

Users > avipatel > range function.py > ...

```
1
2  for x in range(5):
3      print("frist range :",x)
4
5
6
7  for y in range(3,6):
8      print("second range :",y)
9
10 for z in range(1,5,2):
11     print("third range :",z)
```

```
for x in range(5):
    print("frist range :",x)
for y in range(3,6):
    print("second range :",y)
for z in range(1,5,2):
    print("third range :",z)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ×

```
/usr/local/bin/python3 "/Users/avipatel/range function.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/range function.py"
frist range : 0
frist range : 1
frist range : 2
frist range : 3
frist range : 4
second range : 3
second range : 4
second range : 5
third range : 1
third range : 3
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > ➋ identity operator.py > ...

```
1     x = 20
2     y = 20
3
4     print(x is y)
5
6     print([x is not y])
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏴ ⏵ ⏷ ⏸ ⏹ ⏸ ⏹ ⏸

```
/usr/local/bin/python3 "/Users/avipatel/identity operator.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/identity operator.py"
True
False
avipatel@Avis-MBP ~ %
```

if statement.py X

▷ ⌂ ⌂ ...

Users > avipatel > if statement.py > ...

```
1  x = 10
2  y = 20
3
4  if x > y:
5      print("x is a greater number ")
6
7  if y > x:
8      print("y is a greater number ")
```

x is a greater number
y is a greater number

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ▾ ⌂ ⌂ ^ X

```
/usr/local/bin/python3 "/Users/avipatel/if statement.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/if statement.py"
y is a greater number
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > range function example 2.py > ...

```
1  list1 = [10,20,"avi patel"]
2
3  for i in range(len(list1)):
4      print('value is :',list1[i])
5
```

```
list1 = [10,20,"avi patel"]
for i in range(len(list1)):
    print('value is :',list1[i])
```

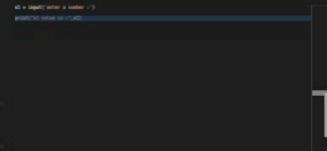
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ×

```
/usr/local/bin/python3 "/Users/avipatel/range function example 2.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/range function example 2.py"
value is : 10
value is : 20
value is : avi patel
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > example.py > ...

```
1 n1 = input('enter a number :')
2
3 print("n1 value is :",n1)
```



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 /Users/avipatel/example.py
avipatel@Avis-MBP ~ % /usr/local/bin/python3 /Users/avipatel/example.py
enter a number :10
n1 value is : 10
avipatel@Avis-MBP ~ %
```

Users > avipatel > ➊ example 2.py > ...

```
1 n1 = int(input('enter number1 :'))
2 n2 = int(input('enter number2 :'))
3
4 ans=n1+n2
5
6 print(ans)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏴ ⏵ ⏷ ⏸ ⏹ ⏹

```
/usr/local/bin/python3 "/Users/avipatel/example 2.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/example 2.py"
enter number1 :10
enter number2 :20
30
avipatel@Avis-MBP ~ %
```

Users > avipatel > number datatype.py > ...

```
1 n1 = 10
2 print(n1, "is of type", type(n1))
3
4 n2 =10.5
5 print(n2, "is of type ", type(n2))
6 print(n2, "is complex number?", isinstance(10.5, int))
7
8 n3 =1+2j
9 print([n3, "is complex number?", isinstance(1+2j, complex)])
```

```
private void TickOfSystem()
{
    private void TickOfSystem<T>()
    {
        private void TickOfSystem<T>(T value)
        {
            private void TickOfSystem<T>(T value, long time)
        }
    }
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/number datatype.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/number datatype.py"
10 is of type <class 'int'>
10.5 is of type <class 'float'>
10.5 is complex number? False
(1+2j) is complex number? True
avipatel@Avis-MBP ~ %
```

Users > avipatel > ➋ string datatype.py > ...

```
1  name= "avi patel"
2
3
4  print("Name is :",name)
5
6
7  print(name[0])
8
9
10 print(name[2:5])
11
12
13 print(name[2:])
14
15
16 print(name * 2)
17
18
19 print(name + "hello")
```

```
name='avi patel'
print('Name is :',name)
print(name[0])
print(name[2:5])
print(name[2:])
print(name * 2)
print(name + "hello")
```

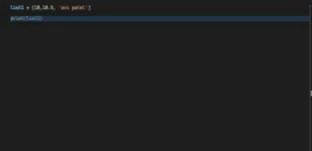
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏺ ⏹ ⏷ ⏸ ⏹ ⏷

```
/usr/local/bin/python3 "/Users/avipatel/string datatype.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/string datatype.py"
Name is : avi patel
a
i p
i patel
avi patelavi patel
avi patelhello
avipatel@Avis-MBP ~ %
```

Users > avipatel > list datatype.py > ...

