

Agenda

a. BETWEEN Keyword

b. IN Clause

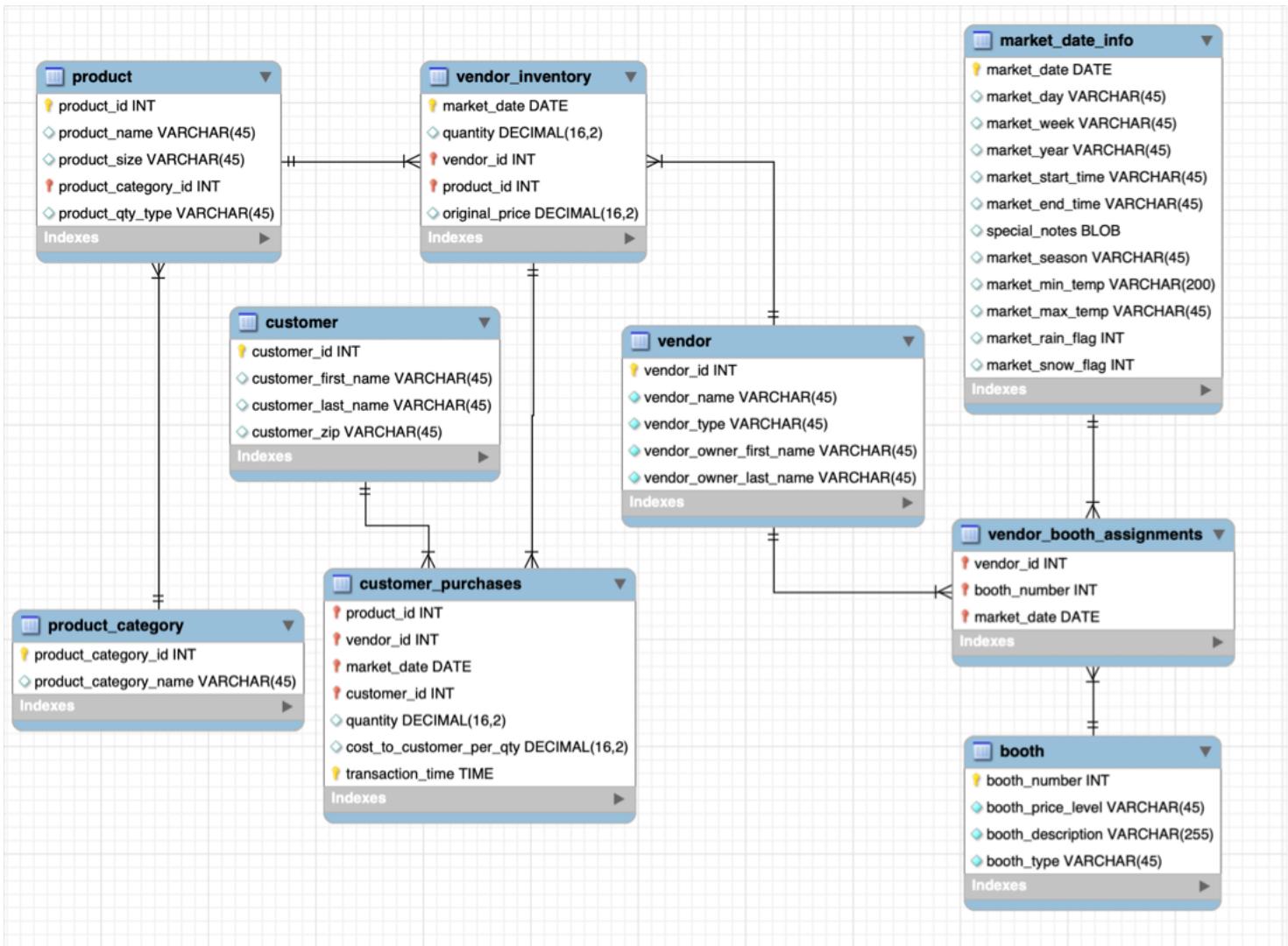
c. LIKE keyword

d. Sub queries

e. Case Statement

f. Aggregation in SQL

