

Arena

Program Name: arena.java

Input File: arena.dat

You are a programmer on a team working on a new RPG called Arena. You have been assigned to write the battle engine of the game. Write a program that will take in the attacks and blocks of two fighters and determine the victor of the battle.

Each battle will consist of 5 rounds, and each fighter starts a battle with 5 health. During each round, each fighter performs an attack and a block at one of three heights: low, medium, or high. If a fighter attacks a height that is not blocked by the other fighter, the attack inflicts damage of 2 health points, otherwise no damage is incurred. After a given round, if either fighter is out of health, the battle is over. If only one fighter survives a given round, that fighter is the winner. If both fighters die in the same round or both end the match with equal health, the battle ends in a draw. Otherwise, the victor is the fighter with the most remaining health.

Input

The first line of input will be a single integer indicating the total number of battles (from 1 to 20). Each battle will consist of 4 rows, each containing 5 integers separated by single spaces. The first and second rows indicate the first fighter's attack and block heights respectively, and the third and fourth rows contain similar information for the second fighter. Attack/block heights are encoded as numbers: 1 = high, 2 = medium, 3=low.

Output

For each battle, print a statement declaring the outcome of the battle. If there was a victor, output, "<Winner> is the victor!" where <Winner> is the fighter who has won the battle (either "Fighter 1" or "Fighter 2"). If the battle is a draw, output, "This battle ended in a draw!"

Example Input File

```
3
1 1 1 1 1
3 3 3 3 3
2 2 2 2 2
1 1 1 1 1
1 3 2 1 2
2 2 1 1 2
3 3 3 3 3
2 2 2 2 2
1 1 2 3 2
2 3 2 1 3
2 3 2 1 3
1 1 2 3 2
```

Example Output To Screen

```
Fighter 2 is the victor!
Fighter 2 is the victor!
This battle ended in a draw!
```