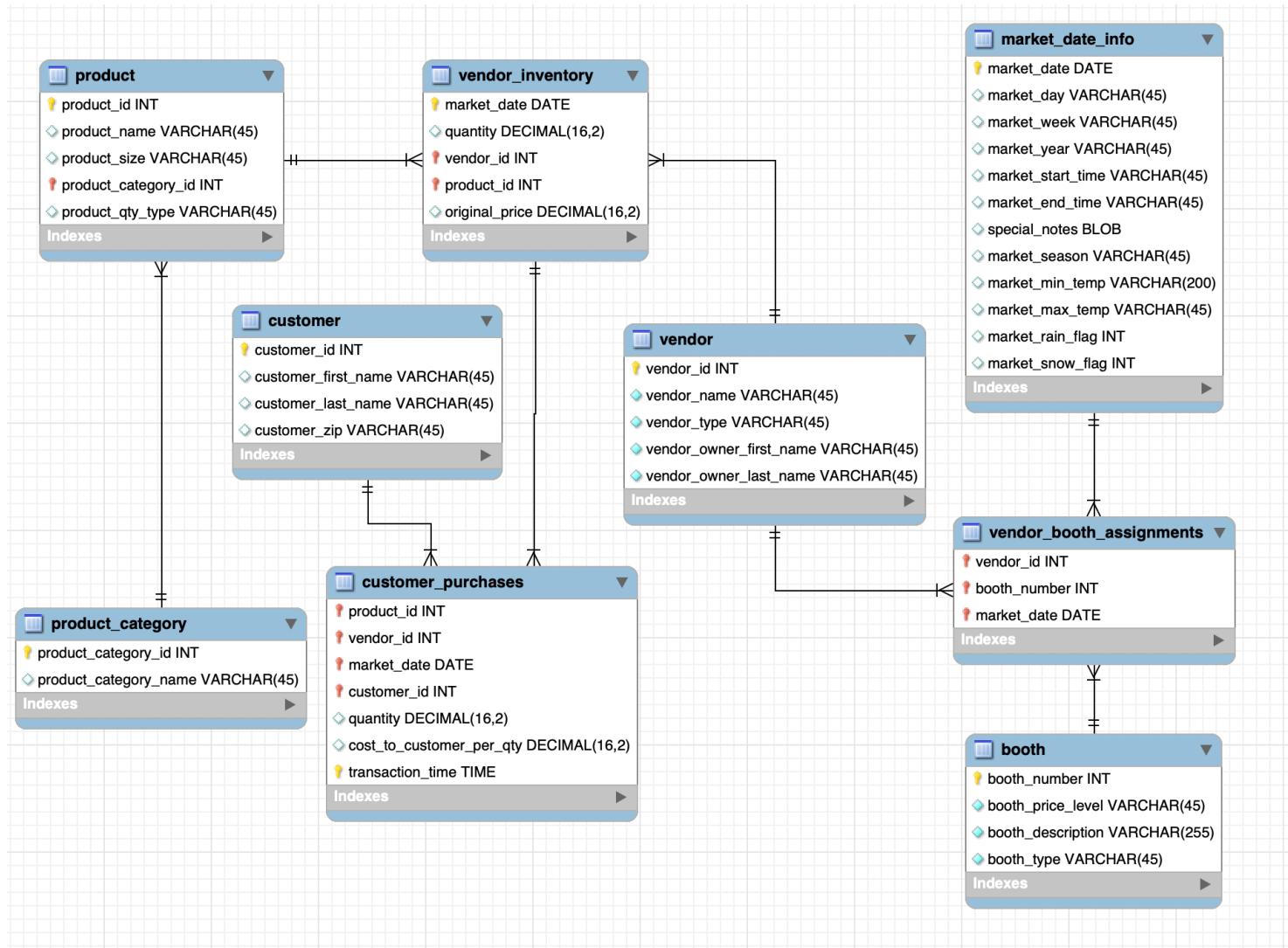


Agenda

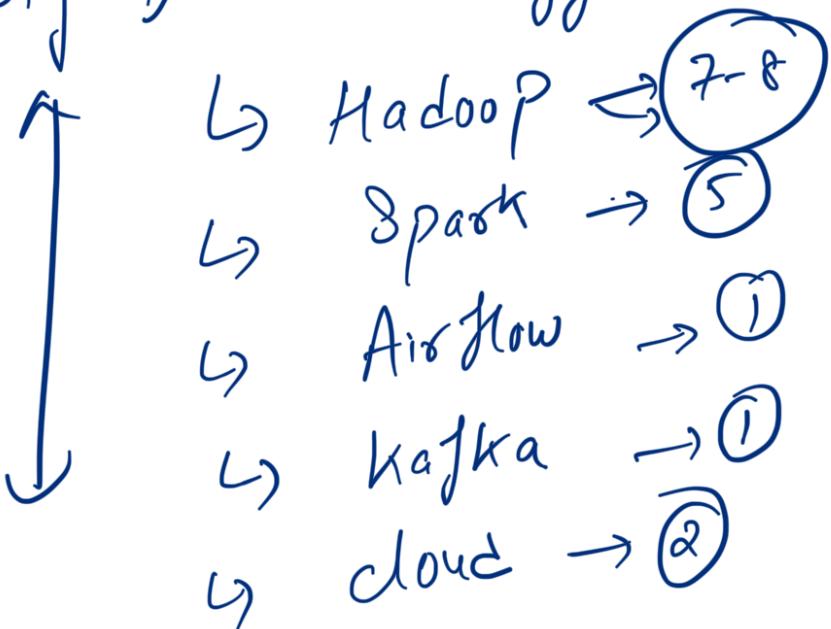
a. SQL SQL and SQL



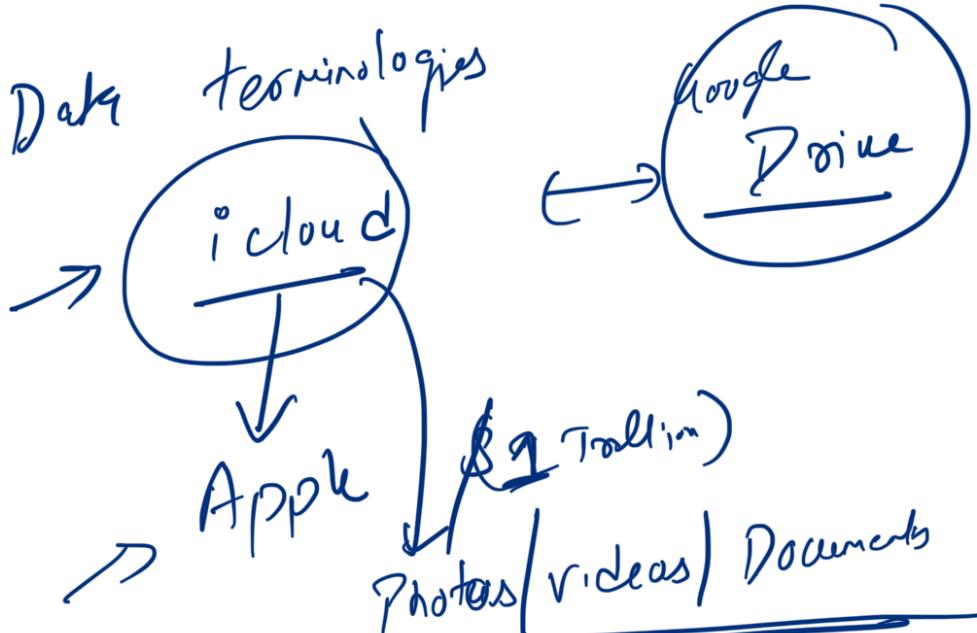
