class Name {

String name;

//constructor

public String getName() {

return name.substring(0,2); //returns just substring of first two characters.

}

}

class NameComparator implements Comparator<Name> {

public int compare(Name n1, Name n2) {

if (n1.getName().equals(n2.getName()))

return 0;

else

return n1.getName().compareTo(n2.getName());

}

class Main {

public void main(String[] args) {

int numNames = Integer.parseInt(br.readLine());

NameComparator namecomp = new NameComparator();

while (numName!=0) {

for (int i=0;i<numName;i++) {

namearr[i] = new Name(br.readLine());

}

Arrays.sort(namearr, nameComp);

for (int i=0;i<numName;i++) {

pw.println(namearr[i]);

}

numNames = Integer.parseInt(br.readLine());

if(numNames !=0) {

pw.println();

}

}

}

}