GPS Navigation

Time Limit: 2.0s **Memory Limit:** 128M

Mounir has been trying very hard to develop a GPS system that will help students find their way between the rooms of the school, and after a lot of hard work, he realized that what he was making already existed. Therefore he needs to make his system better than the existing one. The update that his system will offer consists in the follwing task: Given someones room numbers, and assuming they start at room 1, find out which rooms this person is able to go to, assuming the he can only move up, down, left, and right.

Input Specifications

First, two numbers, m and n representing the width and height respectively $(2 < m, n < 1000)$. Then, a grid, where `#` represents a wall, `0` represents an empty space, and a number will represent a room. There will be no more than 9 rooms.

Output Specifications

The list of rooms the user is able to travel to (Including room 1) separated by spaces from least to greatest.

Sample Input 1

```
5
4
03002
0000#
1###4
#5000
```

Sample Output 1

```
1 2 3
```

Sample Input 2

```
7
8
000#20#
10000#3
000000#
0007000
0000000
##000#0
04#0#50
60#0000
```

Sample Output 2

```
1 2 5 7
```