► THE QUEEN ANNE CURIOSITY SHOP PROJECT QUESTIONS (Chapter One)

The Queen Anne Curiosity Shop sells both antiques and current-production household items that complement or are useful with the antiques. For example, the store sells antique dining room tables and new tablecloths. The antiques are purchased from vendors, including individuals, and distributors. The store's customers include individuals, owners of bed-and-breakfast operations, and interior designers. The two tables below are a sample list of customers and sales (**Sale_Customer Table**) and a sample list of purchased inventory items and vendors (**Purchase_Vendor Table**).

CustomerName	CustomerPhone	CustomerAddress	ItemName	SalePrice	SaleDate
Anderson	425-125-8461	533 Main street, Chicago, IL, 62803	Antique Desk	3000	14-Dec-12
Anderson	425-125-8461	533 Main street, Chicago, IL, 62803	Lamp	200	17-Dec-12
Judy	231-234-1232	112 University Ave., State College, PA, 16802	Chair	1000	2-Dec-12
Judy	231-234-1232	112 University Ave., State College, PA, 16802	Coffee Table	150	2-Dec-12
David	131-122-9987	17 Green Street, Seattle, WA, 10592	Book Shelf	500	20-Dec-12

ItemName	PurchasePrice	PurchaseDate	VendorName	VendorPhone	VendorAddress
Coffee Table	100	20-Nov-12	European Specialties	206-329-1920	18 Union St., San Francisco, CA, 28192
Antique Desk	2500	14-Nov-12	European Specialties	206-329-1920	18 Union St., San Francisco, CA, 28192
Crystal lights	900	2-Nov-12	Lamps and Lights	231-129-1232	210 Broadway, Dallas, TX, 23212
Lamp	170	1-Nov-12	Lamps and Lights	231-129-1232	210 Broadway, Dallas, TX, 23212
Book shelf	320	24-Oct-12	Antique Things	321-329-1203	190 Alley St., Miami, 96802
Chair	700	13-Nov-12	European Specialties	206-329-1920	18 Union St., San Francisco, CA, 28192

A.   Describe problems that are likely to occur when inserting, updating, and deleting data in these spreadsheets. (20 points)

Note: Don't use general terms "redundancy" or "loss of information" to describe the problems. Describe a specific problem for EACH case (insert, update, delete). For example, you should write "if I update column X in list Y, the problem is…."

B.   Split both **Purchase_Vendor** table and **Sale_Customer** table into two tables such that each has only one theme. (30 points)

Note: Don't lose information when you split one table into two!

C.   Explain how the tables in your answer to part B will eliminate the problems you identified in part A. (20 points)

D.   Using the 4 tables you designed in Question C, how should I look for answers to the following questions? (30 points)

Note: For each question, specify (1) the names of the tables which I should look up, (2) the precise information I should look up in each table, and (3) the order in which these tables should be looked up.

   a.   How many items were purchased from vendor European Specialist?

   b.   How many items from European Specialist were sold?

   c.   Is there any customer from Chicago bought any item from European Specialist?