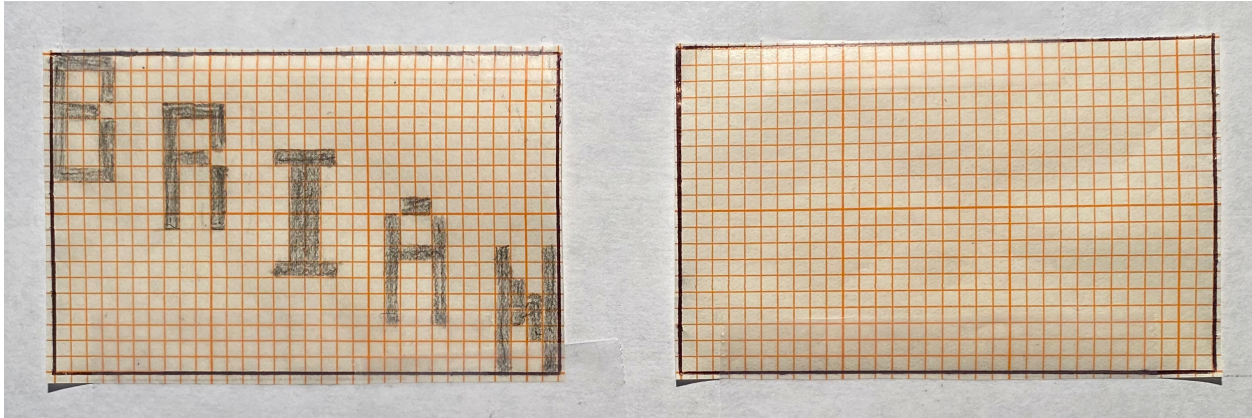


Assignment 0 – Bitmap – Email me your sketch by 9pm Sunday, Jan. 16

Part A

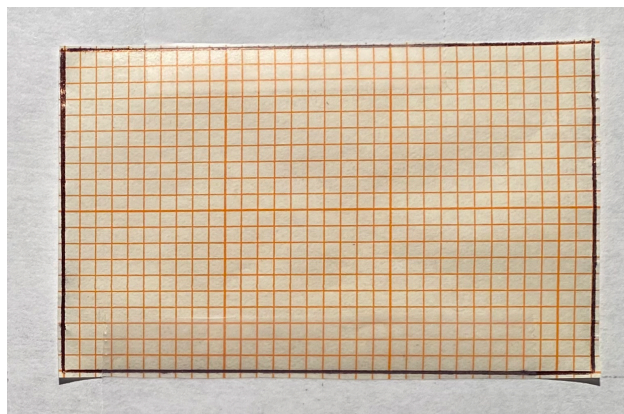
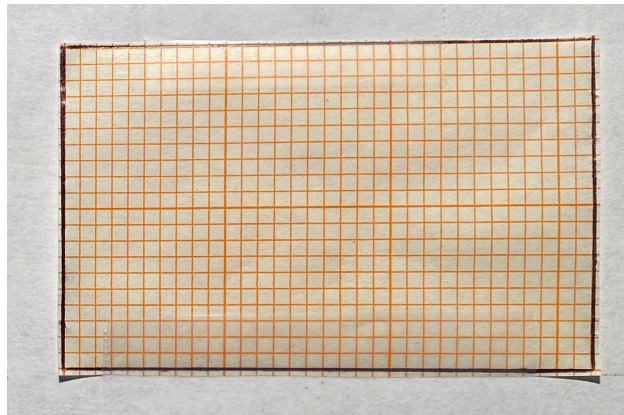
Below are two 32x20 canvases. On the left is an example. On the right is a blank canvas for you to use.



Some specific directions:

- Make full use of the far upper-left (don't leave a buffer of blank pixels).
- Also make full use the far lower-right (don't leave a buffer of blank pixels there either).
- Whatever you choose to draw, be very clear about whether each pixel is filled in or not.
- Don't get too creative. A five-letter word is already going to result in plenty of work in Part B.

Here are two spare blank canvases in case you mess up the one above. Try working in pencil.



