

SQL

Database



DBMS

RDBMS

Table

- File
- Image
- object
- Dict.

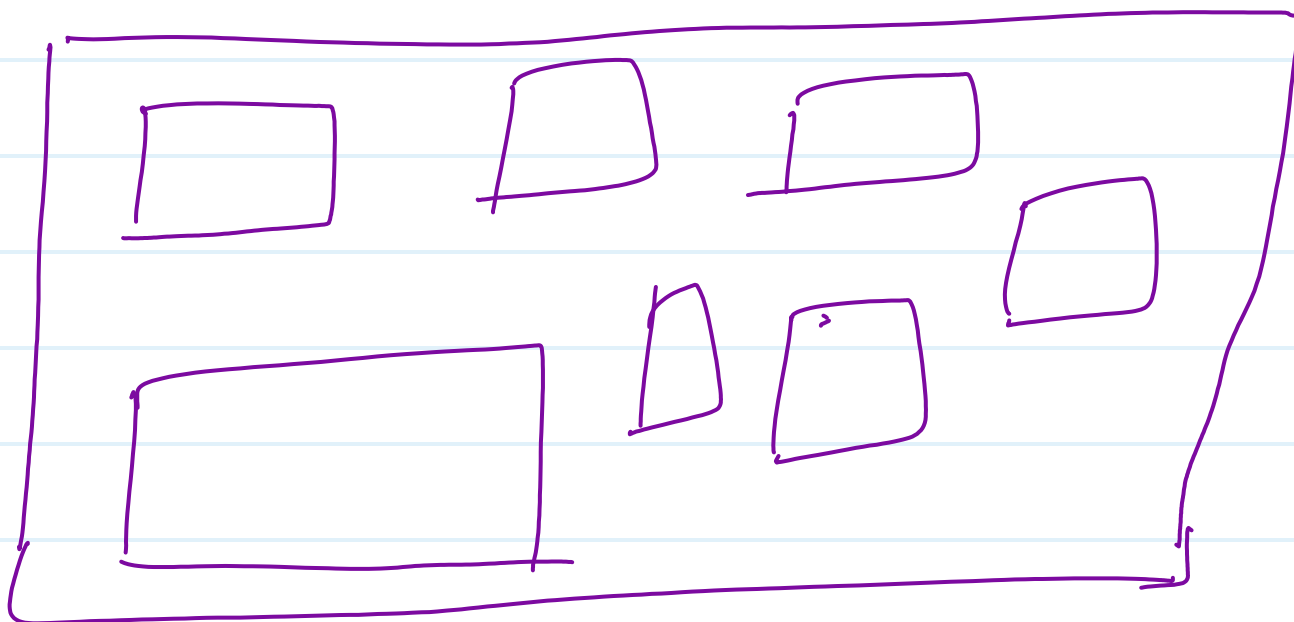
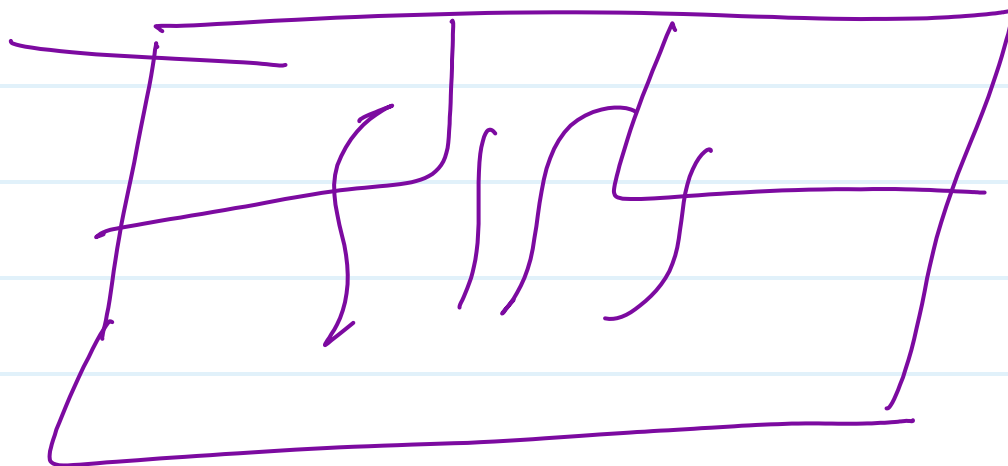
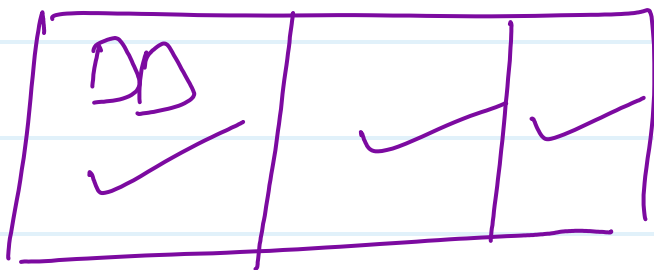
mongodb
Cassandra
Redshift

