// ListMain: use IntList class
public class ListMain {
    public static void main(String[] args) {
        IntList list1 = new IntList();
        IntList list2 = new IntList();
        GetNext getNext = new GetNext();
        int num;
        while(true) {
            num = getNext.getNextInt();
            if (num == 0) break;
            list1.add(num);
            list2.add(num);
        }
        list1.dump();
        while (!list1.isEmpty()) {
            System.out.print(list1.removeMin() + " ");
            System.out.println();
        }
        while (!list2.isEmpty()) {
            System.out.print(list2.removeMax() + " ");
            System.out.println();
        }
    }
}

// IntListMain: use CompList class for ints
public class IntListMain {
    public static void main(String[] args) {
        CompList list1 = new CompList();
        CompList list2 = new CompList();
        GetData getData = new GetData();
        int numWrap;
        while(true) {
            num = getData.getNextInt();
            numWrap = new Integer(num);
            if (num == 0) break;
            list1.add(numWrap);
            list2.add(numWrap);
        }
        list1.dump();
        while (!list1.isEmpty()) {
            System.out.print(list1.removeMin() + " ");
            System.out.println();
        }
        while (!list2.isEmpty()) {
            System.out.print(list2.removeMax() + " ");
            System.out.println();
        }
    }
}

// DoubleListMain: use CompList class for Doubles
public class DoubleListMain {
    public static void main(String[] args) {
        CompList list1 = new CompList();
        CompList list2 = new CompList();
        GetData getData = new GetData();
        double num;
        Double numWrap;
        while(true) {
            num = getData.getNextDouble();
            numWrap = new Double(num);
            if (num == 0) break;
            list1.add(numWrap);
            list2.add(numWrap);
        }
        list1.dump();
        while (!list1.isEmpty()) {
            System.out.print(list1.removeMin() + " ");
            System.out.println();
        }
        while (!list2.isEmpty()) {
            System.out.print(list2.removeMax() + " ");
            System.out.println();
        }
    }
}

// StringListMain: use CompList class for Strings
public class StringListMain {
    public static void main(String[] args) {
        CompList list1 = new CompList();
        CompList list2 = new CompList();
        GetData getData = new GetData();
        String item;
        while(true) {
            item = getData.getNextString();
            if (item.equals("quit")) break;
            list1.add(item);
            list2.add(item);
        }
        list1.dump();
        while (!list1.isEmpty()) {
            System.out.print(list1.removeMin() + " ");
            System.out.println();
        }
        while (!list2.isEmpty()) {
            System.out.print(list2.removeMax() + " ");
            System.out.println();
        }
    }
}