Database Programming with PL/SQL

12-1: Using Dynamic SQL Practice

Activities

Vocabulary

Identify the vocabulary word for each definition below:

Native Dynamic SQL	SQL statements that cannot be parsed at compile time, but must be parsed at run time. The text of these statements can, and probably will, change from execution to execution.
EXECUTE IMMEDIATE	A statement that prepares (parses) and immediately executes a dynamic SQL statement or an anonymous PL/SQL block.

Try It / Solve It

1. Name three of the states that SQL statements go through.

   - **PARSE**
   - **BIND**
   - **EXECUTE**

2. List three reasons why using the EXECUTE IMMEDIATE command is preferable to using the DBMS_SQL package.

Usa menos líneas de código.

Es mucho más fácil que DBMS_SQL.

Su ejecución es más rápido porque tiene menos líneas de código.

3. The DEPARTMENTS and EMPLOYEES tables have two columns in common: department_id and manager_id. Create a procedure that uses a single EXECUTE IMMEDIATE call to select and display a department_id from either table, where the manager_id is 205. The procedure should accept the table name as an input parameter and display the department_id from that table. Remember to handle any possible exceptions that might be raised because we are selecting into a single variable, not using a cursor in this case. Test your procedure twice, once with each of the two tables.

```
CREATE OR REPLACE PROCEDURE ver_id(p_tabla IN VARCHAR2) as
V_CONSULTA VARCHAR2(100);
V_res VARCHAR2(100);
BEGIN
V_consulta:='SELECT DEPARTMENT_ID FROM ' || p_tabla || ' WHERE MANAGER_ID = 205;';
EXECUTE IMMEDIATE V_CONSULTA INTO V_RES;
DBMS_OUTPUT.PUT_LINE('Resultado '||v_res);
END;
```

4. Create a procedure called how_many_rows to display the table name of any chosen table, and the number of rows it contains. Test the procedure on the COUNTRIES and REGIONS tables.

```
 CREATE OR REPLACE how_many_rows(p_tabla IN VARCHAR2) IS
V_consulta VARCHAR2(100);
BEGIN
 V_CONSULTA:= ‘select count(*) from ’ || p_tabla || ‘;’
EXECUTE IMMEDIATE V_CONSULTA;
END;
```

5. Create a copy of the COUNTRIES table by executing the following SQL statement:

CREATE TABLE copy_countries AS SELECT * FROM countries;

Create a procedure that deletes all the rows from a chosen table and displays how many rows have been deleted. Test your procedure on the COPY_COUNTRIES table.

```
CREATE OR REPLACE PROCEDURE delete_rows(p_tabla in VARCHAR2)
AS
V_consulta VARCHAR2(50);
V_afectados NUMBER(3);
Begin
V_consulta:='DELETE FROM'|| p_tabla ||';';
EXECUTE IMMEDIATE V_CONSULTA;
V_AFECTADOS:=SQL%ROWCOUNT;
DBMS_OUTPUT.PUT_LINE(V_AFECTADOS);
End;

BEGIN
Delete_rows('countries');
END;
```