



Introduction

With my friends, we like to watch soccer matches and bet for the winner. A bet consists on playing 3 coins per match and specifying the result of the match, for example 3-1 if locals wins scoring 3 goals and visitors score 1 goal. We only allow the same bet to happen twice. Each of us can only make a maximum of two bets. All coins collected by bets are for the winner of the bet, or split in two in case there are two winning bets. Your friends have requested you, as the programmer of the group, to write a program that helps compute the bet results.

Input

The first line of the input is the number of bets, followed by a sequence of bets in the form of the name of a friend and their bet in the format local-visitant. The last line is the actual result of the match.

John 3-1 Peter 1-2 Laura 3-0 John 3-0 Mark 3-1 Peter 0-3 3-1

Output

The output of the program is the total amount of coins collected, number of different players and the list of players ordered by the amount of money won from most to least. In case of a tie, order alphabetically the players.

Total 18 Players 4 John 9 Mark 9 Laura 0 Peter 0