

## Section 7 Lesson 1: INSERT Statements

### Try It / Solve It

Students should execute DESC tablename before doing INSERT to view the data types for each column. VARCHAR2 data-type entries need single quotation marks in the VALUES statement.

- Give two examples of why it is important to be able to alter the data in a database.
   School student databases change day-to-day and year-to-year. Employees get hired, fired, and promoted throughout the year.
- DJs on Demand just purchased four new CDs. Use an explicit INSERT statement to add each CD to the copy\_d\_cds table. After completing the entries, execute a SELECT \* statement to verify your work.

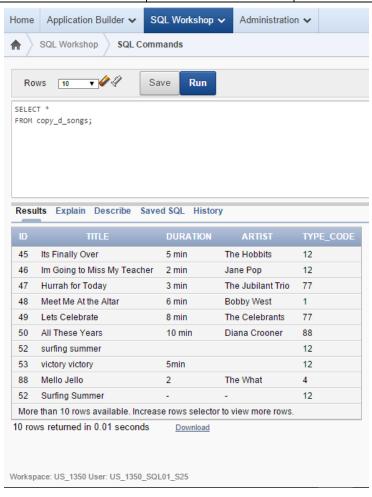
CD_Number	Title	Producer	Year
97	Celebrate the Day	R & B Inc.	2003
98	Holiday Tunes for All Ages	Tunes are Us	2004
99	Party Music	Old Town Records	2004
100	Best of Rock and Roll	Old Town Records	2004





3. DJs on Demand has two new events coming up. One event is a fall football party and the other event is a sixties theme party. The DJs on Demand clients requested the songs shown in the table for their events. Add these songs to the copy\_d\_songs table using an implicit INSERT statement. I'm not sure if there was some kind of error, but the values have been previously inserted before I started this exercise.

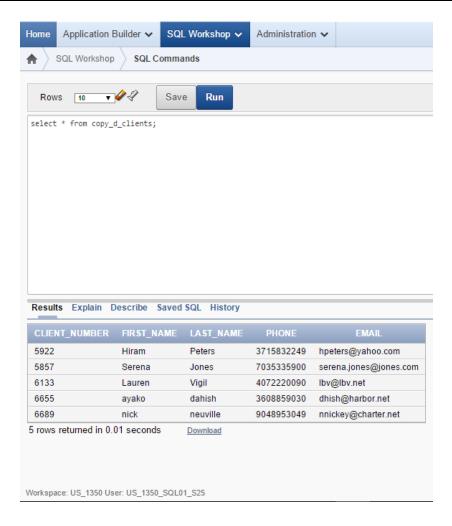
ID	Title	Duration	Type_Code
52	Surfing Summer	Not known	12
53	Victory Victory	5 min	12





4. Add the two new clients to the copy\_d\_clients table. Use either an implicit or an explicit INSERT.

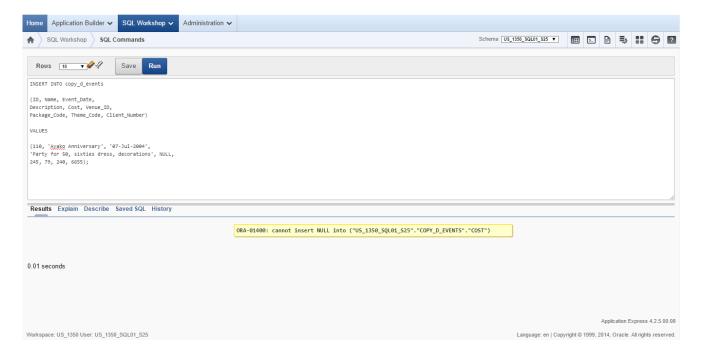
Client_Number	First_Name	Last_Name	Phone	Email
6655	Ayako	Dahish	3608859030	dahisha@harbor.net
6689	Nick	Neuville	9048953049	nnicky@charter.net





5. Add the new client's events to the copy\_d\_events table. The cost of each event has not been determined at this date. Cannot insert NULL values into a column that does not permit NULL values.

ID	Name	Event_	Description	Cost	Venue_	Package_	Theme_	Client_
		Date			ID	Code	Code	Number
110	Ayako	07-Jul-	Party for 50,		245	79	240	6655
	Anniversary	2004	sixties					
			dress,					
			decorations					
115	Neuville	09Sep2004	Barbecue at		315	87	340	6689
	Sports		residence,					
	Banquet		college					
			alumni, 100					
			people					





Create a table called rep\_email using the following statement: CREATE TABLE rep\_email(

id NUMBER CONSTRAINT rel\_id\_pk PRIMARY KEY, first\_name VARCHAR2, last\_name VARCHAR2, email\_address VARCHAR2)

Populate this table by running a query on the employees table that includes only those employees who are REP's.





