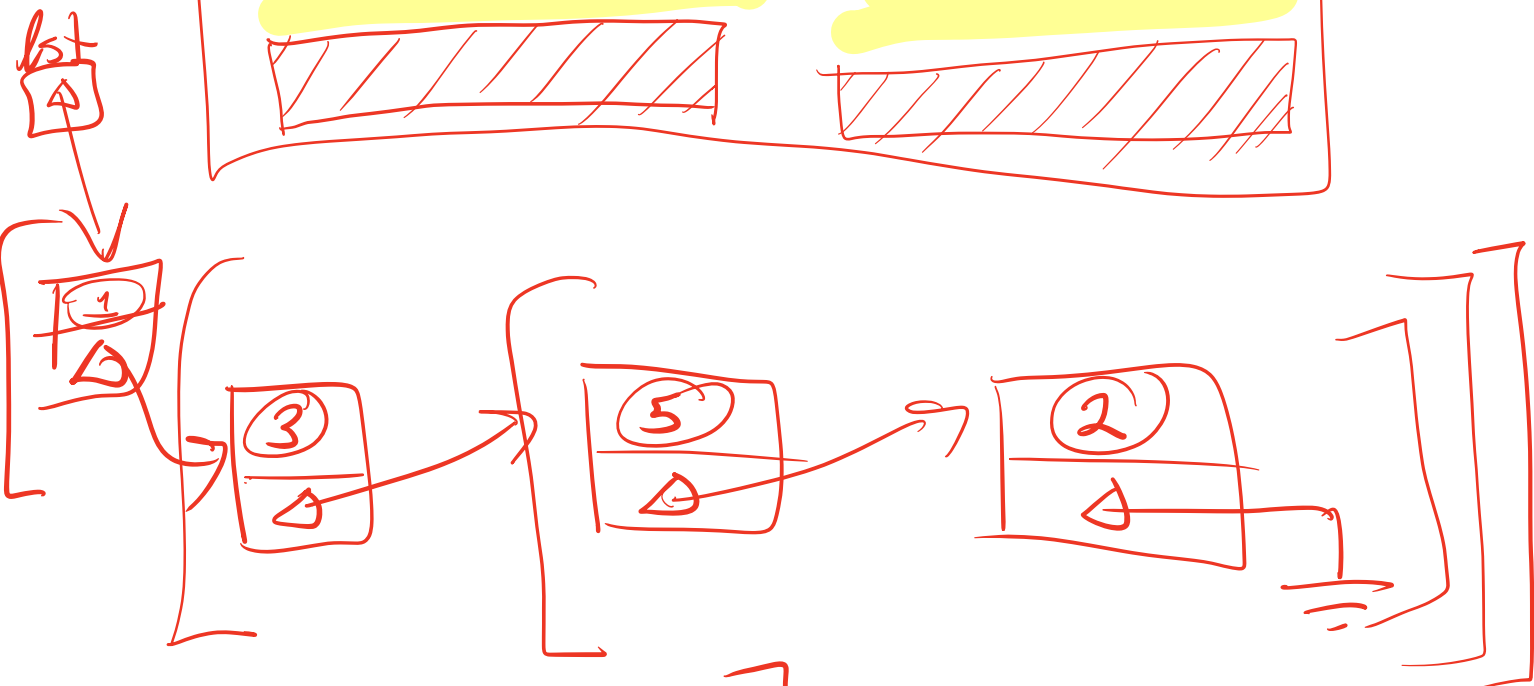
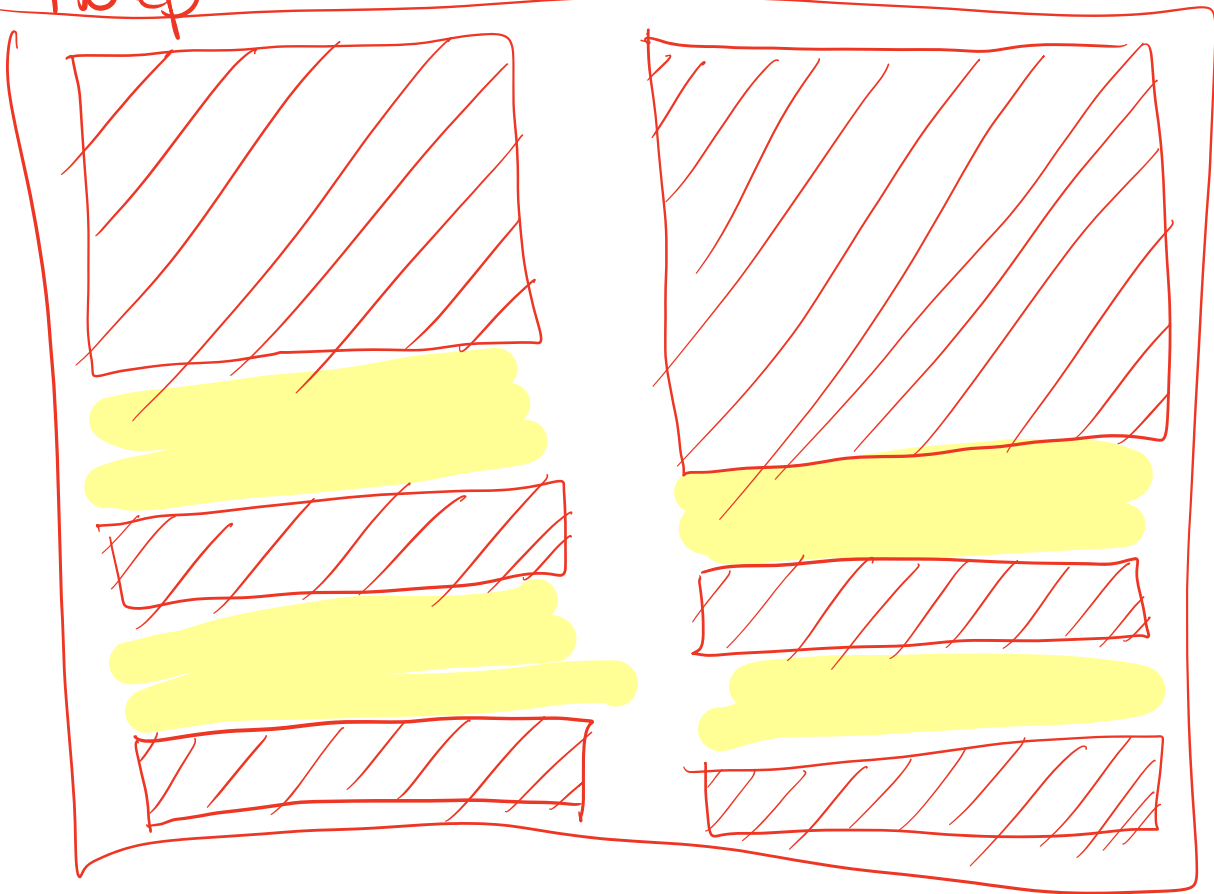


