**Practice Exercise #1:**

Based on the *employees* table, insert employee records:

CREATE TABLE employees

( employee\_number int NOT NULL,

last\_name char(50) NOT NULL,

first\_name char(50) NOT NULL,

salary int,

dept\_id int,

CONSTRAINT employees\_pk PRIMARY KEY (employee\_number)

);

| employee\_number | last\_name | first\_name | salary | dept\_id |
| --- | --- | --- | --- | --- |
| 1001 | Smith | John | 62000 | 500 |
| 1002 | Anderson | Jane | 57500 | 500 |
| 1003 | Everest | Brad | 71000 | 501 |
| 1004 | Horvath | Jack | 42000 | 501 |
| 1005 | Johnson | Sally | 58000 | 500 |

**Practice Exercise #2:**

Based on the *suppliers* table populate with the following data

CREATE TABLE suppliers

( supplier\_id int NOT NULL,

supplier\_name char(50) NOT NULL,

city char(50),

state char(50),

CONSTRAINT suppliers\_pk PRIMARY KEY (supplier\_id)

);

| supplier\_id | supplier\_name | city | state |
| --- | --- | --- | --- |
| 100 | Microsoft | Redmond | Washington |
| 200 | Google | Mountain View | California |
| 300 | Oracle | Redwood City | California |
| 400 | Kimberly-Clark | Irving | Texas |
| 500 | Tyson Foods | Springdale | Arkansas |
| 600 | SC Johnson | Racine | Wisconsin |
| 700 | Dole Food Company | Westlake Village | California |
| 800 | Flowers Foods | Thomasville | Georgia |
| 900 | Electronic Arts | Redwood City | California |
| 1000 | Apple | NULL | NULL |

## Practice Exercise #3:

Based on the products table populated with the following data, update the product\_name to 'Grapefruit' for all records whose product\_name is "Apple".

CREATE TABLE products

( product\_id int NOT NULL,

product\_name char(50) NOT NULL,

category\_id int,

CONSTRAINT products\_pk PRIMARY KEY (product\_id)

);

INSERT INTO products (product\_id, product\_name, category\_id) VALUES (1,'Pear',50);

INSERT INTO products (product\_id, product\_name, category\_id) VALUES (2,'Banana',50);

INSERT INTO products (product\_id, product\_name, category\_id) VALUES (3,'Orange',50);

INSERT INTO products (product\_id, product\_name, category\_id) VALUES (4,'Apple',50);

INSERT INTO products (product\_id, product\_name, category\_id) VALUES (5,'Bread',75);

INSERT INTO products (product\_id, product\_name, category\_id)VALUES (6,'Sliced Ham',25);

INSERT INTO products (product\_id, product\_name, category\_id) VALUES (7,'Kleenex',null);

The products table would now look like this:

| product\_id | product\_name | category\_id |
| --- | --- | --- |
| 1 | Pear | 50 |
| 2 | Banana | 50 |
| 3 | Orange | 50 |
| 4 | **Grapefruit** | 50 |
| 5 | Bread | 75 |
| 6 | Sliced Ham | 25 |
| 7 | Kleenex | NULL |

## Practice Exercise #4:

Based on the suppliers table populated with the following data, update the city to 'Boise' and the state to "Idaho" for all records whose supplier\_name is "Microsoft".

CREATE TABLE suppliers

( supplier\_id int NOT NULL,

supplier\_name char(50) NOT NULL,

city char(50),

state char(50),

CONSTRAINT suppliers\_pk PRIMARY KEY (supplier\_id)

);

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (100, 'Microsoft', 'Redmond', 'Washington');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (200, 'Google', 'Mountain View', 'California');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (300, 'Oracle', 'Redwood City', 'California');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (400, 'Kimberly-Clark', 'Irving', 'Texas');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (500, 'Tyson Foods', 'Springdale', 'Arkansas');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (600, 'SC Johnson', 'Racine', 'Wisconsin');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (700, 'Dole Food Company', 'Westlake Village', 'California');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (800, 'Flowers Foods', 'Thomasville', 'Georgia');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (900, 'Electronic Arts', 'Redwood City', 'California');

The suppliers table would now look like this:

| supplier\_id | supplier\_name | city | state |
| --- | --- | --- | --- |
| 100 | Microsoft | **Boise** | **Idaho** |
| 200 | Google | Mountain View | California |
| 300 | Oracle | Redwood City | California |
| 400 | Kimberly-Clark | Irving | Texas |
| 500 | Tyson Foods | Springdale | Arkansas |
| 600 | SC Johnson | Racine | Wisconsin |
| 700 | Dole Food Company | Westlake Village | California |
| 800 | Flowers Foods | Thomasville | Georgia |
| 900 | Electronic Arts | Redwood City | California |

## Practice Exercise #5:

Based on the employees table, delete all employee records whose salary is greater than $60,000:

CREATE TABLE employees

( employee\_number int NOT NULL,

last\_name char(50) NOT NULL,

first\_name char(50) NOT NULL,

salary int,

dept\_id int,

CONSTRAINT employees\_pk PRIMARY KEY (employee\_number)

