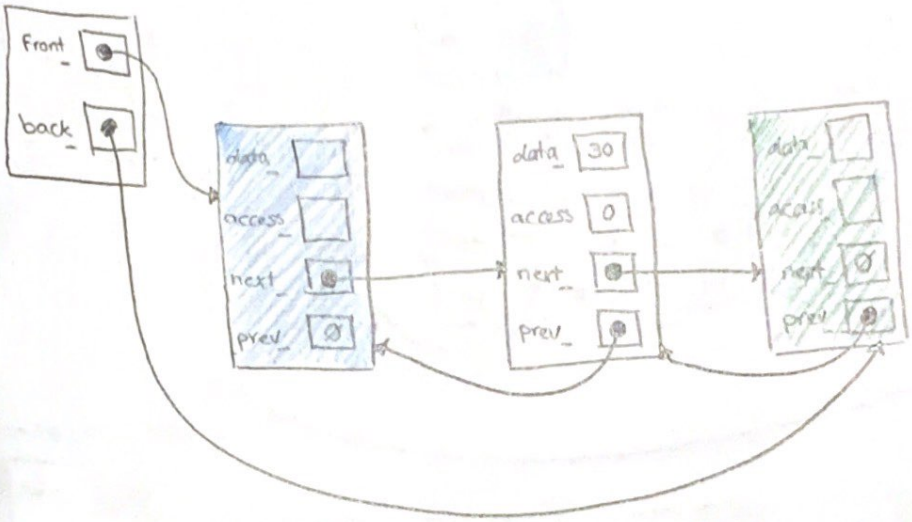
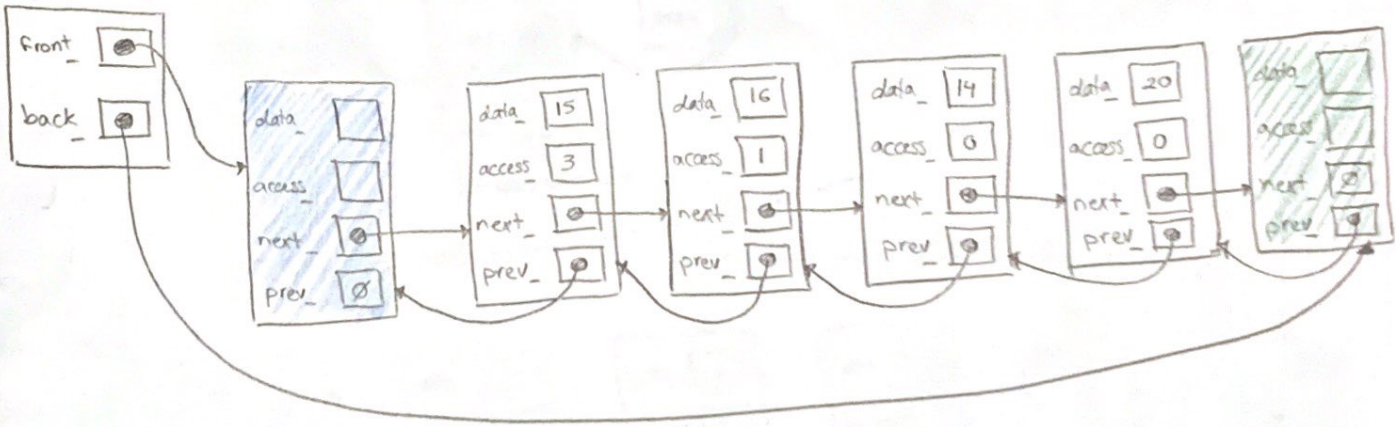
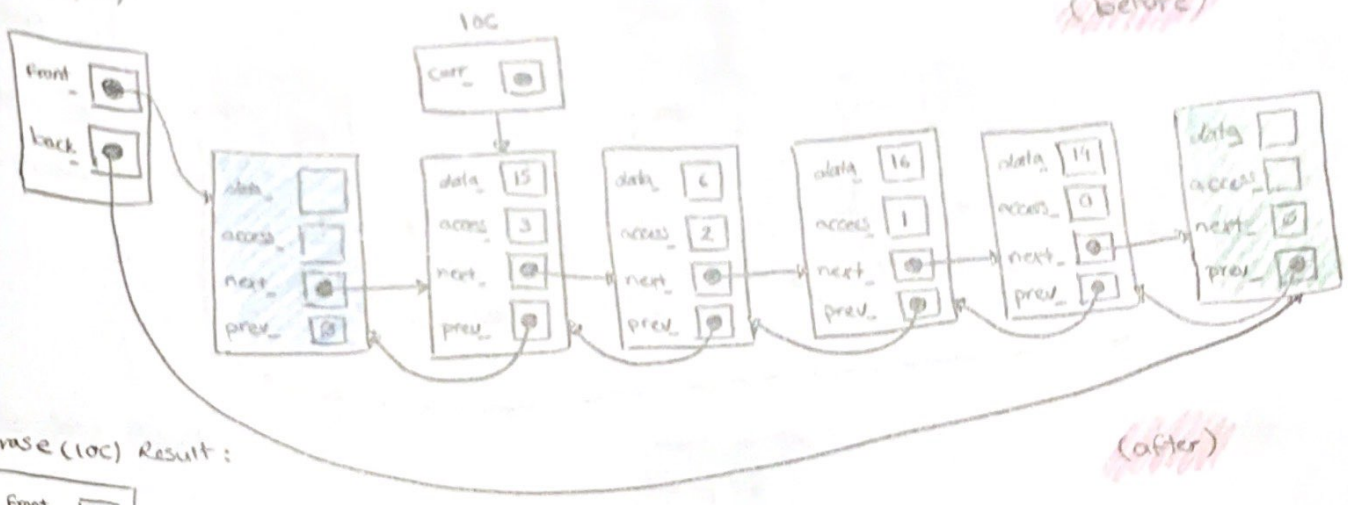
insert (30):



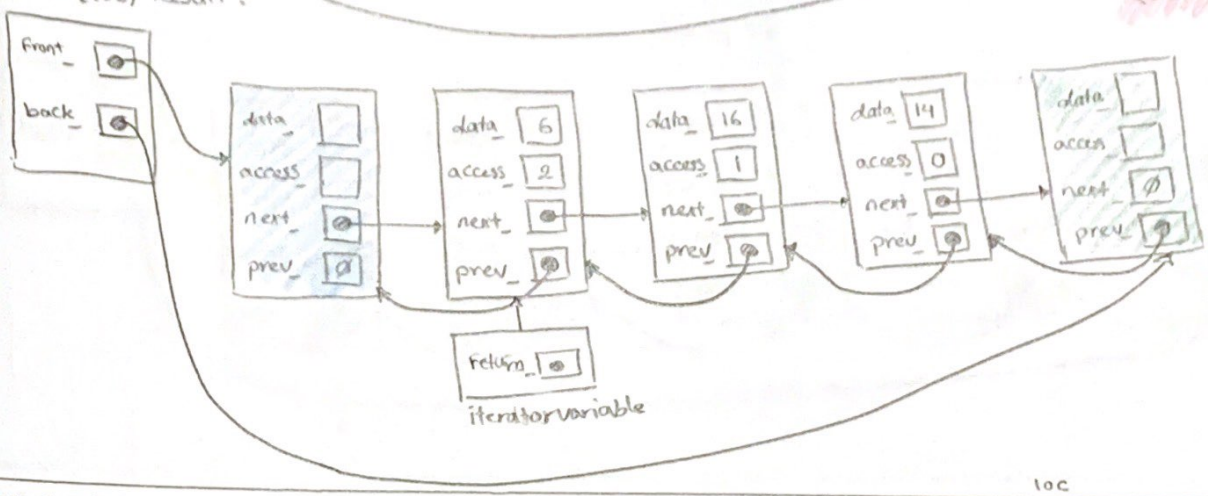
insert (20):



