Practices for Lesson 9

In this practice, you add rows to the MY_EMPLOYEE table, update and delete data from the table, and control your transactions. You run a script to create the MY_EMPLOYEE table.

Practice 9-1: Manipulating Data

The HR department wants you to create SQL statements to insert, update, and delete employee data. As a prototype, you use the MY_EMPLOYEE table before giving the statements to the HR department.

Note: For all the DML statements, use the Run Script icon (or press [F5]) to execute the query. This way you get to see the feedback messages on the Script Output tabbed page. For SELECT queries, continue to use the Execute Statement icon or press [F9] to get the formatted output on the Results tabbed page.

Insert data into the MY_EMPLOYEE table.

1) Run the statement in the lab_09_01.sql script to build the MY_EMPLOYEE table used in this practice.

2) Describe the structure of the MY_EMPLOYEE table to identify the column names.

```
DESCRIBE my_employee
Name                           Null     Type
------------------------------ -------- --------------
ID                             NOT NULL NUMBER(4)
LAST_NAME                               VARCHAR2(25)
FIRST_NAME                              VARCHAR2(25)
USERID                                  VARCHAR2(8)
SALARY                                  NUMBER(9,2)

5 rows selected
```

ID	LAST_NAME	FIRST_NAME	USERID	SALARY
1	Patel	Ralph	rpatel	895
2	Dancs	Betty	bdancs	860
3	Biri	Ben	bbiri	1100
4	Newman	Chad	cnewman	750
5	Ropeburn	Audrey	aropebur	1550

3) Create an INSERT statement to add the *first row* of data to the MY_EMPLOYEE table from the following sample data. Do not list the columns in the INSERT clause. *Do not enter all rows yet.*

Practice 9-1: Manipulating Data (continued)

4) Populate the `MY_EMPLOYEE` table with the second row of the sample data from the preceding list. This time, list the columns explicitly in the `INSERT` clause.

5) Confirm your addition to the table.

	ID	LAST_NAME	FIRST_NAME	USERID	SALARY
1	1	Patel	Ralph	rpatel	895
2	2	Dancs	Betty	bdancs	860

6) Write an `INSERT` statement in a dynamic reusable script file to load the remaining rows into the `MY_EMPLOYEE` table. The script should prompt for all the columns (`ID`, `LAST_NAME`, `FIRST_NAME`, `USERID`, and `SALARY`). Save this script to a `lab_09_06.sql` file.

7) Populate the table with the next two rows of the sample data listed in step 3 by running the `INSERT` statement in the script that you created.

8) Confirm your additions to the table.

	ID	LAST_NAME	FIRST_NAME	USERID	SALARY
1	1	Patel	Ralph	rpatel	895
2	2	Dancs	Betty	bdancs	860
3	3	Biri	Ben	bbiri	1100
4	4	Newman	Chad	cnewman	750

9) Make the data additions permanent.

Update and delete data in the `MY_EMPLOYEE` table.

10) Change the last name of employee 3 to Drexler.

11) Change the salary to $1,000 for all employees who have a salary less than $900.

12) Verify your changes to the table.

	ID	LAST_NAME	FIRST_NAME	USERID	SALARY
1	1	Patel	Ralph	rpatel	1000
2	2	Dancs	Betty	bdancs	1000
3	3	Drexler	Ben	bbiri	1100
4	4	Newman	Chad	cnewman	1000

13) Delete Betty Dancs from the `MY_EMPLOYEE` table.

14) Confirm your changes to the table.

Practice 9-1: Manipulating Data (continued)

	ID	LAST_NAME	FIRST_NAME	USERID	SALARY
1	1	Patel	Ralph	rpatel	1000
2	3	Drexler	Ben	bbiri	1100
3	4	Newman	Chad	cnewman	1000

15) Commit all pending changes.

Control data transaction to the `MY_EMPLOYEE` table.

16) Populate the table with the last row of the sample data listed in step 3 by using the statements in the script that you created in step 6. Run the statements in the script.

17) Confirm your addition to the table.

	ID	LAST_NAME	FIRST_NAME	USERID	SALARY
1	1	Patel	Ralph	rpatel	1000
2	3	Drexler	Ben	bbiri	1100
3	4	Newman	Chad	cnewman	1000
4	5	Ropeburn	Audrey	aropebur	1550

18) Mark an intermediate point in the processing of the transaction.

19) Delete all the rows from the `MY_EMPLOYEE` table.

20) Confirm that the table is empty.

21) Discard the most recent `DELETE` operation without discarding the earlier `INSERT` operation.

22) Confirm that the new row is still intact.

	ID	LAST_NAME	FIRST_NAME	USERID	SALARY
1	1	Patel	Ralph	rpatel	1000
2	3	Drexler	Ben	bbiri	1100
3	4	Newman	Chad	cnewman	1000
4	5	Ropeburn	Audrey	aropebur	1550

23) Make the data addition permanent.

If you have the time, complete the following exercise:

24) Modify the `lab_09_06.sql` script such that the `USERID` is generated automatically by concatenating the first letter of the first name and the first seven characters of the last name. The generated `USERID` must be in lowercase. Therefore, the script should not prompt for the `USERID`. Save this script to a file named `lab_09_24.sql`.

ID	LAST_NAME	FIRST_NAME	USERID	SALARY
6	Anthony	Mark	manthony	1230

Practice 9-1: Manipulating Data (continued)

25) Run the `lab_09_24.sql` script to insert the following record:

26) Confirm that the new row was added with correct `USERID`.

	ID	LAST_NAME	FIRST_NAME	USERID	SALARY
1	6	Anthony	Mark	manthony	1230