

List

Week 6: Lecture 2

List Slicing

```
List_A = ['A','B','C','D','E','F','G']
```

```
print(List_A[2:5])
```

In the above list note that the range is from 2(Inclusive) to 5(exclusive). Therefore values at index position 2,3 and 4 will be printed.

Another point to keep in mind is that a the first element of the list has index 0 (zero).

Therefore the output will be: ['C', 'D', 'E']

INDEX	0	1	2	3	4	5	6
ELEMENTS	A	B	C	D	E	F	G

```
List_A = ['A','B','C','D','E','F','G']  
print(List_A[:4])
```

In the above list note that the range will begin from 0th index to the 3rd index. Therefore values at index position 0,1,2, and 3 will be printed.

Therefore the output will be: ['A', 'B', 'C', 'D']

Negative Indexing in a List

- Negative indexing means start from the end of the list.
- Therefore an index value of [-1] refers to the last item of the list.
- Similarly an index value of [-2] refers to the second last item of the list and so on.

Example

```
List = [1, 2, 'a', 4, 'b', 6, 'c']
```

```
print(List[-1]) # prints c
```

```
print(List[-3]) # prints b
```

```
print(List[-5]) # prints a
```

remove method

```
List = [1, 2, 3, 4, 5, 6, 7]
print("Initial List: ")
print(List)
# Removing elements from List using remove() method
List.remove(5)
List.remove(6)
print("\nList after Removal of two elements: ")
print(List)
```

Output:

List after Removal of two elements:

[1, 2, 3, 4, 7]

Removing elements from List using iterator method

```
List=[1,2,3,4,5,6,7,8,9]
```

```
for i in range(1,5):
```

```
List.remove(i)
```

```
print("\nList after Removing a range of elements: ")
```

```
print(List)
```

Output:

List after Removing a range of elements:

[5, 6, 7, 8, 9]

list operation Converts an iterable (tuple ,string, set, dictionary) to a list. For example consider the following code.

```
list1=list("MORNING")  
print(list1)
```

Output:

```
['M', 'O', 'R', 'N', 'I', 'N', 'G']
```


- Thank You