

Today's Agenda :-

READ

* BETWEEN

* LIKE

* IS NULL

* ORDER BY

* LIMIT

UPDATE

DELETE

* DELETE VS TRUNCATE

LIKE :-

batches

id	Name
	Academy May 23 Beg
	Term 24 Academy Intermediate

} → Academy

```
Select * from batches
where name = "Academy"
```

Exact match with *
entire value

```
bool checkAcademy (String batchName) {
    if (batchName.contains ("Academy") &&
        batchName.contains ("Morning")) {
        return T
    }
    return F
}
```

LIKE : when you want to check inside a string

i) $'_'$: exactly one occurrence of any character

ii) $'\%'$:- any # of occurrences of any character
0, 1, 2, 3, ...

\ast cat

__t ✓

% t
ca

% ✓

cat ✓

% ca ✗

% cat % ✓
0 0

Return all morning batches in academy
batches



id	Name

name like %morning%academy% ✗

Morning Apr 22 Beg Java Academy ✗

June 23 Morning DSML batch ✓

Academy Apr 22 Beg Morning ✓

Select * from batches
where batchName like %morning%
AND
batchName like %academy%

$n = 2$

and

$n = 4$

$a = 2$

and

$O = 4$

✓

✗

o/o son o/o

o/o moon o/o

123.0.0 ✗

$$\textcircled{7} \text{---}^1 \text{---}^2 \text{---}^3 \textcircled{7}$$

0/0 123 X

IS NULL :-

film

id Name des

→ can NULL

Get all films where
description is NULL

'NULL'

Select * from film
where description = NUC

X

NULL means nothing . You cannot use $=$ / $!$ =

to check for null.

NULL
Keyword

NOTHING \equiv NULL \times

NULL \equiv NULL \times

NULL $\stackrel{a}{\equiv}$ NULL \times

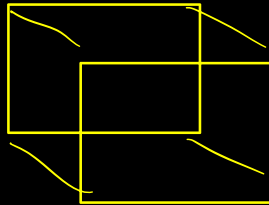
$a = \text{NULL} \checkmark$

$a \neq \text{NULL} \times$

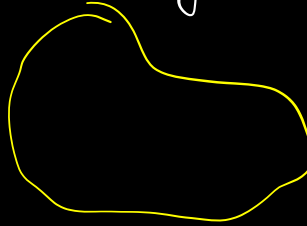
false

==
!=

empty box



empty brain



IS \times

IS NULL =

IS NOT NULL \neq

IS NULL

IS NOT NULL

Students

→ can be NULL

1 != 2 false

id	Name	batch-id
1	Aman	1
2	Sakshi	2
3	Yashi	NULL

Get all Students with

1 != 2

2 != 2 X batch-id != 2

NULL != 2 X

NULL is NULL ✓

Select * from Students
where batch-id != 2

2

1 Aman 1

also should have been

Select * from Students
where batch-id <> 2 OR
batch-id is NULL



ORDER BY :-

By default, the order of rows in the output is not guaranteed.

If you want final ans to be ordered by something you should use order by.

By default, the tie breaker is primary key ✓

Select title, distinct desc
from film

ORDER BY WITH DISTINCT :-

Students

Name	job
A	1990
B	1995
A	1998

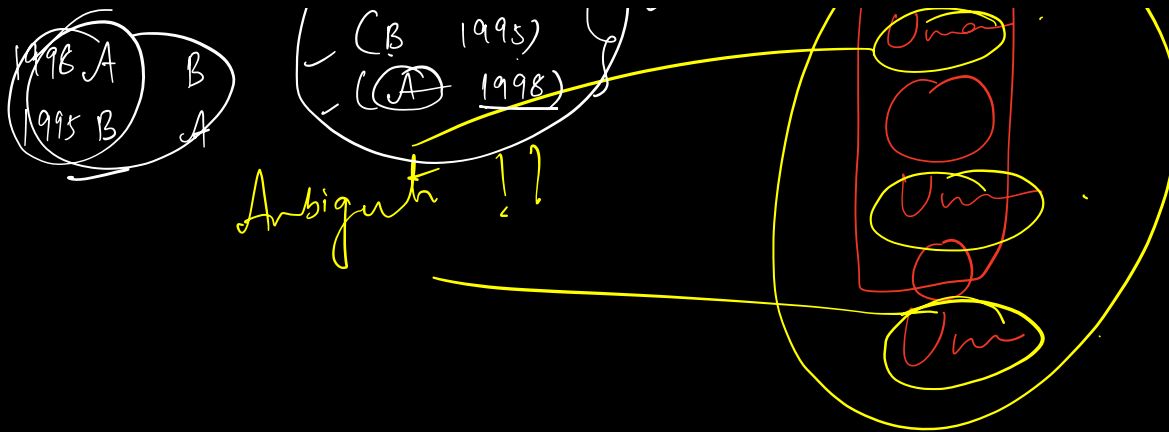
Select distinct name, job
from Students
order by job ✓

Ambiguity

A → 1990
B → 1995

A → 1998
B → 1995

(A 1990) ✓



If you have distinct in the select statement, then you can only sort by column that are present in the select statement.

UPDATE



UPDATE table_name

SET { New ^{values} of col or set of column }

WHERE { condition }

If you forget to mention where clause in
update query, all rows will be
updates -

DELETE

↳ used for deleting rows of the table.

↳ not going to delete the table

DELETE FROM { }
WHERE { } → delete all rows.

Both will delete rows of

Delete vs Truncate

↓
delete but
based on where
clause

↓ No condition (No where)
delete all row of
the table

Delete from film;

Truncate film;

Both will produce

the same outcome

Delete deletes the row by row

↑
Truncate is faster than delete.

→ for (—) {
 if (where) {
 delete;
 }
}

Rollback

Note that,

DELETE:

1. Removes specified rows one-by-one from table (may delete all rows if no condition is present in query but keeps table structure intact).
2. It is slower than TRUNCATE.
3. Doesn't reset the key.
4. It can be rolled back.

TRUNCATE:

1. Removes the complete table and then recreates it.
2. Faster than DELETE.
3. Resets the key.
4. It can not be rolled back because the complete table is deleted as an intermediate step.

DROP:

1. Removes complete table and the table structure as well.
2. It can not be rolled back.