

group by date

Q. Find the largest order taken by each salesperson on each date.

Lecture-8

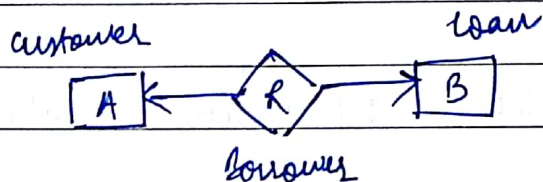
SSK

05/02/18

Mapping cardinalities

- Entity set
- Relationship set

① One to one



② One to many

if a customer can take multiple loans.

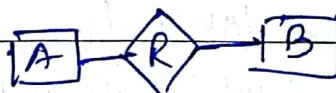


③ Many to one

one loan can be associated by more than one customer and each customer can take at most 1 loan



④ Many to many
No restriction



A single-valued attribute - ○

cust.id

this line means primary key.

A multi-valued attribute - ○

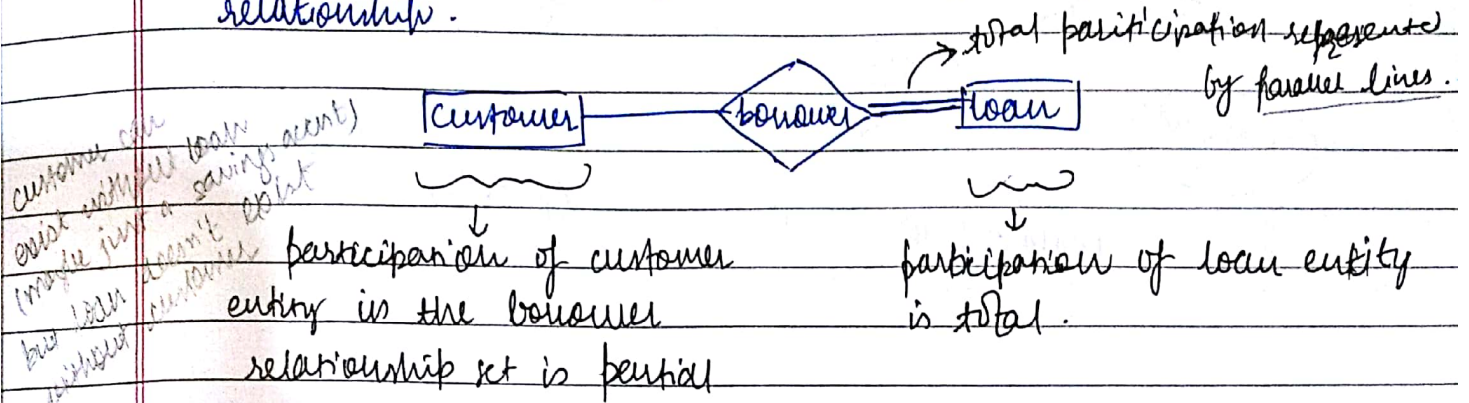
Derived attribute - ○

like age from dob

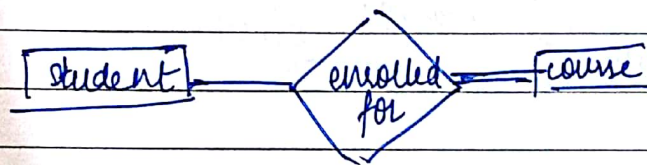
E-R model

Participation

Tells us how an entity in an entity set participates in a relationship.



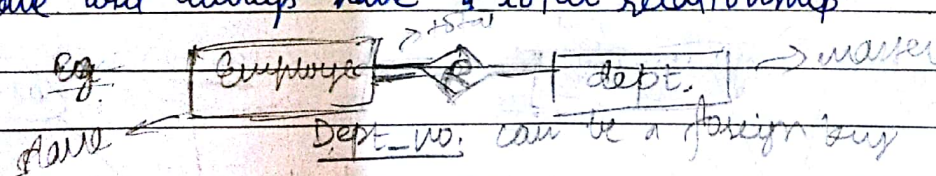
total, partial → participation constraints



Keys

• Super key is an attribute or a collection of attributes that can be used to identify one entity from the entity set.

- Candidate key - Any particular attribute (a singular super key) that can be used to distinguish an entity from another.
E.g. - customer id for customers.
- Primary key - A candidate key selected by database designer.
- Foreign key - The common key in a master-detail relationship. (slave) will always have a total relationship.



- Extraneous attribute for slave
- Candidate key for master