

Examples of integer, float and boolean expressions:
Screen grabs from idle session

```
>>> i = 2
>>> j = 3
>>> k = 6
>>> i + j * k
20
>>> (i + j) * k
30
>>> i += 1
>>> i
3
>>> i *= 5
>>> i
15
>>> k = j ** 2
>>> k
9
>>> i % k
6
>>> i / k
1
>>> k >> 2
2
>>> k_bin = bin(k >> 2)
>>> k_bin
'0b10'
>>> type(k)
<type 'int'>
>>> type(k_bin)
<type 'str'>
>>> i < 0
False
>>> if i >= 0:
    print('variable "i" is greater than zero')

variable "i" is greater than zero
>>> if (i >= 0):
    print("parenthesis can help readability as well as enforcing precedence")

parenthesis can help readability as well as enforcing precedence
>>> if (i > 0) and (j > 0):
    print('both "i" and "j" are greater than zero')

both "i" and "j" are greater than zero
>>> if (i > 0) and (k < 0):
    print("yup")
else:
    print("nope")

nope
>>>
```

```

>>>
>>> x = 3.75
>>> print(type(x), x)
(<type 'float'>, 3.75)
>>> print type(x), x
<type 'float'> 3.75
>>> # use print as a function not as a statement
>>> # even though both work in Python 2.7
>>> # print statement won't work in Python 3
>>> print("x is %s with value %f" % (type(x), x))
x is <type 'float'> with value 3.750000
>>> print("x is %s with value %3.2f" % (type(x), x))
x is <type 'float'> with value 3.75
>>> # above shows old way of formatting
>>> # this is simple version of new way
>>> print(" x is {} with value {}".format(type(x), x))
 x is <type 'float'> with value 3.75
>>> i
15
>>> k
9
>>> divki = k/i
>>> divki
0
>>> type(divki)
<type 'int'>
>>> divki = float(k)/float(i)
>>> divki
0.6
>>> type(divki)
<type 'float'>
>>> # in Python 3 the initial div expression would be implicitly converted to float
>>> i
15
>>> bool(i)
True
>>> j = 0
>>> bool(j)
False
>>> k = -1
>>> bool(k)
True
>>> i and j
0
>>> i or j
15
>>> not i
False
>>> not j
True
>>> i == j
False
>>> i != j
True
>>> |

```