

Joins

Students

id	name	b_id
1	A	1
2	B	2
3	C	1
4	D	1
5	E	3

Batch

id	name
1	X
2	Y
3	Z

Name of every student with the
name of batch.

A	X
B	Y
C	X
D	X
E	Z

way to
combine
multiple tables

↓

Join

Do we want to attach every row of one table to every row of other table?

(No)

↓
join should happen
based on some condⁿ

join condition { student's batch-id = Batch's batch-id
↓
join the rows

select

Students.name, batches.name

from students

join batches

on students.batch-id = batches.batch-id;

Students

id	name	b-id
1	A	1
2	B	2
3	C	1
4	D	1
5	E	3

Batch

id	name
1	X
2	Y
3	Z

s-id	s-name	s-bid	B-id	b-name
1	A	1	1	X
2	B	2	2	Y
3	C	1	1	X
4	D	1	1	X
5	E	3	3	Z

ans = []

for every row1 in students

for every row2 in batches

if (row1 and row2 matches
on colⁿ)

ans.append(row1 + row2);

return ans

Q

film \rightarrow name, language.

film title, category name.

film table
title

doesn't have
anything associated
category

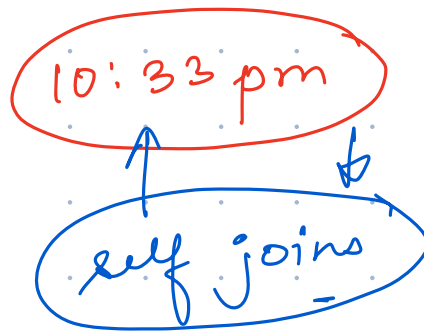
category
category-id
name
last-updated

} nothing related
to film

film-category
category-id
film-id
last-update

category-id film-id — title

joins can be done on multiple tables



Students :- Buddy → student itself.

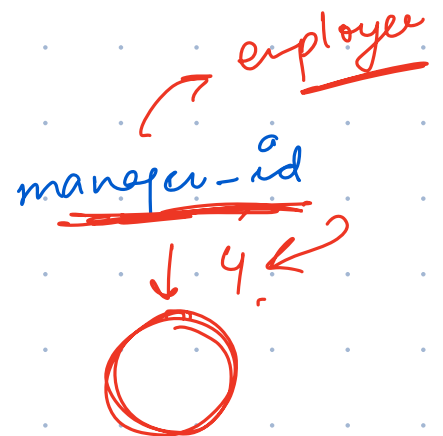
<u>id</u>	name	psp	batch id	<u>buddy id</u>
1				4

↑ st id self referal FK

employee



name dept-name



For every student, (student Name,
buddy Name)

student Table

id	name	buddy-id
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Buddy

id	name
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```
select st.name, b.name
from students st
join buddy b
on st.buddy.id = b.id
```

student

id	name	<u>buddy-id</u>
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student

<u>id</u>	name	buddy-id
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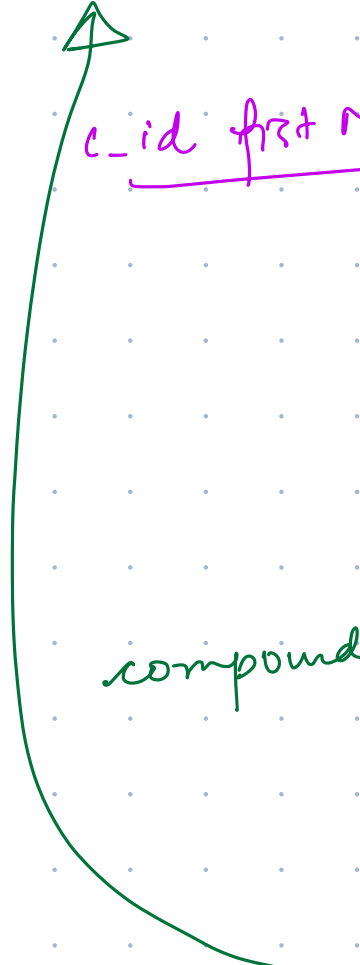
self Join

```
select st.name, b.name
from students st
join students b
on st.buddy.id = b.id
```

When you are doing self joins
aliases are mandatory.

Sakila Database

• Find customers with same last Name.



c_id	first name	last name	cld	first name	last name
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compound join :- when you use
multiple condition in join
with diff columns.

Example