Python Bootcamp & Masterclass

Booleans

- The Boolean data type (**bool)** is a subtype of integer and stores one of only two values – **True** / **False**

- When used in numerical expressions **True** evaluates to 1 and **False** to 0.

- **None**, 0, and empty objects (empty string , empty list, empty tuple , empty dict, etc.) are all **False** Everything else is considered to be **True**

- Booleans are immutable (they can't be modified after they've been created)

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```python
print("Boolean value of None:          ", bool(None))
print("Boolean value of zero:          ", bool(0))
print("Boolean value of zero:          ", bool(0.0))
print("Boolean value of empty string:  ", bool(''))
print("Boolean value of empty list:    ", bool([]))
print("Boolean value of empty tuple:   ", bool(()))
print("Boolean value of empty dict:    ", bool({}))
```

```
Boolean value of None:          False
Boolean value of zero:          False
Boolean value of zero:          False
Boolean value of empty string:  False
Boolean value of empty list:    False
Boolean value of empty tuple:   False
Boolean value of empty dict:    False
```

```python
print("Boolean value of non-zero:       ", bool(0.000000000000001))
print("Boolean value of non-zero:       ", bool(-273))
print("Boolean value of infinity:       ", bool(float('inf')))
print("Boolean value of non empty string: ", bool('None'))
print("Boolean value of non empty list:   ", bool([1]))
print("Boolean value of non empty tuple:  ", bool((1)))
print("Boolean value of non empty dict:   ", bool({1:'USA'}))
```

```
Boolean value of non-zero:          True
Boolean value of non-zero:          True
Boolean value of infinity:          True
Boolean value of non empty string:  True
Boolean value of non empty list:    True
Boolean value of non empty tuple:   True
Boolean value of non empty dict:    True
```

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Online Resources

For best python resources, please visit:

gknxt.com/python/

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