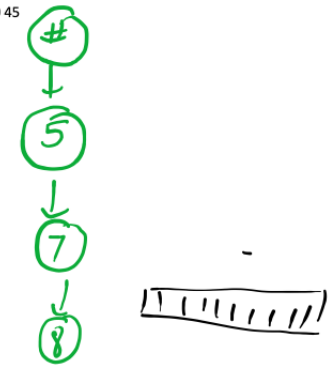
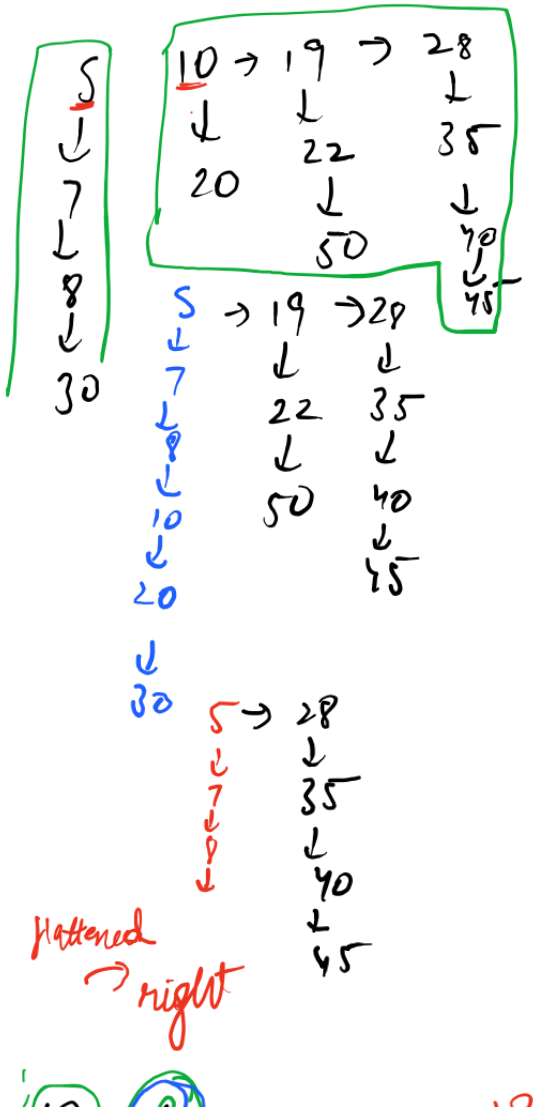
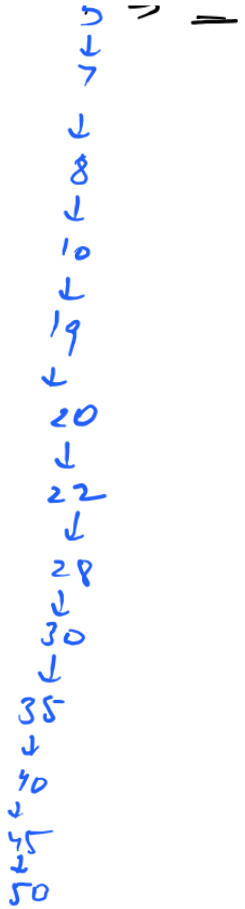
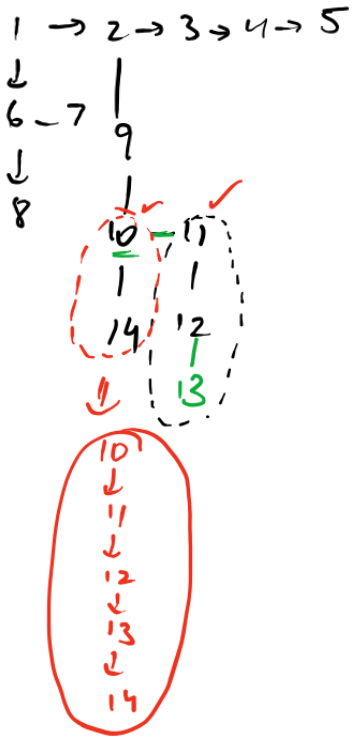
Thursday, 29 February 2024
8:42PM

