

CSE 20 5-1-20

Supplemental lecture

Recall :

```
def swap(x, y):
    temp = x
    x = y
    y = temp
#end swap()
```

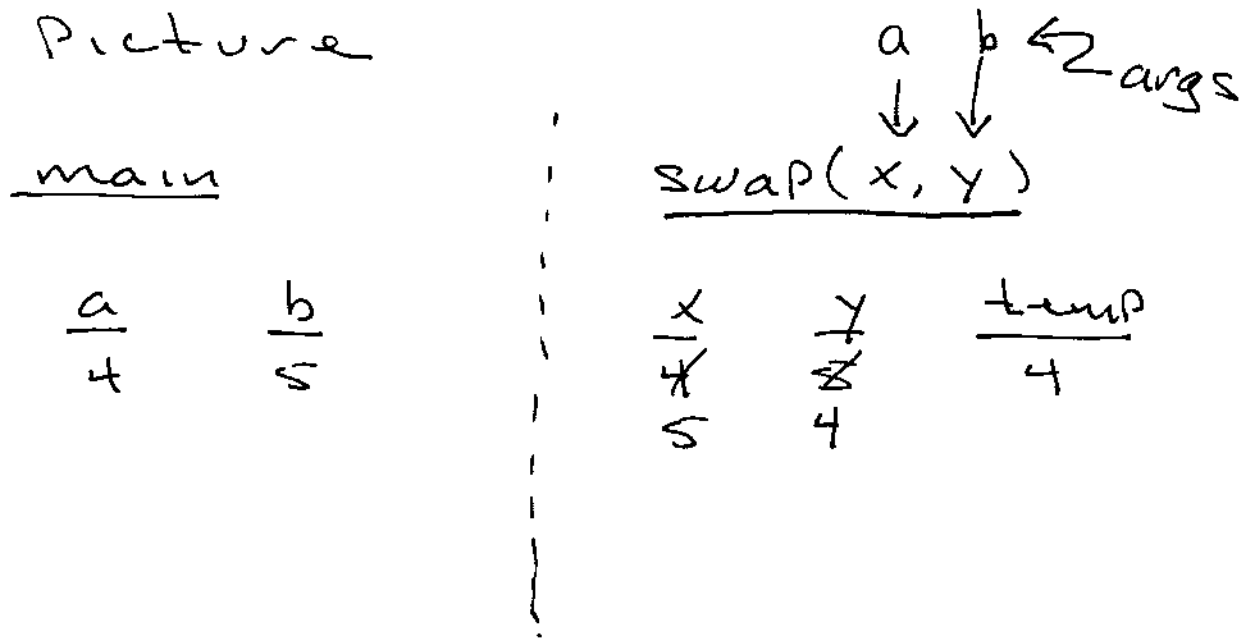
This function doesn't work

look at memory.

main

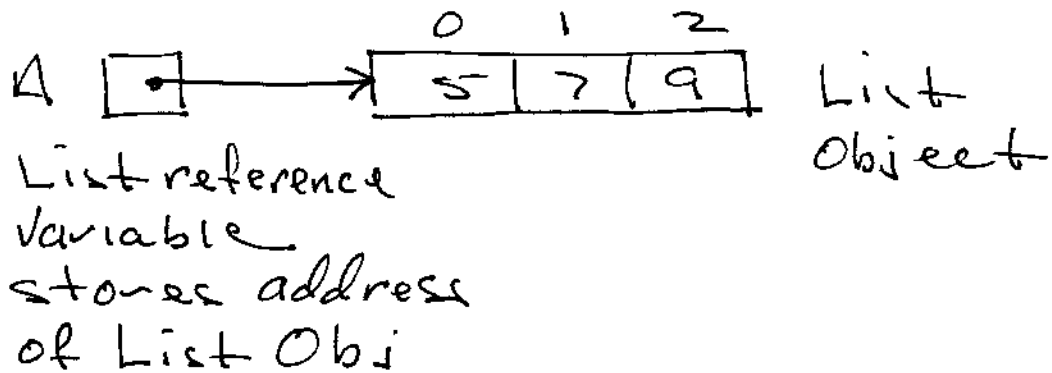
```
a = 4
b = 5
swap(a, b)
print(a, b)
#output: 4 5
```

Picture



List Variable :

$A = [5, 7, 9]$



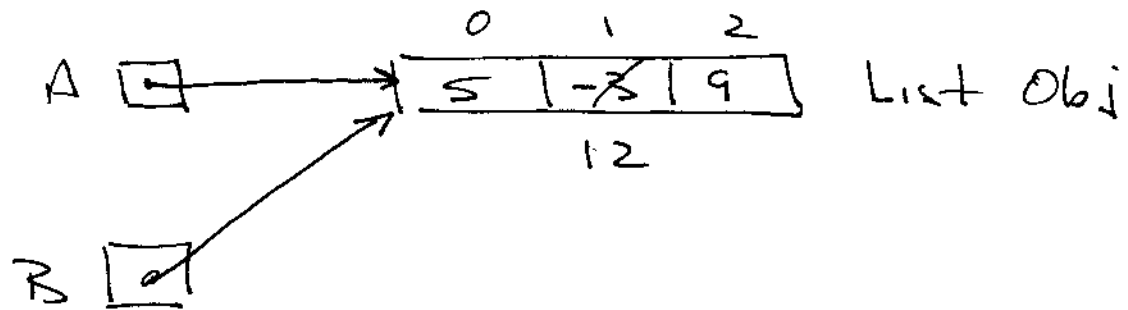
`Print(A[1])` # output : 7

`A[1] = -3`

`Print(A)` # output : $[5, -3, 9]$

$R = A$ # does not create new
list object

Picture:



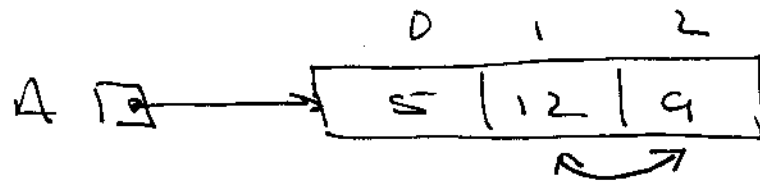
$R[1] = 12$

$\text{Print}(A)$ # output: $[5, 12, 9]$

Another swap function

```
def swap(L, i, j):
    temp = L[i]
    L[i] = L[j]
    L[j] = temp
# end swap()
```

main

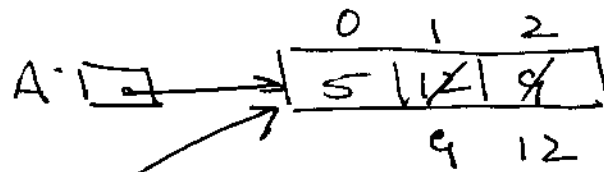


swap(A, 1, 2)

Print(A) ~~is~~ output [5, 9, 12]

Picture

main



← args

$\begin{matrix} A & 1 & 2 \\ \downarrow & \downarrow & \downarrow \\ \text{swap}(L, i, j) \end{matrix}$

L [] i [1] j [2] temp [12]