

Q What is difference between Deep copy and Shallow copy? Demonstrate creation of deep copy by using python code snippet.

→ A shallow copy means constructing a new collection object and then populating it with references to the child objects found in the original. In essence, a shallow copy is only one level deep. The copying process does not recurse and ergo won't create copies of child objects.

A deep copy makes the copying process recursive. It means constructing a new collection first then recursively populating it with copies of child objects found in the original. Copying an object this way traverses the whole object tree to create fully independent clone of the original object and all of its children.

Deep copy snippet

```
import copy
```

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

```
zs = copy.deepcopy(xs)
```