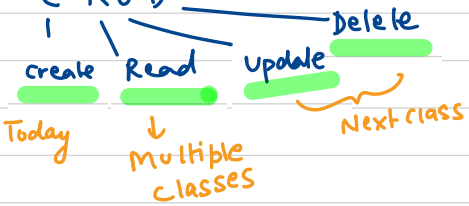
Agenda

→ Foreign Keys Constraints

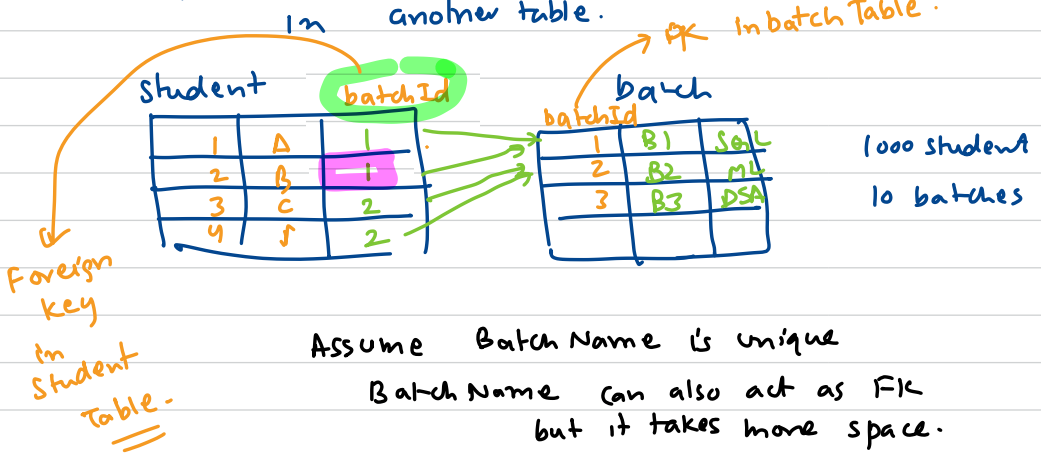
→ Sakila DB Setup.

→ C R U D



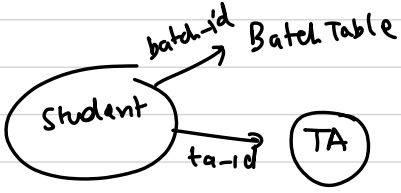
Foreign Keys

→ any col in table that references another col in another table.

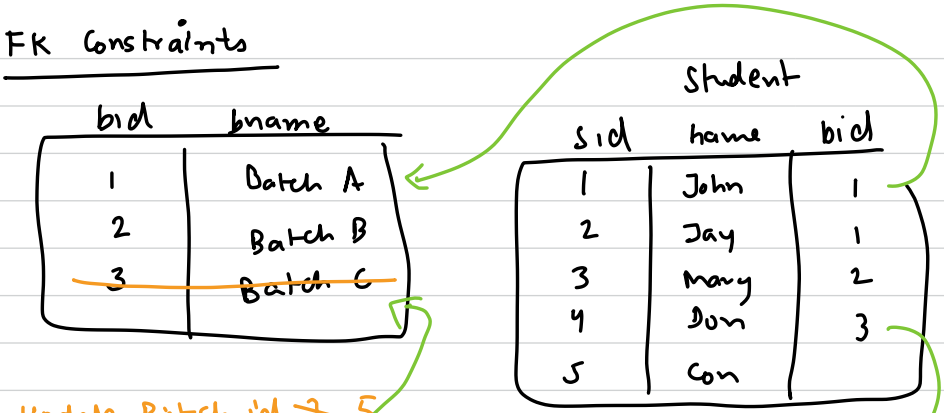


Assume Batch Name is unique

Batch Name can also act as FK but it takes more space.



FK Constraints



Update Batch-id 3 → 5

① upd² Don as well.

② Restrict

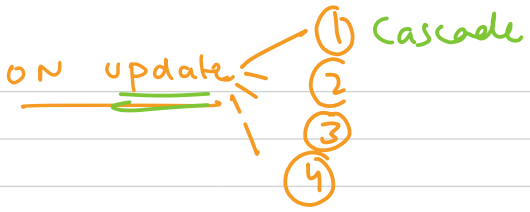
③ Set BatchId as NULL

Delete Batch 3

① Delete Don as well

② Restrict Deleting Batch (Don't Allow)

③ Set Batch-id of Don → NULL



1. CASCADE

If batch table row is delete or updated, all rows containing That batch_id in the student table are also deleted or updated.

Batch (Parent)

↑

Student (child)

2. Set NULL

If the reference data (b_id in batch table) is updated or deleted, all rows containing that FK are set to NULL.

3. No Action / Restrict

Default behaviours, the query will not execute the update or delete operation on the batch table. Nothing will happen.

4. Set Default

If the reference data is deleted or updated, all corresponding rows are set to default values.

