Using SQL Developer

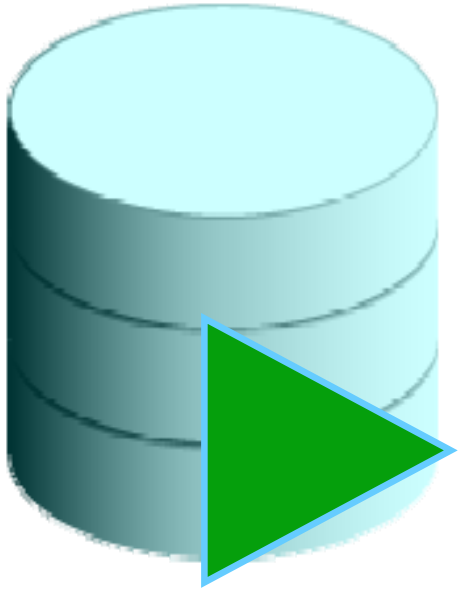
Objectives

After completing this appendix, you should be able to do the following:

- List the key features of Oracle SQL Developer
- Install Oracle SQL Developer
- Identify menu items of Oracle SQL Developer
- Create a database connection
- Manage database objects
- Use SQL Worksheet
- Execute SQL statements and SQL scripts
- Create and save reports

What Is Oracle SQL Developer?

- Oracle SQL Developer is a free graphical tool that enhances productivity and simplifies database development tasks.
- You can connect to any target Oracle database schema using standard Oracle database authentication.

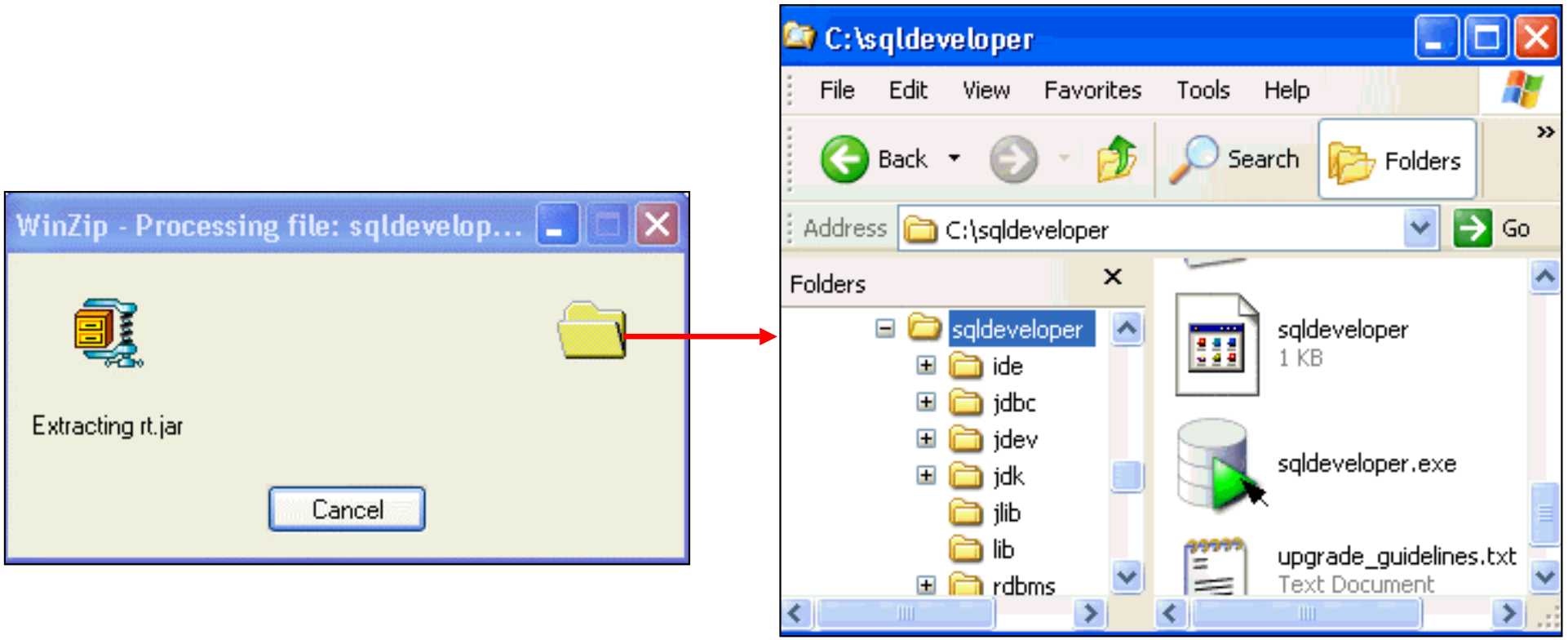


Key Features

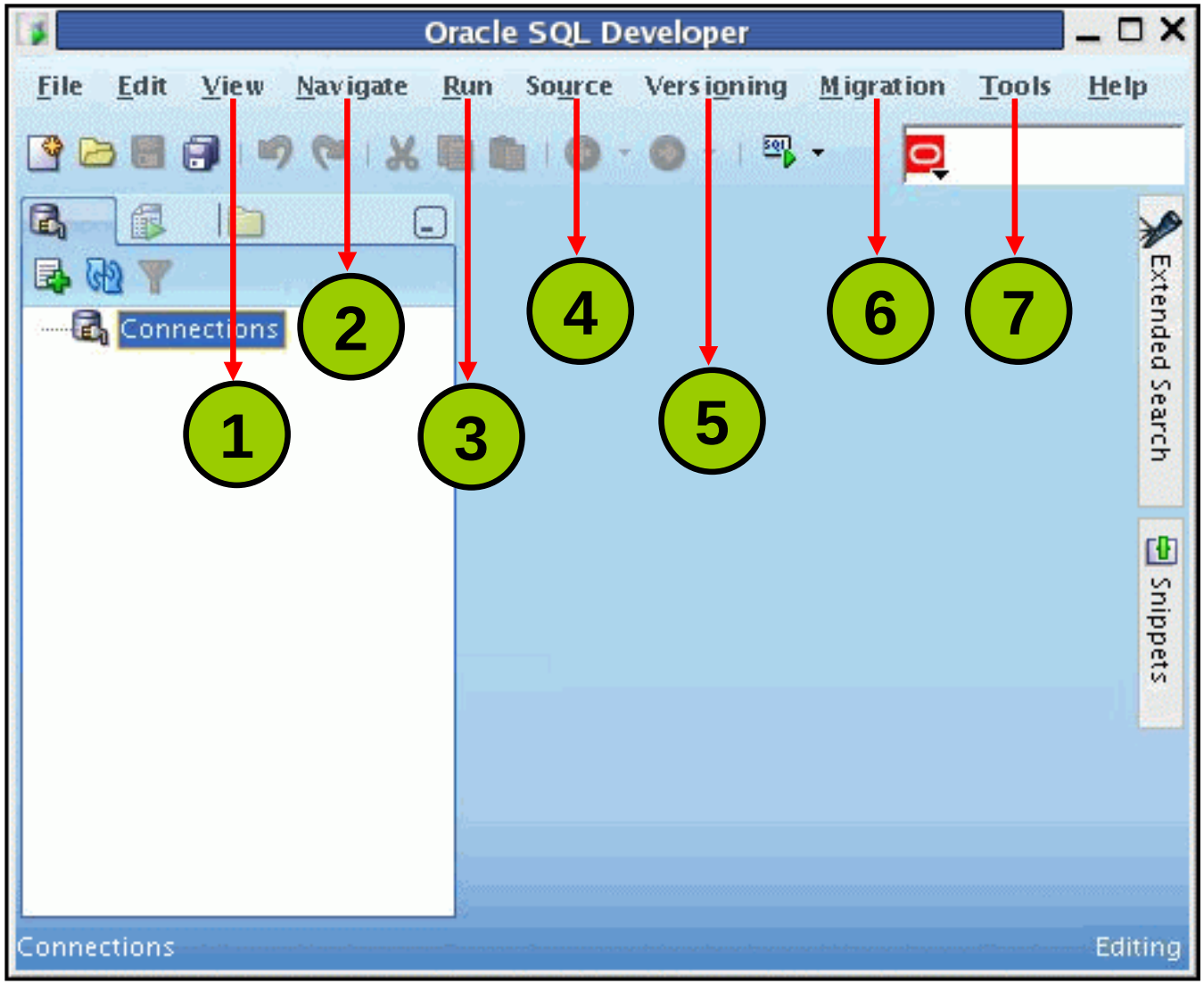
- Was developed in Java
- Supports Windows, Linux, and Mac OS X platforms
- Uses the JDBC Thin driver for default connectivity
- Does not require an installer
- Connects to any Oracle Database version 9.2.0.1 and later
- Is bundled with JRE 1.5

Installing SQL Developer

Download the Oracle SQL Developer kit and unzip into any directory on your machine.



