

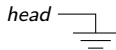
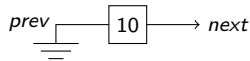
Doubly Linked List

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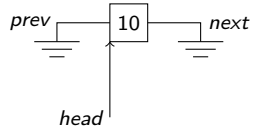
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Insertion of node at the beginning

In the beginning head is `NULL`. So we allocate a node put data in, make its `prev` pointer `NULL` and `next` pointer to point to head. Then we make head point to it. Let us say data is 10.

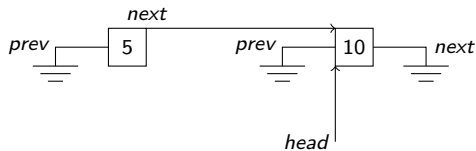


Insertion of node at the beginning

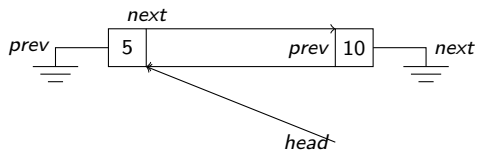


Inserting another node at beginning

Our linked list has one node with data 10. Now let us say we want to insert another node at beginning with say data 5. The process remains same with one change. Since head is not NULL we update prev pointer to this new node.



Inserting another node at beginning



Inserting a node in between

Let the data to be inserted is 12. In this case we just manipulate the pointers next and previous to the node. First we set the node's next and prev pointers and then we adjust the pointers of nodes next and previous to it.

