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Question 1:

- a) CREATE TABLE customer\_detail (  
CustomerID NUMBER(3),  
CustomerName VARCHAR(50),  
ContactName VARCHAR(),  
Address VARCHAR(150),  
City VARCHAR(20),  
PostalCode NUMBER(5),  
State VARCHAR(20),  
CONSTRAINT customer\_detail\_pk PRIMARY KEY (CustomerID)  
);
- b) ALTER TABLE customer\_detail  
MODIFY CustomerName VARCHAR(50) NOT NULL;
- c) ALTER TABLE customer\_detail  
ADD Country VARCHAR(60);
- d) RENAME customer\_detail TO customer;

Question 2:

1. CREATE DATABASE MY\_LIBRARY;
2. CREATE TABLE book( book\_ID VARCHAR2(5) NOT NULL, title VARCHAR2(30) NOT NULL,  
CONSTRAINT book\_pk PRIMARY KEY (book\_ID)  
);  
  
CREATE TABLE book\_authors(  
book\_ID VARCHAR2(5) NOT NULL,  
author\_name VARCHAR(30) NOT NULL,  
CONSTRAINT book\_authors\_pk PRIMARY KEY (book\_ID, author\_name),  
CONSTRAINT book\_authors\_book\_fk FOREIGN KEY (book\_ID) REFERENCES book(book\_ID)  
);  
  
CREATE TABLE library\_branch(  
branch\_ID VARCHAR2(5) NOT NULL,  
CONSTRAINT library\_branch\_pk PRIMARY KEY (branch\_ID)  
);  
  
CREATE TABLE book\_copies(  
book\_ID VARCHAR2(5) NOT NULL,  
branch\_ID VARCHAR2(5) NOT

```
NULL, no_of_copies INTEGER NOT
NULL,
CONSTRAINT book_copies_pk PRIMARY KEY (book_ID, branch_ID),
CONSTRAINT book_copies_book_fk FOREIGN KEY (book_ID) REFERENCES
book(book_ID),
CONSTRAINT book_copies_library_branch_fk FOREIGN KEY (branch_ID)
REFERENCES library_branch(branch_ID)
);
```

```
CREATE TABLE borrower( card_no
VARCHAR2(8) NOT NULL, name
VARCHAR2(30) NOT NULL,
address VARCHAR2(40) NOT
NULL, city VARCHAR2(20), phone
INTEGER
);
```

### QUESTION 3

- a. ALTER TABLE borrower  
ADD CONSTRAINT borrower\_cardno-pk PRIMARY KEY (card\_no);
- b. ALTER TABLE borrower  
DROP city;
- c. ALTER TABLE borrower  
MODIFY phone VARCHAR2(20);