Movie
Song
Name



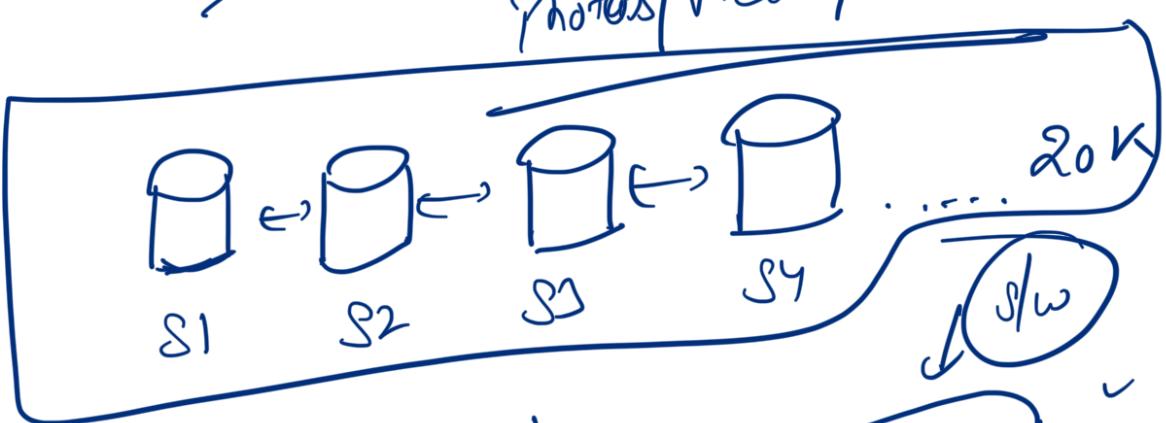
Big Data technology



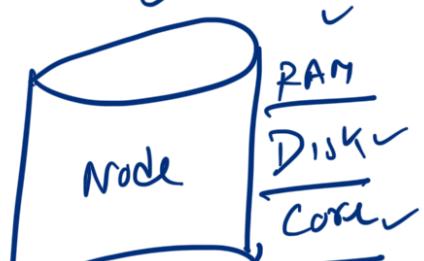
Big Data terminologies