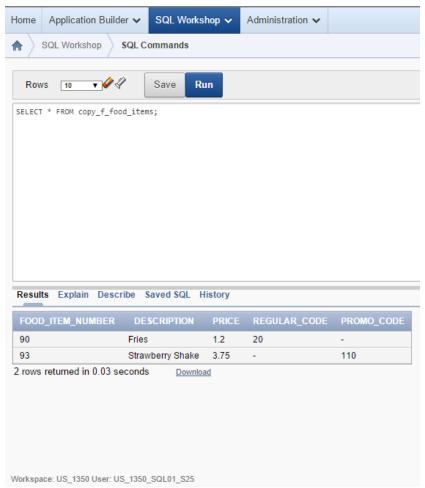
# Section 7 Lesson 2: Updating Column Values and Deleting Rows

# Try It / Solve It

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

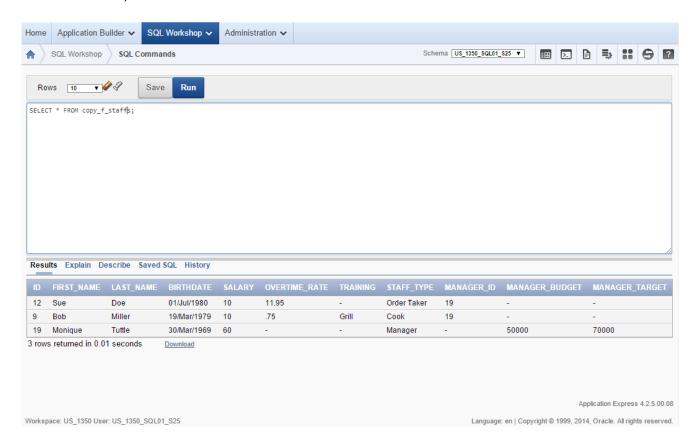
If any change is not possible, give an explanation as to why it is not possible.

 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.





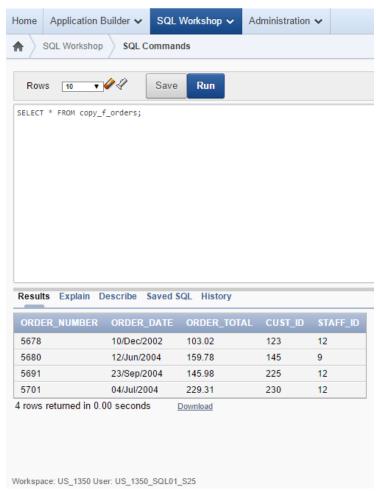
2. Bob Miller and Sue Doe have been outstanding employees at Global Fast Foods. Management has decided to reward them by increasing their overtime pay. Bob Miller will receive an additional \$0.75 per hour and Sue Doe will receive an additional \$0.85 per hour. Update the copy\_f\_staffs table to show 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:

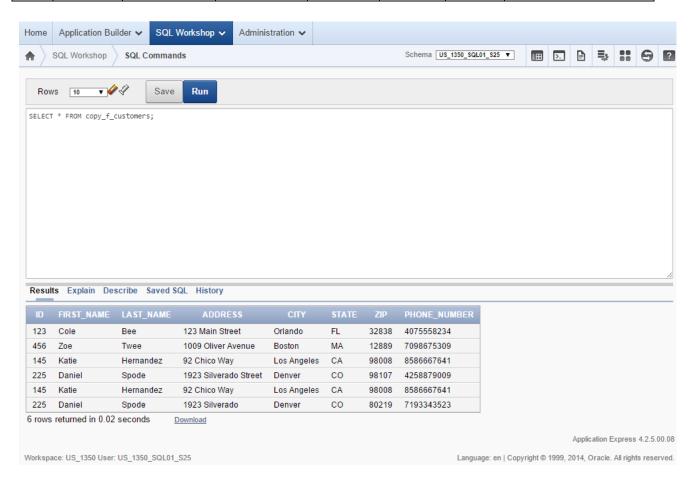
ORDER_NUMBER	ORDER_DATE	ORDER_TOTAL	CUST_ID	STAFF_ID
5680	June 12, 2004	159.78	145	9
5691	09-23-2004	145.98	225	12
5701	July 4, 2004	229.31	230	12





