DBMS - V

SIMPLY QUERIES

- Types of commands in SQL
- Major operations in SQL
    - Create a row
    - read a
    - update
- Operators SQL

- Joins
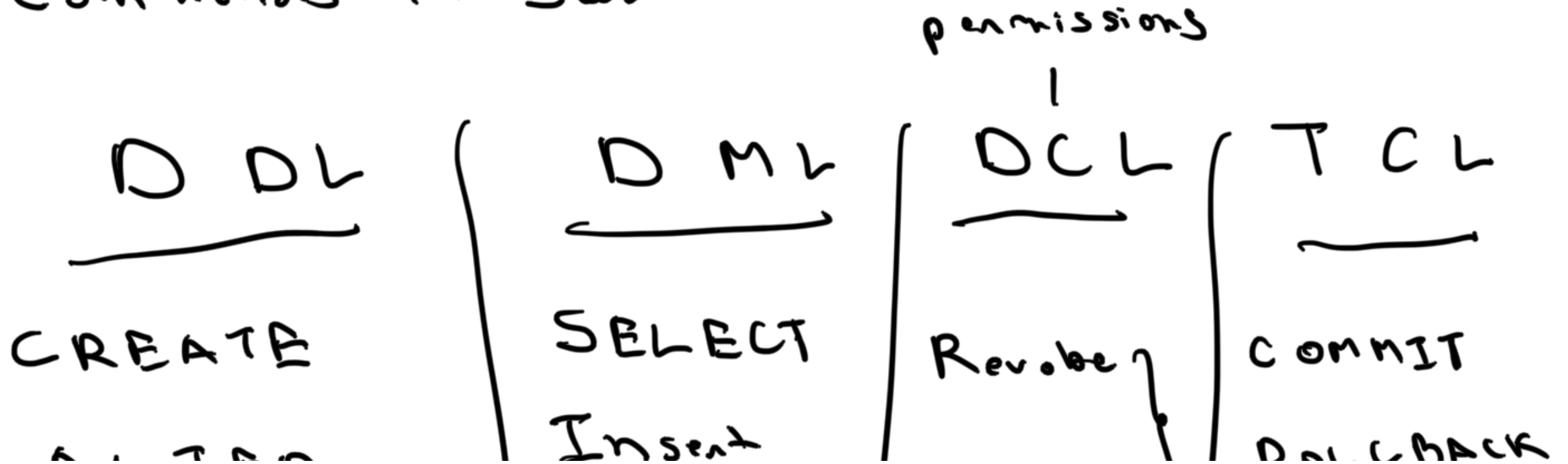 - Inner Join

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Major systems

CRUD

Table

C	—	Create
R	—	DESC
U	—	ALTER
D	—	DROP

CRUD — now

C R ⟶ Select

C R ∪ D

C ⟶ Insert

∪ ⟶ Update

D ⟶ Delete

Commonds in SQL

permissions
|

DDL	DML	DCL	TCL
CREATE	SELECT	Revoke	COMMIT
	Insert		ROLLBACK

ALTER

DROP

TRUNCATE

UPdate

Delete

Grant

BEGIN

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Joins

One table

How do we interact with multiple

table?

