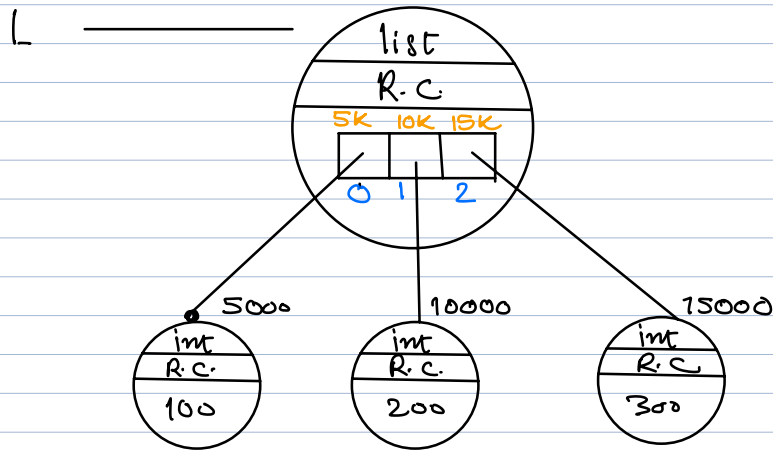


Giving Access Back to individual elements:

$L = [100, 200, 300]$



$L[0] == 100 \mid L[1] == 200 \mid L[2] == 300$

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 `len(iterable)` times.

`i = 0`

```
while i < len(L):
```

Body

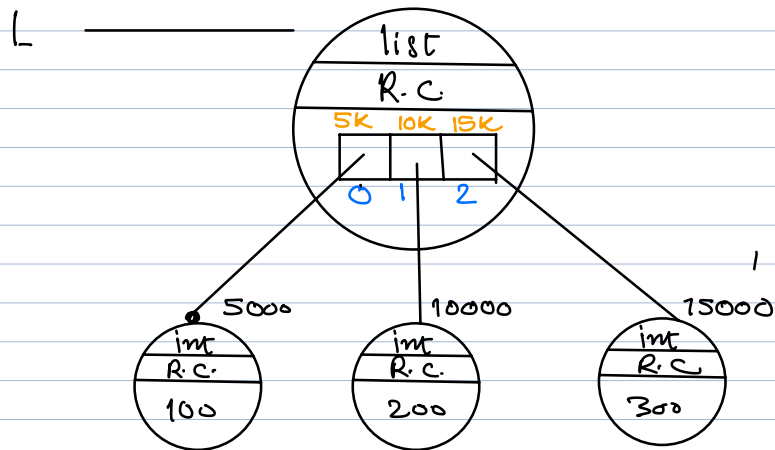
`i = i + 1`

```
for v in iterable:
```

Body

loop variable.

Behaviour of the for loop statement :



for x in L :

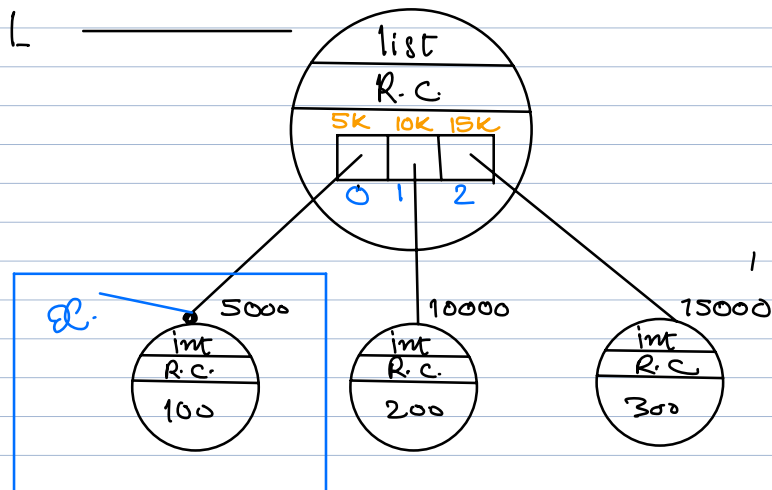
print(x)

Number of Iterations:

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

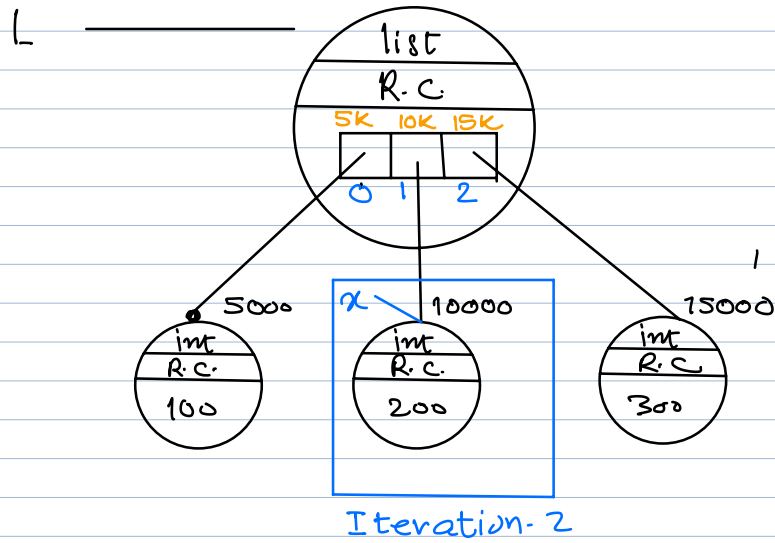
the Body will execute 3 times.

Iteration-1:

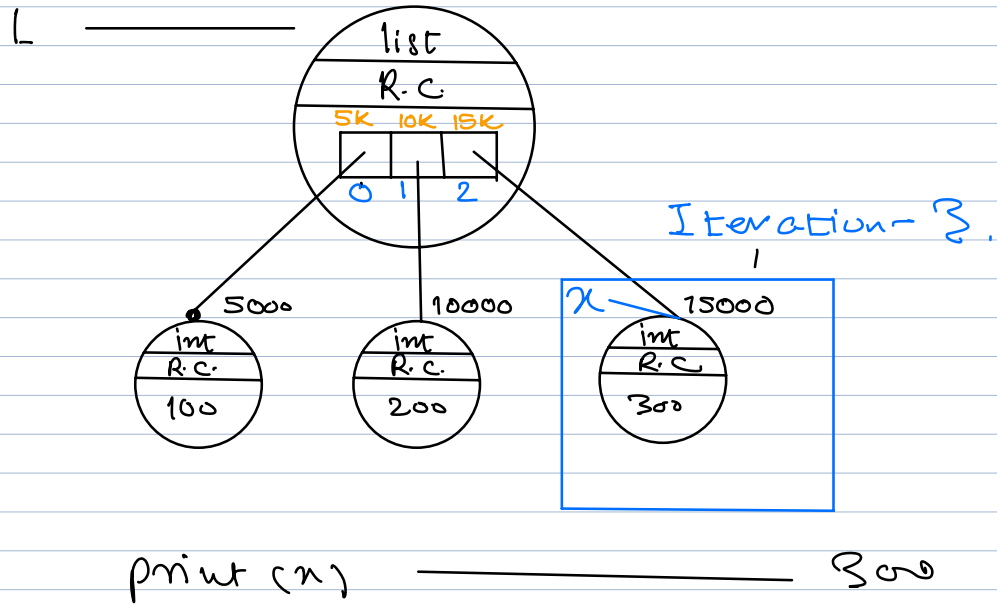


Iteration-1

print(x) $\rightarrow 100$



print (x) —————> 200



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