

PL/SQL BLOCKS

Cursor	Procedure	Function	Trigger	Package
<p><u>Meaning:-</u> A cursor is a temporary work area created in the system memory when a SQL statement is executed. A cursor contains information on select statement and the rows of data accessed by it.</p>	<p><u>Meaning:-</u> A procedure is a PL/SQL block which perform one or more specific tasks. It is just like procedures in other programming languages.</p>	<p><u>Meaning:-</u> The PL/SQL function is very similar to PL/SQL procedure. The main difference between procedure and a function is, a function must always return a value.</p>	<p><u>Meaning:-</u> Trigger is invoked by Oracle engine automatically whenever a specific event occurs. Trigger is stored into database and invoked repeatedly, when specific condition match.</p>	<p><u>Meaning:-</u> A package is a schema object that group logically related PL/SQL types, variables, constants, subprograms, cursors, and exceptions. A package is compiled and stored in the database.</p>
<p><u>Syntax:-</u> <pre> DECLARE variables; records; create a cursor; BEGIN OPEN cursor; FETCH cursor; process the records; CLOSE cursor; END;</pre> </p>	<p><u>Syntax:-</u> <pre> CREATE [OR REPLACE] PROCEDURE procedure-name [(parameter[, parameter])] IS [declaration-section] BEGIN executable-section [EXCEPTION] exception-section] END [procedure-name];</pre> </p>	<p><u>Syntax:-</u> <pre> CREATE [OR REPLACE] FUNCTION function-name (parameter [(parameter-name [IN OUT IN OUT] type [, ...])]) RETURN return-datatype; [IS AS] BEGIN <function-body> END [function-name];</pre> </p>	<p><u>Syntax:-</u> <pre> CREATE [OR REPLACE] TRIGGER trigger-name [BEFORE AFTER INSTEAD OF] {INSERT [OR] UPDATE [OR] DELETE} [OF col-name] [REFERENCING OLD AS o NEW AS n] [FOR EACH ROW] WHEN (condition) DECLARE Declaration-statement; BEGIN Executable-statements EXCEPTION Exception-handling-statement; END;</pre> </p>	<p><u>Syntax:-</u> <pre> creating package:- CREATE [OR REPLACE] PACKAGE package-name [AUTHID {CURRENT USER DEFINER}] [IS AS] creating package body:- CREATE [OR REPLACE] PACKAGE BODY package-name [IS AS] name [IS AS]</pre> </p>
<p><u>Execution:-</u> Enter back slash (/) Press Enter to execute cursor.</p>	<p><u>Execution:-</u> <pre> execute proc-name(value); or calling a procedure. declare n number; begin ni:=<n>; pl(n); end;</pre> </p>	<p><u>Execution:-</u> <pre> select fun-name from dual; or calling a function. declare p,q,r number; begin pi:=<p>; qi:=<q>; r:=f(p,q); --variable; dbs-output-line (value);</pre> </p>	<p><u>Execution:-</u> trigger will execute when commands like insert, update, delete will not satisfy condition.</p>	<p><u>Execution:-</u> <pre> execute pack-name, proc-name(values); for procedure. execute pack-name.fun- name(values); for function.</pre> </p>