Part B

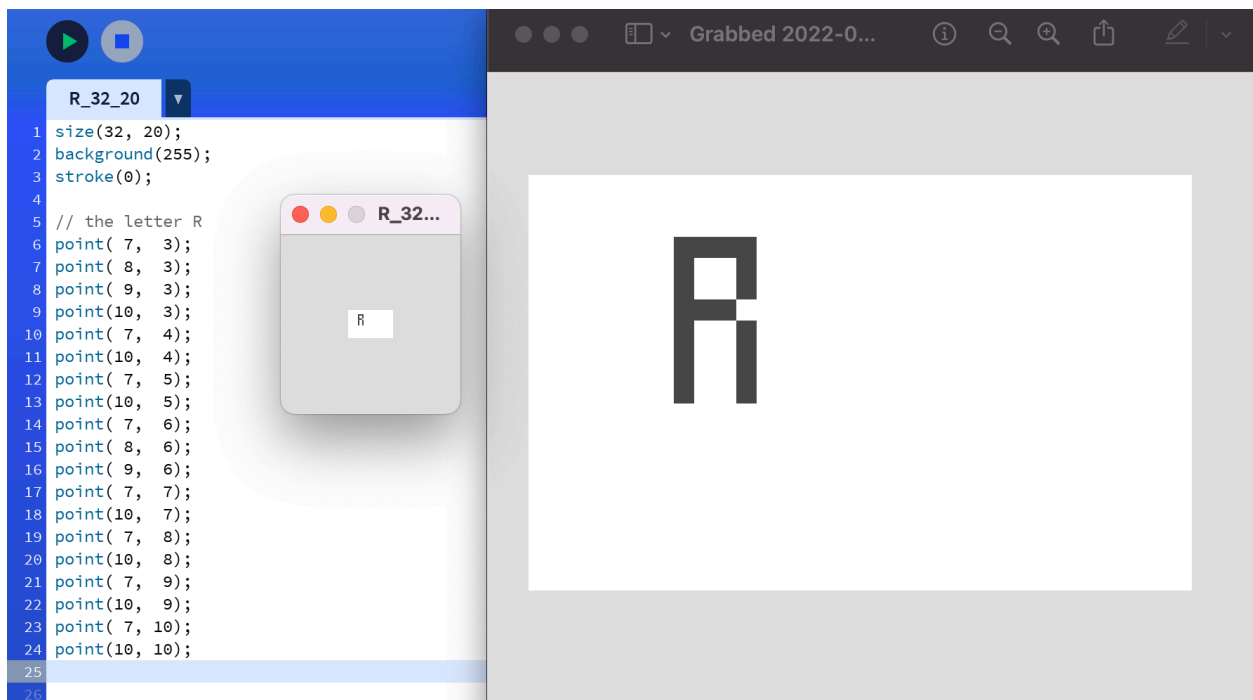
Create a new sketch in Processing starting with these three lines:

```
size(32, 20);  
background(255);  
stroke(0);
```

Then for every pixel that is filled in in Part A, use the `point()` function to fill it in in the sketch.

Keep in mind, the upper-left-most pixel is at (0, 0). The lower-right-most pixel is at (31, 19) — not at (32, 20). As an example, here are the 19 points that I used to draw the letter R:

```
// the letter R  
point( 7,  3);  
point( 8,  3);  
point( 9,  3);  
point(10,  3);  
point( 7,  4);  
point(10,  4);  
point( 7,  5);  
point(10,  5);  
point( 7,  6);  
point( 8,  6);  
point( 9,  6);  
point( 7,  7);  
point(10,  7);  
point( 7,  8);  
point(10,  8);  
point( 7,  9);  
point(10,  9);  
point( 7, 10);  
point(10, 10);
```



Part C

Color each letter differently using some combination of red, green, blue, cyan, magenta, and yellow.

How to change the stroke color to red:

```
stroke(255, 0, 0); // red
```

Green:

```
stroke(0, 255, 0); // green
```

Blue:

```
stroke(0, 0, 255); // blue
```

Cyan:

```
stroke(0, 255, 255); // green and blue make cyan
```

Magenta:

```
stroke(255, 0, 255); // red and blue make magenta
```

Yellow:

```
stroke(255, 255, 0); // red and green make yellow
```

A darker yellow:

```
stroke(255, 204, 0); // mustard
```

My example finished (I am using screenshots to blow up the tiny 32x20 result):

