

enumerate()

In this lecture we will learn about an extremely useful built-in function: `enumerate()`. Enumerate allows you to keep a count as you iterate through an object. It does this by returning a tuple in the form (count,element).

The function itself is equivalent to:

```
def enumerate(sequence, start=0):  
    n = start  
    for elem in sequence:  
        yield n, elem  
        n += 1
```

Example ¶

In [1]:

```
lst = ['a', 'b', 'c']  
  
for number, item in enumerate(lst):  
    print(number)  
    print(item)
```

```
0  
a  
1  
b  
2  
c
```

`enumerate()` becomes particularly useful when you have a case where you need to have some sort of tracker. For example:

In [2]:

```
for count, item in enumerate(lst):  
    if count >= 2:  
        break  
    else:  
        print(item)
```

```
a  
b
```

`enumerate()` takes an optional "start" argument to override the default value of zero:

In [3]:

```
months = ['March', 'April', 'May', 'June']  
  
list(enumerate(months, start=3))
```

Out[3]:

```
[(3, 'March'), (4, 'April'), (5, 'May'), (6, 'June')]
```

Great! You should now have a good understanding of enumerate and its potential use cases.