

```
In [1]: list1=[1,2,3,4,5]
```

```
In [2]: list1
```

```
Out[2]: [1, 2, 3, 4, 5]
```

```
In [3]: print(type(list1))
```

```
<class 'list'>
```

```
In [4]: list1[0]
```

```
Out[4]: 1
```

```
In [5]: list1[1]
```

```
Out[5]: 2
```

```
In [6]: list1[-3]
```

```
Out[6]: 3
```

```
In [7]: list1[-6]
```

```
-----  
IndexError                                Traceback (most recent call last)  
Cell In[7], line 1  
----> 1 list1[-6]
```

```
IndexError: list index out of range
```

```
In [8]: len(list1)
```

```
Out[8]: 5
```

## slicing

```
In [26]: List2 = [123,1234,342,4532,543,'one','two','three']
```

```
In [10]: List2[0:2]
```

```
Out[10]: [123, 1234]
```

```
In [11]: List2[1:4]
```

```
Out[11]: [1234, 342, 4532]
```

```
In [12]: List2[:4]
```

```
Out[12]: [123, 1234, 342, 4532]
```

```
In [13]: List2[3:]
```

```
Out[13]: [4532, 543, 'one', 'two', 'three']
```

```
In [14]: List2[1:]
```

```
Out[14]: [1234, 342, 4532, 543, 'one', 'two', 'three']
```

```
In [15]: List2[:-4]
```

```
Out[15]: [123, 1234, 342, 4532]
```

```
In [16]: List2[-4:]
```

```
Out[16]: [543, 'one', 'two', 'three']
```

```
In [17]: List2[:]
```

```
Out[17]: [123, 1234, 342, 4532, 543, 'one', 'two', 'three']
```

## Add , Remove & Change Item

```
In [19]: List2
```

```
Out[19]: [123, 1234, 342, 4532, 543, 'one', 'two', 'three']
```

```
In [35]: List2.append("four")  
List2
```

```
Out[35]: [123, 1234, 342, 'Rohit', 'Rohit', 4532, 543, 'one', 'two', 'three', 'four']
```

```
In [32]: List2.insert(3, 'Rohit')
```

```
In [36]: List2
```

```
Out[36]: [123, 1234, 342, 'Rohit', 'Rohit', 4532, 543, 'one', 'two', 'three', 'four']
```

```
In [37]: List2.remove("four")
```

```
In [38]: List2
```

```
Out[38]: [123, 1234, 342, 'Rohit', 'Rohit', 4532, 543, 'one', 'two', 'three']
```

```
In [39]: List2.pop() # remove the last element
```

```
Out[39]: 'three'
```

```
In [40]: List2
```

```
Out[40]: [123, 1234, 342, 'Rohit', 'Rohit', 4532, 543, 'one', 'two']
```

```
In [41]: List2.pop(4) # remove the index number 4
```

```
Out[41]: 'Rohit'
```

```
In [42]: List2
```

```
Out[42]: [123, 1234, 342, 'Rohit', 4532, 543, 'one', 'two']
```

```
In [44]: del List2[4] # remove the index number 4
```

```
In [45]: List2
```

```
Out[45]: [123, 1234, 342, 'Rohit', 543, 'one', 'two']
```

```
In [ ]: List[4] = 13253
```