ICA #3 - Converting ERDs to schemas

In this activity, we will convert two ERDs (from ICA #2) to database schemas. Below are the rules of how to successfully convert an ERD to a schema.

1. Create a table for every entity

2. Create table fields for every entity's attributes

3. Implement relationships between the tables

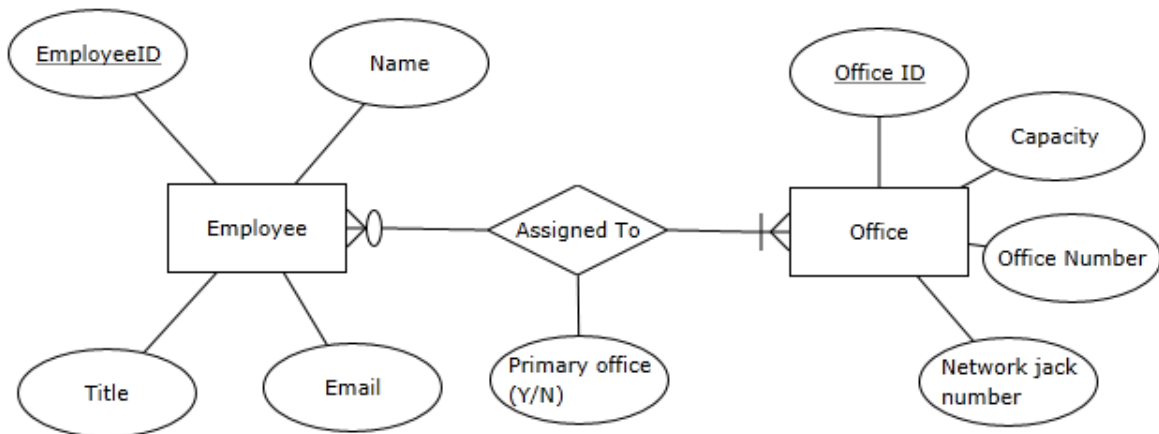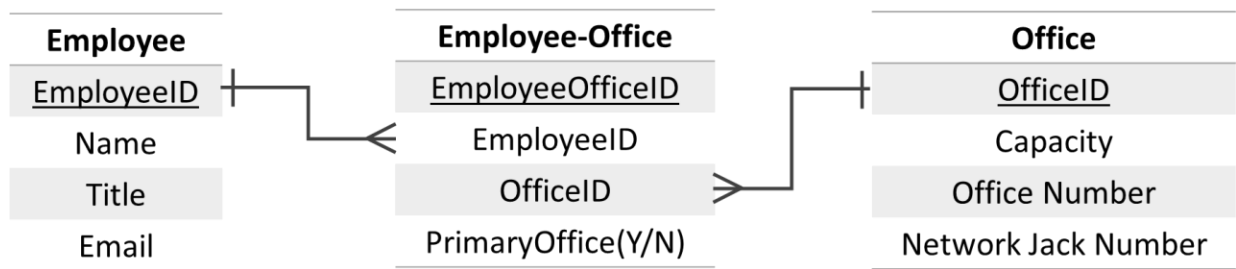|	
1:1 relationships	• Put primary key field of one table into other table as foreign key field
1:many relationships	• Primary key field of "1" table put into "many" table as foreign key field
many:many relationships	• Create new table • 1:many relationships with original tables

So, for example, if you have this (very simple) ERD with a many-to-many relationship:

You'll wind up with this schema (**note that we only specified maximum cardinality**):
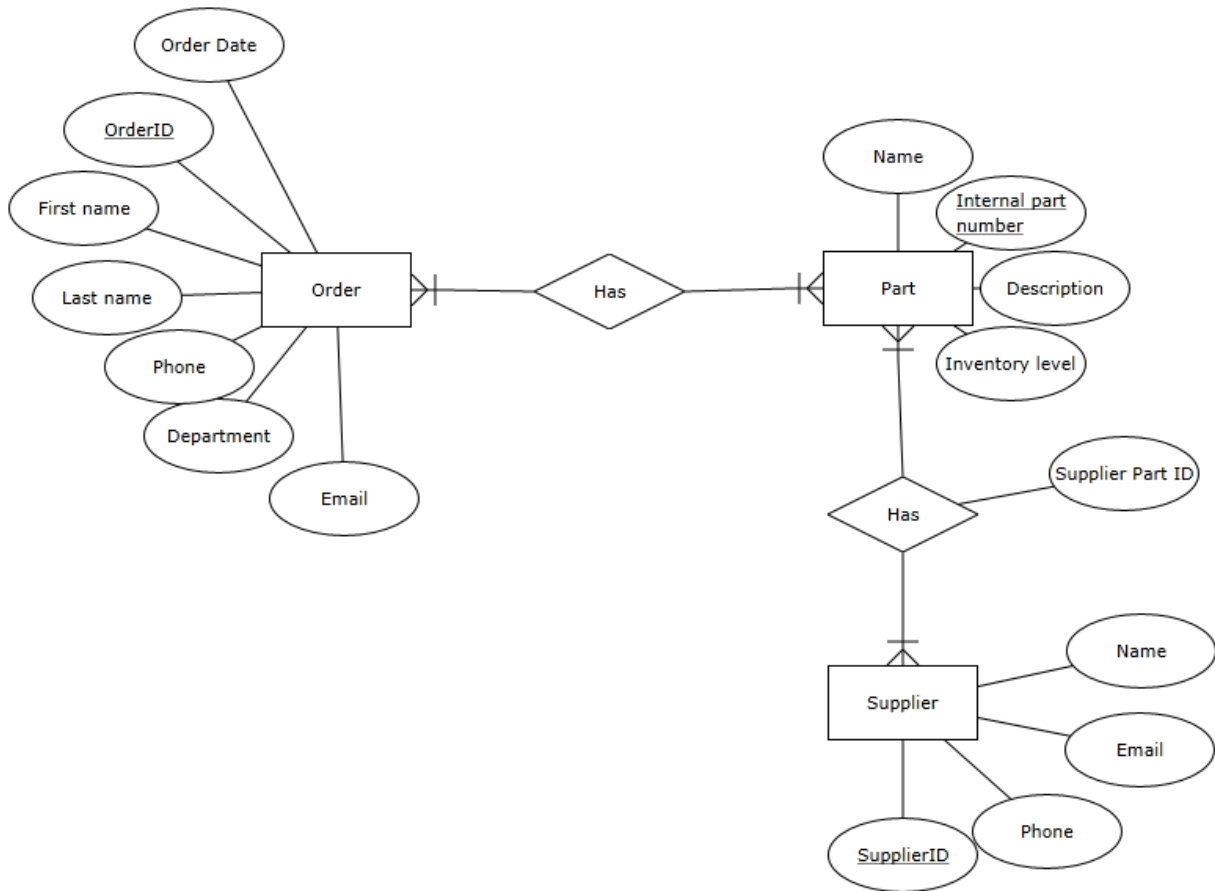
Employee	Employee-Office	Office
EmployeeID	EmployeeOfficeID	OfficeID
Name	EmployeeID	Capacity
Title	OfficeID	Office Number
Email	PrimaryOffice(Y/N)	Network Jack Number

New table with

- New primary key
- Foreign keys from other tables' primary keys
- Attribute describing the relationship (if applicable)

Now create the schemas for the following ERDs (You DO NOT need to specify minimum cardinality for the ICA.):

Scenario 1: Inventory and Parts

Scenario 2: Housing Authority