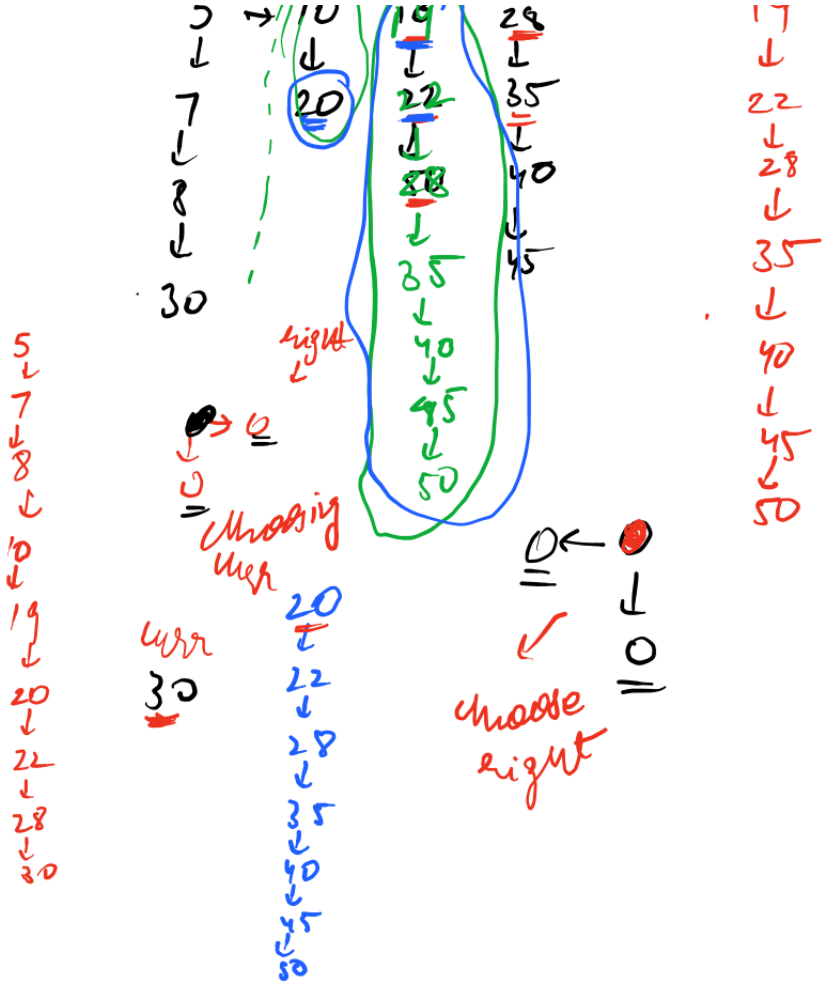
```
4
4
5 7 8 30
2
10 20
3
19 22 50
4
28 35 40 45
```





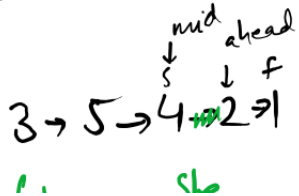






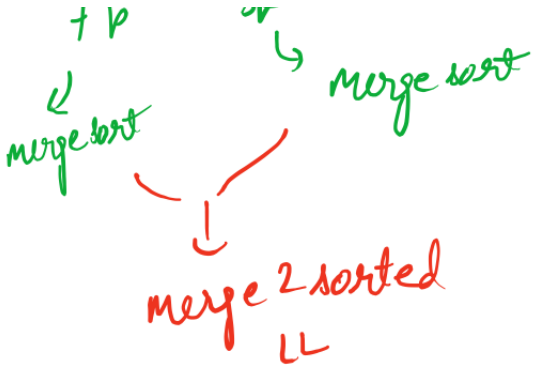

```
static Node merge(Node curr, Node right){
    if(curr==null){
        return right;
    }else if(right==null){
        return curr;
    } else if(curr.data<right.data){
        // choose curr
        curr.down = merge(curr.down, right);
        curr.right = null;
        return curr;
    }else{
        // choose right
        right.down = merge(curr,right.down);
        right.right = null;
        return right;
    }
}
```

