

LINKED LIST MANIPULATIONS

Deleting a Node from a Linked List

Deleting a node requires that we logically remove the node from the list by changing various link pointers and then physically deleting the node from the heap.

We can delete

- the first node
- any node in the middle
- the end node

To logically delete a node:

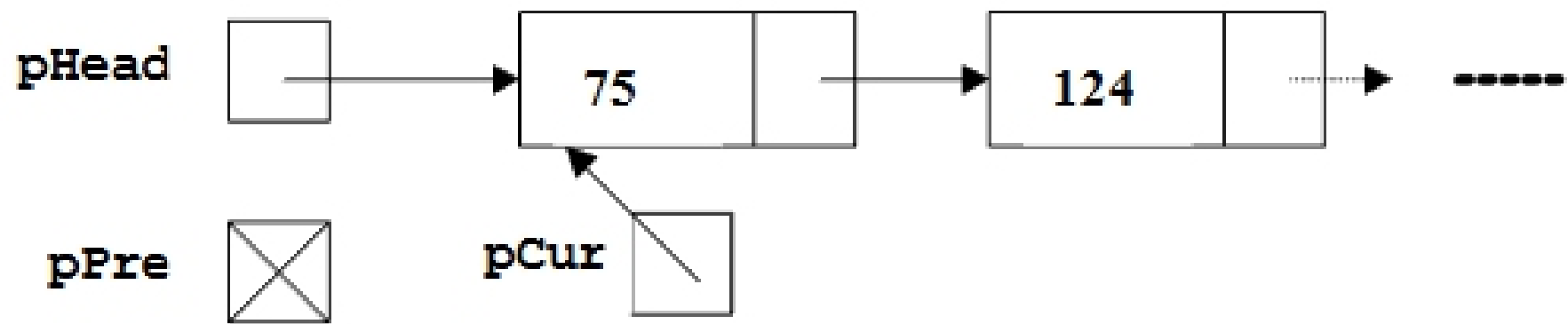
1. first locate the node itself , name the current node as `pCur` and its predecessor node as `pPre`.
2. change the predecessor's link field to point to successor of the current node.
3. recycle the node (send it back to memory) using *free*.

Note: We may be deleting the only node in a list. So take care of it separately.

This will result in an empty list in which case the head pointer is set to `NULL`.

Delete First Node

BEFORE



```
pCur = pHead;  
pHead = pCur -> next;  
free (pCur);
```

AFTER