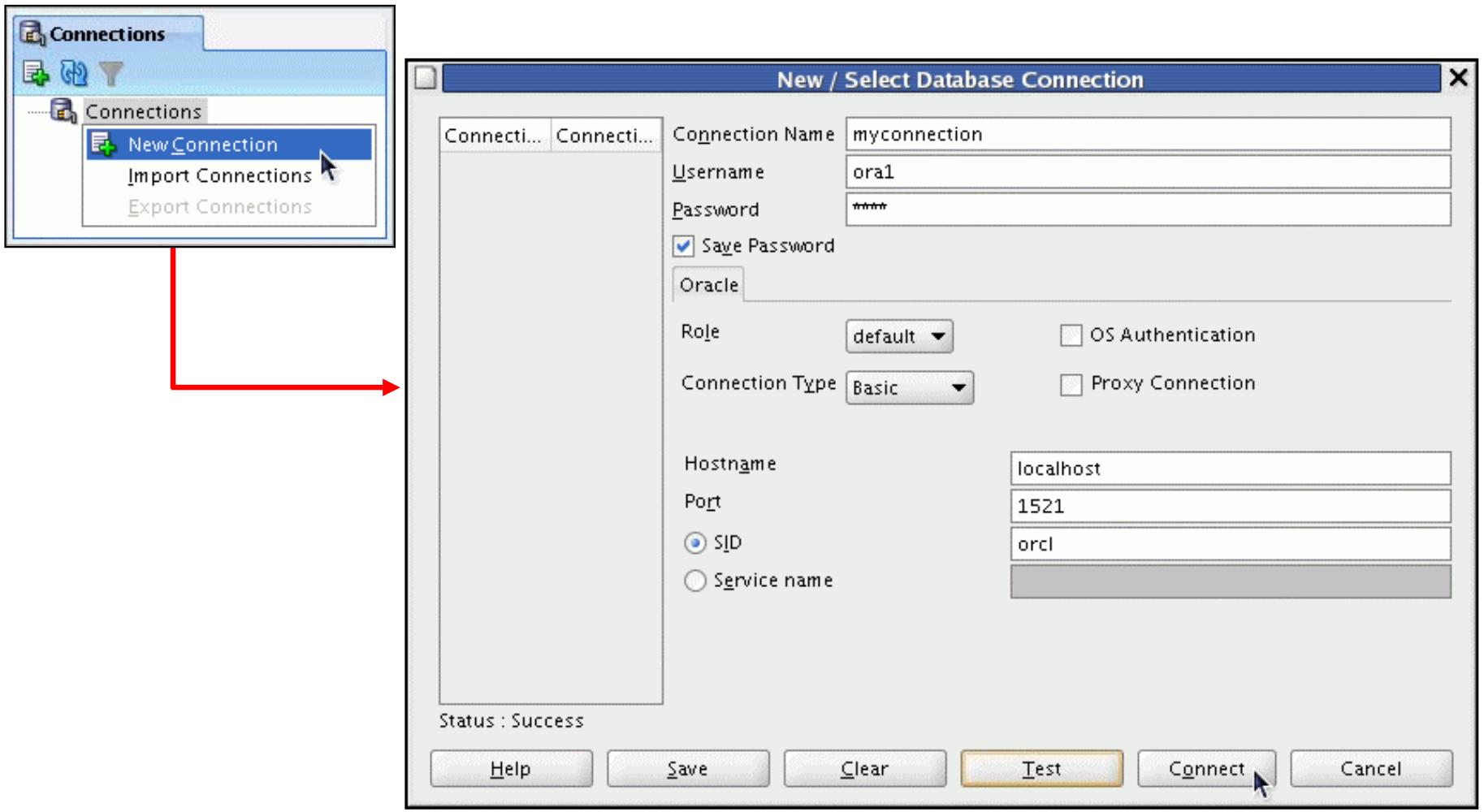
Menus for SQL Developer



Creating a Database Connection

- You must have at least one database connection to use SQL Developer.
- You can create and test connections for multiple:
  - Databases
  - Schemas
- SQL Developer automatically imports any connections defined in the `tnsnames.ora` file on your system.
- You can export connections to an XML file.
- Each additional database connection created is listed in the connections navigator hierarchy.

