1 Number Plate

Shyam is very particular about the numbers on the number plates of his vehicles.He buys/registers/reserves these numbers such that the digits in the number are continuous(need not have the same order). Ex: 4576, 4657, 7645,5467. Help Shyam in deciding on the numbers that can be used for his vehicle(s)

Note: The vehicle numbers can range from 1 to 1000000

Input:
Input contains the numbers (m)
Output:
YES or NO (in Capitals)

Input Constraints:
1 <=c <= 1000
1 <=m <= 1000000

Input/Output

Input	Output	Comments
3546	**YES**	Digits in the numbers are in a continuous sequence, though not in the same order.
614578	**NO**	Digits in the numbers are not in a continuous sequence.

2. People and Distances

You are given the top view of a ground, where there are two values: '0' and '1'. Each '1' denotes that there is a person standing at that

position in the ground. Recently Raman was asked to find the number of distinct pairs of people who have given manhattan distances between them.

Raman doesn't like to disappoint and hence he has come to you for help.

For more information on Manhattan distance, see here.

https://xlinux.nist.gov/dads/HTML/manhattanDistance.html

Input Format :

-- The first line of the input contains two space-separated integers 'n' and 'm' denoting the number of rows and number of columns in the ground.

Then 'n' lines follow, each of which contains a string containing '0's and '1's.

The next line contains the value of 'q' denoting the number of queries.

Each of the following lines contain one integer denoting the distance.

Output Format :

Print q lines, each containing the number of distinct pairs of people who have manhattan distance equal to the given manhattan distance.

It is guaranteed that the distance given in query will be between 1 and n+m-2 (both inclusive).

Input/Output

Input	Output	Comments
3 4 0001 0100 0010 5 1 2 3 4 5	0 1 2 0 0	Input: Explanation: