &gt;= ANY   (SELECT c.actual_cur_bal    FROM dwgl_period_bals c, dwfnd_rf_fund_cds d    WHERE c.fund_cd = d.fund_cd    AND d.fund_cat = 'EN'    AND d.fund_purpose_cd = 'UP'    AND c.full_coa_cd LIKE 'T.T.M441.%.T.T.T'    AND c.gl_period_name = 'JUL-1999')</pre> </li> </ul>
<p>!= ANY (list or subquery)</p>	<p>Does not equal every one of the values in the list</p> <p><b>Note:</b> If the list has at least two values, this test will fail.</p> <p><b>Example</b> (finds requisitions split between two or more tubs):</p> <ul style="list-style-type: none"> <li> <pre> SELECT reserved_po_no FROM dwpo_requisition_distrs a WHERE tub_cd != ANY   (SELECT tub_cd    FROM dwpo_requisition_distrs b    WHERE a.reserved_po_no = b.reserved_po_no)</pre> </li> </ul>