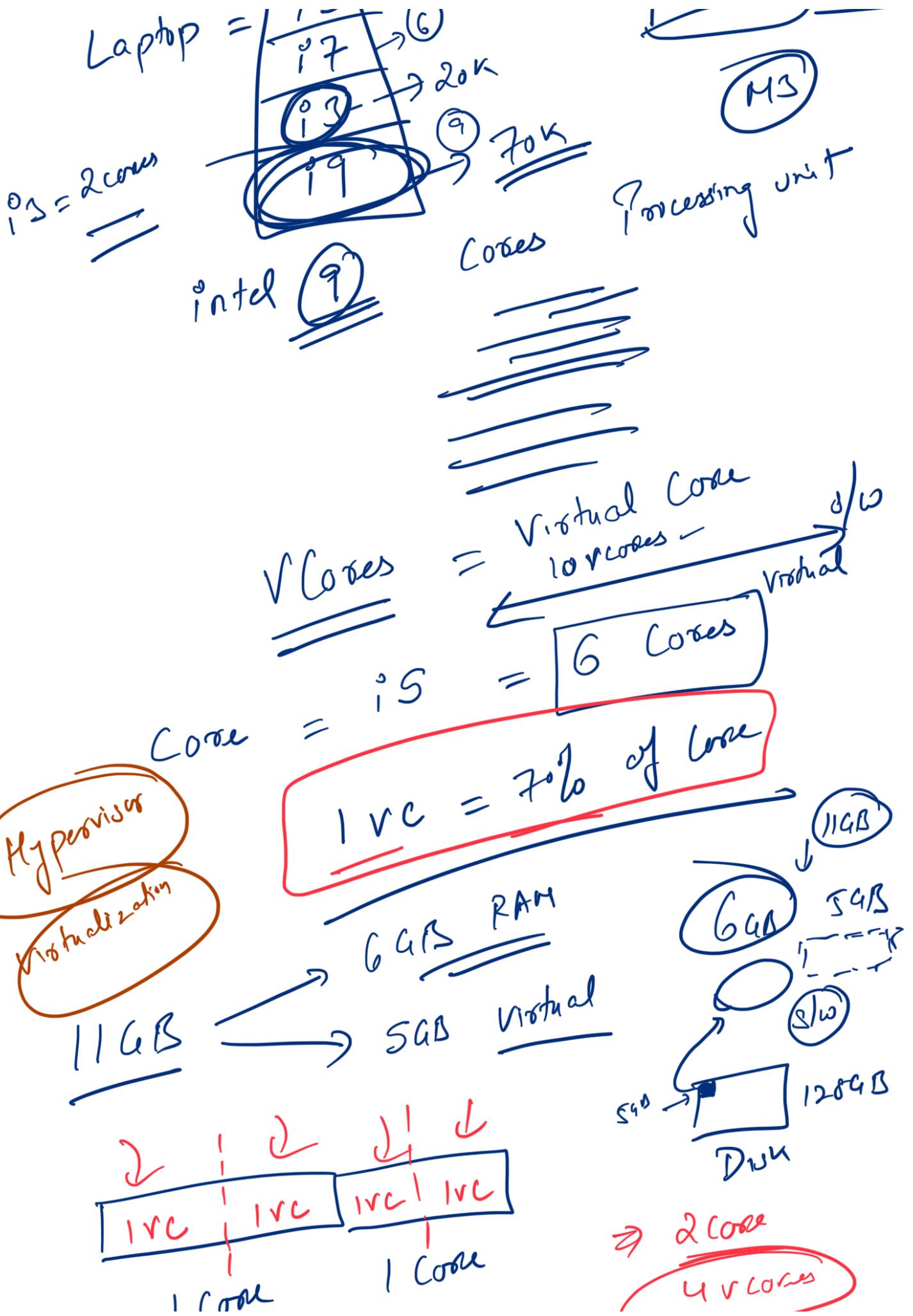


cluster

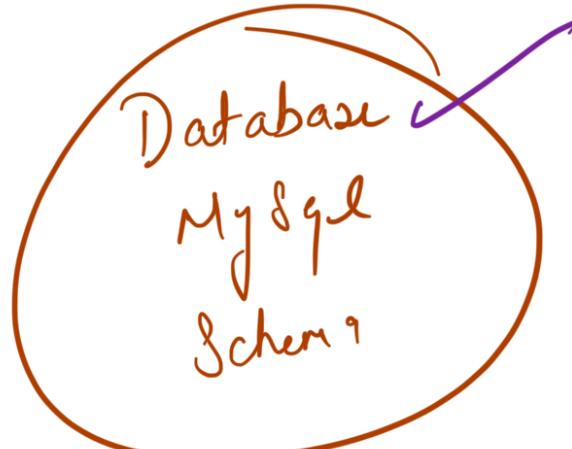


Server → Node

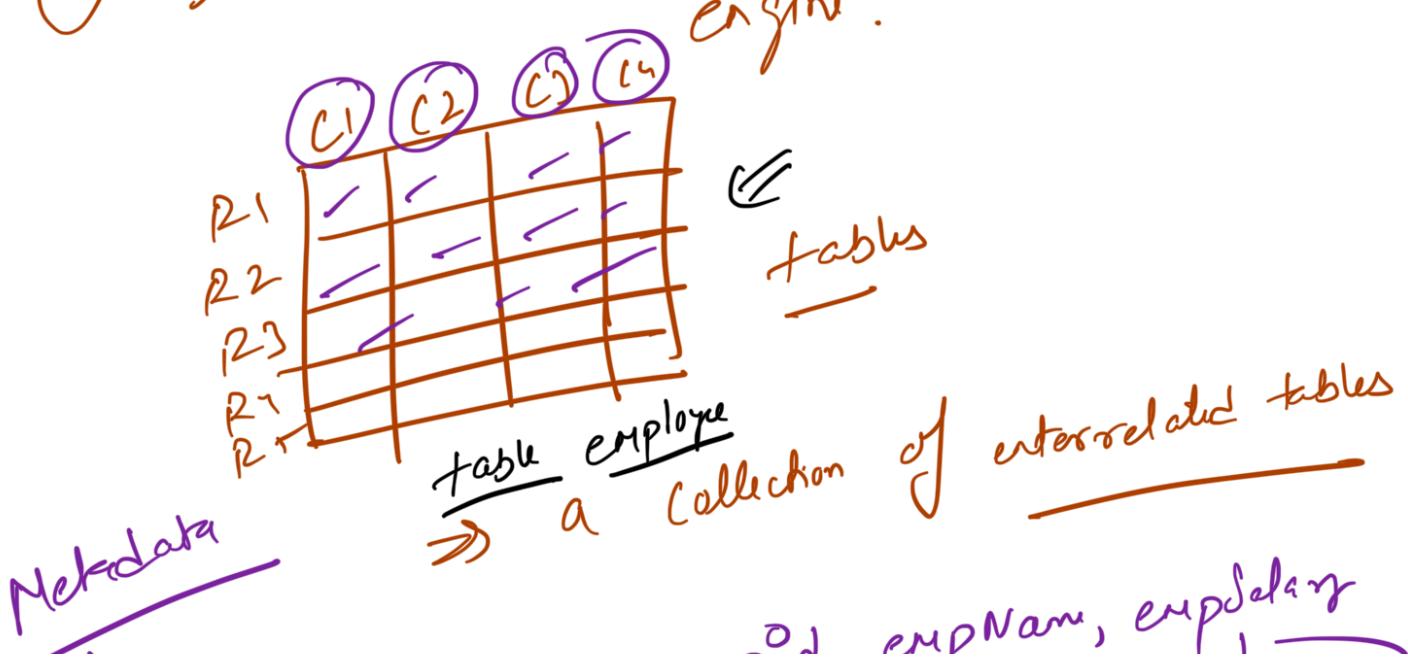


