

Operators In Oracle ===> =====

They are listed below:-

- Arithmetic Operators
- Comparison Operators
- Logical Operators
- Set operators
- Miscellaneous Operators

Arithmetic Operators ===> =====

- * Arithmetic operators manipulate numeric operands as well as date operands.
- * There are 6 Arithmetic operators in Oracle and they are:

- + (unary) : Makes operand positive
- (unary) : Negates operand
- / : Division (numbers and dates)
- * : Multiplication
- + : Addition (numbers and dates)
- : Subtraction (numbers and dates)

Comparison Operators ===> =====

- * Comparison operators are used in conditions and compare one expression with another .
- * The result of a comparison can be TRUE, FALSE, or UNKNOWN.

- = : Equality Operator
- <>, !=, ^= : Not Equality Operator
- > : Greater Than Operator
- < : Less Than Operator
- >= : Greater Than or Equal to Operator
- <= : Less Than or Equal to Operator

Logical Operators ===> =====

- * Logical operators combine the results of two-component conditions to produce a single result.
- * Logical operators provided by Oracle are:

- AND : Logical Conjunction Operator
- OR : Logical Disjunction Operator
- NOT : Logical Negation Operator

Miscellaneous Operators ===> =====

- * Following are a few more built-in operators which can't be categorized in any of the previous categories so we call them miscellaneous operators.

- || : Concatenation
- IN , NOT IN : Comparison for a value in a specified list

BETWEEN , NOT BETWEEN : Comparison based on range of values
LIKE , NOT LIKE : Used for pattern matching
IS ,IS NOT : Used for comparing NULL values

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Format Command ===>
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* Syntax :-

- Column <column_name> format <format_details>;

* Format details , are dependent on the type of column we want to format.

* For numbers , we use the number 9 as many times as we want max number of digits.

* For example, to set the width of sal column to 5 digits we would write :

- Column sal format 99999;

* For varchar2, we use the pattern AX where X is the number indicating the width we want to set.

* For example, to set the width of ename column to 4 characters we would write

:

- Column ename format A4;

Pattern Matching Using " LIKE Operator " ===>
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* In Oracle, we may not always know the exact value to search for, sometimes we may want to select rows that match a certain character pattern.

* For example:

- All employees whose name starts with 'M'

- All employees whose job title ends with 'R'

- All customers whose phone number does not begin with +91

* Two symbols can be used to construct the search string:

- % : The percent (%) sign, represents any sequence of characters (0 or more).

- _ : The underscore (_) sign, represents any single character.

Queries ====>
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WAQ to display name and salary of every employee.

- Select ename, sal from emp;

WAQ to display name and salary of employees working in department no 10 only.

- Select ename, sal from emp where deptno = 10;

WAQ to display name of every employee along with his total income.

- Select ename, sal + comm as income from emp;

WAQ to display name and salary of all the employees who earn from 3000 to 5000.

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- Select ename, sal from emp where sal >= 3000 and sal <= 5000;
      OR
- Select ename, sal from emp where sal BETWEEN 3000 and 5000;

# WAQ to display name and salary of all the employees who do not earn from 3000
to 5000.
- Select ename, sal from emp where sal < 3000 OR sal > 5000;
      OR
- Select ename, sal from emp where sal NOT BETWEEN 3000 AND 5000;

# WAQ to display name and salary of all the employees who earn 1000 , 1500 Or
3000.
- Select ename, sal from emp where sal = 1000 OR sal = 1500 OR sal = 3000;
      OR
- Select ename, sal from emp where sal IN (1000, 1500, 3000);

# WAQ to display name and salary of all the employees who do not earn 1000 ,
1500 Or 3000 .
- Select ename, sal from emp where sal != 1000 AND sal != 1500 AND sal != 3000;
      OR
- Select ename, sal from emp where sal NOT IN (1000, 1500, 3000);

# WAQ to display ename, sal and job of all those CLERK and SALESMAN whose
salary is greater than 1000.
- Select ename, job, sal From emp Where (job = 'CLERK' or job = 'SALESMAN') and
sal > 1000;

# =====> Pattern Matching
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# WAQ to display ename, job and sal of every employee whose name is exactly
five characters long.
- Select ename, job, sal from emp where ename LIKE '_____'; (5 underscore)

# WAQ to display ename, job and sal of every employee whose name is having 2
consecutive L .
- Select ename, sal from emp where ename LIKE '%LL%';

# WAQ to display ename, job and sal of every employee whose name contains 2 A.
- Select ename, job, sal from emp where ename LIKE '%A%A%';

# WAQ to display ename, job and sal of every employee whose name ends with the
letter S
- Select ename, sal from emp where ename LIKE '%S';

# WAQ to display ename ,job and sal of every employee who have A as the third
alphabet in their name.
- Select ename, job, sal from emp where ename LIKE '___A%'; (2 underscore)

# WAQ to display ename ,job and sal of every employee whose name begins with
the letter S and who also have T as the second last letter in their name.
- Select ename, sal from emp where ename LIKE 'S%T_';

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