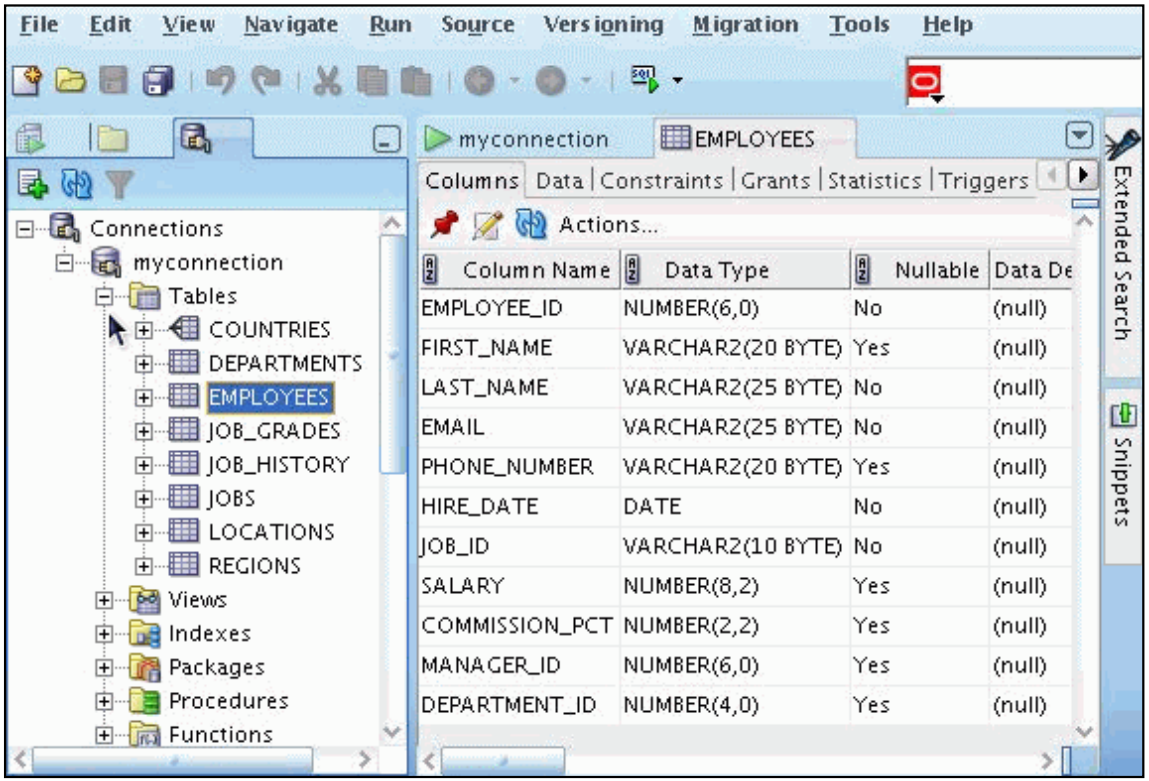
Creating a Database Connection



Browsing Database Objects

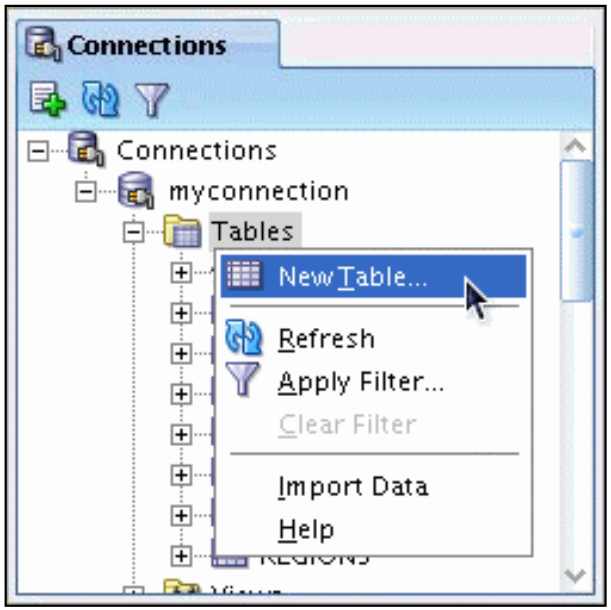
Use the Database Navigator to:

- Browse through many objects in a database schema
- Do a quick review of the definitions of objects

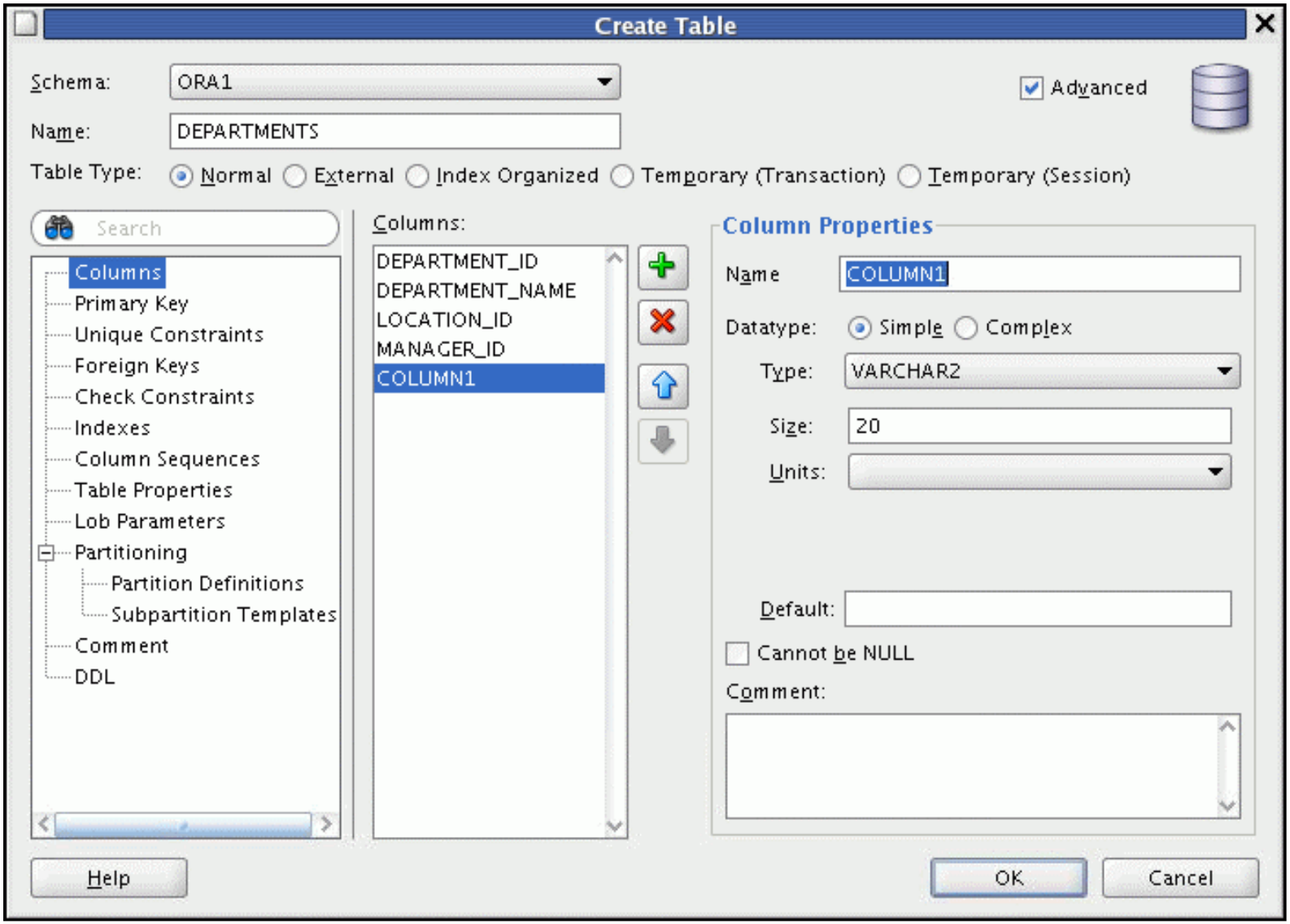


Creating a Schema Object

- SQL Developer supports the creation of any schema object by:
  - Executing a SQL statement in SQL Worksheet
  - Using the context menu
- You can edit the objects by using an edit dialog box or one of many context-sensitive menus.
- You can view the DDL for adjustments such as creating a new object or editing an existing schema object.

