

Skill based Matchmaking

You are given **N** players who want to play a **M** vs **M** match. Each Player has an attribute **Score** which is a positive integer.

The program needs to find possible unique matches of M vs M players depending on their **Score**. The matches should be sorted based on the **quality** of each match. The **quality** of the match is defined as the closeness of the scores between the teams.

Example for quality

Let's say we have 1vs1 matches with the following scores-

Match1 100 vs 98

Match2 60 vs 40

Match3 62 vs 64

The sorted order here would be:

Match1, Match3, Match2

For matches with multiple players on one side, the average score should be used.

Input-

Number of players on each side: M

Example-

2

Input-

<name of player 1> <score>

<name of player 2> <score>

A blank line denotes end of input.

Example-

bleh 85

Aequitas 90

akS 87

lamiV 20

Output-

sorted list of (best to worst)

<comma separated list of players in team A>(average score) **vs** <comma separated list of players in team B>(average score)

Example-

bleh,akS (86) vs Aequitas,lamiV (55)

bleh,Aequitas (87.5) vs akS,lamiV (53.5)

bleh,lamiV (52.5) vs Aequitas,akS (88.5)

Formatting variations in the input/output are okay. Your program will be reviewed by a human being.