Programming with C I

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CSCI 112

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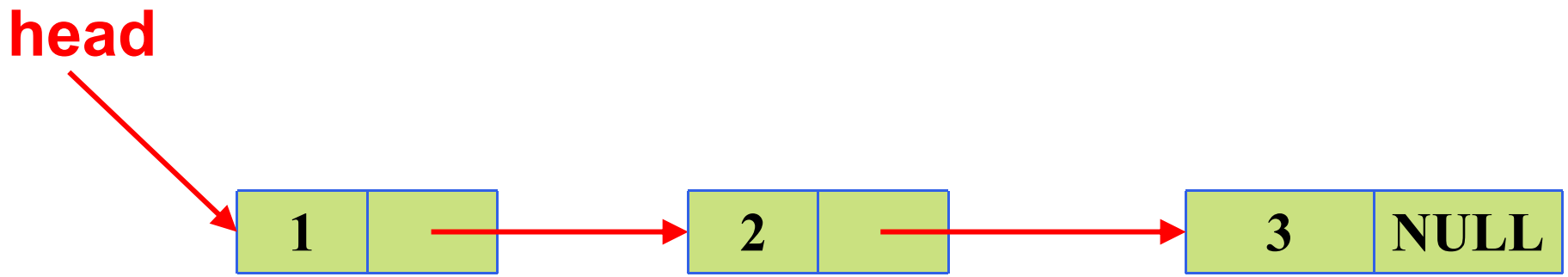
2025.04.11

