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BSIT- NW3B**

**WEEK 8- ASSIGNMENT04**

**Instructions**: Read and answer the following:  
1. What are the PL/SQL Guidelines?   
As a procedural extension language for SQL and the Oracle relational database, the PL/SQL programming language was created by Oracle Corporation in the late 1980s.

Discuss the following:

1. PL/SQL Guidelines

* A high-performance, entirely portable transaction processing language is PL/SQL.
* An integrated, interpreted, and OS agnostic programming environment is offered by PL/SQL.
* Additionally, PL/SQL may be directly invoked via the SQL\*Plus command-line interface.
* Direct calls to databases may also be done from outside programming languages.
* The overall grammar of PL/SQL is based on that of the computer languages ADA and Pascal.
* In addition to Oracle, PL/SQL is supported by IBM DB2 and TimesTen's in-memory database.

1. PL/SQL Syntax

Because PL/SQL is a block-structured language, its applications are separated into logical blocks of code and expressed in this manner. Each block has three sub segments:

* Declarations

The term DECLARE is used to begin this section. It is an optional part and defines all variables, cursors, subprograms, and other items to be used in the program.

* Executable Commands

This section, which is surrounded by the keywords BEGIN and END, is required. It contains of the program's executable PL/SQL statements. It must have at least one line of code that can be executed, even if it is merely a NULL command to signal that nothing should be done.

* Handling Exceptions

EXCEPTION is the first word in this section. The exception(s) in this optional section address software failures.

1. Writing PL/SQL Blocks

A semicolon marks the end of every PL/SQL query (;). Using BEGIN and END, PL/SQL blocks can be nested inside of other PL/SQL blocks. The fundamental design of a PL/SQL block is as follows:

DECLARE

<declarations section>

BEGIN

<executable command(s)>

EXCEPTION

<exception handling>

END;

The PL/SQL block is terminated with the end; line. You might need to enter / at the start of the first blank line that follows the last line of code in order to execute it from the SQL command line.

REFERENCE:

*PL/SQL - Quick Guide*. (n.d.). https://www.tutorialspoint.com/plsql/plsql\_quick\_guide.htm