```
a = 10
b = 20
c = a * b
print(c, type(c))
```

```
200 <class 'int'>
```

```
a = 10.0
b = 20
c = a * b
print(c, type(c))
```

```
200.0 <class 'float'>
```

```
a = 10.0
b = 20.0
c = a * b
print(c, type(c))
```

```
200.0 <class 'float'>
```

```
a = 10.0
b = True
c = a * b
print(c, type(c))
```

```
10.0 <class 'float'>
```

```
a = 10.0
b = False
c = a * b
print(c, type(c))
```

```
0.0 <class 'float'>
```

```
a = 10
b = False
c = a * b
print(c, type(c))
```

```
0 <class 'int'>
```

```
a = True
b = False
c = a * b
print(c, type(c))
```

```
0 <class 'int'>
```

```
a = 'python'
b = 'python'
c = a * b
print(c, type(c))
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-8-489626b31334> in <module>
      1 a = 'python'
      2 b = 'python'
----> 3 c = a * b
      4 print(c, type(c))

TypeError: can't multiply sequence by non-int of type 'str'
```

SEARCH STACK OVERFLOW

```
a = 'python'
b = 2
c = a * b
print(c, type(c))
```

```
pythonpython <class 'str'>
```

```
a = 1
b = 'python'
c = a * b
print(c, type(c))
```

```
python <class 'str'>
```

```
a = 0
b = 'python'
c = a * b
print(c, type(c))
```

```
 <class 'str'>
```

```
a = True
b = 'python'
c = a * b
print(c, type(c))
```

```
python <class 'str'>
```

```
a = False
b = 'python'
c = a * b
print(c, type(c))
```

```
 <class 'str'>
```

```
a = 1.0
b = 'python'
c = a * b
print(c, type(c))
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
```

```
a = 1
b = 'python'
c = a * b
print(c, type(c))
```

```
python <class 'str'>
```

```
a = 5
b = 2
c = a ** b
print(c, type(c))
```

```
25 <class 'int'>
```

```
a = 5.0
b = 2
c = a ** b
print(c, type(c))
```

```
25.0 <class 'float'>
```

```
a = 'python'
b = 2
c = a ** b
print(c, type(c))
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-18-944589131941> in <module>
      1 a = 'python'
      2 b = 2
----> 3 c = a ** b
      4 print(c, type(c))

TypeError: unsupported operand type(s) for ** or pow(): 'str' and 'int'
```

SEARCH STACK OVERFLOW

```
amount = 100000
print('2000 notes :',amount//2000)
amount = amount % 2000
print('500 notes :',amount//500)
amount = amount % 500
print('200 notes :',amount//200)
amount = amount % 200
print('100 notes :',amount//100)
amount = amount % 100
```

```
2000 notes : 50
500 notes : 0
200 notes : 0
100 notes : 0
```

Relational Operators

==

!=

<

>

<=

>=

```
a = 100
b = 200
c = a == b
print(c, type(c))
```

```
False <class 'bool'>
```

```
a = 100
b = 100
c = a == b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 100
b = 100.0
c = a == b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 1
b = True
c = a == b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 0.0
b = False
c = a == b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 'python'
b = 'python'
c = a == b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 'Python'
b = 'python'
```

```
c = a == b
print(c, type(c))
```

```
False <class 'bool'>
```

```
a = 'Python'
b = 'python'
c = a < b
print(c, type(c))
```

```
True <class 'bool'>
```

```
print('$')
print(ord('$'))
```

```
$
36
```

```
a = 'Python'
b = 'p'
c = a < b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 'python'
b = 'P'
c = a < b
print(c, type(c))
```

```
False <class 'bool'>
```

```
a = 'python'
b = 'pythoN'
c = a < b
print(c, type(c))
```

```
False <class 'bool'>
```

```
a = 'pythoN'
b = 'python'
c = a < b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 'python'
b = 'python'
c = a > b
print(c, type(c))
```

```
False <class 'bool'>
```

```
a = 'python'
b = 'pythoN'
```

```
c = a > b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 'python'
b = 'python'
c = a <= b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 'python'
b = 'p'
c = a <= b
print(c, type(c))
```

```
False <class 'bool'>
```

```
a = 'python'
b = 'python'
c = a >= b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 100
b = 200
c = a != b
print(c, type(c))
```

```
True <class 'bool'>
```

```
a = 100
b = 100.0
c = a != b
print(c, type(c))
```

```
False <class 'bool'>
```

Assignment Operators

+=

-=

/=

%=

//=

***=**

****=**

```
a = 10
a = a + 1
print(a)
```

```
11
```

```
a = 10
a+=1
print(a)
```

```
11
```

```
a = 10
a = + 1
print(a)
```

```
1
```

```
a = 10
a = - 1
print(a)
```

```
-1
```

```
a = 100
a+=a
print(a)
```

```
200
```

```
a = 20
a+=10
print(a)
```

```
30
```

```
a = 20
a+=0
print(a)
```

```
20
```

```
a = 100
a-=a
print(a)
```

```
0
```

```
a = 50
a/=1
print(a)
```

```
50.0
```

```
a = 20
a/=a
```

```
print(a)
```

```
1.0
```

```
a = 20
a/=0
print(a)
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
<ipython-input-63-763259d6df42> in <module>
      1 a = 20
----> 2 a/=0
      3 print(a)

ZeroDivisionError: division by zero
```

SEARCH STACK OVERFLOW

```
a=25
a%=6
print(a)
```

```
1
```

```
a = 25
a%=a
print(a)
```

```
0
```

```
a = 45
a//=5
print(a)
```

```
9
```

```
a = 45
a//=a
print(a)
```

```
1
```

```
a = 4
a*=2
print(a)
```

```
8
```

```
a = 4
a*=a
print(a)
```

```
16
```

```
a = 4
a*='python'
print(a)
```

```
pythonpythonpythonpython
```

```
a = 5
a**=a
print(a)
```

```
3125
```