Iterators

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Iteration: A process of traversing through a collection to get the value one by one.

The function that is used for the iteration is known as iterator.

For-> Inbuilt Iterator
While-> Manual iterator
In manual iteration, initialization and updation is required.
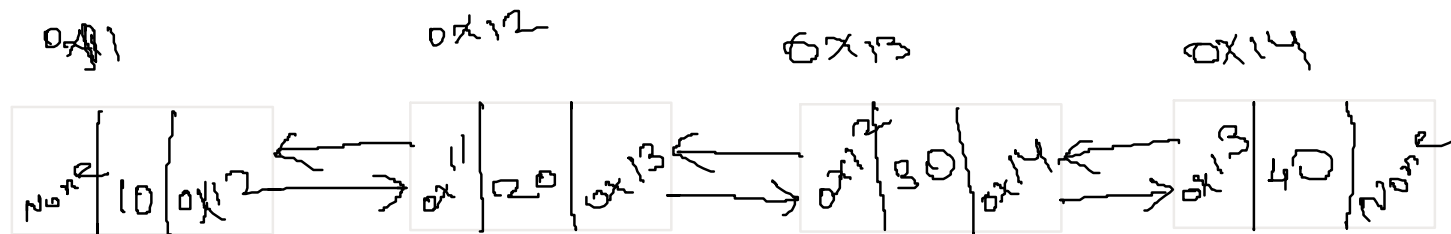
For iterators, There are 2 functions:
  i. Iter()
  ii. Next()

  I. Iter(): It is used to point the initial address of the collection.
  II. Next(): It will take the value and make the control to point towards the next block.

Eg:
l=[10,20,30,40]

block 1 → Address of previous node

block 2 → Data

block 3 → Address of next node

i = iter(l)
l = 0x11 → initial address
print(next(i)) → 10
print(next(i)) → 20

```
print(next(i)) -> 
print(next(i)) -> 20
print(next(i)) -> 30
print(next(i)) -> 40
print(next(i)) -> Stop Iteration Error
```

```
l=[10,20,30,40]
i=iter(l)
print(i)
print(next(i))
print(next(i))
print(next(i))
print(next(i))
print(next(i))
```