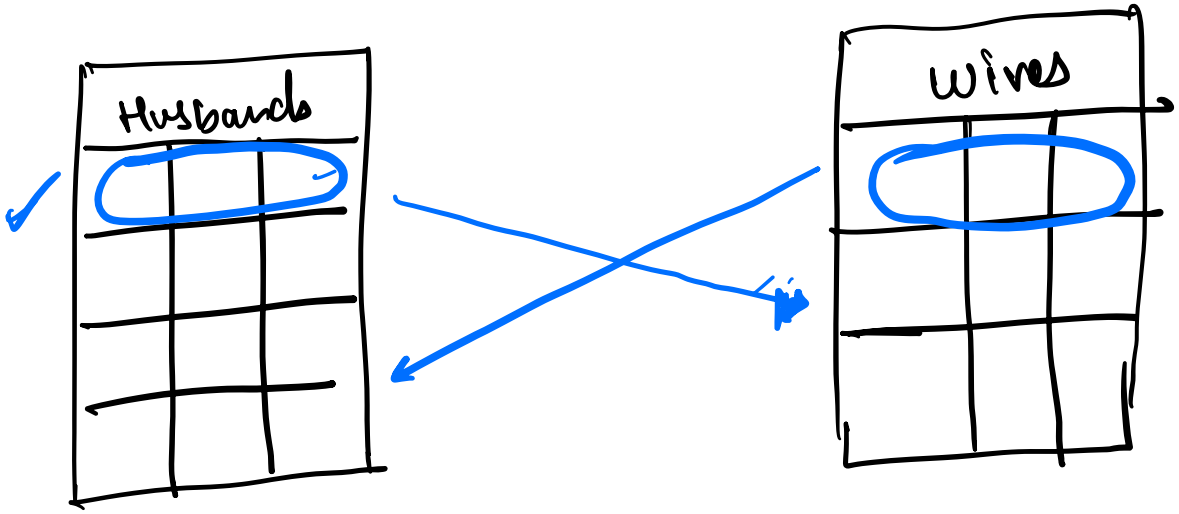
Lec 2 : Extracting data using SQL

Agenda :

1. Relationships
2. ER Diagram
3. SQL
4. Basic query writing

* Different types of Relationships:

