

2. MAGIJA

The well-known magician Al'Dimi Kartimi needs a program to help him design the back side of his cards.

Al'Dimi first draws the upper left quarter of the card, mirrors it horizontally onto the upper right quarter and then vertically mirrors the entire upper half onto the lower half.

After the mirroring, Al'Dimi also adds a small error (changes the appearance of one square) to help him determine which card it is (to cheat, if you will).

Help Al'Dimi by writing a program that, given the design of the upper left quarter and the location of the error, draws the entire back side.

Here are three examples of Al'Dimi's cards (the error is shaded gray):

###.##.###	#.#..#.#	■.###.##
#####	#.####.#	#.#..#.#
.#####.	#.####.#
..#####.#..#..
#####■#####	.#.#.#.	..#..#..
#####	.#.#.#.
.#####.	#.#..#.#
.#####.	#.####.#	##.###.##
#####	#.####.#	
###.##.###	#.#.■.##	

Input

The first line of input contains two integers, R and C ($1 \leq R, C \leq 50$), the number of rows and columns in the upper left quarter of the card.

Each of the R following lines contains C characters '.' or '#', the design of the upper left quarter.

The next line contains two integers, A and B ($1 \leq A \leq 2R, 1 \leq B \leq 2C$), the row and column of the error.

Output

Output 2R rows, each containing 2C characters, the design of the back side.

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Sample test data

input

2 2
#.
.#
3 3

output

#..#
.##.
.#..
#..#

input

3 3

1 4

output

###.##

#####

input

5 4
#.#.
#.#.
#.#.
#.#.
....
.#.#
10 5

output

#.#..#.#
#.#####
#.#####
.....
.#.##.#.
.#.##.#.
.....
#.#####
#.#####
#.#.##.#