Linked Lists

A linked list is a simple data structure.

It refers to a series of nodes that contain both data and a reference to the next node in the list.

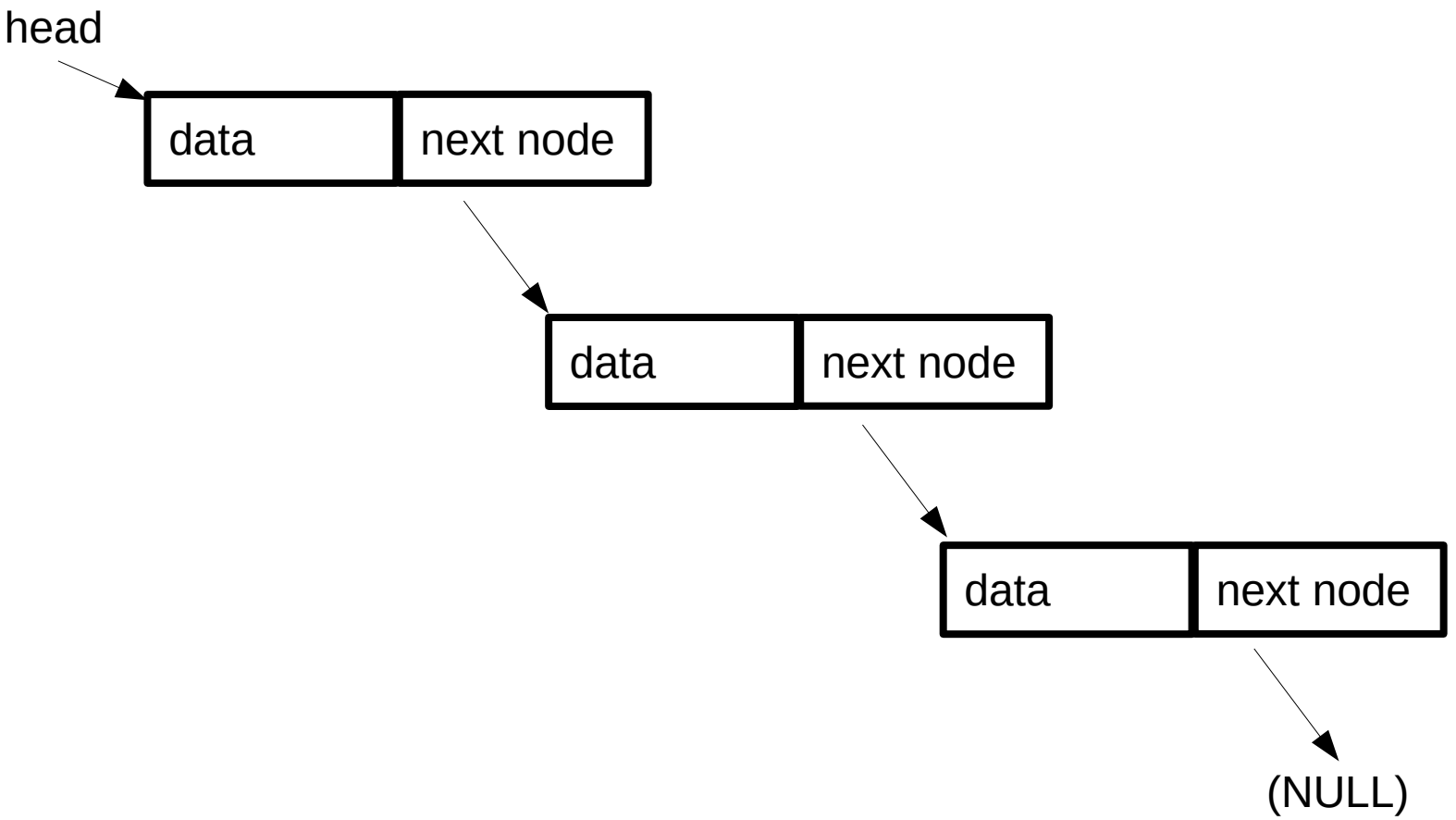
An independent variable is established that points to the first node in the list.

Nodes are added to the list by splicing them between existing nodes. Commonly, nodes are inserted at the beginning of the list for expediency.

