

<codeClash>2019

Code Clash Sample Problem #2 'Impossible Corn Maze'

Problem statement

Someone is stuck in a corn maze and is looking for the quickest way to escape, although the exit is not very clear. While searching for the exit, it was determined that it is necessary to count the number of adjacent passageways to each cell. The maze is represented by a grid composed of impassable walls (represented by X) and passageways (represented by ~). You must analyze the grid and return it with a small transformation: for each cell with a passageway, instead of ~, return the number of its adjacent passable cells. For each cell with a wall, change nothing and return X.

The first line of input will contain the number of test cases to follow.

The first line of each test case's specific input contains two integers separated by a space, representing the width and height of the grid respectively.

Sample test case

Sample input and output for this problem:

Input	Output
1	
5 3	
~~~~X	1322X
X~X~~	X2X31
~~X~X	12X1X