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# Binary Search

Input file:            `standard input`  
Output file:        `standard output`  
Time limit:         1 second  
Memory limit:      256 megabytes

Given 2 numbers  $N$  and  $Q$ , array  $A$  of  $N$  numbers and  $Q$  queries each one contains a number  $X$ .

For each query print a single line that contains “**found**” if the number  $X$  exists in array  $A$  otherwise, print “**not found**”.

## Input

First line contains two numbers  $N, Q$  ( $1 \leq N, Q \leq 10^5$ ).

Second line contains  $N$  numbers ( $1 \leq A_i \leq 10^9$ ).

Next  $Q$  lines contains  $X$  ( $1 \leq X \leq 10^9$ ).

## Output

Print the answer for each query in a single line.

## Example

standard input	standard output
5 3	found
1 5 4 3 2	found
5	not found
3	
6	