

**Subject:DBMS**  
**Topic:Relationship**

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# Relationship

It is an association between two or more entities of same or different entity set

No representation in ER diagram as it is an instance or data

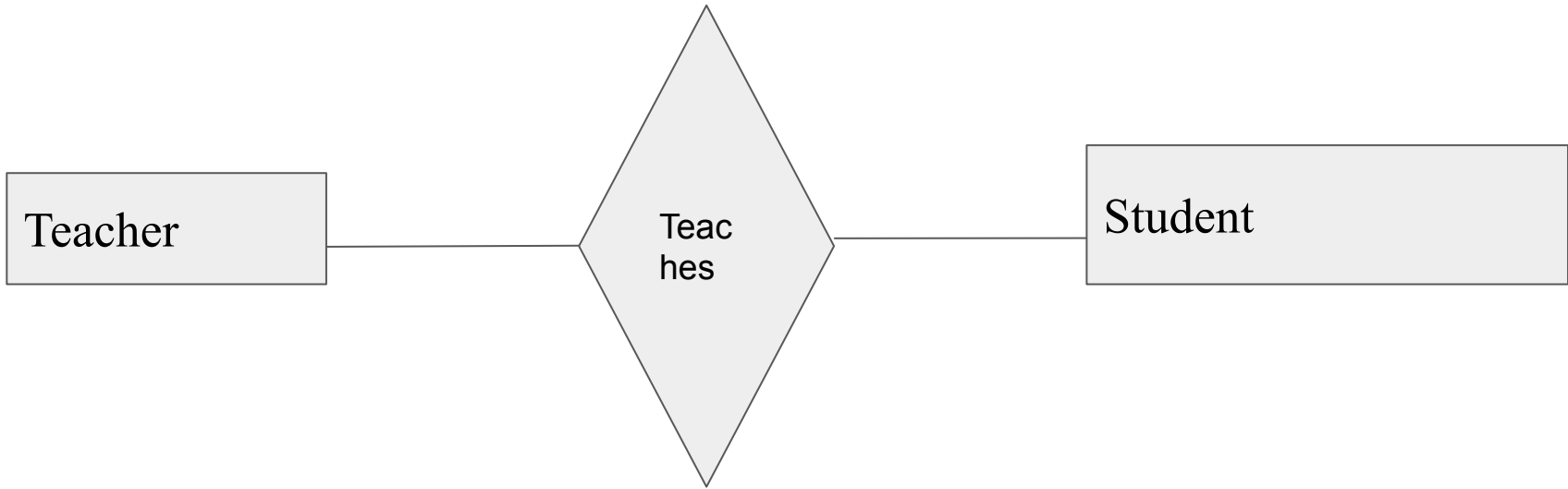
In relational model represented either using a row in a table

# Relationship type or set

A set of similar type of relationship. In ER diagram represent add using a diamond. In a relational model either by a separate table or by separate column.

Every relationship type has three component

1. Name
2. Degree
3. Cardinality ratio for participation constraint



# Degree of a relationship set

Degree of a relationship means number of entity set associated or participated in the relationship set

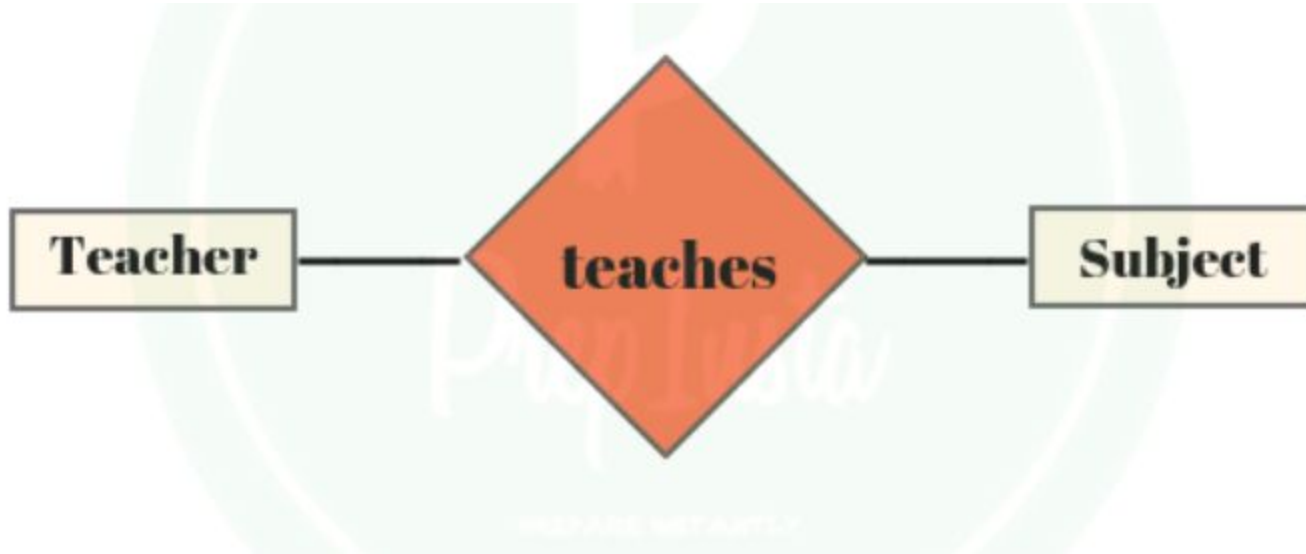
Most of relationships sets in the ER diagram are binary. Occasionally however relationships sets involved more than two entity sets

