

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

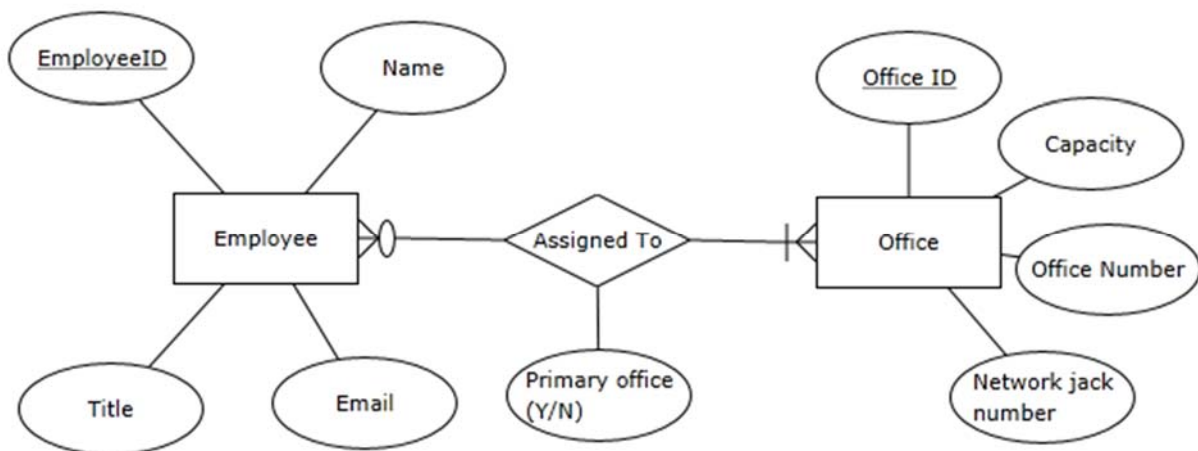
many:many
relationships

- Create new table
- 1:many relationships with original tables

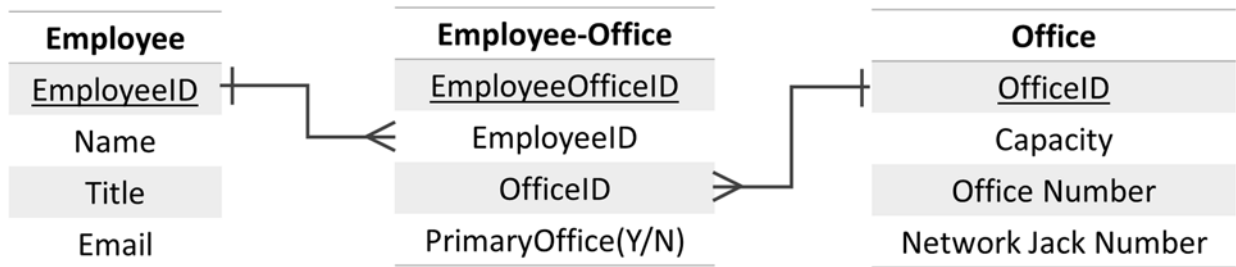
1:1
relationships

- 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):

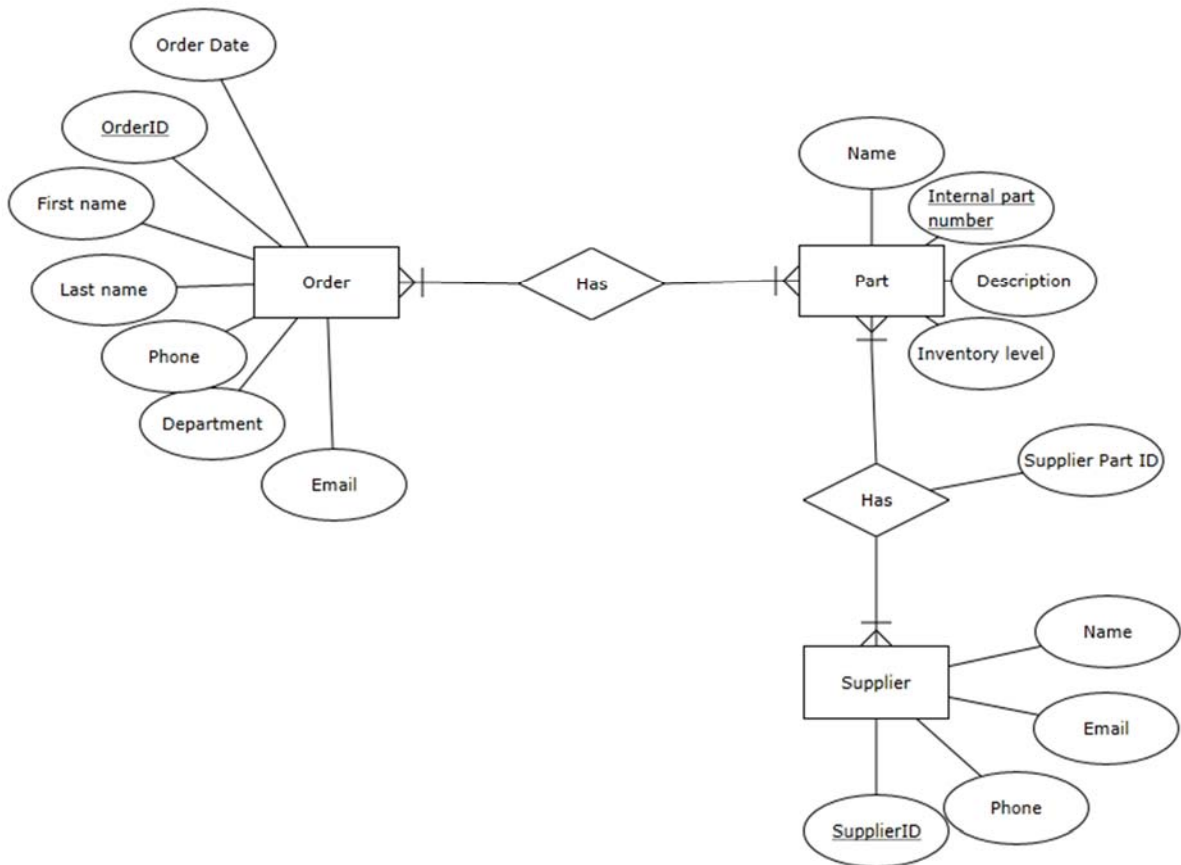


New table with

- 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

