Python course materials

# 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

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:

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:

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

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

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