Database Programming with PL/SQL

2-2: Recognizing PL/SQL Lexical Units

Practice Activities

identificatorii

-tre sa inceapa cu o litera

-maxim 30 de caractere

-pot include $, \_, #

-nu pot contine spatii

-sunt case insensitive (nu conteaza litere mici/mari)

Character Literals

-sunt case sensitive (conteaza)

-enclosed by ‘ ‘

Numeric Literals

-efectiv numere

Boolean Literals

-TRUE/FALSE

-nu le trebe ‘ ‘

Comentarii

-- ca in vhdl, o linie

/\* \*/ ca in C/Java, bloc de comentarii

Vocabulary

|  |  |
| --- | --- |
| Literals | An explicit numeric, character string, date, or Boolean value that  is not represented by an identifier. |
| Delimitatori | Symbols that have special meaning to an Oracle database. |
| Reserved words | Words that have special meaning to an Oracle database and  cannot be used as identifiers. |
| Comentarii | Describe the purpose and use of each code segment and are  ignored by PL/SQL. |
| Lexical units | Building blocks of any PL/SQL block and are sequences of  characters including letters, digits, tabs, returns, and symbols. |
| Identifier | A name, up to 30 characters in length, given to a PL/SQL object. |

Try It / Solve It Questions

1. Identify each of the following identifiers as valid or invalid. If invalid, specify why.

|  |  |  |  |
| --- | --- | --- | --- |
| Identificator | Valid | Invalid | De ce invalid? |
| Today | ja |  |  |
| Last name | nein | ja | spatiu |
| today’s\_date | nein | ja | ‘ |
| number\_of\_days\_in\_february\_this\_year | ja |  |  |
| Isleap$year | ja |  |  |
| #number | nein | ja | Nu incepe cu litera |
| NUMBER# | ja |  |  |
| Number1to7 | ja |  |  |

2. Identify the reserved words in the following list.

|  |  |
| --- | --- |
| Cuvant | Rezervat?(Y/N) |
| create | ja |
| make | nein |
| table | ja |
| seat | nein |
| alter | ja |
| rename | ja |
| row | ja |
| number | ja |
| web | nein |

3. What kind of lexical unit (for example Reserved word, Delimiter, Literal, Comment) is each of the following?

|  |  |
| --- | --- |
| Value | Lexical Unit |
| SELECT | Reserved word |
| := | Delimitator compus |
| ‘TEST’ | Character literal |
| FALSE | Boolean Literal |
| -- new process | Commentariu pe o sg linie |
| FROM | Reserved word |
| */\* select the country with the highest elevation\**/ | Comentariu pe mai multe linii poate |
| v\_test | Identificator |
| 4.09 | Numeric literal |