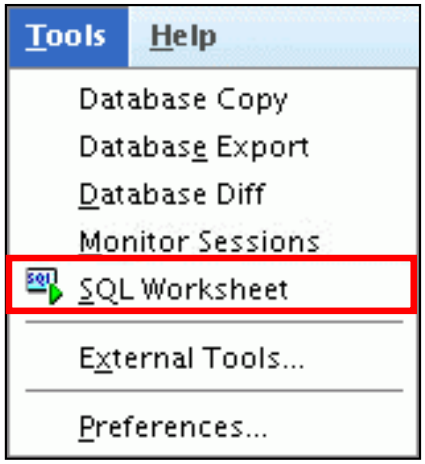


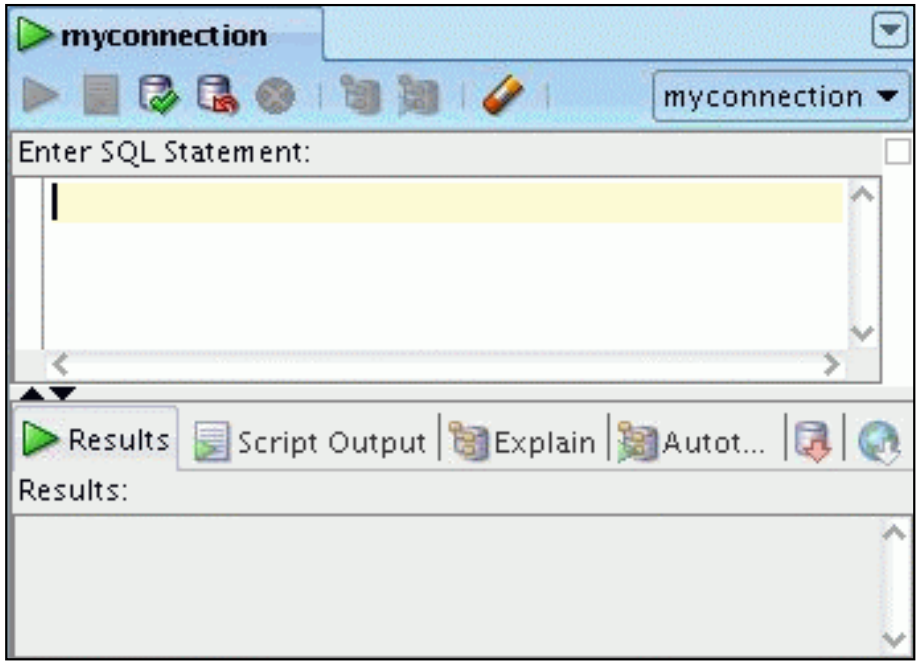
Creating a New Table: Example



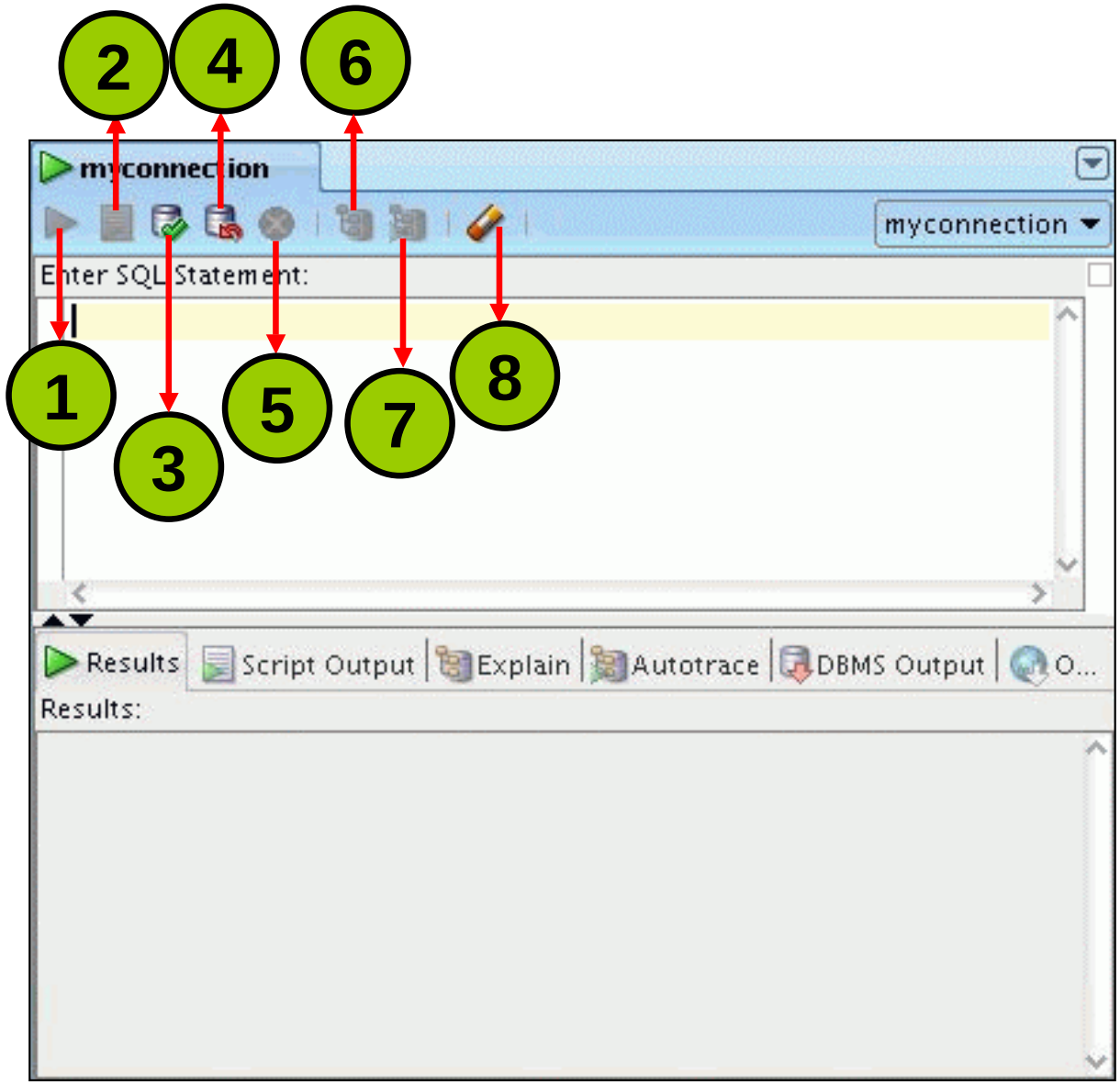
Using SQL Worksheet

- Use SQL Worksheet to enter and execute SQL, PL/SQL, and SQL *Plus statements.
- Specify any actions that can be processed by the database connection associated with the worksheet.



