

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
sumit_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