Database Design, CSCI 340, Spring 2016
Lab 7, Normalization, March 11

Download and open the Excel file Lab07_SalesOrder.xlsx. This file contains data with the following attributes:

salesOrderID
orderDate
productID
productName
unitPrice
standardCost
categoryID
categoryName
orderQty
regionID
territoryName
countryCode

1. Give likely functional dependencies amongst these attributes.

   salesOrderID ⟶ orderDate, regionID, territoryName, countryCode
   productID ⟶ productName, categoryID, categoryName
   categoryID ⟶ categoryName
   regionID ⟶ territoryName, countryCode
   salesOrderID, productID ⟶ unitPrice, standardCost, orderQty

2. Import the sales data given in the Excel file into Access and use the Access table analyzer to create new tables.

   Open a blank Access database
   Access 2013
   Blank desktop database

   Import the Excel spreadsheet
   EXTERNAL DATA tab
   Excel
   Browse to file
   Import the source data into a new table in the current database

Use the table analyzer to create new tables
DATABASE TOOLS tab
Analyze table
Read through the examples given
Let the wizard do the decomposition
List any tables which are similar to our design

One table is the Category Table
Another is the Region table

Go back and create the design yourself.
Drag fields out to create new tables
Set keys for the tables

3. Look at each of your table to see if they are as expected. List the number of records in each table.

Order table has 31,465 records
Category table has 35 records
Product table has 266 records
Region table has 10 records
OrderDetails table has 121,317 records
This is the same as the original Excel file