g. Group By



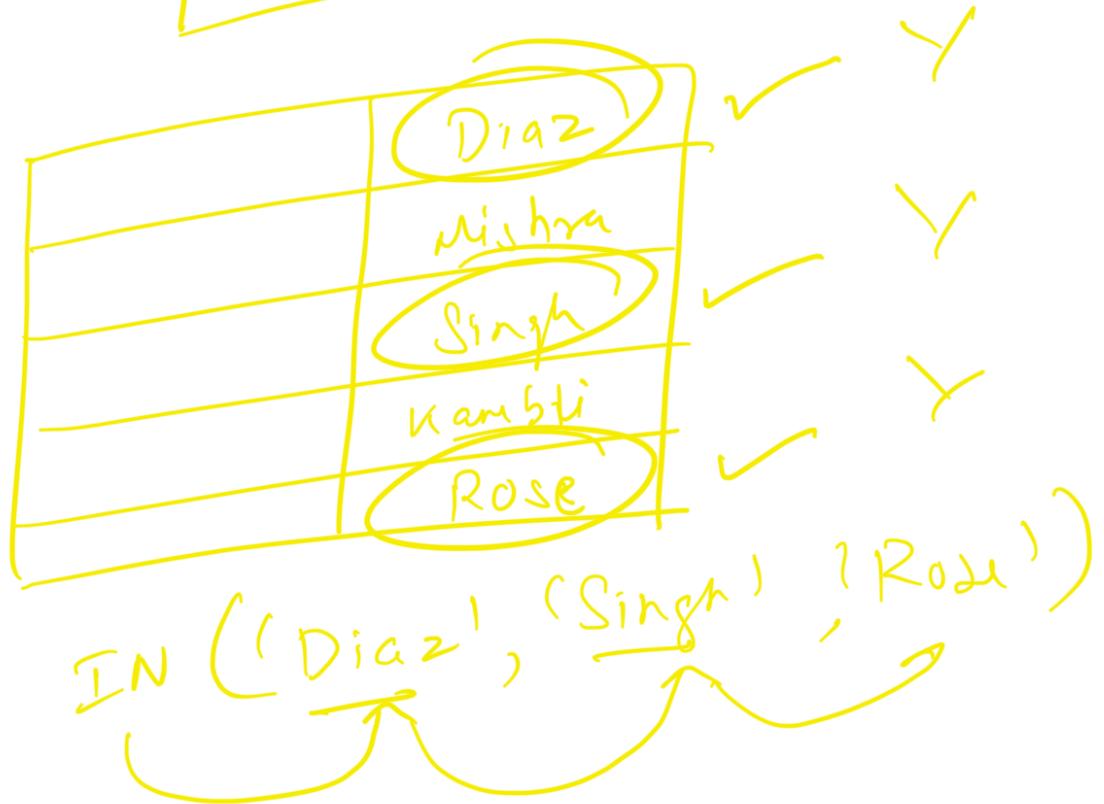
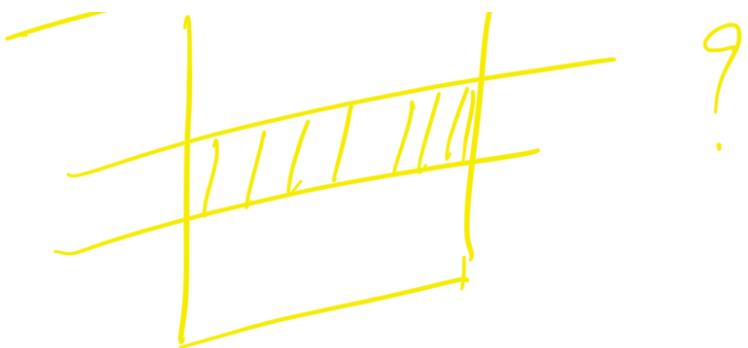
① bitCap ÷ amt
Select bitCap ("@amt") → A_{amt}

