PL/SQL - OPERATORS PRECEDENCE

http://www.tutorialspoint.com/plsql/plsql_operators_precedence.htm

Operator precedence determines the grouping of terms in an expression. This affects how an expression is evaluated. Certain operators have higher precedence than others; for example, the multiplication operator has higher precedence than the addition operator:

For example x = 7 + 3 * 2; here, x is assigned 13, not 20 because operator * has higher precedence than +, so it first gets multiplied with 3*2 and then adds into 7.

Here, operators with the highest precedence appear at the top of the table, those with the lowest appear at the bottom. Within an expression, higher precedence operators will be evaluated first.

=, <, >, <=, >=, <>, !=, ~=, ^=,

IS NULL,LIKE, BETWEEN, IN

Operator	Operation
**	exponentiation
+, -	identity, negation
*, /	multiplication, division
+, -, ||	addition, subtraction, concatenation
comparison	
NOT	logical negation
AND	conjunction
OR	inclusion

Example:

Try the following example to understand the operator precedence available in PL/SQL:

```
DECLARE
   a number(2) := 20;
   b number(2) := 10;
   c number(2) := 15;
   d number(2) := 5;
   e number(2) ;
BEGIN
   e := (a + b) * c / d;      -- ( 30 * 15 ) / 5
   dbms_output.put_line('Value of (a + b) * c / d is : '|| e );

   e := ((a + b) * c) / d;   -- (30 * 15 ) / 5
   dbms_output.put_line('Value of ((a + b) * c) / d is  : ' ||  e );

   e := (a + b) * (c / d);   -- (30) * (15/5)
   dbms_output.put_line('Value of (a + b) * (c / d) is  : '||  e );

   e := a + (b * c) / d;     --  20 + (150/5)
   dbms_output.put_line('Value of a + (b * c) / d is  : ' ||  e );
END;
/
```

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

```
Value of (a + b) * c / d is : 90
Value of ((a + b) * c) / d is  : 90
Value of (a + b) * (c / d) is  : 90
Value of a + (b * c) / d is  : 50

PL/SQL procedure successfully completed.
```