① One - to - one

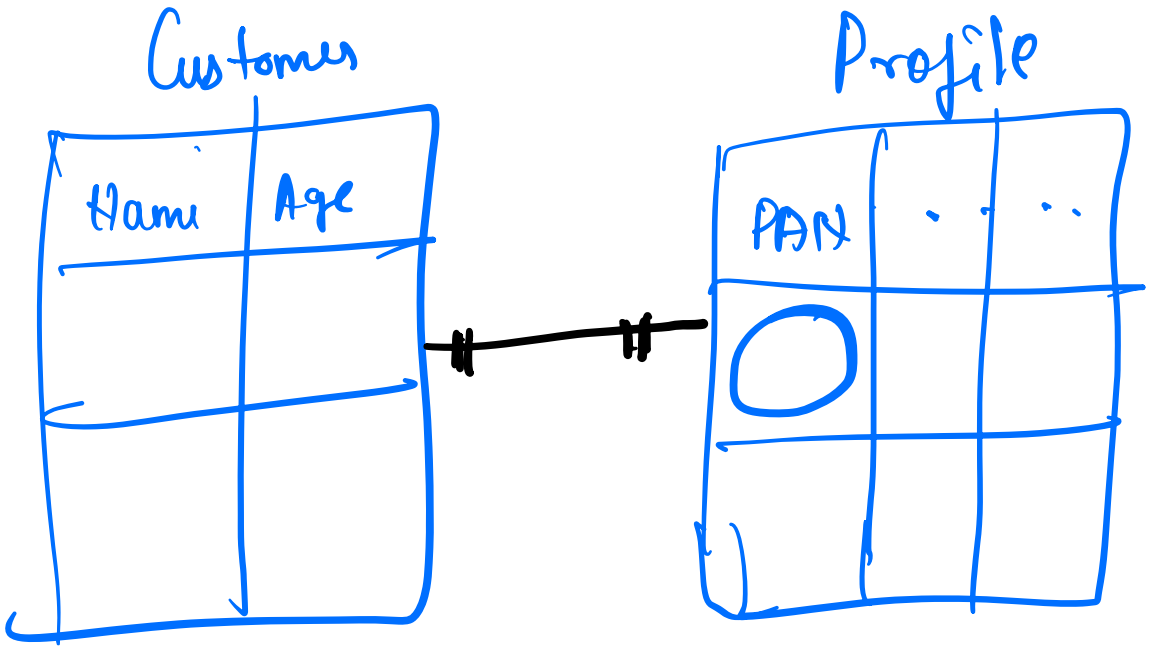


1H ⟶ 1W

1H ⟵ 1W

1 - to - 1

eg2

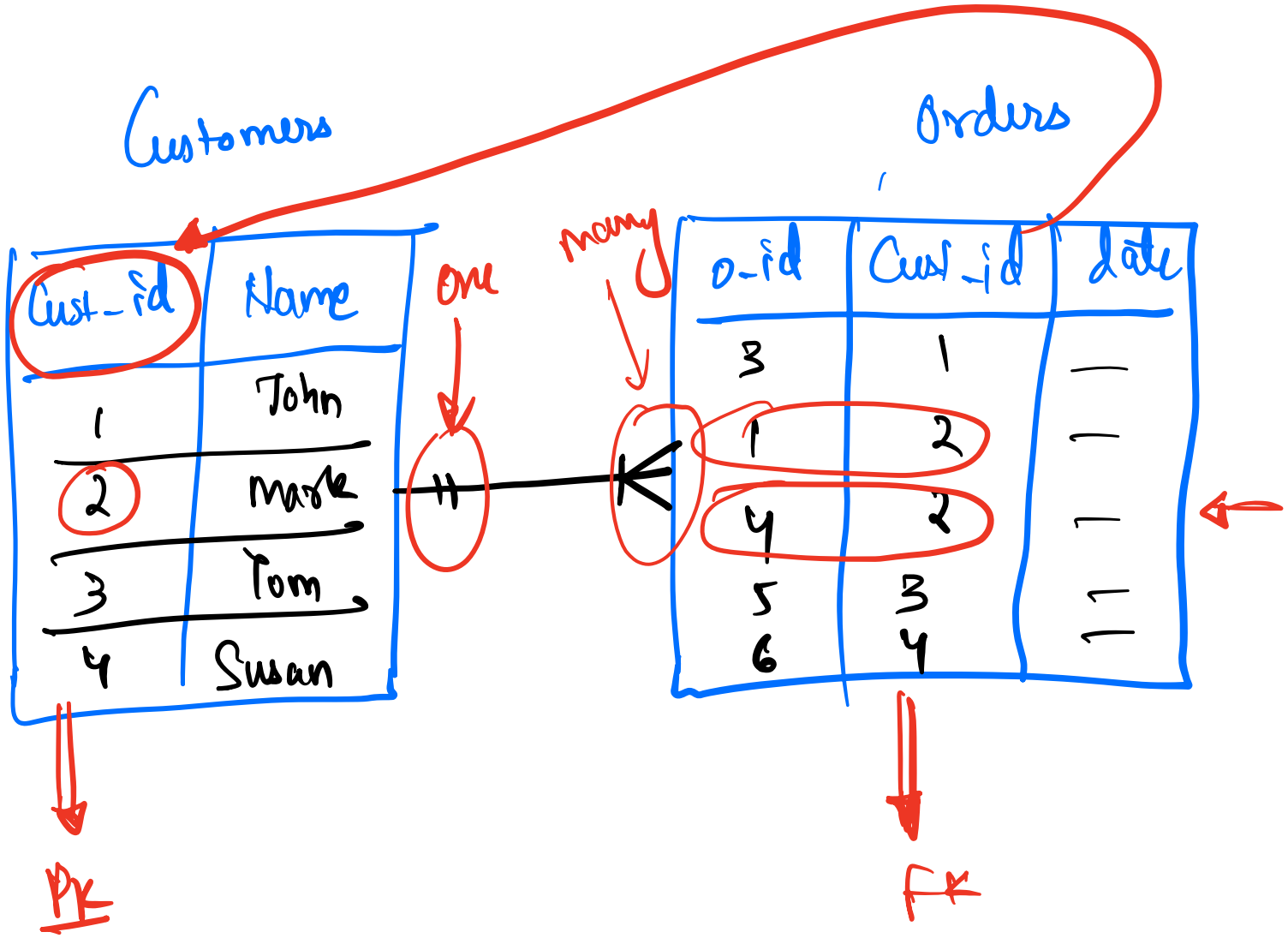


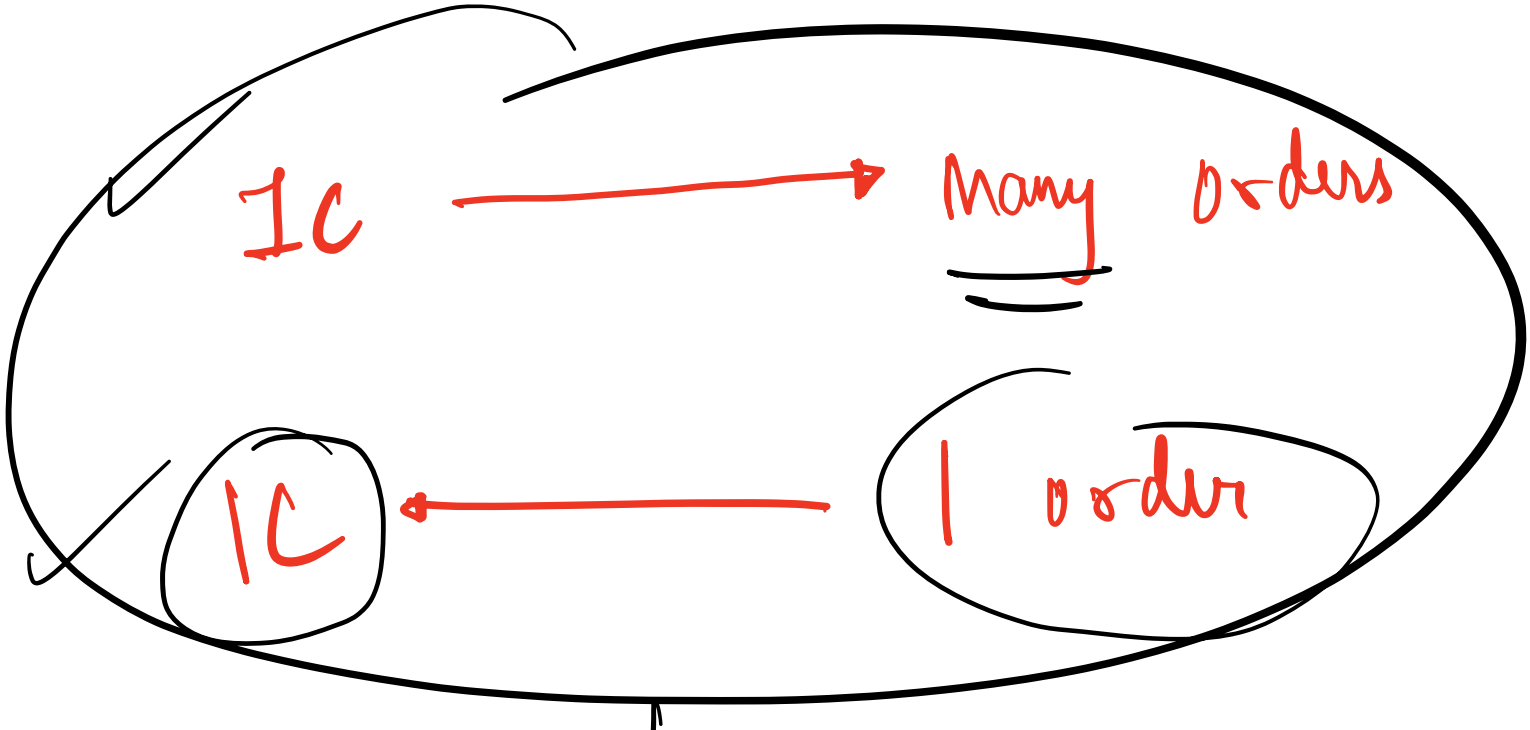
1C ⟶ 1 Profile

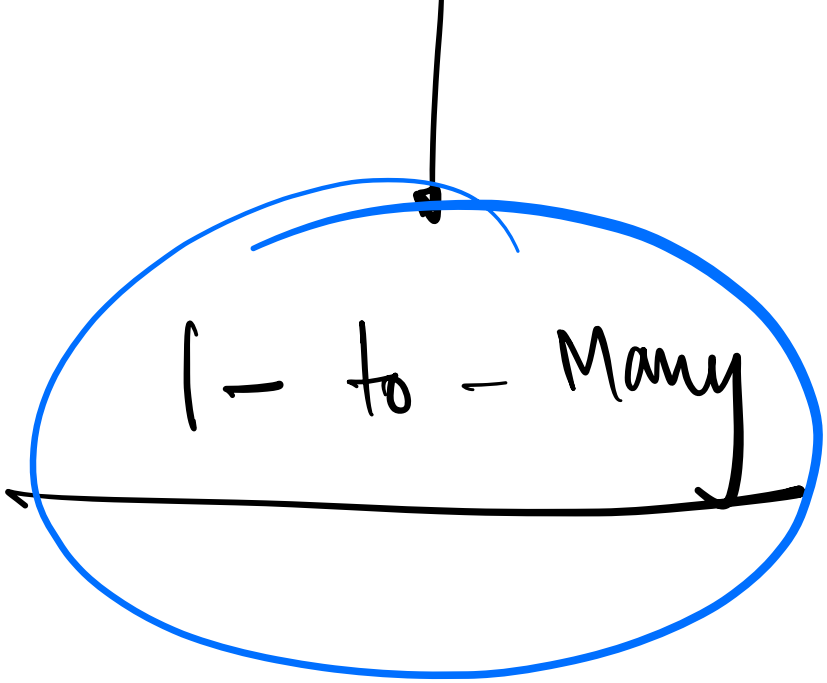