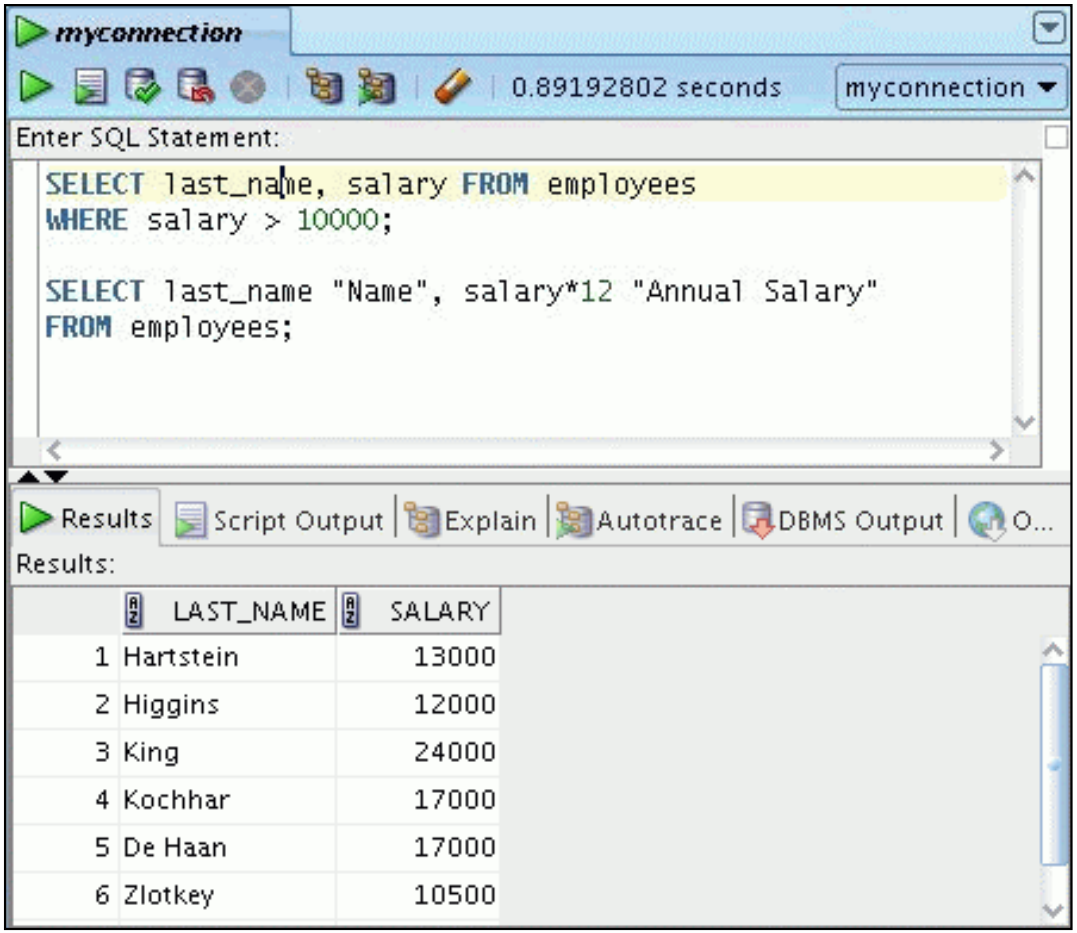


Using SQL Worksheet

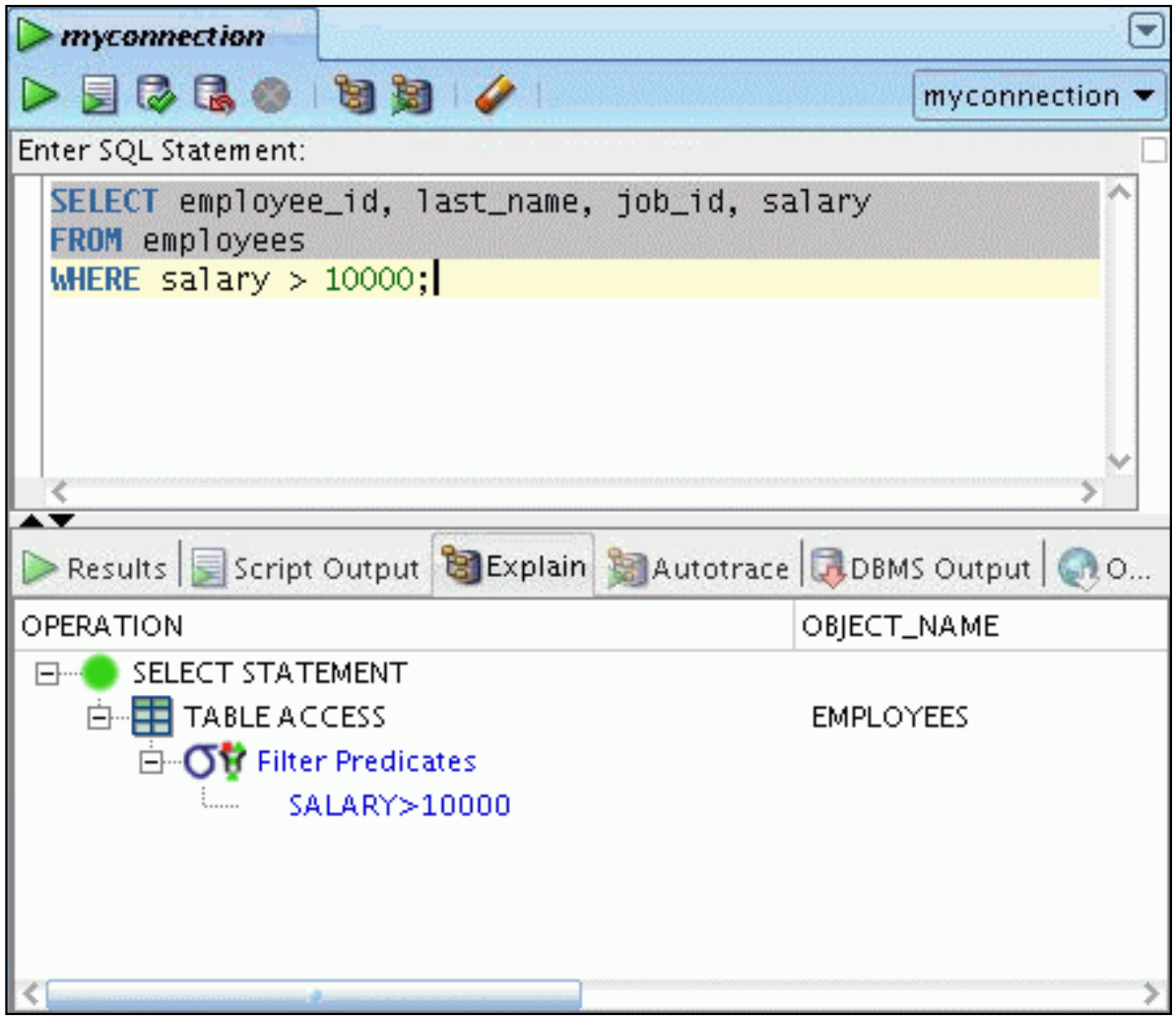


Executing SQL Statements

Use the Enter SQL Statement box to enter single or multiple SQL statements.

