

2. SKENER

Having solved the match issue, Mirko faced another challenging problem. His mom ordered him to read an article about the newest couples on the Croatian show-biz scene in the "Moja Tajna" magazine. The article is written in a very small font size which Mirko cannot read. Luckily, Mirko has a scanner in the closet which will enlarge the article for him.

The article is a matrix of characters with R rows and C columns. The characters are letters of the English alphabet, digits and the character '.' (period). Mirko's scanner supports two parameters, ZR and ZC . It **substitutes each character** it scans with a **matrix of ZR rows and ZC columns**, where all entries are equal to the scanned character.

Mirko realized his scanner's software no longer works so he needs your help.

Input

The first row contains four integers, R , C , ZR and ZC . R and C are between 1 and 50, while ZR and ZC are between 1 and 5.

Each of the following R rows contains C characters each, representing the article from "Moja Tajna".

Output

The output should be a matrix of characters with $R \cdot ZR$ rows and $C \cdot ZC$ columns, the enlarged article.

Sample test data

input	input
3 3 1 2	3 3 2 1
.x.	.x.
x.x	x.x
.x.	.x.
output	output
..xx..	.x.
xx..xx	.x.
..xx..	x.x
	x.x
	.x.
	.x.