# Database Programming with PL/SQL
## 1-1: Introduction to PL/SQL
## Practice Activities

## Vocabulary

Identify the vocabulary word for each definition below:

| | |
|---|---|
| procedural programming | Programming language features such as reusable/callable program units, modular blocks, cursors, constants, variables, assignment statements, conditional control statements, and loops |
| 3GL | 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 | Language | |
|---|---|---|
| | PL/SQL | SQL |
| 3GL | PL/SQL | SQL |
| 4GL | PL/SQL | SQL |
| Is proprietary to Oracle Corporation | PL/SQL | SQL |
| Nonprocedural | PL/SQL | SQL |
| Procedural | PL/SQL | SQL |
| Is ANSI-compliant | PL/SQL | SQL |

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

   in cases where more queries need to be updated/written

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

   LOOP,FOR & IF

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          variable
    v_first_name varchar2(40);
    v_last_name varchar2(40);
    v_first_letter varchar2(1);
BEGIN     reusable/callable program unit
    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);     assignment statement
    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;
```

conditional control statements if&else