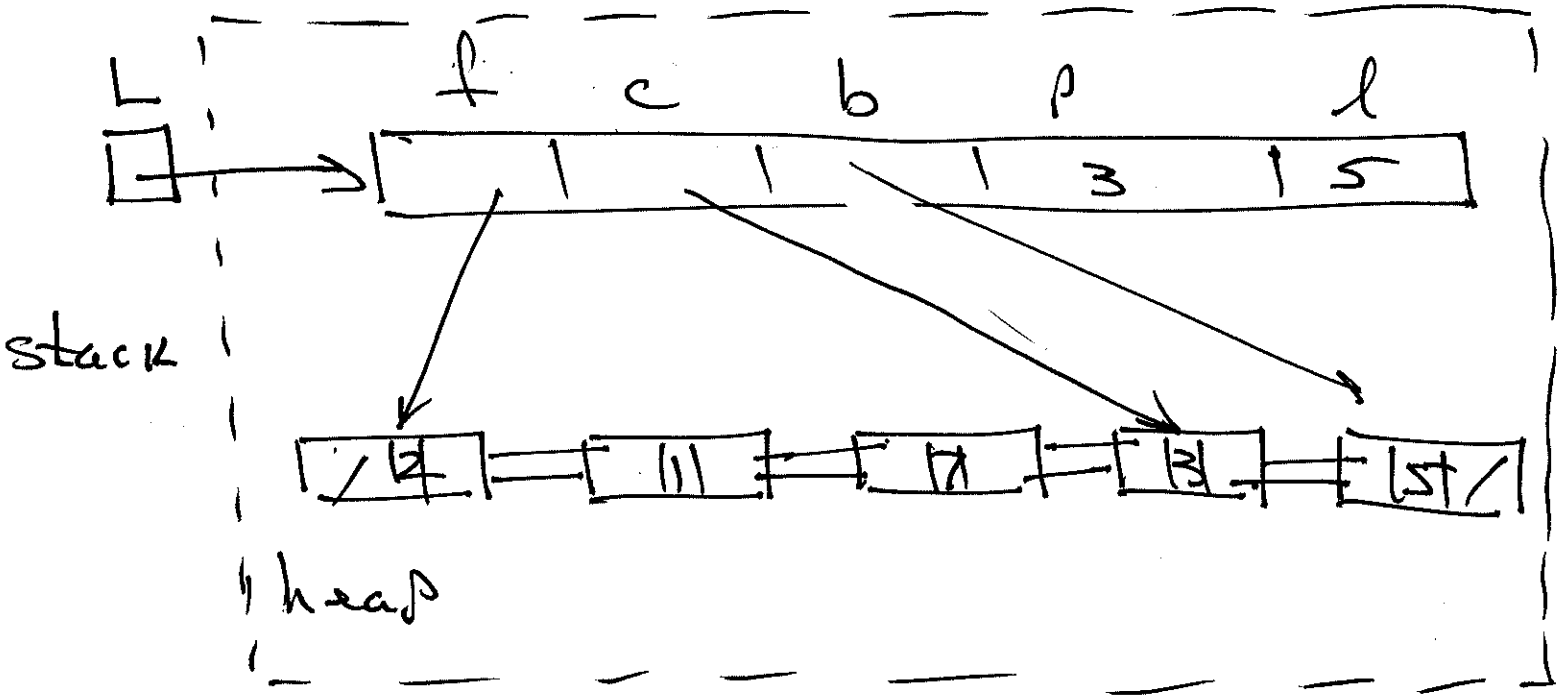
CSE 101 1-8-26

Ex

client: (2, 1, 7, 3, 5)

0 1 2 3 4

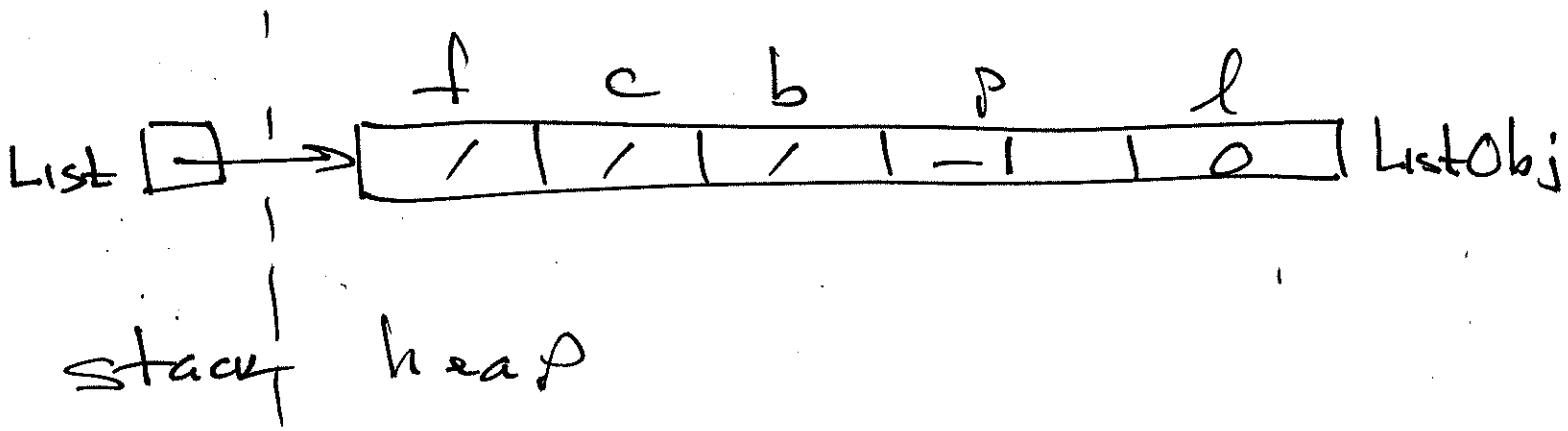
inside:



