
Search In Matrix

Input file: **standard input**
Output file: **standard output**
Time limit: **2 seconds**
Memory limit: **64 megabytes**

Given two numbers N and M , a 2D array of size $N * M$ and a number X . Determine whether X **exists** in the 2D array A or **not**.

Input

First line contains two numbers N, M ($2 \leq N, M \leq 100$) N donates number of rows and M donates number of columns.

Each of the next N lines will contain M numbers ($1 \leq A_i \leq 10^5$).

Last line contains a number X ($0 \leq X \leq 10^5$) described above.

Output

Print “**will take number**” if the number **doesn’t exist** in the 2D array otherwise, print “**will not take number**”.

Examples

standard input	standard output
2 2 1 2 3 4 3	will not take number
2 2 1 2 3 4 10	will take number