② Round ÷ 12.3333
12.34 12.35

Select Round [12.3333, 2)
⇒ 12.34 → 12
⇒ 12.3 → 12
6% DA/DS
+ CRUD + SP

Day 5:
[>, <, =] ↵

→ 4 and 7 also include 10
✓ 7 4 and 7 OR 7 10
→ BETWEEN clause



⇒ Pattern Matching



where name (like) 
Case Sensitive

I% = stand in for 0 or more characters

- ① shubham ✓ → like 'shubham'
→ ② shubhaditya ✓ ✓ shubham
→ ③ shooran X ✓ shubhaditya
→ ④ Simran X
→ ⑤ Sameer X
→ ⑥ shubash ✓
→ ⑦ Henant ✓ X =
→ ⑧ shub ✓

ii) like '%(hu)b'
→ 1, 2, 6, ⑦, 8

iii) a like 'aut%'
x M Autumn
→ ② auto ✓

"U" "I"
 X ③ Autosales ④ Fragments
 3.5 aut = none

⇒ 3.c aut = 2, 4

b) UnderScore = stands in for one and only one character

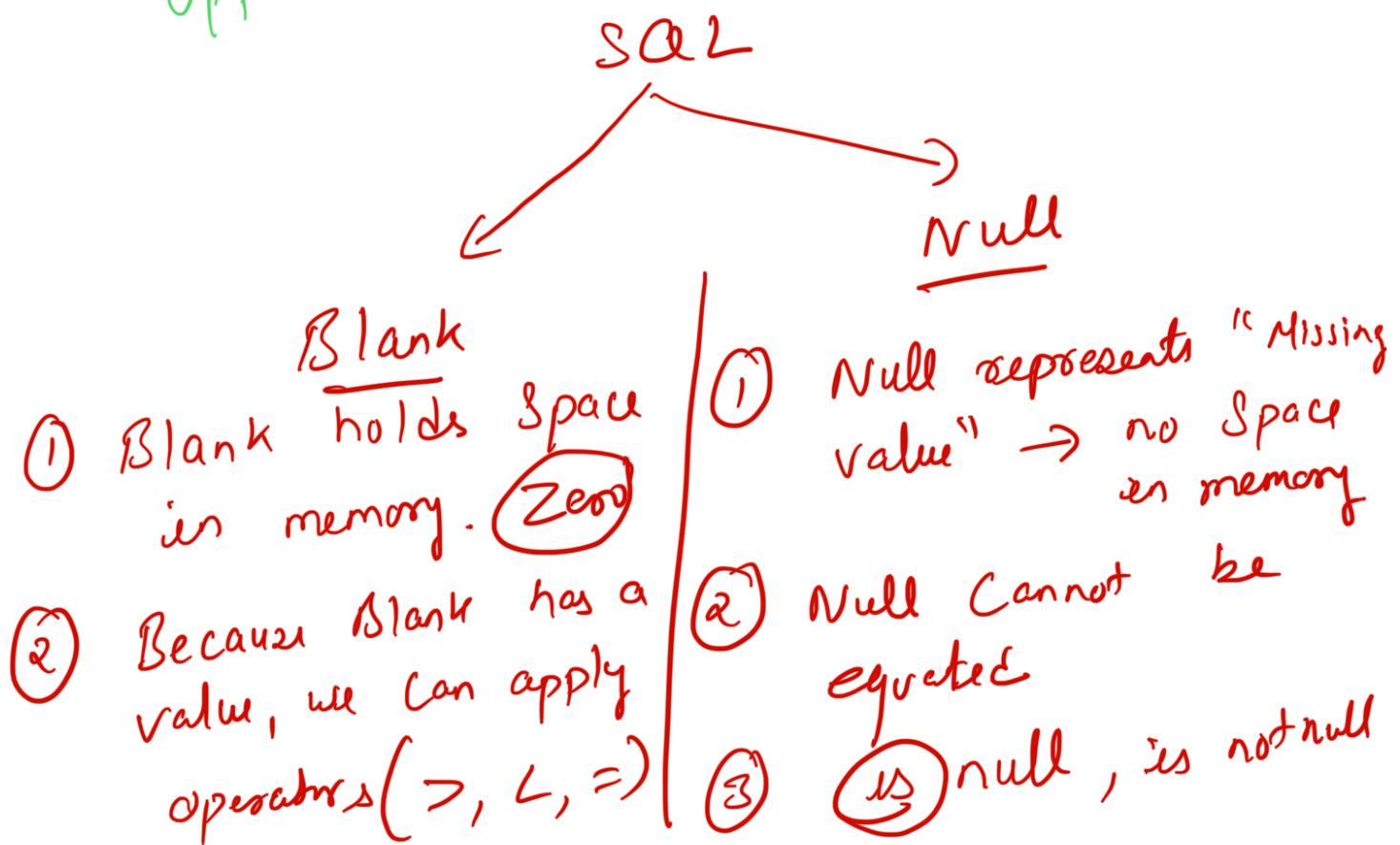
like A
 ✓ ① Anita ② Anita X
 X ③ Arched. ④ Aunt ✓
 ⑤ A.M.a.B X ⑥ A Mat ✓
 ⑦ A ① ① i ✓