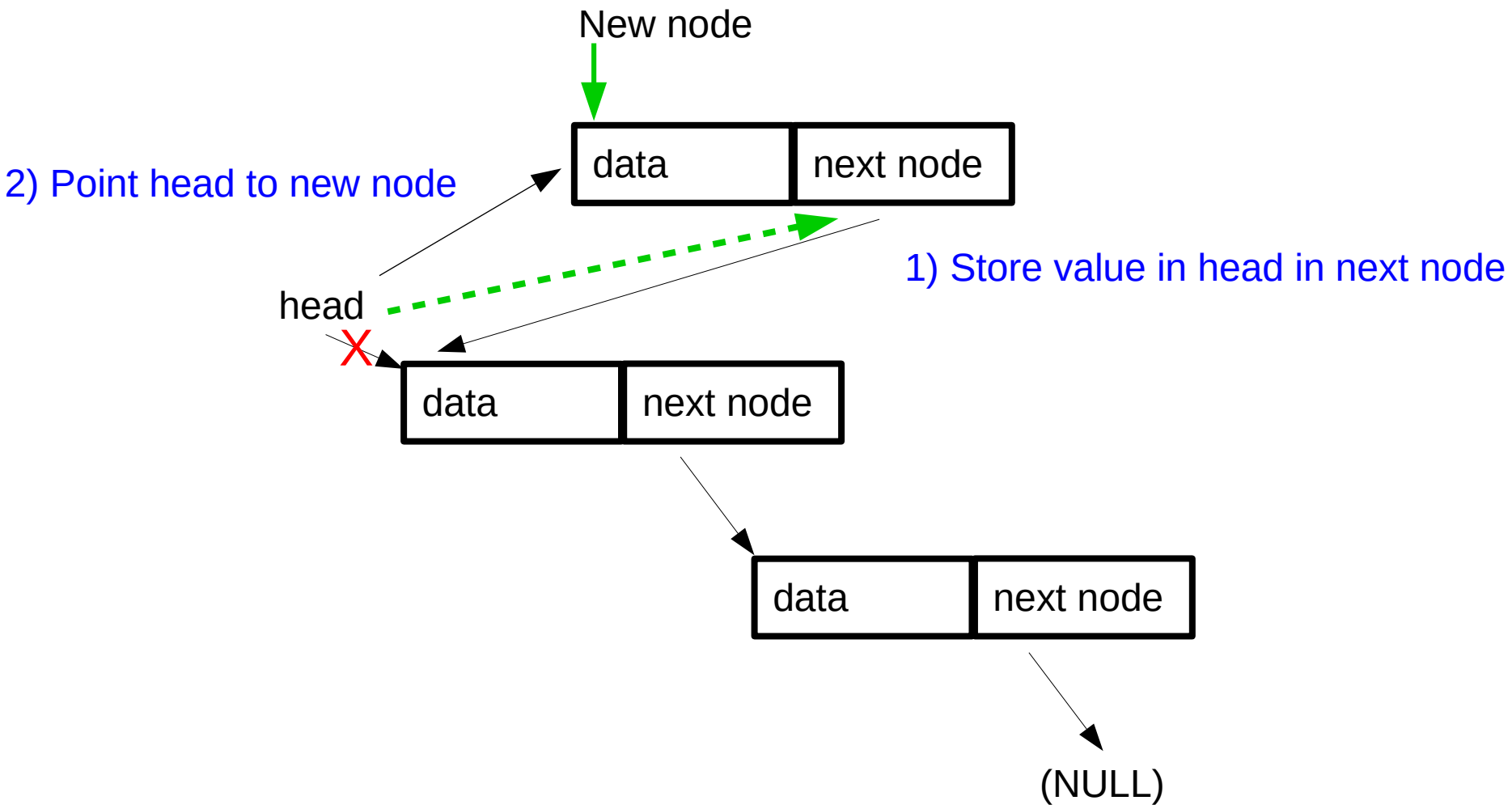
Nodes are removed from the list by simply revising the links to them.

The list may be traversed using a very simple iterative algorithm.

