

## Phase-1 Practice Project: Assisted Practice

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

source code:

```
import java.io.*;
```

```
@SuppressWarnings("unused")
```

```
public class SingleLink {
```

```
    Node head;
```

```
    class Node {
```

```
        int data;
```

```
        Node next;
```

```
        Node(int d)
```

```
        {
```

```
            data = d;
```

```
            next = null;
```

```
        }
```

```
    }
```

```
    void deleteNode(int key)
```

```
    {
```

```
        Node temp = head, prev = null;
```

```
    if (temp != null && temp.data == key) {

        head = temp.next;

        return;
    }

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

        prev = temp;

        temp = temp.next;
    }

    if (temp == null)

        return;

    prev.next = temp.next;
}

public void push(int new_data)
{
    Node new_node = new Node(new_data);

    new_node.next = head;

    head = new_node;
}
```

```
public void printList()
{
    Node tnode = head;

    while (tnode != null) {
        System.out.print(tnode.data + " ");
        tnode = tnode.next;
    }
}
```

```
public static void main(String[] args)
{
    Singlelink llist = new Singlelink();

    llist.push(7);
    llist.push(1);
    llist.push(3);
    llist.push(2);

    System.out.println("Created Linked List:");
    llist.printList();

    llist.deleteNode(2);

    System.out.println(
```

```

        "\nLinked List after Deletion of 2:");

        llist.printList();

    }

}

```

output:

