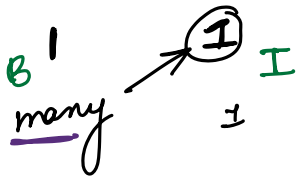
Agenda

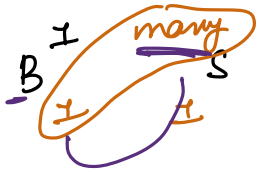
Scaler's Schema

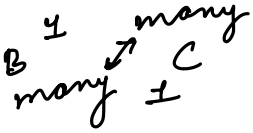
Netflix Schema.

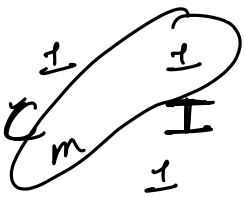
How to approach a schema design?



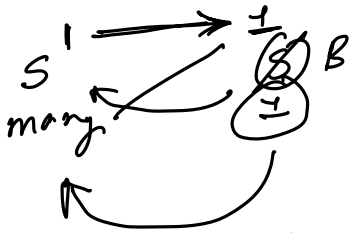
1. Scaler will have multiple batches.
2. For each batch, we need to store the name, start month and current instructor.
3. Each batch of Scaler will have multiple students.
4. Each batch has multiple classes.



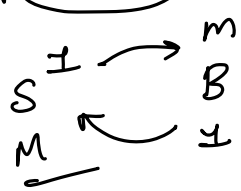




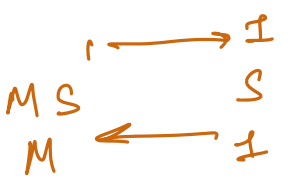
5. For each class, store the name, date and time, instructor of the class.
6. For every student, we store their name, graduation year, university name, email, phone no.
7. Every student has a buddy, who is also a student.

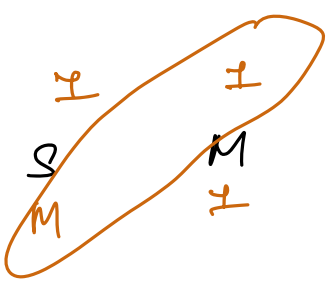


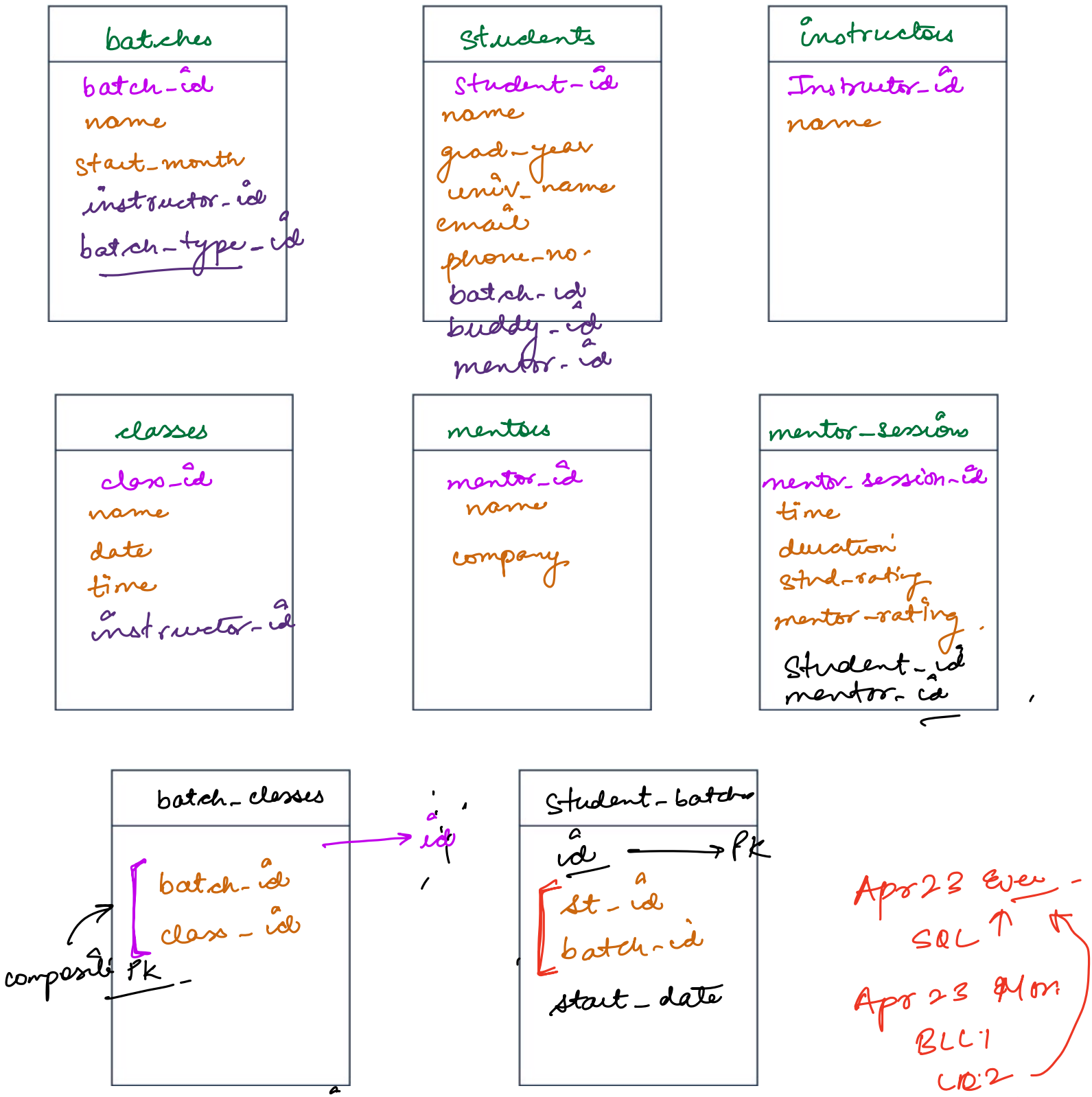
8. A student may move from one batch to another.
9. For each batch a student moves to, the date of starting is stored.



