Extra Problems for Module 3

If you want some additional practice on the CREATE TABLE statement, you can work these problems. The solution document is available in the Module 3 area of the class website.

The problems use the *Customer*, *OrderTbl*, and *Employee* tables of the simplified Order Entry database. The *Customer* table contains clients who have placed orders. The *OrderTbl* contains basic facts about customer orders. The *Employee* table contains facts about employees who take orders. The primary keys of the tables are *CustNo* for *Customer*, *EmpNo* for *Employee*, and *OrdNo* for *OrderTbl*.

Customer

CustNo	CustFirstName	CustLastName	CustCity	CustState	CustZip	CustBal
C0954327	Sheri	Gordon	Littleton	CO	80129-5543	$230.00
C1010398	Jim	Glussman	Denver	CO	80111-0033	$200.00
C2388597	Beth	Taylor	Seattle	WA	98103-1121	$500.00
C3340959	Betty	Wise	Seattle	WA	98178-3311	$200.00
C3499503	Bob	Mann	Monroe	WA	98013-1095	$0.00
C8543321	Ron	Thompson	Renton	WA	98666-1289	$85.00

Employee

EmpNo	EmpFirstName	EmpLastName	EmpPhone	EmpEmail
E1329594	Landi	Santos	(303) 789-1234	LSantos@bigco.com
E8544399	Joe	Jenkins	(303) 221-9875	JJenkins@bigco.com
E8843211	Amy	Tang	(303) 556-4321	ATang@bigco.com
E9345771	Colin	White	(303) 221-4453	CWhite@bigco.com
E9884325	Thomas	Johnson	(303) 556-9987	TJohnson@bigco.com
E9954302	Mary	Hill	(303) 556-9871	MHill@bigco.com

OrderTbl

OrdNo	OrdDate	CustNo	EmpNo
O1116324	01/23/2021	C0954327	E8544399
O2334661	01/14/2021	C0954327	E1329594
O3331222	01/13/2021	C1010398	
O2233457	01/12/2021	C2388597	E9884325
O4714645	01/11/2021	C2388597	E1329594
O5511365	01/22/2021	C3340959	E9884325
O7989497	01/16/2021	C3499503	E9345771
O1656777	02/11/2021	C8543321	
O7959898	02/19/2021	C8543321	E8544399

1. Write a CREATE TABLE statement for the *Customer* table. Choose data types appropriate for the DBMS used in your course. Note that the *CustBal* column contains numbers with two digits to the right of the decimal point. The currency symbols are not stored in the database. The *CustFirstName* and *CustLastName* columns are required (not null).
2. Write a CREATE TABLE statement for the *Employee* table. Choose data types appropriate for the DBMS used in your course. The *EmpFirstName*, *EmpLastName,* and *EmpEMail* columns are required (not null).
3. Write a CREATE TABLE statement for the *OrderTbl* table. Choose data types appropriate for the DBMS used in your course. The *OrdDate* column is required (not null). The OrdDate column stores date values without time.
4. Identify the foreign keys and 1-M relationships among the *Customer*, *Employee*, and *OrderTbl* tables. For each relationship, identify the parent table and the child table.
5. Extend your CREATE TABLE statement from problem (3) with referential integrity constraints.
6. From examination of the sample data and your common understanding of order entry businesses, are null values allowed for the foreign keys in the *OrderTbl* table? Why or why

not? Extend the CREATE TABLE statement in problem (5) to enforce the null value restrictions if any.

7. Extend your CREATE TABLE statement for the *Employee* table (problem 2) with a unique constraint for *EmpEMail*. Use a named constraint clause for the unique constraint.
8. In the data type for *OrdDate* from problem 3, what would the data type be in Oracle and PostrgreSQL if the column stores both date and time values such as 10-Jul-2022 11:55AM?