In [15]:

```python
a = True
print(type(a))
print(id(a))

a= bool(252)
b= bool(252)
print(id(a))
print(id(b))

# Arithmetic Operations
a= bool(25)
b= bool(19)
c= a+b
print(c)
c= a-b
print(c)
c= a*b
print(c)
c= a/b
print(c)
c = a**b
print(c)

print(a>b)

print(a<b)

print(a>=b)

print(a<=b)

# Equality Operator

print(a==b)
print(a!=b)

# Logical operators

print(True and True)
print(False and True)
print(True and False)
print(False and False)
print(True or True)
print(False or True)
print(True or False)
print(False or False)
print(not True)
print(not False)

# Bitwise Operators

print (True & True)
print (True | False)
print (True ^ False)
print (~ True)
print (True<<2)
print (True>>2)

a = True
```

```python
b = True
print(a is b) #True
print(a is not b) #False

a = False
b = False
print(a is b) #True
print(a is not b) #False

# Membership operation

print(True in [10,10.20,10+20j,'Python', True])
print(False in (10,10.20,10+20j,'Python', False))
print(True in {1,2,3, True})
print(True in {True:100, False:200, True:300})
print(False in {True:100, False:200, True:300})
```

```
<class 'bool'>
140722186213200
140722186213200
140722186213200
2
0
1
1.0
1
False
False
True
True
True
False
True
False
False
False
True
True
True
False
False
True
True
True
True
-2
4
0
True
False
True
False
True
True
True
True
True
```