

# python-operators

March 14, 2025

## 1 Operators

```
[5]: 3
```

```
[5]: 3
```

```
[7]: "Naresh"
```

```
[7]: 'Naresh'
```

```
[9]: 1+2
```

```
[9]: 3
```

```
[11]: 2-1
```

```
[11]: 1
```

```
[14]: 4/2
```

```
[14]: 2.0
```

```
[16]: 6/2
```

```
[16]: 3.0
```

```
[18]: 7/2
```

```
[18]: 3.5
```

```
[20]: 7//2
```

```
[20]: 3
```

```
[22]: 3%2
```

```
[22]: 1
```

```
[26]: 3**2
```

```
[26]: 9
```

```
[28]: 3**2
```

```
[28]: 9
```

```
[30]: 3.14
```

```
[30]: 3.14
```

```
[32]: 1+1j
```

```
[32]: (1+1j)
```

```
[34]: (1+1j)*(1-1j)
```

```
[34]: (2+0j)
```

```
[36]: a=3  
      b=2
```

```
[81]: a=3  
      b=2  
      total=a+b  
      diff=a-b  
      product=a*b  
      division=a/b  
      remainder=a%b  
      floor_div=a//b  
      expo=a**b
```

```
[89]: print(total)  
      print("a+b = ",total)  
      print("Diff = ",diff)  
      print("Product = ",product)  
      print("Division = ",division)  
      print("Remainder = ",remainder)  
      print("Floor Divsision = ",floor_div)  
      print("Exponential = ",expo)
```

```
5  
a+b = 5  
Diff = 1  
Product = 6  
Division = 1.5
```

```
Remainder = 1
Floor Divsision = 1
Exponential = 9
```

```
[93]: num_one = 3
      num_two = 4
      total = num_one + num_two
      diff = num_two - num_one
      product = num_one * num_two
      div = num_two / num_two
      remainder = num_two % num_one
```

```
[95]: print('difference: ', diff)
      print('product: ', product)
      print('division: ', div)
      print('remainder: ', remainder)
```

```
difference: 1
product: 12
division: 1.0
remainder: 1
```

```
[97]: r = 10                                # radius of a circle
      area_circle=3.14*r** 2                # two * sign means exponent or power
      print('Area of a circle:', area_circle)
```

```
Area of a circle: 314.0
```

```
[99]: length = 10
      width = 20
      area_of_rectangle = length * width
      print('Area of rectangle:', area_of_rectangle)
```

```
Area of rectangle: 200
```

```
[101]: mass = 75
       gravity = 9.81
       weight = mass * gravity
       print(weight, 'N')
```

```
735.75 N
```

```
[105]: print(3 > 2)      # True, because 3 is greater than 2
```

```
True
```

```
[107]: print(3 >= 2)    # True, because 3 is greater than 2
```

```
True
```

```
[109]: print(3 < 2)      # False, because 3 is greater than 2
```

False

```
[111]: print(2 < 3)      # True, because 2 is less than 3
```

True

```
[113]: print(2 <= 3)     # True, because 2 is less than 3
```

True

```
[115]: print(3 == 2)     # False, because 3 is not equal to 2
```

False

```
[117]: print(3 != 2)     # True, because 3 is not equal to 2
```

True

```
[119]: print(len('mango') == len('avocado')) # False
```

False

```
[121]: print(len('mango') != len('avocado')) # True
```

True

```
[123]: print(len('mango') < len('avocado')) # True
```

True

```
[125]: print(len('milk') != len('meat'))     # False
```

False

```
[127]: print(len('milk') == len('meat'))     # True
```

True

```
[129]: print(len('tomato') == len('potato')) # True
```

True

```
[131]: print(len('python') > len('dragon')) # False
```

False

```
[133]: print('True == True: ', True == True)
```

```
True == True: True
```

```
[135]: print('True == False: ', True == False)
```

```
True == False: False
```

```
[137]: print('False == False:', False == False)
```

```
False == False: True
```

```
[139]: print('True and True: ', True and True)
```

```
True and True: True
```

```
[141]: print('True or False:', True or False)
```

```
True or False: True
```

```
[147]: print(1 is 1) # True - because the data values are the same
```

```
True
```

```
<>:1: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
```

```
<>:1: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
```

```
C:\Users\Dhanwantari Devre\AppData\Local\Temp\ipykernel_13604\3296757644.py:1:
```

```
SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
```

```
    print(1 is 1) # True - because the data values are the same
```

```
[190]: print('1' is not '2')
```

```
True
```

```
<>:1: SyntaxWarning: "is not" with 'str' literal. Did you mean "!="?
```

```
<>:1: SyntaxWarning: "is not" with 'str' literal. Did you mean "!="?
```

```
C:\Users\Dhanwantari Devre\AppData\Local\Temp\ipykernel_13604\1549941953.py:1:
```

```
SyntaxWarning: "is not" with 'str' literal. Did you mean "!="?
```

```
    print('1' is not '2')
```

```
[151]: print('A in Asabeneh', 'A' in 'Asabeneh') # True - A found in the string
       print('B in Asabeneh', 'B' in 'Asabeneh') # False -there is no uppercase B
       print('coding' in 'coding for all') # True - because coding for all has the
       ↪word coding
       print('a in an:', 'a' in 'an')          # True
       print('4 is 2 ** 2:', 4 is 2 ** 2)
```

```
A in Asabeneh True
```

```
B in Asabeneh False
```

```
True
```

```
a in an: True
```

```
4 is 2 ** 2: True
```

```
<>:5: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
<>:5: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
C:\Users\Dhanwantari Devre\AppData\Local\Temp\ipykernel_13604\1604371332.py:5:
SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
print('4 is 2 ** 2:', 4 is 2 ** 2)
```

```
[153]: print(3 > 2 and 4 > 3) # True - because both statements are true
```

True

```
[155]: print(3 > 2 and 4 < 3) # False - because the second statement is false
```

False

```
[157]: print(3 < 2 and 4 < 3) # False - because both statements are false
```

False

```
[159]: print(3 > 2 or 4 > 3) # True - because both statements are true
```

True

```
[169]: print(3 > 2 or 4 < 3)
```

True

```
[167]: print(3 < 2 or 4 < 3)
```

False

```
[165]: print(not 3 > 2)
```

False

```
[171]: print(not True)
```

False

```
[173]: print(not False)
```

True

```
[177]: print(not not True)
```

True

```
[179]: print(not not False)
```

False

[ ]: