Database Programming with PL/SQL 6-4: Cursors with Parameters

Practice Activities

Vocabulary

No new vocabulary for this lesson

Try It / Solve It

1. Describe the benefit of using one or more parameters with a cursor.

Evitas crear un cursor para cada caso, es mejor usar parámetros así evitas tener más cursores y más código.

2. Write a PL/SQL block to display the country name and the area of each country in a chosen region. The region_id should be passed to the cursor as a parameter. Test your block using two region_ids: 5 (South America) and 30 (Eastern Asia). Do not use a cursor FOR loop.

```
DECLARE

CURSOR cur_countries(p_region_id NUMBER) IS SELECT country_id, country_name,area
FROM countries WHERE region_id = p_region_id;

v_country_record cur_countries%ROWTYPE;

BEGIN
open cur_countries(5);
LOOP
FETCH cur_countries INTO v_country_record;
EXIT WHEN cur_countries%NOTFOUND;
DBMS_OUTPUT.PUT_LINE('Country '||v_country_record.country_name || ' Area: '||
V_country_record.area);
```

```
END LOOP;

close cur_countries;

END;
```

3. Modify your answer to question 2 to use a cursor FOR loop. You must still declare the cursor explicitly in the DECLARE section. Test it again using regions 5 and 30.

```
 DECLARE

CURSOR cur_countries(p_region_id NUMBER) IS SELECT country_id, country_name,area
FROM countries WHERE region_id = p_region_id;

v_country_record cur_countries%ROWTYPE;

BEGIN

FOR v_country_record IN cur_countries(15) LOOP

DBMS_OUTPUT.PUT_LINE('Country '||v_country_record.country_name || ' Area: '||
V_country_record.area);

END LOOP;


END;
```

4. Modify your answer to question 3 to display the country_name and area of each country in a chosen region that has an area greater than a specific value. The region_id and specific area should be passed to the cursor as two parameters. Test your block twice using region_id 5 (South America): the first time with area = 200000 and the second time with area = 1000000.

```
 DECLARE

CURSOR cur_countries(p_region_id NUMBER, p_area NUMBER) IS SELECT country_id,
country_name,area FROM countries WHERE region_id = p_region_id AND area>p_area;

v_country_record cur_countries%ROWTYPE;

BEGIN

FOR v_country_record IN cur_countries(5,20000) LOOP

DBMS_OUTPUT.PUT_LINE('Country '||v_country_record.country_name || ' Area: '||
V_country_record.area);
```

```
END LOOP;

END;
```


5. Modify your answer to question 4 to fetch and display two sets of countries in a single execution of the block. You should open and close the cursor twice, passing different parameter values to it each time. Before each set of output rows, display the message “Region: <region_id> Minimum Area: <area>”., for example “Region: 5 Minimum Area: 200000”. Test your changes using (5, 200000) and (30, 500000).

```
DECLARE

CURSOR cur_countries(p_region_id NUMBER, p_area NUMBER) IS SELECT country_id, country_name,area FROM countries WHERE region_id = p_region_id AND area>p_area;

v_country_record cur_countries%ROWTYPE;

BEGIN

FOR v_country_record IN cur_countries(5,20000) LOOP

DBMS_OUTPUT.PUT_LINE('Region: '||v_country_record.country_name || ' Minumum Area: '|| V_country_record.area);

END LOOP;


FOR v_country_record IN cur_countries(30,500000) LOOP

DBMS_OUTPUT.PUT_LINE('Region: '||v_country_record.country_name || ' Minumum Area: '|| V_country_record.area);

END LOOP;

END;
```