List Slicing and Mutability

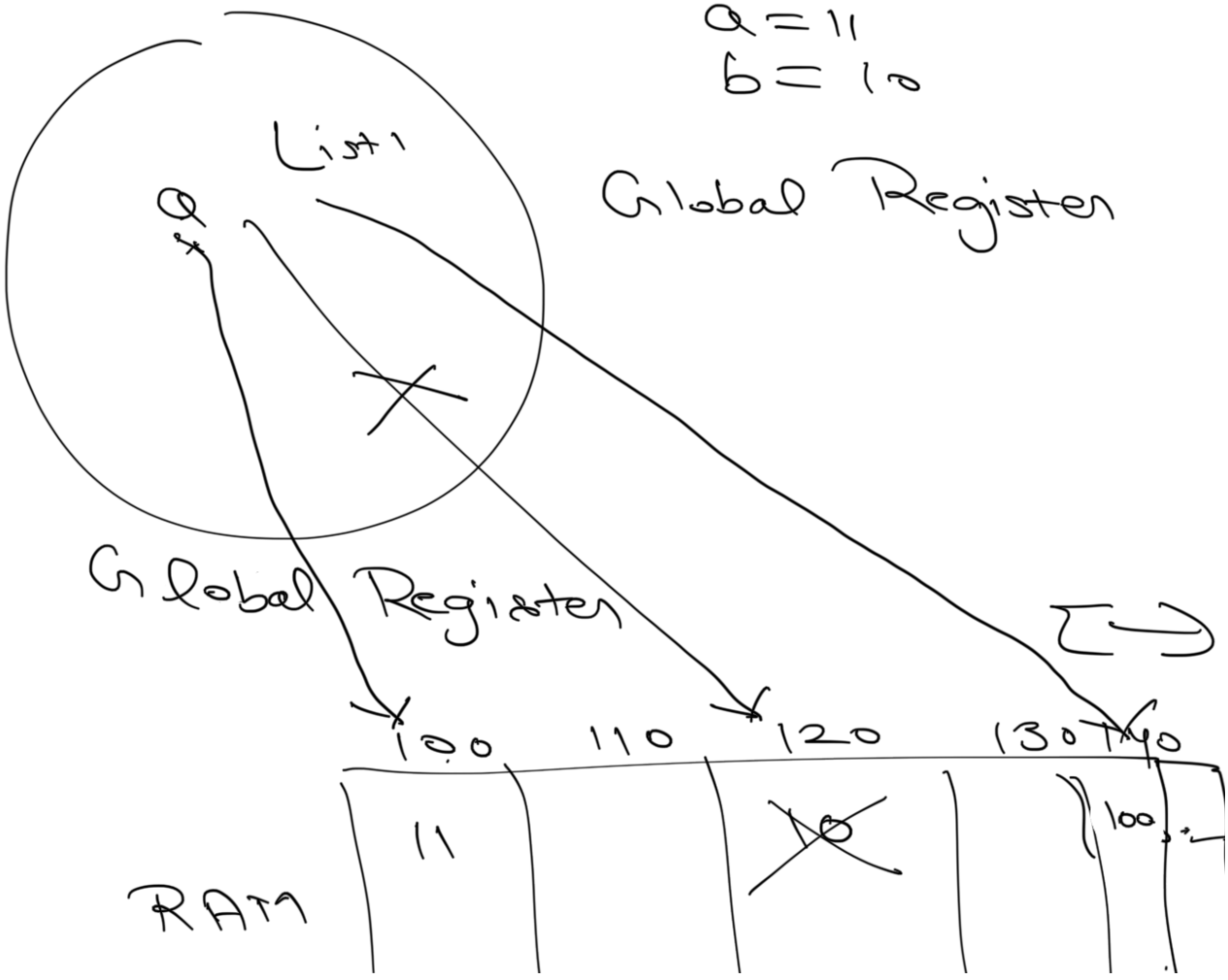
List :-

- Heterogeneous
- Dynamic
- Ordered
- Mutable

Mut

list = [100]

a = 10
a = 11
b = 10



List Slicing

	-5	-4	-3	-2	-1
a = [	10	20	30	40	50]
	0	1	2	3	4

len(a) = 5

a[2] ⇒ 30

a[5] ⇒ Error IndexError

a[-6] ⇒ IndexError

a[-5] ⇒ 10

⇒ Slicing : We extract a RANGE of Elements

a[start : End : jump]

Default Val ⇒ 0 | len(a) | 1

Ex:

a ⇒ [10, 20, 30, 40, 50]

a[0:2:1] ⇒ [10, 20]

✓ a[1:3] ⇒ all of a

[20, 30]

Ex: a[2:]

[30, 40, 50]

Negative Jumps

Jump +ve

0 1 2 3 4 5 6 ....

Jump -ve

a[2:5:-1] ⇒ [ ]

$$a \Rightarrow \{10, 20, \textcircled{30}, 40, 50, 60\}$$

$$a[5:2:-1] \Rightarrow \{40, 30, 20\}$$

40, 50, 60

60, 50, 40