

Last login: Wed Apr 29 13:57:24 on ttys000

→ ~ ipython

Python 3.8.2 (default, Mar 11 2020, 00:29:50)

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IPython 7.13.0 -- An enhanced Interactive Python. Type '?' for help.

```
In [1]: a = 6
```

```
In [2]: if a > 0:
...:     print("Positive")
...: else:
...:     print("Negative")
...:
Positive
```

```
In [3]: a = -9
```

```
In [4]: if a > 0:
...:     print("Positive")
...: else:
...:     print("Negative")
...:
Negative
```

```
In [5]: a > 0
```

```
Out[5]: False
```

```
In [6]: a = 0
```

```
In [7]: if a > 0:
...:     print("Positive")
...: else:
...:     print("Negative")
...:
Negative
```

```
In [8]: if a > 0:
...:     print("Positive")
...: elif a == 0:
...:     print("Zero")
...: else:
...:     print("Negative")
...:
Zero
```

```
In [9]: if a == 0:
...:     a = a + 2
...:
```

```
In [10]: if a == 0:
...:     a = a + 2
...:     b = 7
...:
```

```
In [11]: a = int(input())
```

```
1
```

```
In [12]: a = int(input())
```

```
2
```

```
In [13]: for i in range(1,10):  
...:     print(i)  
...:
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

```
6
```

```
7
```

```
8
```

```
9
```

```
In [14]: range(3)
```

```
Out[14]: range(0, 3)
```

```
In [15]: list(range(3))
```

```
Out[15]: [0, 1, 2]
```

```
In [16]: list(range(10))
```

```
Out[16]: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
```

```
In [17]: list(range(5,10))
```

```
Out[17]: [5, 6, 7, 8, 9]
```

```
In [18]: list(range(5,20,2))
```

```
Out[18]: [5, 7, 9, 11, 13, 15, 17, 19]
```

```
In [19]: for i in range(1,10,2):  
...:     print(i, end=" ")  
...:
```

```
1 3 5 7 9
```

```
In [20]: pass
```

```
In [21]: for i in range(10):
```

```
...:     pass
```

```
...:
```

```
In [22]: 0/0
```

```
ZeroDivisionError
```

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

```
<ipython-input-22-9ab73e148374> in <module>
```

```
----> 1 0/0
```

```
ZeroDivisionError: division by zero
```

```
In [23]: a = 8
```

```
In [24]: b = 0
```

```
In [25]: if b != 0:
...:     print(a/b)
...: else:
...:     pass
...:
```

```
In [26]: break
File "<ipython-input-26-6aaf1f276005>", line 1
break
^
```

SyntaxError: 'break' outside loop

```
In [27]: for i in range(1,10):
...:     if i == 5:
...:         break
...:
```

```
In [28]: for i in range(1,10):
...:     print(i)
...:     if i == 5:
...:         break
...:
```

```
1
2
3
4
5
```

```
In [29]: a = [1,2,3,4,5]
```

```
In [30]: for i in a:
...:     print(i)
...:
```

```
1
2
3
4
5
```

```
In [31]: a = [10,20,30,40,50]
```

```
In [32]: for i in a:
...:     print(i)
...:
```

```
10
20
30
40
50
```

```
In [33]: a = (10,20,30,40,50)
```

```
In [34]: for i in a:
```

```
    ...:     print(i)
    ...:
10
20
30
40
50
```

```
In [35]: d = {1:10,2:20,3:30,4:40}
```

```
In [36]: for i in d.keys():
    ...:     print(i)
    ...:
1
2
3
4
```

```
In [37]: for i in d.values():
    ...:     print(i)
    ...:
10
20
30
40
```

```
In [38]: d.items()
```

```
Out[38]: dict_items([(1, 10), (2, 20), (3, 30), (4, 40)])
```

```
In [39]: for k,v in d.items():
    ...:     print(k, v)
    ...:
    ...:
1 10
2 20
3 30
4 40
```

```
In [40]: coninue
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-40-889eb3c9a4cb> in <module>
----> 1 coninue
```

