

LWD  
↓  
Backend (Java)  
→ Python

15, 27  
④ ③

① Schema Design

② Window functions

- Aggregation

③ Query execution + optimisation

- EXPLAIN

- SCONS

④ Triggers

③ Stored Procedures

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SELECT  $\rightarrow$  select

①  select 'a'

① Subqueries

② Indexes

③ Views

→ Find all students whose psp  
is greater than the psp of  
the student with the lowest

a student with id = 4

id	name	psp
1	A	81
2	B	84
3	C	87
4	D	92

Select \* from students

where

psp > 92

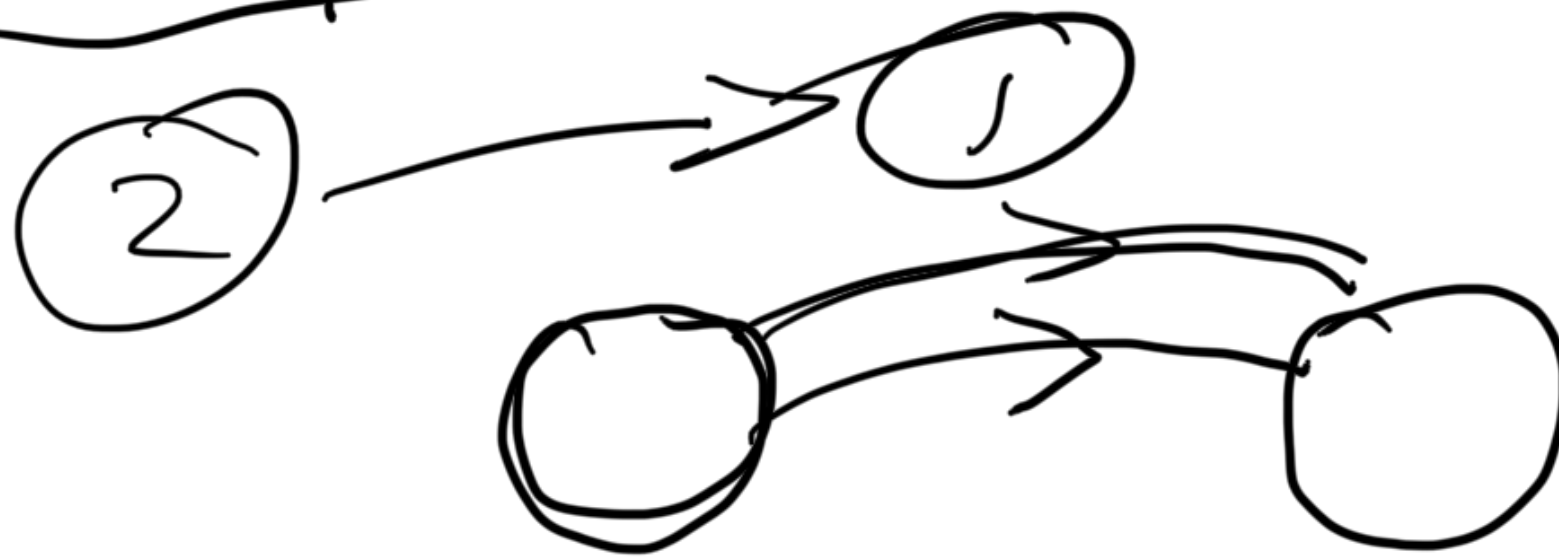
①

Find a psp of st.

with id

4

② Find stud. psp > ①



Self

Join → ON

Select \* FROM

Students S1 Join Students S2

ON (S1.nso > S2.nso)

AND  $S2.id = 4$

S1

S2

ID	NAME	PSP	ID	NAME	PSP
1	A	91	1	A	91 X
2	B	84	2	B	84 X
3	C	87	3	C	87
4	D	82	4	D	82

1 A 91  
2 B 84

4 D 82

3      c      67

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Sub-queries

- Run multiple queries in 1  
network call

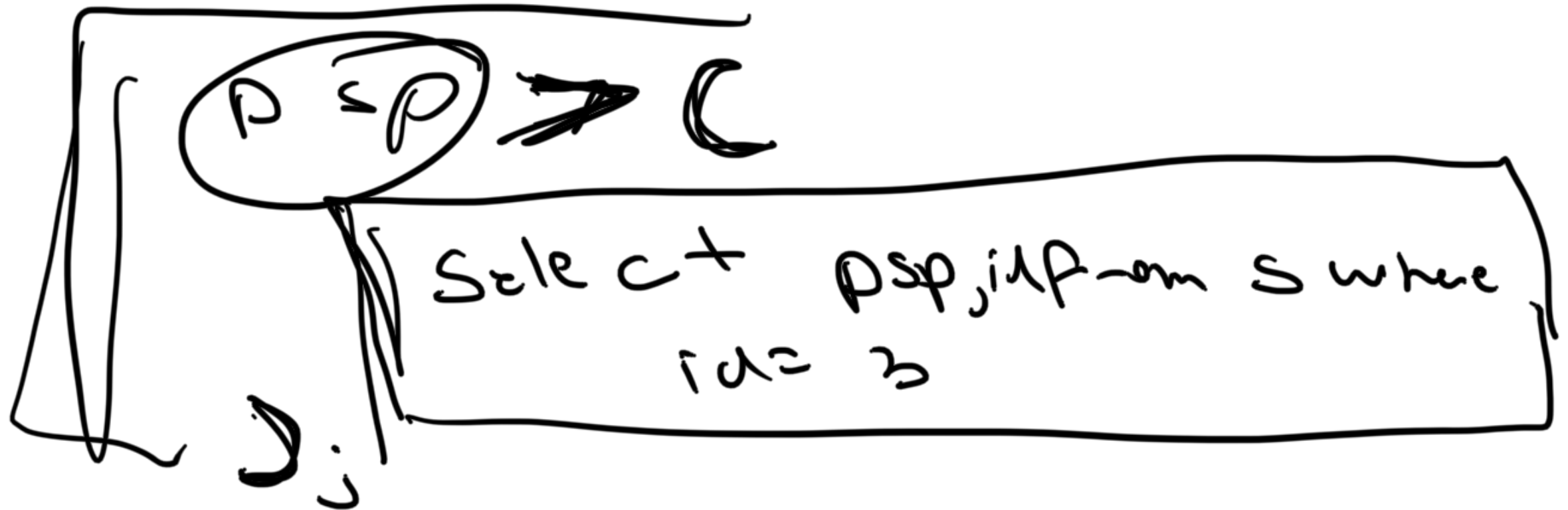
- Inner - psp id = 3

    ↓  
- Outer - filters all the students



(Select psp where id = b)  
└ inner q.

Select \* from S where



psp > [1, 2, 3]