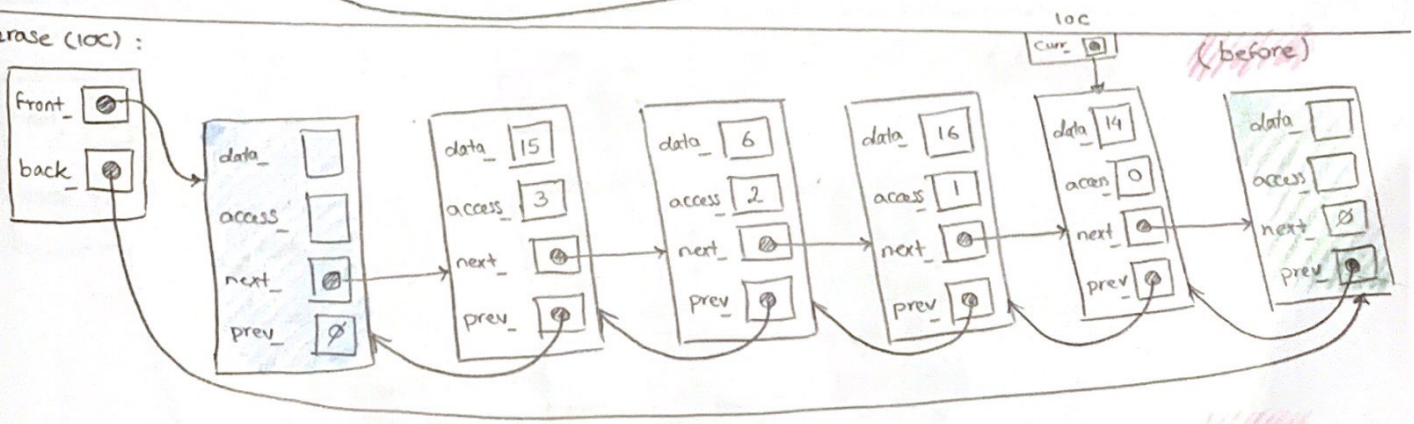
erase(loc)



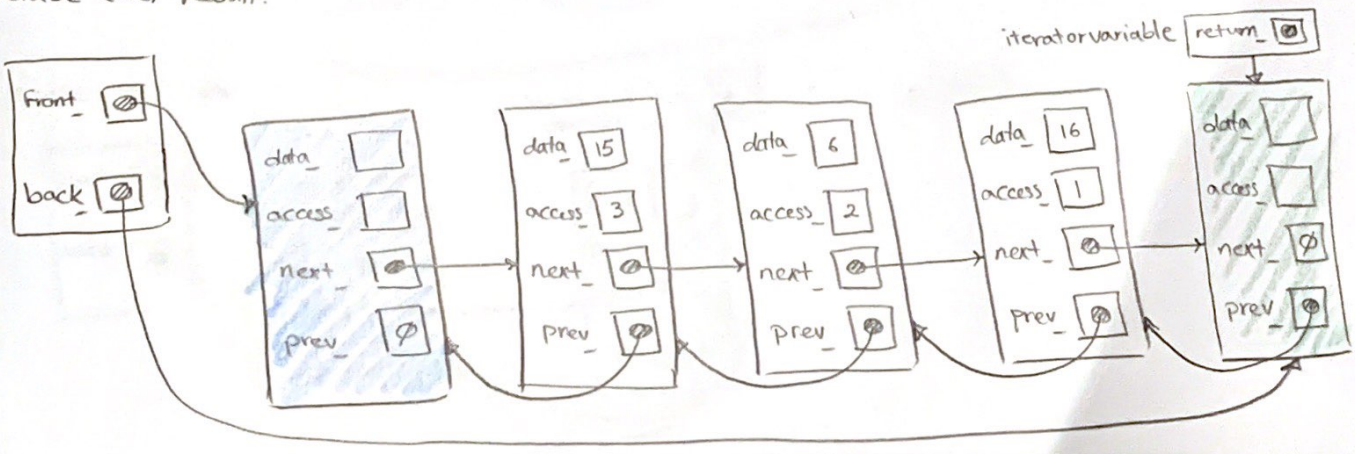
erase (loc) Result:



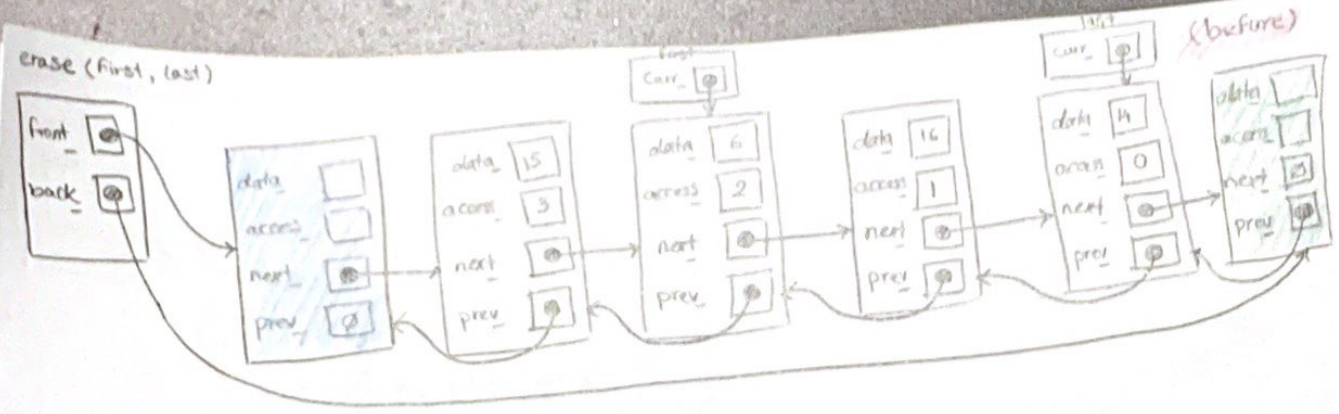
erase (loc):



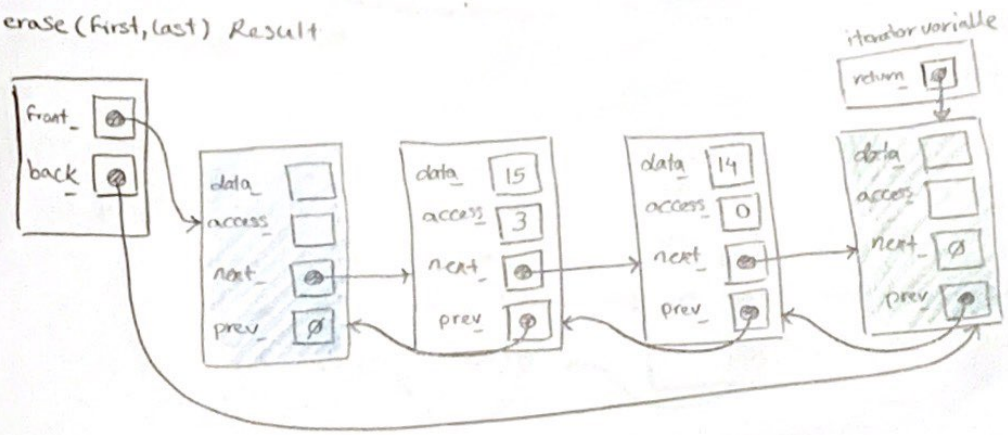
erase (loc) Result:



