// Online Java Compiler

// Use this editor to write, compile and run your Java code online

class node{

int data;

node next;

node prev;

public node(int data)

{

this.data=data;

next=null;

prev=null;

}

}

class DLL{

node head;

node tail;

// int Count

public DLL()

{

head=tail=null;

}

public void Insert(int data)

{

// Count++;

node n=new node(data);

if(head==null)

{

head=n;

tail=n;

}

else

{

tail.next=n;

n.prev=tail;

tail=n;

}

}

public void Print()

{

node curr=head;

while(curr!=null)

{

System.out.println(curr.data);

curr=curr.next;

}

}

public void PrintRev()

{

node curr=tail;

while(curr!=null)

{

System.out.println(curr.data);

curr=curr.prev;

}

}

public void insertAt(int pos,int data)

{

node n=new node(data);

int c=1;

node curr=head;

if(pos==1)

{

n.next=head;

head.prev=n;

head=n;

}

else{

while(curr!=null)

{

if(c==pos)

{

curr.prev.next=n;

n.prev=curr.prev;

n.next=curr;

curr.prev=n;

}

c++;

curr=curr.next;

}

}

}

public void Delete(int val)

{

if(val==head.data)

{

head=head.next;

head.prev=null;

}

if(tail.data==val)

{

node curr=head;

System.out.println(curr.data);

while(curr!=null)

{

if(curr.next.next==null)

{

tail=curr;

tail.next=null;

// break;

}

curr=curr.next;

}

}

if(val!=head.data&&val!=tail.data){

node curr=head;

System.out.println(curr.data);

while(curr!=null)

{

if(curr.data==val)

{

curr.next.prev=curr.prev;

curr.prev.next=curr.next;

}

curr=curr.next;

}

}

}

}

class HelloWorld {

public static void main(String[] args) {

DLL obj=new DLL();

obj.Insert(5);

obj.Insert(191);

obj.Insert(5);

obj.Insert(13);

obj.Insert(5);

obj.Insert(5);

obj.Delete(5);

// obj.Print();

//obj.PrintRev();

}

}