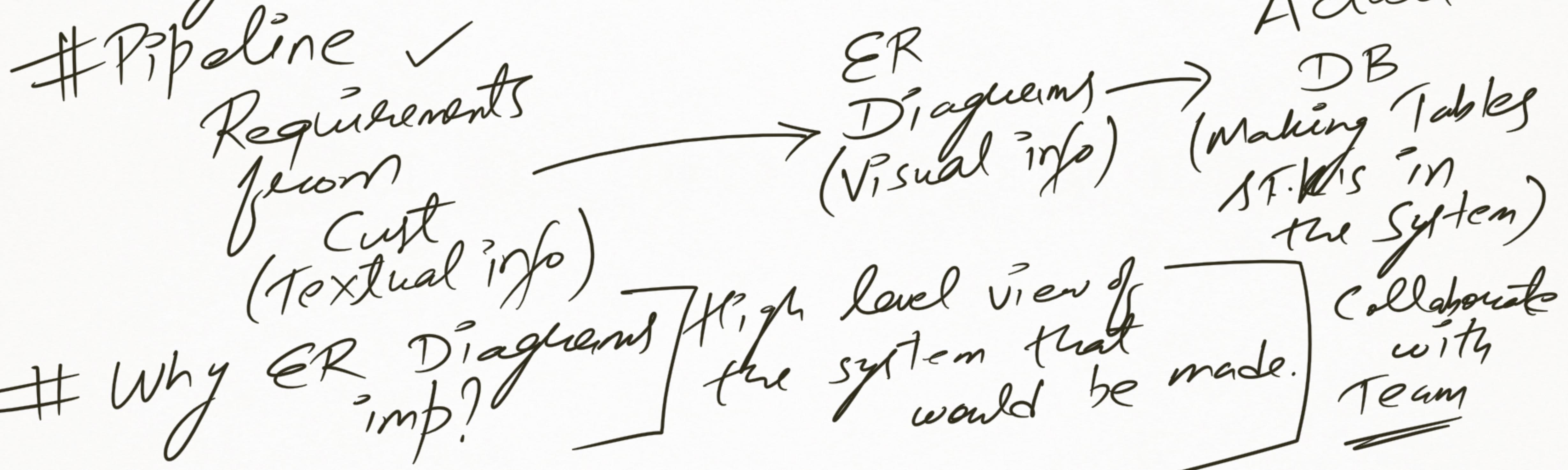


ER Diagrams

Entity Relationship Diagrams



ER Diagram consists of :