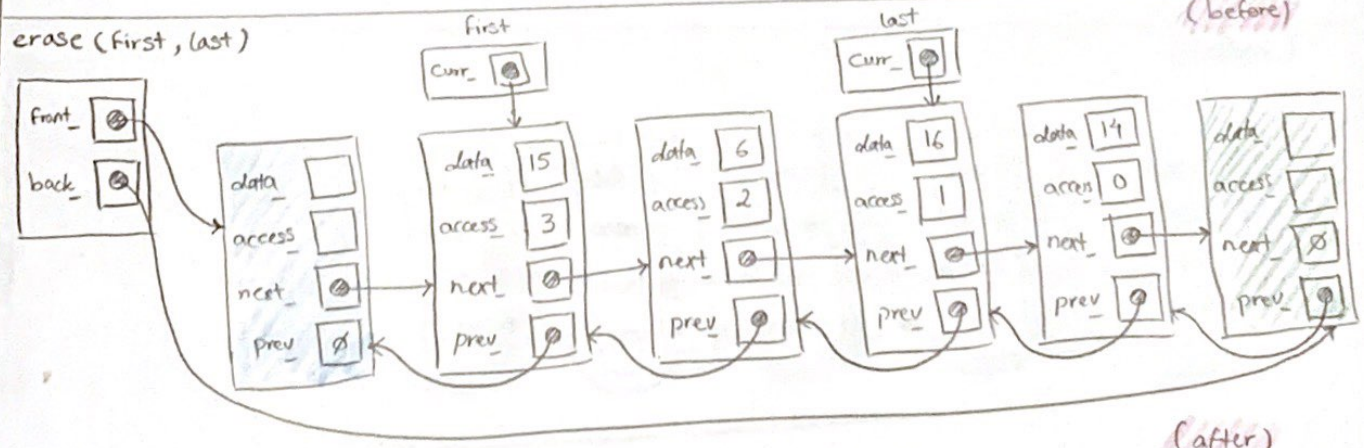
erase (first, last) (before)



erase (first, last) Result (after)

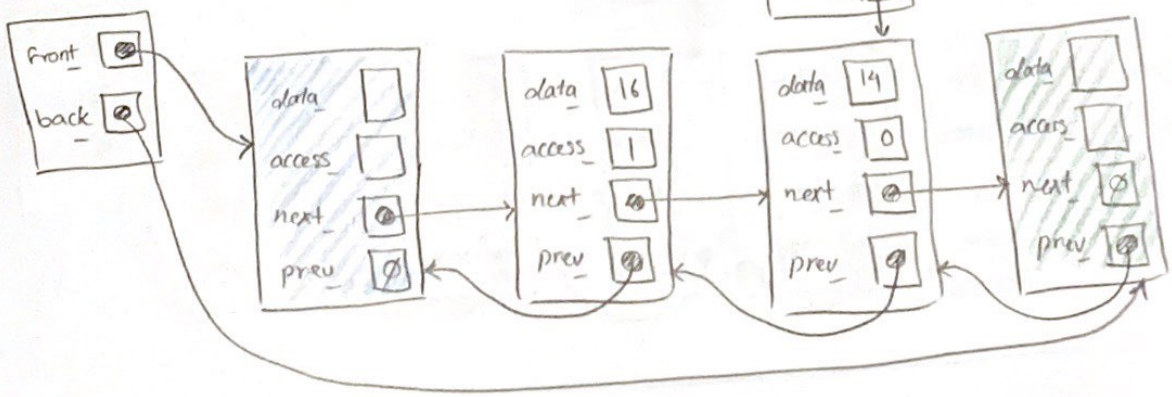


erase (first, last) (before)

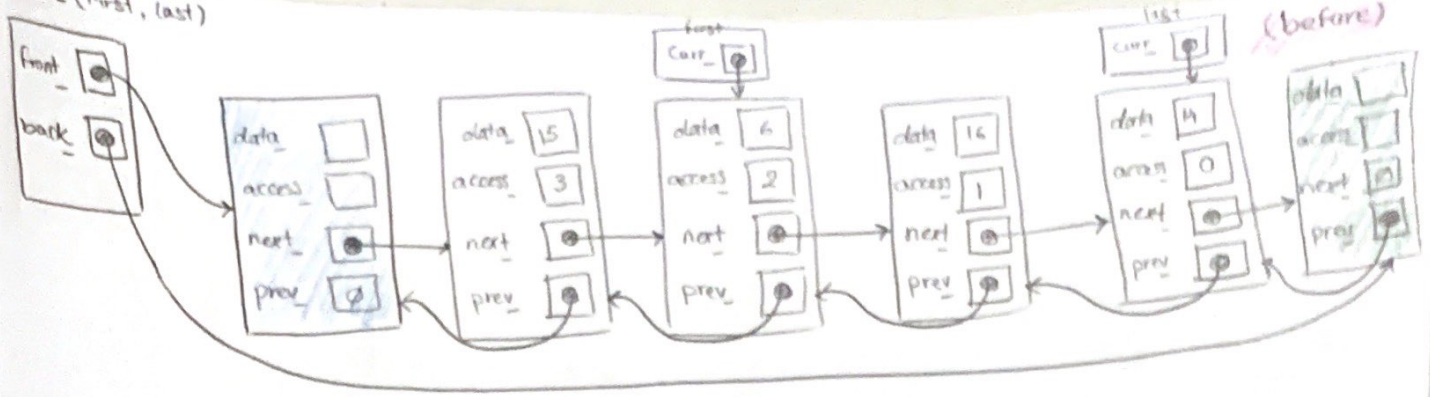


(after)

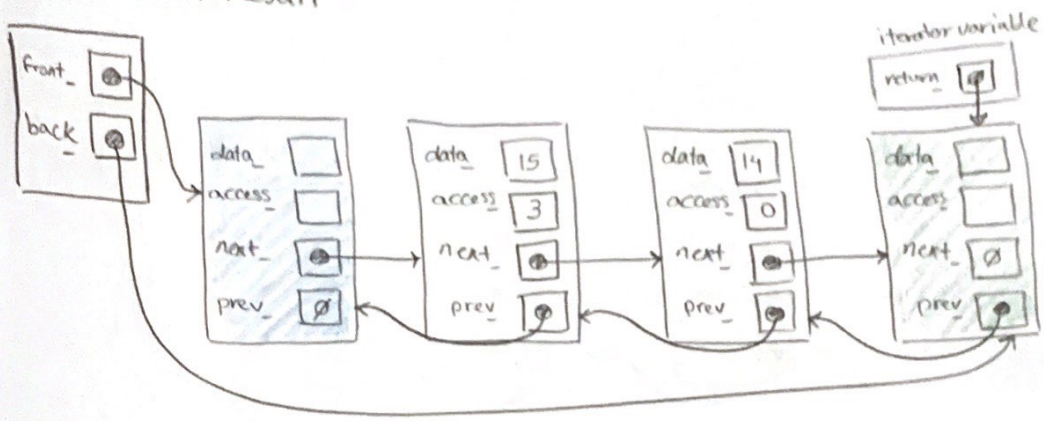
erase (first, last)



