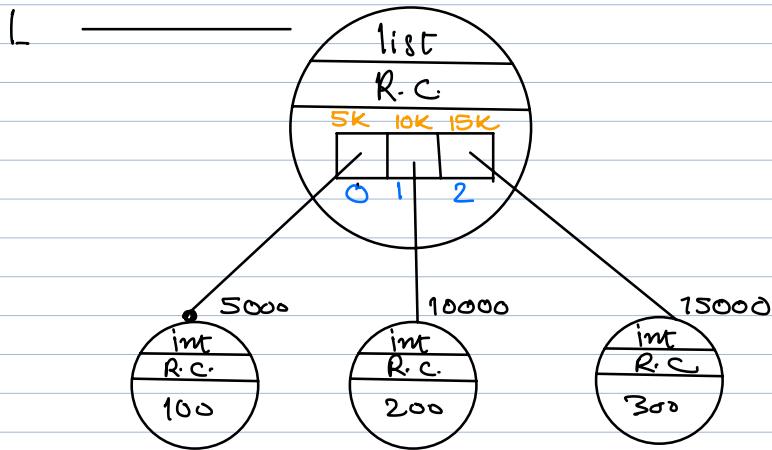


Giving Access Back to individual elements:

$L = [100, 200, 300]$



$L[0] == 100$ | $L[1] == 200$ | $L[2] == 300$

0 to $\text{len}(L) - 1$

$i = 0$
while $i < \text{len}(L)$:

 print($i, L[i]$)

$i = i + 1$

Principle: Container data types can choose

index based or key based access back to

a desired individual element (object)

There is another way which involves giving

a turn by turn individual access to

'ALL' elements in the container. We

cannot access 'a specific' element

of our choice but we can visit all' elements in the container.

$L = [100, 200, 300]$

for x in L :

 print(x)

for x in $[100, 200, 300]$:

for v in iterable:

Body

looping statement.

the body of for statement

will iterate $\text{len}(\text{iterable})$

times.

$i = 0$

while $[i] < \text{len}(L)$:

Body

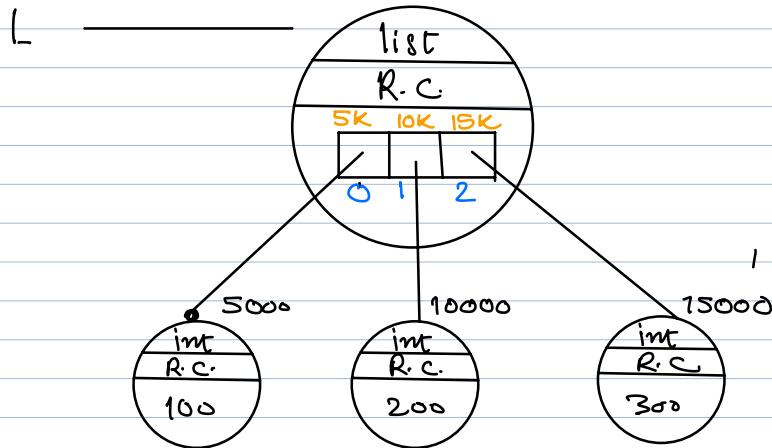
$i = i + 1$

for $[v]$ in iterable:

Body

loop variable.

