



```
In [63]: # arithmetic operators
x,y=10,2
print("x + y =", x + y) # Addition
print("x - y =", x - y) # Subtraction
print("x * y =", x * y) # Multiplication
print("x / y =", x/y)#division
print("x //y =", x //y)
print("x % y =", x % y) # Modulus
print("x ** y =", x ** y) # Exponentiation
```

```
x + y = 12
x - y = 8
x * y = 20
x / y = 5.0
x //y = 5
x % y = 0
x ** y = 100
```

```
In [64]: # relational operators
a=5
b=6
a<b #less than
```

Out[64]: True

```
In [65]: a>b #greater than
```

Out[65]: False

```
In [66]: b=5
a==b #equal to
```

Out[66]: True

```
In [67]: a<=b #less than or equal to
```

Out[67]: True

```
In [68]: a>=b #greater than or equal to
```

Out[68]: True

```
In [69]: a!=b #not equal to
```

Out[69]: False

```
In [70]: #assignment operators
x=8
x=x+2
x
```

Out[70]: 10

```
In [71]: x+=2  
x
```

Out[71]: 12

```
In [72]: x-=2  
x
```

Out[72]: 10

```
In [73]: x*=2  
x
```

Out[73]: 20

```
In [74]: x/=2  
x
```

Out[74]: 10.0

```
In [75]: x%=2  
x
```

Out[75]: 0.0

```
In [76]: #unary operators  
x=9  
x=-x  
x
```

Out[76]: -9

```
In [77]: x=-x  
x
```

Out[77]: 9

```
In [78]: #logical operators  
a=5  
b=4  
a<8 and b<5 #and operator
```

Out[78]: True

```
In [79]: a<8 and b<2 #or operator
```

Out[79]: False

```
In [80]: a<8 or b<2 #or operator
```

```
Out[80]: True
```

```
In [81]: a>8 or b<2 #or operator
```

```
Out[81]: False
```

```
In [82]: x=False  
x
```

```
Out[82]: False
```

```
In [83]: not(x) #not operator
```

```
Out[83]: True
```