

05-logic

September 16, 2022

1 Logical operators

Logical operator perform logic operations: - and ... - or ... - not ... - is - returns true if left and right operands refer to the same object, false otherwise. - in - returns true if and item belongs to a list, false otherwise.

```
[1]: S = [1, 2, 3]
```

```
[2]: 1 in S
```

```
[2]: True
```

```
[3]: (1 in S) and (2 in S)
```

```
[3]: True
```

```
[4]: (1 in S) and (4 in S)
```

```
[4]: False
```

```
[5]: (1 in S) and not (4 in S)
```

```
[5]: True
```

```
[6]: (1 in S) or (4 in S)
```

```
[6]: True
```

```
[7]: S is [1, 2, 3]
```

```
[7]: False
```

```
[8]: R = S  
     R is S
```

```
[8]: True
```

```
[9]: id(S) == id(R)
```

[9]: True

[10]: `id(R)`

[10]: 2524502894656

[11]: `id(S)`

[11]: 2524502894656