Problem I. Quidditch Match

Input: standard
Output: standard
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Quidditch is the most popular sport among the students of Hogwarts School of Witchcraft and Wizardry. Quidditch is played between two teams of N players each, in an oval or rectangular stadium (This season, the oval stadium is under repair, and therefore all the matchs are played always in the rectangular one).

If you know Harry Potter, you may know a lot of things about this game: its rules, its punctuation system, the positions of the players and that while Harry is on the ground, his team Gryffindor will win to Slytherin (come on, we all know that Harry always defeats Malfoy).

Madame Hooch is the flight instructor and Quidditch referee in Hogwarts. Although she admires Harry's skills in Quidditch she is tired of seeing him win always. For this reason, she has decided to create an alternative system of punctuation, in which at least on some occasions, Slytherin could win Gryffindor.

The game as it is well know ends when the seeker catchs the snitch. In that moment, Madame Hooch registers the position of each player on the plane of the stadium (Although the players compete flying over their brooms, in the scheme of Madame Hooch the height to which they fly is despised and only takes into account their location in the plane in two dimensions).

In the Madame Hooch's system, the team who *dominates* the most part of the field when the match ends wins the game. She consider that all the players fly at the same speed and therefore, each player dominates the region that surround him and which has all the points of the field that are most close to him than to any other player, because flying at the same speed, he could reach to any point of his region before any other player.

Under this idea, the 2D map of the field is divided into $2N$ regions, one for each player. Then Madame Hooch sums the area of the regions belonging to each team, declaring winner to that team that dominates the greater area of the Quidditch stadium.

However, doing this calculation is really tedious, and since Madame Hooch has not found an spell that calculates the winner, she has decided to appeal to muggle programming. Can you help her?

Input

The first line of the input contains an integer T, the number of test cases. Each case begins with a line with 4 integers X_0, Y_0, X_f and Y_f ($0 \leq X_0, Y_0, X_f, Y_f \leq 100$; $X_0 + 2 \leq X_f$, and $Y_0 + 2 \leq Y_f$), the coordinates of the lower left point and the upper right point in the Cartesian plane. The next line contains an integer N ($1 \leq N \leq 10$), the number of players of each team. Following there are N lines with the integers x and y ($X_0 < x < X_f$ and $Y_0 < y < Y_f$), the coordinates of each Gryffindor's player. Then N more lines come, with two integers x and y each ($X_0 < x < X_f$ and $Y_0 < y < Y_f$), the coordinates of each Slytherin's player.

All the coordinates given are integers values. However, keep in mind that the regions defined for each player may have decimal vertices.

Output

Print a single line for each case, the name of the winner team ($Gryffindor$ or $Slytherin$) according to Madam Hooch's calculation. It is guaranteed that there will be no draws.

Input	Output
1 0 0 2 8 3 1 1 1 2 1 6 1 4 1 5 1 3	Gryffindor