# Heap



[2, 5, 3, 1]

List: 

Node*
-------

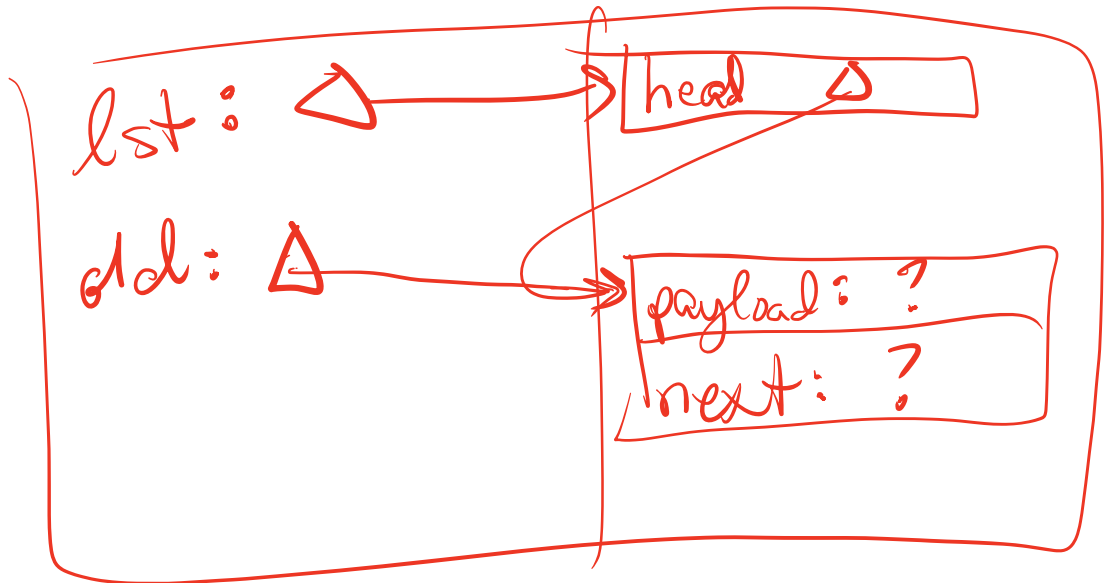
Node: 

