

Pat: ext. 1 day

Another way to create Node type.

```
typedef struct NodeObj* Node;
```

A B

```
typedef struct NodeObj {
```

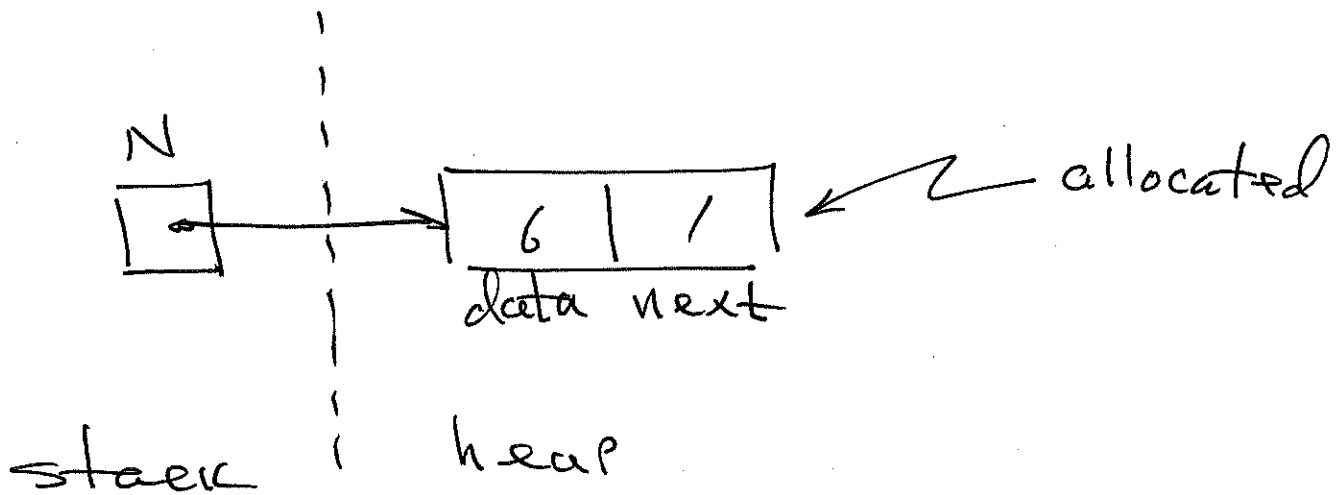
```
int data;
```

```
Node next;
```

```
} NodeObj;
```

B A

```
N = malloc(sizeof(NodeObj));
```



```
N->data = 6;
N->next = NULL;
```