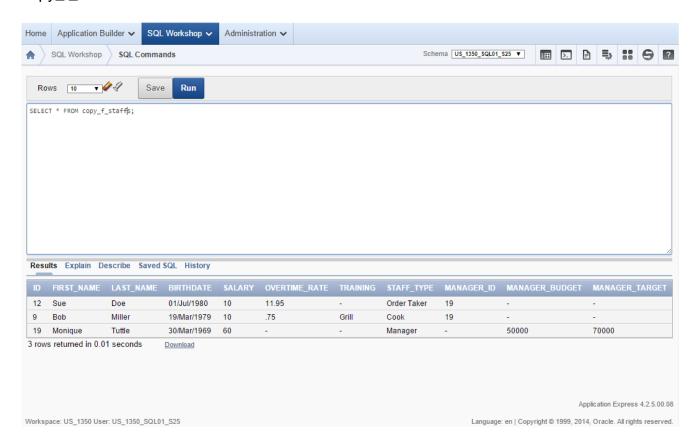
4. Add the new customers shown below to the copy\_f\_customers table. You may already have added Katie Hernandez. Will you be able to add all these records successfully?

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





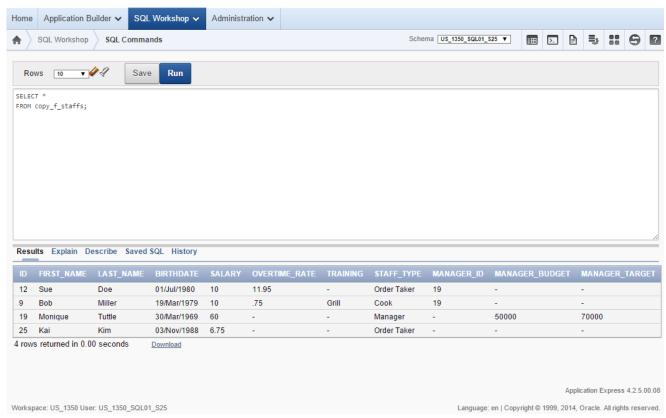
 Sue Doe has been an outstanding Global Foods staff member and has been given a salary raise. She will now be paid the same as Bob Miller. Update her record in copy\_f\_staffs.





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.



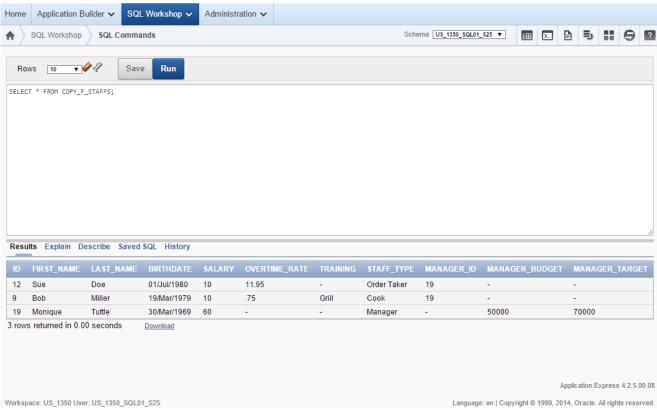


8. Execute the following SQL statement. Record your results. The following error message was shown: ora-02292: integrity constraint (US\_1350\_SQL01\_S25.EMP\_DEPT\_FK) violated - child record found

DELETE from departments WHERE department\_id = 60;

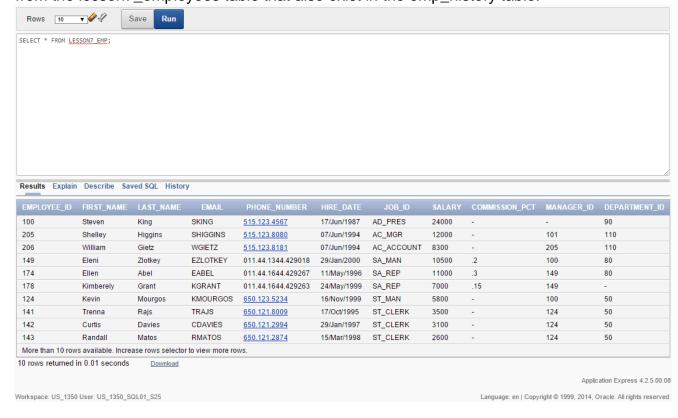
9. Kim Kai has decided to go back to college and does not have the time to work and go to school. Delete him from the Global Fast Foods staff. Verify that the change was made.





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 emp\_history table.