① Entity

② Relationship

③ Attributes

→ Representation
of entity

"Name of
Entity"
Rectangle

Person

Car

Customer

Office

Employee

Class

City

Noun Entity set

House

Teacher

Animal

Student

Product

Industry

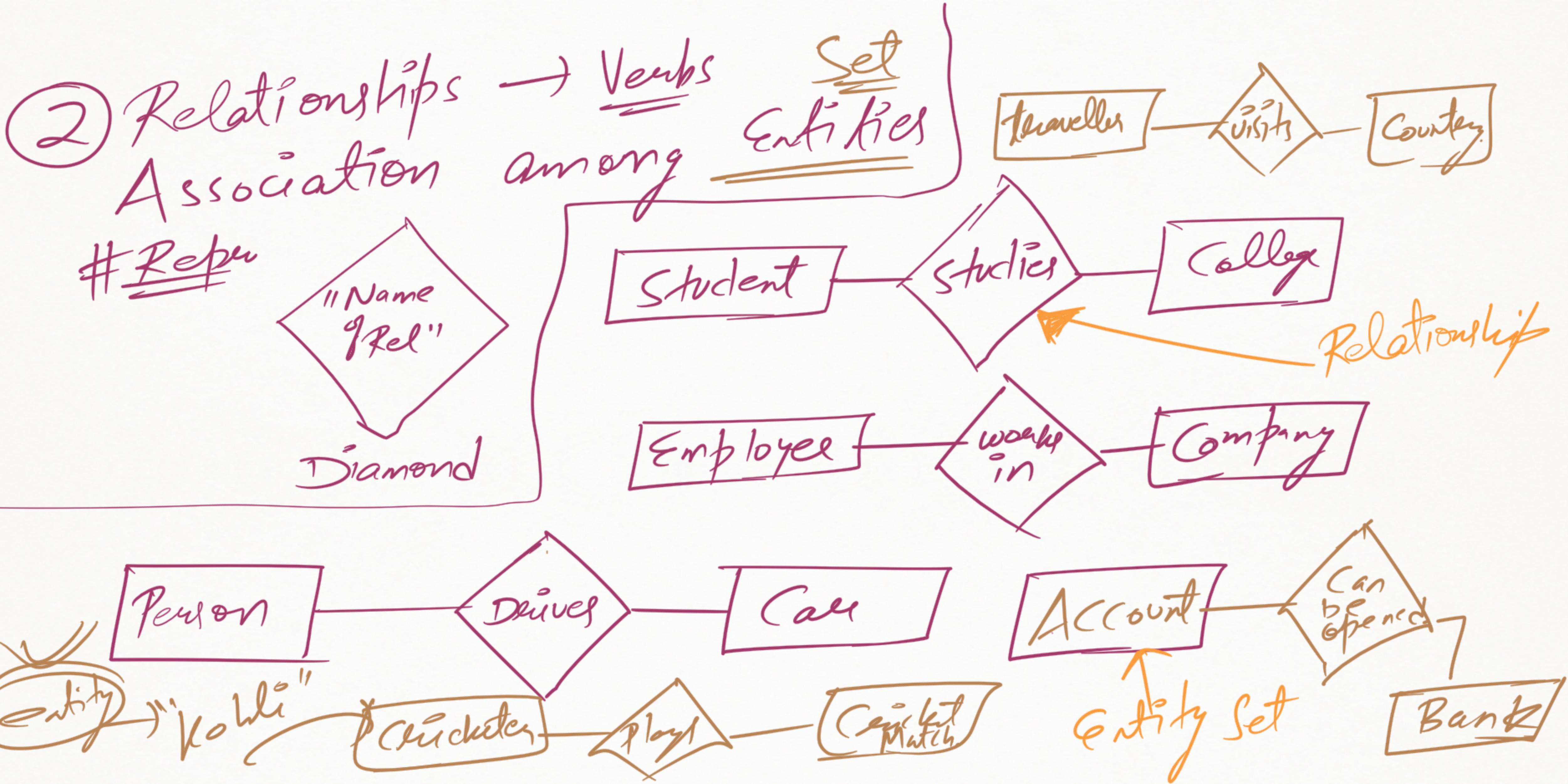
Bank

client

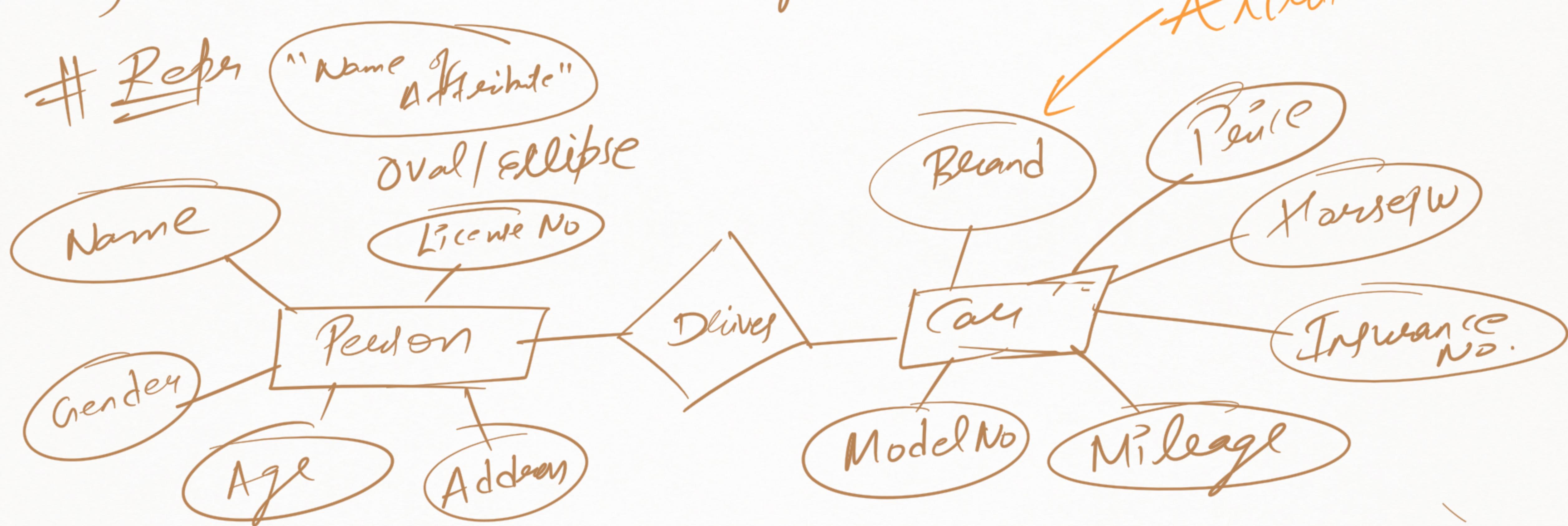
College

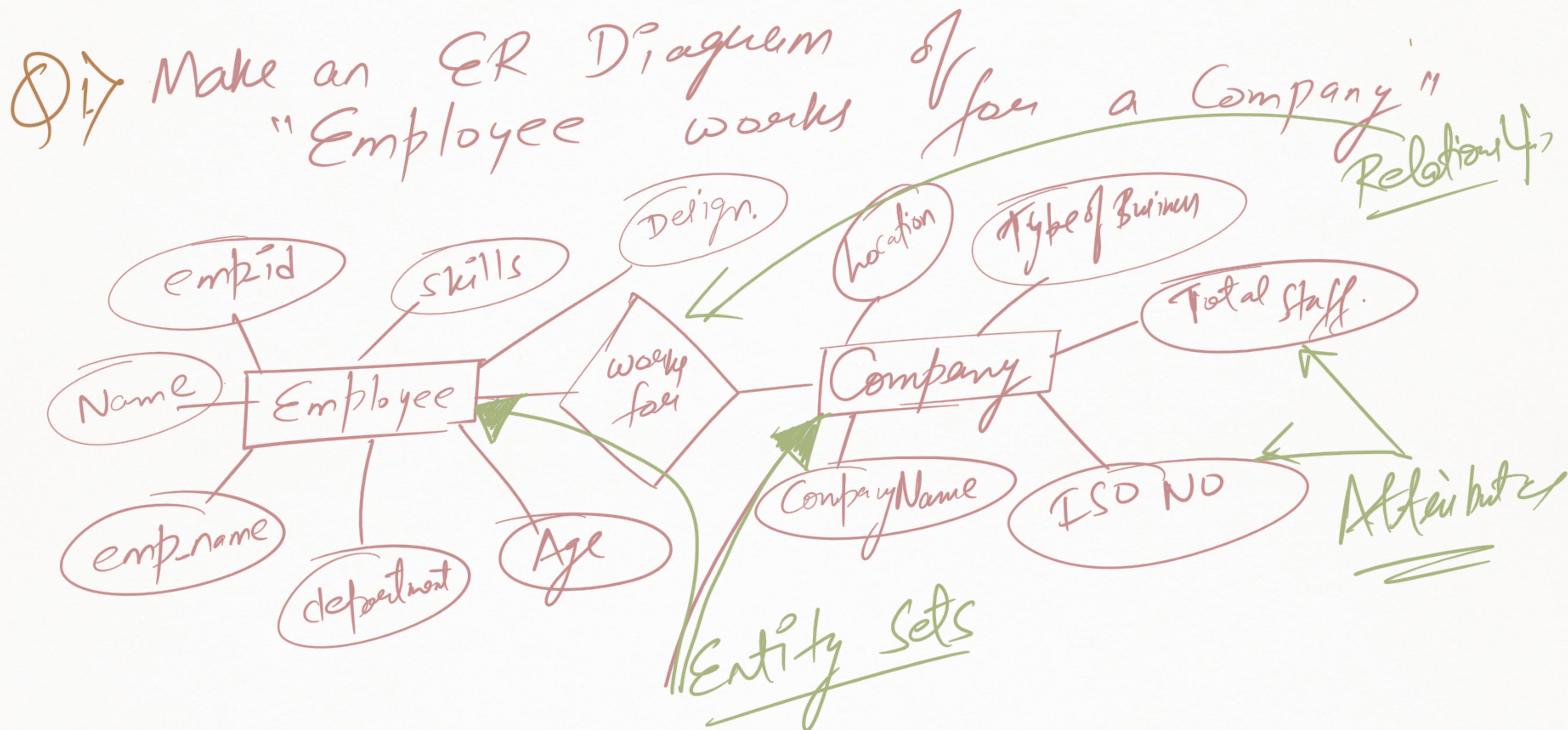
Entity

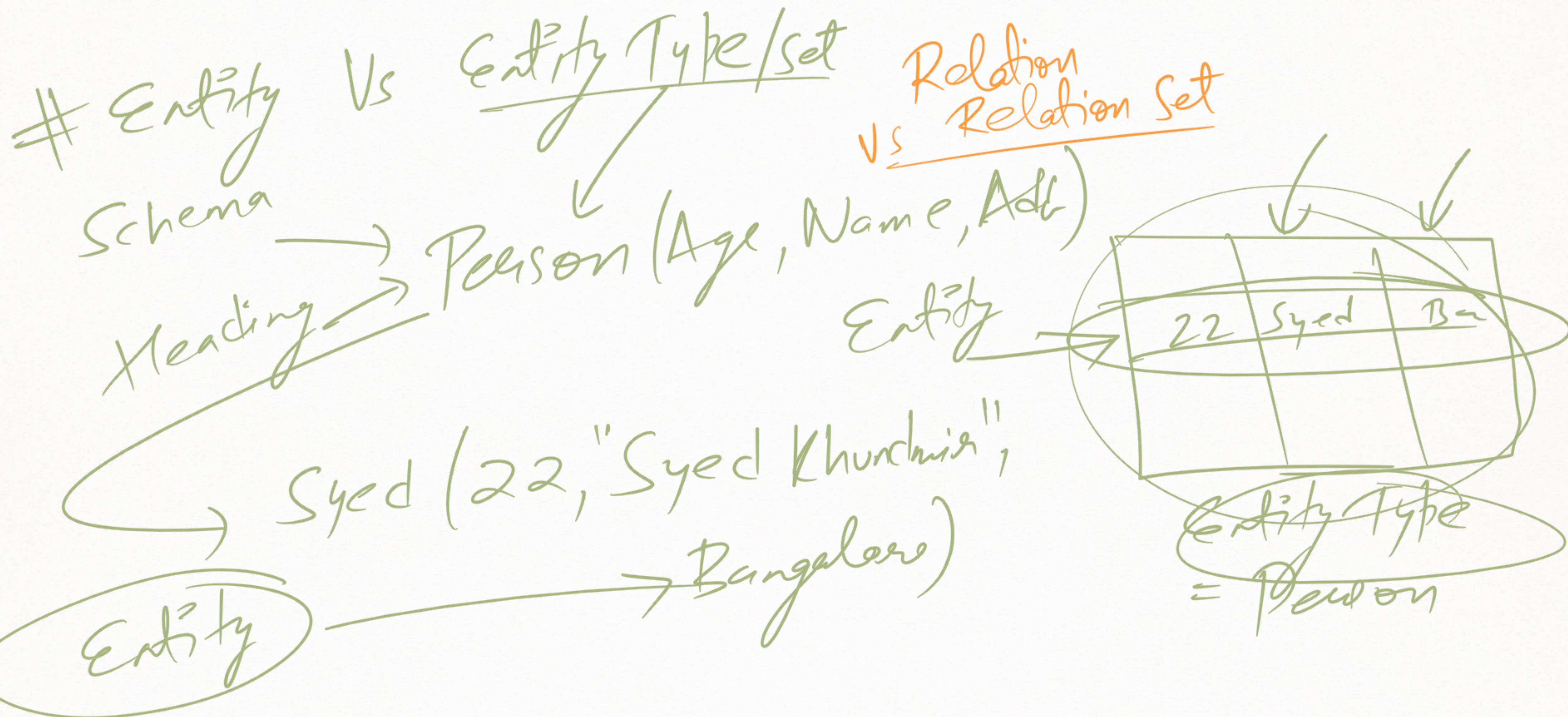
→ Any living/Non living thing
that you want to model.



Attributes → Nouns which describe Entity sets
→ Characters/Properties of Entity Sets







Attributes

Can be divided Based on :-

- ① Composite Vs Simple
- ② Atomic Vs Multi Valued
- ③ Stored Vs Derived
- ④ Complex Attributes

