

Sudoku Challenge

Time limit: 1.0s **Memory limit:** 256M

Solve the given [Sudoku](#).

Input Specification

One Sudoku puzzle. Squares are given in left-to-right, top-to-bottom order. A digit stands for itself, whereas a period indicates a square that is to be filled. The input is guaranteed to have exactly one solution.

Output Specification

The solution to the given Sudoku (with all squares filled). Nine lines, each containing one row of the solved Sudoku.

Sample Input 1

```
1.45..89.  
.963..5.1  
53.41....  
6.....25  
2.9...3.7  
48.....6  
....37.54  
9.7..563.  
.45..12.9
```

Sample Output 1

```
124576893  
796328541  
538419762  
671893425  
259164387  
483752916  
862937154  
917245638  
345681279
```

Sample Input 2

```
9...28.57
5...192.3
.3.5...6.
.8.2..395
...7.6...
341..5.2.
.6...7.3.
1.895...4
75.46...9
```

Sample Output 2

```
916328457
574619283
832574961
687241395
295736148
341895726
469187532
128953674
753462819
```