Ex. empty state:

client: ()

inside:



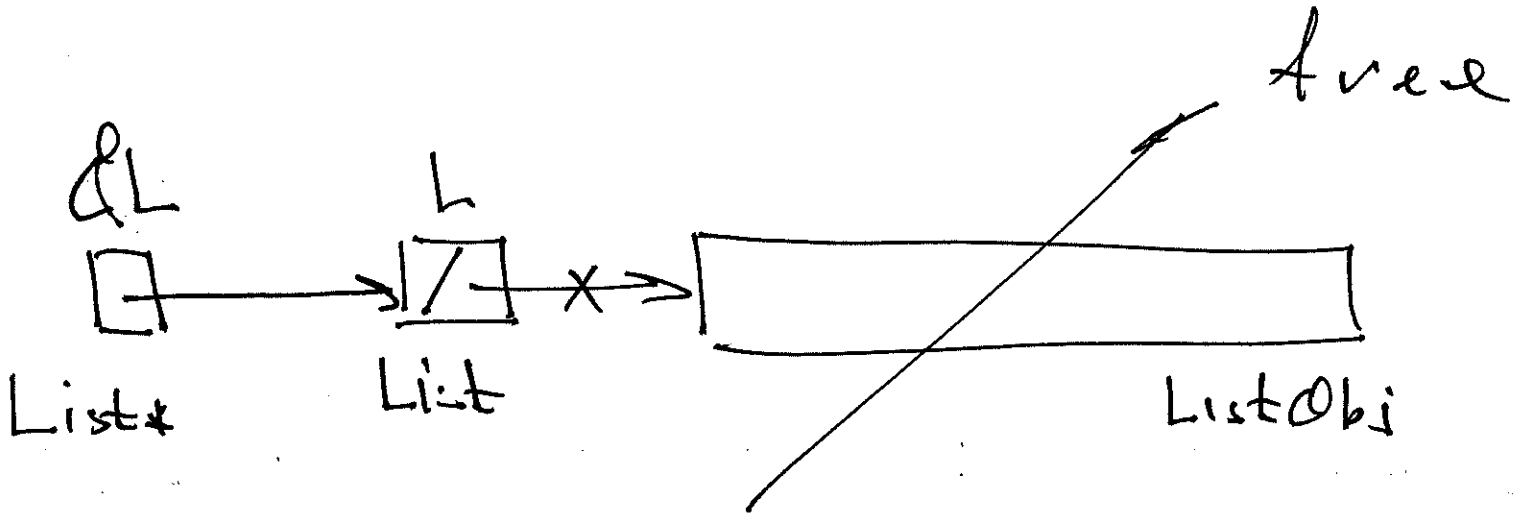
note:

typedef A B;

B: alias for A

Ex. call to destructor

freeList(&L);



Part : Client of List ADT

Don't use 'Variable length Array'

```
int n;
n = ..... ;
int A[n];
```

stack

Instead use heap array

```
int n;
n= .....
int* A = calloc(n, sizeof(int));
  :
free(A);
```

heap

How to 'indirectly' sort array of strings?

Ex.

0	1	2	3
"c"	"a"	"b"	"d"

$A = (\text{"c"}, \text{"a"}, \text{"b"}, \text{"d"})$

Want

$L = (1, 2, 0, 3)$

start : $L = ()$

insert 0 : $L = (0)$

insert 1 : $L = (\underline{0})$

$L = (1, \underline{0})$

insert 2: $L = (\underline{1}, 0)$

$L = (1, \underline{0})$

$L = (1, 2, \underline{0})$

insert 3: $L = (\underline{1}, 2, 0)$

$L = (1, \underline{2}, 0)$

$L = (1, 2, \underline{0})$

$L = (1, 2, 0)$

$L = (1, 2, 0, 3)$ ✓