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Problem A

Pennant race

The Korea Baseball Organization (KBO) of South Korea is a professional baseball league. KBO was originally founded with six teams in 1982 and currently has eight teams. Each team plays 133 games in the regular season. The KBO season culminates in its championship series, known as the Korean Series. Currently, the top four teams qualify for the post-season based on (win/the number of games) records; starting from the 2009 season, tied games count as a loss for both teams for percentage calculation purposes (from 2002 until 2007 they were considered a “no game”; prior to this they counted as half a win and half a loss). The team with the best record gains a direct entry into the Korean Series, while the other three teams compete for the remaining place in a step-ladder playoff system:

- Semi-playoff: 3rd vs. 4th; best 3 out of 5 games
- Playoff: 2nd vs. Semi-playoff winner; best 3 out of 5 games
- Korean Series: 1st vs. Playoff winner; best 4 out of 7 games

You are to program to decide which team gains a direct entry into the 2009 Korean Series when teams' standings are given. Assume that a team of the best record is unique.

Input

Your program is to read the input from standard input. The input consists of T ($1 \leq T \leq 20$) test cases. The number of test cases T is given in the first line of the input. Each test case starts with a line containing an integer n ($1 \leq n \leq 10$) which represent the total number of teams in the pennant race. The next n lines are given with B , w , l and t (separated by a space), where B represents a team name (a string of length less than 10), w , l , t represents the number of games in which the team had won, lost, tied ($0 \leq w \leq 133$, $0 \leq l \leq 133$, $0 \leq t \leq 133$).

Output

Your program is to write to standard output. Print the name of team which gains a direct entry into the 2009 Korean Series for each test case.

Sample Input	Output for the Sample Input
3 3 DOOSAN 84 0 49 KIA 118 3 12 SK 93 27 13 4 Haitai 101 25 7 LG 22 39 72 Hanhwa 17 79 37 Samsung 28 5 100 9 Bears 51 60 22 Eagles 11 54 68 Giants 107 19 7 Twins 96 33 4 Lions 21 92 20 Wyverns 60 63 10 Tigers 109 14 10 Heroes 26 28 79 Haitai 106 14 13	KIA Haitai Tigers