Problem B: League of Legends

Maybe you've heard of the Multiplayer Online Battle Arena (MOBA) game called "League of Legends." It's played with two teams of 5 players on each side. Each player controls a **champion**, with unique abilities specially designed to kill the other side's **champions**. Upon death, a **champion** waits a short while and respawns at the base.

After the game ends, it's customary to tell your teammates exactly how bad they are at playing: typically you ask them to uninstall the game. The performance of a player is measured using the **kill-death ratio (KDA)**, which is the number of kills divided by the number of deaths (if a player has no deaths, their **KDA** is ∞).

Surely the player with the lowest **KDA** on the losing team didn't perform well, so let's tell him to uninstall. We'll also tell everyone on his team with the same **KDA** as him to uninstall. Furthermore, anyone else on the losing team who had a **KDA** less than $\frac{1}{2}$ played badly, and should uninstall. The winning team is not exempt from having bad players: any player on the winning team with a **KDA** less than $\frac{1}{3}$ should also be told to uninstall.

Input Specification:

The input begins with an integer $T \leq 25$, the number of test cases. Each test case is 10 lines long. The first five lines are the 5 players on the winning team: each line begins with a string denoting the player's name (without spaces in the name), followed by two non-negative integers $K \leq 10^9$ and $D \leq 10^9$, representing that player's **kills** and **deaths**, respectively. Following this are 5 lines of similar format, but for the losing team.

Output Specification:

For each test case output one line for each person that should uninstall: `<NAME> plz uninstall`

Print players in the same order they were given in the input. Do not print blank lines.

Sample Input:

```
1
JarvanIV 5 1
Udyr 1 1
Ahri 1 4
Vayne 4 1
Sona 1 4
Heimerdinger 0 5
Ashe 1 1
Kassadin 8 2
Darius 1 2
Elise 1 2
```

Sample Output:

```
Ahri plz uninstall
Sona plz uninstall
Heimerdinger plz uninstall
```

Andrew Henrey