int
Node*

node \* old = lst -> head;

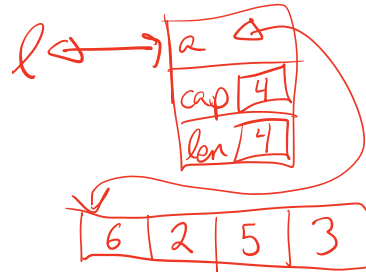
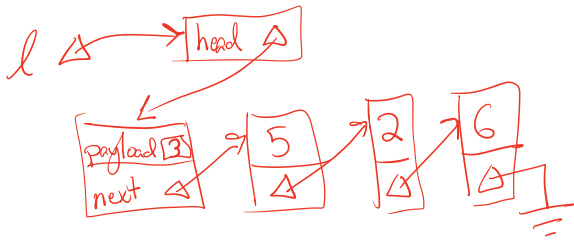


old



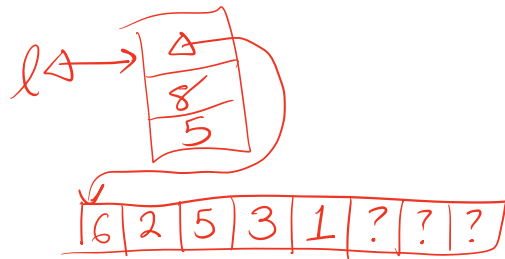
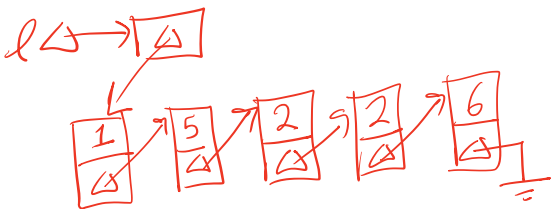
Sep 29