Students, batches
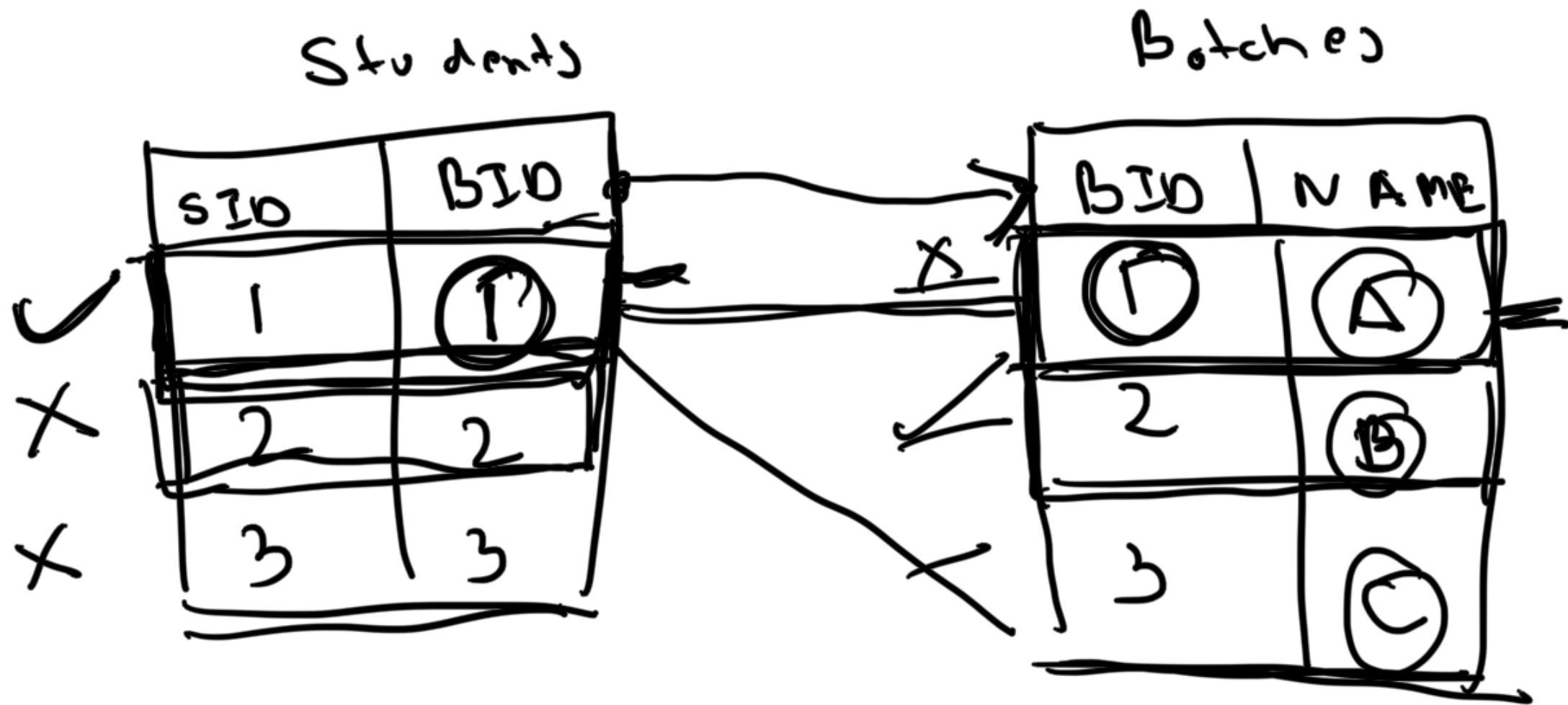
I want to know all students in Shenlock batch