# Section 7 Lesson 3: DEFAULT Values, MERGE, and Multi-Table Inserts

## Try It / Solve It

- 1. When would you want a DEFAULT value? DEFAULT values are useful in the event that a new row is inserted and no value for the column is assigned. The default value can be assigned instead of a null value.
- 2. Currently, the Global Foods F\_PROMOTIONAL\_MENUS table START\_DATE column does not have SYSDATE set as DEFAULT. Your manager has decided she would like to be able to set the starting date of promotions to the current day for some entries. This will require three steps:
  - a. In your schema, Make a copy of the Global Foods F\_PROMOTIONAL\_MENUS table using the following SQL statement:
     CREATE TABLE copy\_f\_promotional\_menus

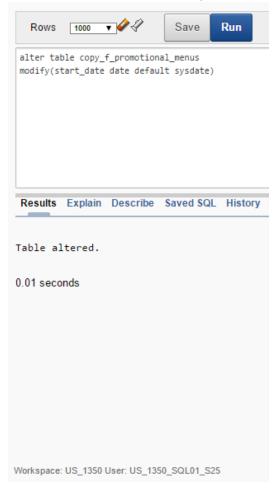
     AS (SELECT \* FROM f\_promotional\_menus)





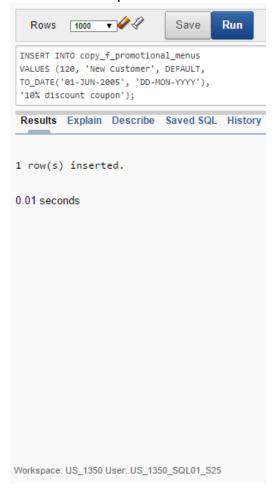
b. Alter the current START\_DATE column attributes using:

ALTER TABLE copy\_f\_promotional\_menus MODIFY(start\_date DATE DEFAULT SYSDATE)





c. INSERT the new information and check to verify the results. INSERT a new row into the copy\_f\_promotional\_menus table for the manager's new promotion. The promotion code is 120. The name of the promotion is 'New Customer.' Enter DEFAULT for the start date and '01-JUN-2005' for the ending date. The giveaway is a 10% discount coupon. What was the correct syntax used?





- 3. Allison Plumb, the event planning manager for DJs on Demand, has just given you the following list of CDs she acquired from a company going out of business. She wants a new updated list of CDs in inventory in an hour, but she doesn't want the original D\_CDS table changed. Prepare an updated inventory list just for her.
  - a. Assign new cd\_numbers to each new CD acquired.
  - b. Create a copy of the D\_CDS table called manager\_copy\_d\_cds. What was the correct syntax used?

```
CREATE TABLE manager copy d cds
```

c. INSERT into the manager\_copy\_d\_cds table each new CD title using an INSERT statement. Make up one example or use this data: 20, 'Hello World Here I Am', 'Middle Earth Records', '1998' What was the correct syntax used? INSERT INTO manager\_copy\_d\_cds VALUES (20, 'Hello World Here I Am', 'Middle Earth Records', '1998')

d. Use a merge statement to add to the manager\_copy\_d\_cds table, the CDs from the original table. If there is a match, update the title and year. If not, insert the data from the original table. What was the correct syntax used?

```
MERGE INTO manager_copy_d_cds m
USING d_cds o
ON (m.cd_number = o.cd_number)
WHEN MATCHED
THEN UPDATE SET m.title = o.title, m.year = o.year
WHEN NOT MATCHED
THEN INSERT VALUES (o.cd_number, o.title, o.producer, o.year);
```

4. Run the following 3 statements to create 3 new tables for use in a Multi-table insert statement. All 3 tables should be empty on creation, hence the WHERE 1=2 condition in the WHERE clause.

```
CREATE TABLE sal_history (employee_id, hire_date, salary)
AS SELECT employee_id, hire_date, salary
FROM employees s
WHERE 1=2;

CREATE TABLE mgr_history (employee_id, manager_id, salary)
AS SELECT employee_id, manager_id, salary
FROM employees
WHERE 1=2;
```



CREATE TABLE special\_sal (employee\_id, salary)
AS SELECT employee\_id, salary
FROM employees
WHERE 1=2;

Once the tables exist in your account, write a Multi-Table insert statement to first select the employee\_id, hire\_date, salary, and manager\_id of all employees. If the salary is more than 20000 insert the employee\_id and salary into the special\_sal table. Insert the details of employee\_id, hire\_date, and salary into the sal\_history table. Insert the employee\_id, manager\_id, and salary into the mgr\_history table.

You should get a message back saying 39 rows were inserted. Verify you get this message and verify you have the following number of rows in each table:

Sal\_history: 19 rows Mgr\_history: 19 rows

Special\_sal: 1