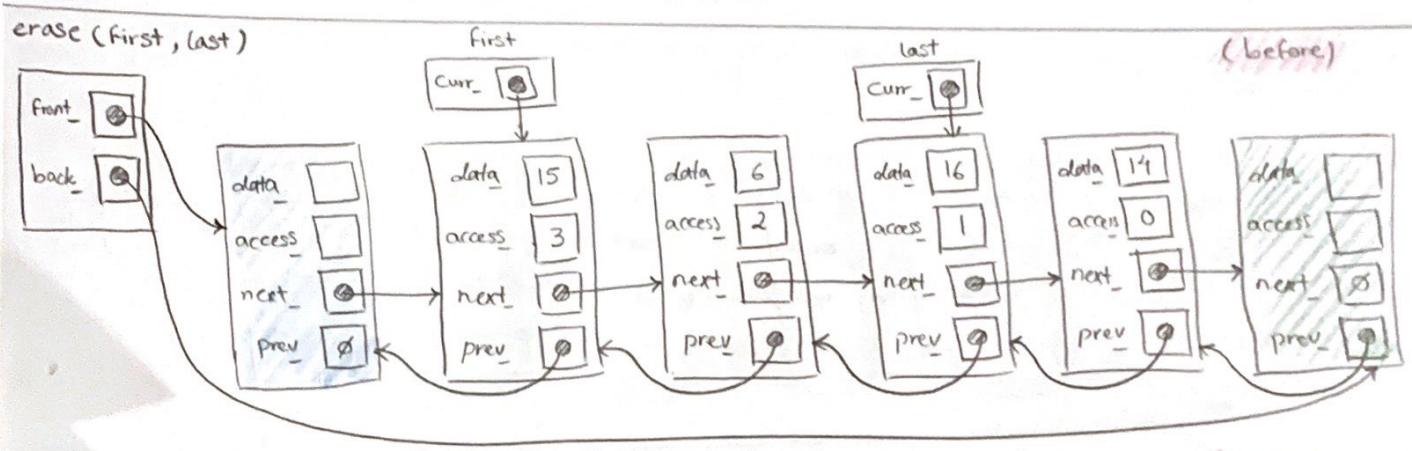
erase (first, last)



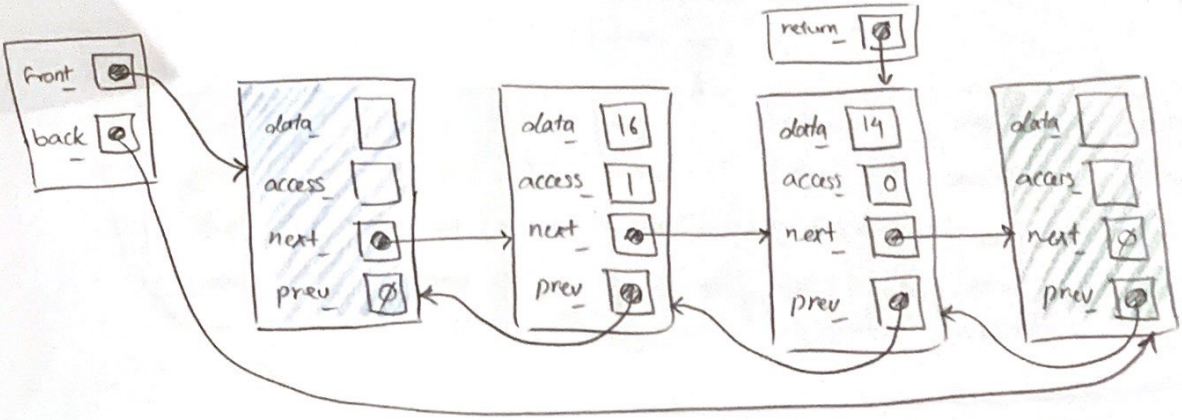
erase (first, last) Result



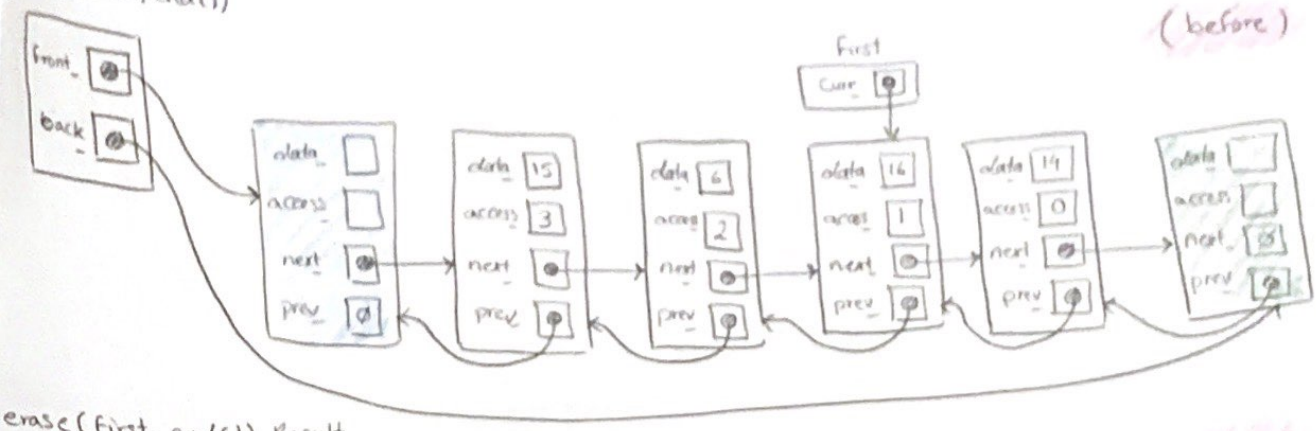
erase (first, last)



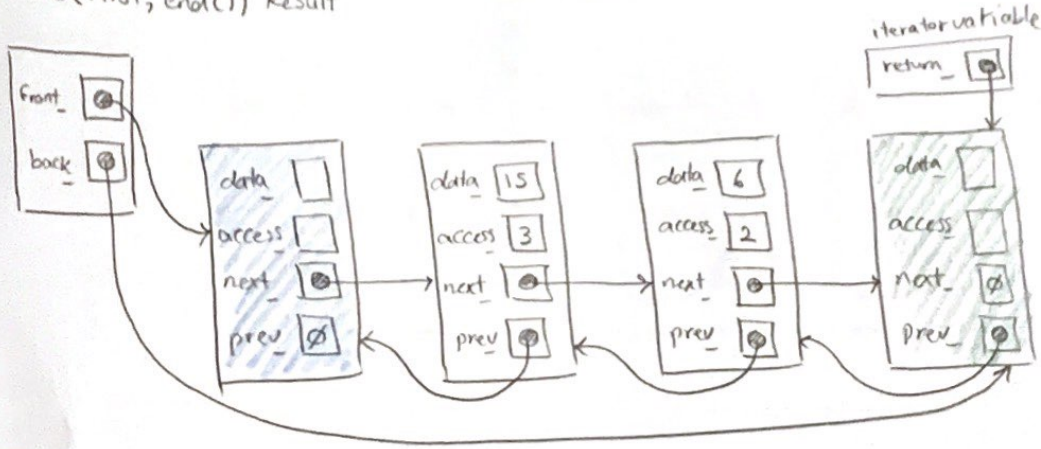
erase (first, last)