```
1  list1 = [10,10.5, 'avi patel']
2
3  print(list1)
```



PROBLEMS

OUTPUT

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Python - avipatel + ⏴ ⏵ ⏴ ⏵ ⏴ ⏵ ⏴ ⏵

```
/usr/local/bin/python3 "/Users/avipatel/list datatype.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/list datatype.py"
[10, 10.5, 'avi patel']
avipatel@Avis-MBP ~ %
```

Users > avipatel > arithmetic operator.py > ...

```
1     x = 10
2     y = 6
3
4     print('x+y =', x+y)
5
6     print(['x-y =', x-y])
7
8     print('x*y =', x*y)
9
10    print('x/y =', x/y)
11
12    print('x//y =', x//y)
13
14    print('x**y =', x**y)
15
```

```
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ×

```
/usr/local/bin/python3 "/Users/avipatel/arithmetic operator.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/arithmetic operator.py"
x+y = 16
x-y = 4
x*y = 60
x/y = 1.6666666666666667
x//y = 1
x**y = 1000000
avipatel@Avis-MBP ~ %
```

Users > avipatel > if else statement.py > ...

```
1  x = 20
2  y = 10
3
4  if x > y:
5      print("x is a greater number ")
6
7  else:
8      print("y is a greater number ")
```

```
x is a greater number
y is a greater number
```

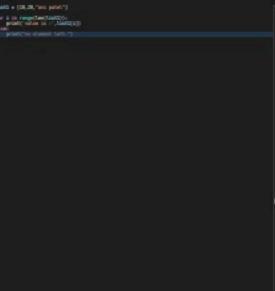
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/if else st%
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/if else statement.py"
x is a greater number
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > loop with else.py > ...

```
1  list1 = [10,20,"avi patel"]
2
3  for i in range(len(list1)):
4      print('value is :',list1[i])
5  else:
6      print("no element left.")
```



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/loop with else.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/loop with else.py"
value is : 10
value is : 20
value is : avi patel
no element left.
avipatel@Avis-MacBook-Pro ~ %
```

| 08

hello world.py



Get Started

hello world.py X

▶ ▾ ⌂ ⌂ ⌂

Users > avipatel > hello world.py

1 print("hello world")

PROBLEMS

OUTPUT

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Python - avipatel + ▾ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/hello world"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/hello world.py"
hello world
avipatel@Avis-MBP ~ %
```



a=10.py X

Users > avipatel > a=10.py > ...

```
1 a=10
2 b=10.5
3 c="avi patel"
4
5 print(a)
6 print("value of b is : ",b)
7 print("company name is : ",c)
```



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ×

```
avipatel@Avis-MBP ~ % /usr/local/bin/python3 /Users/avipatel/a=10.py
10
value of b is : 10.5
company name is : avi patel
avipatel@Avis-MBP ~ %
```

Users > avipatel > list datatype example 2.py > ...

```
1  list1 = [10,20,30,"avi",40,50,"patel",60]
2
3
4  print("list1[2] =",list1[2])
5
6
7  print("list[0:3] =",list1[0:3])
8
9
10 print("list [5:] =",list1[5:])
11
```

```
list1 = [10,20,30,"avi",40,50,"patel",60]
print("list1[2] =",list1[2])
print("list[0:3] =",list1[0:3])
print("list [5:] =",list1[5:])
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```
/usr/local/bin/python3 "/Users/avipatel/list datatype example 2.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/list datatype example 2.py"
list1[2] = 30
list[0:3] = [10, 20, 30]
list [5:] = [50, 'patel', 60]
avipatel@Avis-MBP ~ %
```

+ ▾ ^ ×

Γ ⚡ Python ...
L ⚡ zsh avip...
❯ Python avi...

