

```
In [1]: ## =, copy(), deepcopy()  
lst1=[1,2,3,4]  
lst2=lst1
```

```
In [2]: lst2[1]=1000
```

```
In [3]: lst2
```

```
Out[3]: [1, 1000, 3, 4]
```

```
In [4]: lst1
```

```
Out[4]: [1, 1000, 3, 4]
```

```
In [5]: ##copy  
## Shallow Copy  
lst1=[1,2,3,4]  
lst2=lst1.copy()
```

```
In [6]: lst2[1]=1000
```

```
In [7]: lst2,lst1
```

```
Out[7]: ([1, 1000, 3, 4], [1, 2, 3, 4])
```

```
In [8]: ## Shallow Copy nested list  
lst1=[[1,2,3,4],[5,6,7,8]]  
lst2=lst1.copy()
```

```
In [9]: lst1[1][0]=100
```

```
In [10]: lst1
```

```
Out[10]: [[1, 2, 3, 4], [100, 6, 7, 8]]
```

```
In [11]: lst2
```

```
Out[11]: [[1, 2, 3, 4], [100, 6, 7, 8]]
```

```
In [12]: lst1.append([2,3,4,5])
```

```
In [13]: lst1
```

```
Out[13]: [[1, 2, 3, 4], [100, 6, 7, 8], [2, 3, 4, 5]]
```

```
In [14]: lst2
```

```
Out[14]: [[1, 2, 3, 4], [100, 6, 7, 8]]
```

```
In [15]: ##deep copy
import copy
lst1=[1,2,3,4]
lst2=copy.deepcopy(lst1)
```

```
In [16]: lst2[1]=100
```

```
In [17]: lst2
```

```
Out[17]: [1, 100, 3, 4]
```

```
In [18]: lst1
```

```
Out[18]: [1, 2, 3, 4]
```

```
In [19]: ### In a normal list shallow ==deep copy
```

```
In [20]: lst1=[[1,2,3],[3,4,5],[5,6,7]]  
lst2=lst1.copy()
```

```
In [21]: lst1=[[1,2,3],[3,4,5],[5,6,7]]  
lst2=copy.deepcopy(lst1)
```

```
In [22]: lst2[1][0]=100
```

```
In [23]: lst2
```

```
Out[23]: [[1, 2, 3], [100, 4, 5], [5, 6, 7]]
```

```
In [24]: lst1
```

```
Out[24]: [[1, 2, 3], [3, 4, 5], [5, 6, 7]]
```