Database Programming with PL/SQL

2-5: Writing PL/SQL Executable Statements

Practice Activities

Vocabulary

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| Explicit conversion | Converts values from one data type to another by using built-in  functions. |
| Implicit conversion | Converts data types dynamically if they are mixed in a  statement. |

Try It / Solve It

1. Examine the following code and then answer the questions.

DECLARE

x VARCHAR2(20);

BEGIN

x := '123' + '456' ;

DBMS\_OUTPUT.PUT\_LINE(x);

END;

A. What do you think the output will be when you run the above code?

123456 (Concateneaza)

B. Now, run the code. What is the output?

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C. In your own words, describe what happened when you ran the code. Did any implicit

conversions take place?

In mod evident o convertit cele 2 stringuri in numere, o facut suma, o reconvertit in string si o pus in x care deja era string

2. Write an anonymous PL/SQL block that assigns the programmer’s full name to a variable, and

then displays the number of characters in the name.

DECLARE

vb VARCHAR2(20):='Vlad Bartolomei';

L PLS\_INTEGER := length(vb);

BEGIN

DBMS\_OUTPUT.PUT\_LINE(L);

END;

3. Write an anonymous PL/SQL block that uses today's date and outputs it in the format of ‘Month

dd, yyyy’. Store the date in a DATE variable called my\_date. Create another variable of the DATE

type called v\_last\_day. Assign the last day of this month to v\_last\_day. Display the value of

v\_last\_day.

DECLARE

my\_date DATE:=SYSDATE;

v\_last\_day DATE:=LAST\_DAY(my\_date);

BEGIN

DBMS\_OUTPUT.PUT\_LINE(TO\_CHAR(my\_date, 'MONTH dd, yyyy'));

DBMS\_OUTPUT.PUT\_LINE(v\_last\_day);

END;

4. Modify the program created in question 3 to add 45 days to today’s date and then calculate and

display the number of months between the two dates.

DECLARE

my\_date DATE:=SYSDATE;

v\_last\_day DATE:=LAST\_DAY(my\_date);

delta number:=0;

BEGIN

my\_date := my\_date+45;

DBMS\_OUTPUT.PUT\_LINE(TO\_CHAR(my\_date, 'MONTH dd, yyyy'));

delta:=Months\_between(my\_date, v\_last\_day);

DBMS\_OUTPUT.PUT\_LINE(trunc(DELTA, 0));

END;

5. Examine the following code and then answer the questions.

DECLARE

x NUMBER(6);

BEGIN

x := 5 + 3 \* 2 ;

DBMS\_OUTPUT.PUT\_LINE(x);

END;

A. What do you think the output will be when you run the above code?

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B. Now run the code. What is the output?

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C. In your own words, explain the results.

Destul de evident. Ala cand vede operatii de adunare and so on, face conversie la numere. Numai ca totul deja era pe baza de numere.

6. Examine the following code and then answer the question.

DECLARE

v\_number NUMBER;

v\_boolean BOOLEAN;

BEGIN

v\_number := 25;

v\_boolean := NOT(v\_number > 30);

END;

What value is assigned to v\_boolean?

OBS: nu pot printa un boolean

probabil null, since it exists

7. List two drawbacks to relying on implicit data type conversions.

Iti face programul conversii ne-necesare cand ti-i lumea mai draga (vezi problema 1)

Sunt mai lente