

Database Programming with PL/SQL

2-5: Writing PL/SQL Executable Statements

Practice Activities

Vocabulary

Identify the vocabulary word for each definition below:

Converts values from one data type to another by using built-in functions.
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?
- B. Now, run the code. What is the output?
- C. In your own words, describe what happened when you ran the code. Did any implicit conversions take place?
- 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.

- 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.
- 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.
- 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?
- B. Now run the code. What is the output?
- C. In your own words, explain the results.
- 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?

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