

B2 – Three-card poker

Consider the following simplified card game. The deck only has cards from 1 (low) to 9 (high) (i.e. no tens, jacks, queens, or kings, and aces are treated as 1's), and all four suits are represented (clubs, diamonds, hearts, and spades). In this game, each player gets three cards, and makes the best hand possible. The ranking of the hands is slightly different from regular poker:

- The highest hand is a *straight flush*, where the player has three consecutive cards of the same suit. The 4, 5, and 6 of clubs is a straight flush.
- The next highest hand is a *three of a kind*, where the player has three of the same number. The 9 of clubs, 9 of spades, and 9 of hearts would make a three of a kind
- The next highest hand is a *flush*, where the player has three of the same suit (but not consecutive, because that would be a straight flush). The 1, 5, and 8 of diamonds would be a flush.
- The next highest hand is a *straight*, where the player has three consecutive cards (but not all in the same suit, because that would be a straight flush). The 2 of diamonds, 3 of diamonds, and 4 of hearts would be a straight.
- The lowest hand is a *nothing*, which catches any hand that doesn't make one of the above qualifications. (Notice that a pair is a nothing hand by these rules)

All hands in one ranking are better than all hands in a lower ranking, regardless of the actual cards that make the hand. In other words, a three of a kind made out of 1's beats a straight (but not a straight flush) made out of 9, 8 and 7. If two hands are in the same ranking, the higher hand is the one that has the highest total of numbers on the cards.

Your task is to read in two hands (where the cards in a hand can be arranged in any order), and to determine which one is higher, or if they are tied.

Input:

Each input instance will list 6 cards. Each card will be of the form NS , where N is the number of the card (a digit between 1 and 9), and S is the suit (one capital letter denoting the first letter of the suit). The first three cards will comprise the first hand, and the next three cards will be the second hand.

Output:

Print one line stating:

Player n wins.

Where n can be the 1 or 2, meaning that player 1 is the first hand, player 2 is the second hand. If there is a tie, print the line:

There is a tie.

Input and output samples:

Input:
9C 9D 9H 9S 1S 2D

Output:
Player 1 wins.

Input:
9C 9D 9H 1C 1D 1H

Output:
Player 1 wins.

Input:
2D 3H 4H 2S 4S 3S

Output:
Player 2 wins.

Input:
2S 3H 7S 5S 5S 2C

Output:
There is a tie.