

## Database Programming with SQL

### 12-2: Updating Column Values and Deleting Rows

#### Practice Activities

#### Objectives

- Construct and execute an UPDATE statement
- Construct and execute a DELETE statement
- Construct and execute a query that uses a subquery to update and delete data from a table
- Construct and execute a query that uses a correlated subquery to update and delete from a table
- Explain how foreign-key and primary-key integrity constraints affect UPDATE and DELETE statements
- Explain the purpose of the FOR UPDATE Clause in a SELECT statement

#### Vocabulary

Identify the vocabulary word for each definition below.

UPDATE	Modifies existing rows in a table
correlated subquery update	retrieves information from one table & uses the information to update another table
Integrity Constraints	Ensures that the data adheres to a predefined set of rules
correlated subquery delete	deletes information on a linked table based on what was deleted on the other table
DELETE	Removes existing rows from a table

#### Try It / Solve It

**NOTE: Copy tables in this section do not exist**

If any change is not possible, give an explanation as to why it is not possible.

1. Monique Tuttle, the manager of Global Fast Foods, sent a memo requesting an immediate change in prices. The price for a strawberry shake will be raised from \$3.59 to \$3.75, and the price for fries will increase to \$1.20. Make these changes to the copy\_f\_food\_items table.
2. Bob Miller and Sue Doe have been outstanding employees at Global Fast Foods. Management has decided to reward them by increasing their overtime pay. Bob Miller will receive an additional \$0.75 per hour and Sue Doe will receive an additional \$0.85 per hour. Update the copy\_f\_staffs table to show these new values. (Note: Bob Miller currently doesn't get overtime pay. What function do you need to use to convert a null value to 0?)

3. Add the orders shown to the Global Fast Foods copy\_f\_orders table:

ORDER_NUMBER	ORDER_DATE	ORDER_TOTAL	CUST_ID	STAFF_ID
5680	June 12, 2004	159.78	145	9
5691	09-23-2004	145.98	225	12
5701	July 4, 2004	229.31	230	12

4. Add the new customers shown below to the copy\_f\_customers table. You may already have added Katie Hernandez. Will you be able to add all these records successfully?

ID	FIRST_NAME	LAST_NAME	ADDRESS	CITY	STATE	ZIP	PHONE_NUMBER
145	Katie	Hernandez	92 Chico Way	Los Angeles	CA	98008	8586667641
225	Daniel	Spode	1923 Silverado	Denver	CO	80219	7193343523
230	Adam	Zurn	5 Admiral Way	Seattle	WA		4258879009

5. Sue Doe has been an outstanding Global Foods staff member and has been given a salary raise. She will now be paid the same as Bob Miller. Update her record in copy\_f\_staffs.
6. Global Fast Foods is expanding their staff. The manager, Monique Tuttle, has hired Kai Kim. Not all information is available at this time, but add the information shown here.

ID	FIRST_NAME	LAST_NAME	BIRTHDATE	SALARY	STAFF_TYPE
25	Kai	Kim	3-Nov-1988	6.75	Order Taker

7. Now that all the information is available for Kai Kim, update his Global Fast Foods record to include the following: Kai will have the same manager as Sue Doe. He does not qualify for overtime. Leave the values for training, manager budget, and manager target as null.

8. Execute the following SQL statement. Record your results.

```
DELETE from departments  
WHERE department_id = 60;
```

9. Kim Kai has decided to go back to college and does not have the time to work and go to school. Delete him from the Global Fast Foods staff. Verify that the change was made.

10. Create a copy of the employees table and call it lesson7\_emp;  
Once this table exists, write a correlated delete statement that will delete any employees from the lesson7\_employees table that also exist in the job\_history table.