# Problem C: Majsoul

Time Limit: 1 Sec  Memory Limit: 128 MB
Submit: 558  Solved: 240
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## Description

Mahjong, one of the most famous games in China, has aroused lanran's interest. However, it is a little bit complex for a new bee and he needs your help: To sort **13** Mahjong tiles in order, so that he can make decision much easier. Here is the rule of sorting Mahjong tiles:

1.Mahjong tiles can be roughly divided into four types, ' 萬' , ' 筒', ' 条', ' 字'. For **the first three types**, each type has 9 different numbers('1' to '9'), usually noted by '1萬', '2萬','1条','2条'. If you still get puzzled, just imagine that we express the cards in 'UNO' by a number and a Chinese character rather than a colour. For **the last type**, there are only 7 kinds of tiles, ' 東', ' 南', ' 西', '北', '白', '發','中'.

2.' 萬 ' noted by **'Wx'**( x is an integer between '1' to '9'), for example (W1,W2,...). Similarly, ' 筒 ' by **'Tx'**, ' 条 ' by **'Yx'**. We name those 7 tiles of the last type by **'E','S','W','N','B','F','Z'** correspondingly.

3.Here is the priority of Mahjong tiles:
**Wx>Tx>Yx>E>S>W>N>B>F>Z**
For the same type:
**W1>W2>W3>W4>W5>W6>W7>W8>W9**

**Notice that: For each kind of tile, there are totally four duplicate ones.**



| W1 | W9 | T1 | T9 | Y1 | Y9 | E | S | W | N | B | F | Z |

## Input

The first line of input is the number of test cases T (1<=T<=200)
For each test case, there are 13 strings in one line, showing the Mahjong tiles you have.

## Output

For each test case, output the ordered Mahjong tiles in one line.

## Sample Input

```
2
W1 S S N E N E N W E W W S
T1 T2 T3 T5 T8 T9 T6 T4 T7 T9 T9 T1 T1
```

## Sample Output

```
W1 E E E S S S W W W N N N
T1 T1 T1 T2 T3 T4 T5 T6 T7 T8 T9 T9 T9
```

## HINT

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