

## Steps to Make ER Diagram

- i) Identify entity set
- ii) Identify attributes & their type.
- iii) Identify relationship & constraints
  - ↳ Mapping
  - ↳ Participation

## → ER Model of Banking System

### \* Requirements

→ Branch name,

→ Bank → customer

customer → account & take loan.

customer associated with some Bank.

Bank → employees.

Account → saving & current.

Loan originated by Branch.

- ↳ ~~Loan can be given~~ same loan can be given to multiple customers.
- ↳ Payment schedule.

### \* Steps

Entity set & its attributes & types.

① Branch → name, city, assets

② customer → customer-id, name, DOB, age, contact-no

- ③ Employee  $\rightarrow$  employee-id, name, contact-no, department.
- ④ Saving account  $\rightarrow$  interest rate, limit.
- ⑤ Current account  $\rightarrow$  transaction-charges.
- ⑥ generated entity account  $\rightarrow$  account no, balance.
- ⑦ loan  $\rightarrow$  loan number, amount.
- ⑧ weak entity, payment  $\rightarrow$  Payment no, date, amt.

Relationship & Constraints

① Customer  $\xrightarrow{\text{honours}}$  loan  
 $M : N =$

② loan originated by branch  
 $= N : 1$

③ loan  $\xrightarrow{\text{loan payment}}$  payment  
 $1 : N =$

④ Customer  $\xrightarrow{\text{deposit}}$  account  
 $M : N =$

⑤ Customer  $\xrightarrow{\text{Banker}}$  employee  
 $N : 1$

⑥ employee  $\xrightarrow{\text{manage by}}$  employee  
 $N : 1 =$

