**PL/SQL Placeholders**

Placeholders are temporary storage area. Placeholders can be any of Variables, Constants and Records. Oracle defines placeholders to store data temporarily, which are used to manipulate data during the execution of a PL SQL block.   
  
Depending on the kind of data you want to store, you can define placeholders with a name and a datatype. Few of the datatypes used to define placeholders are as given below.   
Number (n,m) , Char (n) , Varchar2 (n) , Date , Long .

**PL/SQL Variables**

These are placeholders that store the values that can change through the PL/SQL Block.   
The General Syntax to declare a variable is:

variable\_name datatype [NOT NULL := value ];

* *variable\_name* is the name of the variable.
* *datatype* is a valid PL/SQL datatype.
* NOT NULL is an optional specification on the variable.
* *value* or DEFAULT *value*is also an optional specification, where you can initialize a variable.
* Each variable declaration is a separate statement and must be terminated by a semicolon.

For example, if you want to store the current salary of an employee, you can use a variable.

DECLARE

salary number (6);

\* “salary” is a variable of datatype number and of length 6.  
  
When a variable is specified as NOT NULL, you must initialize the variable when it is declared.  
  
For example: The below example declares two variables, one of which is a not null.

DECLARE

salary number(4);

dept varchar2(10) NOT NULL := “HR Dept”;

The value of a variable can change in the execution or exception section of the PL/SQL Block. We can assign values to variables in the two ways given below.

1) We can directly assign values to variables.   
    The General Syntax is:

  variable\_name:= value;

2) We can assign values to variables directly from the database columns by using a SELECT.. INTO statement. The General Syntax is:

|  |
| --- |
| SELECT column\_name  INTO variable\_name  FROM table\_name  [WHERE condition]; |

**PL/SQL Constants**

As the name implies a *constant* is a value used in a PL/SQL Block that remains unchanged throughout the program. A constant is a user-defined literal value. You can declare a constant and use it instead of actual value.

For example: If you want to write a program which will increase the salary of the employees by 25%, you can declare a constant and use it throughout the program. Next time when you want to increase the salary again you can change the value of the constant which will be easier than changing the actual value throughout the program.

The General Syntax to declare a constant is:

|  |
| --- |
| constant\_name CONSTANT datatype := VALUE; |

* *constant\_name* is the name of the constant i.e. similar to a variable name.
* The word *CONSTANT* is a reserved word and ensures that the value does not change.
* *VALUE* - It is a value which must be assigned to a constant when it is declared. You cannot assign a value later.

For example, to declare salary\_increase, you can write code as follows:

DECLARE

salary\_increase CONSTANT number (3) := 10;