

10230 Savage Garden

Mr. Savage has a huge square-shaped garden named Savage Garden. The Savage Garden is very famous for its rare plants and amazing beauty. Currently, he is thinking of improving the garden by changing the orientation of plants into a special way. He wishes to divide the garden into smaller square regions such that the length of the complete square region is a power of two. Then, he wants to group the regions into *L-shaped regions* formed by three smaller squares. Each *L-shaped region* will have a different plant from the adjacent *L-shaped regions*. He feels that the *L* will represent Love and his loved ones from all over the world and in the heavens can enjoy its beauty forever.

You have been hired by Mr. Savage to generate a plan for Savage Garden.

Input

Input consists of several test cases. Each test case specifies three integers, N , X and Y . N , $1 \leq N \leq 10$ represents that Savage Garden is of size $2^N \times 2^N$, after division. X and Y indicate the region where his house is located. For example, topmost-leftmost region is indicated by $X = 1$ and $Y = 1$. Of course, he doesn't want his house to be planted with saplings. So, make sure you leave his house intact while deriving the plan. You can assume that the co-ordinates given are always within the square region.

Output

For each test case, output a square matrix showing the Savage Garden. Indicate his house by the character '*'. All other regions should be indicated by alphabets 'a'-'z'. Character used to represent one *L-shaped region* should be different from the ones used to represent its neighboring *L-shaped regions*. Assume that each small square region has 8 neighbors. If there are many solutions, you may output any of them. You may assume that there is at least one solution for the given test cases. Output a blank line after each test case.

Sample Input

```
2 3 4
```

Sample Output

```
aadd
abbd
cbee
cc*e
```