

Notes on Chapter 5 - Structured Types, Mutability, and High Order Functions

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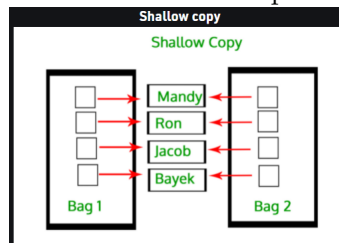
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A curated list of important points for my reference.

1. Literals of type **tuples** are written by enclosing a comma separated list of elements within parenthesis.
2. Like strings, tuples can be concatenated, indexed and sliced.
3. Sequences and Multiple Assignments
 - Executing the statement `x,y=(3,4)` where x will be bound to 3 and y to 4
 - The statement `a,b,c = 'xyz'` will bind x to a, y to b and z to c.
4. Built-in-function **id**, which returns a unique integer identifier for an object.
5. Deep and Shallow copy in python

```
import copy
copy.copy(x)          #shallow copy
copy.deepcopy(x)      #deep copy
```

- Shallow Copy → A shallow copy creates a new object which stores the reference of the original elements. So, a shallow copy doesn't create a copy of nested objects, instead it just copies the reference of nested objects. This means, a copy process does not recurse or create copies of nested objects itself.



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- Deep Copy → A deep copy creates a new object and recursively adds the copies of nested objects present in the original elements. The deep copy creates independent copy of original object and all its nested objects.

