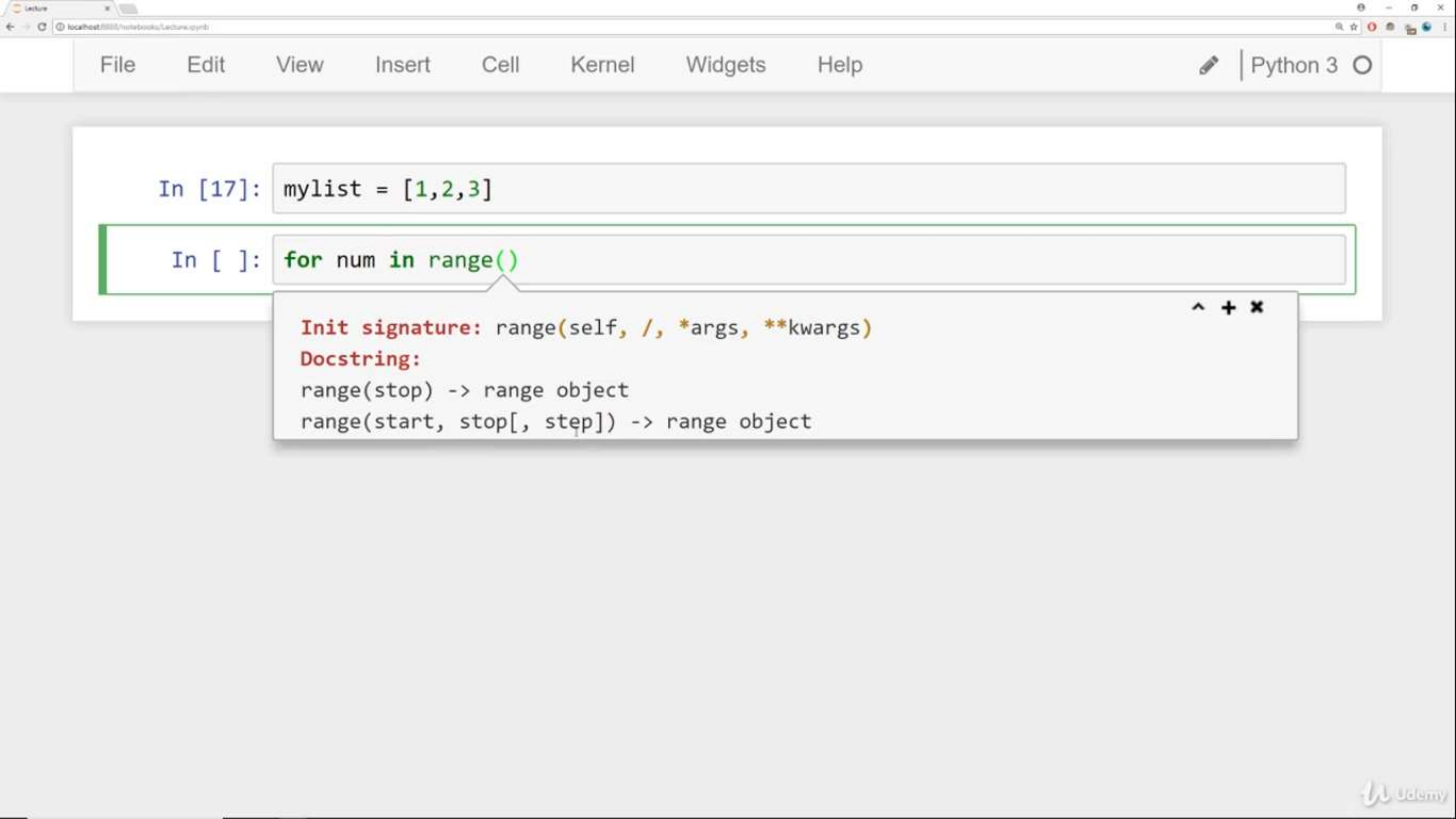




Useful Operators



```
In [17]: mylist = [1,2,3]
```