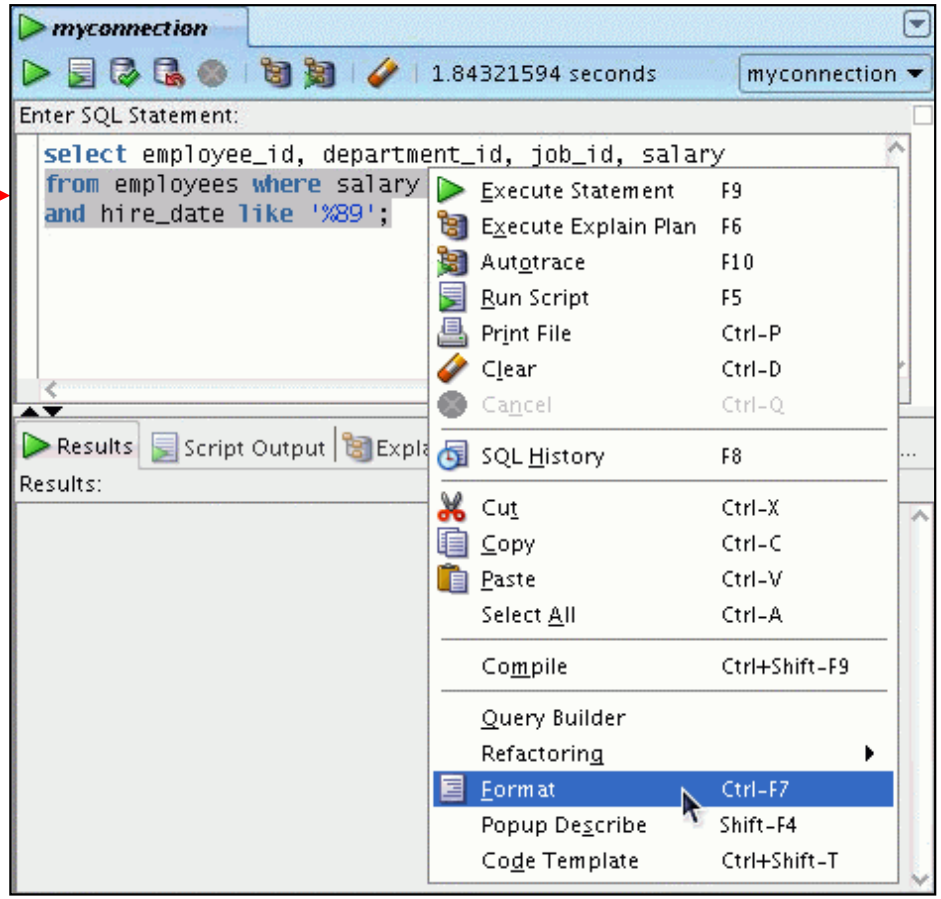


Viewing the Execution Plan

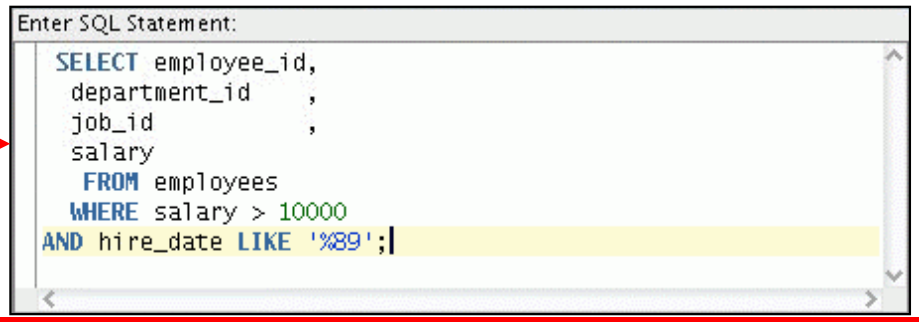


Formatting the SQL Code

Before formatting

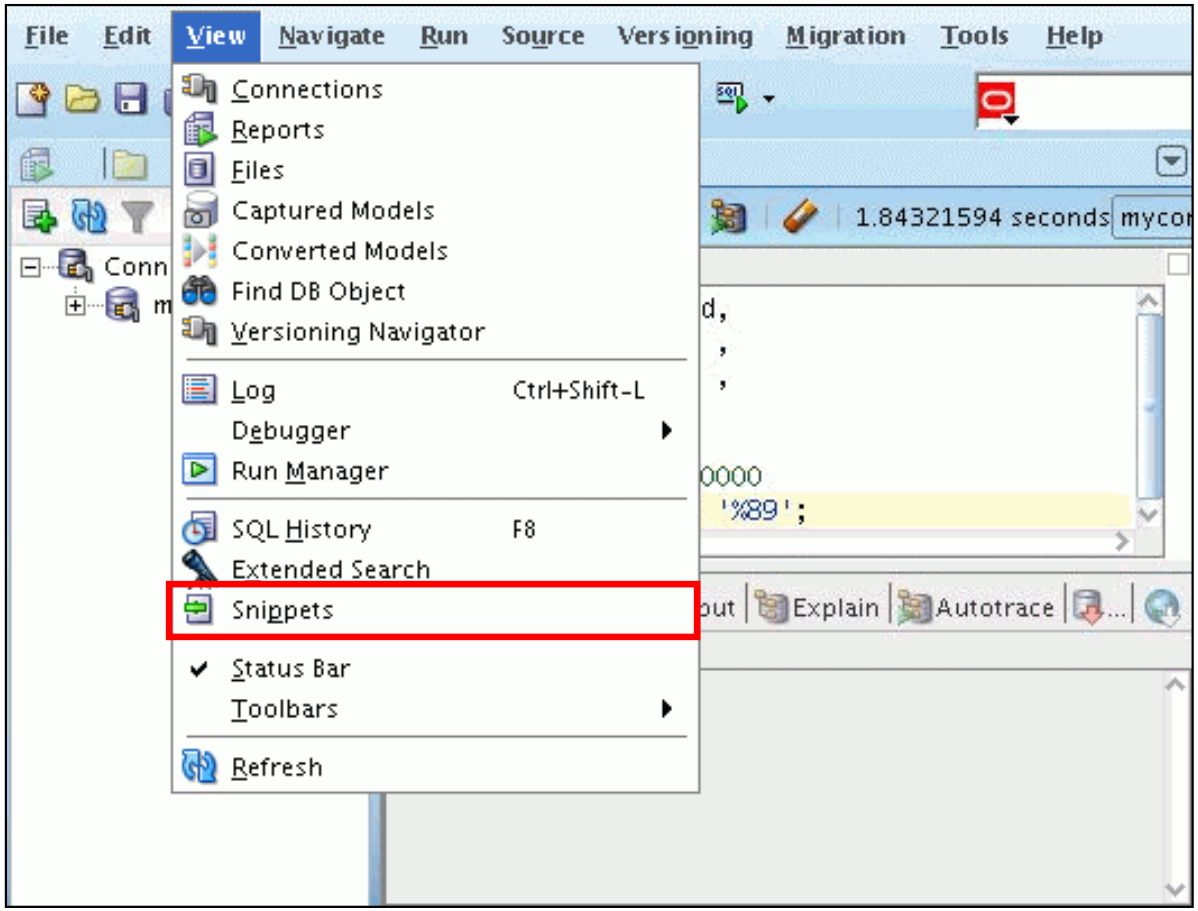


After formatting



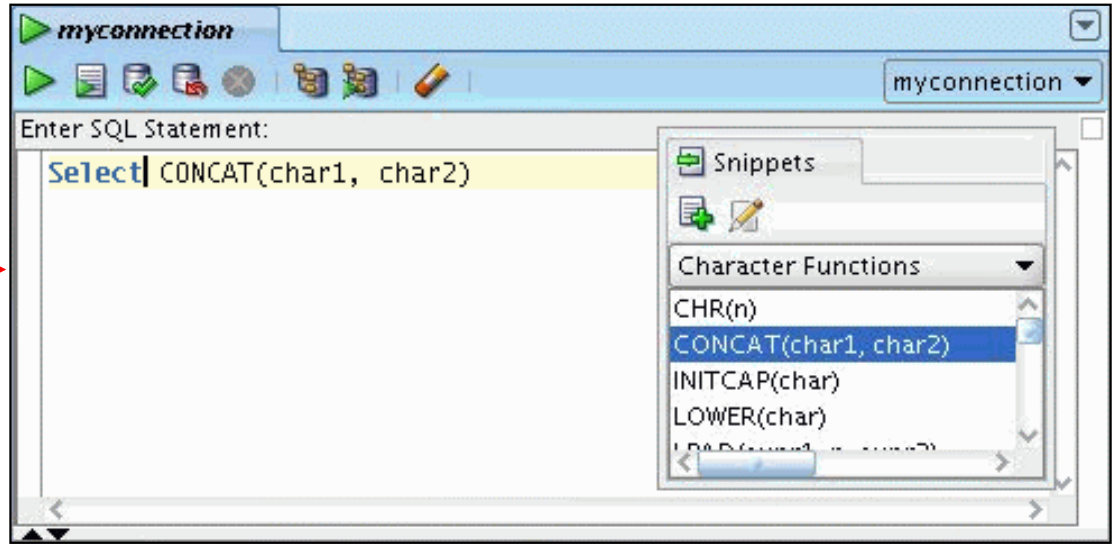
Using Snippets

Snippets are code fragments that may be just syntax or examples.