MySQL
SQL server
Oracle SQL
Post grey

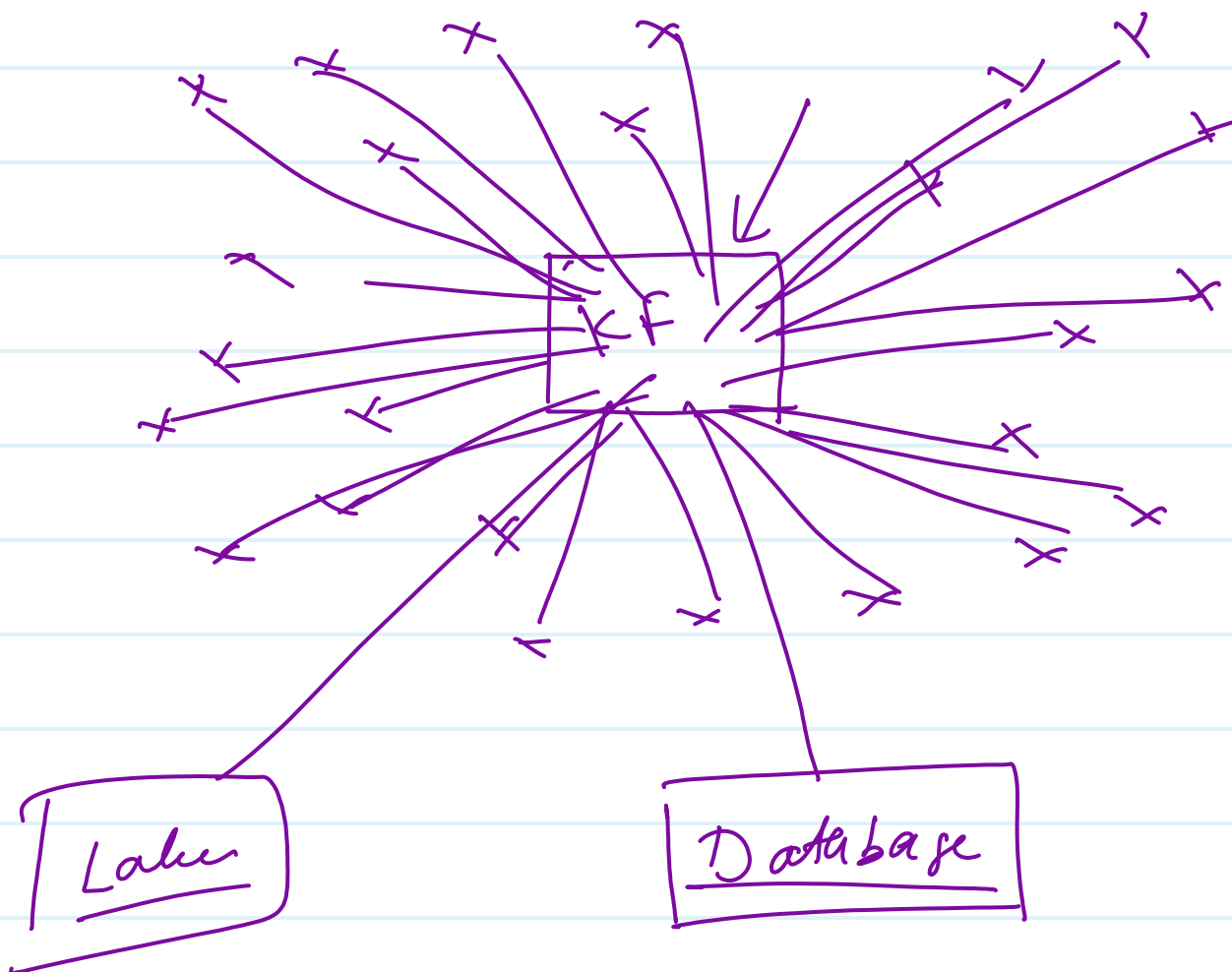
Database —

— Data warehouse — ✓ snowflake

Data lake —
Cloud —



kafka



RDBMS

Case sensitive

Amit amit
└──────────┘

Select *
from table name

Commands

- ① Data definition lang.
- ② Data manipulation lang
- ③ Data control lang.
- ④ Transaction control lang.
- ⑤ Data query lang.

① DDL

create
Drop
Truncate

Auto-commit

② DML

Insert → non-Auto-commit
update
Delete

③ DCL

Grant
Revoke

⑤ DQL
select

④ TCL

commit
Rollback
save point

10 sec

3 sen

Subquery

select ~~id~~ from table where >
(())

Clause

where -

group by -

having -

order by -

limit -

offset -

Data type sql

- ① Int - whole number.
- ② Decimal - Decimal
- ③ char/varchar - str
- ④ Date -
- ⑤ Time - Time
- ⑥ Bool - T/F
- ⑦ Blob - image

* Arithmetic operators

+, -, ×, ÷, %

* Comparison operators

=, >, <, <=, >=

<>, !=

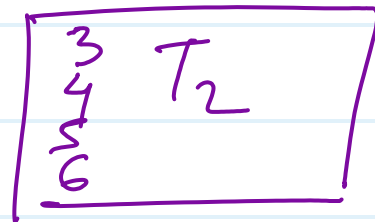
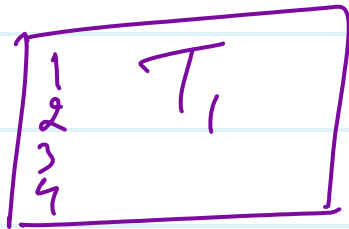
* logical operators

and, or, not, in, is, between
Like, if

* Agg Function (Window Fund)