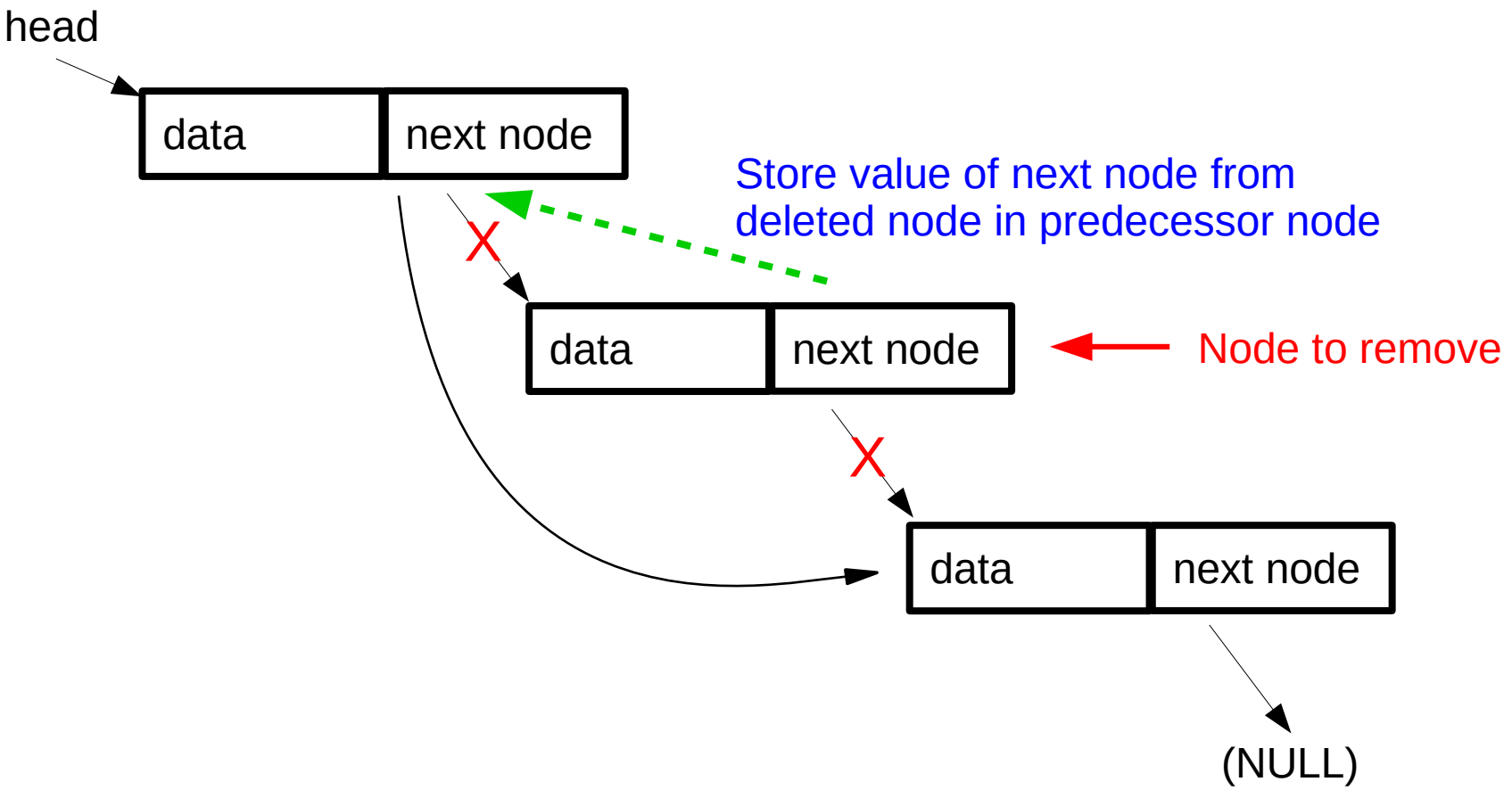
Visualization of a linked list:



Adding a node:



Removing a node:



Traversing the list

Pseudocode:

```
traverse_list ( head )
        cur_node= head
        while ( cur_node )
                // access node data
                cur_node= cur_node.next_node
```

Example code:

linked_list_bytes.c

linked_list_structs.c