Practice Question

like aut Autumn ✓

✓ (a) Mahout~~on~~
 ✗ (b) Butter~~ful~~
 (c) route~~d~~ X
 ⇒ %~~O~~% Ans = All

lower (Jeri) = 'jeri'
 upper (Jeri) = JERI



A = binary 0101001
 - - - - - - - - - -

→ = (0 →)
 ASCII

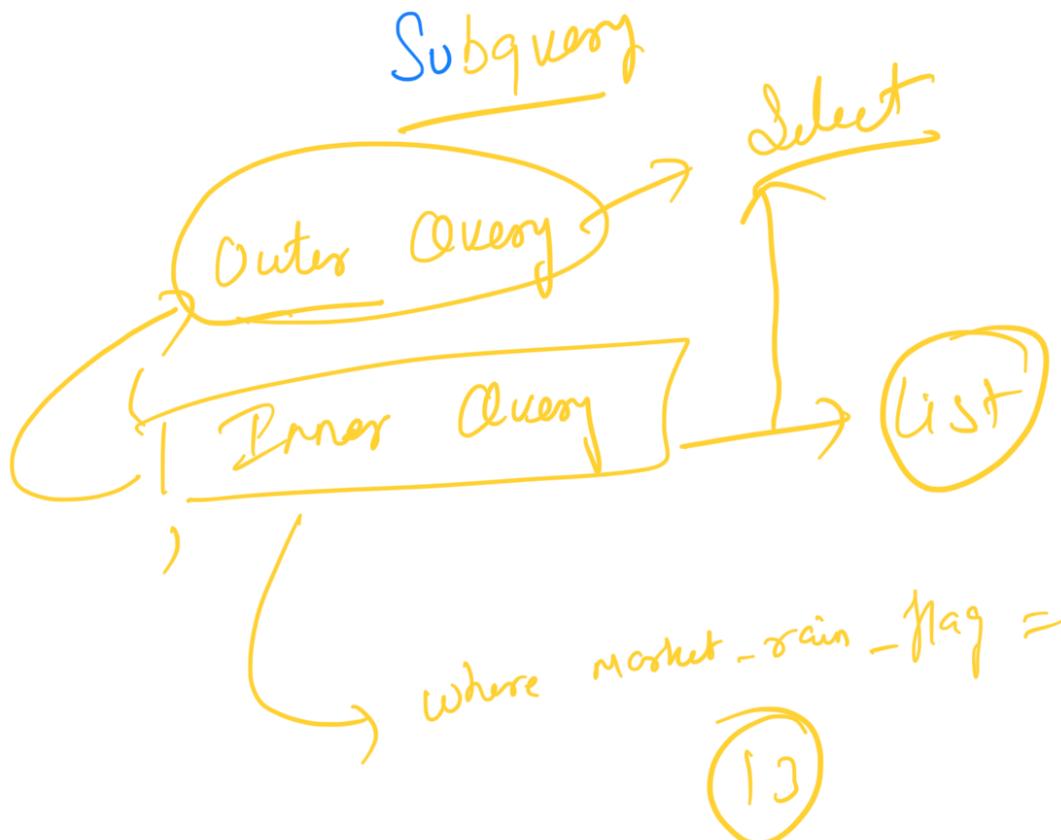
Trim → it removes leading &
 (solution for blank) trailing spaces. (Not
 between)

when trim(name) IN (A, R, H)

name = 'Anit@Singh--' ↓, ①
 = 'Rayda@Amanath-' ↓, ②
 = 'Hannath@B---' ↓, ③

name = 'Saurav@Kumar' ↓
trim(name) = Saurav@Kumar
 Saurav ----- Kumar

Null
 ↳ if null [Co], value)