IDs Names

Joins

Combinining multiple tables

Joins — Inner Join

Students

SID	BID
1	①
2	2
3	3

✓
✗
✗

Batches

BID	NAME
①	Ⓐ
2	Ⓑ
3	Ⓒ

Inner Join   BID

when we join two table
we need to match on a
Column

Column — FK

SID	BID	NAME
1	1	A
2	2	B
3	3	C

Students

Batches

SID	BID		BID	NAM

1   1   J
1
2   ○(1)   ○(1)   A
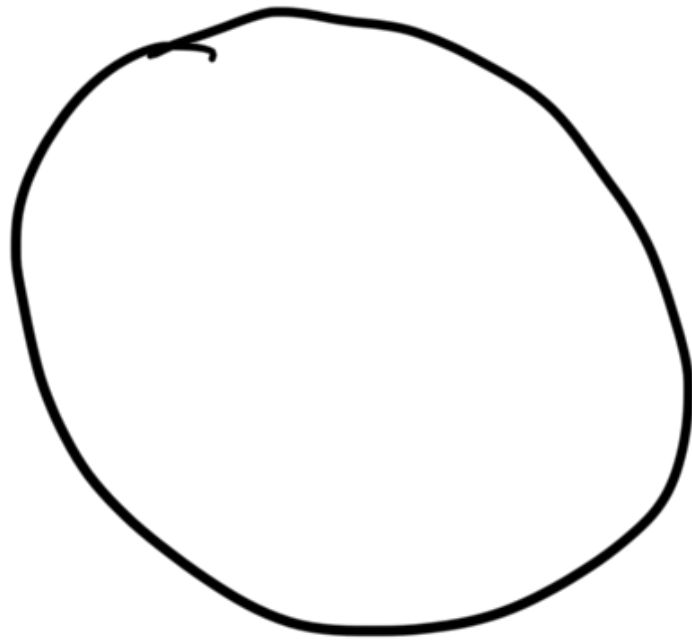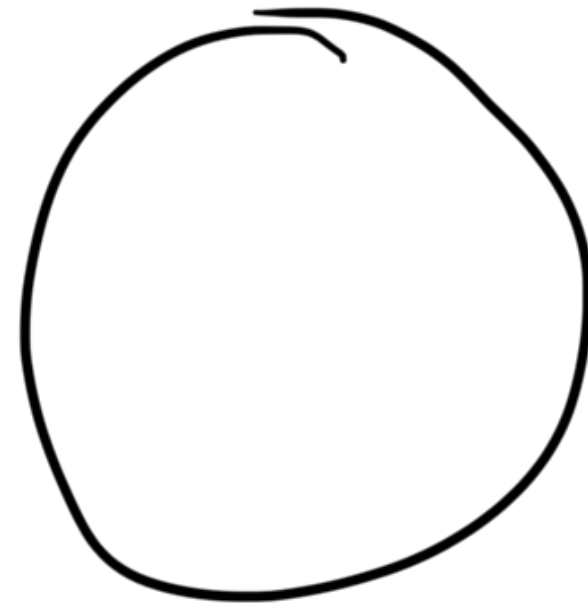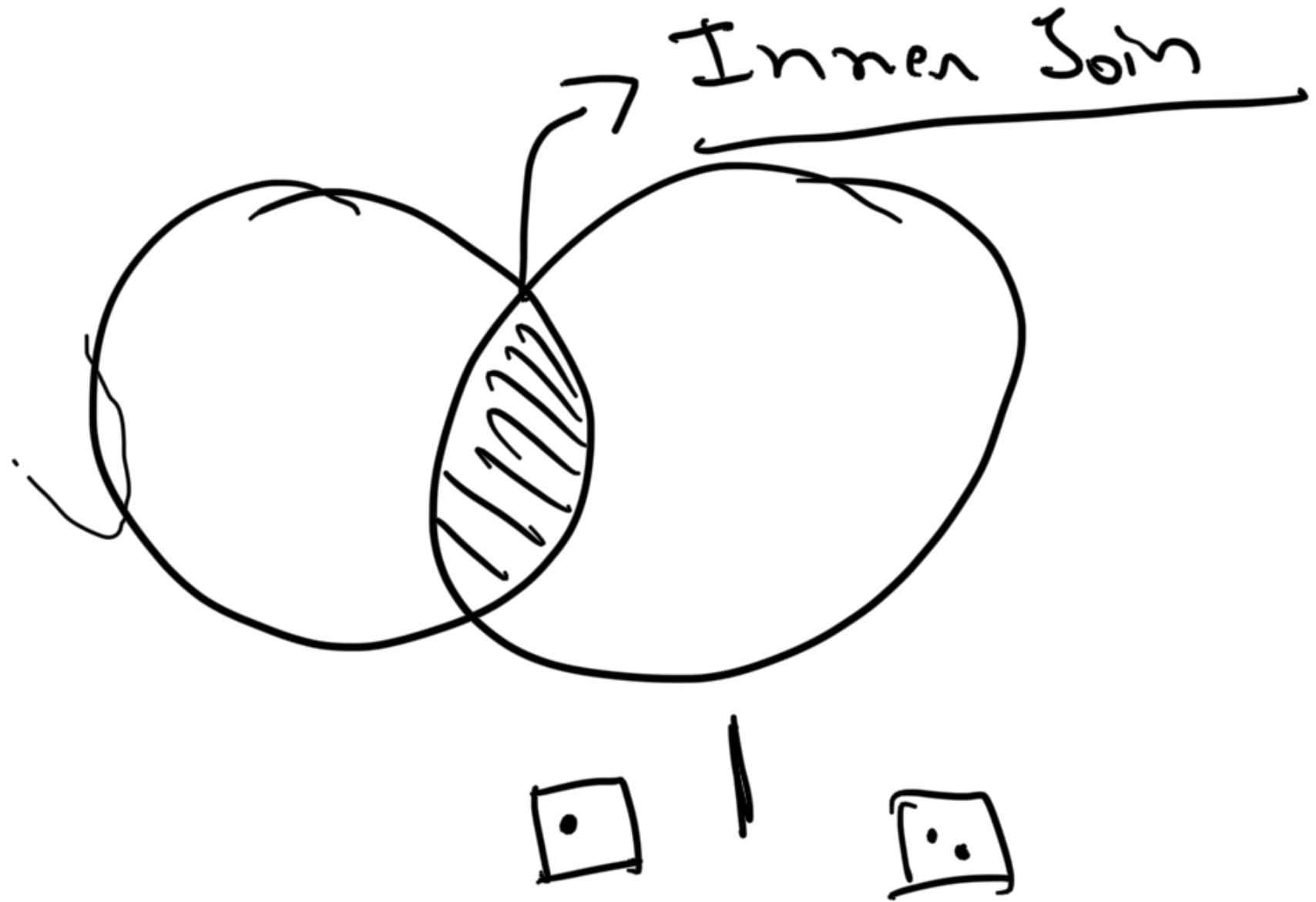3   2   2   B

