Notes on
Schema Mapping from ER/EER diagrams

WHEN TO UNDERLINE FOREIGN KEYS (FK) :

1. When using cross-referencing option for mapping relationships all FK must be underlined.
2. When creating table for multivalued attribute, the FK from the entity to which the attribute belongs to must be
 underlined.
3. When creating table for weak entity, the FK from the identifying entity must be underlined.
4. When using option 8A for superclass and subclass mapping, the fk added to subclass from the superclass must be
  underlined.

WHEN NOT TO UNDERLINE FOREIGN KEYS (FK) :

1. When using foreign key approach to map relationships, the FK should not be underlined.

ADDING THE PRIMARY KEY (PK) AS A FOREIGN KEYS (FK) IN A TABLE:

1. If the PK of a table is composed of multiple attributes, then the whole PK (i.e. all the attributes of the PK)
  should be added as the FK in the referencing table.

MAPPING SUBCLASSES:

1. Option 8A and 8D is applicable in all scenarios when mapping superclass-subclass
2. Option 8B is not applicable if the subclasses have a "partial" relationship with superclass. In 8B, only subclass tables exist, no table for superclass exists. But "partial" means some superclass members do not belong to any subclass. Data of such members will be lost as there is no table to store those data.
3. Option 8C is not applicable if the subclasses have an "overlapping" relationship with superclass. In 8C, one "type" attribute is added to the single table as a discriminator to indicate which subclass the entity belongs to. Overlapping means 1 entity can belong to more than one subclass. So one type attribute is not sufficient to store overlapping info as we cannot insert multiple values in the database.
4. Option 8D, even though it is applicable for all scenarios, there will be no data loss or error, it is "inefficient" if the specialization is "disjoint" as multiple flags will only waste space and one type attribute(8C) is sufficient for disjoint. But we CAN use 8D as well , it is applicable, just not efficient storage wise.