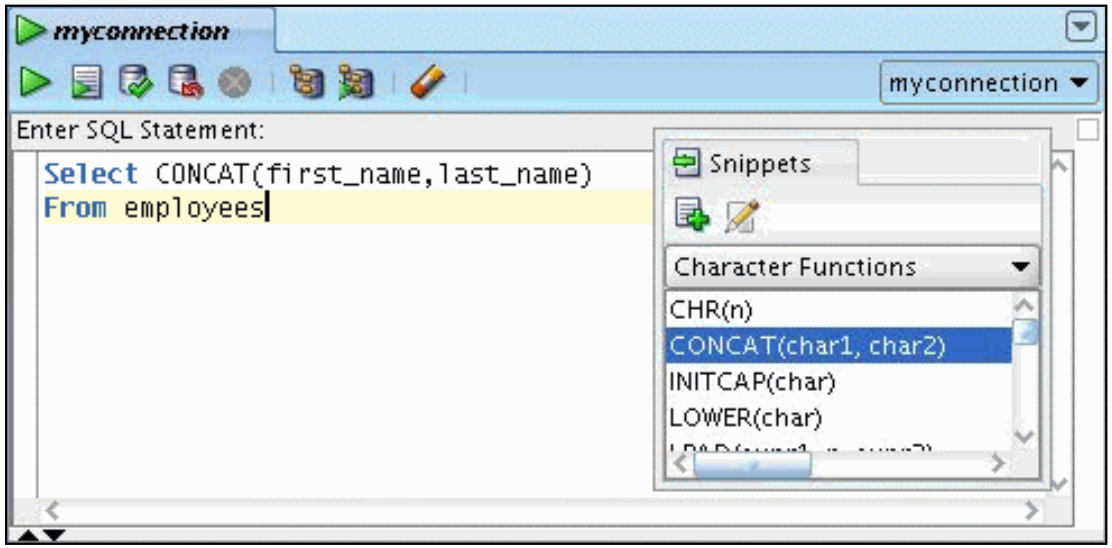


Using Snippets: Example

Inserting a snippet

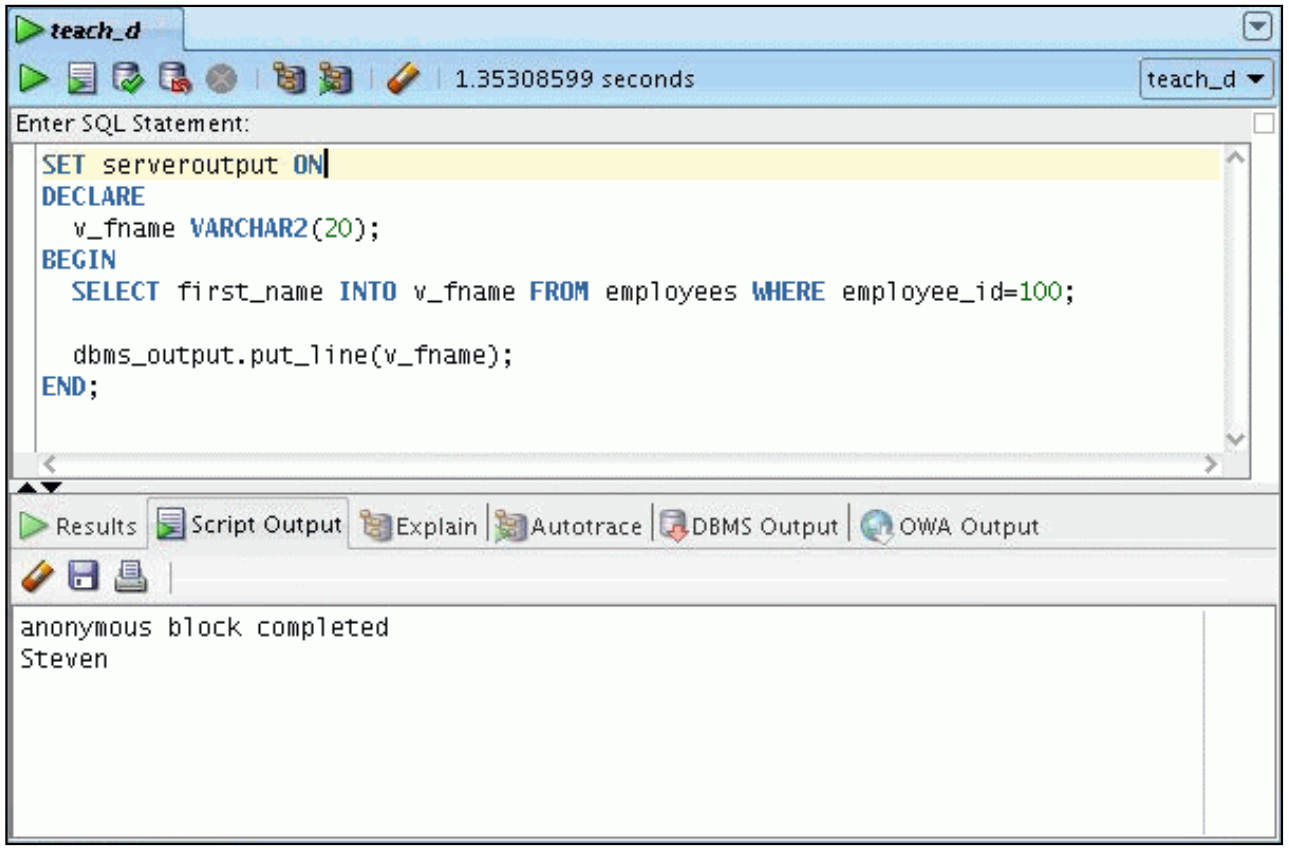


Editing the snippet



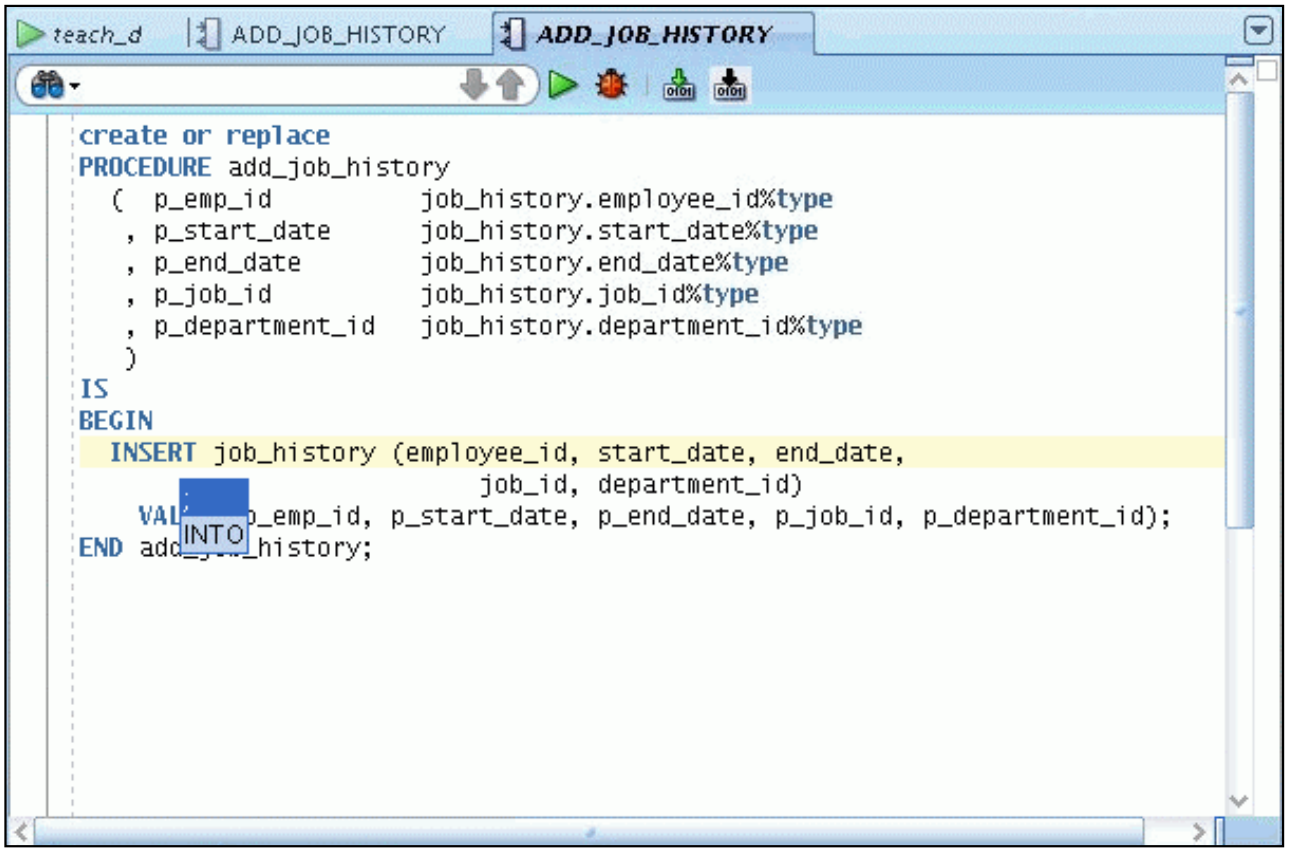
Creating an Anonymous Block

Create an anonymous block and display the output of the `DBMS_OUTPUT` package statements.