1 | (| (A
2 | (| (A

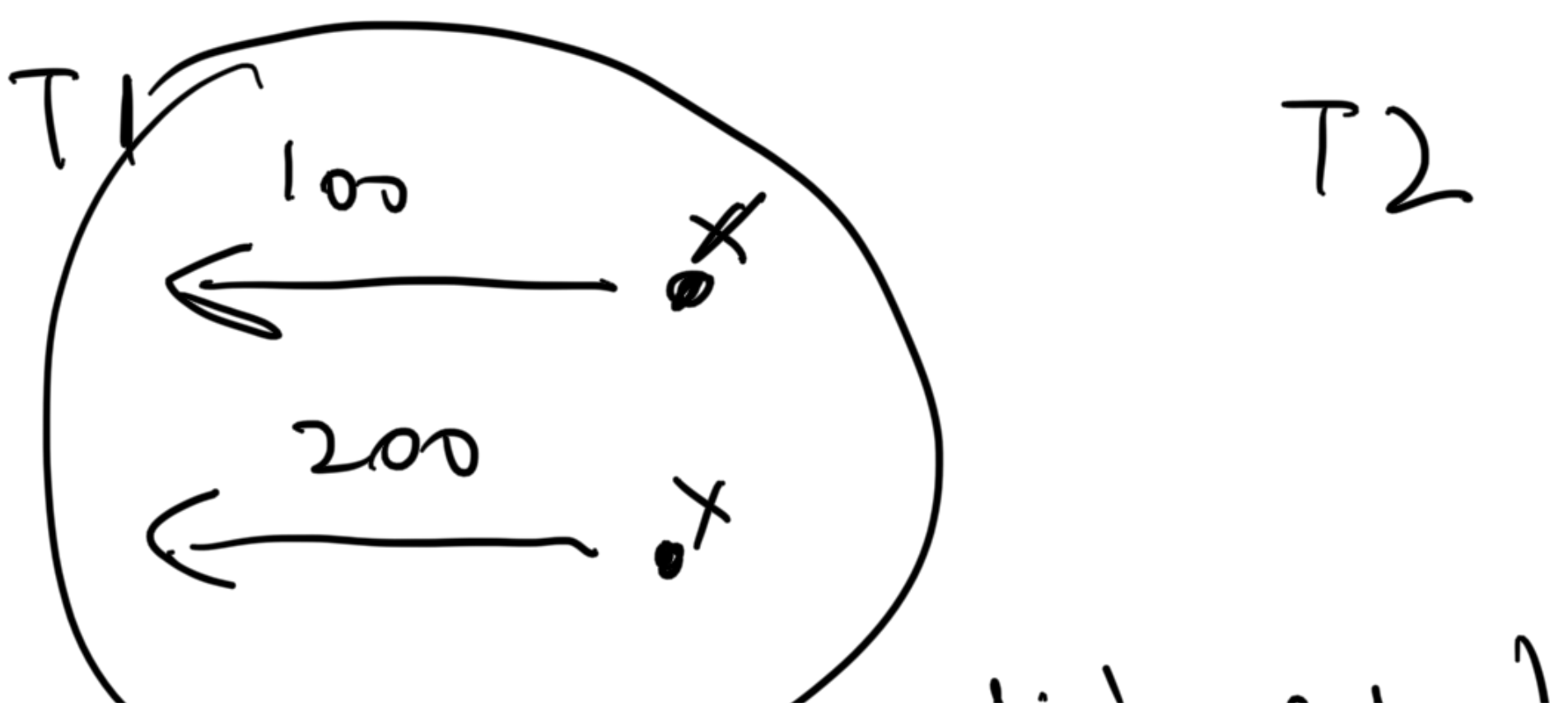Inner Spin

A == NULL False

