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## 10. Odd Couple

**Program Name:** Odd.java

**Input File:** odd.dat

Felix and Oscar were unlikely roommates in the television series *The Odd Couple*. Felix, being the fastidious one, placed unique matching letters on the bottom of both shoes of each pair of Oscar's shoes to make it easier for Oscar to keep his shoes arranged in pairs. Knowing when to fight his battles, Felix did not insist that the left shoe be on the left of the matching right shoe but did insist that the shoes be lined up in alphabetical order. In one episode, Felix finds Oscar's shoes neatly arranged in a row on the floor of Oscar's closet but not in alphabetical order. Felix can not stand the lack of order and since this seemed to happen frequently, Felix needs you to write a program that will tell him how to arrange the shoes so they will be in alphabetical order.

Each line of your input file will have an even number of shoes that will indicated by a string of capital letters of the alphabet. You will rearrange the shoes so matching shoes are next to each other and are in ascending alphabetical order.

### Input

The first line of input will contain a single integer  $n$  that indicates the number of sets of shoes to follow. Each of the next  $n$  lines will contain a single string with an even number of capital letters. Each letter represents one shoe and every shoe will have exactly one match.

### Output

For each line of input, you will print how the shoes will be arranged when placed in alphabetical order.

### Example Input File

```
3
ACBBAC
AFTTERAFER
AWTZZTWA
```

### Example Output to Screen

```
AABBCC
AAEEFFRRTT
AATTWWZZ
```