

Database Programming with PL/SQL

4-3: Iterative Control: Basic Loops

Practice Activities

Vocabulary

Identify the vocabulary word for each definition below:

Basic Loop	Encloses a sequence of statements between the keywords LOOP and END LOOP and must execute at least once.
EXIT	Statement to terminate a loop.

Try It / Solve It

1. What purpose does a loop serve in PL/SQL?

A loop allows PL/SQL to repeatedly execute a sequence of statements until a termination condition is met. (O bucl permite PL/SQL s execute în mod repetat o secven de instrucuni pân când este îndeplinit o condiie de terminare.)

2. List the types of loops in PL/SQL.

Basic LOOP, FOR LOOP WHILE LOOP

3. What statement is used to explicitly end a loop?

EXIT or EXIT WHEN

4. Write a PL/SQL block to display the country_id and country_name values from the COUNTRIES table for country_id whose values range from 1 through 3. Use a basic loop. Increment a variable from 1 through 3. Use an IF statement to test your variable and EXIT the loop after you have displayed the first 3 countries.

5. Modify your solution to question 4 above, replacing the IF statement with an EXIT....WHEN statement.

6. Create a MESSAGES table and insert several rows into it.

- A. To create the messages table.

```
DROP TABLE messages;
CREATE TABLE messages (results NUMBER(2));
```

- B. Write a PL/SQL block to insert numbers into the MESSAGES table. Insert the numbers 1 through 10, excluding 6 and 8.

```
B. BEGIN
    FOR i IN 1..10 LOOP
        -- Excludem 6 i 8
        IF i != 6 AND i != 8 THEN
            INSERT INTO messages (results)
VALUES (i);
        END IF;
    END LOOP;

    -- Confirmm insertiile
    COMMIT;
END;
```

- C. Execute a SELECT statement to verify that your PL/SQL block worked. `SELECT * FROM messages;`