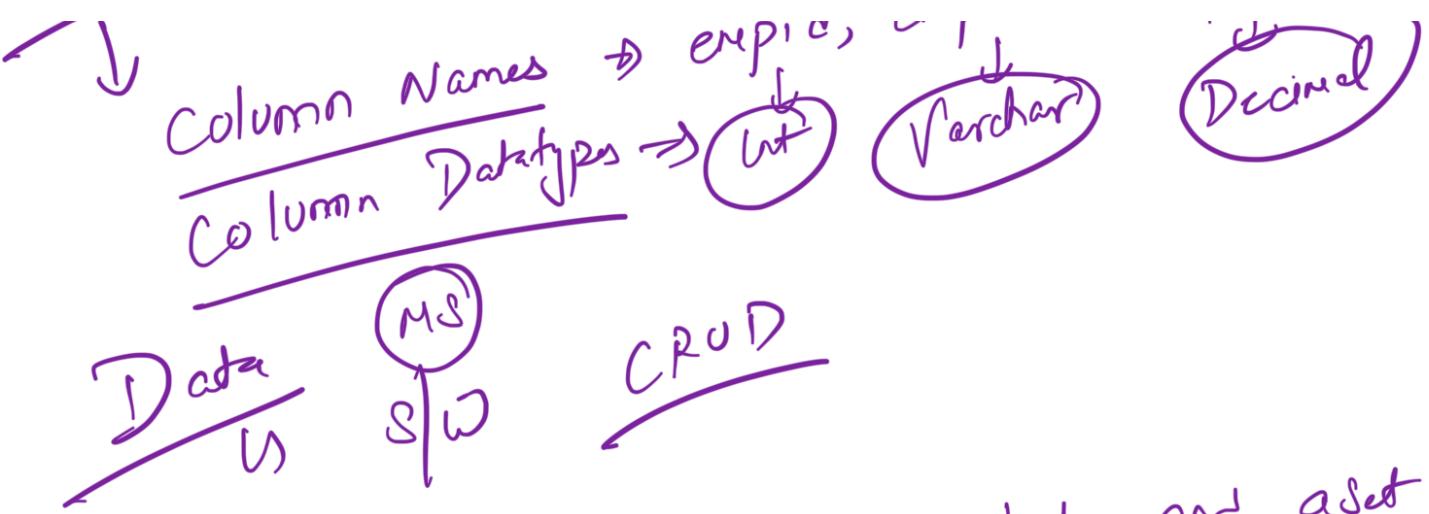


1.
 2 Processes
 n Processes



① Database:- Row (Column) based storage engine.





