

## Operators in database

### Arithmetic operators

+, -, \*, / , %

### Relational operators

>, <, >=, <=, = , !=

### Logical operators

And, or, not

[not] Between...and	When you want to check the range of values use between... and operator, Given values are inclusive
[not] In	When you want to check multiple values in the same column with either or condition , then use in operator
Is [not] null	To check null values , then use is null
like	To do the pattern matching we use like operator, % --- 0 or many character _ ---- matches with exactly 1
REGEXP	It will match with pattern
Case ... end	

-----display employee with name JONE or JAMES

Select \* from emp

Where ename in ('JONES','JAMES')

-----display employee with name starts with J

Select \* from emp

Where ename like 'J%'

-----display employee with name contains with E

Select \* from emp

Where ename like '%E%'

-----display all employees with name ends with N

Select \* from emp

Where ename like '%N'

-----display all employees with name contains L at 2 nd position and N at the end

Select \* from emp

Where ename like '\_L%N'

-----display all employees with name either starts with M or starts with A

Select \* from emp

Where ename like 'M%' or ename like 'A%'

-----display all employees with name either starts with M or A and ends with N or R

Select \* from emp

Where ename like 'M%N' or ename like 'M%R' or ename like 'A%N' or ename like 'A%R';

## REGEXP

^	Any pattern to match at the beginning
\$	Match the pattern at the end
.	Any one character, alphabet, digit, special character etc
*	Matches with 0 or more occurrences if preceding pattern
+	Matches with 1 or more occurrences if preceding pattern
?	Matches with 0 or 1 occurrences if preceding pattern
{m}	Exactly m occurrences
{m,n}	Minimum m or maximum n
{m,}	Minimum m or maximum any number
[abcd]	Either a or b or c any one character
[^abcd]	Anything other than a or b or c or d
(abc pqr xyz)	Any one of these patterns

-----display all employees with name either starts with M or A and ends with N or R

Select \* from emp

Where ename REGEXP '^([MA]).\*([NR])\$';

-----display all employees with name starts with M, ends with R and length should be 6

Select \* from emp

Where ename REGEXP '^M.{4}R\$'

-----display all employees with name starts with either A or M and contains L at either 2 nd or 3 rd position

Select \* from emp

Where ename REGEXP '^([AM]).?L'

----list all employees which has MAN somewhere in the job

Select \* from emp

Where job REGEXP 'MAN'

-----generate derived columns

----display all employees empno,ename,sal,comm,net sal(sal+comm)

select empno,ename,sal,comm,sal+ifnull(comm,0) netsal

from emp;

----display all employees empno,ename,sal,comm,net sal

-----after increamenting sal by 15%, give alias net "net salary"

select empno,ename,sal,comm,sal\*1.15+ifnull(comm,0) "net salary"

from emp;

----display distinct jobs

select distinct job

from emp;

----display distinct combinations of job and mgr

select distinct job,mgr

-> from emp;

-----display remark as

If comm is null need improvement

If <300 ok

If < 500 good

Else excellent

Select empno,ename,sal,comm,case when comm is null then 'need improvement'

---display deptname

If deptno =10 then HR

If 20 then accounts

Else show purchase

Select empno,ename,sal,deptno,case deptno when 10 then 'HR'

When 20 then 'Accounts'

Else 'purchase' end dname

From emp;