**Python If Boolean Logic**

In Python, use == to compare two things for equality -- works for int values, strings, lists ... anything. Python supports all the standard operators to compare two values: == != < <= > >=. The boolean operators are written out as **and** **or** **not**. Here's an example if-statement:

def if\_demo(s):

if s == 'Hello' or s == 'Hi':

s = s + ' nice to meet you'

else:

s = s + ' woo hoo!'

return s

Notice above that you do not need to add parenthesis ( ) around the test -- other languages require the parenthesis, so many people add them out of habit. Also, forgetting the colon ":" after the test is a common syntax error when learning Python.

As is standard, the precedence of "and" is higher than "or" ("and" is like arithmetic \*, "or" is like arithmetic +). The if statement can be followed by an optional **elif *test2*:** which adds another test if the first test fails, and there can be a final **else:** which runs if all the tests are false.

In Python, there are False and True literal values, many times you do not need to use them directly. The number 0, the empty string "", the empty list [], and the special None value all count as False when used in a boolean context, such as an if-test.

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