1C ⟵ 1 Profile

1 – to – 1

② One - to - many Relationships

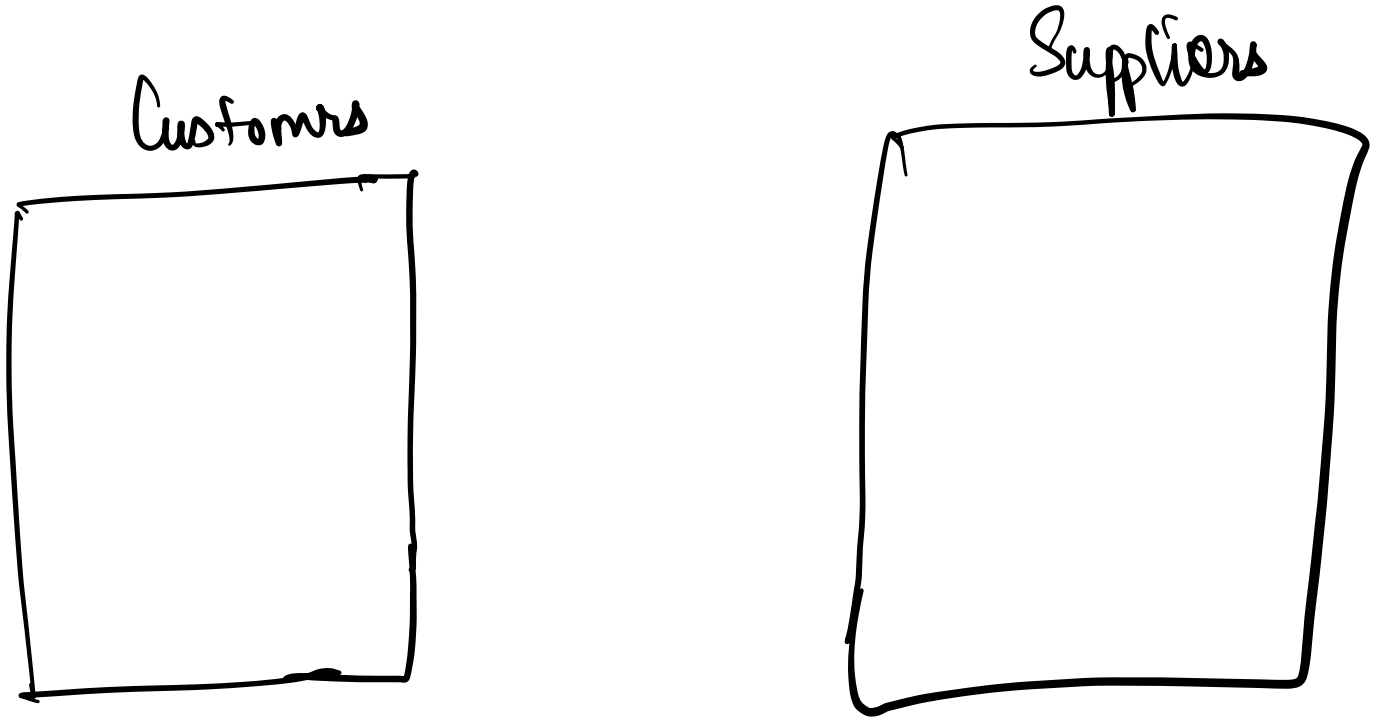




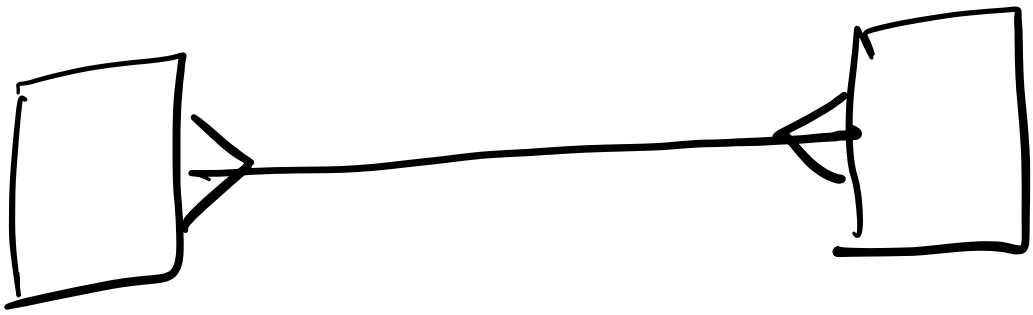


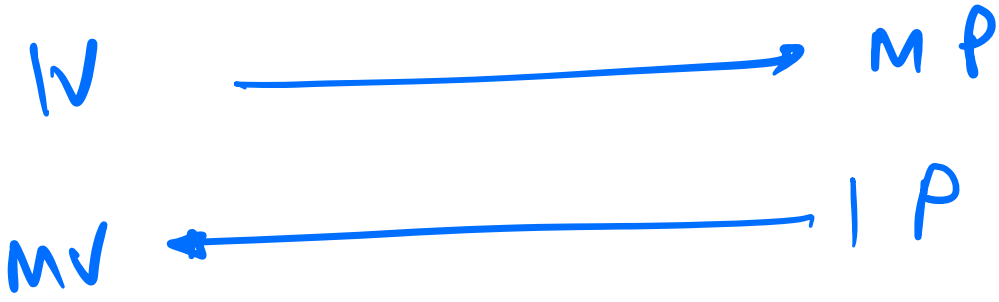
Relationship

