Database Programming with PL/SQL

1-1: Introduction to PL/SQL

Practice Activities

Vocabulary

|  |  |
| --- | --- |
| PLSQL | Programming language features such as reusable/callable program units,  modular blocks, cursors, constants, variables, assignment statements,  conditional control statements, and loops |
| PLSQL | Oracle Corporations standard procedural language for relational databases  which allows basic program logic and control flow to be combined with SQL  statements |

Try It / Solve It

1. Circle the programming language meeting the criteria

Criteria

|  |  |
| --- | --- |
| **Criteria** | **Language** |
| 3GL | PL/SQL |
| 4GL | SQL |
| E Proprietatea Oracle Corporation? | PL-SIGUR!SQL Nu e |
| Nonprocedural | SQL |
| Procedural | PL/SQL |
| Is ANSI-compliant | SQL |
| - | - |

3GL = 3rd generation language

4th GL = e mai usor de inteles

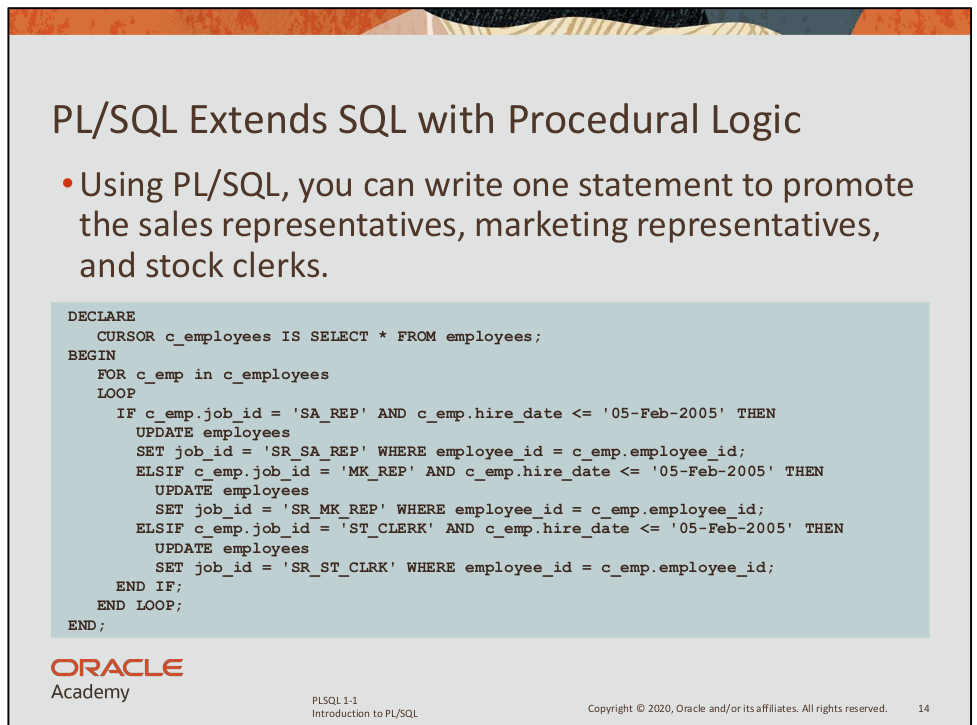
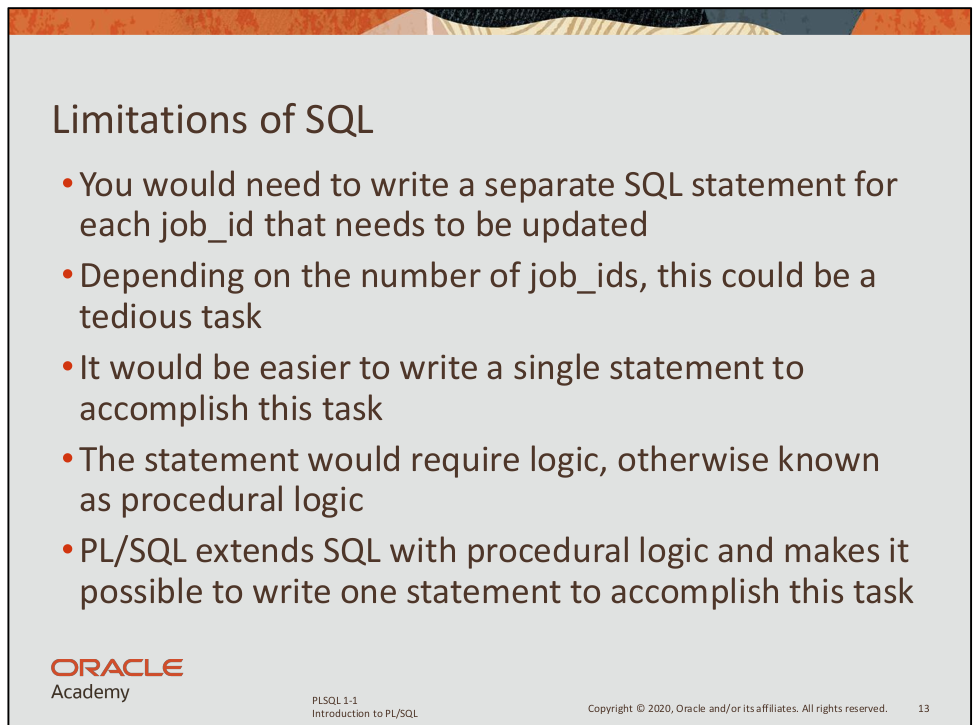
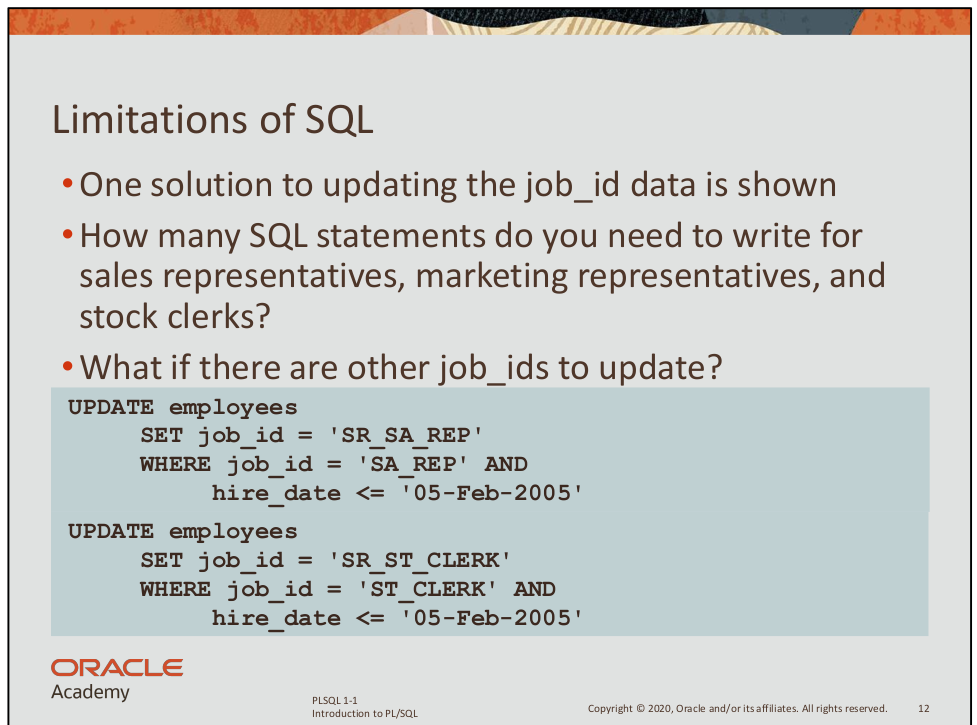
2. In your own words, describe why a procedural language like PL/SQL is needed.

