

5. Write a program in Java to delete the first occurrence of a key in a singly linked list

```
package com.assin.solution;
```

```
class ListNode {  
    int val;  
    ListNode next;  
  
    ListNode(int val) {  
        this.val = val;  
        this.next = null;  
    }  
}
```

```
public class SiLinkedList {
```

```
    public static ListNode deleteNode(ListNode head, int key) {  
        if (head == null) {  
            return null;  
        }  
    }
```

```
    // If the key to be deleted is at the head  
    if (head.val == key) {  
        return head.next;  
    }
```

```
    ListNode prev = head;  
    ListNode current = head.next;
```

```
    while (current != null) {  
        if (current.val == key) {  
            prev.next = current.next;  
            break;  
        }  
        prev = current;  
        current = current.next;  
    }
```

```
    return head;  
}
```

```
public static void printList(ListNode head) {  
    ListNode current = head;  
    while (current != null) {  
        System.out.print(current.val + " ");  
        current = current.next;  
    }  
    System.out.println();  
}
```

```
public static void main(String[] args) {  
    ListNode head = new ListNode(4);  
    head.next = new ListNode(5);  
    head.next.next = new ListNode(1);  
    head.next.next.next = new ListNode(9);  
  
    System.out.println("Linked List before deletion:");  
    printList(head);  
  
    int key = 5;  
    head = deleteNode(head, key);  
  
    System.out.println("Linked List after deleting first occurrence of " + key + ":");  
    printList(head);  
}  
}
```