Database Programming with PL/SQL

4-3: Iterative Control: Basic Loops

Practice Activities

|  |  |
| --- | --- |
| Basic loop | Encloses a sequence of statements between the keywords  LOOP and END LOOP and must execute at least once. |
| EXIT [When condition] | Statement to terminate a loop. |

Try It / Solve It

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

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

Basic loop, FOR, WHILE

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

EXIT [when condition]

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.

Declare

v\_cnt number:=1;

v\_nume\_tara wf\_countries.country\_name%type;

begin

loop

select country\_name into v\_nume\_tara from wf\_countries

where country\_id=v\_cnt;

DBMS… (v\_nume\_tara);

v\_cnt:=v\_cnt+1;

if(v\_cnt > 3) then exit;

end if;

end loop;

end;

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

statement.

Declare

v\_cnt number:=1;

v\_nume\_tara wf\_countries.country\_name%type;

begin

loop

select country\_name into v\_nume\_tara from wf\_countries

where country\_id=v\_cnt;

DBMS… (v\_nume\_tara);

v\_cnt:=v\_cnt+1;

exit when v\_cnt > 3;

end loop;

end;

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));

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B. Write a PL/SQL block to insert numbers into the MESSAGES table. Insert the numbers 1

through 10, excluding 6 and 8.

declare

cnt number:=1;

begin

loop

if cnt<>6 and cnt<>8 then

insert into messages

values(cnt)

end if;

cnt:=cnt+1;

exit when cnt>10;

end loop;

end;

C. Execute a SELECT statement to verify that your PL/SQL block worked.

Select \* from messages;