Title: 2. To understand and apply the concept of Constraints.

Objective: To understand the concept of data constraints that is enforced on data being stored in the table. Focus on Primary Key and the Foreign Key.

1. Create the tables described below:

Table name: **CLIENT_MASTER_1**

Description: used to store client information.

Column name	data type	Size	Constraints
CLIENTNO	Varchar	6	Primary key / first letter must start with 'C'
NAME	Varchar	20	Not Null
ADDRESS 1	Varchar	30	
ADDRESS 2	Varchar	30	
CITY	Varchar	15	
PINCODE	Integer	8	
STATE	Varchar	15	
BALDUE	Decimal	10,2	

Table Name: **PRODUCT_MASTER_1**

Description: used to store product information

Column name	data type	Size	Attributes
PRODUCTNO	Varchar	6	Primary Key/ first letter must start with 'P'
DESCRIPTION	Varchar	15	Not Null
PROFITPERCENT	Decimal	4,2	Not Null
UNIT MEASURE	Varchar	10	Not Null
QTYONHAND	Integer	8	Not Null
REORDERL VL	Integer	8	Not Null
SELLPRICE	Decimal	8,2	Not Null
COSTPRICE	Decimal	8,2	Not Null

Table Name: **SALESMAN_MASTER _1**

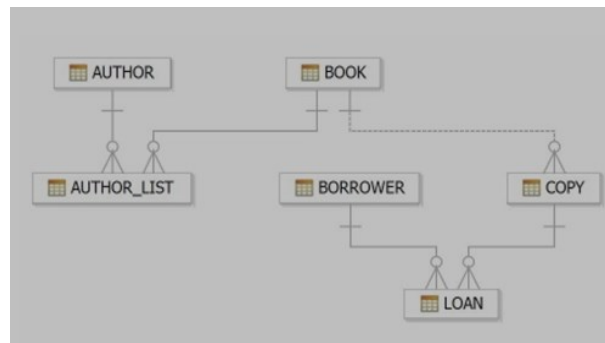Description: used to store salesman information working for the company.

Column name	data type	Size	Attributes

SALESMANNO	Varchar	6	Primary Key/ first letter must start with 'S'
SALESMANNAME	Varchar	20	Not Null
ADDRESS 1	Varchar	30	Not Null
ADDRESS 2	Varchar	30	
CITY	Varchar	20	
PINCODE	Integer	8	
STATE	Varchar	20	
SALAMT	Real	8,2	Not Null , Cannot be 0
TGTTOGET	Decimal	6,2	Not Null , Cannot be 0
YTDSALES	Double	6,2	Not Null
REMARKS	Varchar	60	

2. Reinsert the data in these two tables based upon Lab 1.

3. Display the contents of each table.

4. Create table AUTHOR = {<u>Author_ID</u> , Lastname, Firstname, Email, City, Country}

> Where:
>
> Author_ID – text data type, 5 characters, primary key
>
> Lastname – text data type, 15 characters, not null
>
> Firstname – text data type, 15 characters, not null
>
> Email – text data type, 40 characters,
>
> City – text data type, 15 characters,
>
> Country – text data type, 15 characters,

5. Create Table BOOK={ Book_ID, Book_Title, Copies)

> Where :
>
> Book_ID – text data type, 5 characters Primary Key Start With Character **B**

Book_Title - Text data Type Not Null

Copies- No.of copies Data Type int always greater the 2

6. Create table AUTHOR_LIST = {<u>Author_ID</u> , <u>Book_ID</u> , Role}

Where:

Author_ID – text data type, 5 characters, referenced by Author_ID from AUTHOR
table

Book_ID – text data type, 5 characters

Role – text data type, 15 characters

and primary key is: Author_ID, Book_ID

7. Add four records in each tables AUTHOR, BOOK, BOOK_LIST.

8. Alter structure of table AUTHOR_LIST add the field Publisher data type of 30 Character.