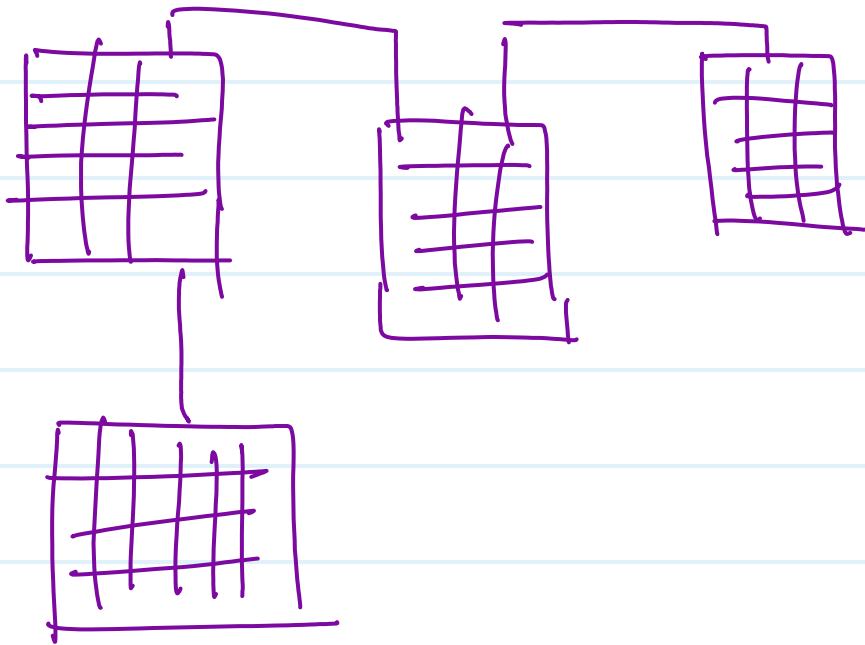


Database

① RDBMS

② DBMS



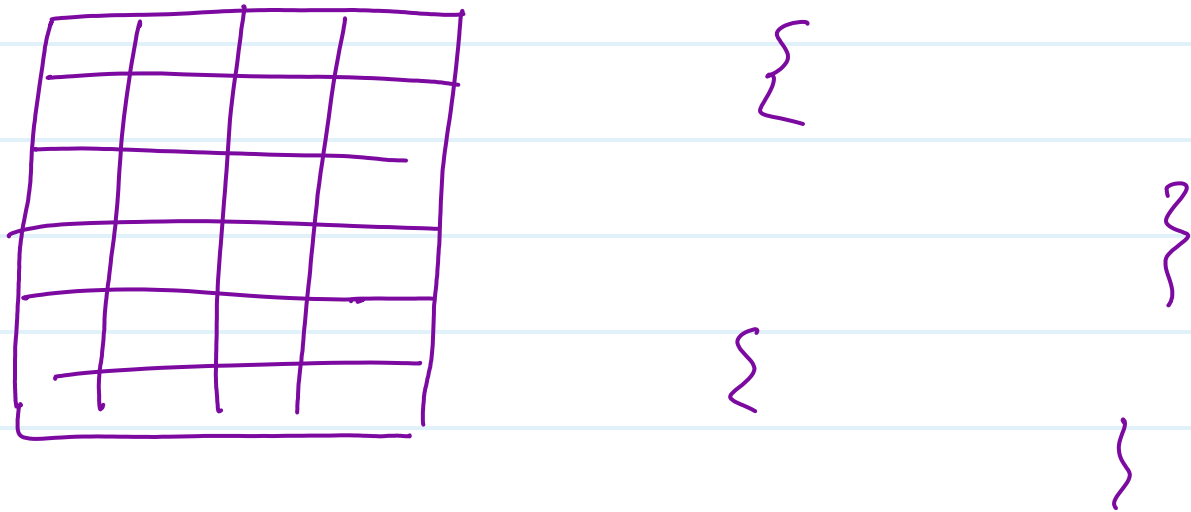
JSON, parquet, xml, image, object

Type of data

① structure

② semistructure

③ unstructure



Structure data

RDBMS — SQL

SQL — NoSQL

mySQL
 SQL server
 PostgreSQL
 Informix

} RDBMS

MySQL — SQL
↓

→ Abc — Abc abc
abc

→ select * from tablename;

select
*
from
table-name:

Data type —

- | | |
|-----------------------|-----------------------|
| ① int — whole | ⑥ Time = "hh-mm-ss" |
| ② binary — 0, 1 | ⑦ bool — True/False |
| ③ string — " " | ⑧ blob — <u>image</u> |
| ④ date — "yyyy-mm-dd" | |
| ⑤ float — 7.05 | |