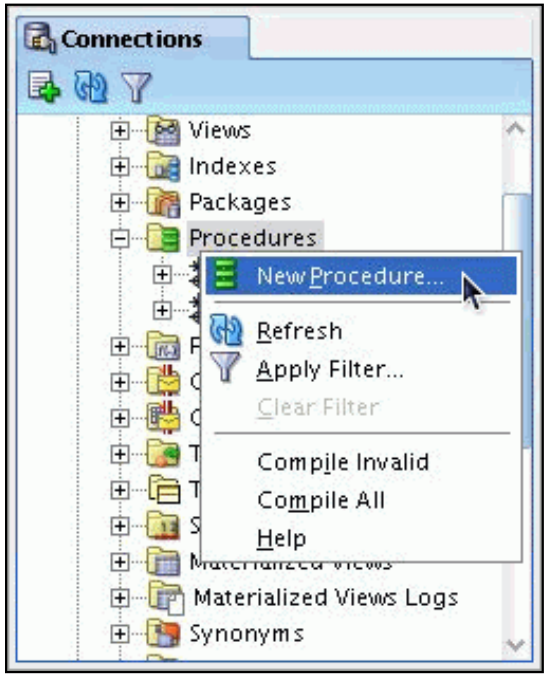


Editing the PL/SQL Code

Use the full-featured editor for PL/SQL program units.



Creating a PL/SQL Procedure



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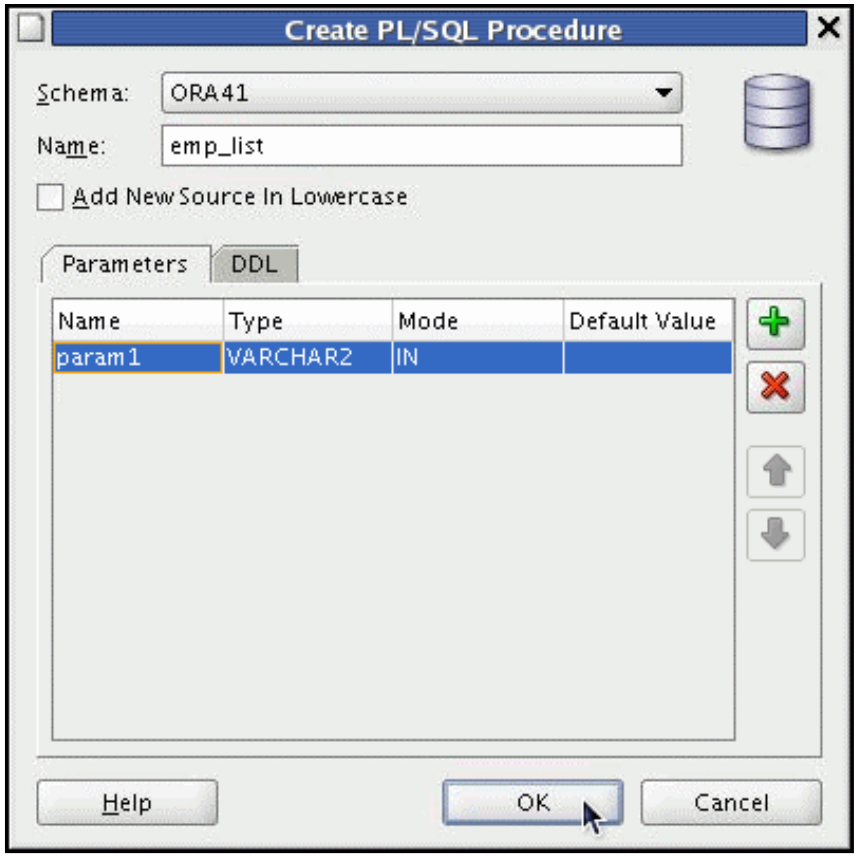

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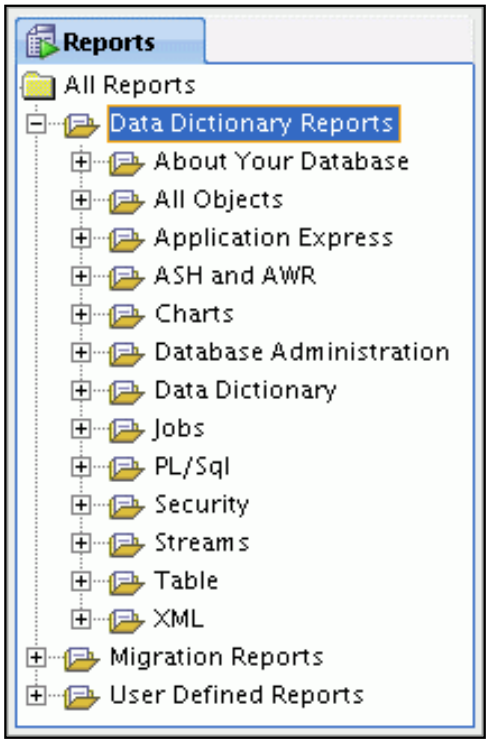
Using SQL*Plus

- SQL Worksheet does not support all SQL*Plus statements.
- SQL*Plus statements that are not supported by SQL Worksheet are:
  - `append`
  - `archive`
  - `attribute`
  - `break`
  - `change`
  - `clear`

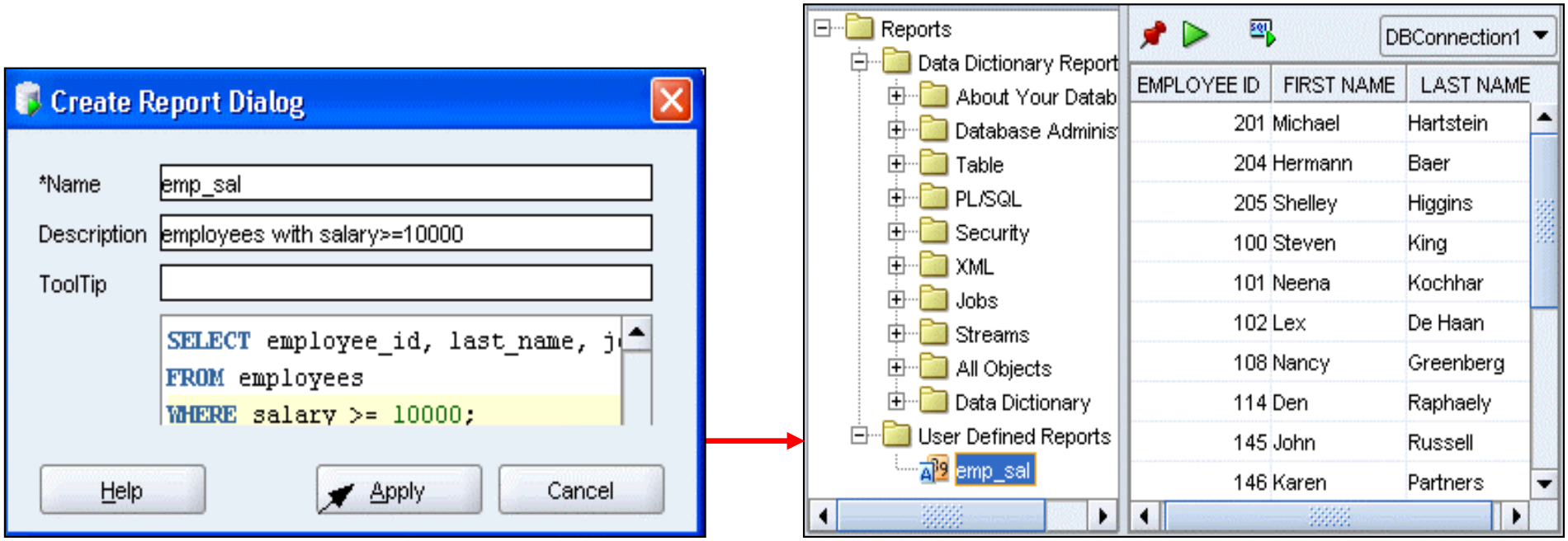
Database Reporting

- SQL Developer provides you with a number of predefined reports about your database and objects.
- The reports are organized into categories.
- You can create your own customized reports too.



Creating a User-Defined Report

Create and save user-defined reports for repeated use.



Summary

In this appendix, you should have learned how to use SQL Developer to do the following:

- Browse, create, and edit database objects
- Execute SQL statements and scripts in SQL Worksheet
- Create and save custom reports