Users > avipatel > ➋ arithmetic operator example2.py > ...

```
1     x = 10
2     y = 6
3
4     print('x>y =', x>y)
5
6     print('x<y =', x<y)
7
8     print('x==y =', x==y)
9
10    print('x!=y =', x!=y)
11
12    print('x>=y =', x>=y)
13
14    print('x<=y =', x<=y)
15
```

```
...  
11  
print('x>y =', x>y)  
12 print('x<y =', x<y)  
13 print('x==y =', x==y)  
14 print('x!=y =', x!=y)  
15 print('x>=y =', x>=y)  
16 print('x<=y =', x<=y)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏴ ⏵ ⏷ ⏸ ⏹ ⏸

```
/usr/local/bin/python3 "/Users/avipatel/arithmetic operator example2.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/arithmetic operator example2.py"
x>y = True
x<y = False
x==y = False
x!=y = True
x>=y = True
x<=y = False
avipatel@Avis-MBP ~ %
```

Users > avipatel > if elif else statement.py > ...

```
1  x = 20
2  y = 10
3
4  if x == y:
5      print("Both number are equal")
6  elif x>y:
7      print("x is a greater number ")
8
9  else:
10     print("y is a greater number ")
```

```
1  x = 20
2  y = 10
3
4  if x == y:
5      print("Both number are equal")
6  elif x>y:
7      print("x is a greater number ")
8
9  else:
10     print("y is a greater number ")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Python - avipatel + v W ^ X

```
/usr/local/bin/python3 "/Users/avipatel/if elif else statement.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/if elif else statement.py"
x is a greater number
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > break statement.py > ...

```
1  
2  
3     i = 0  
4     while i < 10:  
5         print("value is :",i)  
6         i+=1  
7         if i>=5:  
8             break
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/break statement.py"  
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/break statement.py"  
value is : 0  
value is : 1  
value is : 2  
value is : 3  
value is : 4  
avipatel@Avis-MacBook-Pro ~ %
```



avi123.py ×

Users > avipatel > avi123.py > ...

```
1 name="avi patel"
2 print("Name is : ",name)
3
4
5 name="avipatel.com"
6 print("Name is : ",name)
7
```

src/main/java/com/.../Main.java



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

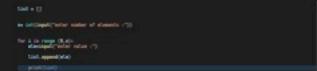
Python - avipatel + ↻ ⊞ ^ ×

```
/usr/local/bin/python3 /Users/avipatel/avi123.py
avipatel@Avis-MBP ~ % /usr/local/bin/python3 /Users/avipatel/avi123.py
Name is : avi patel
Name is : avipatel.com
avipatel@Avis-MBP ~ %
```



Users > avipatel > ➋ take value from the user.py > ...

```
1
2     list = []
3
4
5     n= int(input("enter number of elements :"))
6
7
8     for i in range (0,n):
9         ele=input("enter value :")
10
11         list.append(ele)
12
13     print(list)
```



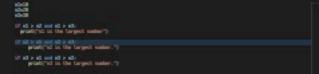
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏺ ⏻ ⏹ ⏸ ⏹ ⏵

```
e user.py"
enter number of elements :3
enter value :avi
['avi']
enter value :patel
['avi', 'patel']
enter value :123
['avi', 'patel', '123']
avipatel@Avis-MBP ~ %
```

Users > avipatel > example of and .py > ...

```
1 n1=10
2 n2=20
3 n3=30
4
5 if n1 > n2 and n1 > n3:
6     print("n1 is the largest number")
7
8 if n2 > n1 and n2 > n3:
9     print("n2 is the largest number.")
10
11 if n3 > n1 and n3 > n2:
12     print("n3 is the largest number.")
```



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ×

```
/usr/local/bin/python3 "/Users/avipatel/example of and .py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/example of and .py"
n3 is the largest number.
avipatel@Avis-MBP ~ %
```

Users > avipatel > ➊ while loop statement.py > ...

```
1  i = 0
2  while i < 5:
3      print("value of i:",i)
4      i +=1
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏴ ⏵ ⏷ ⏸ ⏹ ⏸

```
statement.py"
value of i: 0
value of i: 1
value of i: 2
value of i: 3
value of i: 4
avipatel@Avis-MacBook-Pro ~ %
```

continue statement.py

...

Users > avipatel > continue statement.py > ...

```
1  
2  
3 for x in range(10):  
4     if x & 2 == 0:  
5         continue  
6     print("value is :", x)  
7  
8  
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/continue statement.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/continue statement.py"
value is : 9
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > _multiple values to multiple variables.py > ...