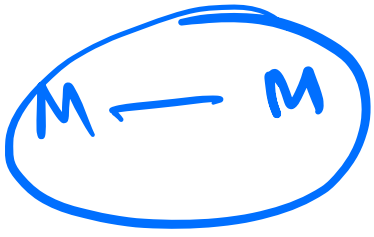
③ Many - to - Many

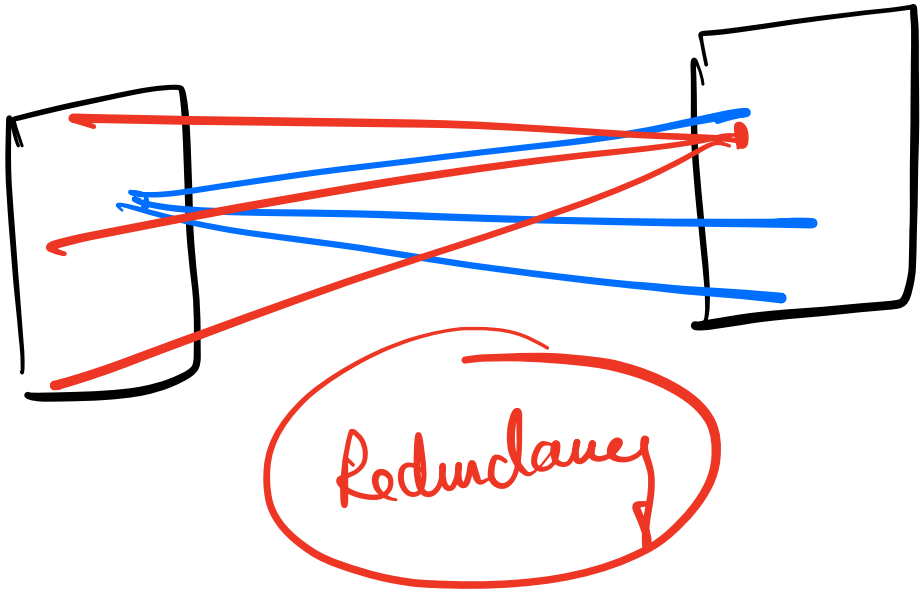


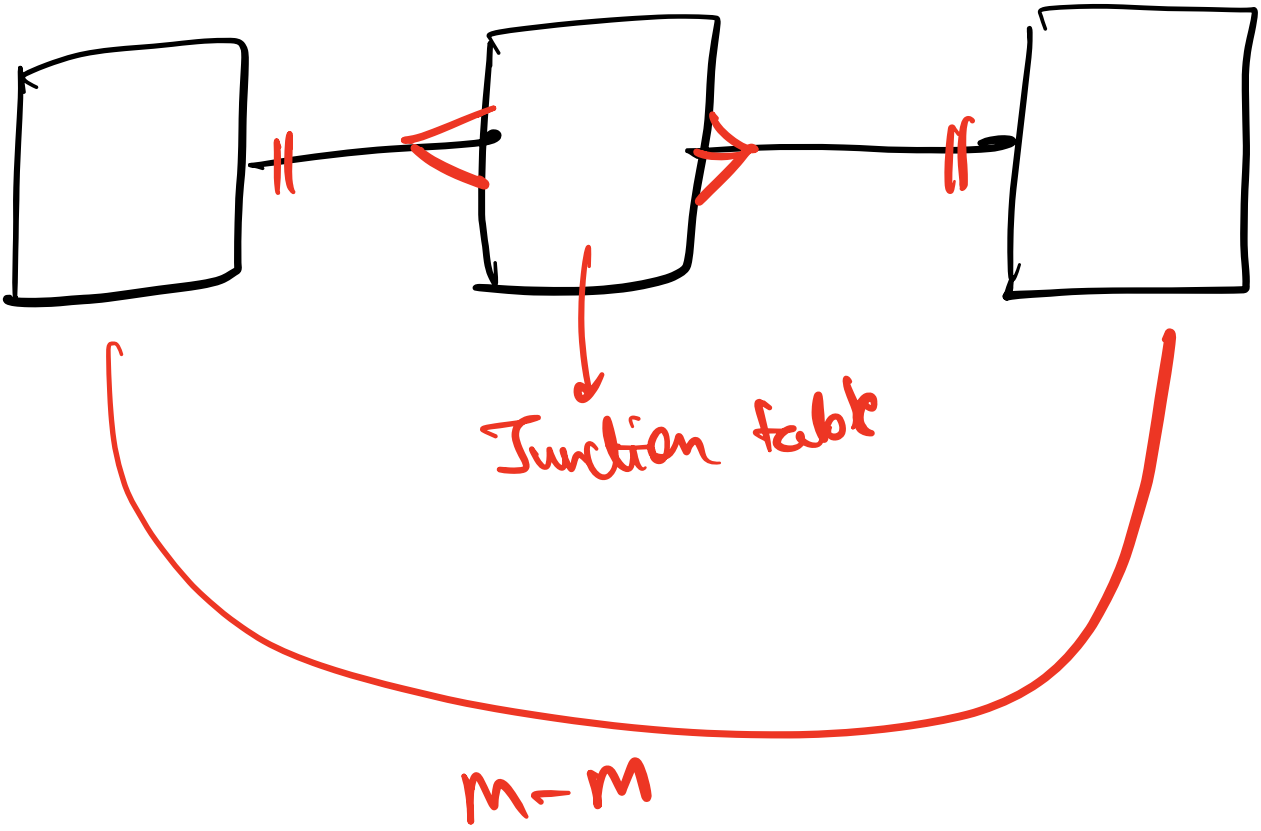
Many - to - many Relationship




IV
MP
MV
IP


M — M

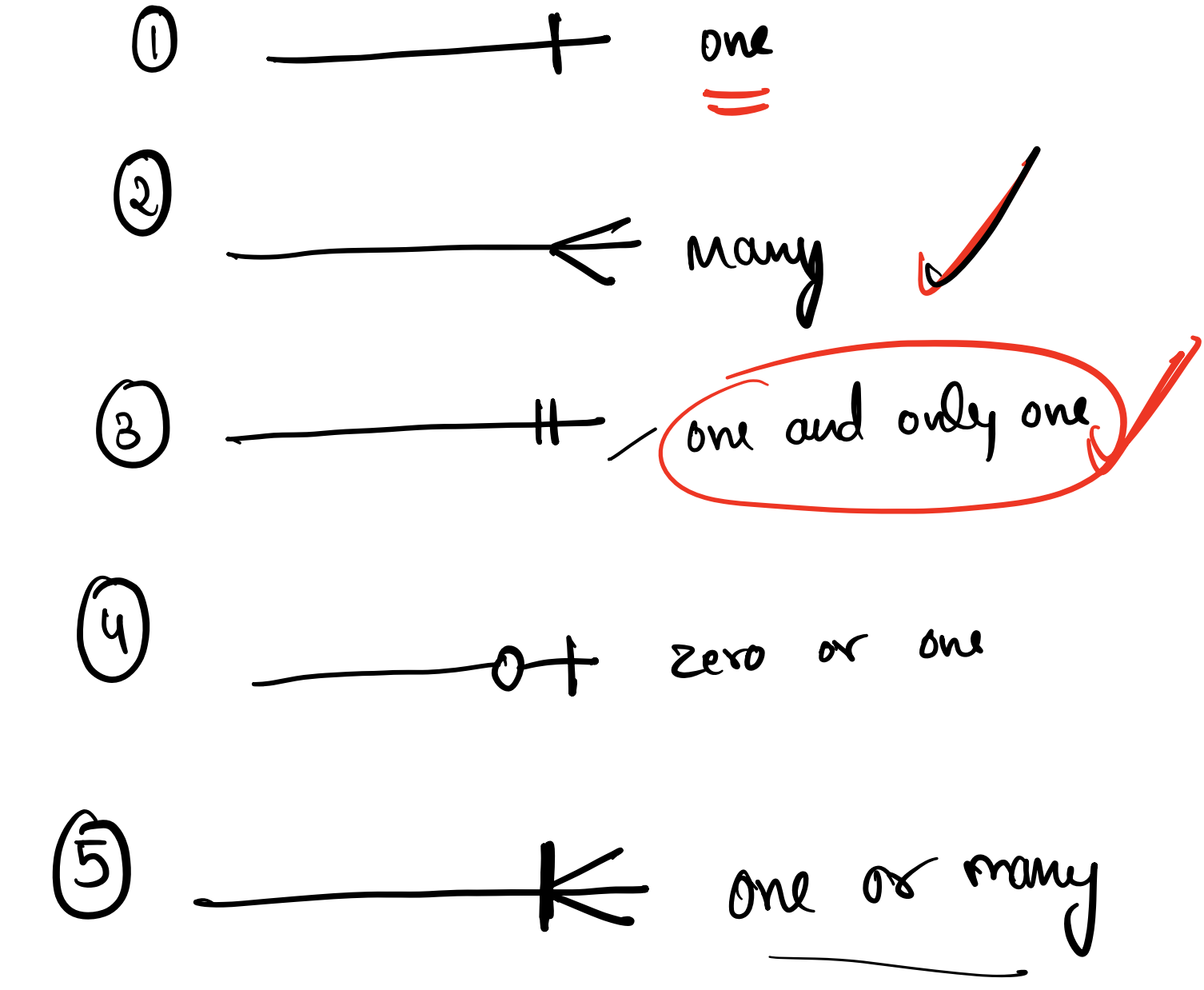