note: in C and C++

(*N).data = 6 same as N->data = 6

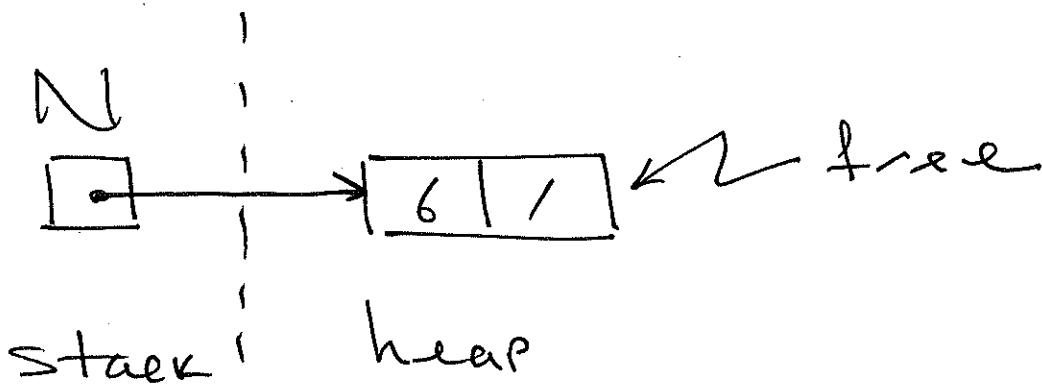
↑
↑
member selection

↑
Pointer dereference
value-at

if we do

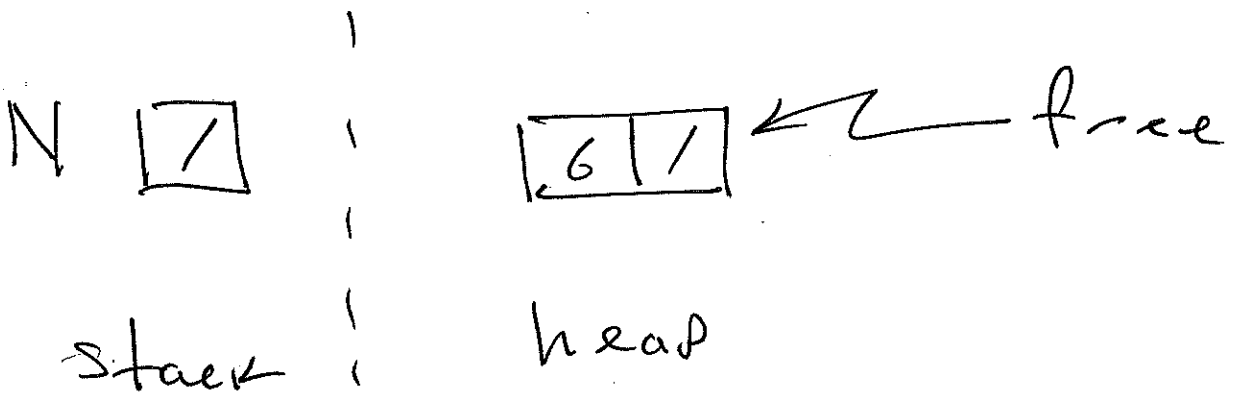
```
free(N);
```

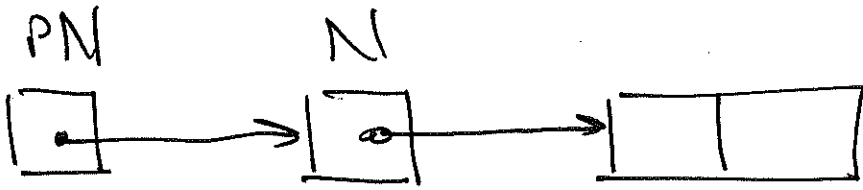
we have:



