

## CSIS 2300- Assignment 1

A company has the following initial specifications.

1. Every customer is related to only one salesperson
2. A salesperson can have many customers
3. The company needs to record the meeting of the customer and the sales person. Remarks for each meeting also needs to be recorded.

Provide the answer or do what is required on each number

1. Consider the following table:

CUSTOMER(CustomerID, LastName, FirstName, Address, City, State, ZIP, EmailAddress, Salesperson\_number, Sfirstname, Slastname, Hiredate, WageRate, ComRate, SPhone, SEmail address)

- a. There is no question for this letter.
2. The table above is not normalized. Normalized the data up to the third normal form.
3. Add the “meeting” table to satisfy the third specification.
4. Enumerate the normalized tables. What are the primary keys and foreign keys (If any) of each table?
  - a. CUSTOMER table with CustomerID as PRIMARY KEY
  - b. SALES\_PERSON table with Salesperson\_number as PRIMARY KEY
  - c. MEETING table with primary keys and foreign keys as CustomerID and
  - d. Salesperson\_number.
5. Open your MS Access, use a new database and create the 3 tables using the CREATE SQL statements. Provide the appropriate data types. Include the primary key constraints and foreign key constraints. You should also be able to use UNIQUE, NOT NULL and DEFAULT constraints. Write your queries below.
  - a. CREATE TABLE CUSTOMER( CustomerID int PRIMARY KEY, LastName char(25) NOT NULL,  
FirstName char(25) NOT NULL, Address char(25) NULL, City char(25) NULL, State char(25)  
NULL ZIP char(6) NULL, EmailAddress char(50) NOT NULL UNIQUE);
  - b. CREATE TABLE SALES\_PERSON( Salesperson\_number int, Sfirstnam char(25) NOT NULL,  
Slastname char(25) NOT NULL, Hiredate Date NULL, WageRate Numeric(8,2) NULL,  
ComRate Numeric(8,2) NULL. Sphone char(12) NULL. SEmailAddress char(50) NOT NULL UNIOUE);
  - c. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  - d. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Using the Alter SQL statement, add another field in the contact table name it "Type". Write the query below.
  - a. \_\_\_\_\_
7. Insert 1 record using the Insert query for each table. You can enter any values you want. Write the queries below.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
8. Update 1 record using the update query Write the query below.
  - a. \_\_\_\_\_
9. Delete 1 record using the update query. Write the query below.
  - b. \_\_\_\_\_
10. Establish the relationships among the tables, apply referential integrity.
11. Create a SQL query that will select all data in the Customer table. Write the SQL statement below:
  - a. \_\_\_\_\_
12. Create a SQL query that will select Customer ID, First Name and Last name only. Write the SQL statement below:
  - a. \_\_\_\_\_
13. Create a SQL query that will select data from the customer table based on a condition. You can choose your own condition. Write the SQL statement below.
  - a. \_\_\_\_\_
14. Create data entry forms for all tables and enter at least one record through that method.
15. Design and create one report.
16. Submit a zipped file that includes the MS Access database and a digital copy of this paper with your answers.