

Relational databases:

Assume that you run an oil company. The information that you have includes:

- customer id number
- customer name
- customer address(need easy access to street, city, state and zip)
- capacity of tank
- house type code
- for each house type code you need to carry the average summer, fall, spring and winter use
- delivery information for the year including
 - the date of the delivery
 - the number of gallons delivered
 - the price per gallon for each delivery that is made

Note that the house type is a code to help determine the predicted usage. The system will have an average use for capes or ranches in the summer, fall etc. A customer is assigned that code to help predict the usage for that type of house.

Your assignment is to design the tables that you would need to develop to implement this database. Show me the tables, the fields/columns contained in each table and the designate the field or fields that would be used as the primary keys.

customer id number also will be part of the delivery table key
customer name
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The is a very basic system which means things like a customer cannot have two houses etc since the custid is the key to the cust table.

So...

First I have a customer table that includes information about the customer and their tank including capacity of tank and house type code (meaning 6rmcape, 10rmcolonial, 7rmranch etc.

Next I need to set up a table that tells the average delivery for each of those house types . This table would have house type code as its primary key and then it would have avgum, avgfall, avgspr, avgwin. Note we are not yet using the primary key in Oracle so this is just for information.

Now we are looking at deliveries. There is a one to many relationship between customers and deliveries. One customer gets many deliveries. A delivery goes to a specific customer.

So this table would have custid and date of delivery as the primary key because no customer can get more than one oil delivery per day. It would also include the price per gallon as of the date of delivery and the number of gallons.

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<u>customer table</u>	<u>housetype table</u>	<u>delivery table</u>
custid PK	housetypecode PK	custid PK part 1
custname	avgsum	deldate P_K part 2
custstreet	avgspr	numgal
custcity	avgfall	pricegal
custstate	avgwin	
custzip		
tankcapacity		
housetypecode		

Again, we have not dealt with setting up primary keys in Oracle so when you create these tables you do not have to deal with the keys.

