Kosakosa Linked List

Problem Submissions Leaderboard Discussions

Write a program to create linked list by appending the elements without its duplicate and print the resultant linked list and also the mid element of the linked list.

Input Format

Input consists of a single line of elements that belongs to the linked list.

Output Format

Output should be formatted in 2 lines : First line should be the linked list Second line should be the mid element of the linked list.

Sample Input 0

```
1 2 3 4
```

Sample Output 0

```
1 2 3 4
3
```

Sample Input 1

```
1 2 3 4 5
```

Sample Output 1

```
1 2 3 4 5
3
```


Java 8

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



class node{
    int data;
    node next;
    node(int d){
        data=d;
        next=null;
    }
}
class linkedlist{
    node head=null;
    node old=null;
    void insert(int data){
        node n=new node(data);
        if(head==null){
            head=n;
            old=n;
        }
    else{
        old.next=n;
        old=n;

    }
    }
    void display(){
        node temp=head;
        while(temp!=null){
            System.out.print(temp.data+" ");
            temp=temp.next;
        }
    }
    void mid(){
        node slow=head;
        node fast=head;
        while(fast!=null && fast.next!=null){
            slow=slow.next;
            fast=fast.next.next;
        }
        System.out.println();
        System.out.print(slow.data);
    }
    void dup() {
        HashSet<Integer> seen = new HashSet<>();
        node curr = head;
        node prev = null;

        while (curr != null) {
            if (seen.contains(curr.data)) {
                prev.next = curr.next;
            } else {
                seen.add(curr.data);
                prev = curr;
            }
            curr = curr.next;
        }
    }
}

public class Solution {

    public static void main(String[] args) {
        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
        Scanner z=new Scanner(System.in);
        linkedlist lst=new linkedlist();
        while(z.hasNextInt()){
            int n=z.nextInt();
            lst.insert(n);
        }
        lst.dup();
        lst.display();
        lst.mid();
    }
}
```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code