**Chapter 4 Laboratory Exercise – ER Diagram**

Examine the following ER diagram for CustomerOrder example, which also appears in Figure 4.9 (located in the textbook):



**1. Write a relational schema for this E-R diagram. Underline primary keys and indicate foreign keys. Note: Foreign keys are in italic.**

**Customer** (custId, lastName, firstname, street, city, state, zip, areaCode, number, creditLimit)

**Order** (orderNo, *custId, itemNo,* date, totalAmount, tax, deliverStreet, deliverCity, deliverState, deliverZip, deliverAreaCode, deliverNumber)

**Item** (itemNo, *supplierNo,* itemName, unitPrice, qtyOnHand, reorderPoint)

**Contains** (*orderNo, itemNo*, quantity)

**Supplier** (supplierNo, supName, supStreet, supCity, supState, supZip/supPostalCode, supCountry, supCountryCode, supAreaCode, supNumber, contactName)

**Supplies** (*supplierNo, itemNo,* unitCost)

**2. Using Oracle, create the database to correspond to the relational schema.**

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**3. Insert several records in each table.**

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**After using statement “insert into <tablename> values (all values for each attribute)”, I got these results on the database:**

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**4. Make up five questions and design five queries.**

1) What customer(s) do(es) live in the state of New York?

**select firstName, lastName from Customer where state=’NY’;**

2) What is the unit price of iPhone?

**select itemName, unitPrice from Item where itemName like ‘Iphone%’;**

3) What is the phone number of Able or Hows?

**select firstName, phoneNum from Customer where firstName=’Able’ OR firstName=’Hows’;**

4) What is the address of Supplier Treutel Inc?

**select street, city, state, postalCode from Supplier where supName=’Treutel Inc’;**

5) Who customers have made orders with amount greater than 1000 and what is the date of them?

**select distinct c.firstName, o.orderDate, o.totalAmount from Customer c, Orders o where c.custId=o.custId and o.totalAmount > 1000;**

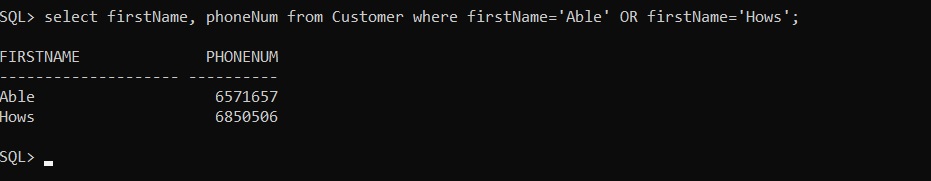
**5. Execute the five queries in the database and show the results.**

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