Students   Bitches
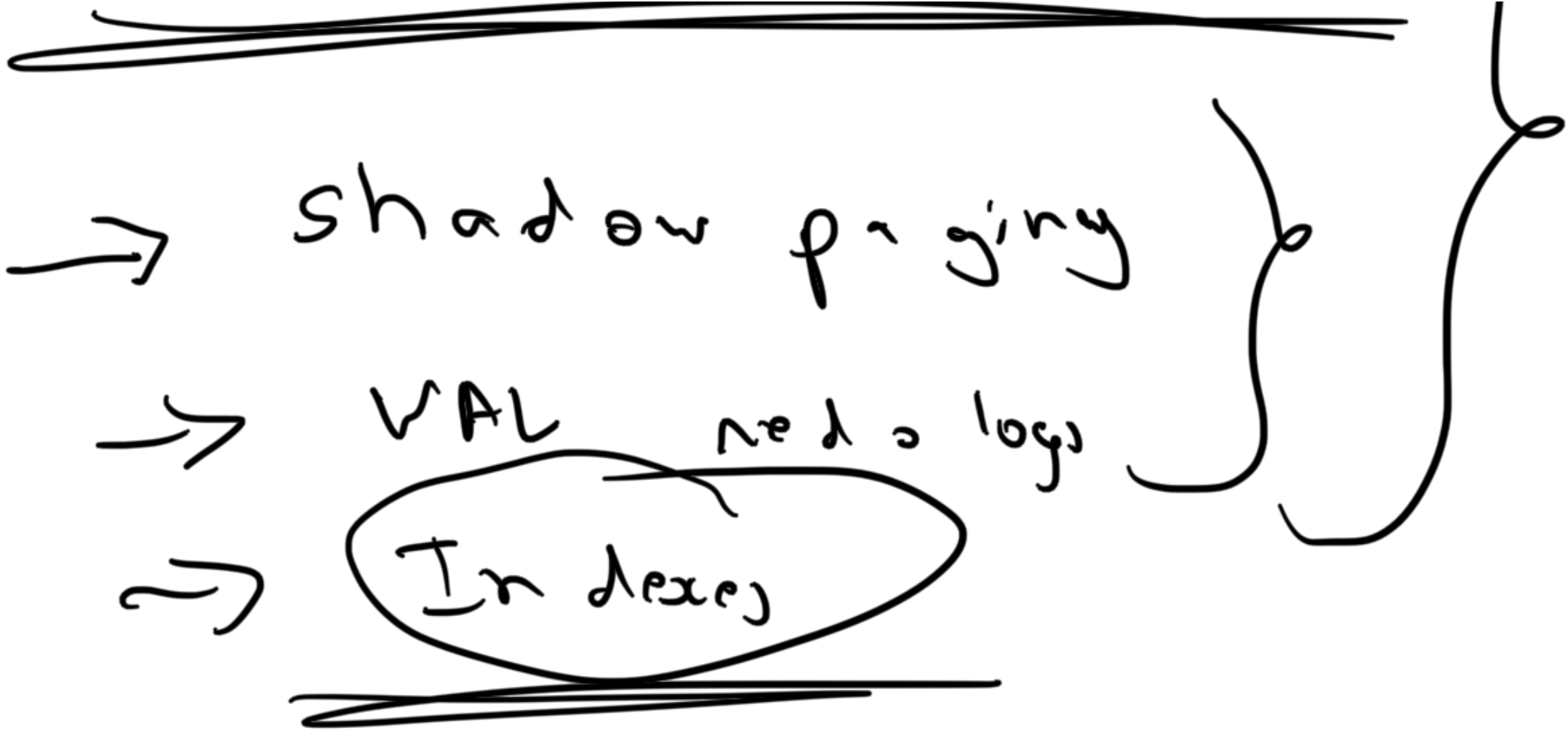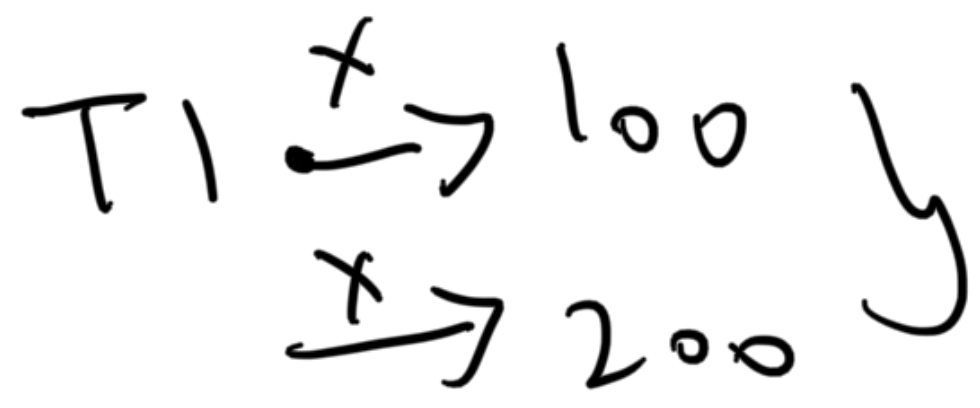