DBMS → Consists of related data and a set of Programs to access & manipulate fact Data.

↗ RDDBMS
 ② MySQL → SQL which stores Data.

why do we need a key?

① Super Key

Customer

↳ Cid

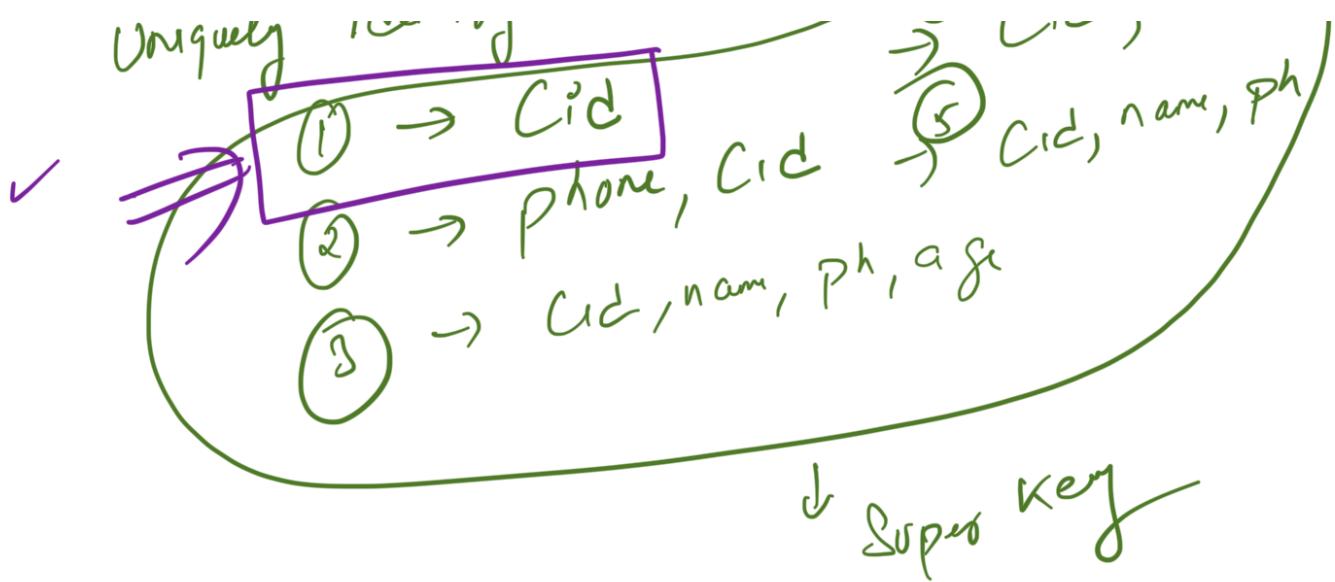
↳ name

↳ Ph

↳ age

↳ Working a Row

↳ r_id, Name



✓ ② Candidate Key

↳ 2, 3, 4, 5

✓ ③ Primary Key = Uniqueness
 + NO null

④ Foreign Key

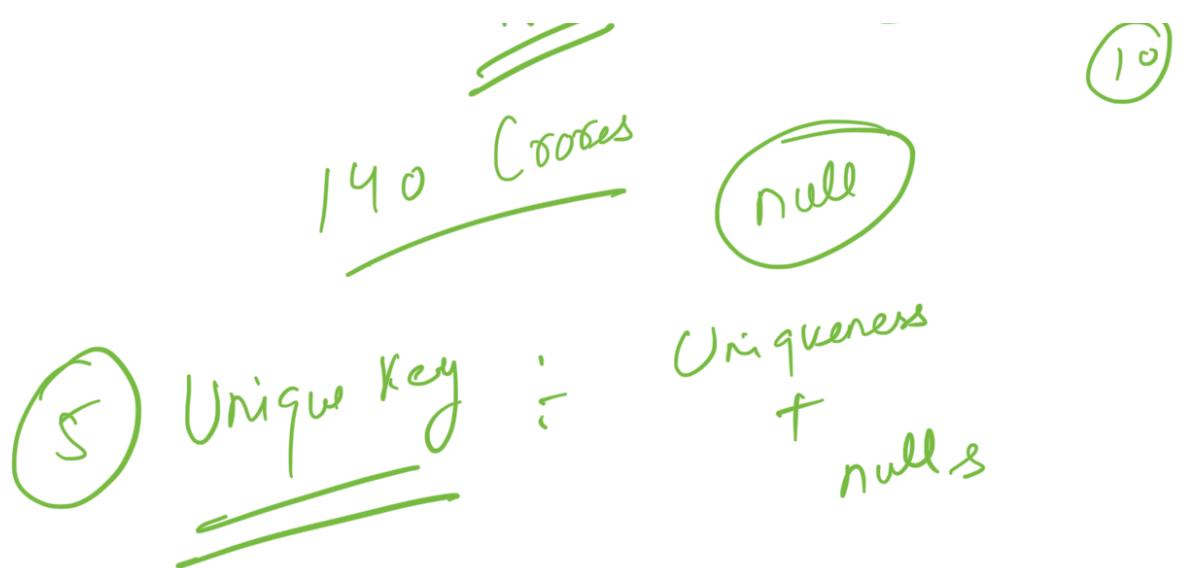
↳ Help us to establish the relationship with other table.

