

```

package datastructure;

public class LinkedList {

    Node head;

    public static LinkedList insert(LinkedList list, int data) {

        Node newNode = new Node(data);

        newNode.next = null;

        if (list.head == null) {

            list.head = newNode;

        } else {

            Node lastNode = list.head;

            while (lastNode.next != null) {

                lastNode = lastNode.next;

            }

            lastNode.next = newNode;

        }

        return list;

    }

    public static LinkedList deleteByKey(LinkedList list, int key) {

        System.out.println();

        System.out.println("Delete Element " + key + " from Linked List ");

        Node currentNode = list.head, previousNode = null;

        if (currentNode != null && currentNode.data == key) {

            list.head = currentNode.next;

            System.out.println(key + " found and deleted");

            return list;

        }

        while (currentNode != null && currentNode.data != key) {

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        previousNode = currentNode;
        currentNode = currentNode.next;
    }
    if (currentNode != null) {
        previousNode.next = currentNode.next;
        System.out.println(key + " found and deleted");
    }
    if (currentNode == null) {
        System.out.println(key + " not found");
    }
    return list;
}

```

```

public static void printList(LinkedList list) {
    Node currentNode = list.head;
    System.out.print("Linked List Elements: ");
    while (currentNode != null) {
        System.out.print(currentNode.data + " ");
        currentNode = currentNode.next;
    }
}

```

```

public static void main(String[] args) {
    LinkedList list = new LinkedList();
    list = insert(list, 4);
    list = insert(list, 1);
    list = insert(list, 3);
    list = insert(list, 8);
}

```

```
    printList(list);  
    deleteByKey(list, 1);  
    printList(list);  
}  
}
```