 



Database Programming with PL/SQL 2-3: Recognizing Data Types

Practice Activities

# Vocabulary

Identify the vocabulary word for each definition below:

|  |  |
| --- | --- |
| NCLOB | Store large blocks of single-byte or fixed width multi-byte NCHAR data in the database. |
| Large Object(LOB) | Hold values, called locators, that specify the location of large objects (such as graphic images) that are stored out of line. |
| Scalar | Hold a single value with no internal components. |
| BLOB | Store large unstructured or structured binary objects. |
| Composite | Contain internal elements that are either scalar (record) or composite (record and table) |
| BFILE | Store large binary files outside of the database. |
| Reference | Hold values, called pointers, that point to a storage location. |
| Object | A schema object with a name, attributes, and methods. |
| CLOB | Store large blocks of character data in the database. |

# Try It / Solve It

1. In your own words, describe what a data type is and explain why it is important.

Un tip de data este o carcteristica a unui limbaj de programare care este importanta prin faptul ca specifica constrangeri si precizeaza un range valid de valori.

1. Identify the three data type categories covered in this course.

Scalar, composite, LOB , Record, Table.

1. Identify three data types covered in the *Database Programming with SQL* course.

Caracter, numeric, Data

1. What data type can be used in PL/SQL, but can’t be used to define a table column?

BOOLEAN

1. Which data type indicates a large data object that is stored outside of the database?

BFILE

1. Identify the data type category (LOB, Scalar, or Composite) for each data type. Each category may be used more than once.

|  |  |
| --- | --- |
| **Data Type** | **Data Type Category** |
| CLOB | LOB |
| VARCHAR2 | SCALAR CHARACTER |
| BLOB | LOB |
| NUMBER | SCALAR NUMERIC |
| BFILE | LOB |
| TIMESTAMP | SCALAR DATE |
| NCLOB | LOB |
| RECORD | Composite |
| PLS\_INTEGER | SCALAR NUMERIC |
| LONG | SCALAR CHARACTER |
| TABLE | Composite |
| BOOLEAN | SCALAR BOOLEAN |

|  |  |
| --- | --- |
| Index | Last\_name |
| 1 | 'Newman' |
| 2 | 'Raman' |
| 3 | 'Han' |

1. Enter the data type category and the data type for each value. The first one has been done for you.

|  |  |  |
| --- | --- | --- |
| **Value** | **Data Type Category** | **Data Type** |
| ‘Switzerland’ | **Scalar** | **VARCHAR2** |
| Text of a resume | LOB | CLOB |
| 100.20 | SCALAR | NUMBER |
| A picture |  |  |
| 1053 | SCALAR | NUMBER |
| 11-Jun-2016 | SCALAR | DATE |
| ‘Computer science is the science of the 21st century.’ | LOB | CLOB |
|  | Composite | Table |
| A movie | LOB | BFILE |
| A sound byte | LOB | BFILE |
| FALSE | SCALAR | Boolean |