

# PL/SQL Interview Questions

PL/SQL is an advance version of SQL. There are given top list of PL/SQL interview questions with answer.

## 1) What is PL/SQL?

PL/SQL stands for procedural language extension to SQL. It supports procedural features of programming language and SQL both. It was developed by Oracle Corporation in early of 90's to enhance the capabilities of SQL.

## 2) What is PL/SQL table? Why it is used?

Objects of type tables are called PL/SQL tables that are modeled as database table. We can also say that PL/SQL tables are a way to providing arrays. Arrays are like temporary tables in memory that are processed very quickly. PL/SQL tables are used to move bulk data. They simplifies moving collections of data.

## 3) What are the datatypes available in PL/SQL?

There are two types of datatypes in PL/SQL:

1. **Scalar datatypes** Example are NUMBER, VARCHAR2, DATE, CHAR, LONG, BOOLEAN etc.
2. **Composite datatypes** Example are RECORD, TABLE etc.

## 4) What is the basic structure of PL/SQL?

PL/SQL uses BLOCK structure as its basic structure. Each PL/SQL program consists of SQL and PL/SQL statement which form a PL/SQL block.

PL/SQL block contains 3 sections.

1. The Declaration Section (optional)
2. The Execution Section (mandatory)

### 3. The Exception handling Section (optional)

#### 5) What is the difference between FUNCTION, PROCEDURE AND PACKAGE in PL/SQL?

**Function:** The main purpose of a PL/SQL function is generally to compute and return a single value. A function has a return type in its specification and must return a value specified in that type.

**Procedure:** A procedure does not have a return type and should not return any value but it can have a return statement that simply stops its execution and returns to the caller. A procedure is used to return multiple values otherwise it is generally similar to a function.

**Package:** A package is schema object which groups logically related PL/SQL types, items and subprograms. You can also say that it is a group of functions, procedure, variables and record type statement. It provides modularity, due to this facility it aids application development. It is used to hide information from unauthorized users.

#### 6) What is exception? What are the types of exceptions?

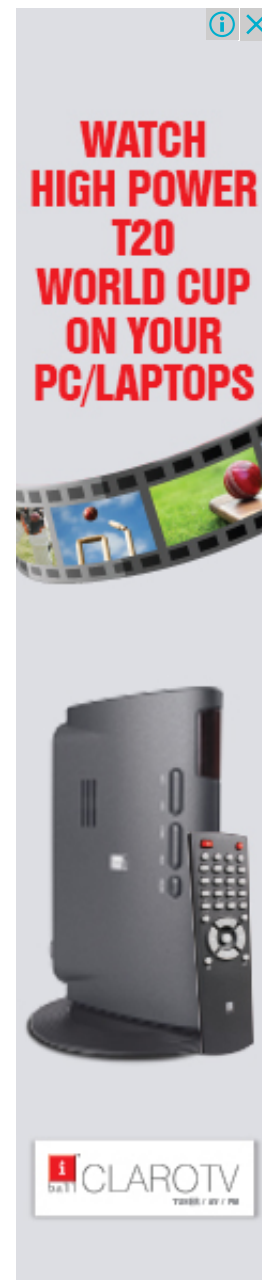
Exception is an error handling part of PL/SQL. There are two type of exceptions: pre\_defined exception and user\_defined exception.

#### 7) How exception is different from error?

Whenever an Error occurs Exception arises. Error is a bug whereas exception is a warning or error condition.

#### 8) What is the main reason behind using an index?

Faster access of data blocks in the table.



## 9) What are PL/SQL exceptions? Tell me any three.

1. Too\_many\_rows
2. No\_Data\_Found
3. Value\_error
4. Zero\_error etc.

## 10) What is the maximum number of triggers, you can apply on a single table?

12 triggers.

## 11) How many types of triggers exist in PL/SQL?

There are 12 types of triggers in PL/SQL that contains the combination of BEFORE, AFTER, ROW, TABLE, INSERT, UPDATE, DELETE and ALL keywords.

- BEFORE ALL ROW INSERT
- AFTER ALL ROW INSERT
- BEFORE INSERT
- AFTER INSERT etc.

## 12) What is stored Procedure?

A stored procedure is a sequence of statement or a named PL/SQL block which performs one or more specific functions. It is similar to a procedure in other programming languages. It is stored in the database and can be repeatedly executed. It is stored as schema object. It can be nested, invoked and parameterized.

## 13) How to execute a stored procedure?

There are two way to execute a stored procedure.

From the SQL prompt, write EXECUTE or EXEC followed by procedure\_name.

**EXECUTE** or [**EXEC**] procedure\_name;

Simply use the procedure name

```
procedure_name;
```

## 14) What are the advantages of stored procedure?

Modularity, extensibility, reusability, Maintainability and one time compilation.

## 15) What are the cursor attributes used in PL/SQL?

**%ISOPEN**: it checks whether the cursor is open or not.

**%ROWCOUNT**: returns the number of rows affected by DML operations: INSERT,DELETE,UPDATE,SELECT.

**%FOUND**: it checks whether cursor has fetched any row. If yes - TRUE.

**%NOTFOUND**: it checks whether cursor has fetched any row. If no - TRUE.

## 16) What is consistency?

Consistency simply means that each user sees the consistent view of the data.

Consider an example: there are two users A and B. A transfers money to B's account. Here the changes are updated in A's account (debit) but until it will be updated to B's account (credit), till then other users can't see the debit of A's account. After the debit of A and credit of B, one can see the updates. That's consistency.

## 17) What is cursor and why it is required?

A cursor is a **temporary work area** created in a system memory when an SQL statement is executed.

A cursor contains information on a select statement and the row of data accessed by it. This temporary work area stores the data retrieved from the database and manipulate this data. A cursor can hold more than one row, but can process only one row at a time. Cursor are required to process rows individually for queries.

## 18) How many types of cursors are available in PL/SQL?

There are two types of cursors in PL/SQL.

1. Implicit cursor, and
2. explicit cursor

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