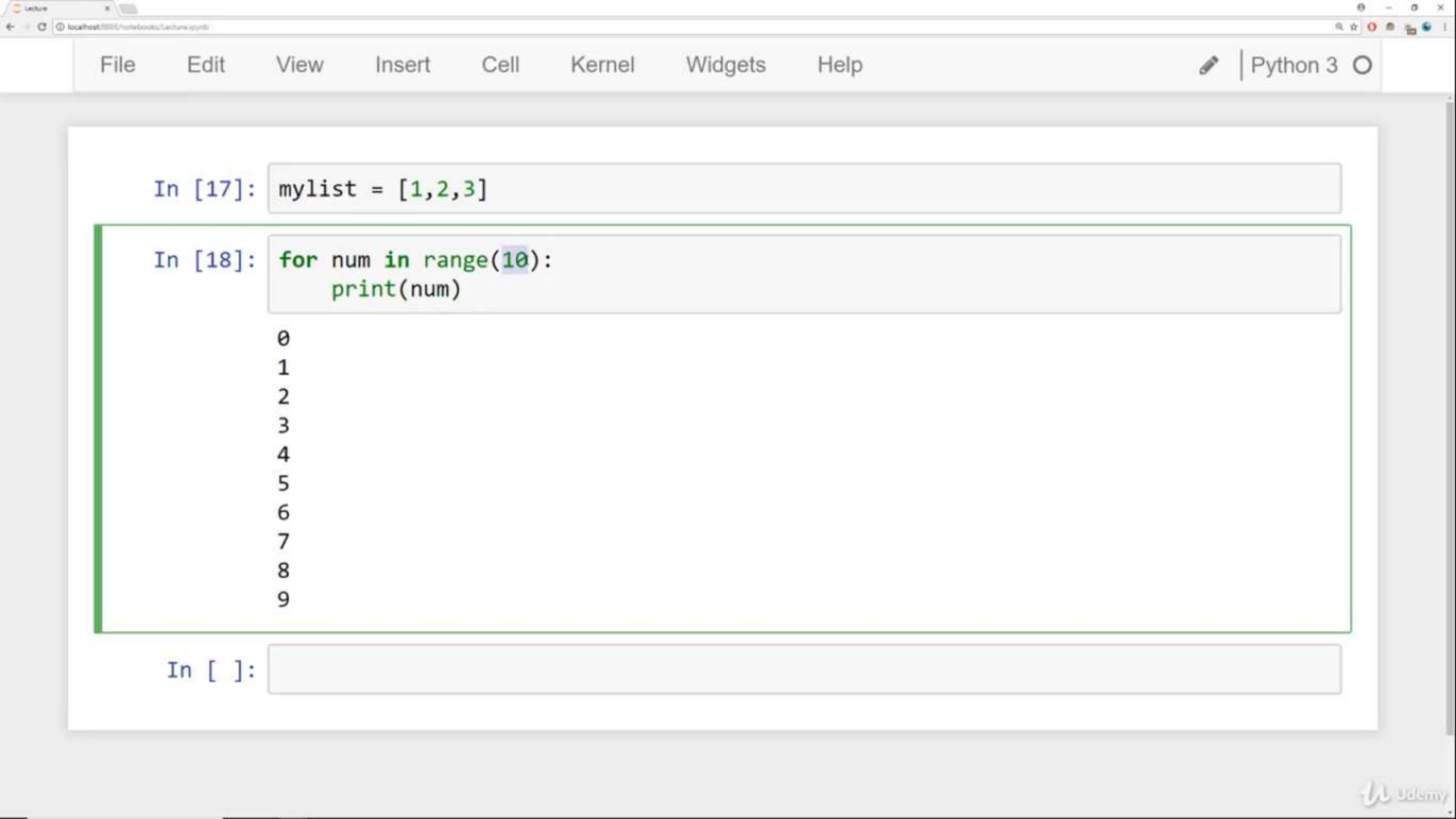
```
In [ ]: for num in range()
```

Init signature: range(self, /, *args, **kwargs)

Docstring:

