LUA - RELATIONAL OPERATORS

Following table shows all the relational operators supported by Lua language. Assume variable **A** holds 10 and variable **B** holds 20 then −

Operator	Description	Example
==	Checks if the values of two operands are equal or not, if yes then condition becomes true.	$A == B$ is not true.
~=	Checks if the values of two operands are equal or not, if values are not equal then condition becomes true.	$A = B$ is true.
>	Checks if the value of left operand is greater than the value of right operand, if yes then condition becomes true.	$A > B$ is not true.
<	Checks if the value of left operand is less than the value of right operand, if yes then condition becomes true.	$A < B$ is true.
>=	Checks if the value of left operand is greater than or equal to the value of right operand, if yes then condition becomes true.	$A >= B$ is not true.
<=	Checks if the value of left operand is less than or equal to the value of right operand, if yes then condition becomes true.	$A <= B$ is true.

Example

Try the following example to understand all the relational operators available in Lua programming language −

```
a = 21
b = 10

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

if( a ~= b )
then
   print("Line 2 - a is not equal to b" )
else
   print("Line 2 - a is equal to b" )
end

if ( a < b )
then
   print("Line 3 - a is less than b" )
else
   print("Line 3 - a is not less than b" )
end

if ( a > b )
then
```

```
   print("Line 4 - a is greater than b" )
else
   print("Line 5 - a is not greater than b" )
end

-- Lets change value of a and b
a = 5
b = 20

if ( a <= b )
then
   print("Line 5 - a is either less than or equal to  b" )
end

if ( b >= a )
then
   print("Line 6 - b is either greater than  or equal to b" )
end
```

When you build and 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 less than b
Line 4 - a is greater than b
Line 5 - a is either less than or equal to  b
Line 6 - b is either greater than  or equal to b
```