

Week 4;

Home work; - How to add an element end of double linked list?

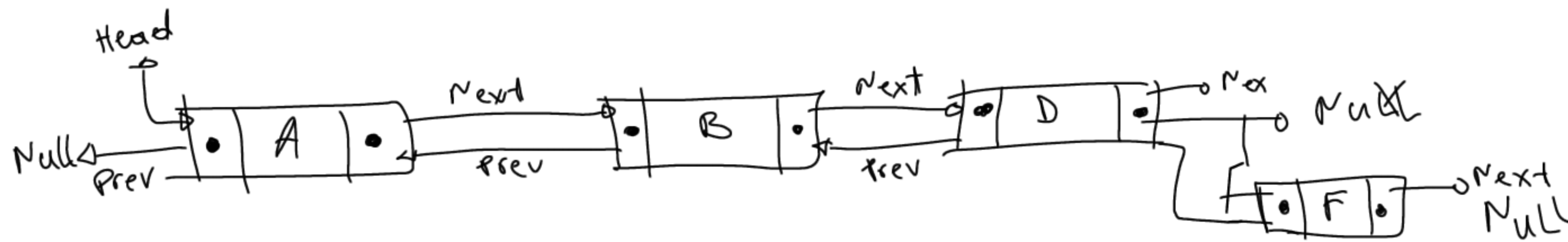
- How you can delete all the elements of a linked list (write it as recursive)
- How you can add an element between elements at double linked list?

figure out the difference between circular linked list and linked list. write it and check the difference with sorting algorithms.

Answer:

① in a linked list the new node is always added after the last node.

Since a linked list is typically represented by the head of it, we have to traverse the list till end and then change the next of last node to new node, after that we place our element at this new node.



② the recursive deletion process involves freeing (deleting from memory) each node, starting from the head of the list. recursion is based on the principle of a function calling itself.

③ the difference between DLL and SLL

- Can be traversed in either direction
- some operations such as deletion and inserting before a node, become easier.

in a SLL to delete a node pointer to the previous node is needed to get this previous node, sometimes the list is traversed.

in DLL we can get the previous node using previous pointer.