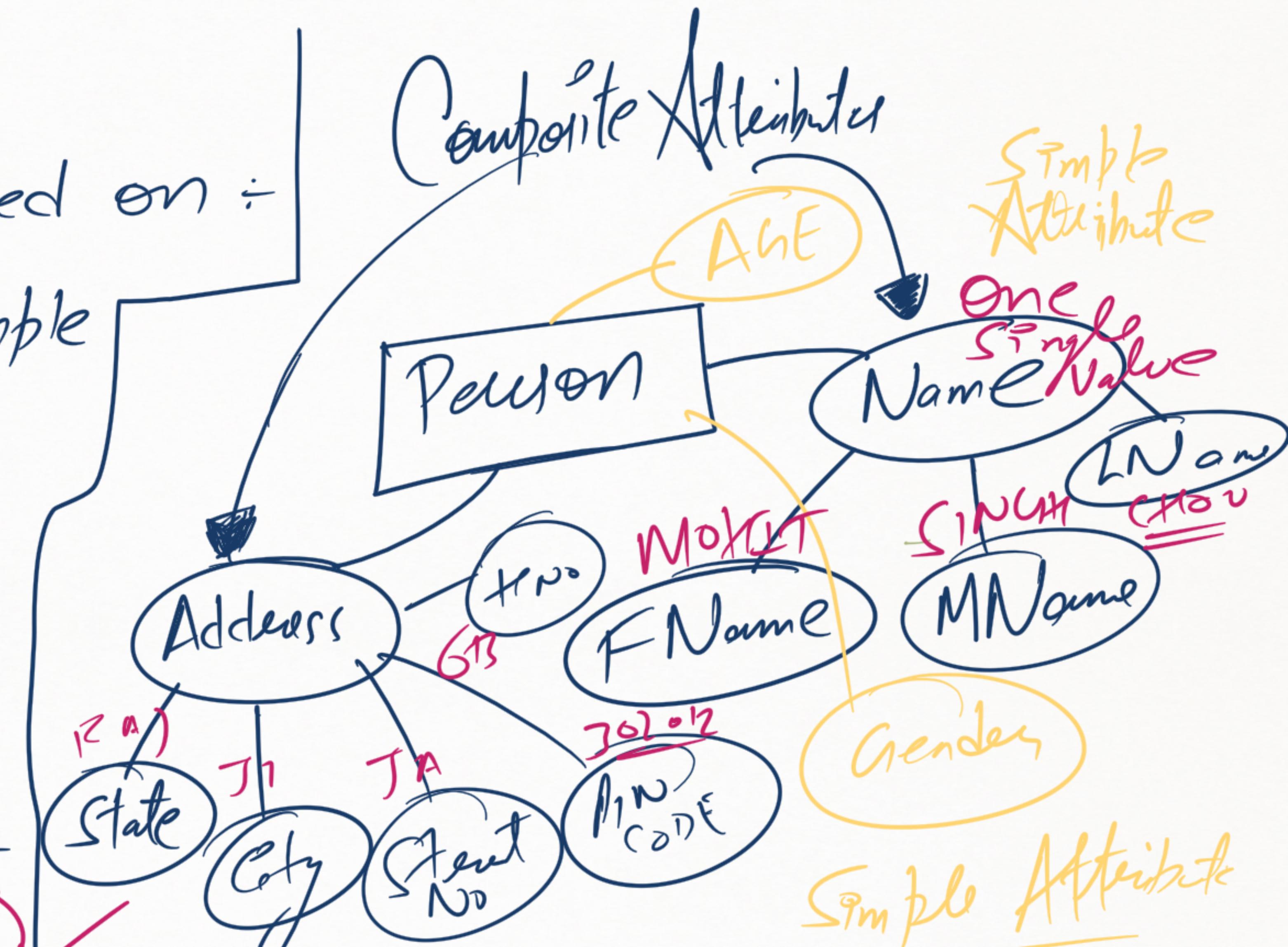
Jumble words

Singari

Moringa

Lokman

Composite Attributes



Simple Attribute