Inserting a node at end of list



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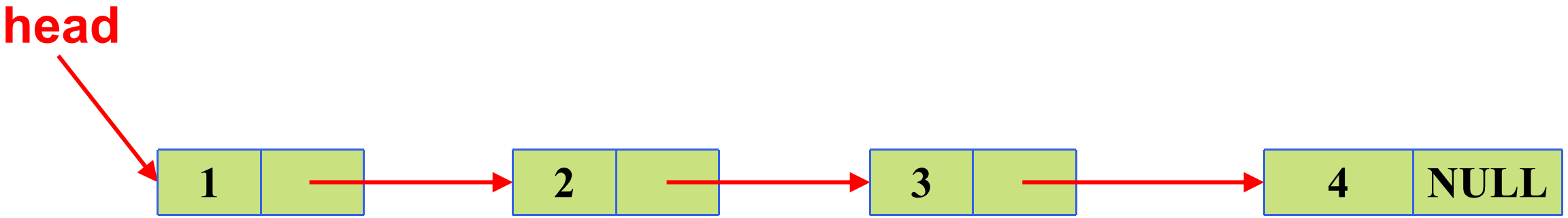
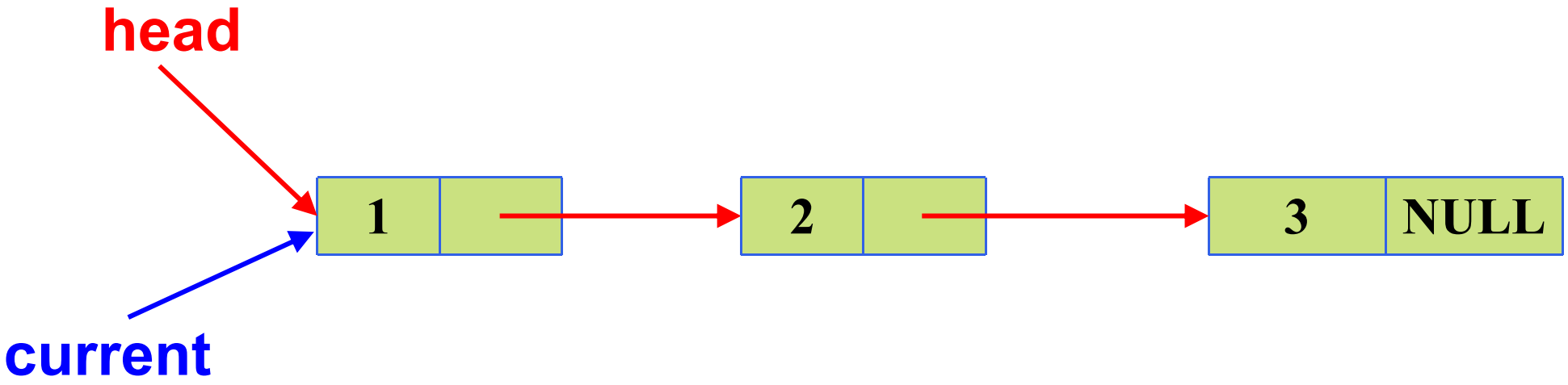
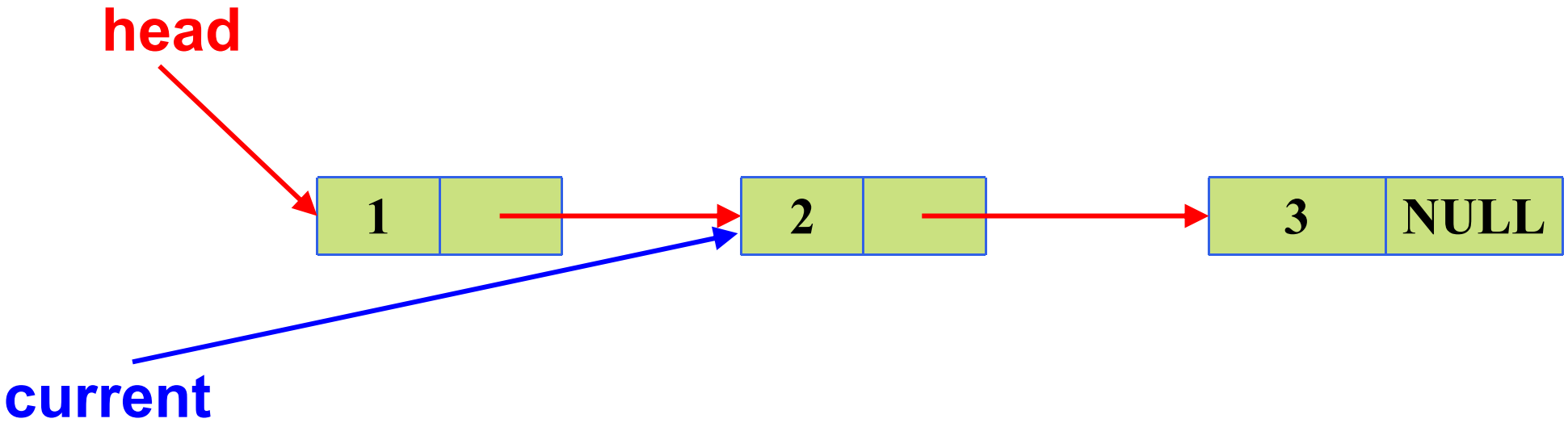


