## **Logical Operators**

Logical operators perform **Logical AND**, **Logical OR**, and **Logical NOT** operations. It is used to combine conditional statements.

| Operator | Description | Syntax |
| --- | --- | --- |
| and | Logical AND: True if both the operands are true | x and y |
| or | Logical OR: True if either of the operands is true | x or y |
|  |  |  |

### **Example: Logical Operators in Python**

* Python3

| # Examples of Logical Operator  a = True  b = False    # Print a and b is False  print(a and b)    # Print a or b is True  print(a or b)    # Print not a is False  print(not a) |
| --- |

**Output**

False

True

False

--------X------------X more examples involving variables and combination of if statements with and-or operators

a = 0

b = 10

if a or b :

print('One of the Variable is not Null')

else:

print('Both Variables are Null')

**Output**

One of the Variable is not Null

a = 0

b = 0

if a and b:

print('Both the variables are not Null')

else:

print('Both the variables are Null')

**Output**

Both the variables are Null