operatorlar

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```
[1]: 2+6
[1]: 8
[2]: 2-6
[2]: -4
[3]: 2*3
[3]: 6
[4]: 6/4
[4]: 1.5
[5]: 6//5
[5]: 1
[6]: 8%6
[6]: 2
[7]: 6.5/2.6
[7]: 2.5
[8]: 2**6
[8]: 64
[9]: 2*100
[9]: 200
[10]: 2**1000
```

```
[11]: 1-0.9
[11]: 0.0999999999999998
```

[12]: 3*0.1

[12]: 0.300000000000004

[13]: 0.2+0.1

[13]: 0.3000000000000004

[14]: 0.3 == 0.4-0.1

[14]: False

[15]:
$$a = 12$$

$$a = a + 15$$

[16]: a

[16]: 27

```
[17]: a = 12
a += 15
print(a)
```

27

```
[18]: s = "Hello"
s = s + "World"
print(s)
```

HelloWorld

```
[19]: s = "Hello"
s += "World"
print(s)
```

HelloWorld

```
[20]: 11 = [1,2,3]
      12 = [4,5]
      1 = 11 + 12
[21]: 11
[21]: [1, 2, 3]
[22]: 12
[22]: [4, 5]
[23]: 1
[23]: [1, 2, 3, 4, 5]
[24]: 11
[24]: [1, 2, 3]
[25]: 12
[25]: [4, 5]
[26]: 11 += 12
[27]: 11
[27]: [1, 2, 3, 4, 5]
[28]: 12
[28]: [4, 5]
[29]: 1
[29]: [1, 2, 3, 4, 5]
[30]: 1 += 7
                                                  Traceback (most recent call last)
      TypeError
       <ipython-input-30-91dcc443fb8d> in <module>
       ----> 1 1 += 7
      TypeError: 'int' object is not iterable
```

```
[31]: 1 += [7]
[32]: 1
[32]: [1, 2, 3, 4, 5, 7]
[33]: 1 += (12,)
[34]: 1
[34]: [1, 2, 3, 4, 5, 7, 12]
[35]: 1 += "Test"
[36]: 1
[36]: [1, 2, 3, 4, 5, 7, 12, 'T', 'e', 's', 't']
[37]: 1 += ["Test"]
[38]: 1
[38]: [1, 2, 3, 4, 5, 7, 12, 'T', 'e', 's', 't', 'Test']
[39]: 3 > 2
[39]: True
[40]: 3 >= 2
[40]: True
[41]: 3 < 2
[41]: False
[42]: 3 <= 2
[42]: False
[43]: 3 == 2
[43]: False
[44]: 3 != 2
```

[44]: True

```
[45]: 4 == 4
[45]: True
[46]: a = 3 > 2
[47]: type(a)
[47]: bool
[48]: a
[48]: True
[49]: a = "Hello"
     b = "Hello"
[50]: a == b
[50]: True
[51]: a is b
[51]: True
[52]: a = 2
     b = 2
      c = 3
[53]: a == b
[53]: True
[54]: a == c
[54]: False
[55]: a is b
[55]: True
[56]: a is b
[56]: True
[57]: a is b
```

```
[57]: True
[58]: a is c
[58]: False
[59]: a = [1,2,3]
      b = [1,2,3]
[60]: a == b
[60]: True
[61]: a is b
[61]: False
[62]: id(a)
[62]: 140021401431168
[63]: id(b)
[63]: 140021398885696
[64]: a = 2
[65]: b = 2
[66]: id(a)
[66]: 9780832
[67]: id(b)
[67]: 9780832
[68]: a = 2**1000
      b = 2**1000
[69]: a
[69]: 10715086071862673209484250490600018105614048117055336074437503883703510511249361
      22493198378815695858127594672917553146825187145285692314043598457757469857480393
```

45677748242309854210746050623711418779541821530464749835819412673987675591655439

46077062914571196477686542167660429831652624386837205668069376

```
[70]: b
[70]: 10715086071862673209484250490600018105614048117055336074437503883703510511249361
      22493198378815695858127594672917553146825187145285692314043598457757469857480393
      45677748242309854210746050623711418779541821530464749835819412673987675591655439
      46077062914571196477686542167660429831652624386837205668069376
[71]: a is b
[71]: False
[72]: a is b
[72]: False
[73]: a is not b
[73]: True
[74]: s1 = "Salem"
      s2 = "Salem"
      s3 = "salem"
[75]: s1 is s2
[75]: True
[76]: s1 is s3
[76]: False
[77]: s1 is not s2
[77]: False
[78]: s1 is not s3
[78]: True
[79]: 'o' in "Hello"
[79]: True
[80]: 'g' in "Hello"
[80]: False
```

```
[82]: 1 in (1,2,3,4)
[82]: True
[83]: 5 in (1,2,3,4)
[83]: False
[84]: 5 in [2,3,4]
[84]: False
[85]: "Hello" in "Hello everybody"
[85]: True
[86]: (1,2,3) in (1,2,3,4,5)
[86]: False
[87]: (1,2,3) in ((1,2,3), (4,5,6))
[87]: True
[88]: 12 not in [1,2,3]
[88]: True
[89]: 2 not in [1,2,3]
[89]: False
[90]: 'salem' not in "salem barshanyzga"
[90]: False
[91]: True and True
[91]: True
[92]: True and False
[92]: False
[93]: False and True
[93]: False
```

```
[94]: False and False
 [94]: False
 [95]: 0
 [95]: 0
 [96]: 0.0
 [96]: 0.0
 [97]:
 [97]: ''
 [98]: []
 [98]: []
[99]: ()
[99]: ()
[100]: {}
[100]: {}
[101]: 2 and 3
[101]: 3
[102]: 3 and 2
[102]: 2
[103]: 3 or 2
[103]: 3
[104]: 2 or 3
[104]: 2
[105]: True or False
[105]: True
```

```
[107]: False or True
[107]: True
[108]: True or True
[108]: True
[109]: False or False
[109]: False
[110]: 3.4 or 5.6
[110]: 3.4
[111]: 3.4 and 5.6
[111]: 5.6
[112]: [1,2] and [3,4]
[112]: [3, 4]
[113]: [] and [3,4]
[113]: []
[114]: bool([])
[114]: False
[115]: bool([2,3,4])
[115]: True
[116]: not True
[116]: False
[117]: not False
[117]: True
[118]: not(True and True)
[118]: False
```

```
[120]: not(True and False)

[120]: True

[121]: not 2

[121]: False

[122]: not 0

[122]: True

[ ]:
```