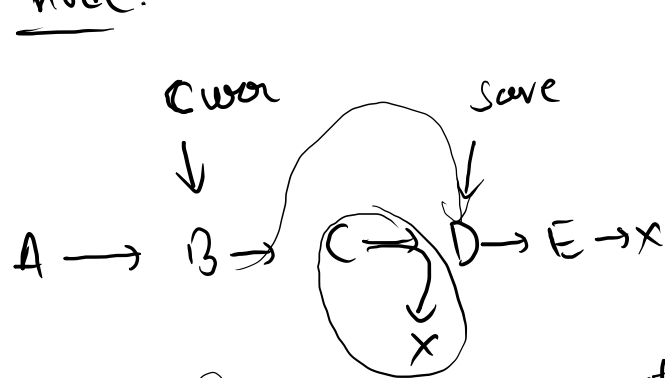


Delete a node.

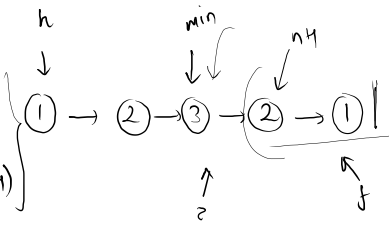


(C) X

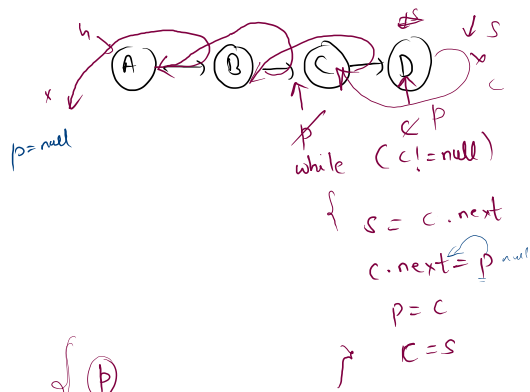
$save = curr.next.next$
 $curr.next.next = null$
 $curr.next = save$

Palindrome

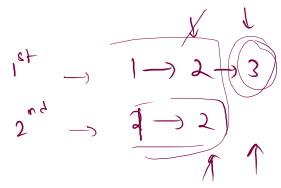
1. mid
2. nh
3. reverse(nh)
4. compare(h, nh)



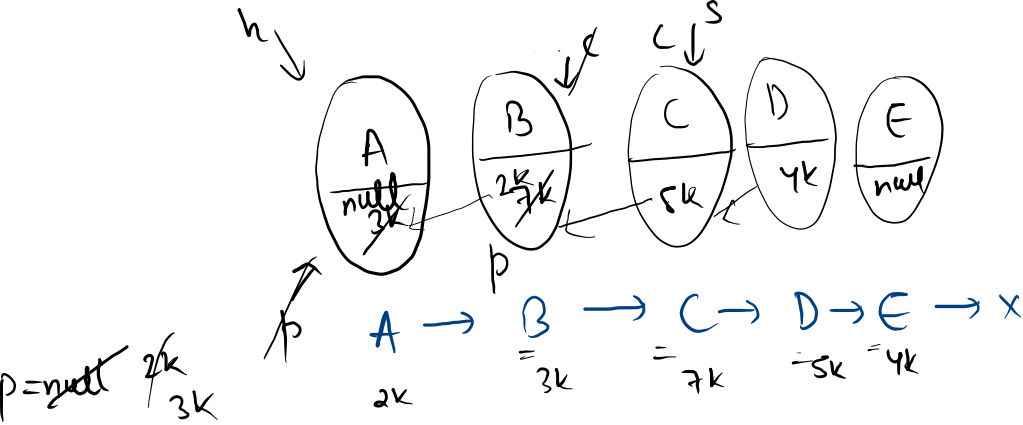
mid = mid_node(h)
nh = mid.next



1 → 2 → 3 → 2 → 1



1 2 3 2 1



(c = null)

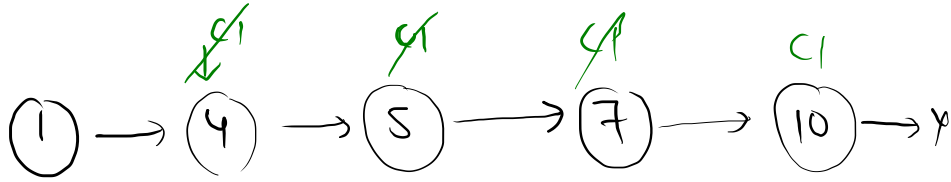
```

}   s = c.next
    c.next = p
    p = c
    c = s
}

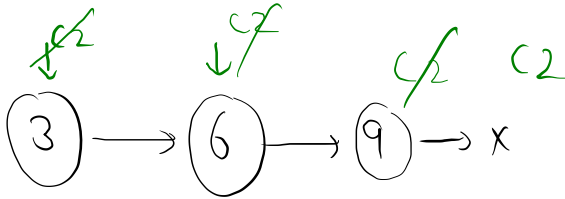
```

Merge two sorted LL.