$l = [6\ 2\ 5\ 3]$



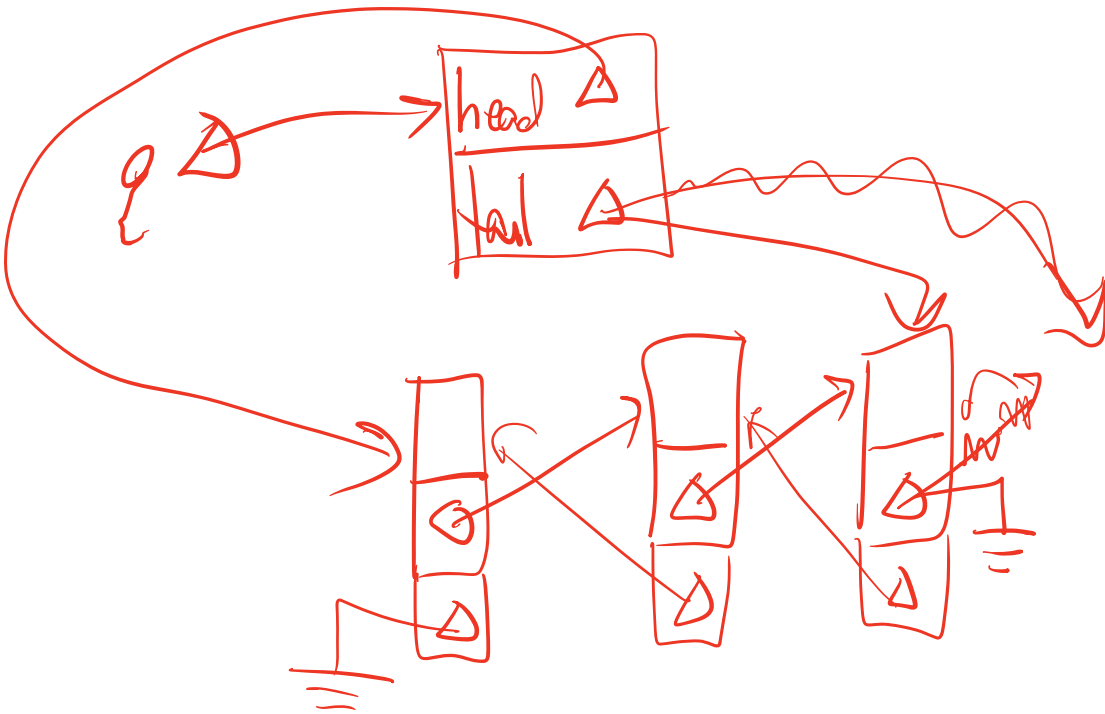
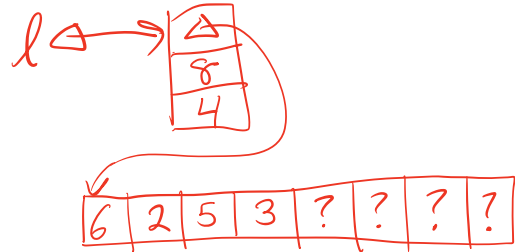
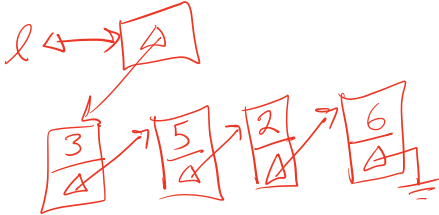
`append(l, 1);`