Redundancy


Junction table
M - M

E-R Diagram

↳ enfity - Relationship Diagram

Edge notations



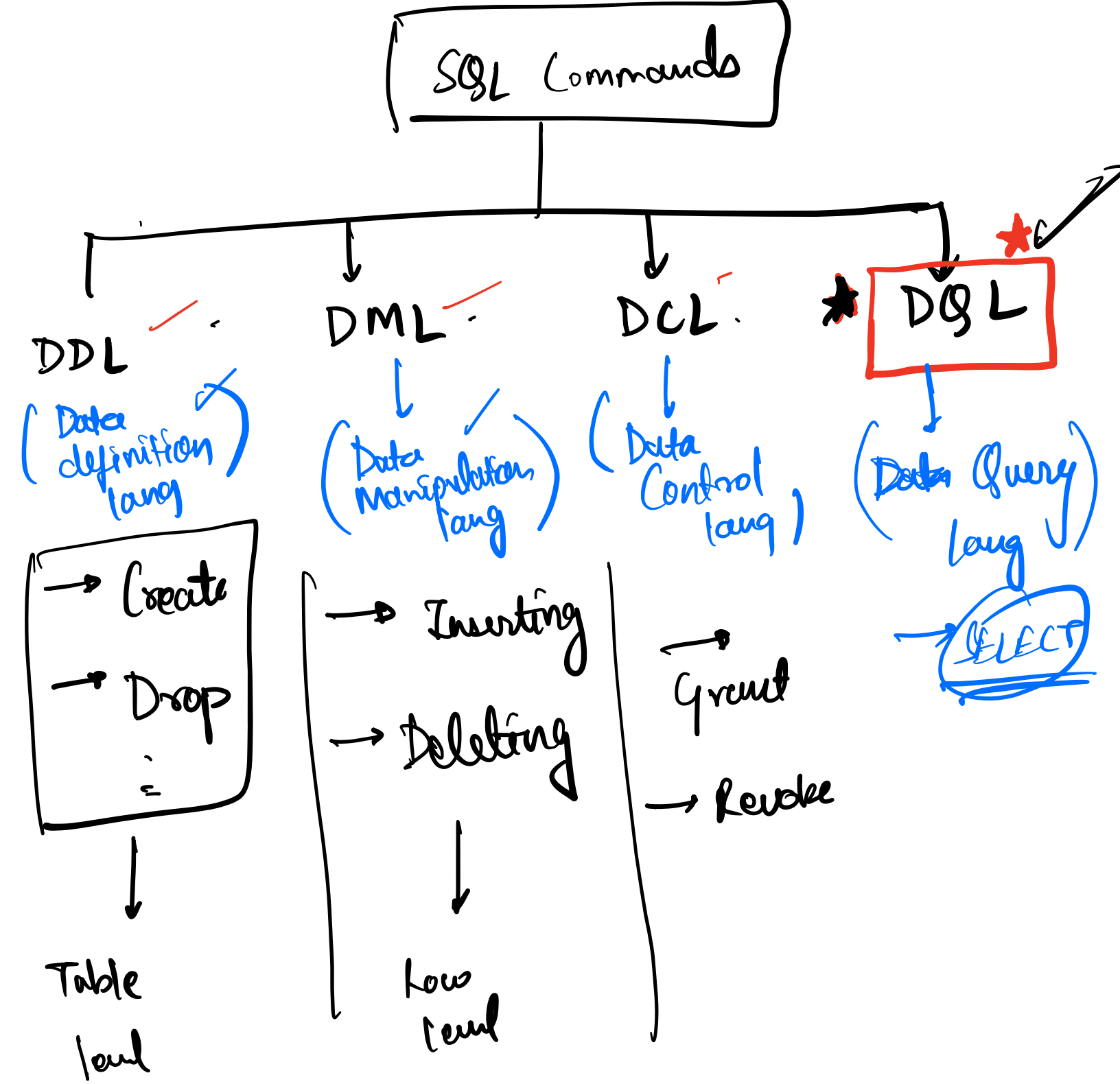
6

Zero or many

Interact

SQL

Structured Query Language


SQL Commands
DDL