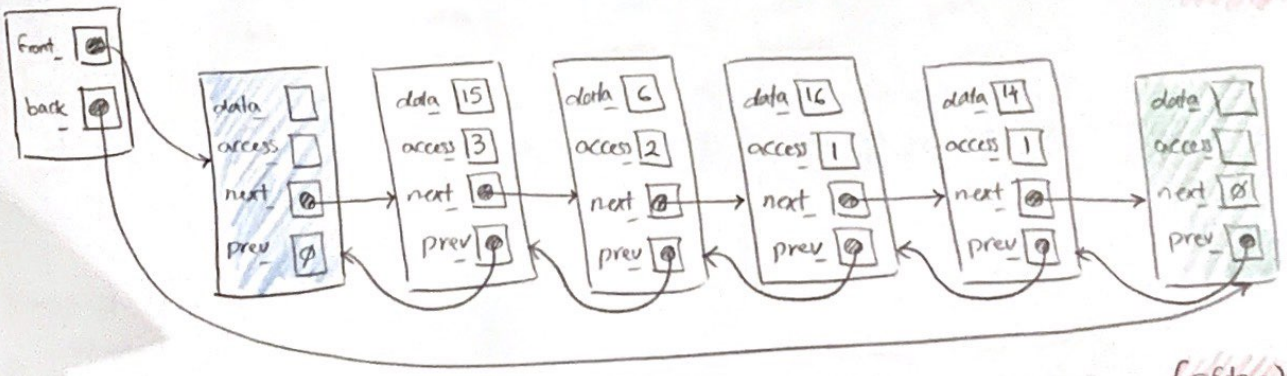
erase (First, end())



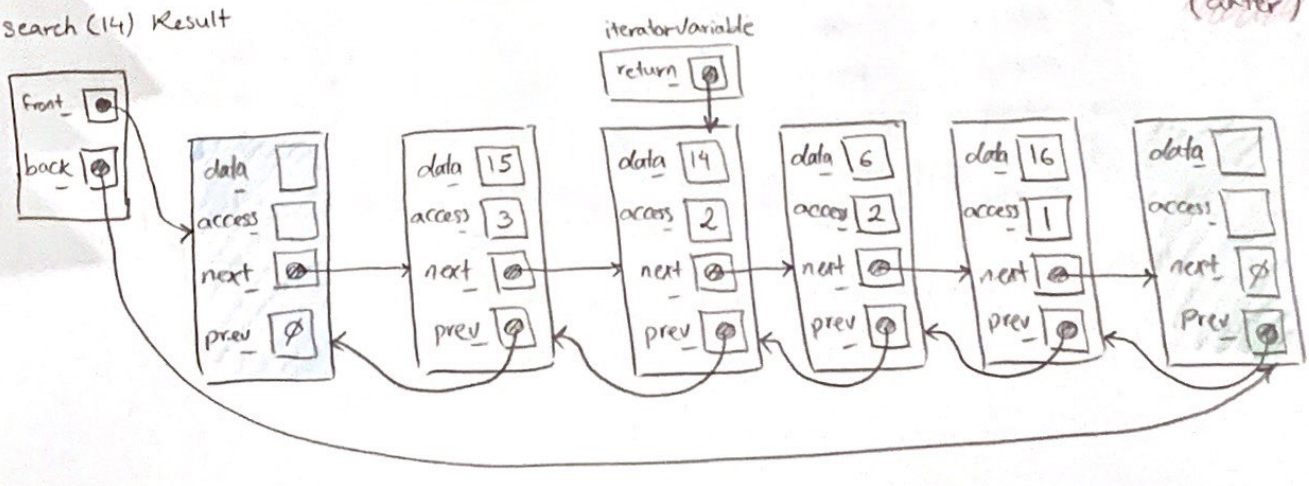
erase (First, end()) Result



Search (14)

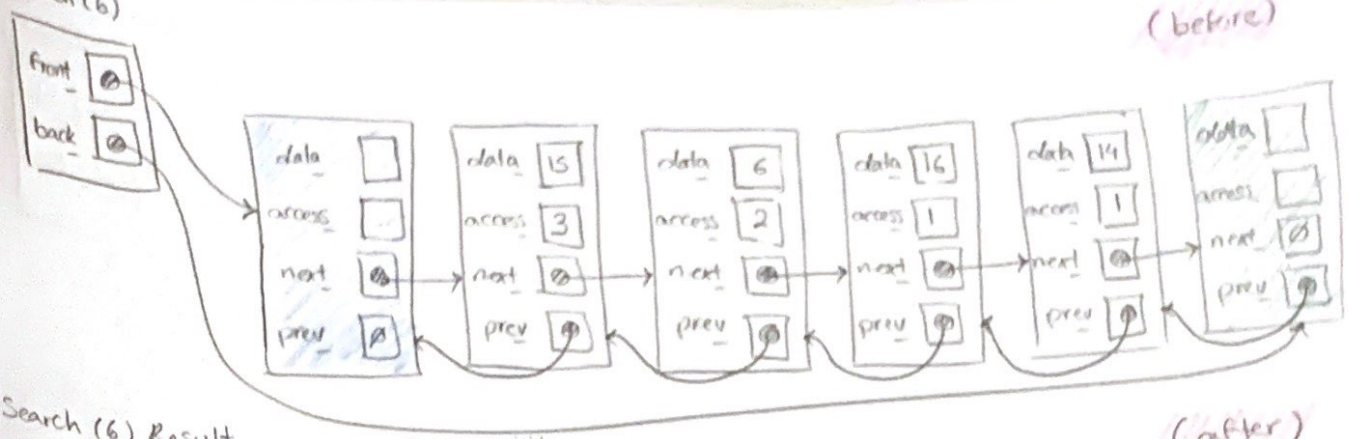


Search (14) Result



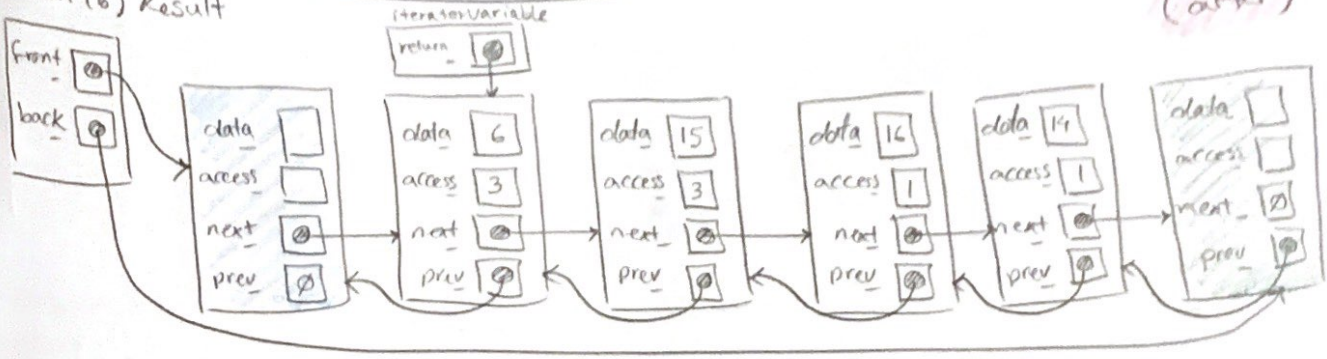
Search (6)

