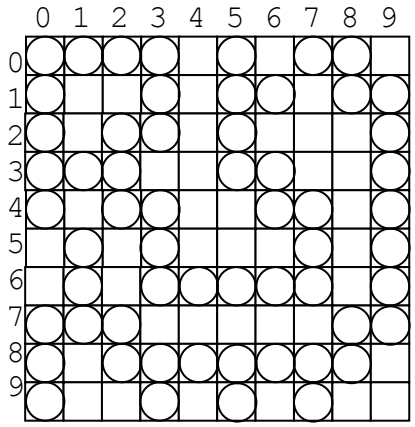
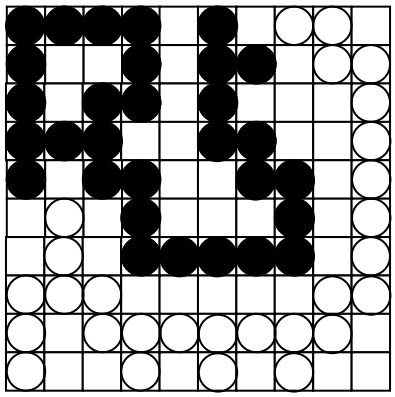
Froggy
Input Data File: FroggyIn.txt

Froggy, the frog, lives in a rectangular pond that has been divided into an orthogonal grid of 1 foot squares. Circular stepping stones have been placed at the center of many of the squares to allow Froggy to "stroll" around the pond. During his strolls, he can hop between adjacent stones: forward, backward, left or right, but *not* diagonally. He can revisit stones, and his objective during a stroll is to visit *every* stone he can reach without reentering the water.

For example, consider the stone arrangement in the pond shown below on the left. Assuming Froggy began his stool on the stone located in row 2 column 3, then the stones he hopped on during the strool are the black stones depicted in the pond shown below on the right.



The pond



The stroll beginning at row 2 column 3

You are to write a program to determine which stones are part of a stroll that begins at a given stone.

Inputs
The first line of the input contains the number of ponds to be considered. This is followed by one data set for each pond. The first line of a data set contains four positive integers, the number of rows, R, and columns, C, in the pond followed by the row and column number of the stone where the stroll begins. Each of the next R lines of a data set contains C marker characters, each of which corresponds to a square on the pond. The marker character **0** (zero) means that there is a stone on the square, and the marker character − (hyphen) means there is not. All inputs on a line are separated by a single space.

Outputs
For each pond, there should be R lines of output. Each output line will contain C marker characters, each separated by a single space. This grid of marker characters should be the same as the input pond description except that the **0** marker character of all of the stones on Froggy's stroll should be replaced with an **X** marker character. Separate marker characters with one space, and the output for each pond should be separated by one blank line.

Sample Input **Sample Output**

```
2
10 10 2 3
0 0 0 0 - 0 - 0 0 -
0 - - 0 - 0 0 - 0 0
0 - 0 0 - 0 - - - 0
0 0 0 - - 0 0 - - 0
0 - 0 0 - - 0 0 - 0
- 0 - 0 - - - 0 - 0
- 0 - 0 0 0 0 0 - 0
0 0 0 - - - - - 0 0
0 - 0 0 0 0 0 0 0 -
0 - - 0 - 0 - 0 - -
9 10 6 0
0 - - 0 - 0 0 - 0 0
0 - 0 0 - 0 - - - 0
0 0 0 - - 0 0 - - 0
0 - 0 0 - - 0 0 - 0
- 0 - 0 - - 0 0 - 0
- 0 - 0 0 0 0 - - 0
0 0 0 - - - - - 0 0
0 - 0 0 0 0 0 0 0 -
0 - - 0 - 0 - 0 - -
```

```
X X X X - X - 0 0 -
X - - X - X X - 0 0
X - X X - X - - - 0
X X X - - X X - - 0
X - X X - - X X - 0
- 0 - X - - - X - 0
- 0 - X X X X X - 0
0 0 0 - - - - - 0 0
0 - 0 0 0 0 0 0 0 -
0 - - 0 - 0 - 0 - -

0 - - 0 - 0 0 - X X
0 - 0 0 - 0 - - - X
0 0 0 - - 0 0 - - X
0 - 0 0 - - 0 0 - X
- X - 0 - - 0 0 - X
- X - 0 0 0 0 - - X
X X X - - - - - X X
X - X X X X X X X -
X - - X - X - X - -
```