Tentaizu!

Filename: `tentaizu`

Tentaizu is a Japanese game whose name means "celestial map." Some people will try to tell you this game is the same as Minesweeper. These people are incorrect.

The game is played on a 7x7 board. Exactly 10 of the 49 squares are each hiding a star. Your task is to determine which squares are hiding the stars. Other squares in the board provide clues: A number in a square indicates how many stars lie next to the square—in other words, how many adjacent squares (including diagonally adjacent squares) contain stars. No square with a number in it contains a star, but a star may appear in a square with no adjacent numbers.

Figure 1 is an example of an initial game board, and Figure 2 is the solution.

1					3	
	1			0		
			2			
	3					3
				1		
			1			1

1	*			*	3	*
						*
	1			0		
		*	2			*
	3	*			*	3
		*		1		*
			1			1

Figure 1   **Figure 2**

The Problem:

Given the description of a 7x7 Tentaizu board, your task is to find the squares containing the 10 hidden stars. You are guaranteed that each given Tentaizu board will have a unique solution.

The Input:

There will be multiple Tentaizu boards in the input file. The first input line contains a positive integer, *t*, indicating the number of Tentaizu boards to be processed. This will be followed by *t* Tentaizu boards. Each Tentaizu board will contain 7 lines, and each line will contain exactly 7 characters. Each character will be a digit from '0'-'8' or a '.' to indicate an empty square (which may be hiding a star). Each Tentaizu board will be separated by a single blank line.

The Output:

For each Tantaizu board, output the line "Tentaizu Board #*x*:" where *x* is the board number (starting from 1). Then, print the solved Tentaizu board in the same format as the input, but with a '*' at each of the 10 star locations. Leave a blank line after the output of each board.

Sample Input:

```
2
1....3.
.......
.1..0..
...2...
.3....3
....1..
...1..1

...1.3.
12....2
.2.1...
...31..
...2..3
..1....
.......
```

Sample Output:

```
Tentaizu Board #1:
1*..*3*
......*
.1..0..
..*2..*
.3*..*3
..*.1.*
...1..1

Tentaizu Board #2:
...1*3*
12...*2
*2*1...
...31.*
..*2*.3
..1..**
.......
```