

## Terms

Oracle Database  
database service  
database server  
database engine  
database listener  
Database Home Page  
SQL\*Plus

database object  
Oracle SQL Developer  
snippet  
SQL script  
Oracle Database SQL Reference  
manual

## Before you start the exercises...

Before you start the exercises for this chapter, you need to install Oracle Database Express Edition and Oracle SQL Developer. You also need to download and install the source files for this book, and you need to create the users and tables for this book. The procedures for doing all of these tasks are provided in appendix A.

## Exercises

In these exercises, you'll use SQL Developer to review the tables in the AP schema that's used throughout this book. In addition, you'll use SQL developer to enter SQL statements and run them against these tables.

### Make sure Oracle Database is running

1. Use the procedure in figure 2-1 to start the database service for Oracle Database. If it is already running, you'll get a message that confirms that. Otherwise, the database service will be started. Either way, you can close the DOS window that's opened.

### Use SQL Developer to review the Accounts Payable database

2. Start Oracle SQL Developer. If you created a menu or desktop shortcut when you installed SQL Developer, you can use that shortcut now. Otherwise, you can use the Windows Explorer to find and double-click on the sqldeveloper.exe file.



3. Create the AP, EX, and OM connections as described in figure 2-4. When you're done, the Connections window should display three connections: AP, EX, and OM.
4. In the Connections window, click on the AP connection to expand it. When you're prompted for a password, enter "ap". That will expand the connection so you can see all of the database objects in the AP schema.
5. Use the techniques in figures 2-5 and 2-6 to navigate through the database objects and view the column definitions for at least the Vendors and Invoices tables.
6. Use the technique in figure 2-6 to view the data for the Vendors and Invoices tables.

### Use SQL Developer to enter and run SQL statements

7. Use the technique in figure 2-8 to open a SQL Worksheet window for the AP connection. Then, enter and run this SQL statement:

```
SELECT vendor_name FROM vendors
```

8. Use the code completion feature described in figure 2-8 to enhance this SQL statement so it includes an ORDER BY clause and some additional columns like this:

```
SELECT vendor_name, vendor_address1, vendor_city, vendor_state,  
       vendor_zip_code  
FROM vendors  
ORDER BY vendor_name
```

Then, run the statement.

9. Move the cursor into the ORDER BY clause and press Ctrl+/ to comment out the line. Then, press Ctrl+/ again to uncomment the line.
10. Delete the *e* at the end of vendor\_zip\_code and run the statement again. Note that this syntax error is handled as in figure 2-10.
11. Open another Worksheet window, and use the COUNT and SUM snippets as shown in figure 2-9 as you enter this statement:

```
SELECT COUNT(*) AS number_of_invoices,  
       SUM(invoice_total) AS grand_invoice_total  
FROM invoices
```

Then, run the statement.

12. Use the Tools→Preferences command to set the default path for scripts as described in figure 2-11. Then, click on the tab for the Worksheet window of exercise 8, click the Save button to save this statement, and note the directory in the Save dialog box. Next, click the Cancel button in the Save dialog box to cancel the command.

### Use SQL Developer to open and run scripts

13. Use the technique in figure 2-11 to open the select\_vendor\_city\_state script that's in the c:\murach\oracle\_sql\scripts\ch02 directory. Notice that this script contains just one SQL statement. Then, run the statement. Because you didn't specify a connection for this statement, SQL Developer will ask you to select one before it runs the statement.



14. Click on the Open button. Note that the recently used directories including the ch02 directory are shown on the left side of the Open dialog box. Then, click on the ch02 directory to display the files that are stored in this directory. Next, click the Cancel button to close this dialog box.
15. Open the select\_vendor\_total\_due script that's in the ch02 directory. Note that this opens another tab. Next, select the AP connection from the connection list and run this script.
16. Open the select\_vendor\_information script that's in the ch02 directory. Notice that this script contains two SQL statements that end with semicolons (scroll down if you need to). Then, move the insertion point to the first statement and press F9 to run that statement. Next, move the insertion point to the second statement and press F9 to run that statement. Last, press F5 or click the Run Script button to run both of the statements that are stored in this script. If you scroll through the Script Output window, you will see the results of the two SELECT statements that were run.

### **Close and restart SQL Developer**

17. Continue to experiment on your own. Make sure to leave at least one saved script open. When you're ready to end this session, use the File→Exit command or click on the Close button in the upper right corner of the SQL Developer window.
18. Restart SQL Developer. When it starts, notice that all of the saved scripts that you left open are automatically opened. However, any unsaved scripts that you entered are lost.
19. Run one of the open scripts. Note that you have to select a connection and provide a password for the connection before the script will run.
20. Exit from SQL Developer.