(Data definition lang)
DML
(Data manipulation lang)
DCL
(Data Control lang)
DQL
(Data Query lang)
Create
Drop
Inserting
Deleting
Grant
Revoke
SELECT
Table level
Row level

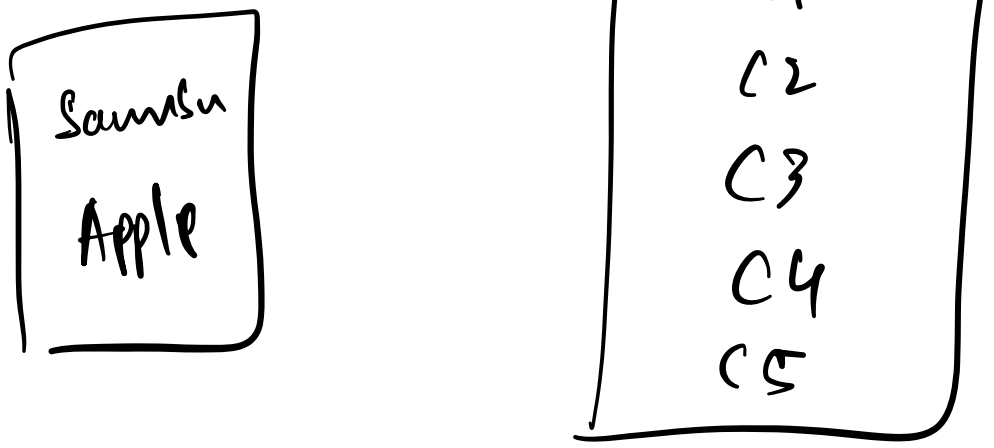
Query :- (SQL Syntax)

