Problem E. Observer Game

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	256 mebibytes

Yuto and Platina are trying to play a new game called the guarding game. The game is played on an $N \times M$ rectangular grid ($N \leq M$).

The game always starts with Yuto, and the two take turns placing observers in the desired empty position on their turn.

In this game, "safe state" means that there is at least one observer in every $K \times K$ square that is completely contained within the grid.

At the moment the game is in a safe state, the game ends, and the player who played the most recent turn wins.

The players tried T games with different parameters. When both are playing their best, let's predict who will win for every game!

Input

The first line gives the number of games, T, to be played ($1 \leq T \leq 10^5$).

Then T lines follow each containing three integers N, M and K ($1 \leq N \leq 3000$, $N \leq M \leq 10^5$, $1 \leq K \leq N$), representing the dimensions of the grid and the size of the square, respectively.

Output

For each case, print the winner's name: either "Yuto" or "Platina".

Example

standard input	standard output
2 1 2 1 3 3 2	Platina Yuto