(before)



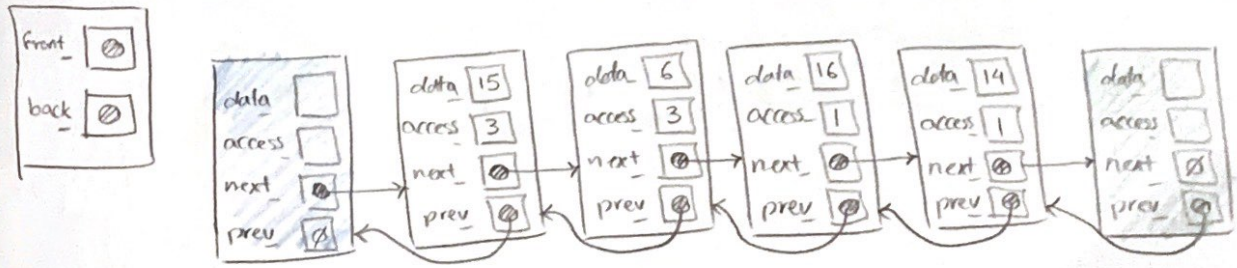
Search (6) Result

(after)

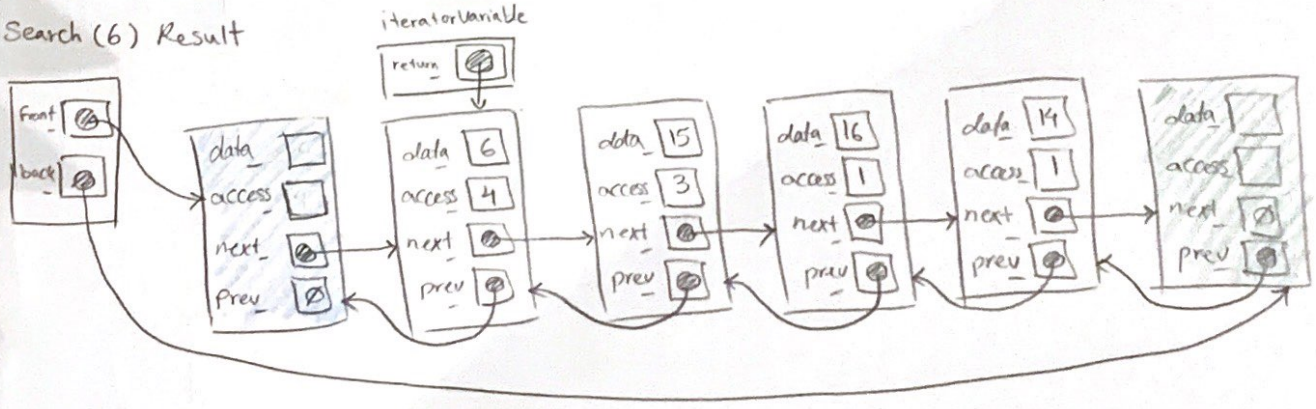


Search (6)

(before)



Search (6) Result

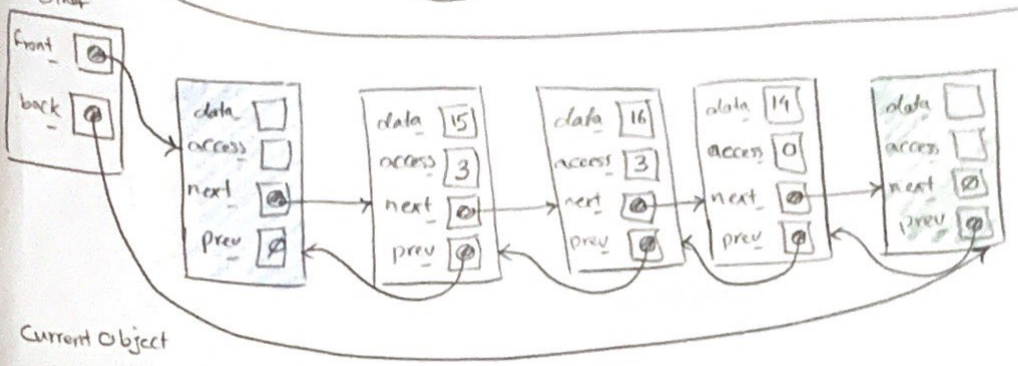


before list.merge (other)

(before)

Current object

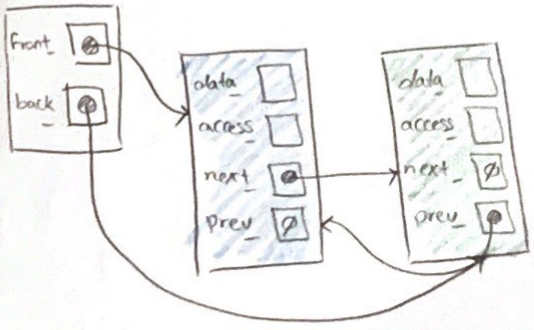
other



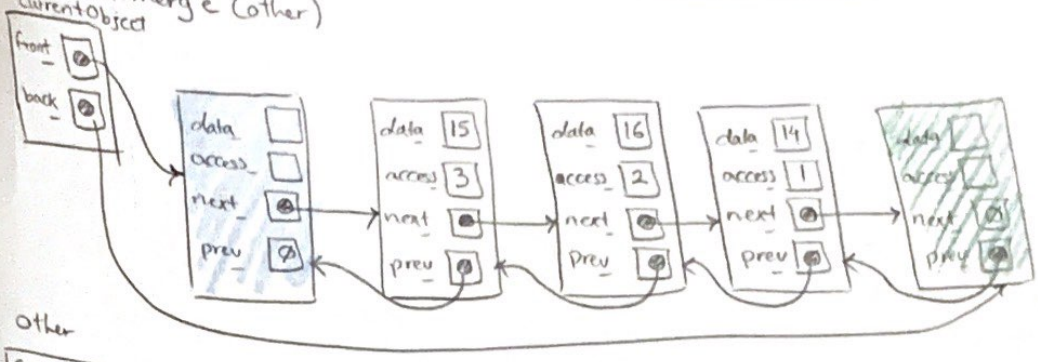
(after)

