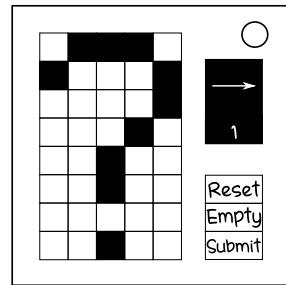


## On the Subject of Shapes And Bombs

I wonder what shape would I input today...

- You have a set of buttons which you can press to light/unlight.
- The lit squares have a color and form a letter.
- With this information, you have to determine which shape to submit based on the steps below.



### Letter values (Table 1):

A	B	D	E	G	I	K	L	N	O	P	S	T	X	Y
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14

### Sequence number table (Table 2):

Yellow	Green	Cyan	Blue	Purple
Module's letter value	Number of current modules	Number of total lit squares	Number of total unlit squares	Use the number 0

- When using this table you need to keep the **Initial number**. This means the number you got before applying the step bellow.
- If the number you got is greater than or equal to 15, subtract 15.

### Letter tables (Table 3):

Yellow			Green			Cyan			Blue			Purple		
K	E	P	K	I	N	O	N	S	A	B	D	Y	X	T
T	A	L	G	S	L	L	Y	P	E	G	I	S	P	O
I	N	G	E	D	Y	K	I	D	K	L	N	N	L	K
D	O	B	O	P	X	T	X	B	O	P	S	I	G	E
Y	X	S	T	A	B	A	E	G	T	X	Y	D	B	A

If the squares' color is white, skip these steps and go to Step 3.

### Step 1 (Expert):

- Use the corresponding table in **Table 3** based on the squares' color.
- After that, you need to do these steps:
  - Start on the position of the module's initial letter.
  - Based on the arrow sequence of the module, start from the number you got on **Table 2**
    - Follow the directions indicated by the arrows, if you leave the table, wrap to the other side.
    - You need to do the step above until the arrow sequence of the module resets back to 0.
  - When you've finished the steps above, the number in where you need to start the arrow sequence in the module is the value of the letter (**Table 1**) on which you ended.

### Step 2 (Defuser):

- Now that you got the number on where to start the arrow sequence on the module:
  - You need to start in the square from the **Initial number** (**Table 1**) plus one, left-to-right and top-to-bottom starting from 1 on the top-left. If the number is greater than 40, leave it at 40.
  - In the arrow sequence, start from the number that you got at the end of **Step 1**.
    - After following an arrow direction, you have to light/unlight the square you're at.
    - If the current square you're on before following an arrow direction is unlit, follow the direction on the opposite side.  
*Example:* Right-Down becomes Left-Up
    - Do these steps until the arrow sequence resets back to 0.
- After you've done all of these steps, you can go to **Step 3**.
- By pressing the number bellow the arrow screen you go to the next number.
- By pressing "Reset" you go back to the initial letter state.
- By pressing "Empty" you can unlight all the current lit squares.

### Step 3 (Shape):

- If the last digit of the serial number is even, count the lit squares; otherwise, count the unlit squares.

- If the module's initial letter value (**Table 1**) is even, only count in the upper-half; otherwise, only count in the bottom-half.
- Next, look up the corresponding table to see which shape fits the number you got:
- If the number is smaller than 5 leave it at 5, otherwise; if it is greater than 14, leave it at 14.
- **NOTE:** White squares means unlit and gray squares means lit.

	5	6	7	8	9
Solved modules is even					
	10	11	12	13	14
Solved modules is odd					
	5	6	7	8	9
Solved modules is odd					
	10	11	12	13	14

- Once you've determined the shape, you need to make that shape in the module and press the button "Submit".