import java.io.\*;

import java.util.\*;

class ArchitectSloution{

public void solve(List<Integer> list){

List<Integer> originalList = new ArrayList<Integer>();

originalList.addAll(list);

Collections.sort(list,Collections.reverseOrder()); //Sorting the listin reverse order

Stack<Integer> stack = new Stack<Integer>();

for(int i=0;i<originalList.size();i++){

System.out.println("Day: "+(i+1));

if(originalList.get(i) != list.get(0)){

stack.push(originalList.get(i));

System.out.println();

}

else{

System.out.print(originalList.get(i)+" ");

list.remove(0);

int j = i-1;

while(list.size()>0 && j>=0 && originalList.get(j)==list.get(0) && !stack.isEmpty()){

System.out.print(list.get(0)+" ");

stack.pop();

list.remove(0);

j--;

//originalList.remove(i);

}

System.out.println();

}

}

while(!stack.isEmpty()){

System.out.print(stack.pop()+" ");

}

}

}

class Assignment3{

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

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

System.out.println("Enter the total number of floors in the building : ");

int n = Integer.parseInt(br.readLine().trim());

List<Integer> list = new ArrayList<Integer>();

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

System.out.print("Enter the floor size given on the day "+i+ " : ");

list.add(Integer.parseInt(br.readLine().trim()));

}

ArchitectSloution obj = new ArchitectSloution();

obj.solve(list);

}

}