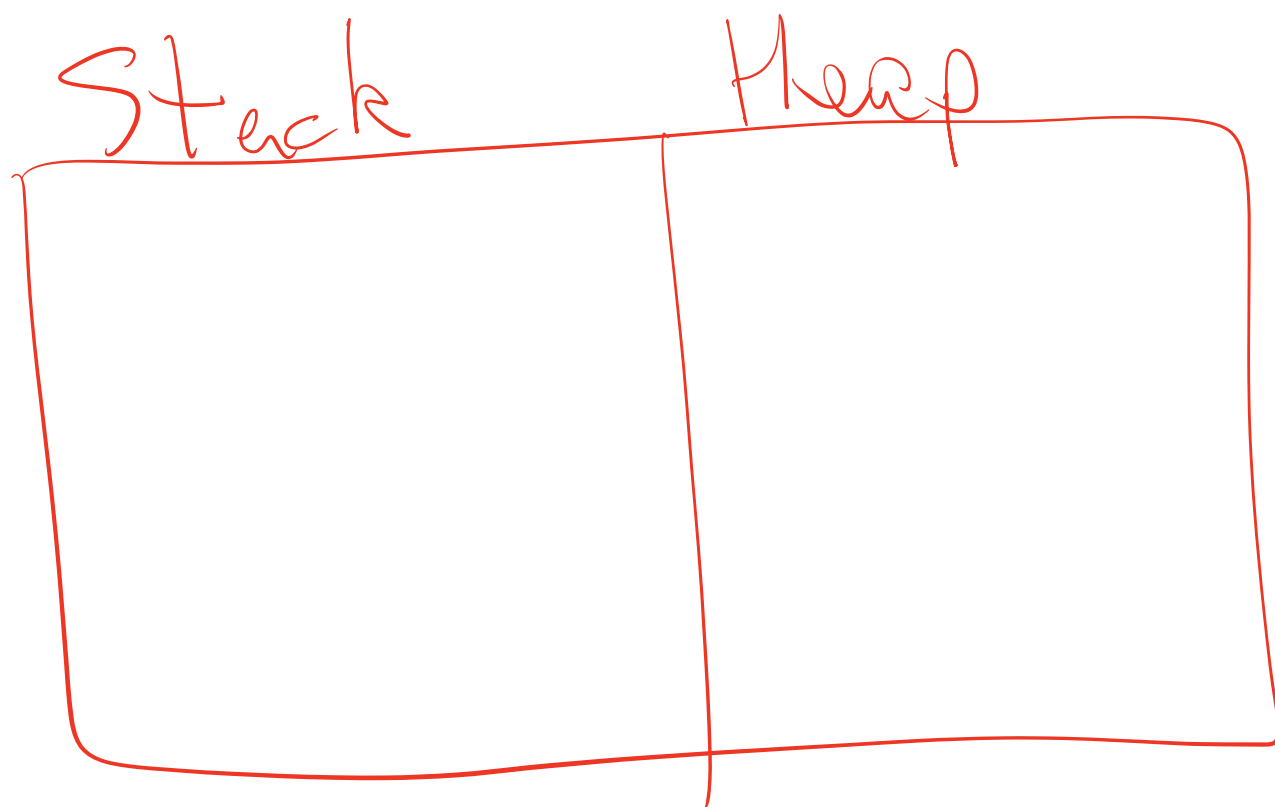
$l = [6\ 2\ 5\ 3\ 1]$



$x = \text{remove\_last}(l);$

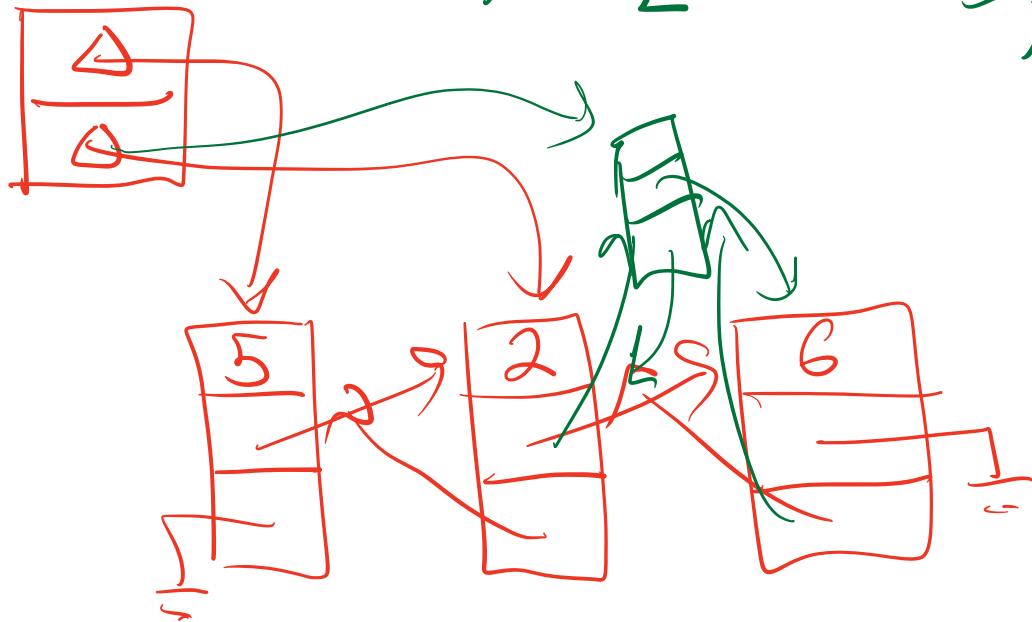
$l = [6 \ 2 \ 5 \ 3] \quad x = 1$



