 



Database Programming with PL/SQL 1-3: Creating PL/SQL Blocks

Practice Activities

# Vocabulary

Identify the vocabulary word for each definition below:

|  |  |
| --- | --- |
| Anonymus Blocks | Unnamed blocks of code not stored in the database and do not exist after they are executed |
| Functii | A program that computes and returns a single value |
| Subprograme | Named PL/SQL blocks that are stored in the database and can be declared as procedures or functions |
| Compilatorul PL/SQL | Software that checks and translates programs written in high- level programming languages into binary code to execute |
| Proceduri | A program that performs an action, but does not have to return a value |

# Try It / Solve It

1. Complete the following chart defining the syntactical requirements for a PL/SQL block:

|  |  |  |
| --- | --- | --- |
|  | Optional or Mandatory? | Describe what is included in this section |
| DECLARE | Optional | Se incepe cu cuvantul cheie DECLARE si se termina cand incepe sectiunea de executare  Contine declaratiile tuturor variabilelor, constantelor, cursor si exceptii definite de utilizator. |
| BEGIN | Obligatoriu | Cu BEGIN incepe blocul de executare si se incheie cu END;  Poate contine oricate blocuri PL/SQL imbricate .  Contine interogari SQL pentru manipularea datelor in bloc. Trebuie sa contina cel putin un statement . |
| EXCEPTION | Optional | Sectiunea exception este continuta in sectiunea de executare si incepe cu cuvantul EXCEPTION .  Specifica actiunile care se vor executa cand avem erori in blocul de executie |
| END; | Obligatoriu | Marcheaza sfarsitul sectiunii de executare |

1. Which of the following PL/SQL blocks executes successfully? For the blocks that fail, explain why they fail
   1. BEGIN END;

🡪nu exista nicio instructiune

* 1. DECLARE

amount INTEGER(10); END;

🡪nu avem cuvantul cheie BEGIN

* 1. DECLARE BEGIN END;

1. 🡪nu exista nicio instructiune
   1. DECLARE

amount NUMBER(10); BEGIN

DBMS\_OUTPUT.PUT\_LINE(amount); END;

1. Fill in the blanks:
   1. PL/SQL blocks that have no names are called unnamed blocks.
   2. Functii and proceduri are named blocks and are stored in the database.
2. In Application Express, create and execute a simple anonymous block that outputs “Hello World.”

BEGIN

DBMS\_OUTPUT.PUT\_LINE('Hello world!');

END;

1. Create and execute a simple anonymous block that does the following:

* Declares a variable of datatype DATE and populates it with the date that is six months from today
* Outputs “In six months, the date will be: <insert date>.”

DECLARE

v\_date DATE := ADD\_MONTHS(SYSDATE, 6);

BEGIN

DBMS\_OUTPUT.PUT\_LINE('In six months, the date will be:' || v\_date);

END;

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