DBMS - VII

SUB - QUERIES
& BUILT-IN
FUNCTIONS

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① Sub- queries
   - where con we use
   - types
     - Select, From, where
     - co-related sub

② Built-in functions
   - string, date, numeric

① Explain - query optimisation

② Views,

③ Indexes

④ Transactions

+ window Cascade

NoSQL
↳ HLD
↳ Async

ORM
↳ LLD
Splitwise
↳ JPA - micro ORM

- Hibernate)
    $\longrightarrow$ Caching
- JBoss)
    $\longrightarrow$ Search
- JPA — micro-ORM
    — | interacts |

Interview

$\longrightarrow$ DB round

$\longrightarrow$ Screener

    $\longrightarrow$ theory database?

— ACID
— Indexes
— Transactions

→ | LLD |

— queries

{ DDL
(DML)

DCL —

DCL —

① JOIN
② Aggregate
③ Sub-queries
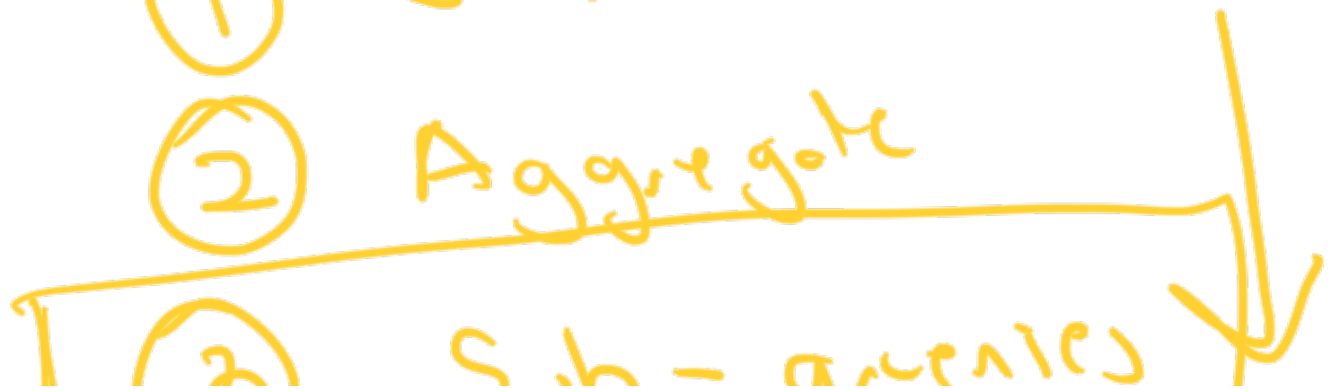
HLD = shanding
       — pantitioning

Sub queries

DML ⟶ Joins
          Aggregates
          ① Sub
          ② functions

$\hookrightarrow$ date

$\hookrightarrow$ numeric

— | Sub - queries |

$\Rightarrow$ nested queries

$\hookrightarrow$ SELECT

$\hookrightarrow$ FROM

$\hookrightarrow$ WHERE

Reasoning

Outer

Value

① Comparison —

② existence —

③ inclusion

Sta$\uparrow$ $\nearrow$ int

id	name	age

Value → Tanmay

SQL Injection

$\longrightarrow$ name   Tanmay

("   ")

alert('Error') $\longrightarrow$ code

ORM — SQL injection

— Code

regex

— FF — React immue

— cleaning — OWASP

Select * where $id = 1$

↓ id

index

→ Table scan

→ Table scan

$\rightarrow$ Index Value

$O(1)$

$O(N)$ ✗

hash map $\rightarrow$ red block tree)

$\Rightarrow$ Get value $\rightarrow$ $O(1)$

↓

tree

$log(n)$

$\rightarrow$ Get and inde — $log(n)$

Bt'

① SQL injection

② MOTM

VPC

pineapple

insert [script]

{ alent( )}

[| script]