↳ Foreign Key can be null.

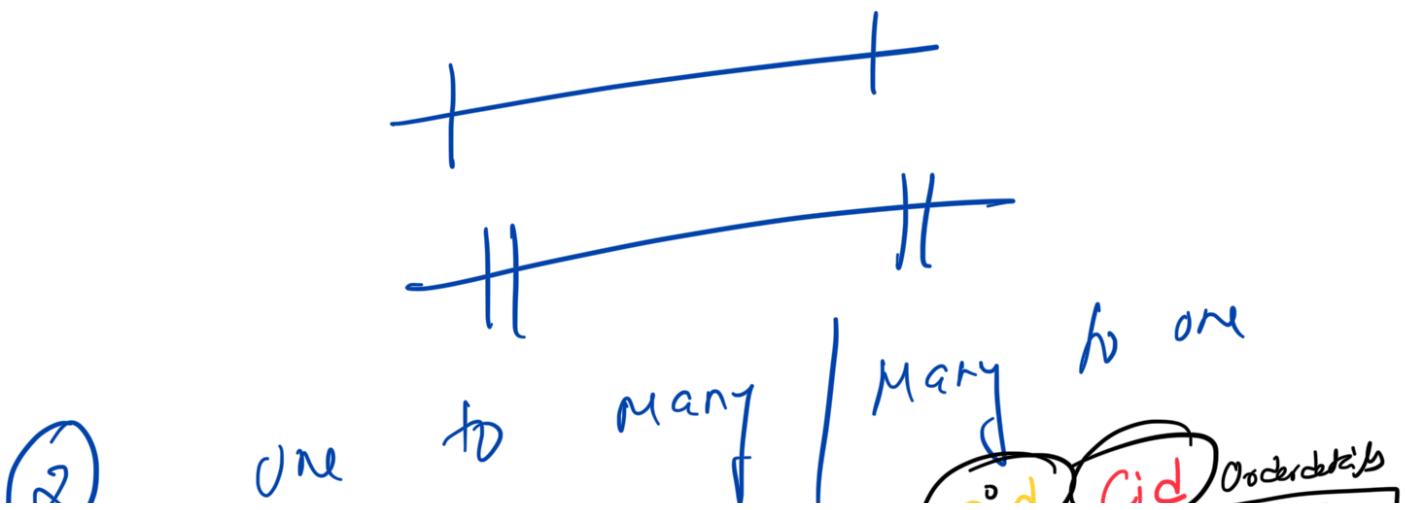
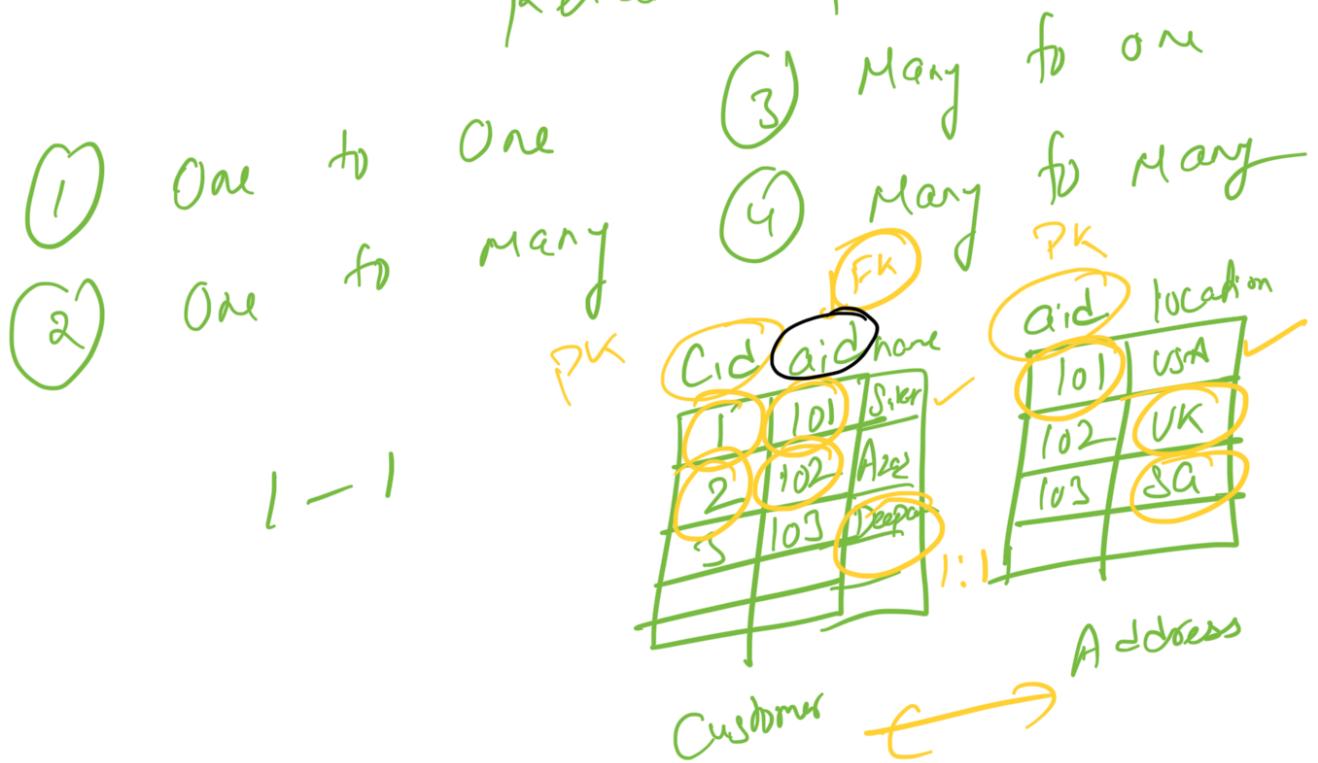
Is Aadhar Card a PK?