Current object

other

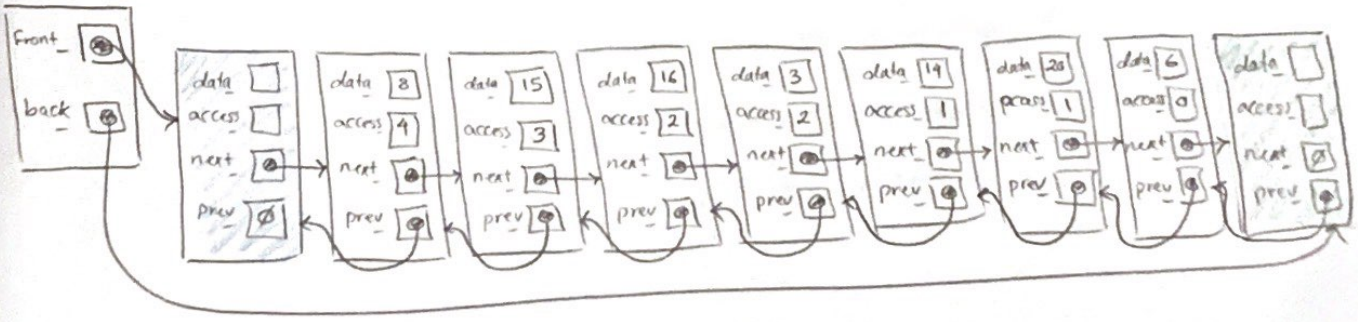


before list.merge(other)



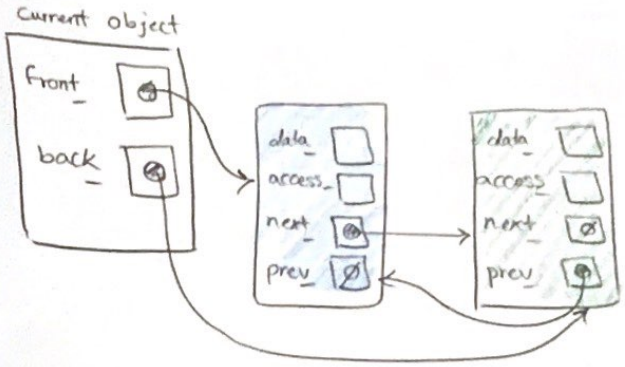
(before)

(after)

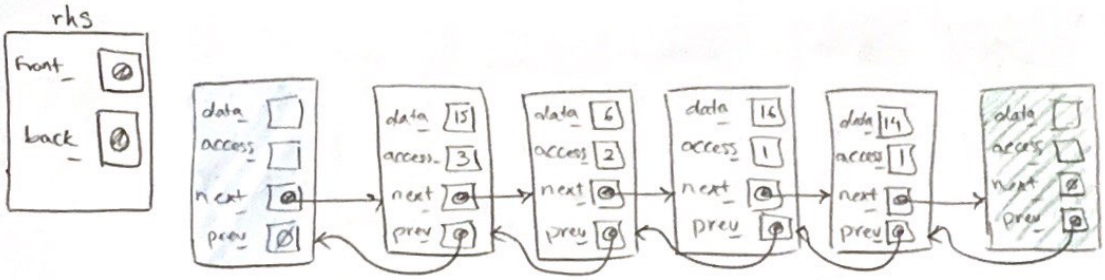


Copy Constructor -

CacheList (rhs);



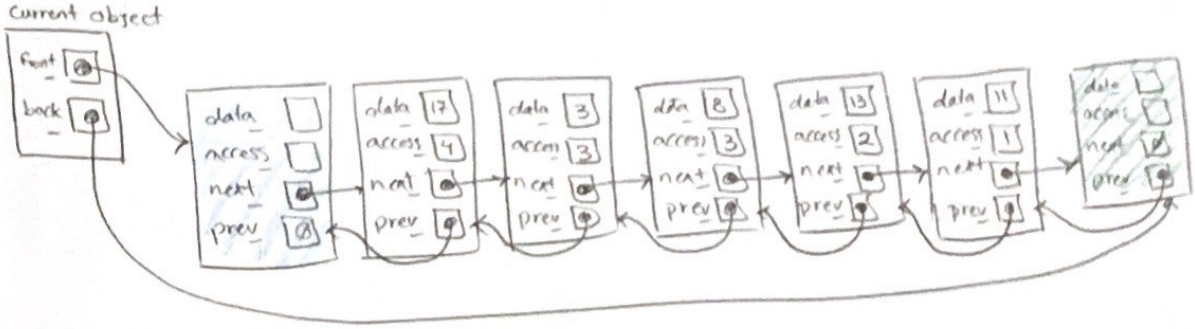
Copy constructor will deallocate the memory and return to the safe state.
all the garbage values will be gone.



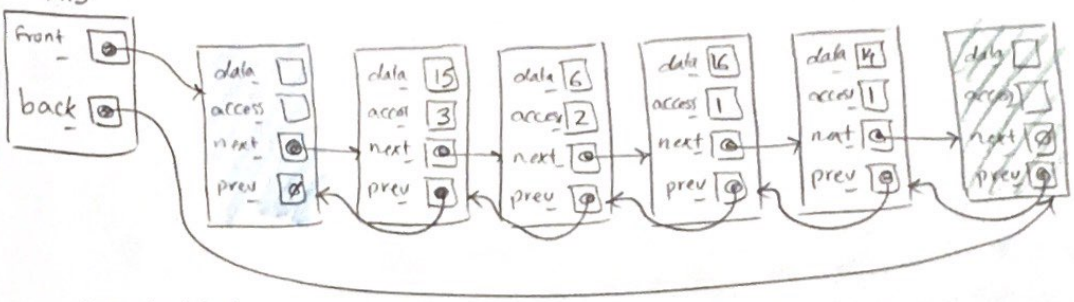
Then call the assignment operator to deep copy the rhs.
current object will hold exact same data as rhs.
In other words we duplicate the data.