Inserting a node at end of list



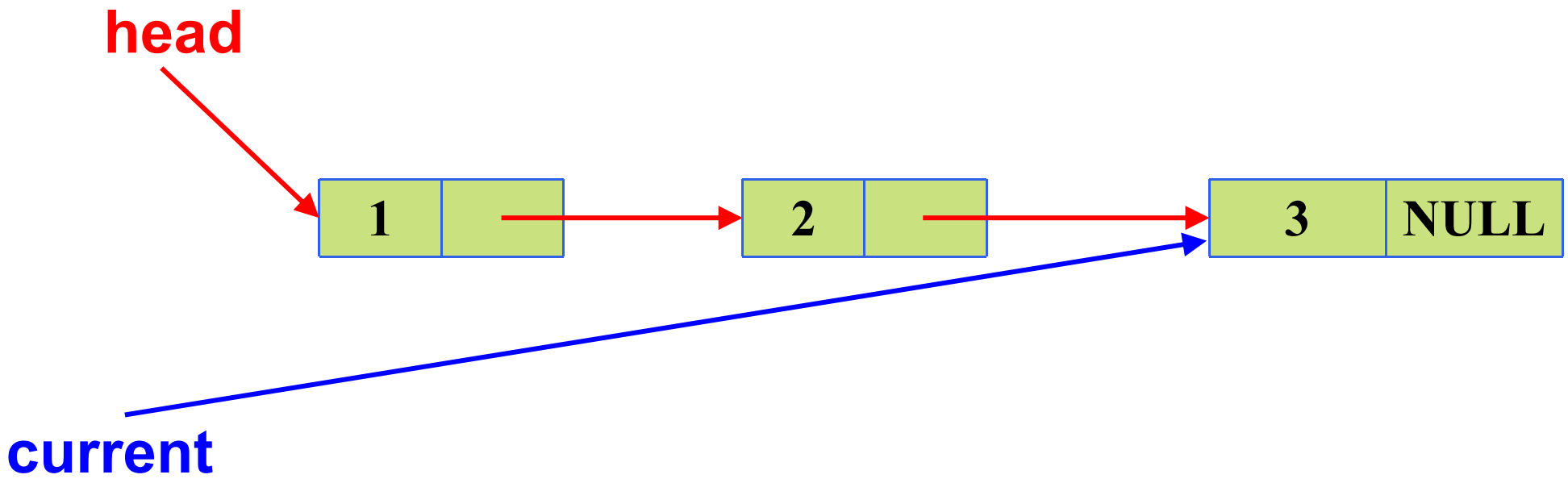
current->next is the 2 node

Inserting a node at end of list



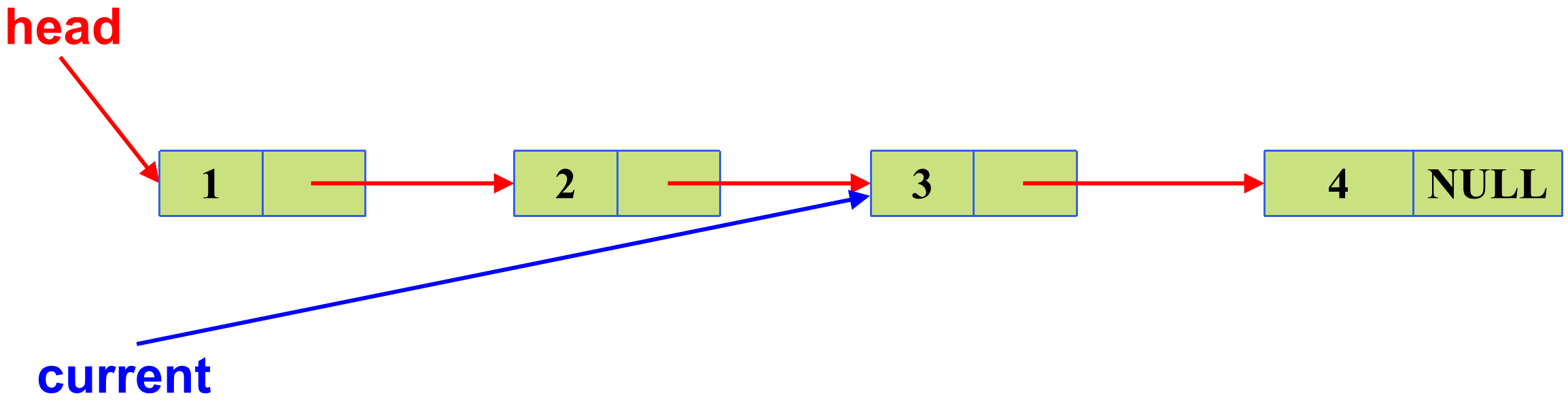
current->next is the 3 node

Inserting a node at end of list



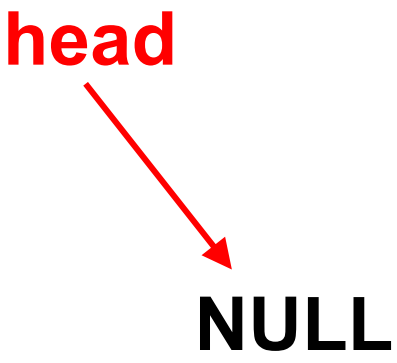
current->next == NULL

