* 1. This is true when StoreName is unique.
  2. This is true when City is unique.
  3. This is true when City is unique.
  4. This is true when StoreName and Country are unique.
  5. This is true when City and Specialty are unique, or their combination is unique.
  6. This is true when the owner is unique and owns multiple stores.
  7. This is true when a store is unique and has multiple specialties.
     1. City → Country
        1. While city names do repeat, for a small business, they most likely won’t.
        2. Step 1:
           1. Identify multivalued dependencies

Owner → (Name, City)

(Name, City) → Specialty

* + - * 1. Create Tables

STORE(Name, City, Country)

STOREOWNER(Name, City, Owner)

STORESPECIALTY(Name, City, Specialty)

* + - 1. Step 2: Identify Functional Dependencies
         1. (Name, City, Country).
      2. Step 3: Identify Candidate Keys
         1. (Name, City, Country). Every determinant is a candidate key, and the relation is BCNF.
      3. Step 4: Multivalued Dependencies
         1. None. StoreOwner is in 4NF. StoreSpecialty is in 4NF.
      4. STORE(Name, City, Country). STOREOWNER(Name, City, Owner). STORESPECIALTY(Name, City, Specialty).
  1. (CountryOfOrigin, Destination) → ShipmentCost
  2. ShipperName → InsuranceValue
  3. (ShipperName, CountryOfOrigin) → InsuranceValue
  4. ShipperName →→ ShipperContact

ShipperName →→ ShipperFax

* 1. ShipmentNumber → ShipperName

ShipmentNumber → ShipperFax

ShipmentNumber → DepartureDate

ShipmentNumber → ArrivalDate

ShipmentNumber → CountryOfOrigin

ShipmentNumber → Destination

ShipmentNumber → ShipmentCost

ShipmentNumber → InsuranceValue

ShipmentNumber → Insurer

ShipperName →→ ShipperFax

* 1. ShipperName → ShipperContact

ShipperName → ShipperFax

* + 1. Step 1:
       1. Identify multivalued dependencies
          1. ShipperName →→ ShipperContact
       2. Create Tables
          1. SHIPPERCONTACT(ShipperName, ShipperContact
          2. SHIPMENT2(ShipmentNumber, ShipperName, ShipperFax, DepartureDate, ArrivalDate, CountryOfOrigin, Destination, ShipmentCost, InsuranceValue, Insurer)
       3. Step 2: Identify Candidate Keys
          1. (ShipperName, ShipperContact). It is in BCNF
       4. Multivalued Dependencies
          1. None. The relation is in both BCNF and 4NF.
       5. SHIPMENT3(ShipmentNumber, ShipperName, DepartureDate, ArrivalDate, CountryOfOrigin, Destination, ShipmentCost, InsuranceValue, Insurer)