import java.util.\*;

class Link

{

Node head;

class Node

{

int data;

Node next;

public Node(int d)

{

data=d;

next=null;

}

}

public void push(int newdata)

{

Node newnode = new Node(newdata);

newnode.next=head;

head=newnode;

}

public void append(int ndata)

{

Node nnode = new Node(ndata);

Node ptr=head;

if(head==null)

{

head=new Node(ndata);

}

else

{

nnode.next=null;

while(ptr.next!=null)

{

ptr=ptr.next;

}

ptr.next = nnode;

}

}

public void print()

{

Node ptr=head;

while(ptr!=null)

{

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

ptr=ptr.next;

}

}

}

class Main

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

Link obj = new Link();

System.out.print("Enter the number of elements to be entered ina nlinked list: ");

int n=sc.nextInt();

for(int i=1;i<n+1;i++)

{

System.out.print("Enter the"+" "+i+" "+"element: ");

int input = sc.nextInt();

obj.push(input);

}

System.out.println();

System.out.println("======================================================================");

System.out.println("The Linked List after insertion are: ");

obj.print();

System.out.println();

System.out.println("======================================================================");

System.out.print("Enter the last item to be inserted in the link list: ");

int newdata = sc.nextInt();

obj.append(newdata);

System.out.println();

System.out.println("======================================================================");

System.out.println("The Linked List after insertion are: ");

obj.print();

}

}