JOIN - ?

Intrsection

Inner Join

① Atomicity in Transactions

→ COMMIT & ROLLBACK

$\rightarrow$ shadow paging

$\rightarrow$ WAL   redo logs

Indexes

T1   T2

    100
←——————————— $\varnothing$

    200
←——————————— x

dirty read

repeatable read

phantom read
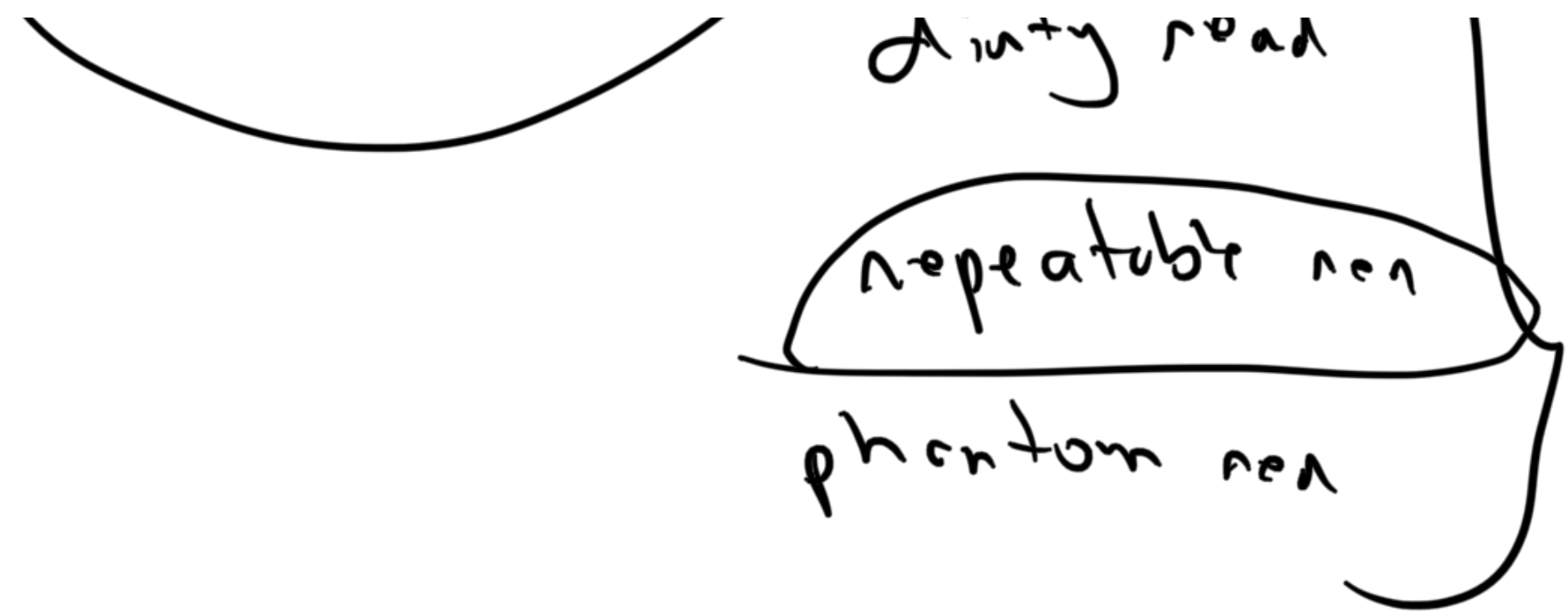
$$T1 \quad \overset{x}{\cdot} \rightarrow 100 \quad \Big\} \quad \text{non-repeatable read}$$
$$\overset{x}{\cdot} \rightarrow 200$$

before I commit some other T
needs it is a dirty read

non-repeatable $\rightarrow$ 100

$\longrightarrow$ 200