class Node {

int data;

Node next;

public Node(int data) {

this.data = data;

this.next = null;

}

}

public class LinkedList {

private Node head;

public LinkedList() {

this.head = null;

}

public void insert(int data) {

Node newNode = new Node(data);

if (head == null) {

head = newNode;

} else {

Node current = head;

while (current.next != null) {

current = current.next;

}

current.next = newNode;

}

}

public void delete(int key) {

if (head == null) {

System.out.println("List is empty. Cannot delete.");

return;

}

if (head.data == key) {

head = head.next;

return;

}

Node current = head;

Node prev = null;

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

prev = current;

current = current.next;

}

if (current == null) {

System.out.println("Key not found in the list.");

return;

}

prev.next = current.next;

}

public void display() {

Node current = head;

while (current != null) {

System.out.print(current.data + " ");

current = current.next;

}

System.out.println();

}

public static void main(String[] args) {

LinkedList list = new LinkedList();

// Insert elements into the list

list.insert(10);

list.insert(20);

list.insert(30);

list.insert(40);

list.insert(50);

System.out.println("Original List:");

list.display();

int keyToDelete = 30;

list.delete(keyToDelete);

System.out.println("List after deleting " + keyToDelete + ":");

list.display();

}

}