unary relationship diagram

## Unary Relationship in DBMS

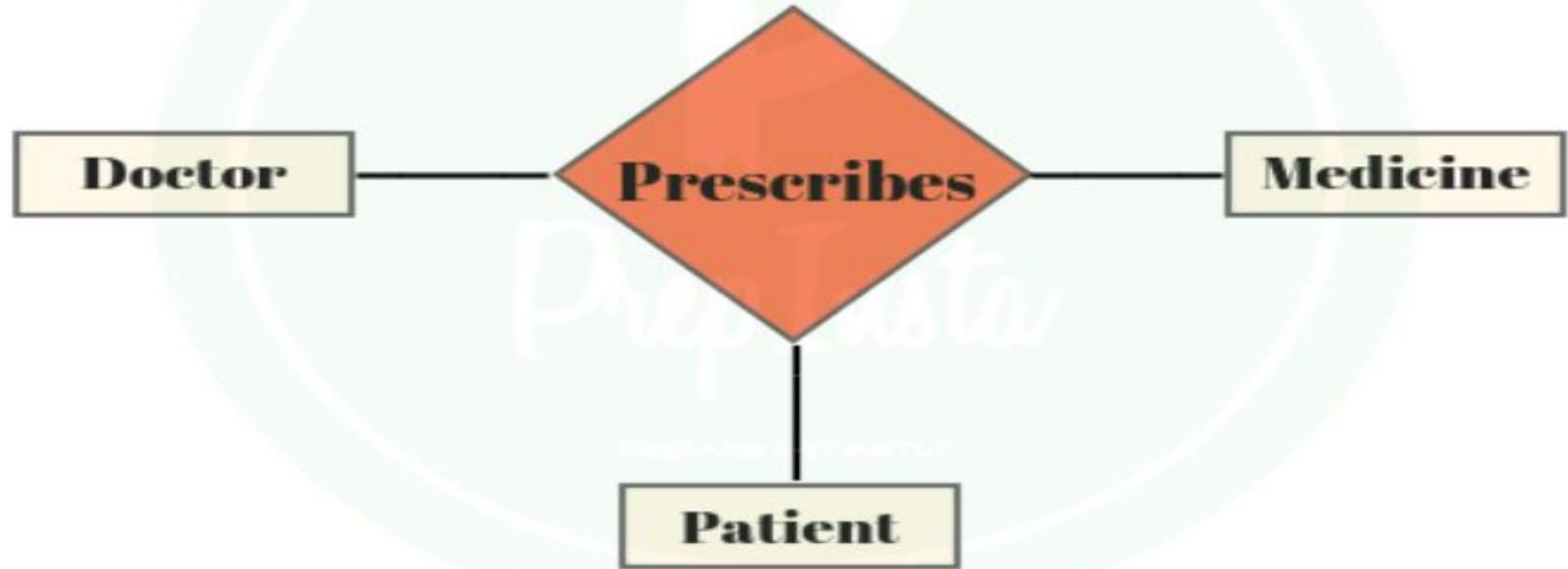


# Binary relationship



Ternary relationship

## **Ternary Relationship in DBMS**





# Cardinality

It describes the mapping of associated entity instances in the relationship

It Express the number of entities to which an entity can be associated through a relationship set

# Mapping cardinality

There are four different types of mapping cardinality

1. One to one
2. One to many
3. Many to one
4. Many to many

Participation constraints

participation constraints are how an entity participate in a relationship

Total participation constraints are if every entity in E participate in at least one relationship in R

Partial constraints are some entities in E participate in the relation R