FP

FE + BE + DB

→ [ ] script

FA
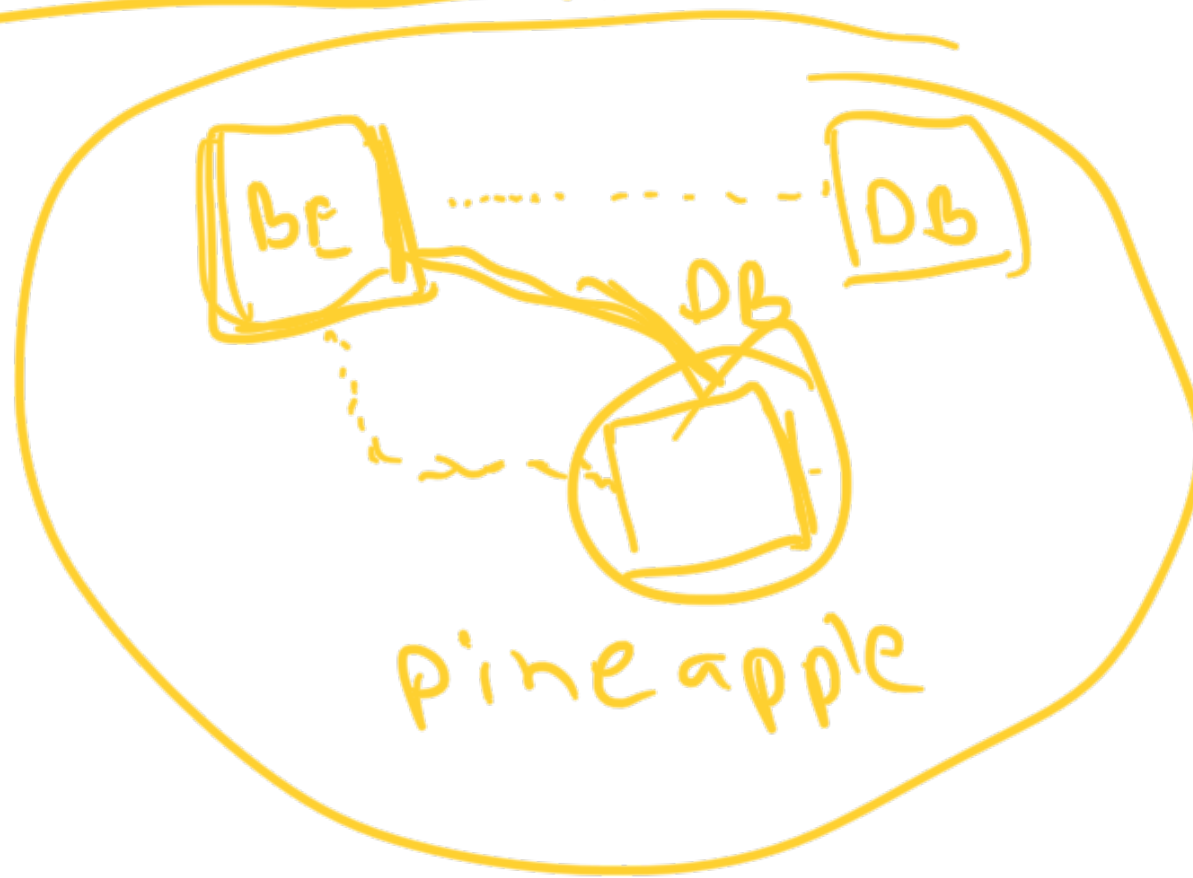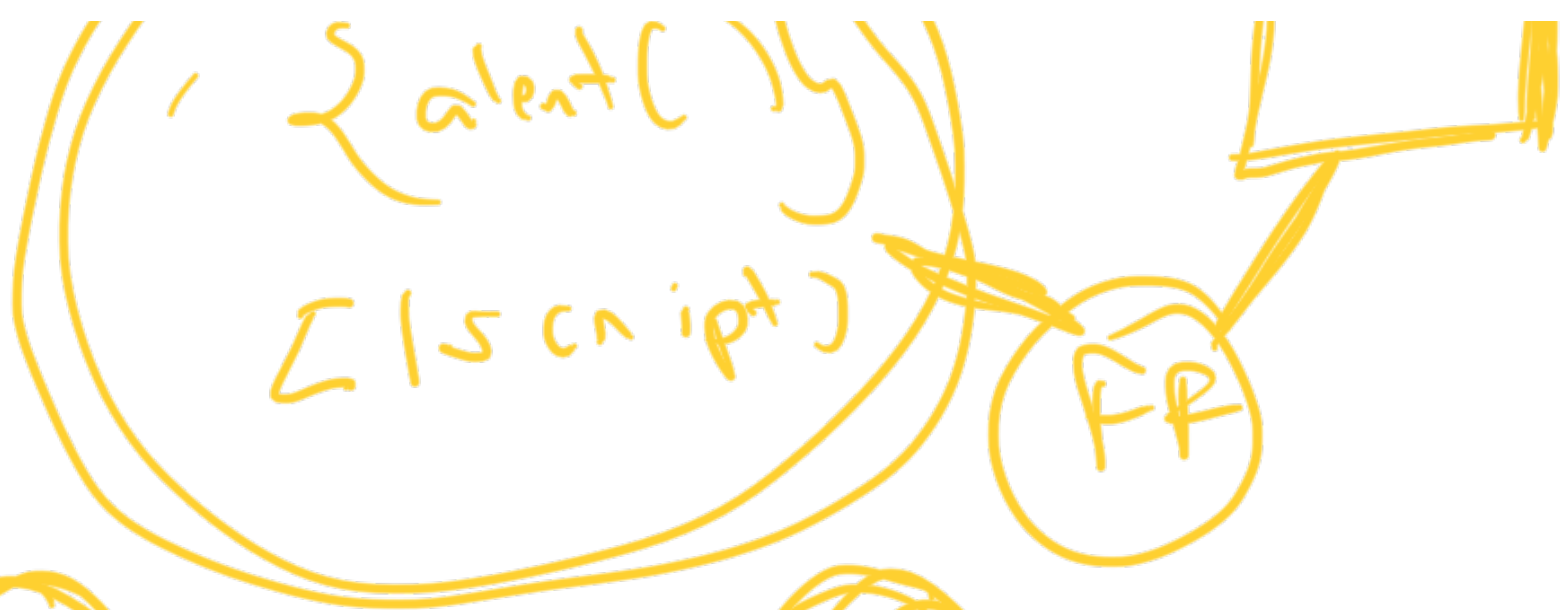
Developer ⟶ management

People

$\boxed{\text{I C}}$

技術 → technical

managers ⟹ | developers |

DSA - Leetcode

LLD - System design

— (Calculator)

— Pen

((')

tictactoe