



Bisques

Time Limit: 1.0 s | Memory Limit: 512 MiB

The New Zealand Pastoral Classic (NZPC) is the most prestigious lawn sports tournament in the country, drawing teams from every region for a weekend of fierce but polite competition. With players of wildly different abilities competing together, keeping matches fair is crucial – and that is exactly what bisques are for.

In an association croquet (AC) handicap doubles event, each side may be awarded bisques. These are free turns given according to the handicaps of the 4 players so that weaker teams may compete with stronger teams on more even terms. In AC, handicaps range from -3 for the strongest players up to +24 for beginners.

To calculate bisques, each team calculates the total handicap of their two players. The difference between the two totals is then halved to give the number of bisques allocated to the weaker side, which is the team with the higher total handicap. This will be zero if the total handicaps are equal. Half bisques are allowed, but no points may be won when using a half bisque.

Given the a list of players and their handicaps, determine the number of bisques awarded and to which team.



Input

The input consists of 4 lines, each representing a player in a match. The first and second players form one team, the third and fourth the other.

Each line consists of a name consisting only of letters, followed by a space, followed by an integer representing that player's handicap (in the range -3 to +24 inclusive). + signs will not be used.

Output

Output a single line showing the number of bisques awarded and to which team.

If one team receives bisques, the line will say

`<B> bisques are awarded to <Player 1> and <Player 2>.`

where `<B>` is the number of free turns, and `<Player 1>` and `<Player 2>` are the appropriate team members in the order they appear in the input.

However, if `<B>` is 1, the line must instead say

`1 bisque is awarded to <Player 1> and <Player 2>.`

If the total handicaps are equal, the line will say:

`No bisques are awarded.`

Sample Input 1

```
Albert 8
Bernice 4
Chen 3
Dimitri 12
```

Sample Output 1

```
1.5 bisques are awarded to Chen and Dimitri.
```

NZPC26

Sample Input 2

```
Eddie -1
Freda 13
Garfield 5
Hettie 7
```

Sample Output 2

```
No bisques are awarded.
```

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