

# **Relationship Types**



- A relationship is a meaningful association among several entities, relationship cardinalities or cardinality ratios express the number of entities to which another entity can be associated through a relationship.
- The number of entities that participate in a relationship set is called the degree of relationship. Based on this degree we can categorize relationship into unary, binary and ternary relationships



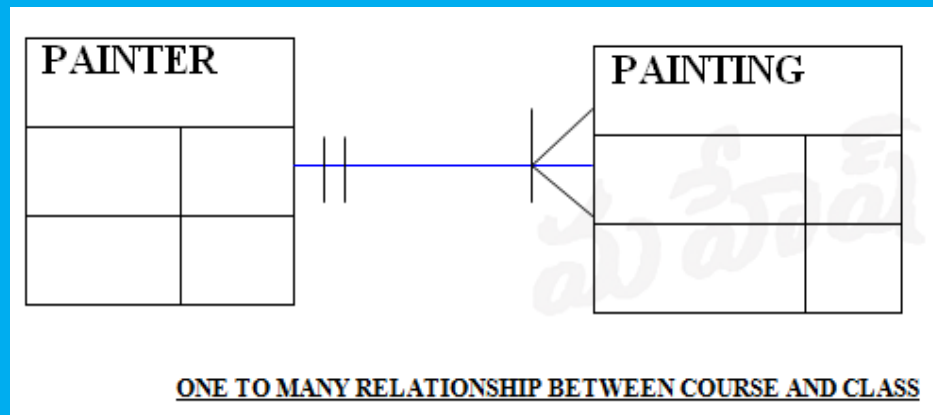
Based on the cardinality of relationships they are classified into the following categories.

- One – to – many relationship (1:M)
- Many- to –many relationship (M:M)
- One – to – one relationship (1:1)



# One – to – many relationship (1:M)

- If an entity in A is associated with multiple entities in B is called One To Many relationship. This is known as 1:M
- Example
- A painter painting many different paintings but each one of them is painted by only one painter.

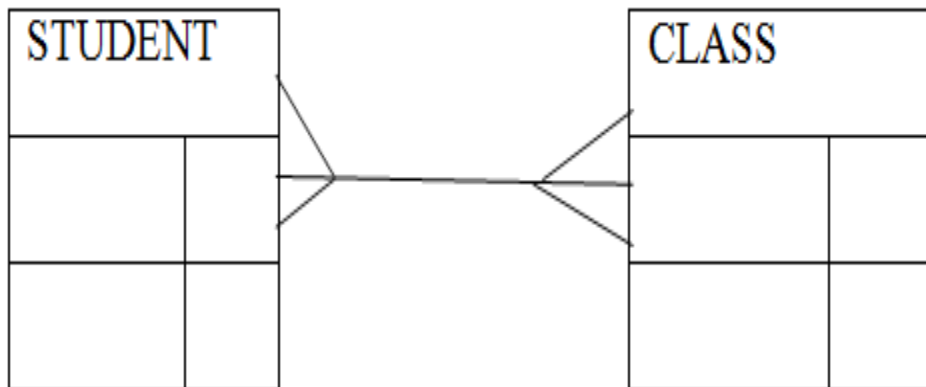


## 2. MANY- TO- MANY RELATIONSHIP:

- If an entity in A is associated with multiple entities in B and an entity in B is also associated with multiple entities in A, then the relationship is called M: N relationship.
- **Example:**
- A student can take many classes and each class can be taken by many students.



## 2. MANY- TO- MANY RELATIONSHIP:



MANY TO MANY RELATIONSHIP BETWEEN STUDENT AND CLASS



# ONE –TO- ONE RELATIONSHIP

- If an entity in A is associated with atmost one entity in B and an entity in B is associated with at most one entity in A, then the relationship is called 1:1 relationship.
- **Example:**
- Each employee is assigned exact only one parking place and each parking place must be assigned one employee.



# ONE -TO- ONE RELATIONSHIP

