Porting a Button Sandbox work from 50x25 to 48x24
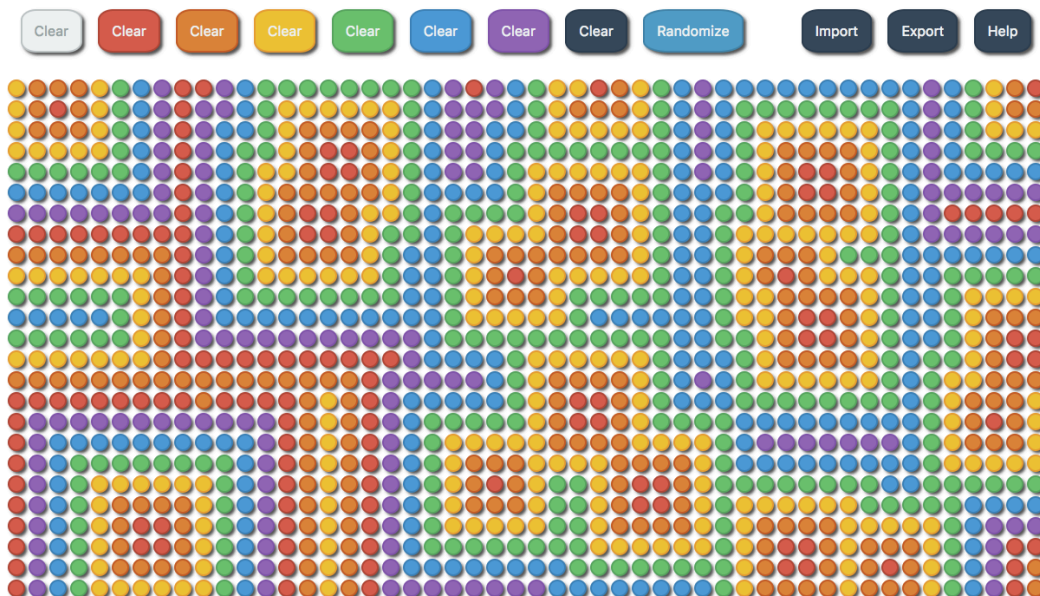
Why the Change?

I elected to make the change rom 50x25 to 48x24 because both 24 and 48 are **highly composite numbers**, meaning each has many divisors, or factors. 24 can be split up into 2, 3, 4, 6, 8, and 12, and 48 can be split up into all those plus 16 and 24.
Basically, you can make more patterns now. Yay!

Okay, so how do I actually do this?

This process includes a number of steps, but it should only take a few minutes. On top of that, because I'm making the process manual and not automatic, you can even customize where you want the image to be cut off. If you'd rather get rid of the middle than the bottom, you can do that. I will be outlining the steps and using screenshots as examples with the Art of the Week:

Exportation and Entering the Editing Medium

First, export your design from Button Sandbox and paste it into a text file. Ideally, you should use something like TextEdit for Mac or Notepad++ for PC, but if you only have conventional text editors available like Microsoft Word or Pages, those will work too. Wherever you paste it, make sure the font is relatively small and that you are using a Monospace font; I'd recommend Courier or Courier New. Once you've done that, it's time to format. This is the art that I'm exporting:

Formatting

Once you've pasted your string, your text editor will probably look something like this:

```
WROYGBPVVVVVcbbbcdefaafeddddddddefafedccabcdefeeeeeeeeeefedcbacbabcdefaffedcccccccdefffedcb
bbcdefedddddddddefedcbbcbbbcdefafeedcbbbbcdeffeedccccccdefedccccccdefedccccccccdefafeddcbaab
cdeffedddddddddefedcbbbbcdefedddddddddddefafedccbaabcdeffedccccccdefedcbaabcdefeeeeeeeeeeeef
afedcbbbbbcdeeeedcbbbbcdeeeedcbaabcdeffffffffffffffffafedcbaabccdeddddcbaabcdeeddcbbbbcdefaaa
aaaaaaaaaafedcbaabcddedccccbaabcdeedcccccccdeffffffbbbbbbbbbafedcbbbbcdeedcbbbbbbcdeedcbb
bcddddeeeeeeccccccccbafedcccccccdeedcbabccccccdeedcbabcccdeeddddddddddddddcbafeddddddddeedcbbbcd
ddddeedccbbbbcdeedcccceeeeedcbafeeeeeeeeeeeedccccccdeeeeeedccbaabcdeedcbbbddddddcbaffffffffff
ffedddddddddddeeddcbaabcdeedcbaacccccccbaaaaaaaaaaafeeeedccccccdeeedcbbbbcdeddcbaabbbbbbbbb
bbbbbbbbbbafffffedcbbbbcdefedccccccdedccbbbaaaaaaaaaabaaaabcbafeeeeedcbaabcdeeedddddddddedcbb
bcaffffffffffffabcbafeddddddcbaabcddddeeeeeeeeedcbabcafeeeeeeeeeefabcbafedcccccbbbbcccccdeff
fffffedcbbbcafeddddddddddefabcbafedcbbbccccbbbbcdeeeeeeeeeedcccccafedccccccccdefabcbafedcbabcdd
cbaabcdddddddddeeddddddafedcbbbbcdefabcbafedcbbbcddcbaabcdcccccccddddddeeeeafedcbaabcdefabcba
fedccccccddcbbbbcdcbbbbccccccdefffafedcbaabcdefabcbafedddddddddccccccccdcbaabcbbbcdefaaafedcbbb
bcdefabcbafeeeeeeeeedddddddddcbaabcbabcdefabafedccccccdefabcbafffffffffffeeeeeeeedcbbbbcbbbcdef
abVVVV
```