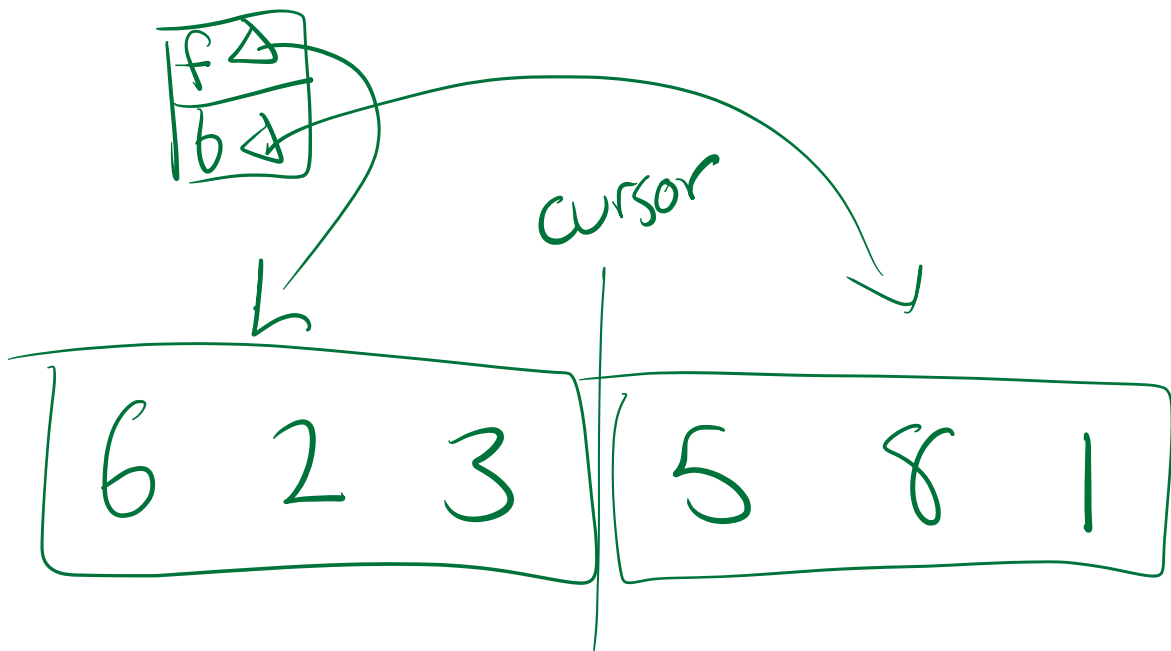


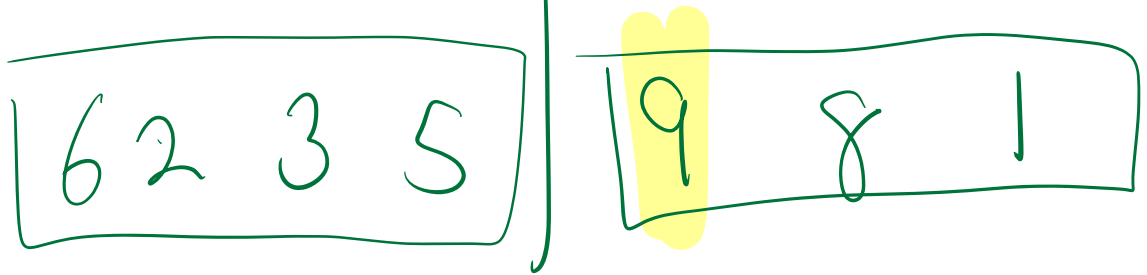
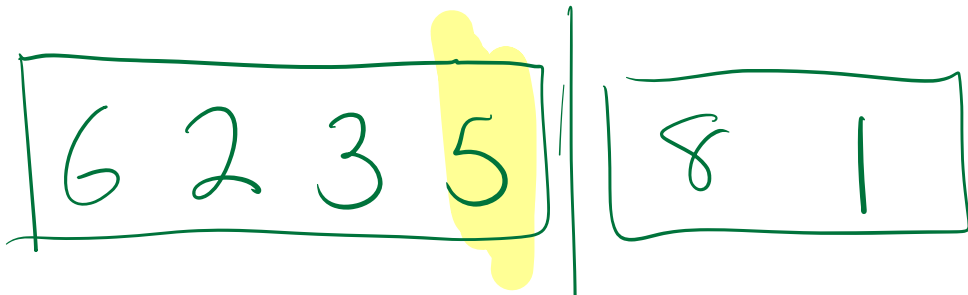
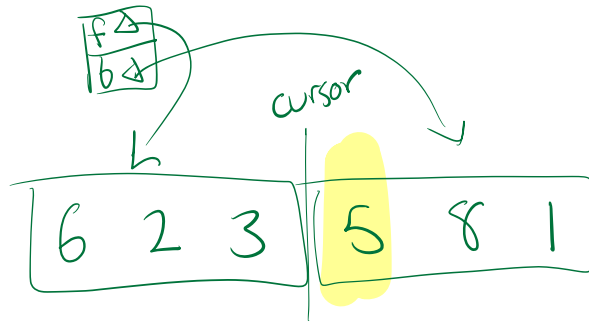
if  $\leftrightarrow$  while  $\leftarrow$  main