Select * from
CP where market_date IN

(Select * from
MDT where train_flag = 1)

→ ['13-04-19', '14-04-19',
 '15-04-19']

Doubt clearing session

Qn. 1 to 20 exclude 2

Select *
from table
where not in 2 ;

1, 3, 4, 5, 6, 7, 8, 9, 10

An.2 Regular Query

amit1234@ymail.com = RegEx
→ like 'amit%@% ---

Day 6 -

Subquery

⇒ Case Statement

}

Case
when [TTT] then [IIII]
when [IIM] then [IIIA]
else [dropping out]
End.

TTT \Rightarrow IIID

$\rightarrow AB - SN - \text{IM} \rightarrow \text{IMA}$

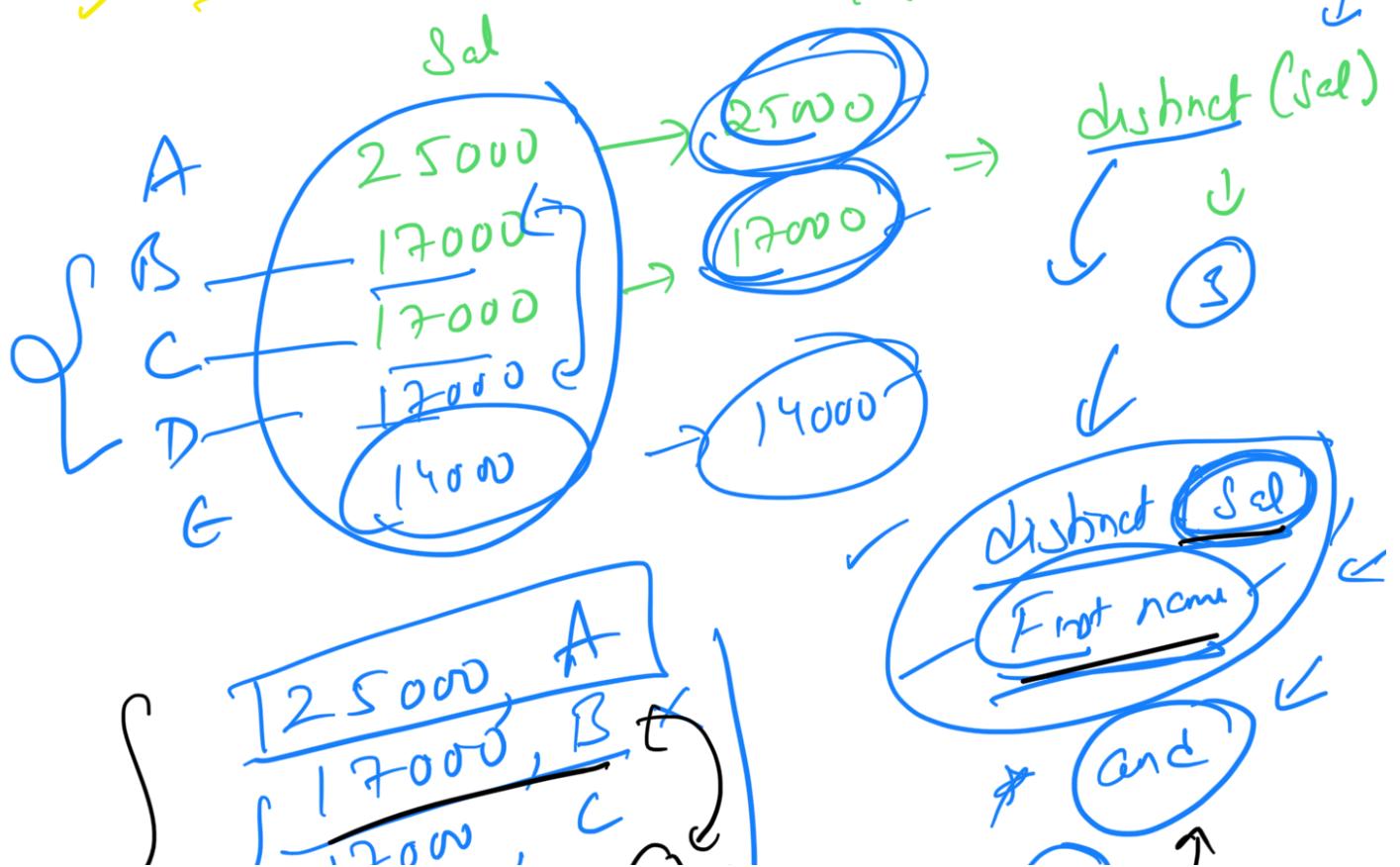
AM

! IT ON
! IM
Dropping out

\rightarrow Distinct
 \hookrightarrow remove duplicates

| | FN | LN | |
|---|---------|-------|--------|
| 1 | YUV | chain | |
| 2 | YUV | Singh | (Sing) |
| 3 | YUV | Yadav | |
| 4 | Shaibor | Yadav | |
| 5 | Karma | N | |

Select distinct FN, LN from employee;
 $1+1+1+1+1 \Rightarrow 5$
 $1+1+1+1 \Rightarrow 4$



$$17^{\text{th}} \text{ Dec } 2000 \rightarrow (5)$$

17 ~~00~~
 2000, 6
 $2 \times 3 = 6$
 $3 \times 2 = 6$

→ MOD

$$14 \div 3$$

$$3 \sqrt{14} \quad \begin{matrix} 14 \\ 12 \\ \hline 2 \end{matrix}$$

$$\underline{\text{Mod}}(14, 3) = 2$$

date 1 2 3
4 5 6 \Rightarrow

| |
|---|
| 2 |
| 4 |
| 6 |

$\text{data} \% 2 = 0$ then even
 $\text{MOD}(\text{data}, 2) = 0$ even

$14 \% 3$
 $\rightarrow 14 \quad 12$
 $\quad \quad \quad 12$
 $\quad \quad \quad 0$