Needless to say, it still looks quite a bit like a jumbled mess. Not to worry! The next step is to separate the lines into something coherent. First, press [ENTER] after those first few capital letters - the "WROYGBPVVVVV." Once you've done that, count out fifty characters on the second line and press enter after that. Then, just go down and hit [ENTER] after every 50 characters. If you're using a monospace font, as I suggested, 50 characters will be in exactly the same place every time. Once you've done that, your file should look a little more like the image on the left.

Now that you've done that, you can hopefully see ever so slight traces of the original pattern. Here, I can see a few snaking paths that suggest I've done it correctly. On to step three!

```
WROYGBPVVVVV
cbbbcdefaafeddddddddefafedccabcdefeeeeeeeeeefedcba
cbabcdefaffedccccccdefffedcbbbcdefeddddddddefedcbb
cbbbcdefafeedcbbbbcdeffeedccccccdefedccccccdefedccc
ccccccdefafeddcbaabcdeffedddddddddefedcbbbbcdefedddd
dddddddefafedccbaabcdeffedcccccccdefedcbaabcdefeeeee
eeeeeeefafedcbbbbbcdeeeedcbbbbcdeeeedcbaabcdeffffffff
ffffffffafedcbaabccdeddddcbaabcdeeddcbbbbcdefaaaaa
aaaaaaaaafedcbaabcddedccccbaabcdeedcccccccdeffffffff
bbbbbbbbbafedcbbbbcdeedcbbbbbbcdeedcbbbcdddeeeeeee
cccccccbafedcccccccdeedcbabcccccdeedcbabcccdeeddddd
ddddddcbafedddddddddeedcbbbcddddeedccbbbbcdeedcccc
eeeedcbafeeeeeeeeeeeedcccccdeeeeedccbaabcdeedcbbb
dddddcbafffffffffffffeddddddddddddeeddcbaabcdeedcbaa
ccccccbaaaaaaaaaaafeeeedcccccdeeedcbbbbcdeddcbaa
bbbbbbbbbbbbbbbbafffffedcbbbbcdefedccccccdedccbbb
aaaaaaaaaabaaaabcbafeeeeedcbaabcdeeedddddddddedcbbbc
afffffffffffffabcbafeddddddcbaabcddddeeeeeeeeedcbabc
afeeeeeeeeeefabcbafedcccccbbbbccccdefffffffffedcbbbc
afeddddddddddefabcbafedcbbbccccbbbbcdeeeeeeeeeedccccc
afedccccccccdefabcbafedcbabcddcbaabcddddddddddeeddddddd
afedcbbbbcdefabcbafedcbbbcddcbaabcdcccccccddddddeee
afedcbaabcdefabcbafedccccccddcbbbbcdcbbbbccccccdefff
afedcbaabcdefabcbafeddddddddddccccccdcbaabcbbbcdefaa
afedcbbbbcdefabcbafeeeeeeeedddddddddcbaabcbabcdefab
afedccccccdefabcbafffffffffffeeeeeeeedcbbbbcbbbcdefab
VVVV
```