Copy assignment

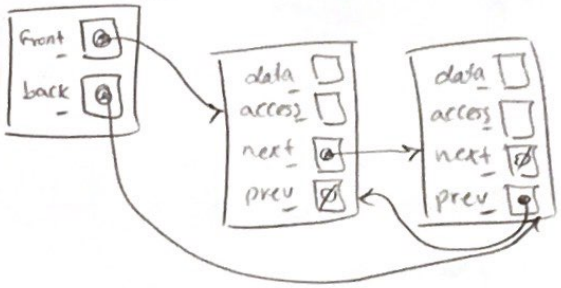
Current object



rhs

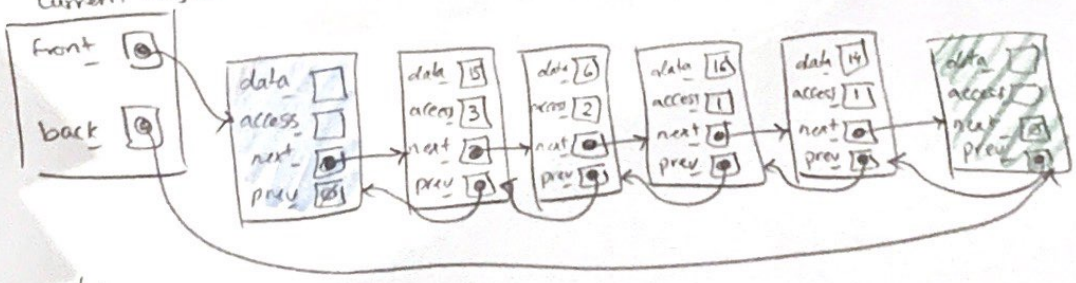


1) Current object

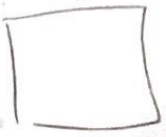


Deallocate the memory

2) Current Object



rhs

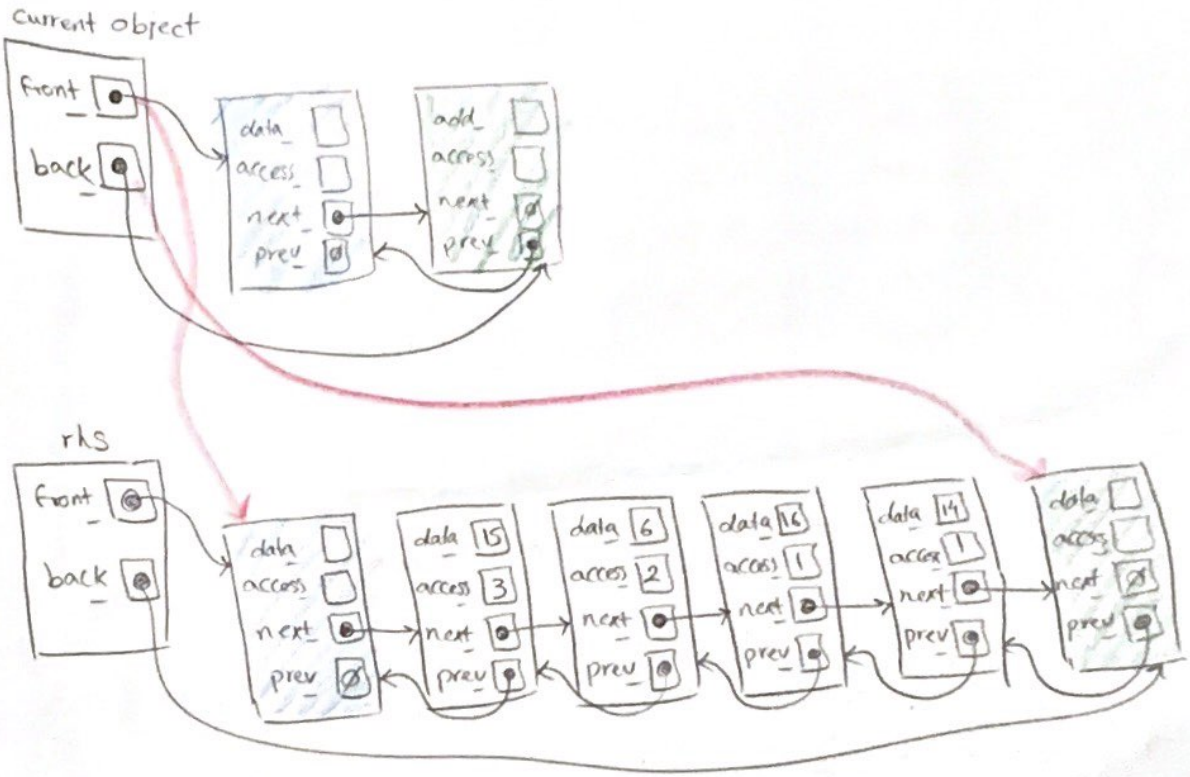


will stay the same as above

The data will be duplicated

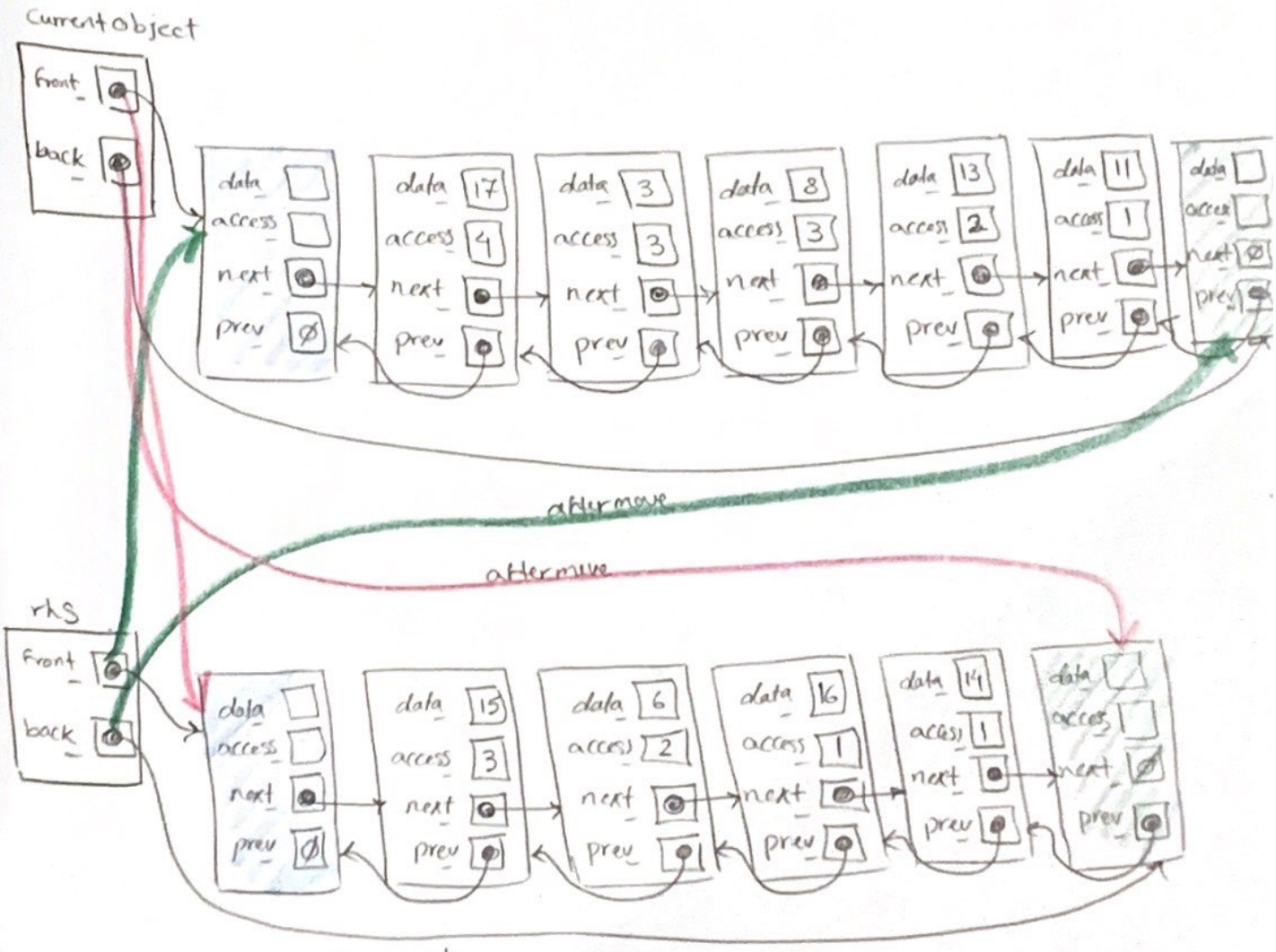
move constructor

CashList (rhs)



At First current object holding garbage datas. the constructor will make it null by deallocating memory then shallow copy the rhs. both rhs and current object pointing to the same data.

move assignment



In move assignment,

rhs data's will move to current object. In other words will shallow copy there.

Simply current object will point to rhs data and rhs could point to current object data.

the red lines will show the pointing.

So current object will hold rhs data and rhs will hold current object datas.