

# Cleanup procedure:

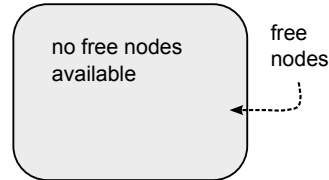
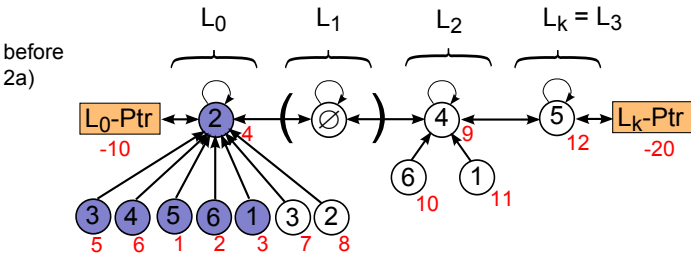
Step 2: Remove marked nodes.

For all nodes u:

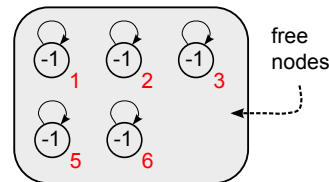
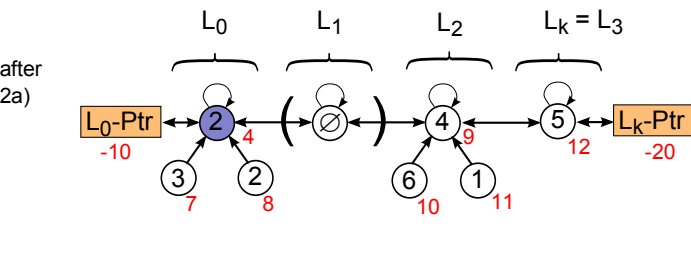
Case 1: If u is a root node, do nothing.

Case 2: If u is a child:

2a) if u is marked as deleted, then remove the node  
(and put it in the queue).



We remove nodes 5,6,1,2,3 and put them in the queue according to case 2a):



address	page value	1	2	3	4	5	6
array	node id	11	8	7	9	12	10

The queue is filled with node id's:

$Q = [1, 2, 3, 5, 6]$

node id	1	2	3	4	5	6	7	8	9	10	11	12
page value	-1	-1	-1	2	-1	-1	3	2	4	6	1	5
parent	-1	-1	-1	4	-1	-1	4	4	9	9	9	12
left	-1	-1	-1	-10	-1	-1	-1	-1	4	-1	-1	9
right	-1	-1	-1	9	-1	-1	-1	-1	12	-1	-1	-20
count	-1	-1	-1	0	-1	-1	0	0	1	0	0	0
marked	-1	-1	-1	1	-1	-1	0	0	0	0	0	0
rank	-1	-1	-1	1	-1	-1	0	0	1	0	0	0

The variables L0-Ptr and Lk-Ptr:

L0-Ptr = 4

Lk-Ptr = 12

Nodes 1,2,3,5,6 are removed from the linked trees and put into the queue. See columns 1,2,3,5,6 for which the array values have been set to -1.