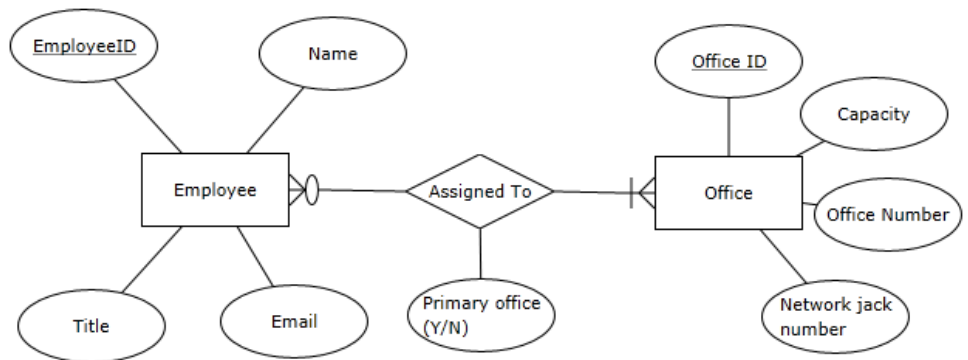


In-class Exercise: Creating Schemas

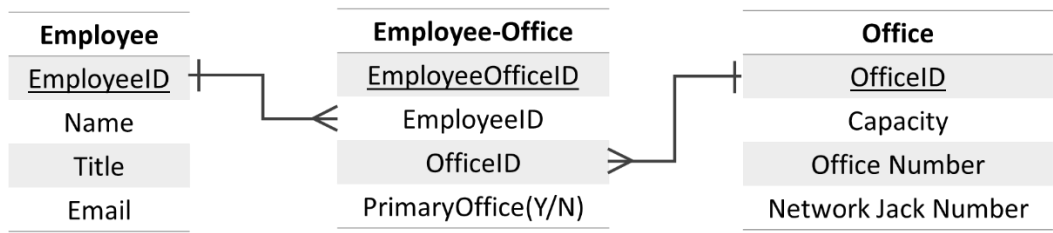
Take the ERDs from the previous in-class exercise (on the next page) and convert each to a schema. Remember, the schema is the implementation of an ERD – you’ll wind up with a set of tables that make up your database.

1. Create a table for every entity
 2. Create table fields for every entity’s attributes
 3. Implement relationships between the tables
- 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
 - 1:1 relationships**
 - Primary key field of one table put into other table as foreign key field

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



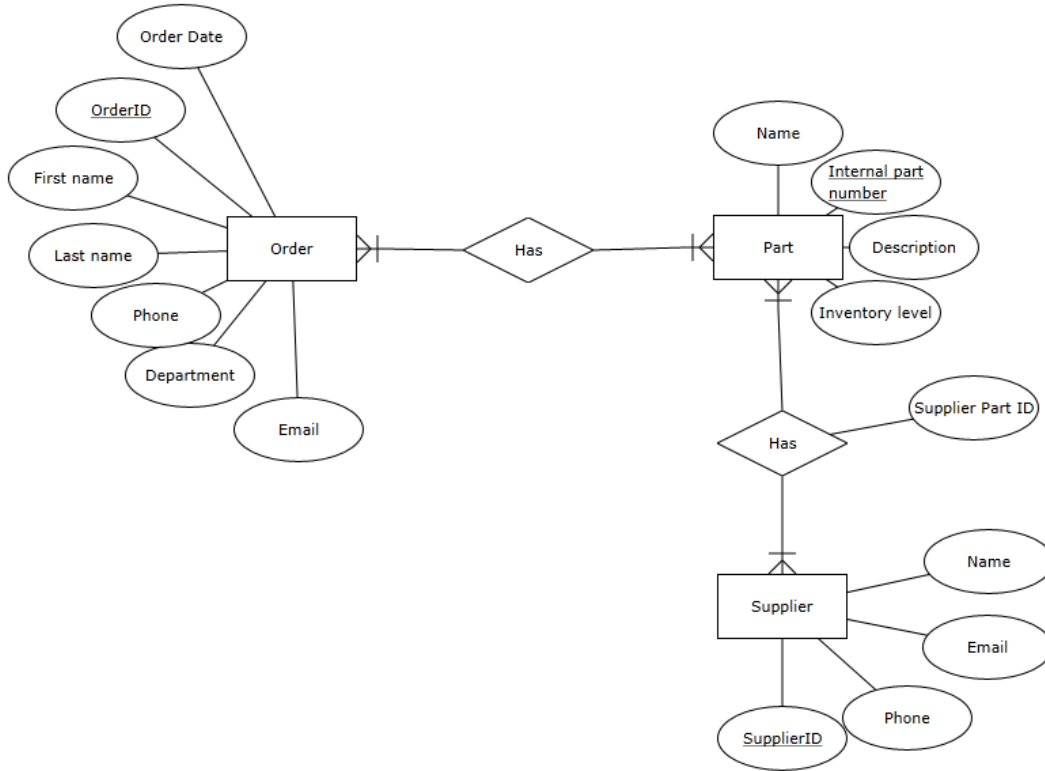
You’ll wind up with this schema (note that we only specified maximum cardinality):



- ↑
- 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:

Scenario 1: Inventory and Parts



Scenario 2: Housing Authority