range(stop) -> range object

range(start, stop[, step]) -> range object

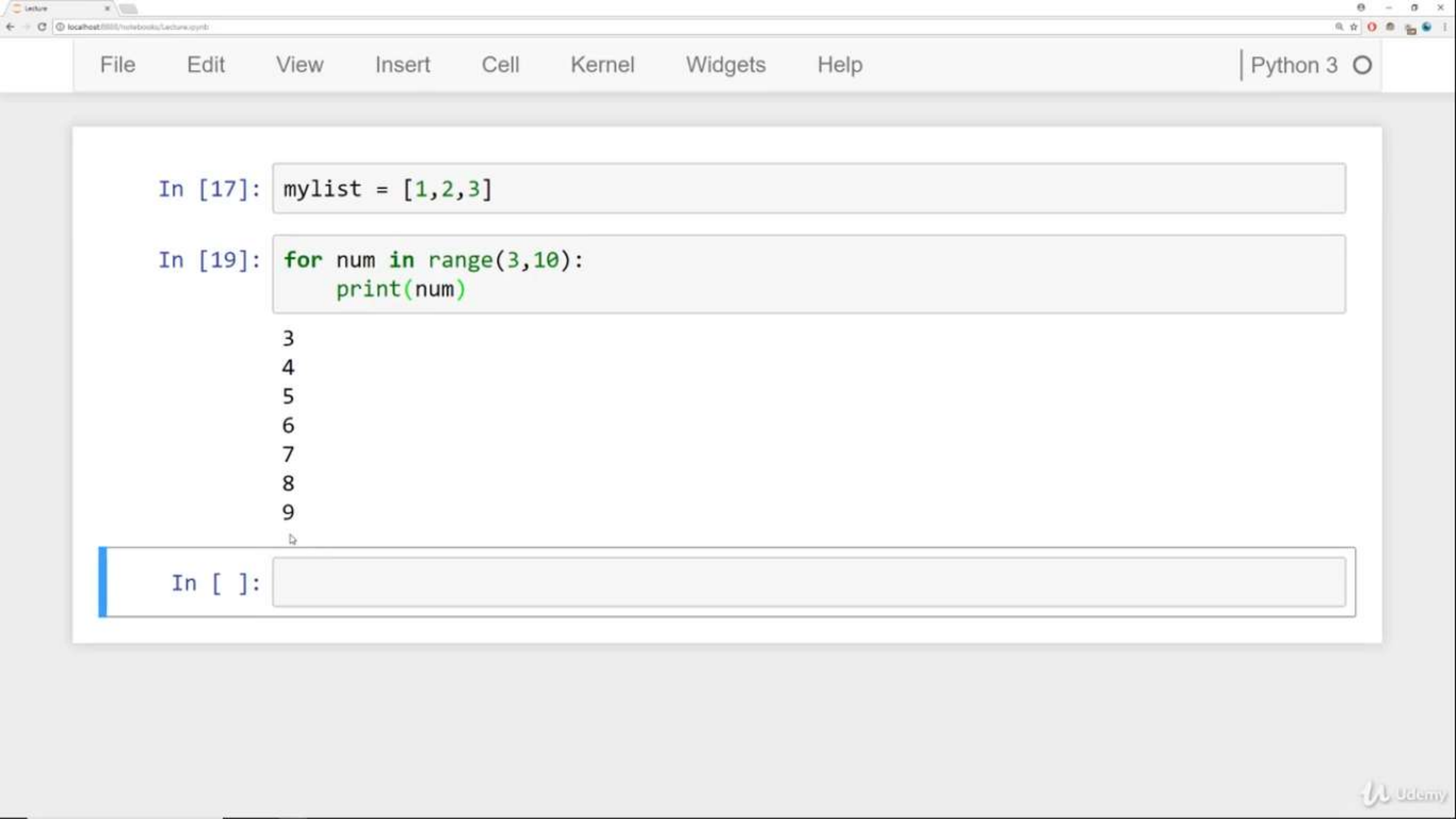


```
In [17]: mylist = [1,2,3]
```

```
In [18]: for num in range(10):  
          print(num)
```

