

## Ques. Python Deep Copy and Shallow Copy?

- **Deep Copy:-** In deep copy any changes made to a copy of object do not reflect in the original object.

```
import copy

old_list = [[1, 1, 1], [2, 2, 2], [3, 3, 3]]
new_list = copy.deepcopy(old_list)

new_list[1][0] = 'BB'

print("Old list:", old_list)
print("New list:", new_list)

Output:-
Old list: [[1, 1, 1], [2, 2, 2], [3, 3, 3]]
New list: [[1, 1, 1], ['BB', 2, 2], [3, 3, 3]]
```

- **Shallow copy:-** A shallow copy creates a new object which stores the reference of the original elements.

```
import copy

old_list = [[1, 1, 1], [2, 2, 2], [3, 3, 3]]
new_list = copy.copy(old_list)

new_list[1][1] = 'AA'

print("Old list:", old_list)
print("New list:", new_list)

Output:-
Old list: [[1, 1, 1], [2, 'AA', 2], [3, 3, 3]]
New list: [[1, 1, 1], [2, 'AA', 2], [3, 3, 3]]
```