

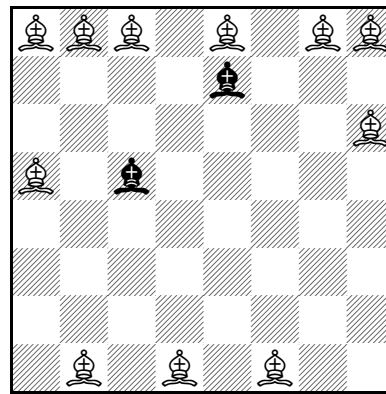
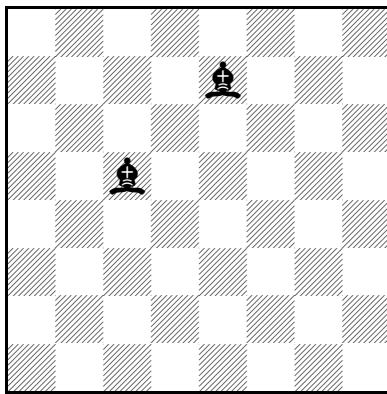
## Bishops

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**

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