Inserting a node at end of list

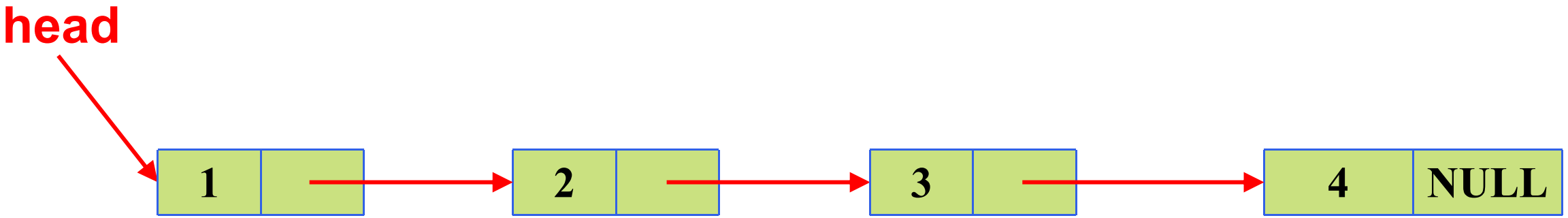


current->next = new

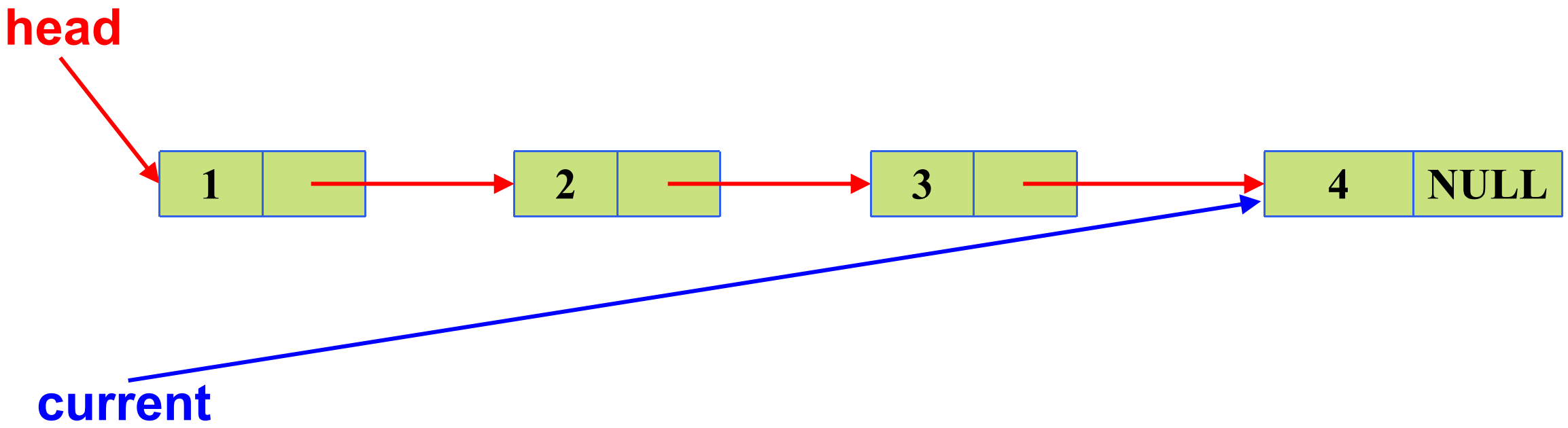
What if list is empty?



Deleting a node at end of list



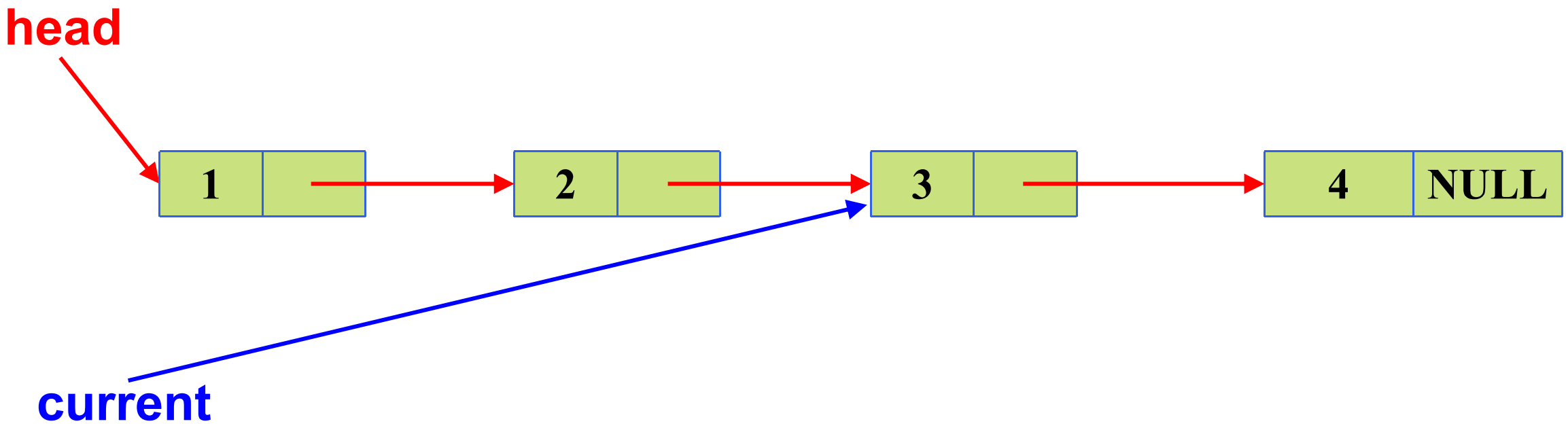
Deleting a node at end of list



current->next == NULL

??? how do we set 3's next?

