



Big Data with Python



By Odin Outsourcing

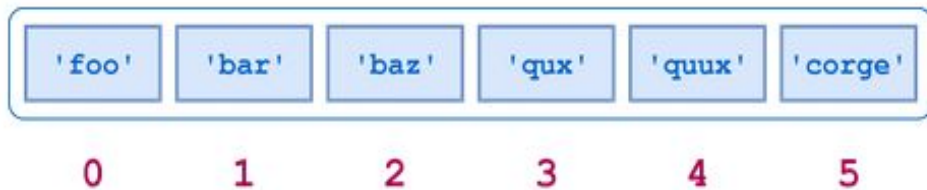


List / Array

Python

```
a = ['foo', 'bar', 'baz', 'qux', 'quux', 'corge']
```

The indices for the elements in a are shown below:



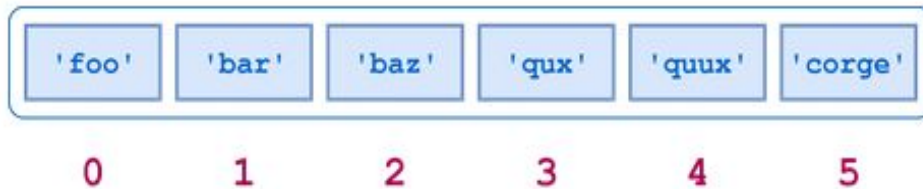
List Indices

List / Array (Con.)

Python

```
a = ['foo', 'bar', 'baz', 'qux', 'quux', 'corge']
```

The indices for the elements in a are shown below:



List Indices

Python

```
>>> a[0]
```

```
'foo'
```

```
>>> a[2]
```

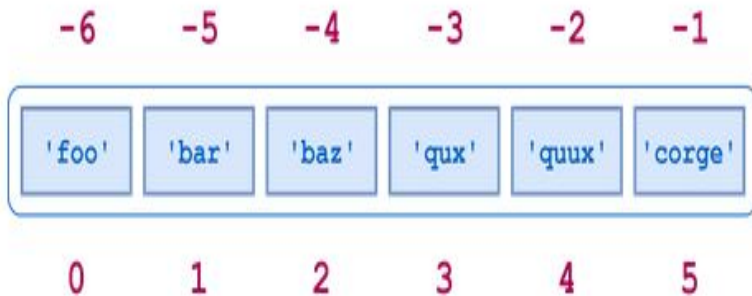
```
'baz'
```

```
>>> a[5]
```

```
'corge'
```

List / Array (Con.)

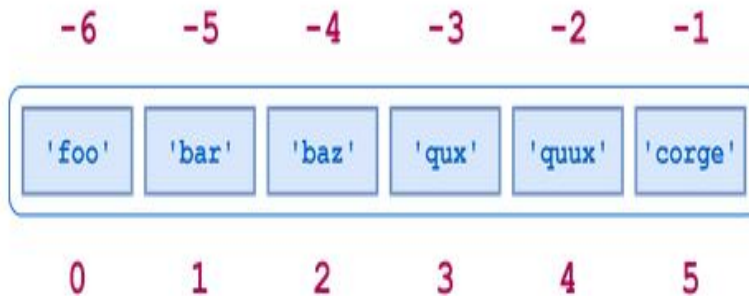
Virtually everything about string indexing works similarly for lists. For example, a negative list index counts from the end of the list:



Negative List Indexing

List / Array (Con.)

Virtually everything about string indexing works similarly for lists. For example, a negative list index counts from the end of the list:



Negative List Indexing

Python

```
>>> a[-1]
'corge'
>>> a[-2]
'quux'
>>> a[-5]
'bar'
```

List / Array Slicing

Python

```
>>> a = ['foo', 'bar', 'baz', 'qux', 'quux', 'corge']
```

```
>>> a[2:5]  
['baz', 'qux', 'quux']
```

Python

```
>>> a[-5:-2]  
['bar', 'baz', 'qux']  
>>> a[1:4]  
['bar', 'baz', 'qux']  
>>> a[-5:-2] == a[1:4]  
True
```

Python

```
>>> print(a[:4], a[0:4])  
['foo', 'bar', 'baz', 'qux'] ['foo', 'bar', 'baz', 'qux']  
>>> print(a[2:], a[2:len(a)])  
['baz', 'qux', 'quux', 'corge'] ['baz', 'qux', 'quux', 'corge']  
  
>>> a[:4] + a[4:]  
['foo', 'bar', 'baz', 'qux', 'quux', 'corge']  
>>> a[:4] + a[4:] == a  
True
```

List / Array Slicing (Con.)

Python

```
>>> a[0:6:2]
['foo', 'baz', 'quux']
>>> a[1:6:2]
['bar', 'qux', 'corge']
>>> a[6:0:-2]
['corge', 'qux', 'bar']
```

Python

```
>>> a[::-1]
['corge', 'quux', 'qux', 'baz', 'bar', 'foo']
```

List / Array in/out

Python

```
>>> a
['foo', 'bar', 'baz', 'qux', 'quux', 'corge']

>>> 'qux' in a
True

>>> 'thud' not in a
True
```


Learning Resources (List / Array)

1. <https://developers.google.com/edu/python/lists>
2. <https://realpython.com/python-lists-tuples/>
3. <https://www.geeksforgeeks.org/python-list/>
4. <http://thomas-cokelaer.info/tutorials/python/lists.html>
5. https://www.w3schools.com/python/python_lists.asp
6. <https://www.pythonforbeginners.com/lists/python-lists-cheat-sheet>
7. <https://www.programiz.com/python-programming/list>

Contract your instructor!

Find Me: <http://rafsanjani.pythonanywhere.com/contact>

Course Website: <https://mrzresearcharena.github.io/Big-Data-using-Python>



Thank you!