Editing

The final step before re-copying the string is to edit it. First, delete one row completely. It can be the first row, the last row, or anything in between, as long as one row is completely deleted. After you've done that, you have to do the same thing with two columns. Delete them entirely. Again, they can be first, last, in the middle, anywhere, as long as they're gone. Once you've deleted a row and two columns, it'll look very similar, something vaguely resembling the image on the right. As you can see, the vast majority of the image is preserved. Now for the final step!

```
WROYGBPVVVVV
cbbbcdefaafedddddddddefafedccabcdefeeeeeeeeeefedc
cbabcdefaffedccccccdefffedcbbbcdefedddddddddefedc
cbbbcdefafeedcbbbbcdeffeedccccccdefedccccccdefedc
ccccccdefafeddcbaabcdeffedddddddddefedcbbbbcdefedd
ddddddefafedccbaabcdeffedccccccdefedcbaabcdefeee
eeeeeeefafedcbbbbbcdeeeedcbbbbcdeeedcbaabcdeffff
ffffffffafedcbaabccdeddddcbaabcdeeddcbbbbcdefaaa
aaaaaaaaafedcbaabcddedccccbaabcdeedccccccccdeffff
bbbbbbbbafedcbbbbcdeedcbbbbbbbcdeedcbbbcdddeeeee
ccccccccbafedcccccccdeedcbabccccccdeedcbabcccdeeddd
ddddddcbafedddddddddeedcbbbcdddddeedccbbbbcdeedcc
eeeeedcbafeeeeeeeeeeedcccccdeeeeeedccbaabcdeedcb
ddddddcbaffffffffffffedddddddddddeeddcbaabcdeedcb
ccccccdcbaaaaaaaaaaaafeeeedcccccccdeeedcbbbbcdeddcb
bbbbbbbbbbbbbbbbbaffffedcbbbbcdefedccccccdedccb
aaaaaaaabaaaabcbafeeeeedcbaabcdeeedddddddedcbb
affffffffffffabcbafeddddddcbaabcddddeeeeeeeedcba
afeeeeeeeeefabcbafedccccbbbbccccdefffffffedcbb
afeddddddddefabcbafedcbbbccccbbbbcdeeeeeeeeedccc
afedcccccccdefabcbafedcbabcddcbaabcddddddddeedddd
afedcbbbbcdefabcbafedcbbbcddcbaabcdccccccccdddddee
afedcbaabcdefabcbafedccccddcbbbbcdcbbbbccccccdef
afedcbaabcdefabcbafeddddddddcccccccdcbaabcbbbcdef
afedcbbbbcdefabcbafeeeeeeeedddddddddcbaabcbabcdef
VVVV
```

Reformatting

Although it may be more appropriately called "re-un-formatting," What you do now is simple: Get rid of all the [ENTER] things you did earlier. Make the entire thing an incomprehensible, jumbled mess. Return the world to its natural, chaotic state:

```
WROYGBPVVVVVcbbbcdefaafeddddddddddefafedccabcdefeeeeeeeeeefedccbabcdefaffedccccccdefffedcbbb
cdefeddddddddddefedccbbbcdefafeedcbbbbcdeffeedccccccdefedccccccdefafeddcbaabcdeffe
dddddddddefedcbbbbcdefedddddddddefedcbbbbcdefedddddddddefafedccbaabcdeffedccccccdefedcbaabcdefeeeeeeeeeeefafedcbbbbb
cdeeeedcbbbbcdeeedcbaabcdeffffffffffffffffafedcbaabccdeddddcbaabcdeeddcbbbbcdefaaaaaaaaaaaaaafed
cbaabcddedccccbaabcdeedccccccccdeffffbbbbbbbbafedcbbbbcdeedcbbbbbbbcdeedcbbbcdddeeeee
cbafedcccccccdeedcbabccccccdeedcbabcccdeeddddddddddcbafeddddddddddeedcbbbcddddddeedccbbbbcdeedcc
eeeeedcbafeeeeeeeeeeedcccccdeeeeeedccbaabcdeedcbdddddddcbaffffffffffffedddddddddddeeddcbaabc
deedcbcccccccbaaaaaaaaaaaafeeeedccccccdeeedcbbbbcdeddcbbbbbbbbbbbbbbbbbaffffedcbbbbcdefed
ccccccdedccbaaaaaaaaabaaaabcbafeeeeedcbaabcdeeeddddddddedcbbaffffffffffffabcbafeddddddcbaab
cddddeeeeeeeedcbaafeeeeeeeeefabcbafedccccbbbbccccdefffffffedcbbafeddddddddefabcbafedcbb
bccccbbbbcdeeeeeeeeeedcccafedcccccccdefabcbafedcbabcddcbaabcddddddddddeedddddafedcbbbbcdefabcba
fedcbbbcddcbaabcdcccccccddddddeeafedcbaabcdefabcbafedccccddcbbbbcdcbbbbccccccdefafedcbaabcde
fabcbafeddddddddcccccccdcbaabcbbbcdefafedcbbbbcdefabcbafeeeeeeeedddddddddcbaabcbabcdefVVVV
```

Now you're done! Go paste it back into Button Sandbox and it should all work fine:

Remember, you can email me with complaints or questions. Thanks for using Button Sandbox!
- Professor L