$nl = [6 \ 2 \ 5], 1$



$l = [2$





List

- add\_left

- add\_right

- remove\_left

- remove\_right

Queue

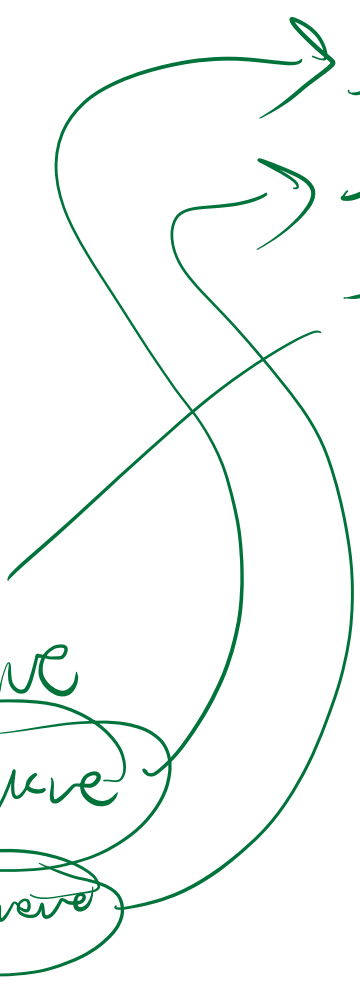
- enqueue

- dequeue

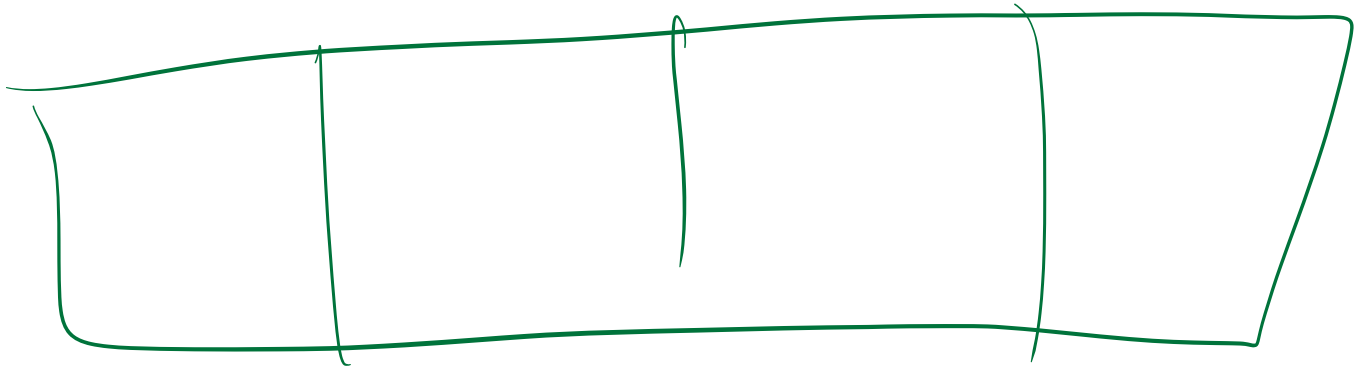
Stack

- push

- pop







```
Sort(List l, (bool)(*thing, *thing)  
      comes_before)
```

```
    if (comes_before(a, b)) {  
        ;  
    }  
    ;
```

```
int compare(int a, int b) {  
    if(a < b) return -1;  
    if(a > b) return 1;  
    if(a == b) return 0;  
}
```