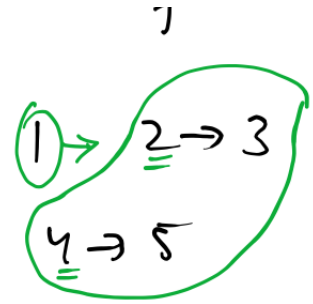
Merge Sort LL

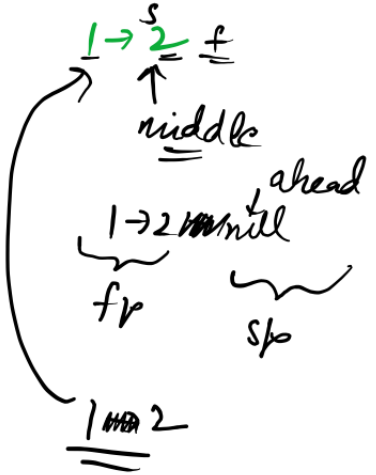


null

f && f.n

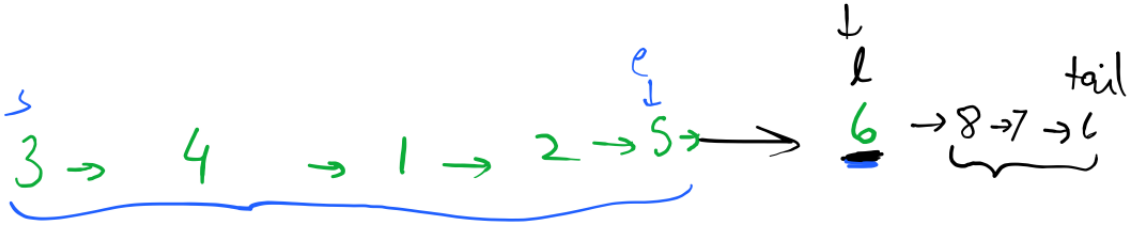






(f != null && f.n != null)

Quick Sort



Clone LL with Random ptr

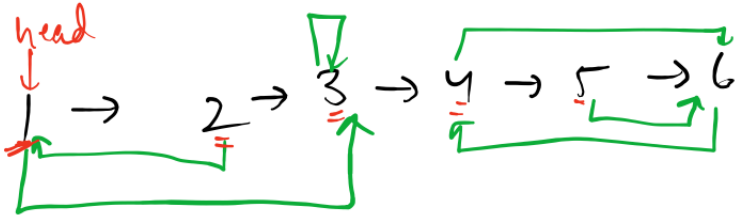
→ add clone vals in same LL

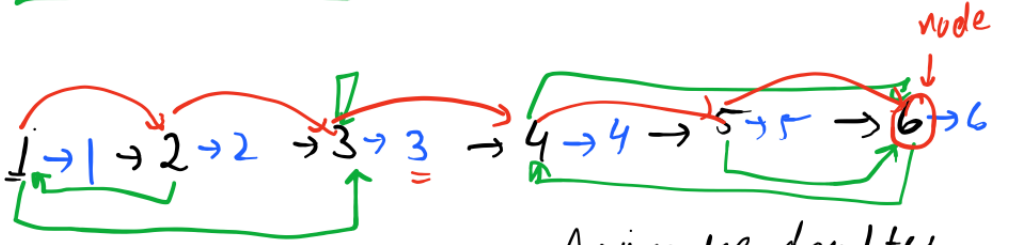
→ create random ptrs

→ split 2 LLs & return

Node {
data,
Node next,
random
}

clone





1 . next = 1

1 . random = 3

1 . random . next = 3

Assign random ptrs.

// 1 . next . random = 1 . random . next

1 . random = 3

3

3