4. Four of a Kind

Program Name: FourKind.java   **Input File: fourkind.dat**

There are many games that are played with 5 standard six-sided dice with numbers one through six on a side. In a poker type game, one of the hands a player can have is four of a kind. A four of a kind hand consists of four dice that have the same number and the remaining die has a different number. For example, `3 3 3 3 5` is a four of a kind hand; `3 3 3 3 3` and `2 3 3 4 3` are not four of a kind hands. If two or more hands have four of a kind, ties are broken first by the number on the four matching dice, with one being the lowest and six being the highest. If four dice match in two or more hands, the tie is broken by the fifth die, again with one being the lowest and six being the highest. If the tie is not broken by one of these two methods, a tie exists.

For the purpose of this program, you will be given the outcomes after each of three players has rolled their dice. You are to determine if any of the players has a four of a kind hand and, if more than one player has a four of a kind hand, which player or players have the highest four of a kind hand.

Input
The first line of input will contain a single integer `n` that indicates the number of games to be played. For each game, there will be three lines with each line containing:
- The player's first name followed by a space.
- Five integers indicating the numbers on each of the five dice, each separated by a space.

Output
For each game
- If there is exactly one person with a four of a kind hand, you will print the name of that person.
- If there is more than one person with a four of a kind hand, you will print the name of the person with the highest four of a kind. For example, a hand of `5 5 5 5 2` would beat a person with a hand of `4 4 4 4 6`.
- If there is more than one person with the same four of a kind hand, you will check the fifth die to see which hand is the highest and print the name of the person with the highest hand.
- If there are two or more people with the same hand, then there is a tie and you will print, on a single line, the word `TIE` followed by the names of the players who were tied in alphabetical order and separated by a space.
- If no hand contains four of a kind, you will print `NO WINNER`.

Example Input File
```
4
MARY 4 4 4 4 3
JOAN 4 4 4 2 3
ART 3 3 3 2 1
RON 4 4 4 4 1
ALEX 4 3 4 4 4
CHEZ 2 6 6 6 3
AMY 4 4 4 4 5
REX 4 5 4 4 4
RICK 2 2 4 2 3
GEORGE 5 4 5 4 1
JOHN 5 5 4 5 3
DICK 1 2 3 4 5
```

Example Output to Screen
```
MARY
ALEX
TIE AMY REX
NO WINNER
```