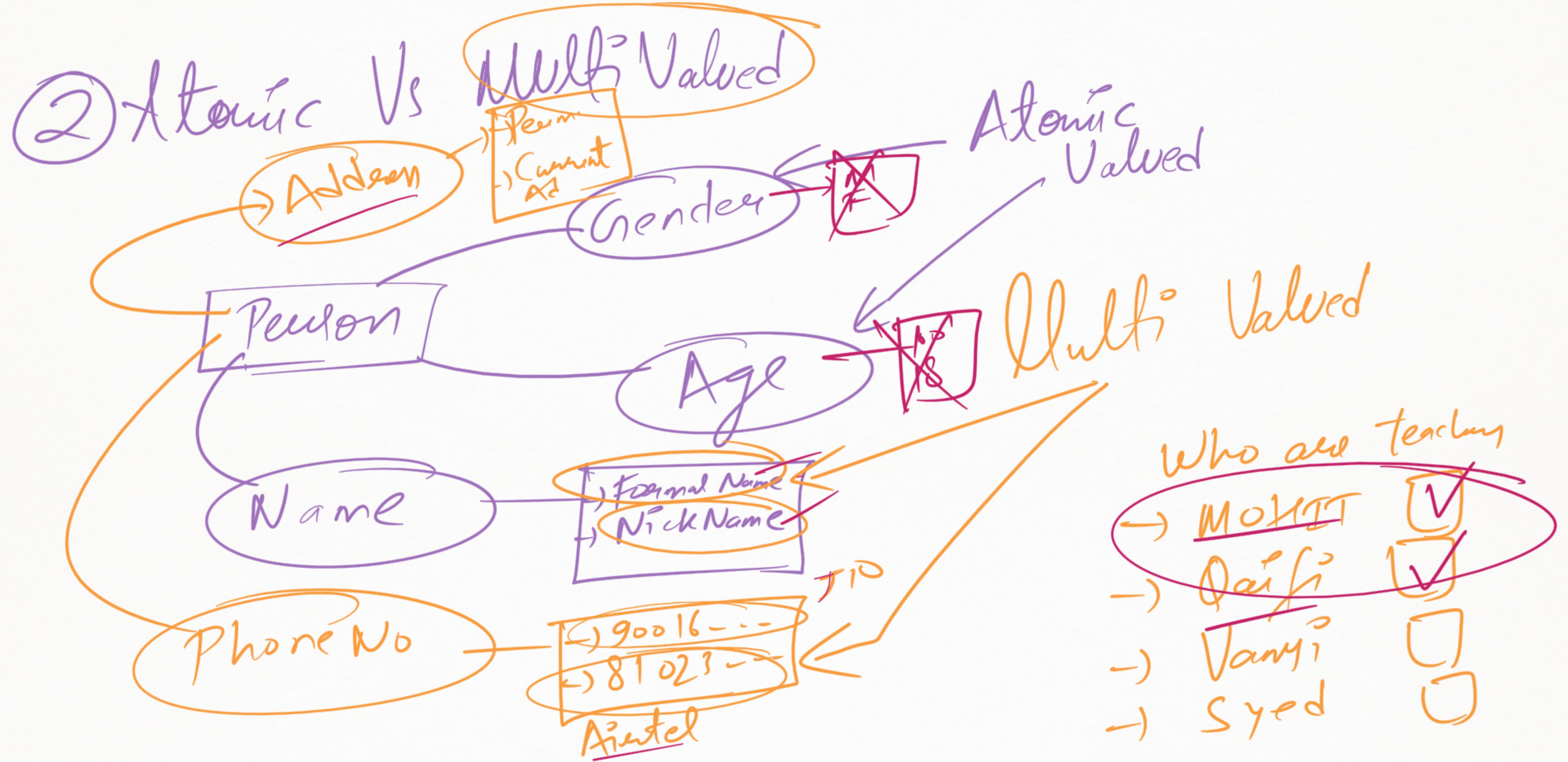
Simple Attribute

One Single Value

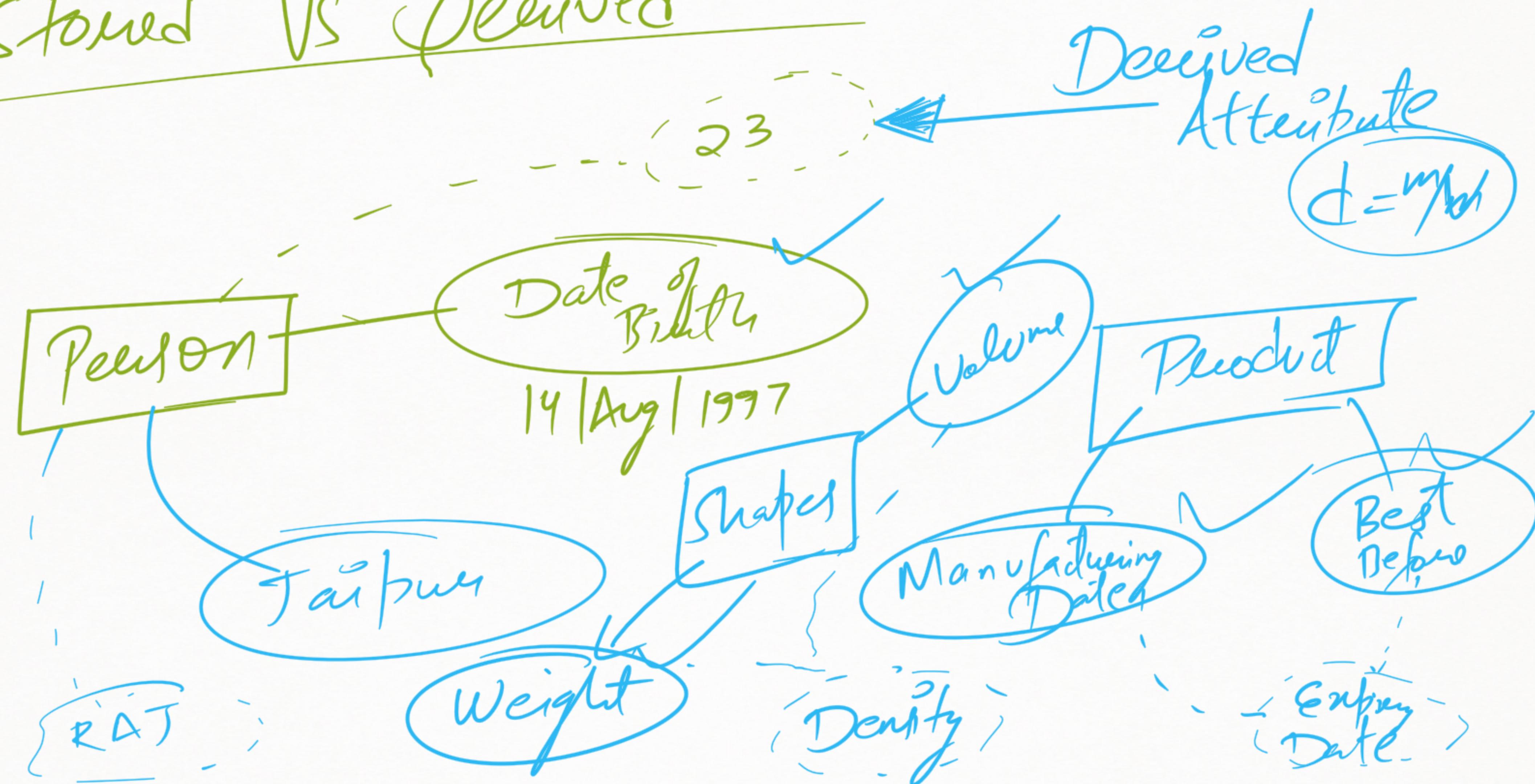
