**SIENA COLLEGE**

**26th Annual High School Programming Contest**

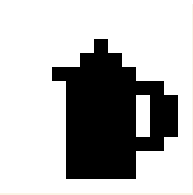
**April 27, 2013**

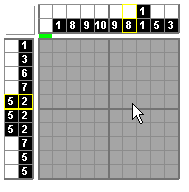
###### Problem #7: Paint by Numbers.

Background Information:  A Paint-By-Numbers puzzle (also known as a nonogram) is a logic puzzle which involves a 10 x 10 grid of white and black squares (represented in your output by spaces and asterisks, respectively). The squares typically depict a picture of some object or scene. The puzzler tries to logically construct the picture based on information on the sequences of black squares in a row or column.

Here is an example. The picture is specified by segments of black squares separated by at least one white space (it could be more). These segments can start at any point on the row/column; however, they still have to fit into the 10 squares allocated for the row/column with minimum spacing between segments. The sequences are specified in left to right order for rows, and top to bottom order for columns. Thus, the fifth row will have a sequence of five black squares followed by some white space followed by two squares. Leading (white spaces before the first black sequence) and trailing (white spaces after the last black sequence) whitespace could exist.

The grid on the left would depict the picture on the right. Note that there is a left-most column of white spaces in the resulting picture.





Rows and columns with no black squares will be designated with a 0.

###### Programming Problem:

Input: 10 row sequences (each on its own line) of the format

Integer N (number of black square sequences) followed by N numbers.

10 column sequences (each on its own line) of the same format as rows

Output:  The picture described by the nonogram puzzle, with spaces for whitespace and asterisks

for black spaces.

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Problem 7 continued:

###### Example 1:  Input:  1 1

1 3

1 6

1 7

2 5 2

2 5 2

2 5 2

1 7

1 5

1 5

0

1 1

1 8

1 9

1 10

1 9

1 8

2 1 1

1 5

1 3

Output: \*

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