>>> a=1

>>> b=2

>>> c=0

>>> not c==a or c==b

True

>>> not c==a and c==b

False

>>> not (c==a and c==b)

True

>>> c=1

>>> not (c==a and c==b)

True

>>> not (c==a or c==b)

False

>>> c

1

>>> c==a

True

>>> not c==a or c==b

False

>>> not c==a and c==b

False

>>> c=2

>>> not c==a or c==b

True

>>> not c==a and c==b

True

>>> not (c==a or c==b)

False