10:10

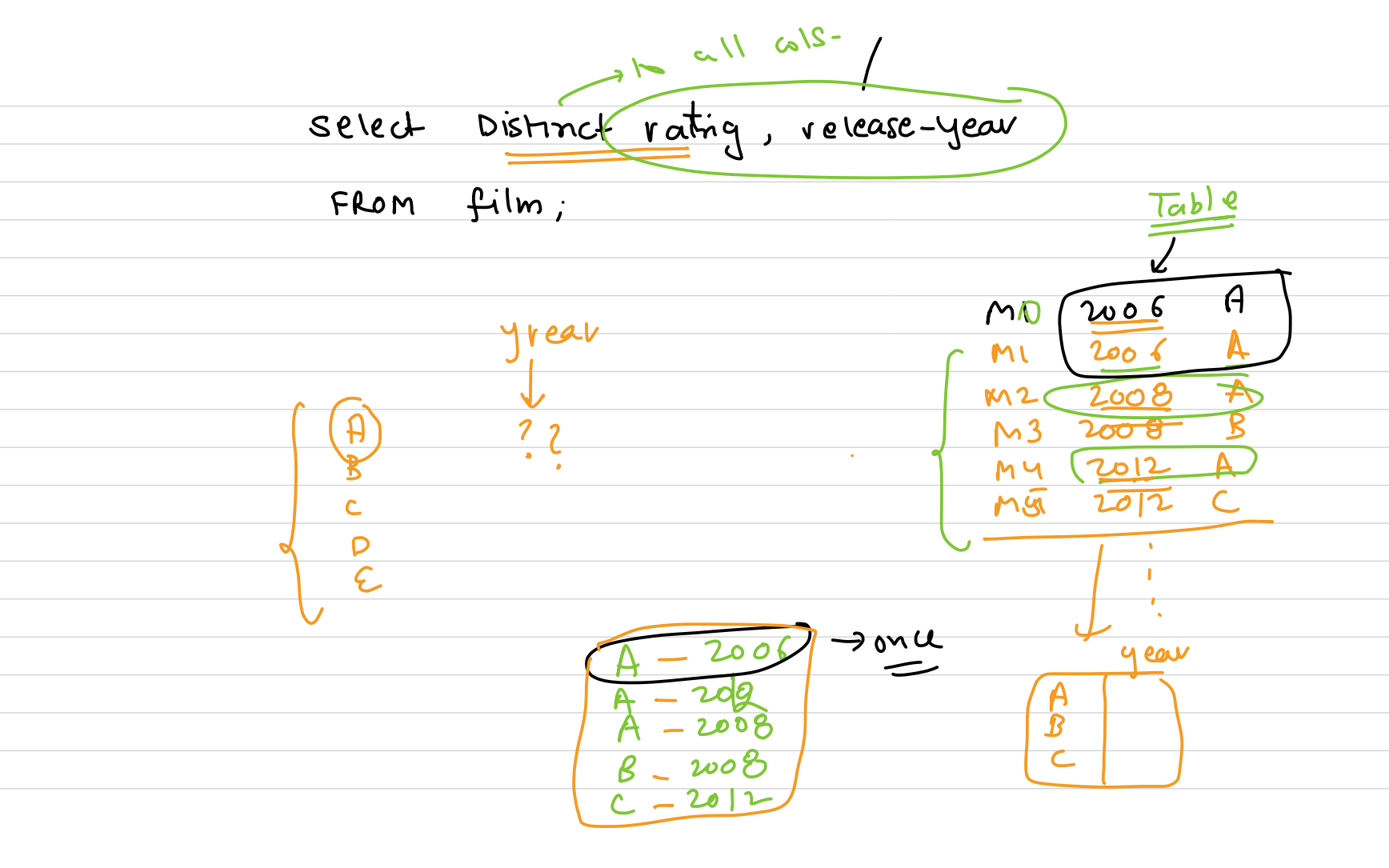
↳ SELECT, FROM, AS

↳ WHERE

↳ AND / OR / NOT

↳ IN

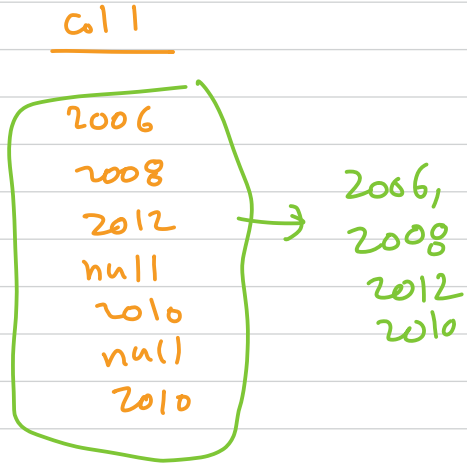
⋮


all cols-
select DISTINCT rating, release-year
FROM film;
Table
M0 2006 A
M1 2006 A
M2 2008 A
M3 2008 B
M4 2012 A
M5 2012 C
year
A
B
C
D
E
year
??
A - 2006
A - 2009
A - 2008
B - 2008
C - 2012
→ once
year
A
B
C

What is the result of the following SQL query: `SELECT DISTINCT column1 FROM table1;`?

69 users have participated

A	It displays all values of column1, including duplicates.	7%
B	It displays unique non-null values of column1.	70%
C	It counts the total number of unique values in column1.	22%
D	It sorts all values in column1.	1%



COUNT( )

```
SELECT    c1, c3
FROM      table
WHERE     release_year = 2023,
```

→ all Rows

Some of Rows which meet a particular condition.