Behaviour of the for loop statement :-



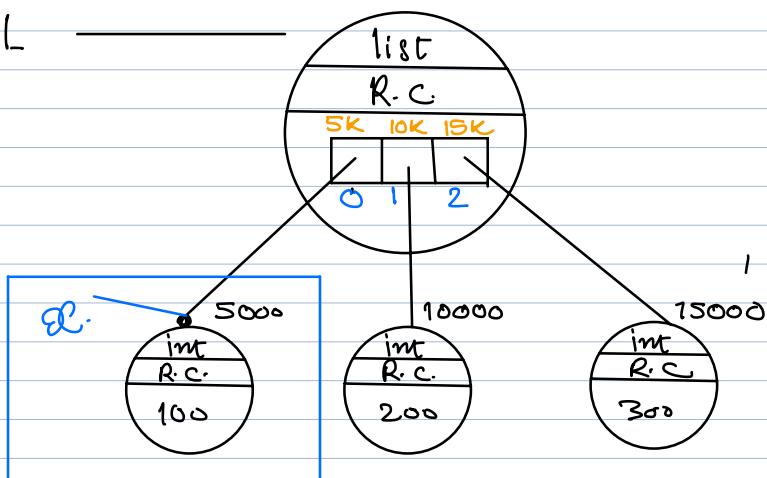
```
for x in L:  
    print(x)
```

Number of Iterations :-

$$\text{len}(L) == 3.$$

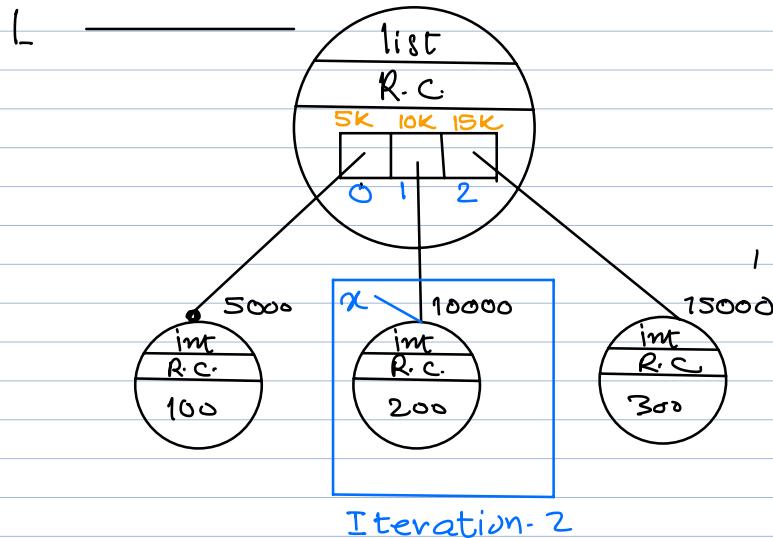
the Body will execute 3 times.

Iteration - 1^o

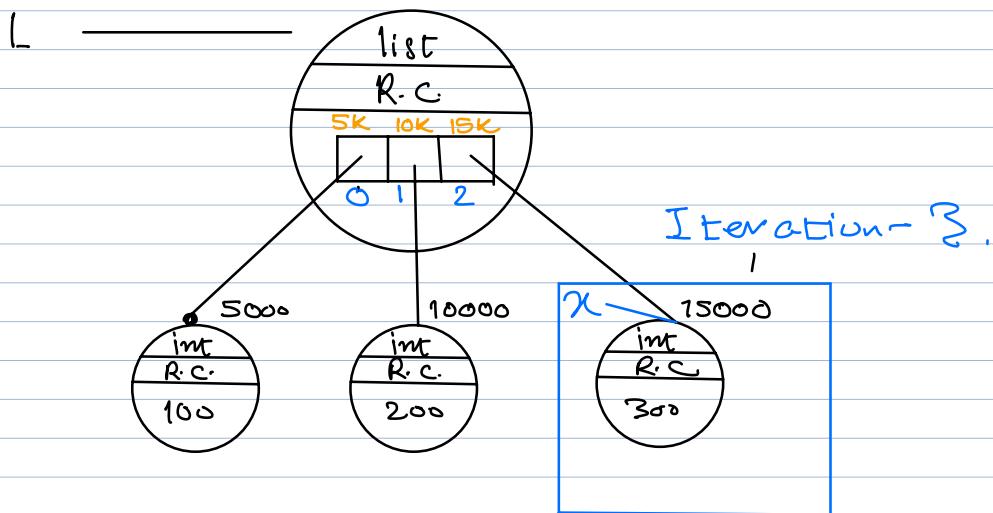


Iteration - 1

print(x) —————> 100



print (n) → 200



print (n) → 300

```
def my_function (L):
    n = len(L)
```