

```
In [20]: import string
```

```
In [21]: alphabet = string.ascii_uppercase
```

```
In [22]: print(alphabet)
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ

```
In [23]: for letter in alphabet:  
         print(letter)
```

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

enumerate method allows you to cycle through index and values

```
In [24]: for i, letter in enumerate(alphabet):  
         print(i, ',', letter)
```

```
0 , A
1 , B
2 , C
3 , D
4 , E
5 , F
6 , G
7 , H
8 , I
9 , J
10 , K
11 , L
12 , M
13 , N
14 , O
15 , P
16 , Q
17 , R
18 , S
19 , T
20 , U
21 , V
22 , W
23 , X
24 , Y
25 , Z
```

```
In [25]: print(i)
```

```
25
```

```
In [26]: print(letter)
```

```
Z
```

```
In [27]: print(alphabet)
```

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ
```

This is an example of slicing

```
In [28]: alphabet[10:15]
```

```
Out[28]: 'KLMNO'
```

python range and indexing is not inclusive of the end point

```
In [29]: for i in range(10):
          print(i)
```

0
1
2
3
4
5
6
7
8
9

```
In [30]: alphabet[10:16]
```

```
Out[30]: 'KLMNOP'
```

list[::-1] reverses the order of a list but does not alter the original list

```
In [31]: alphabet[::-1]
```

```
Out[31]: 'ZYXWVUTSRQPONMLKJIHGFEDCBA'
```

list.append() method allows you to add items to the end of a list

```
In [37]: list_letters = []  
for letter in alphabet:  
    list_letters.append(letter)
```

```
In [38]: print(list_letters)
```

```
['A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N',  
'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z']
```

list.pop() will alter the original list

```
In [39]: last_letter = list_letters.pop()
```

```
In [40]: print(last_letter)
```

Z

```
In [41]: print(list_letters)
```

```
['A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N',  
'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y']
```

```
In [ ]:
```