Syntax error

Fix the bug by encircling the part (maximum of one line) of the code snippet you wish to replace with your correction. If you want to insert a line instead, use an arrow to indicate where you want to insert your correction. Your correction is up to a line long only.

Code snippet	Expected output	Actual output

a = range(10)
for b in a
    print(b)
	0
	1
	2
	3
	4
	5
	6
	7
	8
	9
		File "test.py", line 2
		    for b in a
		            ^
		SyntaxError: invalid syntax

Correction:		

Name error

Fix the bug by encircling the part (maximum of one line) of the code snippet you wish to replace with your correction. If you want to insert a line instead, use an arrow to indicate where you want to insert your correction. Your correction is up to a line long only.

Code snippet	Expected output	Actual output

if foo:
    print('foo')
else:
    print('bar')
	bar	if foo:
		NameError: name 'foo' is not defined

Correction:		

Index error

Fix the bug by encircling the part (maximum of one line) of the code snippet you wish to replace with your correction. If you want to insert a line instead, use an arrow to indicate where you want to insert your correction. Your correction is up to a line long only.

Code snippet	Expected output	Actual output

a = ['a', 'b', 'c', 'd', 'e']
b = 0
while b <= 5:
    print(a[b])
    b += 1
	a
	b
	c
	d
	e
		a
		b
		c
		d
		e
		Traceback (most recent call last):
		  File "test.py", line 4, in <module>
		    print a[b]
		IndexError: list index out of range

Correction:		

Infinite loop

Fix the bug by encircling the part (maximum of one line) of the code snippet you wish to replace with your correction. If you want to insert a line instead, use an arrow to indicate where you want to insert your correction. Your correction is up to a line long only.

Code snippet	Expected output	Actual output
i = 0		<infinite loop>

`while True:`
`    if i < 10:`
`        print('*' * i)`
`    else:`
`        break`
	`*`
	`**`
	`***`
	`****`
	`*****`
	`******`
	`*******`
	`********`
	`*********`	

Correction:		

Watch variables

Fix the bug by encircling the part (maximum of one line) of the code snippet you wish to replace with your correction. If you want to insert a line instead, use an arrow to indicate where you want to insert your correction. Your correction is up to a line long only.

Code snippet	Expected output	Actual output

import numpy
for a in range(10):
  b =
numpy.random.randint(10)
  print(a, b)
  if b <= 5:
    print('ping')
  else:
    print('pong')
	0 7
	ping
	1 6
	ping
	2 1
	pong
	3 2
	pong
	4 8
	ping
	5 9
	ping
	6 4
	pong
	7 3
	pong
	8 8
	ping
	9 5
	pong
		0 7
		pong
		1 6
		pong
		2 1
		ping
		3 2
		ping
		4 8
		pong
		5 9
		pong
		6 4
		ping
		7 3
		ping
		8 8
		pong
		9 5
		ping

Correction:		

Hint:
```
randint(...)
    randint(low, high=None, size=None)

    Return random integers x such that low <= x < high.

    If high is None, then 0 <= x < low.
```

Offline debugging

Fix the bug by encircling the part (maximum of one line) of the code snippet you wish to replace with your correction. If you want to insert a line instead, use an arrow to indicate where you want to insert your correction. Your correction is up to a line long only.

```
def dot(a, b):
    '''Compute the dot product of lists a and b

    Lists a and b are 1D lists of equal length

    Parameters
    ----------
    a : list of int or float
        first vector
    b : list of int or float
        second vector

    Returns
    -------
    total : int or float
        dot product of a and b

    Examples
    ------------
    >>> a = [1, 2, 3]
```

```
>>> b = [4, 5, 6]
>>> dot(a, b)
32'''
if len(a) != len(b):
    raise ValueError("a and b must be of equal length")
total = 0
for i in len(a):
    total += a[i] * b[i]
return total
```

Correction: