

Problem E Queen of KTV I

Time limit: 3 seconds

Memory limit: 1024 megabytes

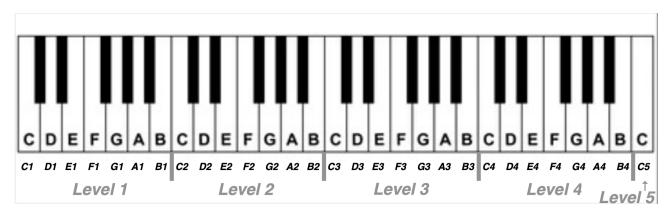
Problem Description

MIMI loves going to karaoke with her friends, and they all call her the "Queen of KTV." A few days ago, her crush invited her to go sing karaoke together next week. While MIMI is excited to showcase her beautiful voice, she is also worried about accidentally hitting off-pitch high notes.

To avoid embarrassment, MIMI comes up with a perfect plan:

- If the *highest note of a song* is higher than the *highest note MIMI can sing*, she will excuse herself to go to the restroom and stay away until the song ends.
- If the *highest note of a song* is lower than or equal to the *highest note MIMI can sing*, she will stay and sing the song.

Notice that, on a piano keyboard, the keys on the right produce higher pitches, while the keys on the left produce lower pitches.



Since MIMI is not very good at judging pitch, she asks you to write a program that determines which songs she can sing and which ones she should escape from.

This problem guarantees that both MIMI's highest singable note and the song's highest note will always be one of C, D, E, F, G, A, or B, with no sharps (#) appearing.

Input Format

Your program is to read from standard input. The input consists of several test cases. The first line contains a character Note and an integer Level. This represents the highest note MIMI can sing on a keyboard. The second line contains a positive integer T, the number of songs to evaluate. The next T lines each contain a character Note and an integer Level, representing the highest note of the next song in the karaoke playlist.



Output Format

Your program is to write to standard output. Output T lines. Each line represents the decision of a song: If the song's highest note is higher than MIMI's range, output "Plan Toilet". Otherwise, output "Plan Singing".

Technical Specification

- $Note \in \{C, D, E, F, G, A, B\}$
- $1 \le Level \le 5$
- $1 \le T \le 1,000$

Sample Input 1

Sampl	le O	utpi	ıt 1
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Sample Input I	Sample Output 1
	Plan Singing
4	Plan Toilet
C4	Plan Singing
B4	Plan Toilet
G2	
C5	