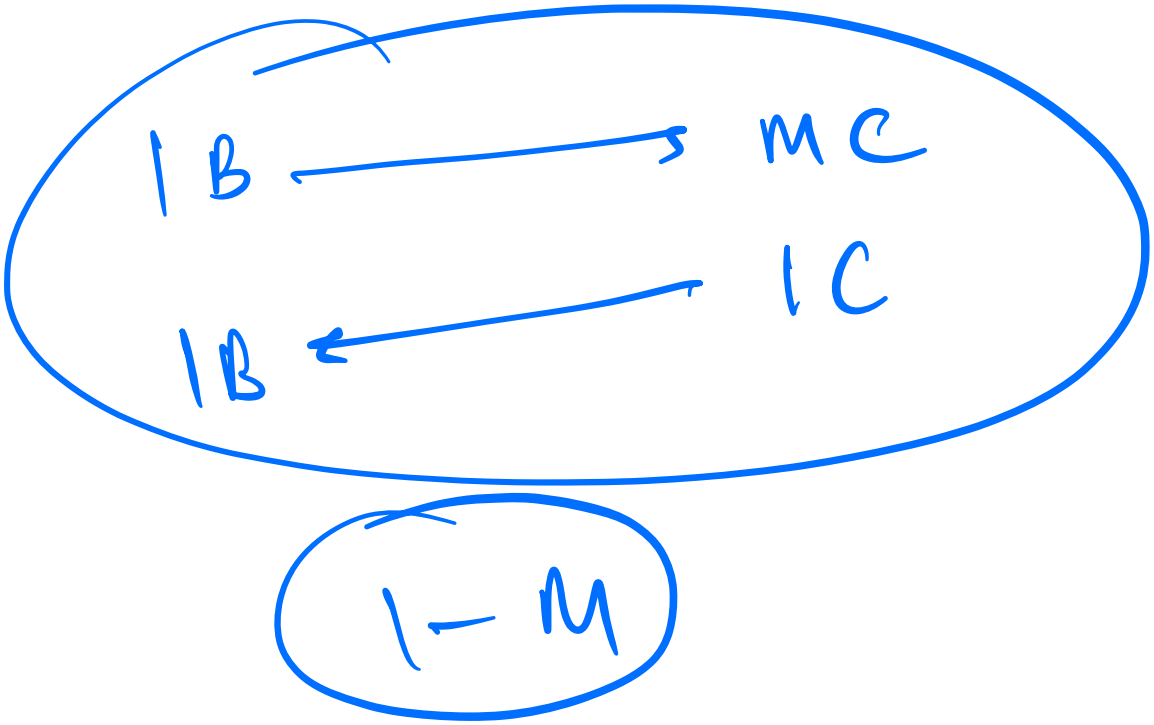
SQL code that retrieves data from the DB

Syntax:

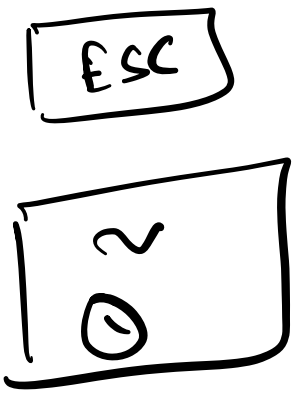
```
SELECT  [ Columns to return ]
FROM    [ table_name ]
WHERE   [ filtering condition ]
ORDER BY [ Columns to sort on ]

LIMIT n
```

