

Let  $x$  and  $L$  be LinkedList Nodes.

#### Analyzing append

```
1 append(x, L) {
2   Node curr = L;
3   while (curr != null && curr.next != null) {
4     curr = curr.next;
5   }
6   curr.next = x;
7 }
```

#### LinkedList Reversal

```
1 reverse(L) {
2   if (L == null) {
3     return null;
4   }
5   else {
6     Node front = L;
7     Node rest = L.next;
8     L.next = null;
9
10    Node restReversed = reverse(rest);
11    append(front, restReversed);
12  }
13 }
```

```
int sum(int[] arr){
    return help(arr,0,arr.length);
}
int help(int[] arr, int lo, int hi) {
    if(lo==hi)    return 0;
    if(lo==hi-1) return arr[lo];
    int mid = (hi+lo)/2;
    return help(arr,lo,mid) + help(arr,mid,hi);
}
```