
LEVEL 6

Corpo:

I can already smell it. The greens, the fame. Think, just think how much we accomplished together already.
...

What do you mean I didn't do anything. You ungrateful br...

Sigh, rookie, you haven't learned a thing about this life, didn't you?

If all this fails now, who do you think takes the blame?

... Of course it's not you!

Corpo:

...

Of course it’s not you!

Corpo:

Let’s talk after this last task, shall we? I’m in meetings all day, talking to everyone, not getting anything done and attempting to fix stuff which should have not even popped up if previous suits would have done their job properly.

I’m a busy guy, being paid for being busy.

Task for Level 6:

Be the matchmaker!

- For the last level you'll be the matchmaker.
- You will be given a list of players that want to play again. **Your task is to group them in teams and put them in games against each other.**
- Some constraints apply:
  - Each player has to be **assigned to a game and only one game.**
  - In any game, **the difference between the lowest rating and the highest rating has to be less or equal to than a given threshold.**
- Your goal will be to **get a score less than or equal to another given threshold.**

- The **score you get for one game** is given by the **absolute difference between the team ratings.**
- The **score for the whole answer** is the **sum of the scores** for each game that you matchmake.
- Example:
  - If you match A (1700) and B(1600) against C(1650) and D(1670), the score is 20.
- **Ratings of players are calculated the same as in the previous levels.**

	Input	Output
Format	gameCount playerCount playersPerTeam pId_0 pS_0 pId_1 pS_1 pId_2 pS_2 … pId_{n-1} pS_{n-1} *… repeated for each game...* pId_0 pS_0 pId_1 pS_1 pId_2 pS_2 … pId_{n-1} pS_{n-1} **maxEloDifference scoreThreshold** **queueSize** **qP_0** **qP_1** ***… repeated for queueSize times …*** **$qP_{queueSize-1}$**	**pId_0 pId_1 pId_2 … pId_{n-1}** ***… repeated for each matchmade game...*** **pId_0 pId_1 pId_2 … pId_{n-1}**
Types	gameCount - Integer. Represents the number of games played for this test case playerCount - Integer. Represents the number of players involved in this test case. playersPerTeam - Integer. Amount of players in one team n - Integer. Amount of players in one game. 2*playersPerTeam pId_i - Integer. Id of the i-th player from one game. If i < playersPerTeam then the player is in the first team, otherwise in the second team. pS_i - Integer. The score obtained by the i-th player. **maxEloDifference - Integer. Max difference between to players in the same game** **scoreThreshold - Integer. Get below this score and pass this level.** **queueSize - Integer. # of players that queued again** **qP_i - Integer. Id of the i-th player that queued**	**pId_i - Integer. Player Id.** **If i < playersPerTeam, player belongs to first team** **Otherwise player is in the second team.**

	Input	Output
Example	9 9 2 2 11840 4 13422 7 1204 8 1865 2 14162 4 16055 5 14386 7 15941 2 13441 3 16987 4 20732 6 18352 0 13458 1 14146 3 18889 5 12225 0 13671 1 14370 2 14906 7 13510 0 8996 3 9075 6 15877 8 22216 0 6780 2 5412 3 4018 8 4464 0 7169 1 7535 2 9969 7 9036 0 4849 1 5097 2 19284 6 19351 90 24 8 0 1 2 4 5 6 7 8	6 8 7 4 5 1 2 0


PLAY
TO
WIN
MOBA
MATCHMAKING
GOOD LUCK