Lecture 3
SSK

classmate
Date 24/01/18
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View of data

SQL> select * from emp; ↵

SQL> Empno Ename Job Sal Deptno.

⇒ Simple structure

1) Physical level - Programmer's area
2) Logical level - DBA / programmers
3) View level - for end user

Database schema & instances

Schema - Permanent structure associated with that database
- usually not changed (Less - infrequent)

Records - frequently changed

Instance - Tells about records currently available.

Data models

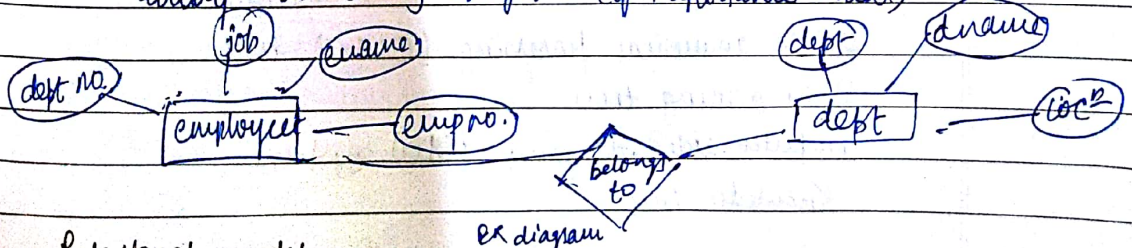
How to store or retrieve data.

Types -

i) Entity - relationship (ER) model
ii) Relational
iii) Hierarchical
iv) Networking

ER model - Graphical model

Entity - something tangible (of importance & real)



Relational model -

2D structure stored as rows, column in a table.

Normalization - Efficient method to access data.

Object relational model - NEW!

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Database languages

1) DDL : create, alter, rename, drop, truncate — Data def^n lang
2) DML : insert, update, delete — Data manip^n lang.
3) TCL (transaction control lang) : commit, rollback, savepoint → before commit → insert marker
4) DCL (Data control language) : → who can access what (for DBA)
grant, revoke

SQL> grant select, insert, update
on emp
to Scott;