

Problem D: Move something

Description

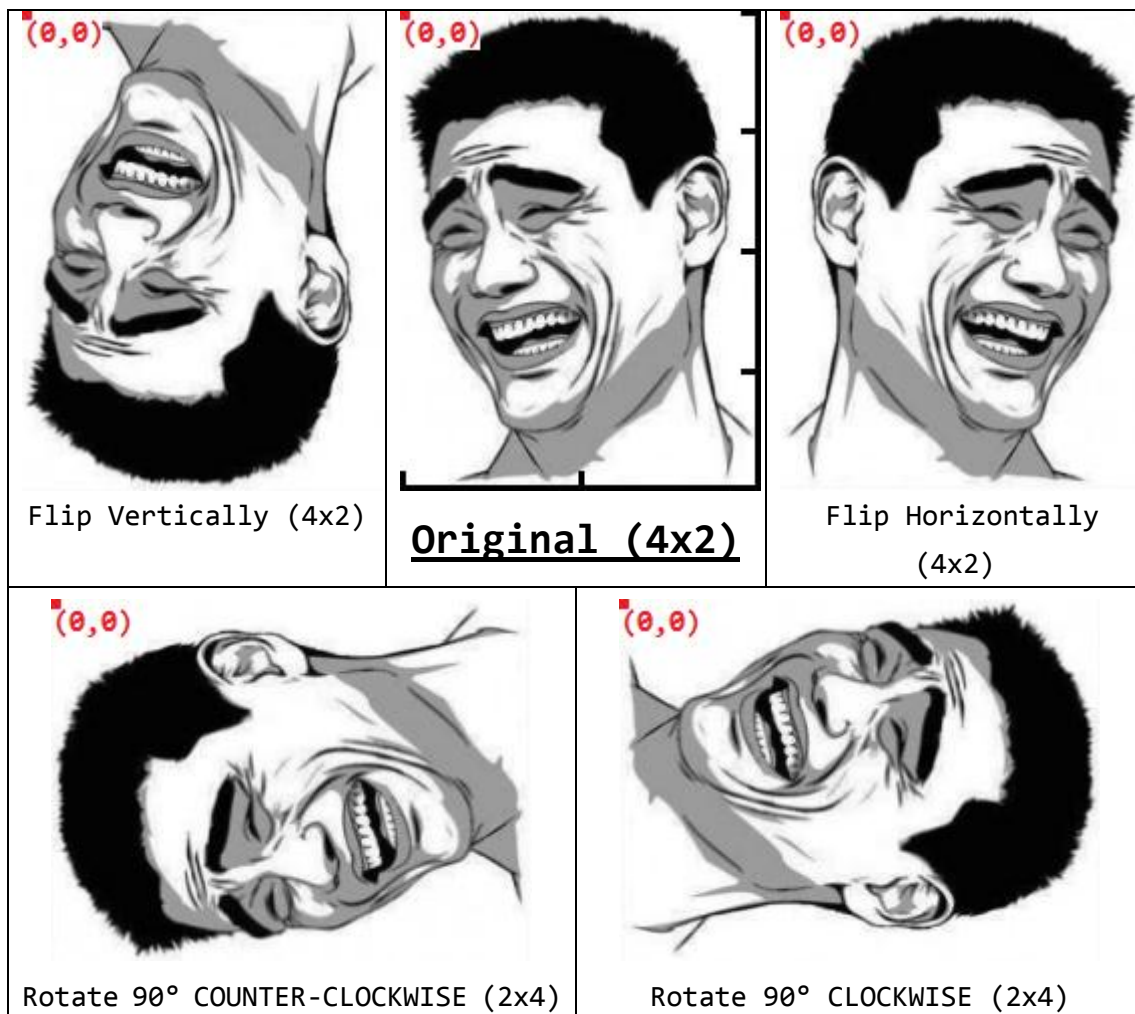
Given a canvas and several pictures, we can do some operation on them, shown in the following table.

Instruction	Description
0	PRINT the canvas and EXIT.
1 #	PUT picture # on the canvas (0, 0).
MOVE	
2 #	Move picture # UP.
3 #	Move picture # DOWN.
4 #	Move picture # LEFT.
5 #	Move picture # RIGHT.
ROTATE	
6 #	Rotate picture # 90° CLOCKWISE
7 #	Rotate picture # 90° COUNTER-CLOCKWISE
FLIP	
8 #	Flip picture # Vertically
9 #	Flip picture # Horizontally

We use 0 and 1 to indicate the color of pictures, 0 as the transparent color, and 1 as the non-transparent color means that it cannot be overlapped by other pictures.

If an instruction makes something illegal (overlapping or out of canvas), discard this instruction and print "error".

Notice that the coordinate where we put the picture is fixed at (0, 0). After rotating or flipping, the upper left corner of the picture will not change.













Input

The first line of input contains two integers M N , M by N canvas.
The second line is an integer k , number of pictures.
The following lines describe those k pictures, picture 1 to picture k .
After that, there are several pairs of instructions with an operation and a picture number.
The end of the input is a line with 0.

Output

Print "error" when you get illegal instruction. Print the whole canvas when the program is ending.

SAMPLE INPUT

INPUT	
7 7	Create a 7x7 canvas
4	4 pictures
3 3	Pic1 is 3x3
0 1 0	
0 1 1	
0 1 0	
2 4	Pic2 is 2x4
1 1 0 0	
0 1 1 0	
2 2	Pic3 is 2x2
0 1	
1 1	
3 1	Pic4 is 3x1
1	
1	
1	
1 1	Inst. 1
5 1	Inst. 2
1 2	Inst. 3
5 1	Inst. 4
1 2	Inst. 5
6 2	Inst. 6
3 2	Inst. 7
3 2	Inst. 8
1 3	Inst. 9
8 3	Inst. 10
5 3	Inst. 11
1 4	Inst. 12
7 4	Inst. 13
0	Inst. 14

SAMPLE OUTPUT

OUTPUT	
error	for Inst. 3
error	for Inst. 13
1 1 1 1 0 0 0	Please refer to the next page.
1 0 1 1 1 0 0	
1 1 0 1 0 0 0	
1 1 0 0 0 0 0	
1 0 0 0 0 0 0	
0 0 0 0 0 0 0	
0 0 0 0 0 0 0	
0 0 0 0 0 0 0	
0 0 0 0 0 0 0	

Inst.	Description	Output
1 1	put pic1 on (0,0)	error
5 1	move pic1 right	
1 2	put pic2 on (0,0)	
5 1	move pic1 right	
1 2	put pic2 on (0,0)	
6 2	rotate pic2 CW	
3 2	move pic2 down	
3 2	move pic2 down	

1 3	put pic3 on (0,0)	
8 3	flip pic3 vertically	
5 3	move pic3 right	
1 4	put pic4 on (0,0)	
7 4	rotate pic2 C-CW	
0		
		1 1 1 1 0 0 0
		1 0 1 1 1 0 0
		1 1 0 1 0 0 0
		1 1 0 0 0 0 0
		1 0 0 0 0 0 0
		0 0 0 0 0 0 0
		0 0 0 0 0 0 0