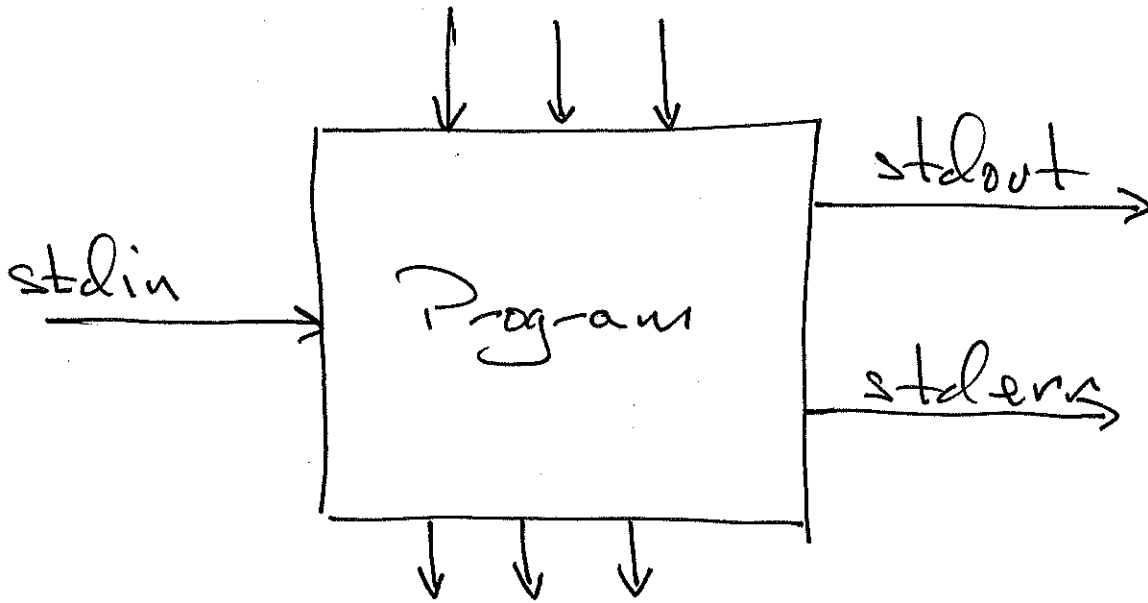
instead

```
freeNode(&N);
```





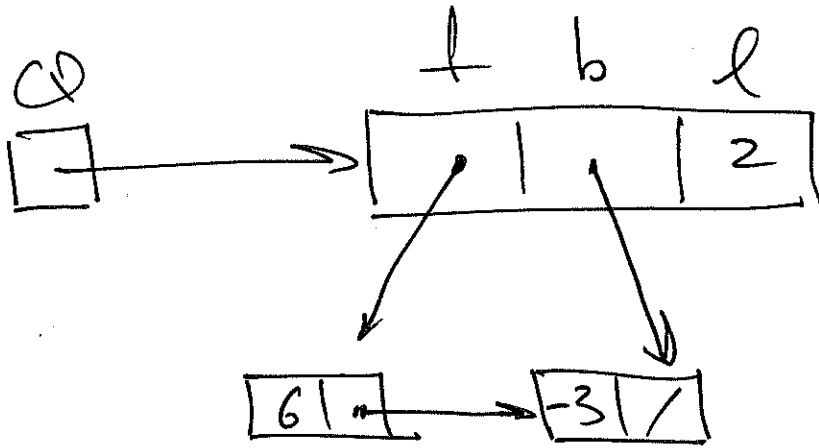
Streams:



```
printf("happy\n"); // stdout
fprintf(stderr, "sad\n"); // stderr
```

client view : $(6, -3)$

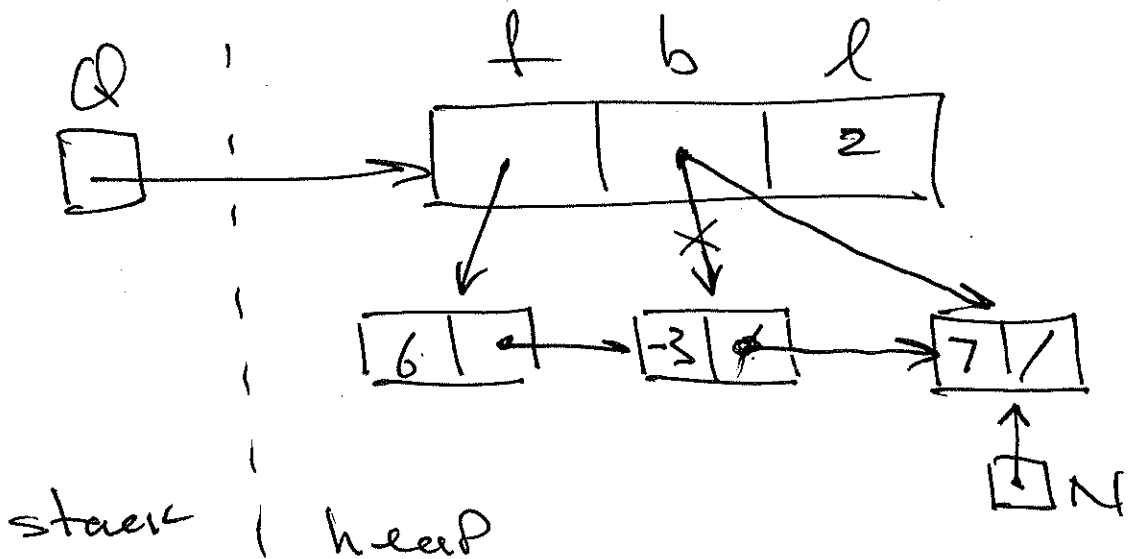
inside view :



enqueue(Q, 7);

client view : $(6, -3, 7)$

inside view :



List ADT Pal:

client view : (2 1 3 5)

inside view

