EER Features

- Sub class and Super class
- Specialization
- Generalization
- Aggregation

EER Features : Sub class and Super class

- Super class is an entity type that has a relationship with one or more subtypes.
- Sub class is a group of entities with unique attributes.
- **Example:**

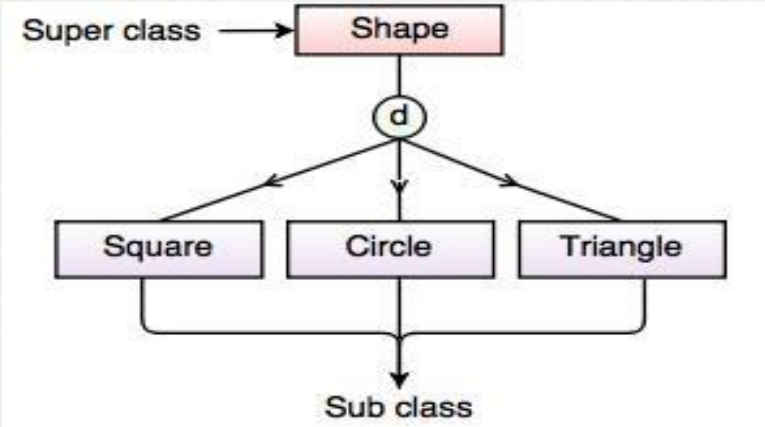

Fig. Super class/Sub class Relationship

EER Features : Specialization

- Specialization is a process that defines a group entities which is divided into sub groups based on their characteristic.
- It is a top down approach, in which one higher entity can be broken down into two lower level entity.
- **Example:**

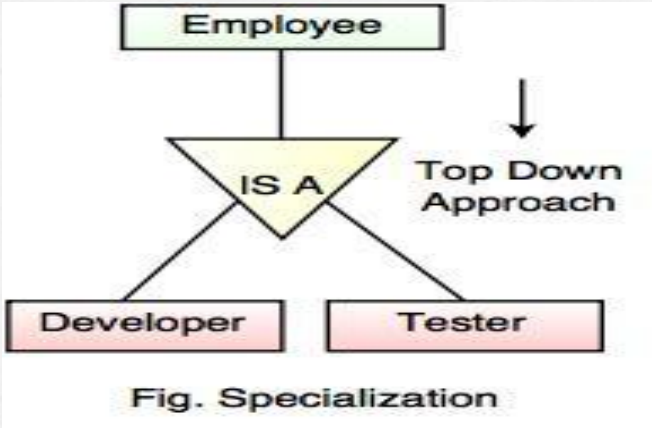

Fig. Specialization

EER Features : Generalization

- Generalization is the process of generalizing the entities which contain the properties of all the generalized entities.
- It is a bottom approach, in which two lower level entities combine to form a higher level entity.
- **Example:**

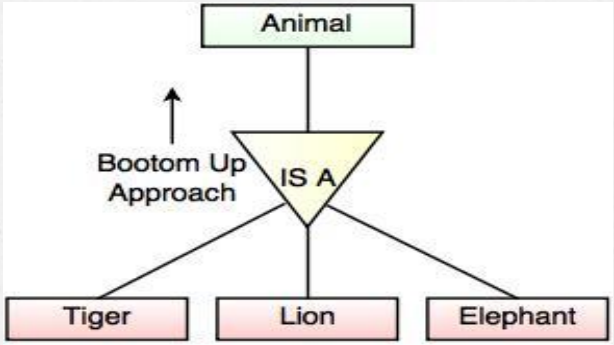

Fig. Generalization

EER Features : Aggregation

- Aggregation is a process that represent a relationship between a whole object and its component parts.
- It is a process when two entity is treated as a single entity.
- **Example:**

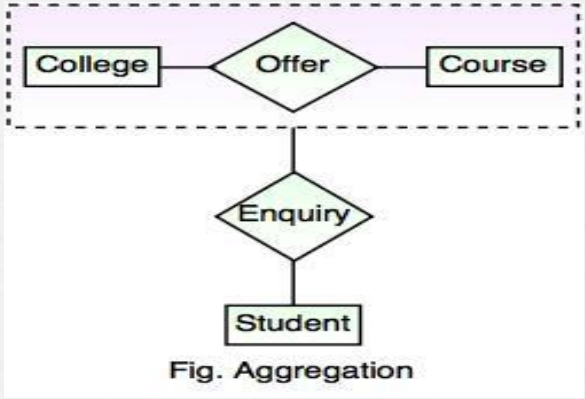

Fig. Aggregation

Constraints on Specialization and Generalization

- **Overlapped :** An entity from super-set can be related (can occur) in multiple sub-class sets
- **Disjoint :** An entity from super set will be related to only one entity of a sub class.

Overlapping constraint

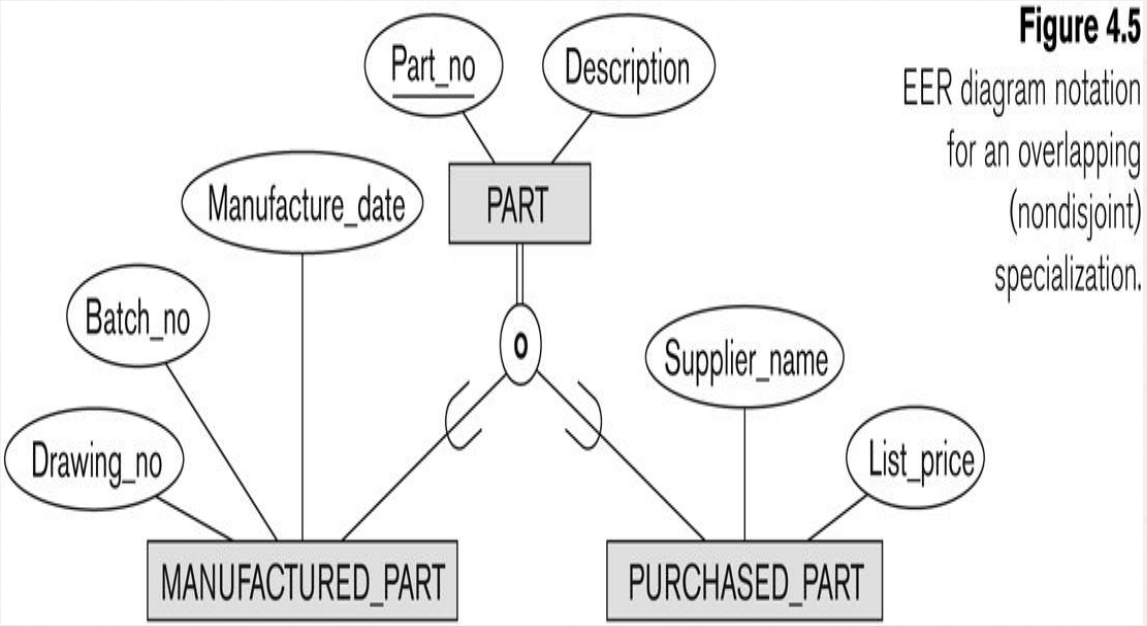

Figure 4.5
EER diagram notation for an overlapping (nondisjoint) specialization.

Disjoint constraint