Forgery

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	1024 megabytes

Camille is attending an auction to acquire some new artworks for their gallery. The auction only offers black-and-white artworks on a grid. However, they suspect that some of the artworks may be forged!

Luckily, any reputable artist would sign their name on their work, so Camille plans to inspect the art closely to determine whether the signature is present. Given the signature and the full artwork, help Camille decide whether the artwork is genuine or a forgery.

Input

The first line of input consists of four space-separated integers r_1, c_1, r_2 and c_2 ($1 \leq r_1 \leq r_2 \leq 100$, $1 \leq c_1 \leq c_2 \leq 100$), representing the number of rows and columns in the signature and the artwork respectively.

r_1 lines follow, the ith of which contains a string $s_{i,1}s_{i,2}\ldots s_{i,c_1}$, where the jth character is either '`.`' or '`*`', denoting a white or black pixel respectively in the signature.

r_2 lines follow, the ith of which contains a string $s_{i,1}s_{i,2}\ldots s_{i,c_2}$, where the jth character is either '`.`' or '`*`', denoting a white or black pixel respectively in the artwork.

Output

Output one line, containing only the word "`Genuine`" (without punctuation) if the signature appears in the artwork, or "`Forgery`" (without punctuation) otherwise.

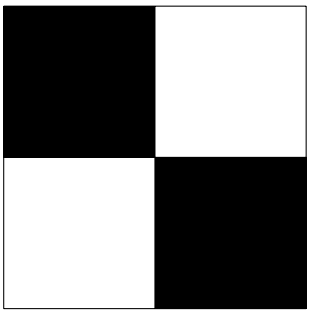
The signature must appear completely unchanged in the artwork, that is, it must be contiguous, not enlarged, and not rotated.

Examples

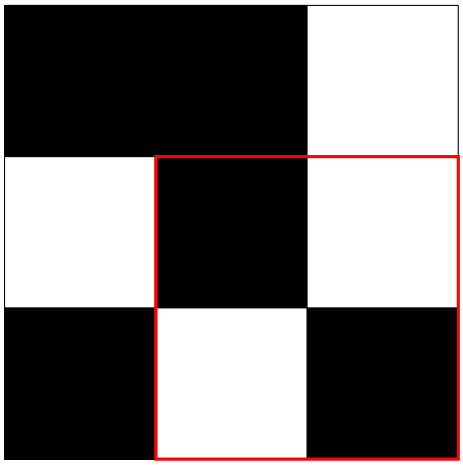
standard input	standard output
2 2 3 3 *. .* **. .*. *.*	Genuine
1 2 2 3 ** *.* *.*	Forgery
2 2 2 2 *. .* .* *.	Forgery
2 2 2 2 ** *. ** *.	Genuine

Note

In the first example, the artist's signature is



and the artwork is



featuring the signature in the bottom-right corner.