SINGL
MNAME

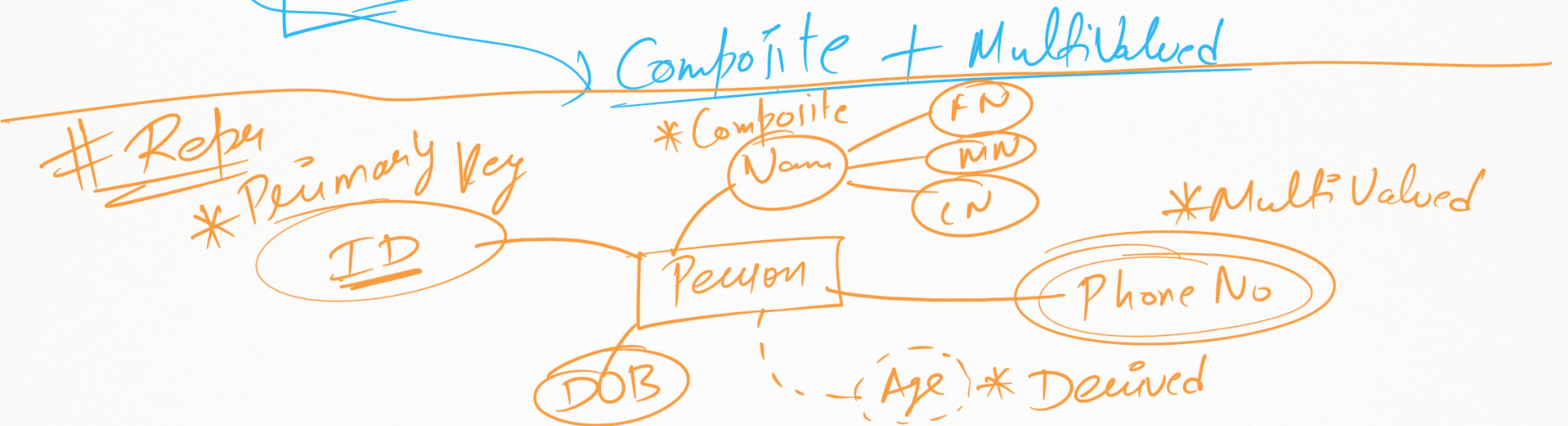
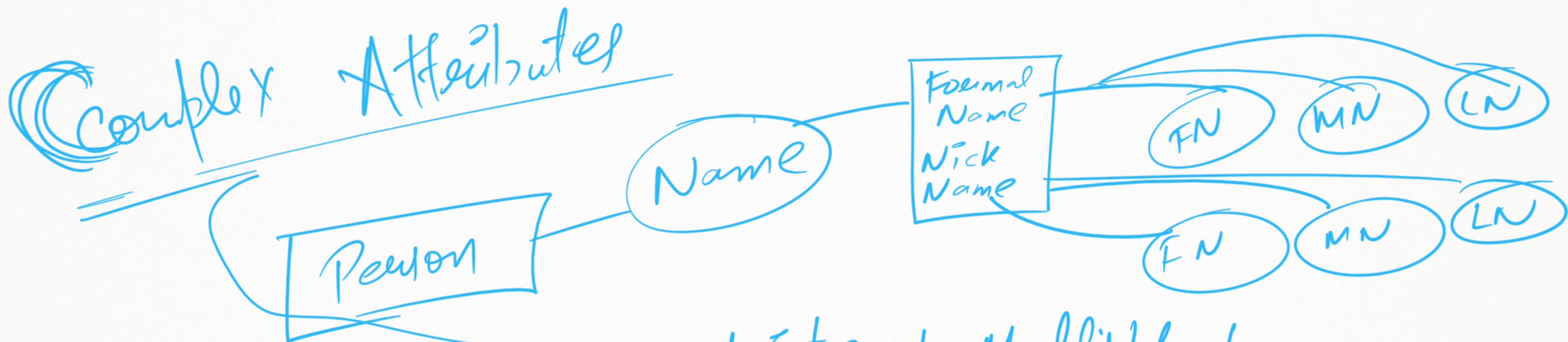
MName

