

Data Retrieval / Queries

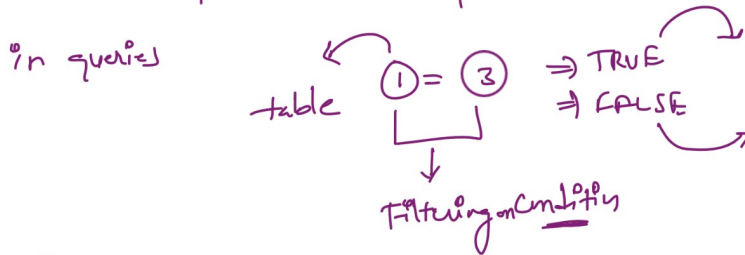
WHERE Clause: Reserved keyword

filters rows from the table based upon the provided condition

(b) Relational Operators:

=, <, >, <=, >=, !=, range (between and), like
NULL & NOT NULL

* we use operators to compare values in SQL against user provided



* They return a boolean result TRUE/FALSE upon the condition
only if condition TRUE those records are retrieved, if not the records are skipped

like: matching string using wild cards

→ Nandya Prasanna Sai
↓ first
last name first
firstname = 'Prasanna Sai' ← match the
'Prasanna Sai' SO - two
cases

firstname like '% Sai' → like '% Sai %'

✓ 1, Prasanna Sai = Sai '% Sai %'

✓ 2, Sai Kumar

✓ 3, Kumar Sai Nandya

4, ↑ ↑
5,

② Logical Operators :

AND, OR, NOT

→ combines multiple conditions in SQL queries

AND : Returns true only if all conditions are true

OR : Returns True if any one condition met true

salary > 60000 OR department_id = 3;

<condition 1> OR <condition 2> OR
True X
False <condition 3> X

NOT : Negates a condition

TRUE → False

False → TRUE

③ Aggregate functions :

→ It performs calculations on group of rows

* COUNT

* SUM

* AVG

* MAX & MIN

④ Grouping & HAVING

GROUP BY : Groups rows based on a column & applies aggregate functions

HAVING : Filters groups after aggregation (mandatory)

⑤ Keyword-based Operators

* IN → matches a list of values

* NOT IN → excludes a list of values

('abc', 'xyz')

1 - 0

⑥ CASE Statements

* It adds conditional logic to queries

SQL

log
⑤

⑦ Common functions

D.E → data

↑

{ DB / scheme
 analyses }

PA

String functions

* CONCAT

* UPPER & LOWER

Date functions

* DATEDIF

* DATE_FORMAT

⑧ Order by, Limit & Offset

* Order by : Sorts results

* Limit : limits the no. of rows returned

* Offset : skips records