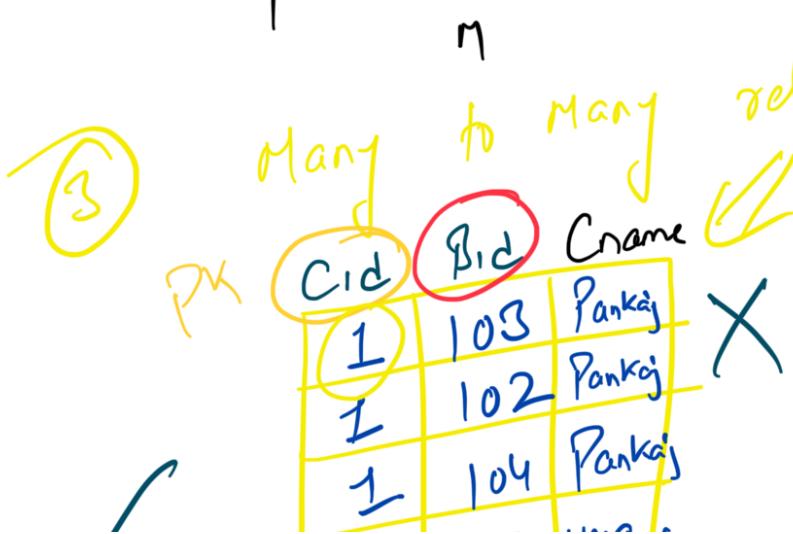
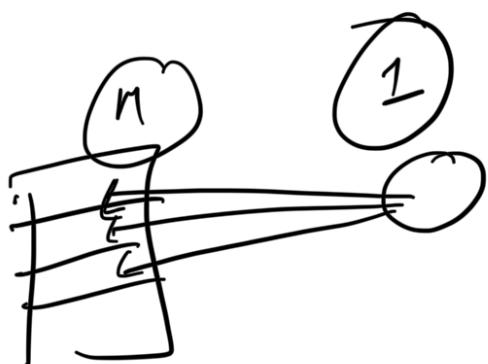
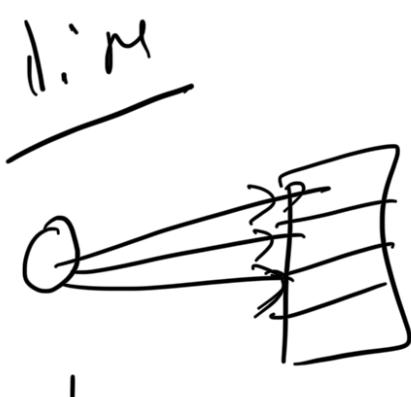
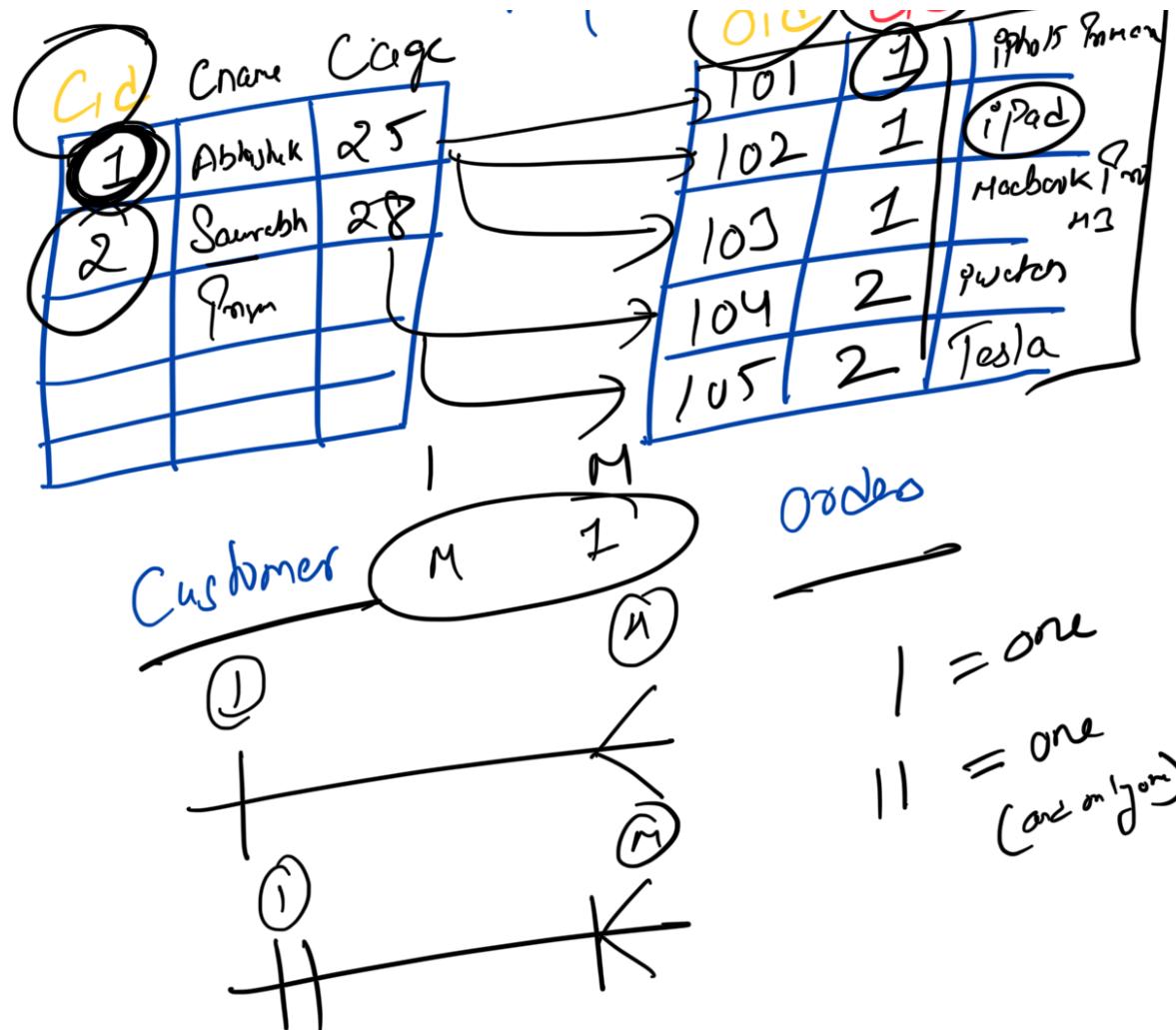
↳ No