10. Every student has a mentor.
11. For every mentor, we store their name and current company name.
12. Store information about all mentor sessions (time, duration, student, mentor, student rating, mentor rating).
13. For every batch, store if it is an Academy-batch or a DSML-batch.






batches
batch_id
name
start_month
instructor_id
batch_type_id
students
student_id
name
grad_year
univ_name
email
phone_no.
batch_id
buddy_id
mentor_id
instructors
Instructor_id
name
classes
class_id
name
date
time
instructor_id
mentors
mentor_id
name
company
mentor_sessions
mentor_session_id
time
duration
stud_rating
mentor_rating
Student_id
mentor_id
batch_classes
id
batch_id
class_id
composite PK
Student_batch
id
PK
st_id
batch_id
start_date
Apr 23 Even -
SQL
Apr 23 Mon:
BLC:1
CIC:2
1 4 14 Apr
1 5 15 May
1 4 15 Jun -

left prefix

PK → (batch_id, class_id) ← index

if batch_id is the search-key.

batch_id	exam_id	
A	3	—
A	4	—
B	3	—
B	4	—

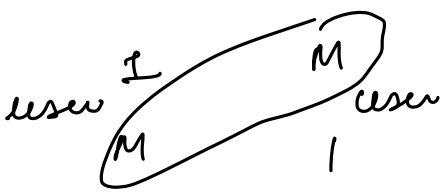
exam_id	exam_name
4	SQL
:	
7	JAVA
:	

student_id	exam_id	b_id	marks
1	4	A	90
1	4	B	70

mapping table → due to add^n of some add^n data about the rel^n, composite PK is not possible.

↓

separate id



conn_id	user1	user2	type
1	1	2	friend
2	1	3	
3	1	4	
4	1	2	teammate

friend
mentor
manager
Teamate

b_id	b_name	b_type
1	A	Academy 0
2	B	DSML 1
3	C	SST 2
4	D	Academy 0
5	E	DSML 1
6	F	Academy 0

academy

→ good amount of space

Batch_type

id	b_type
0	Academy
1	DSML
2	SST
3	SSB

mysql → enum.

ENUMS

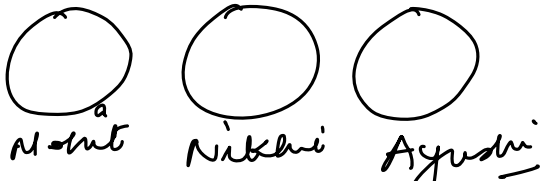
↳ when you have a fixed set of values.

