1507 - Sorting Cards

Description

A standard deck of playing cards consist of 52 cards. Each card has a face value and a suit. Face values are labelled A, 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K. Suits are named Spade, Heart, Club, Diamond. Given a playing card hand (a subset of the standard deck of cards), you are asked to sort the hand, ordered by face value first, and, if two cards have the same face value, by suit. Use the ordering given in the previous paragraph.

Input specification

Input starts with a line containing a positive integer **H** <= 300, representing the number of card hands to follow. Each of the next **H** lines is a card hand and starts with an integer **N** (1 <= **N** <= 52), the number of cards in the hand. It is followed by a space separated list of **N** cards. Each card is represented by two characters:

1. The first character is A, 2, 3, 4, 5, 6, 7, 8, 9, T, J, Q or K and denotes the face value (notice that we use T instead of "10" to simplify input parsing)
2. The second character is S, H, C, or D and denotes the Spade, Heart, Club, or Diamond suit, respectively.

You can assume that the cards in one hand are distinct.

Output specification

For each playing card hand, output in a single line the hand sorted by the criteria described earlier.

Sample input

```
3
4 AC 2H 3S 4D
5 3C 3H TS 3D 2D
2 TS AS
```

Sample output

```
AC 2H 3S 4D
2D 3H 3C 3D TS
AS TS
```

Hint(s)

Source	
Added by	**ejaltuna**
Addition date	2011-10-12 22:21:01.0
Time limit (ms)	1000
Test limit (ms)	1000
Memory limit (kb)	65536
Output limit (mb)	64
Size limit (bytes)	100000
Enabled languages	C C# C++ Java Pascal Perl PHP Python Ruby Text