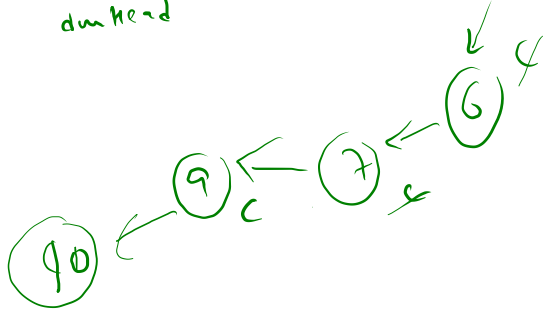
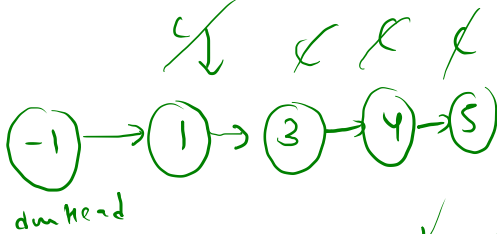
1st



2nd



dummy LL



$(c1 \neq \text{null} \text{ \& \& } c2 = \text{null})$

if $(c1.data < c2.data)$

$c.next = c1$

$c1 = c1.next$

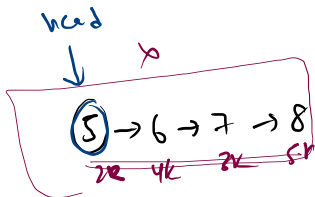
else

$c.next = c2$

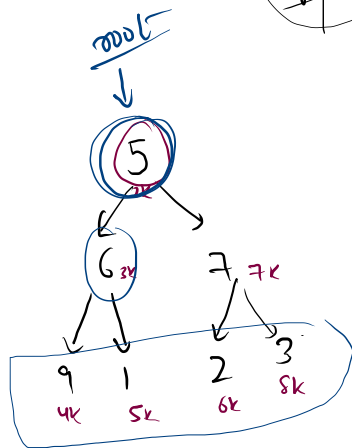
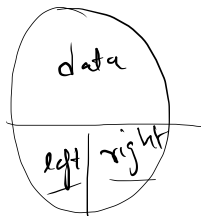
$c2 = c2.next$

$c = c.next$

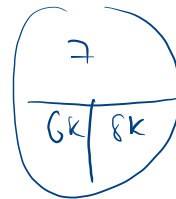
Binary Tree



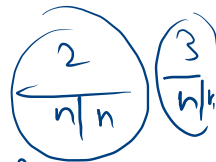
B-Tree



TreeNode



head

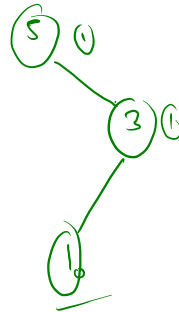
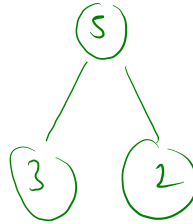
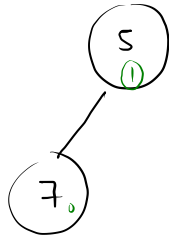


which have $left == null$ & $right == null$ }

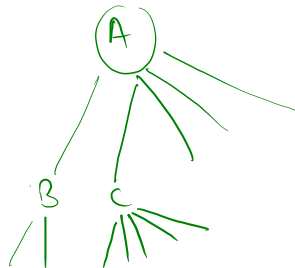
leaf nodes

Binary Tree

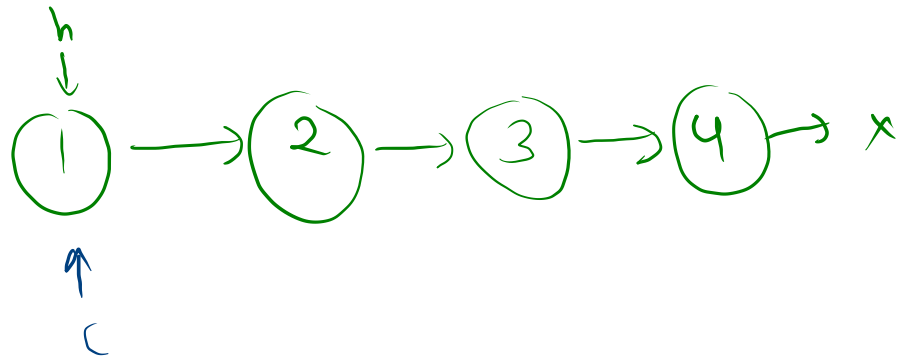
↳ A node can have at max 2 child.



Generic - Tree (n-ary tree).



point LL



iterative.

$c \neq \text{null}$

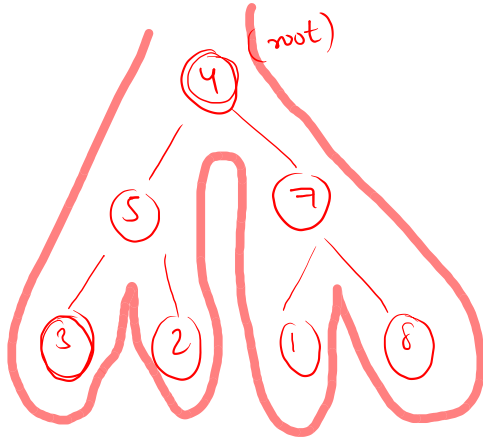
{ syso(c.data);

c = c.next

}

}

print BT. (Recursive Algo).



Euler Path.

} leaf

Preorder Traversal.

→ Root left Right

Inorder Traversal

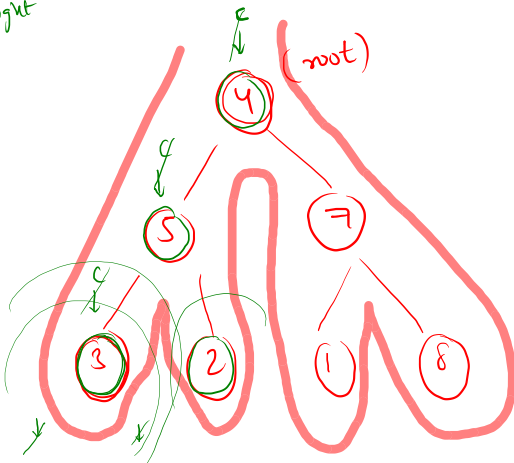
left Root Right

Postorder Traversal

Left Right Root

Pre = Root left right

4 5 3 2



} leaf