Status

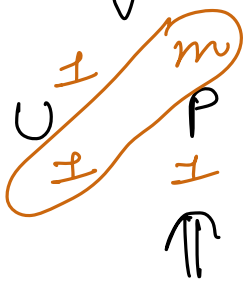
- active
- inactive
- pause

Netflix

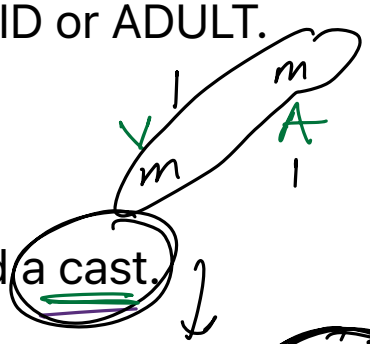
db



- ✓ Netflix has users. ==
- ✓ Every user has an email and a password.
- ✓ Users can create profiles to have separate independent environments.

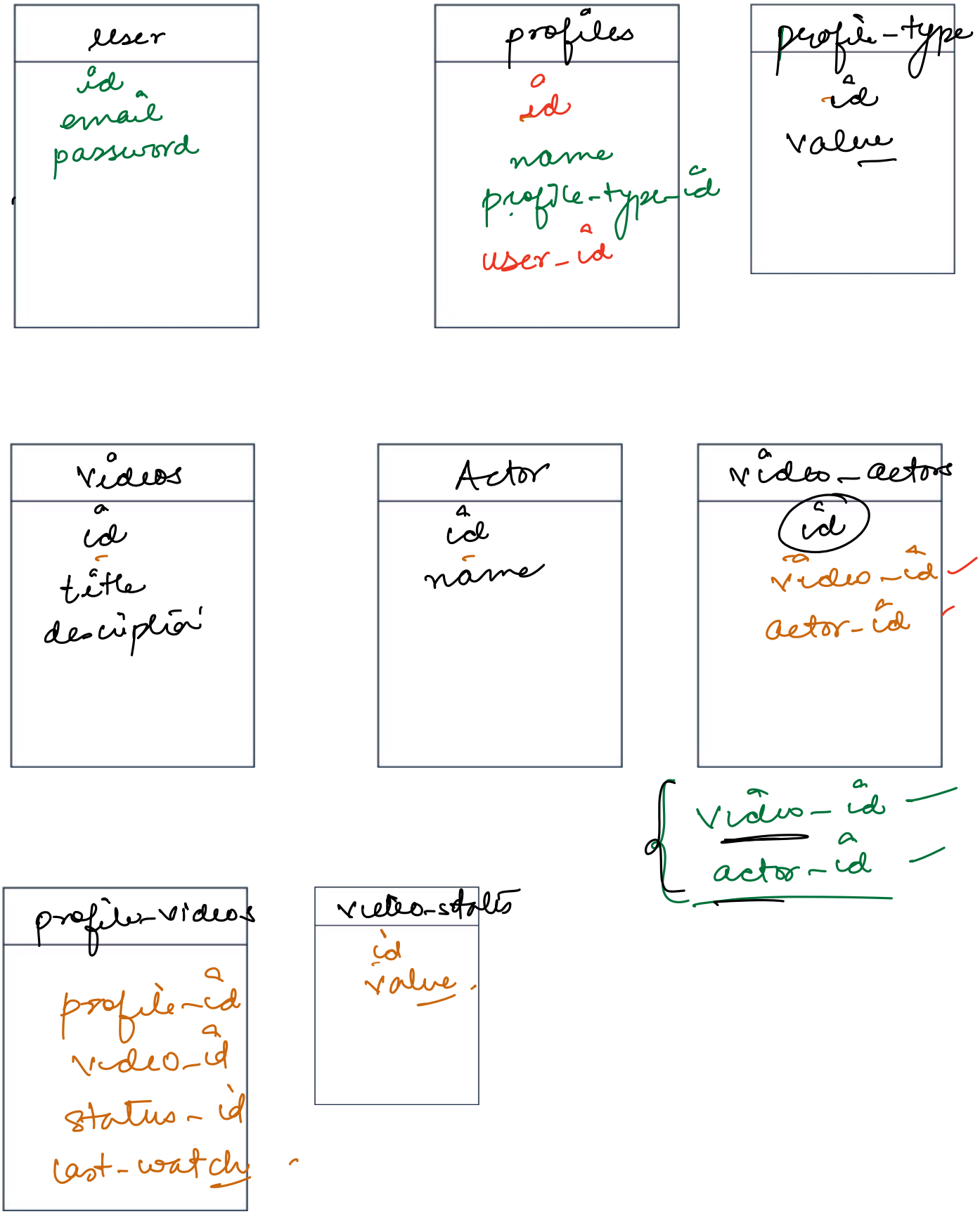


- ✓ Each profile has a name and a type. Type can be KID or ADULT.
- ✓ There are multiple videos on netflix.