Gender



③ Stored Vs Derived





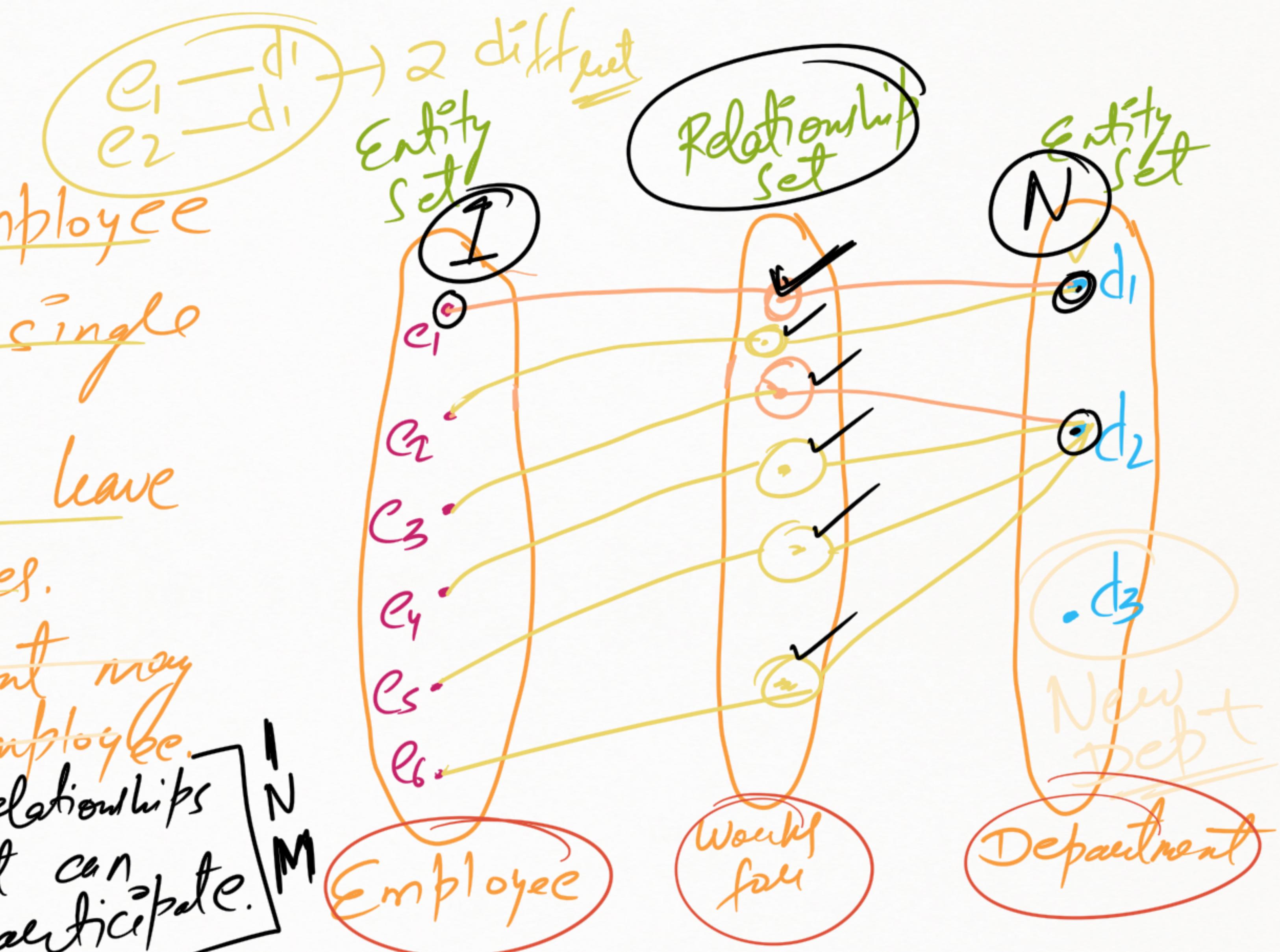
Cardinality

Cust Reg Every employee
works for a single
Department.

(2) Department can leave
many employees.

(3) New Department may
not have an employee.

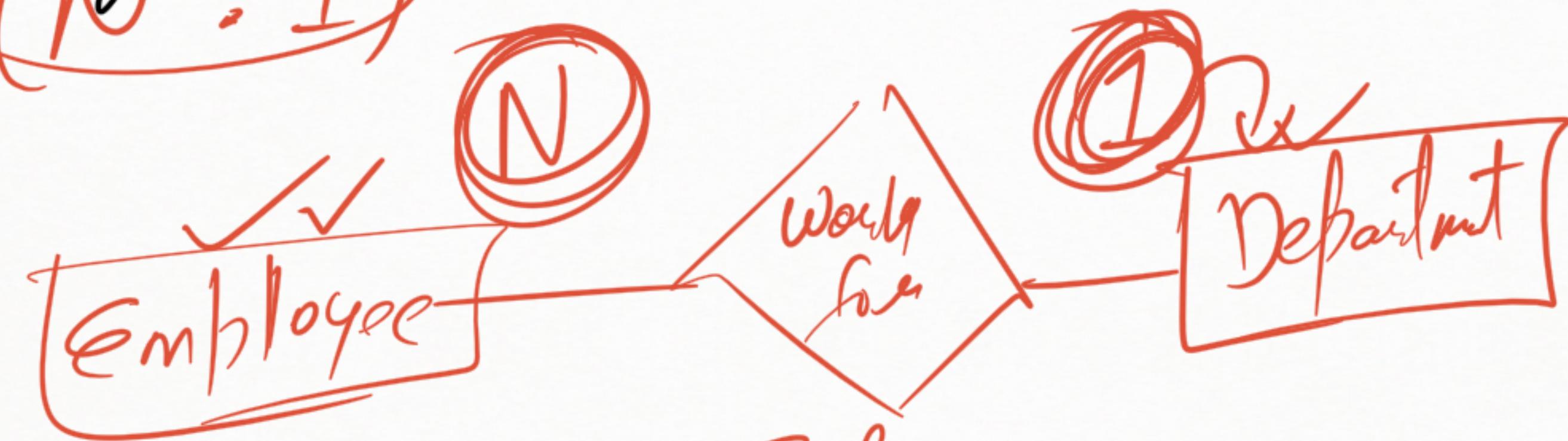
Cardinality = Max No. of Relationships
in which an entity set can participate.



Cardinality Relationships

↳ Many to One, One to One (1:1), Many to Many (N:M)

#



⇒ Many to One Rel.

→ Many Employee can work for a single Department.
→ Single Dep. can have many emp