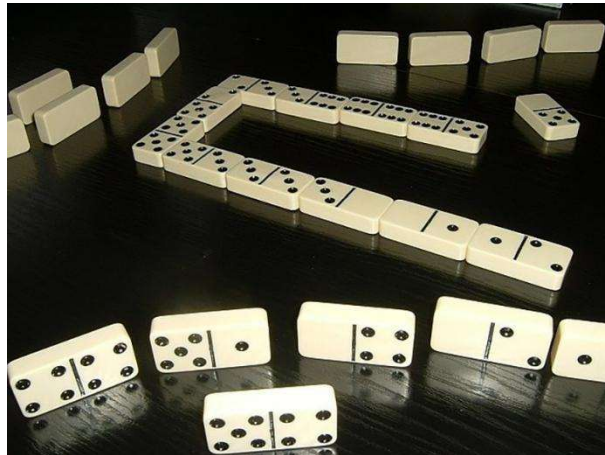


D. The Point Of Each Player

Time Limit: 3 seconds

Problem description



A Domino set

A Domino set will consist of 28 blocks. Each Domino block is a rectangular block, with a dividing line in the middle, forming two squares. On each square face will contain holes or blank. Each square face has a maximum of 6 holes. Thus, Domino blocks will be a pair of numbers. For example: 6:1, 2:2, 3:4, 0:0.

The pair 0:0 is called a Bull block, in the end of the game, the Bull is equivalent to 13 points.

Rules for a 4-player game

When any player has no blocks left, the game ends and the players' ranks are determined

- The winner will get 3 points: is the first player has no blocks left or minimum score of the remaining blocks.
- 1st loser will get 0 points: is the person with 2nd highest score of the remaining blocks.
- 2nd loser will get -1 points: is the person with 3rd highest score of the remaining blocks.
- 3th loser will get -2 points: is the person with maximum score of the remaining blocks.

If the total points of 2 players are equal, the rank is calculated based on the number of blocks. Whoever holds more blocks will be a loser.

If one of the losers holds the Bull, the winner will be awarded 13 points and the one who holds the Bull is penalized 13 points.

Mission

Your mission is based on the remaining blocks of 4 players, calculate the point of each player.

Note

- The maximum length of string of each player is 100 characters.

See some sample test cases:

Test case	INPUT	OUTPUT	DESCRIPTION
1	1:1	3	2 holes => winner => 3 points
	2:0,6:6	-2	14 holes => 3rd loser => -2 points
	5:3	-1	8 holes => 2nd loser => -1 points
	0:4	0	4 holes => 1st loser => 0 points
2	0:0,1:2	-15	The Bull + 3 holes = 16 holes => 3rd loser => -2 - 13 = -15 points
		16	Has no blocks => winner => 3+13=16 points
	3:3	-1	6 holes => 2nd loser => -1 points
	1:0	0	1 holes => 1st loser => 0 points