- ✓ For each video, there will be a title, description and a cast.
- ✓ A cast is a list of actors who were a part of the video. For each actor we need to know their name and list of videos they were a part of.
- For every video, for any profile who watched that video, we need to know the status (COMPLETED/ IN PROGRESS).
- For every profile for whom a video is in progress, we want to know their last watch timestamp.

10:02


user
id
email
password
profiles
id
name
profile-type-id
user-id
profile-type
id
value
videos
id
title
description
Actor
id
name
video-actors
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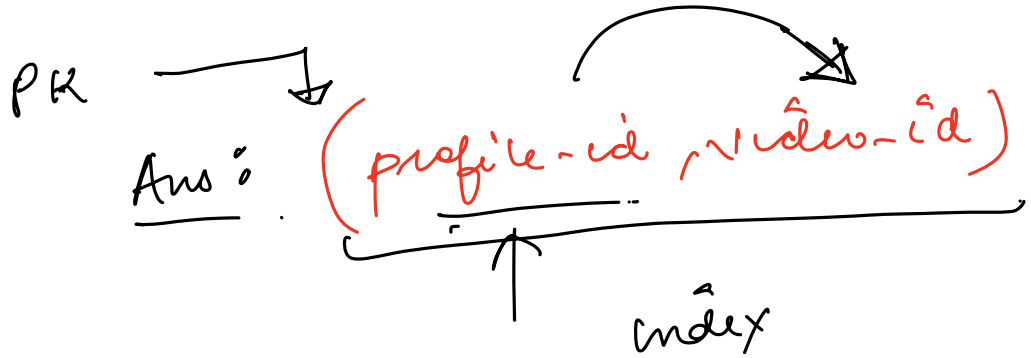
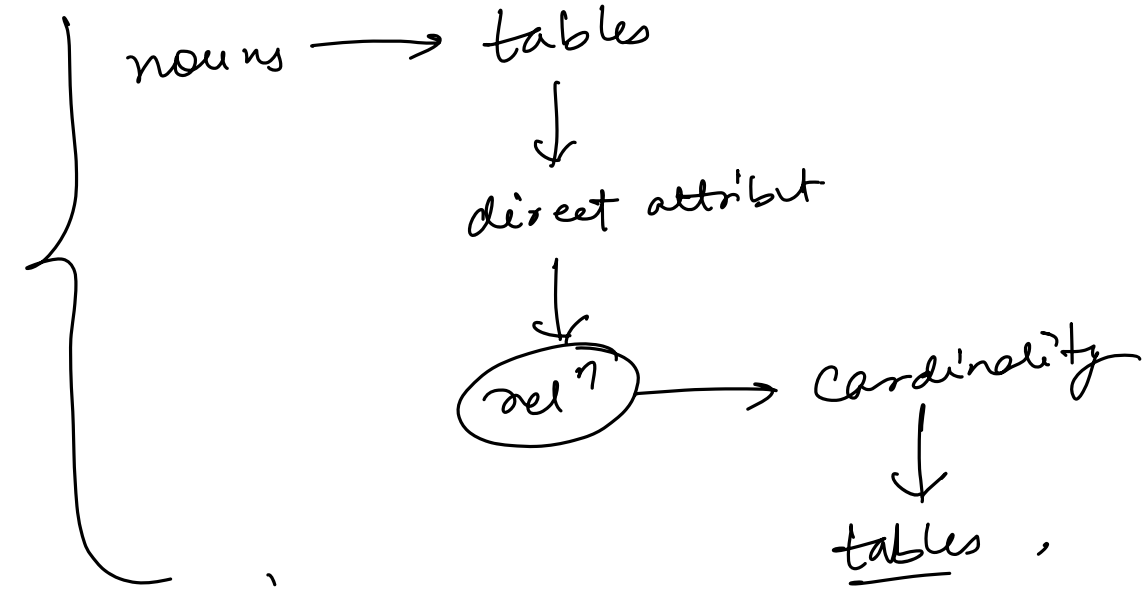
video-id
status-id
last-watch
video-stats
id
value





Schema design :-

- UNION
- VIEW