Doubly Linked List

In this assignment you will write a class `DoublyLinkedList` that elements a doubly Linked List. You should use your notes on Singly Linked List as a reference for completing this class.

class DoublyLinkedList {
    public Node head, tail;

    static class Node {

        int data;
        Node next, prev;

        Node(int d) {
            data = d;
            next = null;
            Prev = null;
        }
    }

    // Create your constructor for your class
    public DoublyLinkedList() {

    }

    // This is the implementation of printing a Linked List taken // from singly linked list. This will still work the same.
    public static void printList(LinkedList list) {
        Node currnode = list.head;

        while (currnode != null) {
            System.out.println(currnode.data);
            currnode = currnode.next;
        }
    }
}
public static LinkedList insert(LinkedList list, int data)
{
    Node currnode = list.tail;
    list.tail.next = new Node(data);
    list.tail = list.tail.next;
    return list;
}

public static LinkedList deleteKey(LinkedList list, int data)
{
    Node prevnode = null, currnode = list.head;
    while (currnode != null && currnode.data != data) {
        prevnode = currnode;
        currnode = currnode.next;
    }
    if (currnode == null) {
        return list;
    }
    if (prevnode == null) {
        list.head = currnode.next;
    } else {
        prevnode.next = currnode.next;
    }
    return list;
}