

[E-R Model]

- * First step in schema design
- * Entity - Relationship model.

Database design steps

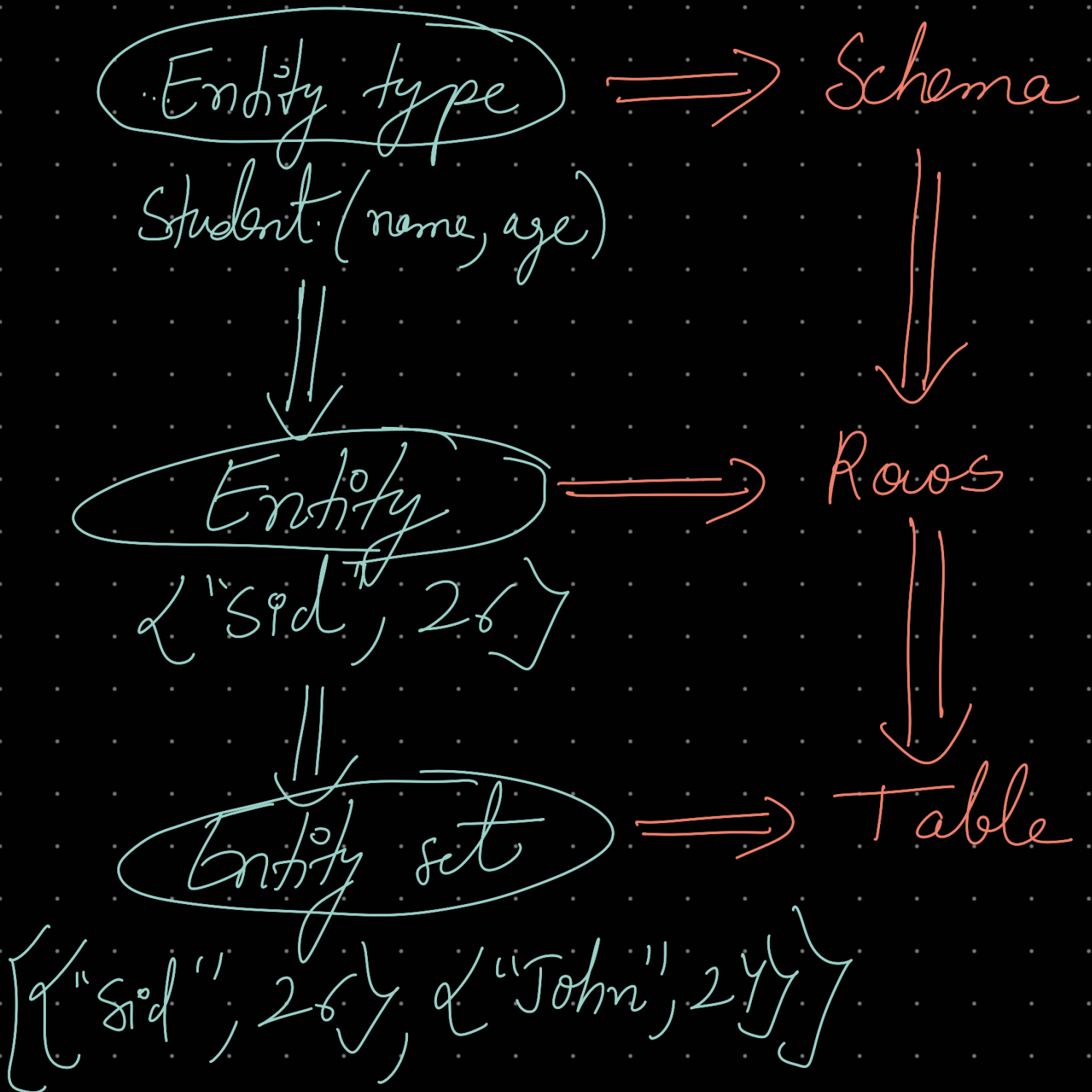
Req. requirement \Rightarrow E-R Model \Rightarrow Relational Model



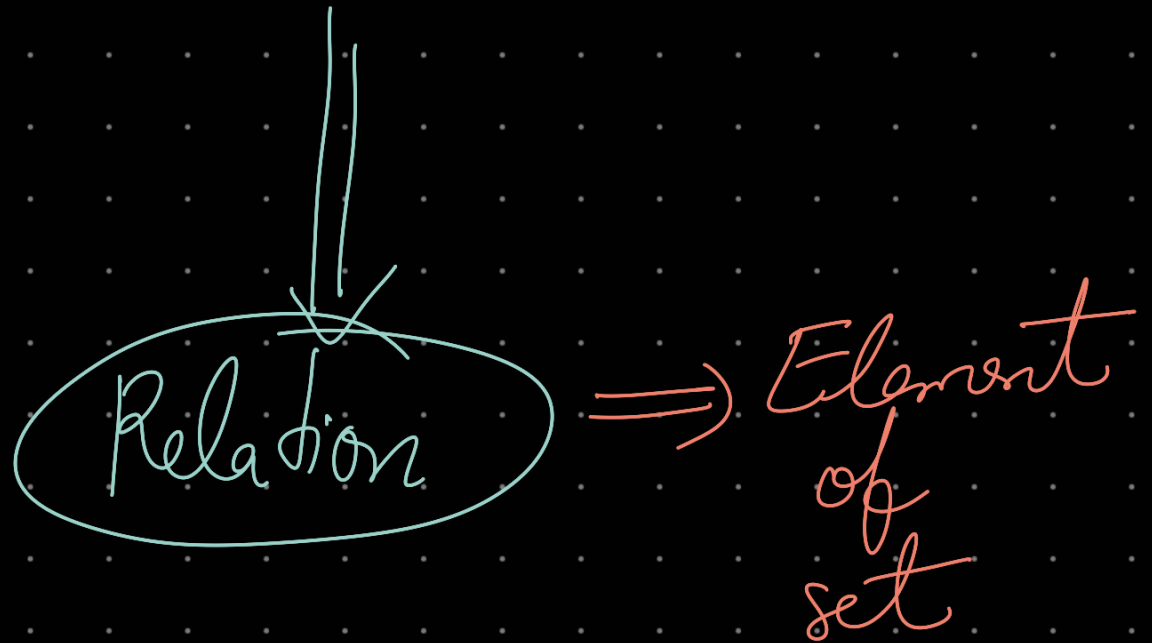
For good table design

- ① Entity (Any object) \rightarrow E.g student
- ② Attributes (Description of entity) \rightarrow Name, age

③ Relationship (Association b/w entities)



* Relationship type \Rightarrow Set name



E-R \rightarrow useful for communication
b/w users and DB designers

[Attributes]

① Composite	v/s	Simple
\Downarrow		\Downarrow
Can be divided further		Can't be divided
E.g \rightarrow Name $\begin{cases} \rightarrow \text{first} \\ \rightarrow \text{Middle} \end{cases}$		E.g \rightarrow Age

② Single valued v/s Multivalued
↓ ↓
Age Mobile number
↳ number 1
↳ number 2

③ stored v/s Derived
↓ ↓
Date of Birth Age
↳ can be calculated from DOB

④ Complex ⇒ combination of
composite + multivalued