```
1 a,b,c = 10,10.5, "avi patel"
2
3 print(a)
4 print("value of b is : ",b)
5 print("company name is : ",c)
6
```

```
a,b,c = 10,10.5, "avi patel"
print(a)
print("value of b is : ",b)
print("company name is : ",c)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏺ ⏹ ⏷ ⏸ ⏹ ⏷

```
/usr/local/bin/python3 "/Users/avipatel/_multiple values to multiple variables.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/_multiple values to multiple variables.py"
10
value of b is : 10.5
company name is : avi patel
avipatel@Avis-MBP ~ %
```

Users > avipatel > error in tuple.py > ...

```
1     tuple1 = (10,20,30, "avi")
2
3
4
5     tuple1[0]=15
```

```
tuple1[0]=15
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏴ ⏵ ⏷ ⏸ ⏹ ⏸

```
/usr/local/bin/python3 "/Users/avipatel/error in tuple.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/error in tuple.py"
Traceback (most recent call last):
  File "/Users/avipatel/error in tuple.py", line 5, in <module>
    tuple1[0]=15
TypeError: 'tuple' object does not support item assignment
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > example of or.py > ...

```
1 ch = input("Enter a character : ")  
2  
3 if (ch=='A' or ch=='a' or ch=='E' or ch=='e' or ch=='I'  
4     or ch=='i' or ch=='O' or ch=='o' or ch=='U' or ch=='u'):  
5     print(ch, "is a vowel")  
6 else:  
7     print(ch, "is a consonant")  
8
```



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/example of or.py"  
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/example of or.py"  
Enter a character : a  
a is a vowel  
avipatel@Avis-MBP ~ %
```

Users > avipatel > for loop statements.py > ...

```
1 for i in 'hello':  
2     print('value :', i)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/for loop statements.py"  
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/for loop statements.py"  
value : h  
value : e  
value : l  
value : l  
value : o  
avipatel@Avis-MacBook-Pro ~ %
```

continue statement.py

▶ ▼ └ ...

Users > avipatel > ⚙ continue statement.py > ...

```
1  
2  
3 for x in range(10):  
4  
5     if x & 2 == 0:  
6         continue  
7  
8     print("value is :", x)  
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/continue statement.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/continue statement.py"
value is : 9
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > same value to multiple variables.py > ...

```
1 a= b = c = 10
2
3 print("value of a is : ",a)
4 print("value of b is : ",b)
5 print("value of c is : ",c)
6
```

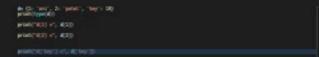
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/same value to multiple variables.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/same value to multiple variables.py"
value of a is : 10
value of b is : 10
value of c is : 10
avipatel@Avis-MBP ~ %
```

Users > avipatel > ➋ dictionary datatype.py > ...

```
1  d= {1: 'avi', 2: 'patel', 'key': 10}
2  print(type(d))
3
4  print("d[1] =", d[1])
5
6  print("d[2] =", d[2])
7
8
9  print("d['key'] =", d['key'])
```



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python - avipatel + ⏺ ⏻ ⏹ ⏸ ⏹ ⏸

```
/usr/local/bin/python3 "/Users/avipatel/dictionary datatype.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/dictionary datatype.py"
<class 'dict'>
d[1] = avi
d[2] = patel
d['key'] = 10
avipatel@Avis-MacBook-Pro ~ %
```

membership operators .py ×

Users > avipatel >  membership operators .py > ...

```
1 x = 10
2 y = 6
3 list1 = [10,20,30,40,50]
4
5 print(x in list1)
6
7 print(y in list1)
8
9 print(y not in list1)
10
```

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```
/usr/local/bin/python3 "/Users/avipatel/membership operators .py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/membership operators .py"
True
False
True
avipatel@Avis-MBP ~ %
```

Users > avipatel > list datatype.py > ...

```
1  list1 = [10,20,"avi patel"]
2
3  for i in list1:
4      print('value :',i)
```



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Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/list datatype.py"
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/list datatype.py"
value : 10
value : 20
value : avi patel
avipatel@Avis-MacBook-Pro ~ %
```

Users > avipatel > pass statement.py > ...

```
1  
2  
3  
4  i = {10,20,30,40}  
5  for val in i :  
6      pass  
7
```

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Python - avipatel + ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
/usr/local/bin/python3 "/Users/avipatel/pass statement.py"  
avipatel@Avis-MacBook-Pro ~ % /usr/local/bin/python3 "/Users/avipatel/pass statement.py"  
avipatel@Avis-MacBook-Pro ~ % process finished with exit code 0
```