Remove First In Linkedlist

Question

1. You are given a partially written LinkedList class.  
2. Here is a list of existing functions:  
2.1 addLast - adds a new element with given value to the end of Linked List  
2.2. display - Prints the elements of linked list from front to end in a single line. All elements are separated by space  
2.3. size - Returns the number of elements in the linked list.  
3. You are required to complete the body of removeFirst function   
3.1. removeFirst - This function is required to remove the first element from Linked List. Also, if there is only one element, this should set head and tail to null. If there are no elements, this should print "List is empty".  
4. Input and Output is managed for you.

Input Format

Input is managed for you

Output Format

Output is managed for you

Constraints

None

Sample Input

addLast 10  
addLast 20  
addLast 30  
display  
removeFirst  
size  
addLast 40  
addLast 50  
removeFirst  
display  
size  
removeFirst  
removeFirst  
removeFirst  
removeFirst  
quit

Sample Output

10 20 30   
2  
30 40 50   
3  
List is empty

import java.io.\*;

import java.util.\*;

public class Main {

public static class Node {

int data;

Node next;

}

public static class LinkedList {

Node head;

Node tail;

int size;

void addLast(int val) {

Node temp = new Node();

temp.data = val;

temp.next = null;

if (size == 0) {

head = tail = temp;

} else {

tail.next = temp;

tail = temp;

}

size++;

}

public int size(){

return size;

}

public void display(){

for(Node temp = head; temp != null; temp = temp.next){

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

}

System.out.println();

}

public void removeFirst(){

if(head == null){

System.out.println("List is empty");

}else if(head == tail){

head=null;

tail=null;

size--;

}else{

Node temp=head;

head=head.next;

temp.next=null;

size--;

}

}

}

public static void main(String[] args) throws Exception {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

LinkedList list = new LinkedList();

String str = br.readLine();

while(str.equals("quit") == false){

if(str.startsWith("addLast")){

int val = Integer.parseInt(str.split(" ")[1]);

list.addLast(val);

} else if(str.startsWith("size")){

System.out.println(list.size());

} else if(str.startsWith("display")){

list.display();

} else if(str.startsWith("removeFirst")){

list.removeFirst();

}

str = br.readLine();

}

}

}