Sikkim \rightarrow XYZ



Relationships in a Schema





PK ✓

| | |
|-----|--------|
| Cid | Chare |
| 1 | Parky |
| 2 | Uma |
| 3 | Deapor |
| 4 | Amit |

| | | |
|---|-----|-----|
| 2 | 103 | Uma |
| 2 | 104 | Uma |

Customer

| | | |
|-----|-----|-----|
| 103 | 106 | Yes |
| 106 | 107 | No |

FK

Bank

Junction mapping
Bridge interactivity

M

| Cid | Bid |
|-----|-----|
| 1 | 103 |
| 1 | 102 |
| 1 | 104 |
| 2 | 103 |
| 2 | 104 |

= T = from both tables.

Rule → A JT must have PK from both tables.

(2) → You can add more columns

$$a = b \quad b = c$$

↓

$$a = c$$

Cid \oplus Bid = PK

| | |
|--------|--------|
| 1, 103 | 1, 104 |
| 1, 105 | 1, 106 |
| 1, 107 | 1, 108 |
| 1, 108 | 1, 109 |
| 1, 109 | |

Composite Primary Key

1 table \rightarrow 1 column \rightarrow 1 PK
 \rightarrow More than 1 col \rightarrow 1 PK | CPK

SQL



Structured
Query
Language