PYTHON COMPARISON OPERATORS EXAMPLE

These operators compare the values on either sides of them and decide the relation among them. They are also called Relational operators.

Assume variable a holds 10 and variable b holds 20, then −

Operator	Description	Example
==	If the values of two operands are equal, then the condition becomes true.	$a == b$ is not true.
!=	If values of two operands are not equal, then condition becomes true.	
<>	If values of two operands are not equal, then condition becomes true.	$a <> b$ is true. This is similar to != operator.
>	If the value of left operand is greater than the value of right operand, then condition becomes true.	$a > b$ is not true.
<	If the value of left operand is less than the value of right operand, then condition becomes true.	$a < b$ is true.
>=	If the value of left operand is greater than or equal to the value of right operand, then condition becomes true.	$a >= b$ is not true.
<=	If the value of left operand is less than or equal to the value of right operand, then condition becomes true.	$a <= b$ is true.

Example

Assume variable a holds 10 and variable b holds 20, then −

```
#!/usr/bin/python

a = 21
b = 10
c = 0

if ( a == b ):
   print "Line 1 - a is equal to b"
else:
   print "Line 1 - a is not equal to b"

if ( a != b ):
   print "Line 2 - a is not equal to b"
else:
   print "Line 2 - a is equal to b"

if ( a <> b ):
   print "Line 3 - a is not equal to b"
else:
   print "Line 3 - a is equal to b"

if ( a < b ):
   print "Line 4 - a is less than b"
```

```
else:
   print "Line 4 - a is not less than b"

if ( a > b ):
   print "Line 5 - a is greater than b"
else:
   print "Line 5 - a is not greater than b"

a = 5;
b = 20;
if ( a <= b ):
   print "Line 6 - a is either less than or equal to  b"
else:
   print "Line 6 - a is neither less than nor equal to  b"

if ( b >= a ):
   print "Line 7 - b is either greater than  or equal to b"
else:
   print "Line 7 - b is neither greater than  nor equal to b"
```

When you execute the above program it produces the following result –

```
Line 1 - a is not equal to b
Line 2 - a is not equal to b
Line 3 - a is not equal to b
Line 4 - a is not less than b
Line 5 - a is greater than b
Line 6 - a is either less than or equal to b
Line 7 - b is either greater than or equal to b
```