Quiz

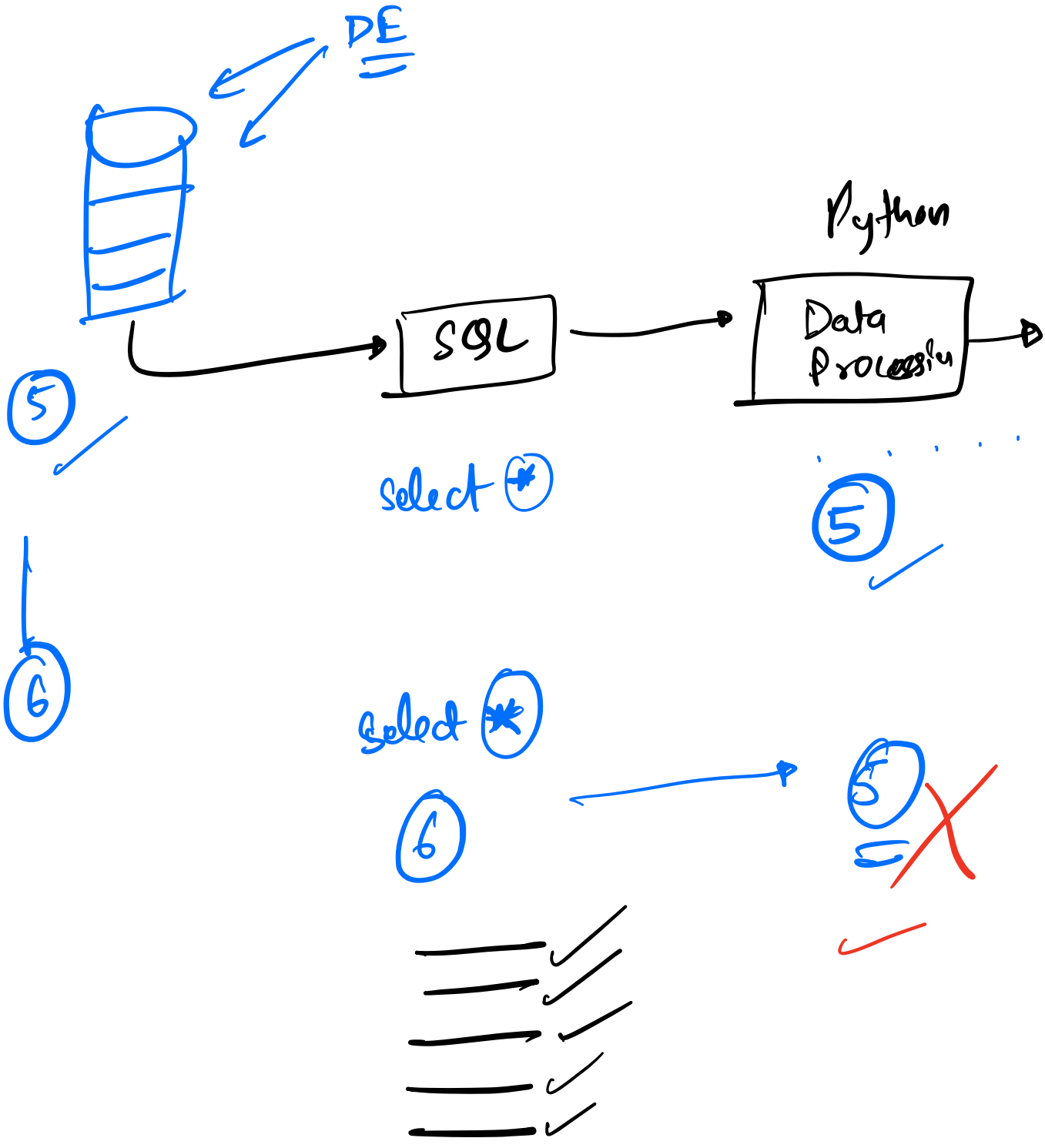




(9.1) Extract all the product details from the market database



* ⟶ all the columns


DE
Python
SQL
Data Processing
5
select *
5
6
select *
6
5

(Q.2) Sorting in SQL (ORDER BY)

(Q.2) Sort the product details data in Ascending order of Product ID.

✓ Select

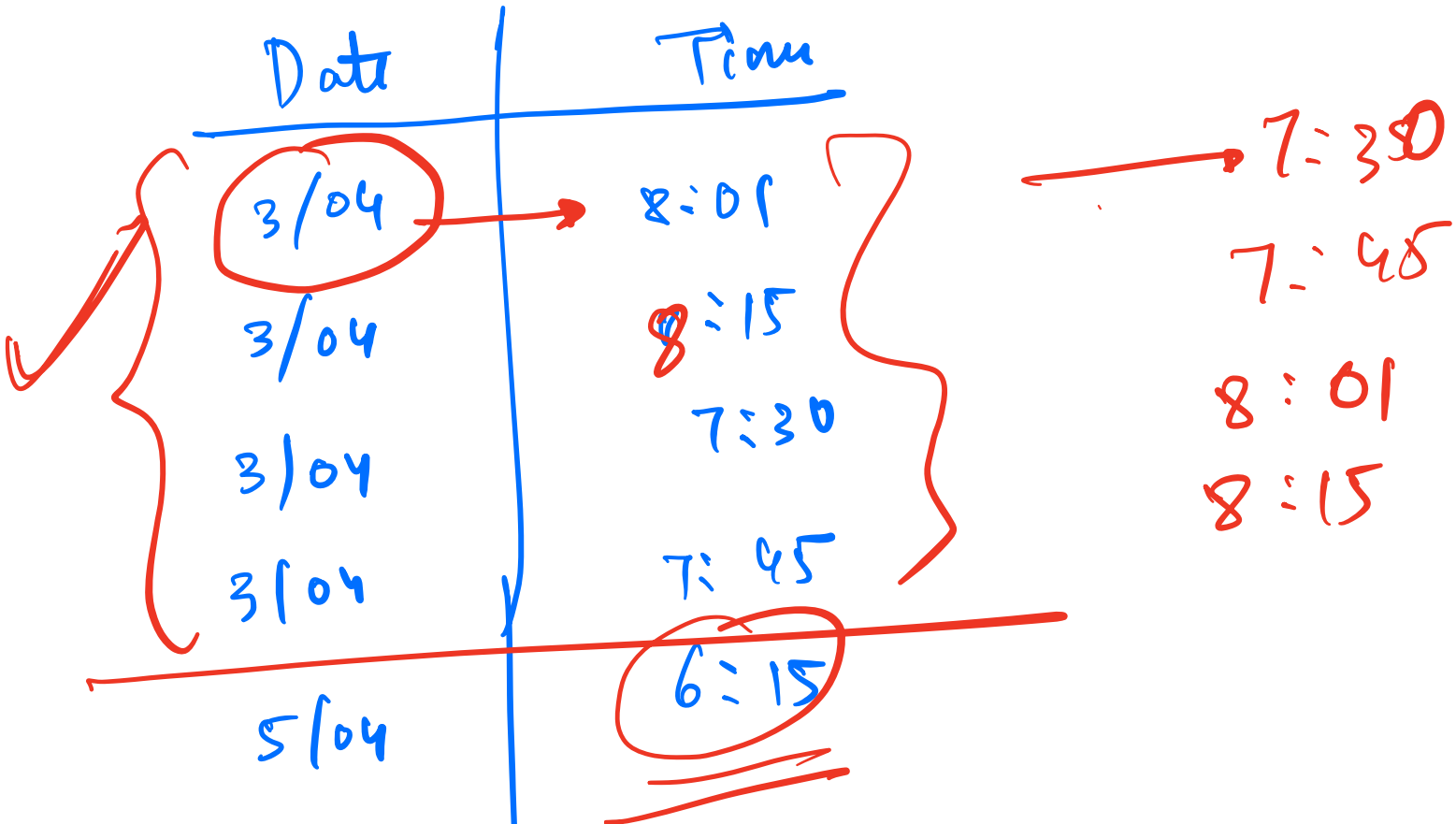
✓ FROM

ORDER BY product_ID

default sorting order → Ascending

order by p_id desc

(Q.3) Get all the customer purchases sorted by date.



5/04

9:10