PL/SQL - GOTO STATEMENT

A **GOTO** statement in PL/SQL programming language provides an unconditional jump from the GOTO to a labeled statement in the same subprogram.

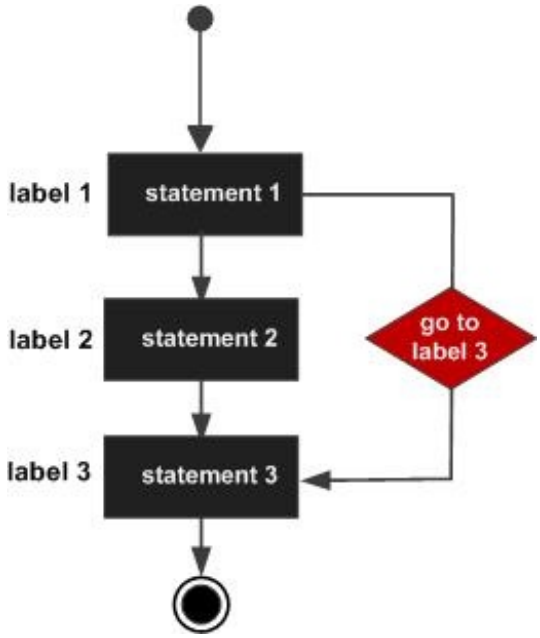
NOTE: Use of GOTO statement is highly discouraged in any programming language because it makes difficult to trace the control flow of a program, making the program hard to understand and hard to modify. Any program that uses a GOTO can be rewritten so that it doesn't need the GOTO.

Syntax:

The syntax for a GOTO statement in PL/SQL is as follows:

```
GOTO label;
..
..
<< label >>
statement;
```

Flow Diagram:



Example:

```
DECLARE
   a number(2) := 10;
BEGIN
   <<loopstart>>
   -- while loop execution
   WHILE a < 20 LOOP
      dbms_output.put_line ('value of a: ' || a);
      a := a + 1;
      IF a = 15 THEN
         a := a + 1;
         GOTO loopstart;
      END IF;
   END LOOP;
END;
/
```

When the above code is executed at SQL prompt, it produces the following result:

```
value of a: 10
value of a: 11
value of a: 12
value of a: 13
value of a: 14
value of a: 16
value of a: 17
value of a: 18
value of a: 19

PL/SQL procedure successfully completed.
```

Restrictions with GOTO Statement

GOTO Statement in PL/SQL impose the following restrictions:

- A GOTO statement cannot branch into an IF statement, CASE statement, LOOP statement, or sub-block.
- A GOTO statement cannot branch from one IF statement clause to another, or from one CASE statement WHEN clause to another.
- A GOTO statement cannot branch from an outer block into a sub-block (that is, an inner BEGIN-END block).
- A GOTO statement cannot branch out of a subprogram. To end a subprogram early, either use the RETURN statement or have GOTO branch to a place right before the end of the subprogram.
- A GOTO statement cannot branch from an exception handler back into the current BEGIN-END block. However, a GOTO statement can branch from an exception handler into an enclosing block.