

Basic filtering

Logical Operators- AND OR NOT

IN and BETWEEN

Handle Null Values

pattern matching

=====

%-zero or more characters (a,ab,,012)

_ exactly one character (a,b,c,0,1,2,-,.)

-- first name starts with J

SELECT *

FROM employees

WHERE first_name like 'J%';

-- first name ends with J

SELECT *

FROM employees

WHERE first_name like '%J';

-- first name starts with J and last name ends with h

SELECT *

FROM employees

WHERE first_name like 'J%'

AND last_name like '%h';

-- first name starts with Ja and ends with e

SELECT *

FROM employees

WHERE first_name like 'Ja%e';

-- Jae

-- Jane

-- Jake

-- first name starts with A and ends with a

'A%a'

-- first name is exactly of 4 characters

SELECT *

FROM employees

WHERE first_name like '____';

-- first name is of 4 or more characters

SELECT *

FROM employees

WHERE first_name like '____%';

-- in first name 1st char is A and third is e followed by anything

'A_e%'

-- all employees where first name is of 4 chars and starts with J

'J____'

-- all employees where first name contains the word son

'%son%'

son

sone

eson

esone

-- job title includes the word manager

'%manager%'

-- from department 2 and have developer in their job title

-- email id

sumit@trendytech.in

rules

- before @ symbol atleast 1 char

- @

- domain name should be of atleast 1 char

- .

- atleast 2 chars

SELECT *

FROM employees

WHERE email NOT LIKE '_%@_%.__%'

-- search for all employees who have % in their email id

SELECT *

FROM employees

WHERE email LIKE '%\%%'

_
_%
__%

%\%
%_

abc_a
submit_h

% - or or more characters
_ - exactly one character
like operator

pattern matching
=====

%

—

= like

sometimes you want to little more complex pattern matching

```
-- I want to get all employees where first name A, B, C, D
SELECT *
FROM employees
WHERE first_name LIKE 'A%'
OR first_name LIKE 'B%'
OR first_name LIKE 'C%'
OR first_name LIKE 'D%';
```

```
-- firstname starting with A, B, C or D
SELECT *
FROM employees
WHERE first_name REGEXP '^[ABCD]';
```

```
-- firstname ending with A, B, C or D
SELECT *
FROM employees
WHERE first_name REGEXP '[ABCD]$';
```

```
-- in the firstname the 2nd character (a,e,i,o,u)
SELECT *
FROM employees
WHERE first_name REGEXP '^[.aeiou]';
```

```
-- 2nd char is a vowel and 4th char is a vowel
```

'^[aeiou].[aeiou]'

Rules for valid email are

sumit@trendytech.in

sumitmittal_hyd@gmail.com

trendytech.sumit@gmail.com

[name@domain.subdomain](#)

name- sumit

domain- trendytech/gmail

subdomain- in/com

name a-z 0-9 . _ [a-z0-9._]+

domain a-z 0-9 _ [a-z0-9_]+

subdomain a-z 2 or more characters

[abcd]* - 0 or more times

[abcd]+ - 1 or more times

[abcd]? - 0 or 1 time

SELECT *

FROM users

WHERE email REGEXP '^[a-z0-9._]+@[a-z0-9_]+\.[a-z]{5}\$'

SELECT *

FROM users

WHERE email REGEXP '^.....\$'

SELECT *

FROM users

WHERE email like '_____'

SELECT *

FROM users

WHERE email REGEXP '.....'

SELECT *

FROM users

WHERE email like '%_____%'

SELECT *

FROM users

WHERE email REGEXP '^[^_]+@[a-z0-9_]+\.[a-z]{5}\$'

. matches any single character

^ matches the start of the string

\$ matches the end of the string

[] defines a character class to match any single character within the brackets

* + ? - quantifiers to specify number of occurrences

[]

BASIC FILTERING

LOGICAL OPERATORS

IN BETWEEN

PATTERN MATCHING (LIKE & REGEXP)

HANDLE NULL VALUES