);

INSERT INTO employees (employee\_number, last\_name, first\_name, salary, dept\_id) VALUES (1001, 'Smith', 'John', 62000, 500);

INSERT INTO employees (employee\_number, last\_name, first\_name, salary, dept\_id) VALUES (1002, 'Anderson', 'Jane', 57500, 500);

INSERT INTO employees (employee\_number, last\_name, first\_name, salary, dept\_id) VALUES (1003, 'Everest', 'Brad', 71000, 501);

INSERT INTO employees (employee\_number, last\_name, first\_name, salary, dept\_id) VALUES (1004, 'Horvath', 'Jack', 42000, 501);

There would be 2 records deleted and the employees table would now look like this:

| employee\_number | last\_name | first\_name | salary | dept\_id |
| --- | --- | --- | --- | --- |
| 1002 | Anderson | Jane | 57500 | 500 |
| 1004 | Horvath | Jack | 42000 | 501 |

## Practice Exercise #6:

Based on the suppliers table, delete the supplier record whose state is 'California' and supplier\_name is not Google:

CREATE TABLE suppliers

( supplier\_id int NOT NULL,

supplier\_name char(50) NOT NULL,

city char(50),

state char(50),

CONSTRAINT suppliers\_pk PRIMARY KEY (supplier\_id)

);

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (100, 'Microsoft', 'Redmond', 'Washington');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (200, 'Google', 'Mountain View', 'California');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (300, 'Oracle', 'Redwood City', 'California');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (400, 'Kimberly-Clark', 'Irving', 'Texas');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (500, 'Tyson Foods', 'Springdale', 'Arkansas');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (600, 'SC Johnson', 'Racine', 'Wisconsin');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (700, 'Dole Food Company', 'Westlake Village', 'California');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (800, 'Flowers Foods', 'Thomasville', 'Georgia');

INSERT INTO suppliers (supplier\_id, supplier\_name, city, state) VALUES (900, 'Electronic Arts', 'Redwood City', 'California');

There would be 3 records deleted and the suppliers table would now look like this:

| supplier\_id | supplier\_name | city | state |
| --- | --- | --- | --- |
| 100 | Microsoft | Redmond | Washington |
| 200 | Google | Mountain View | California |
| 400 | Kimberly-Clark | Irving | Texas |
| 500 | Tyson Foods | Springdale | Arkansas |
| 600 | SC Johnson | Racine | Wisconsin |
| 800 | Flowers Foods | Thomasville | Georgia |

Solution:

Solution for Practice Exercise #1:

INSERT INTO employees

(employee\_number, last\_name, first\_name, salary, dept\_id)

VALUES

(1001, 'Smith', 'John', 62000, 500);

INSERT INTO employees

(employee\_number, last\_name, first\_name, salary, dept\_id)

VALUES

(1002, 'Anderson', 'Jane', 57500, 500);

INSERT INTO employees

(employee\_number, last\_name, first\_name, salary, dept\_id)

VALUES

(1003, 'Everest', 'Brad', 71000, 501);

INSERT INTO employees

(employee\_number, last\_name, first\_name, salary, dept\_id)

VALUES

(1004, 'Horvath', 'Jack', 42000, 501);

INSERT INTO employees

(employee\_number, last\_name, first\_name, salary, dept\_id)

VALUES

(1005, 'Johnson', 'Sally', 58000, 500);

Solution for Practice Exercise #2:

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(100, 'Microsoft', 'Redmond', 'Washington');

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(200, 'Google', 'Mountain View', 'California');

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(300, 'Oracle', 'Redwood City', 'California');

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(400, 'Kimberly-Clark', 'Irving', 'Texas');

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(500, 'Tyson Foods', 'Springdale', 'Arkansas');

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(600, 'SC Johnson', 'Racine', 'Wisconsin');

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(700, 'Dole Food Company', 'Westlake Village', 'California');

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(800, 'Flowers Foods', 'Thomasville', 'Georgia');

INSERT INTO suppliers

(supplier\_id, supplier\_name, city, state)

VALUES

(900, 'Electronic Arts', 'Redwood City', 'California');

INSERT INTO suppliers

(supplier\_id, supplier\_name)

VALUES

(1000, 'Apple');

### Solution for Practice Exercise #3:

The following SQL UPDATE statement would perform this update.

UPDATE products

SET product\_name = 'Grapefruit'

### Solution for Practice Exercise #4:

The following SQL UPDATE statement would perform this update in SQL.

UPDATE suppliers

SET city = 'Boise',

state = 'Idaho'

WHERE supplier\_name = 'Microsoft';

WHERE product\_name = 'Apple';

### Solution for Practice Exercise #5:

The following DELETE statement would delete these records from the employees table:

DELETE FROM employees

WHERE salary > 60000;

### Solution for Practice Exercise #6:

The following SQL DELETE statement would delete these records from the suppliers table:

DELETE FROM suppliers

WHERE state = 'California'

AND supplier\_name <> 'Google';