

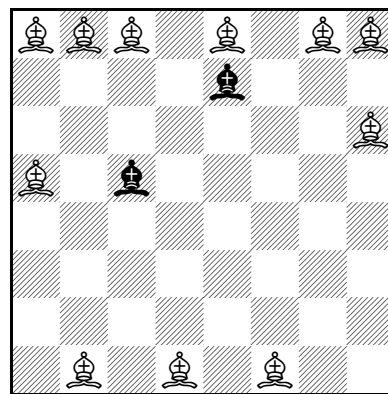
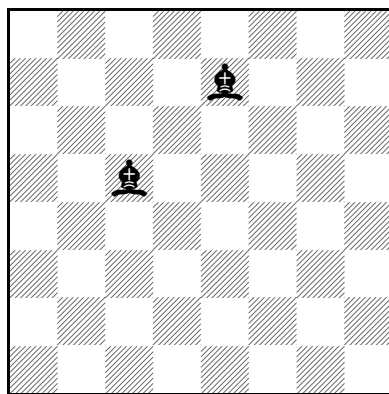
Bishops

P93682_en

Quinzè Concurs de Programació de la UPC - Final (2017-09-13)

You are given an $n \times n$ chess board, with some black bishops on it. Please place as many white bishops as possible in such a way that no white bishop threatens another bishop, either black or white.

For instance, for the board to the left a possible solution is shown on the board to the right.



Input

Input consists of several cases, each with n followed by n lines, each one with n characters: 'B' for black bishops, and '.' for empty cells. Assume $1 \leq n \leq 1000$.

Output

For every case, print any possible solution using 'w' for white bishops, followed by a line with 20 dashes. Follow exactly the format of the sample output.

Sample input

```
8
.....
....B...
.....
..B.....
.....
.....
.....
.....

3
...
...
...
```

Sample output

```
WWW.W.WW
....B...
.....W
W.B.....
.....
.....
.....
.W.W.W..
-----

WWW
...
.W.
-----
```

Problem information

Author : Felix Miravé

Generation : 2018-06-05 14:48:36

© *Jutge.org*, 2006–2018.

<https://jutge.org>