operators

Arithmetic operators

$+$, $-$, $*$, $/$, $\%$

$$7 \% 2 = 1$$

Comparison operators

$<$, $>$, $=$, $<=$, $>=$, $!=$, $<>$,

logical operators

and, or, between, in, any, not,
all

view

x_1	x_2					x_n

10000 x 22

1 min

x_1	x_2	x_3	x_7

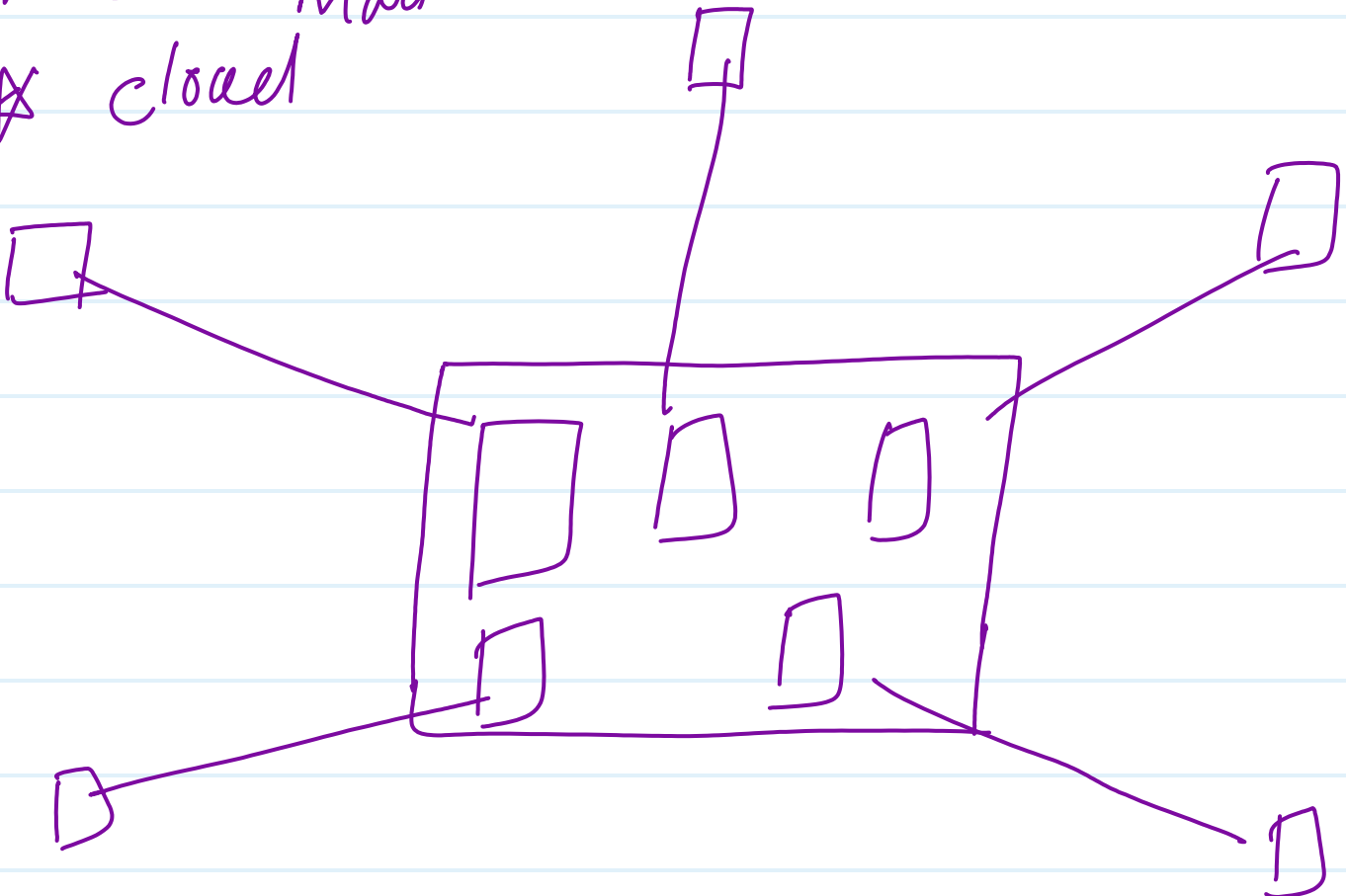
10 Sec.

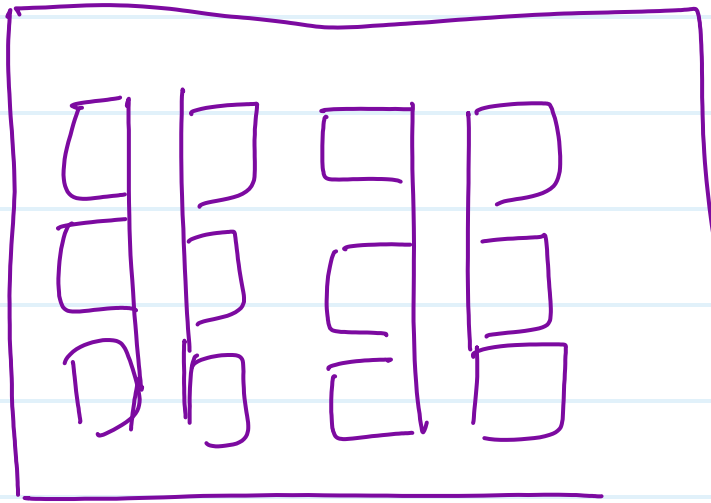
* Datawarehouse

* Data lake

* Data mart

* cloud





Data base vs cloud

↑ ↑

Data

App — 1K — scalable

—
0 - 1k ✓

0 - 10k ✓

0 - 1L.

cloud

AWS ✓

Azure ✓

GCP ✓

Heroku ✓