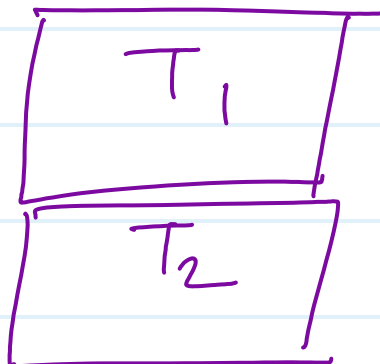
Sum, max, min, Avg, Count,
var, std,

* Union



union

1
2
3
4
5
6



union all

1
2
3
4
5
6

* Join

C_1	T_1	1
		2
		3
		4

C_1	T_2	3
		4
		5
		6

① Inner join

3 3
4 4

② Left join

1 1
2 2
3 3
4 4

③ Right join

3 3
4 4
5 5
6 6

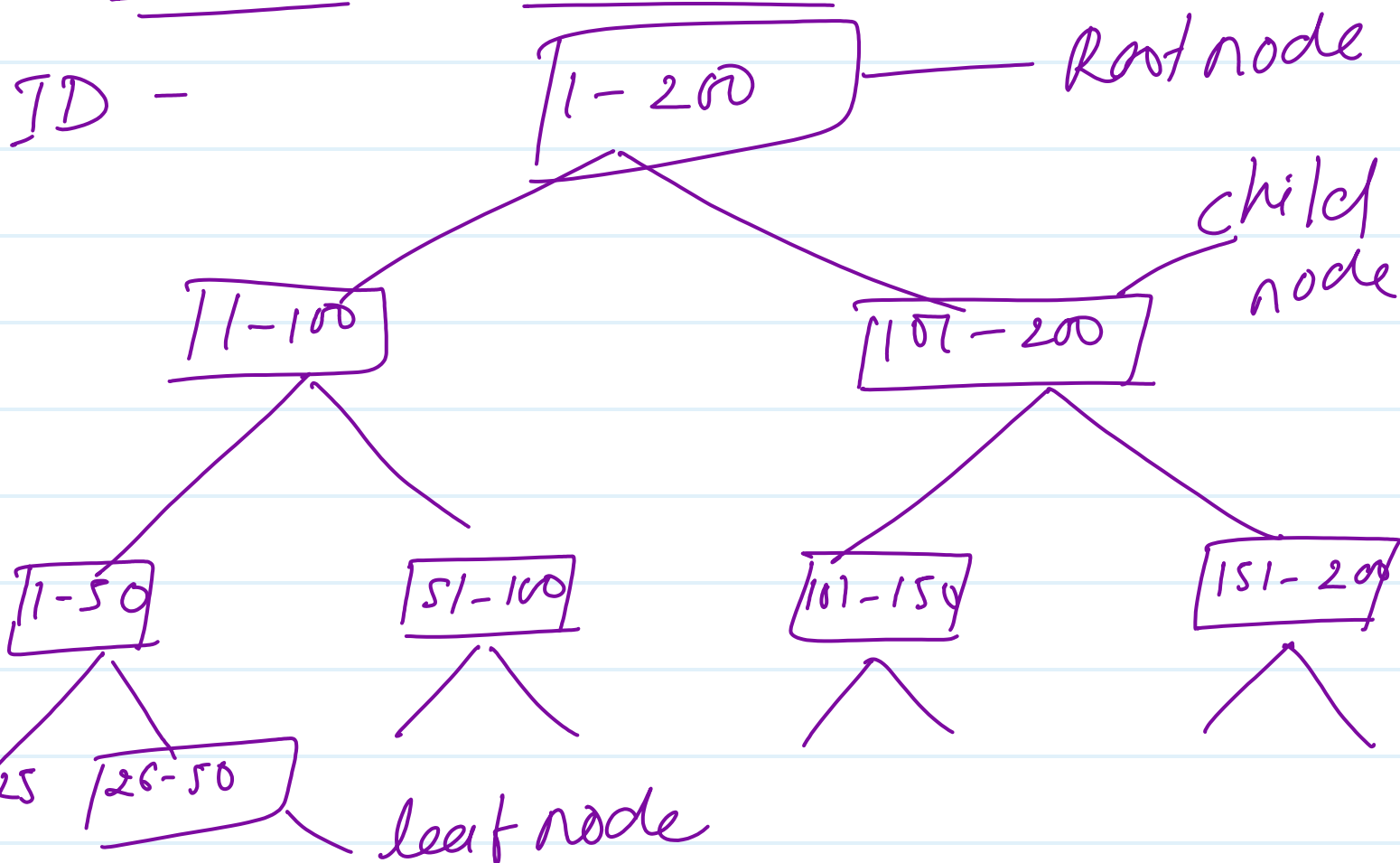
④ full join

1	-
2	-
3	3
4	4
	5
	6

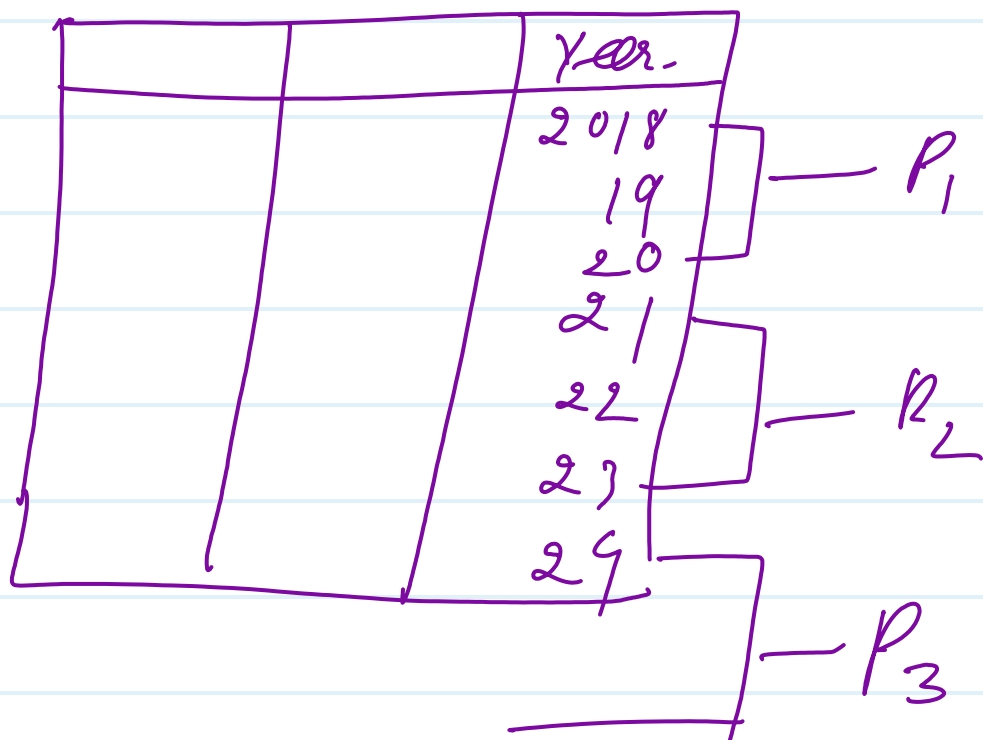
⑤ cross join

$$4 \times 4 = 16$$

* Index Constraint



* partition



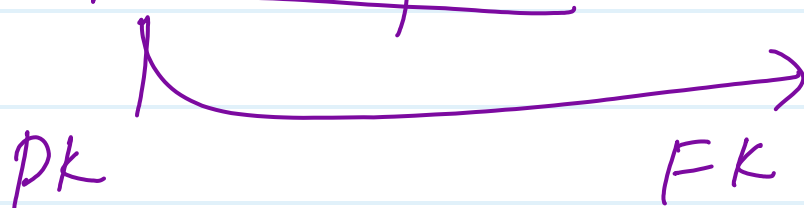
Constraint

- not null —
- unique —
- check —
- Default —
- Auto-increment —
- enum — list

* Constraint

- ① Primary key
- ② Foreign key
- ③ Composit key

ID	Name	Add.
1		
2		
3		
4		



ID	Sub.	Score
1		
1		
2		
2		
3		

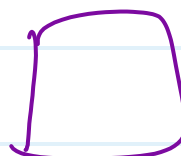
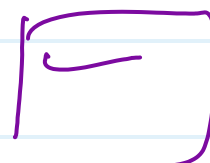
PK

ID	Name

	11)
	1
	7
	112
	167
	131
	14
	15


 P_0

 P_1

 P_2

 P_3

 P_4