```
NameError: name 'coninue' is not defined
```

```
In [41]: range(-5,5)
```

```
Out[41]: range(-5, 5)
```

```
In [42]: a = 5
```

```
In [43]: for i in range(-5,5):
    ...:     c = a/i
    ...:     print(c)
    ...:
```

```
-1.0
-1.25
-1.6666666666666667
-2.5
-5.0
```

-----  
ZeroDivisionError Traceback (most recent call last)

<ipython-input-43-4f3ccb87e52b> in <module>

```
1 for i in range(-5,5):
----> 2     c = a/i
      3     print(c)
      4
```

ZeroDivisionError: division by zero

```
In [44]: for i in range(-5,5):
...:     if i == 0:
...:         continue
...:     c = a/i
...:     print(c)
...:
```

```
-1.0
-1.25
-1.6666666666666667
-2.5
-5.0
5.0
2.5
1.6666666666666667
1.25
```

```
In [45]: i = 0
```

```
In [46]: while i < 10:
...:     print(i)
...:     i += 1
...:
```

```
0
1
2
3
4
5
6
7
8
9
```

```
In [47]: 10 < 10
```

```
Out[47]: False
```

```
In [48]: T = int(input())
5
```

```
In [49]: bool(16)
```

```
....:
....:
Out[49]: True
```

```
In [50]: bool(0)
Out[50]: False
```

```
In [51]: while T:
....:     a = int(input())
....:     print(a**2)
....:     T -= 1
....:
```

```
2
4
4
16
5
25
6
36
7
49
```

```
In [52]: bool(99)
Out[52]: True
```

```
In [53]: bool(0)
Out[53]: False
```

```
In [54]: bool([])
Out[54]: False
```

```
In [55]: bool(())
Out[55]: False
```

```
In [56]: bool({})
Out[56]: False
```

```
In [57]: while T:
....:     T -= 1
....:
```

```
In [58]: while T > 0:
....:     T -= 1
....:
```

```
In [59]: bool(T > 0)
Out[59]: False
```

```
In [60]: bool(T)
Out[60]: False
```

```
In [61]: a = "hello"
```

```
In [62]: for i in a:
```

```
    ...:     print(i)
    ...:
h
e
l
l
o
```

```
In [63]: a[::-1]
Out[63]: 'olleh'
```

```
In [64]: for i in range(len(a)-1,-1,-1):
    ...:     print(a[i], end=" ")
    ...:
```

olleh

```
In [65]: i = 0
```

```
In [66]: j = len(a) - 1
```

```
In [67]: while i < j
File "<ipython-input-67-059ddf3a8522>", line 1
    while i < j
            ^
```

SyntaxError: invalid syntax

```
In [68]: s = ""
```

```
In [69]: s = "hello"
```

```
In [70]: i = 0
```

```
In [71]: j = len(s) - 1
```

```
In [72]: sub = []
    ...:
    ...: for i in range(5):
    ...:     sub.append(float(input()))
    ...:
    ...: per = sum(sub)/5
    ...:
    ...: if per >= 60:
    ...:     print("D")
    ...: elif per >= 70:
    ...:     print("C")
    ...: elif per >= 80:
    ...:     print("B")
    ...: else:
    ...:     print("F")
    ...:
```

92  
93  
91  
94  
95

D

```
In [73]: split()
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-73-b2c4ca1b6d28> in <module>  
----> 1 split()
```

```
NameError: name 'split' is not defined
```

```
In [74]: a = "a,b,c,d"
```

```
In [75]: a
```

```
Out[75]: 'a,b,c,d'
```

```
In [76]: a.split(",")
```

```
Out[76]: ['a', 'b', 'c', 'd']
```

```
In [77]: a = "insert 1 4"
```

```
In [78]: temp = a.split(" ")
```

```
In [79]: temp
```

```
Out[79]: ['insert', '1', '4']
```

```
In [80]: a = "abcd"
```

```
In [81]: list(a)
```

```
Out[81]: ['a', 'b', 'c', 'd']
```

```
In [82]: "".join(a)
```

```
Out[82]: 'abcd'
```

```
In [83]: "-".join(a)
```

```
Out[83]: 'a-b-c-d'
```

```
In [84]:
```