Deleting a node at end of list



current->next->next == NULL

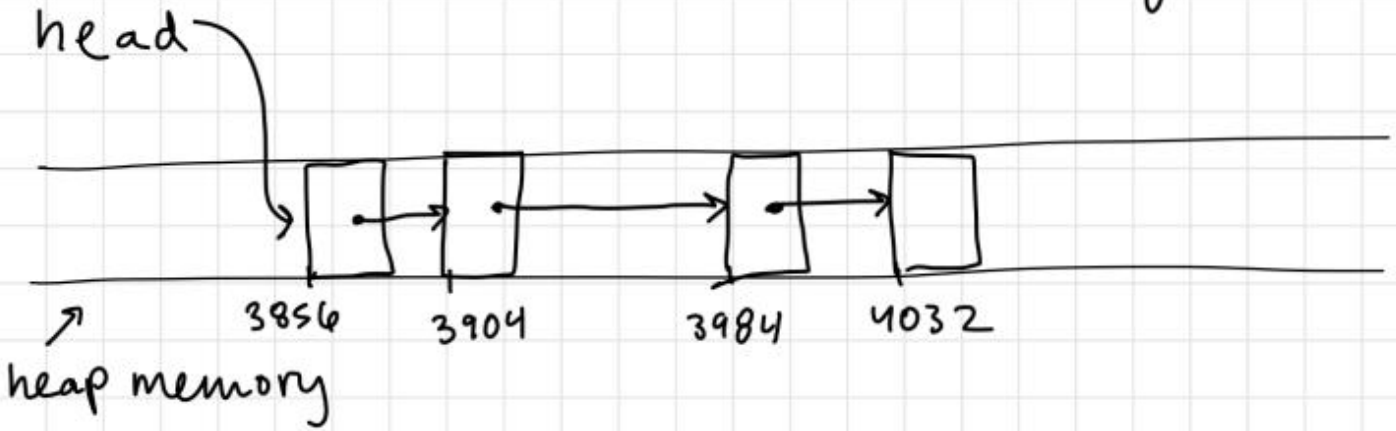
current->next = NULL

Realloc

- reallocates heap memory
- realloc(ptr, new_size) returns a pointer to a block of memory of new_size with data from ptr copied over, and frees old memory (if needed)
- careful in case realloc is unsuccessful

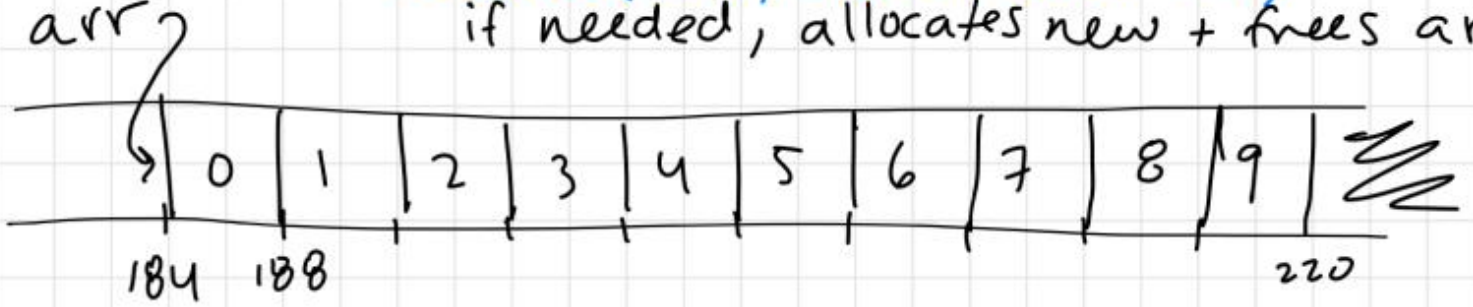
Linked List

- not contiguous



Array

realloc(arr, sizeof(int)·101)
if needed, allocates new + frees arr



THE END

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