

```
1 # 1
2
3 it is an empty list
```

In []:

```
1 # 2
2
3 spam[2]="hello"
```

In []:

```
1 # 3
2
3 d
```

In []:

```
1 # 4
2
3 d
```

In [1]:

```
1 # 5
2 ['a','b']
```

['a', 'b']

In []:

```
1 # 6
2
3 1
```

In []:

```
1 # 7
2
3 bacon:[3.14,'cat',11,'cat',True,99]
```

In []:

```
1 # 8
2
3 bacon:[3.14,11,'cat',True,99]
4
```

In []:

```
1 # 9
2
3 list concatination : +
4 list replication : *
```

In []:

```
1 # 10
2
3
4 append(): this will add elemenmt after the laast element of the lisst
5 insert(): this will add insert he element in the specified index number inside the insert method
```

In []:

```
1 # 11
2
3 pop()
4 remove()
```

In []:

```
1 # 12
2
3 both list and string elements can be accessed using indexing
```

In []:

```
1 # 13
2
3 lists are mutable
4 tuples are immutable
```

In []:

```
1 # 14
2
3 t=(42,)
```

In [2]:

```
1 # 15
2
3 l=[1,2,3]
4 t=(4,5,6)
5 listtotuple=tuple(l)
6 tupletpolist=list(t)
7 print(listtotuple)
8 print(tupletpolist)
```

```
(1, 2, 3)
[4, 5, 6]
```

In []:

```
1 # 16
2
3 lists may contain differnt values like integers,doublowes,string,tuples,lists,complex,dictionaries etc.....
```

In []:

```
1 # 17
2
3 copy() : returns a shallow copy of the list.
4 deepcopy() : returns a deep copy of the list.
```