The answers to Lab 1

Question 1. Create a table book that contains information about books (title, format, and number of pages, authors, publisher, year, edition, ISBN-10 and 13). Find one book on the Web, for instance on amazon.com, to see some examples of the values of these attributes. Search the Web for available SQL domains (types).

```
CREATE TABLE book (
title VARCHAR(128),
format CHAR(9),
pages INT,
authors VARCHAR(128),
publisher VARCHAR(32),
year DATE,
edition INT,
ISBN10 CHAR(10),
ISBN13 CHAR(14)
);
```

Question 2. Delete the table book.

```
DROP TABLE book;
```

Question 3. Create a table book that contains information about books (title, format (paperback or hardcover), number of pages, authors, publisher, year, edition, ISBN-10 and ISBN-13). Choose a primary key. Forbid NULL values for the title and ISBN-10 and 13, make sure the format is either "paperback" or "hardcover".

```
CREATE TABLE book (
title VARCHAR(128) NOT NULL,
format CHAR(9) CHECK(format = 'paperback' OR format='hardcover' OR format IS
NULL),
pages INT,
authors VARCHAR(128),
publisher VARCHAR(32),
year DATE,
edition INT,
ISBN10 CHAR(10) NOT NULL UNIQUE,
ISBN13 CHAR(14) PRIMARY KEY
);
```

Question 4. Insert one book called "Introduction to Database Systems". Go to the Web to find actual details.

```
INSERT INTO book VALUES ('Introduction to Database Systems', 'paperback', 168,
'Stephane Bressan and Barbara Catania', 'MacGraw-Hill', '01-Jan-2005', 1, '0071246509',
'978-0071246507');
```

Question 5. Insert half a dozen books with title containing "Introduction to Database Systems" or authored by C.J. Date. Go to the Web, for instance amazon.com, to find the details of such books.

INSERT INTO book VALUES ('An Introduction to Database Systems', 'paperback', 1024, 'C.J. Date', 'Addison-Wesley', '01-Aug2003', 1, '0321197844','978-0321197849');

INSERT INTO book VALUES ('Introduction to Database Systems (Management Information Systems)', 'paperback', 29, 'R. Dixon, G. Rawlings', 'CIMA Publishing', '01-Dec-1998', 1, '0948036230', '978-0948036231');

INSERT INTO book VALUES ('Introduction to Database Systems', 'hardcover', 650, 'Bipin C. Desai', 'West Group', '01-Aug-1990', 1, '0314667717', '978-0314667717');

INSERT INTO book VALUES ('SQL and Relational Theory: How to Write Accurate SQL Code', 'paperback', 432, 'C.J. Date', 'O Reilly Media', '23-Jan-2009', 1, '0596523068', '978-0596523060');

Comments: please be aware of the default date format in Oracle is DD-MMM-YYYY.

Question 6. Find all the information about all books.

SELECT * FROM book;

Question 7. Modify all books authored by C.J. Date to mention the author's first name (find the author's first name from the Web.)

UPDATE book SET authors='Christopher J. Date' WHERE authors= 'C. J. Date';

Question 8. Delete all books authored by C.J. Date.

DELETE FROM book
WHERE authors='Christopher J. Date';

Question 9. Find the title, format, number of pages, authors, publisher, year, edition, ISBN-10 and ISBN-13 of the books.

SELECT title, format, pages, authors, publisher, year, edition, ISBN10, ISBN13
FROM book;

Question 10.   Find the titles of the books.

SELECT title FROM book;

Question 11.   Find the authors of the books called "Introduction to Database Systems".

SELECT authors FROM book WHERE title='Introduction to Database Systems';

Question 12.   Add a language attribute to all books. Set the default language to English.

ALTER TABLE book
ADD language VARCHAR(32) DEFAULT 'English';

Comments: if you want to remove a language attribute:
ALTER TABLE book
DROP COLUMN language;

Question 13.   Delete the table book.
DROP TABLE book;