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

```
In [ ]:
```

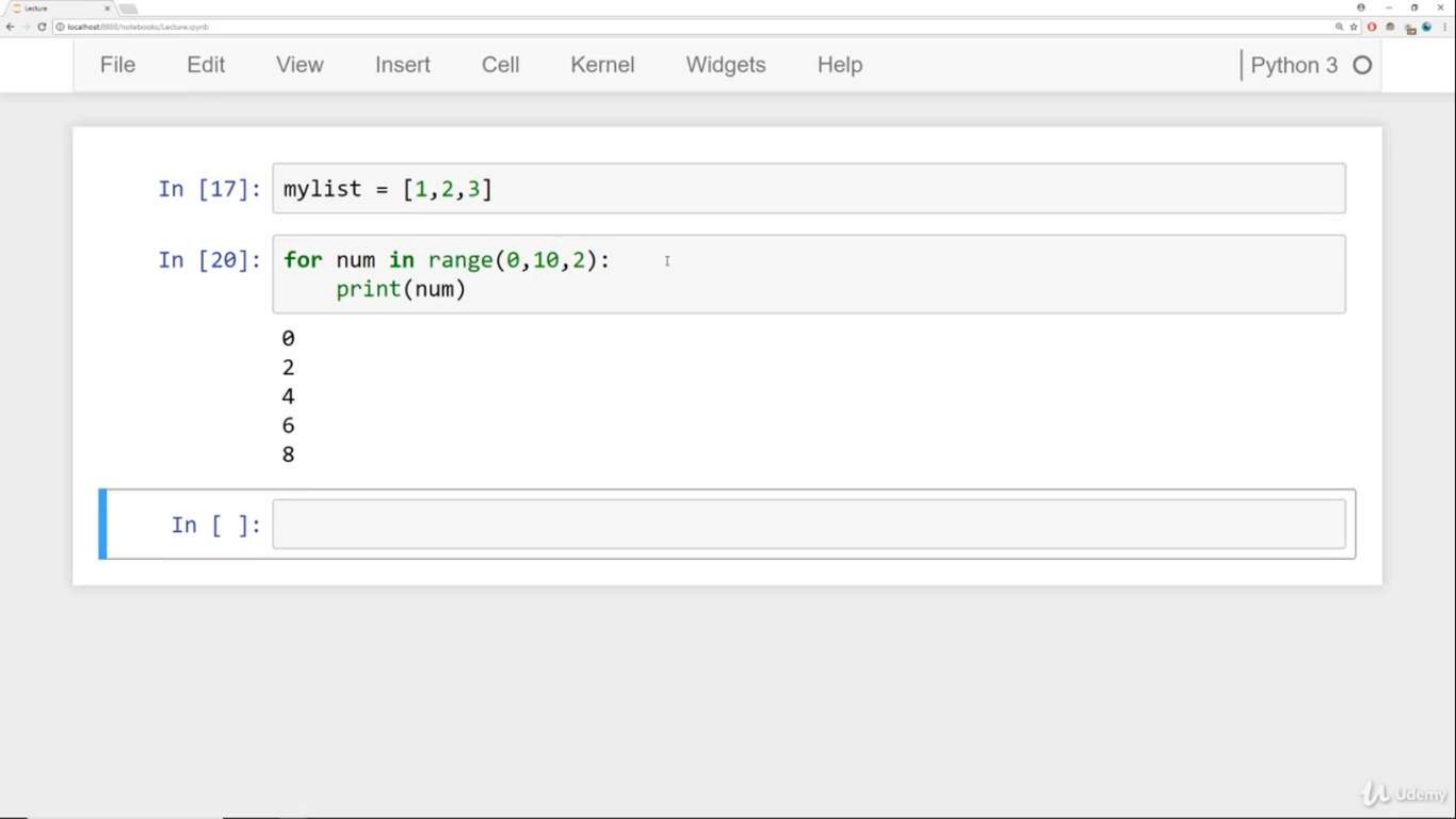


```
In [17]: mylist = [1,2,3]
```

```
In [19]: for num in range(3,10):  
         print(num)
```

```
3  
4  
5  
6  
7  
8  
9
```

```
In [ ]:
```



```
In [17]: mylist = [1,2,3]
```

```
In [20]: for num in range(0,10,2):  
         print(num)
```

```
0  
2  
4  
6  
8
```

```
In [ ]:
```

```
In [17]: mylist = [1,2,3]
```

```
In [21]: for num in range(0,11,2):  
         print(num)
```

```
0  
2  
4  
6  
8  
10
```

```
In [23]: list(range(0,11,2))
```

```
Out[23]: [0, 2, 4, 6, 8, 10]
```

```
In [ ]:
```

2
4
6
8
10

In [23]: `list(range(0,11,2))`

Out[23]: [0, 2, 4, 6, 8, 10]

In [24]: `index_count = 0`

```
for letter in 'abcde':  
    print('At index {} the letter is {}'.format(index_count,letter))  
    index_count += 1
```

At index 0 the letter is a
At index 1 the letter is b
At index 2 the letter is c
At index 3 the letter is d
At index 4 the letter is e

In []:

Out[23]: [0, 2, 4, 6, 8, 10]

```
In [25]: index_count = 0
word = 'abcde'

for letter in word:

    print(word[index_count])
    index_count += 1
```

a
b
c
d
e

In []:

Out[23]: [0, 2, 4, 6, 8, 10]

In [26]:

```
word = 'abcde'

for item in enumerate(word):
    print(item)
```

```
(0, 'a')
(1, 'b')
(2, 'c')
(3, 'd')
(4, 'e')
```

In []:

In [27]:

```
word = 'abcde'

for index, letter in enumerate(word):
    print(index)
    print(letter)
    print('\n')
```

0

a

1

b

```
In [28]: mylist1 = [1,2,3]
         mylist2 = ['a','b','c']
```

```
In [30]: for item in zip(mylist1,mylist2):
         print(item)
```

```
(1, 'a')
(2, 'b')
(3, 'c')
```

```
In [ ]:
```

```
In [32]: mylist1 = [1,2,3]
          mylist2 = ['a','b','c']
          mylist3 = [100,200,300]
```

```
In [33]: for item in zip(mylist1,mylist2,mylist3):
          print(item)
```

```
(1, 'a', 100)
```

```
(2, 'b', 200)
```

```
(3, 'c', 300)
```

```
In [ ]:
```

```
In [34]: mylist1 = [1,2,3,4,5,6]
mylist2 = ['a','b','c']
mylist3 = [100,200,300]
```

```
In [35]: for item in zip(mylist1,mylist2,mylist3):
          print(item)
```

```
(1, 'a', 100)
```

```
(2, 'b', 200)
```

```
(3, 'c', 300)
```

```
In [ ]:
```

e

```
In [34]: mylist1 = [1,2,3,4,5,6]
mylist2 = ['a','b','c']
mylist3 = [100,200,300]
```

```
In [37]: for a,b,c in zip(mylist1,mylist2,mylist3):
          print(b)
```

a

b

c

```
In [36]: list(zip(mylist1,mylist2))
```

```
Out[36]: [(1, 'a'), (2, 'b'), (3, 'c')]
```

File

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Python 3



d

c

In [36]: `list(zip(mylist1,mylist2))`

Out[36]: `[(1, 'a'), (2, 'b'), (3, 'c')]`

In [38]: `'x' in [1,2,3]`

Out[38]: `False`

In []: `'x'|`

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Python 3

Out[39]: True

```
In [41]: 'a' in 'a world '
```

Out[41]: True

```
In [44]: 'mykey' in {'mykey':345}
```

Out[44]: True

```
In [ ]:
```



```
In [47]: mylist = [10,20,30,40,100]
```

```
In [48]: min(mylist)
```

```
Out[48]: 10
```

```
In [49]: max(mylist)
```

```
Out[49]: 100
```

```
In [ ]: |
```

```
In [50]: from random import shuffle
```

```
In [51]: mylist = [1,2,3,4,5,6,7,8,9,10]
```

```
In [52]: shuffle(mylist)
```

```
In [53]: mylist
```

```
Out[53]: [3, 9, 7, 8, 10, 5, 1, 2, 6, 4]
```

```
In [ ]:
```

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Python 3

In [50]: `from random import shuffle`

In [51]: `mylist = [1,2,3,4,5,6,7,8,9,10]`

In [56]: `random_list = shuffle(mylist)`

In [58]: `type(random_list)`

Out[58]: `NoneType`

In []:

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Python 3

In [60]: `from random import randint`

In [61]: `randint(0,100)`

Out[61]: 79

In [62]: `randint(0,100)`

Out[62]: 99

In []:

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Python 3



In [60]: `from random import randint`

In [61]: `randint(0,100)`

Out[61]: 79

In [62]: `randint(0,100)`

Out[62]: 99

In []: `mynum = randint()`



In [64]: mynum

Out[64]: 3

In [66]: result = input('What is your name? ')

What is your name? Jose

In [67]: result

Out[67]: 'Jose'

In []:

File

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Python 3



In [64]: mynum

Out[64]: 3

In [68]: result = input('Favorite Number: ')

Favorite Number: 30

In [69]: result

Out[69]: '30'

In []:

Favorite Number: 30

In [70]: `type(result)`

Out[70]: str

In [71]: `float(result)`

Out[71]: 30.0

In []:

Out[71]: 30.0

In [72]: `int(result)`

Out[72]: 30

In [73]: `result`

Out[73]: '30'

In []: |