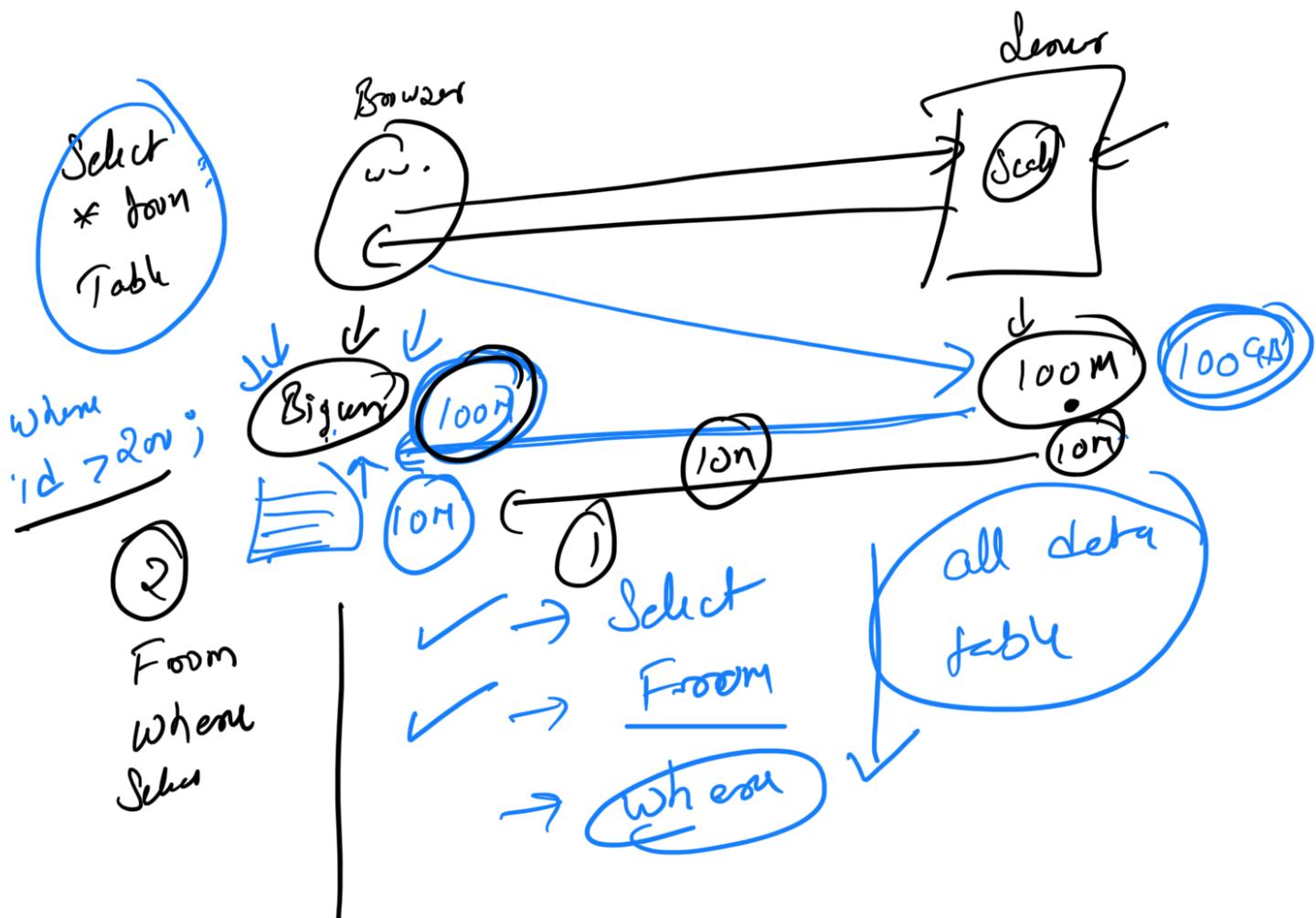
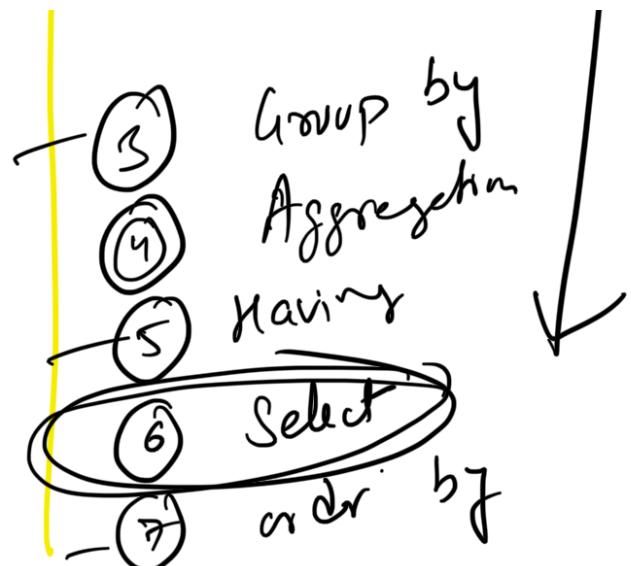
Syntax

① SELECT ()
 - ② FROM ()
 - ... WHERE ()

Execution Cycle

- ① FROM
 - ② WHERE

- (2) UNFR
 - (3) GROUP BY ()
 - (4) Having ()
 - (5) ORDER BY ()
 - (6) limit
 - (7) offset



Aggregation functions

- Aggregation functions

 - ① Sum
 - ② Count
 - ③ Min
 - ④ Max
 - ⑤ Avg

no of elements in a column

① Count = . . .

→ Select * from table;
→ Select Count(*) from table;
→ Select Count(1) →