Programare Modulara

Performanta imbunatatita

Ii bun daca avem de facut mai multe interogari in sql, pt ca in PL le putem face dintr-un foc.

D.e.

3. List some examples of procedural constructs in PL/SQL.

4. In the following code, identify (circle or highlight) examples of these procedural constructs:

variable, conditional control statement, reusable/callable program unit, and an assignment

statement.

**DECLARE**

**v\_first\_name varchar2(40);**

**v\_last\_name varchar2(40);**

**v\_first\_letter varchar2(1);**

**BEGIN**

**SELECT first\_name, last\_name INTO v\_first\_name, v\_last\_name**

**FROM students**

**WHERE student\_id = 105;**

**v\_first\_letter := get\_first\_letter(v\_last\_name);**

**IF 'N' > 'v\_first\_letter' THEN**

**DBMS\_OUTPUT.PUT\_LINE('The last name for ' || v\_first\_name || ' ' || v\_last\_name || ' is between A and M');**

**ELSE**

**DBMS\_OUTPUT.PUT\_LINE('The last name for ' || v\_first\_name || ' ' || v\_last\_name || ' is between N and Z');**

**END IF;**

**END;**

**conventie: get\_first\_letter scrisa cu litera mica pt ca functia e scrisa de autor, adica user**

**PUT\_LINE este scrisa cu litera mare pt ca procedura e scrisa de Oracle**