Week 2 : Program a poster

Code :
```
<!-- So this assignment was really fun. I learnt how to morph text from a
codepen demo and then implemented that into my website. For the bg, I made a
responsive canvas which works on 3 screens.
The responsiveness is not that good but it works. I am still fixing the code
and will be using this for other things as well
Sources: Codepen, P5js library, Youtube, Chatgpt, Github

Used circles, squares and triangles to form the image
On every mouse click, the colours change

-->
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Week 2</title>

  <!-- Google Fonts: Raleway -->
  <link
href="https://fonts.googleapis.com/css2?family=Raleway:wght@400;700&display=swa
p" rel="stylesheet">

  <style>
    @font-face {
      font-family: 'TheFont';
      src:
url("https://garet.typeforward.com/assets/fonts/shared/TFMixVF.woff2")
        format('woff2');
    }

    body, html {
      margin: 0;
      padding: 0;
      height: 100vh;
      width: 100vw;
      display: flex;
      align-items: center;
      justify-content: center;
      overflow: hidden;
      font-family: 'Raleway', sans-serif;
      transition: background-color 0.5s ease;
    }
```

```css
    /* Fullscreen canvas */
    #sketch-holder {
      position: absolute;
      top: 0;
      left: 0;
      width: 100vw;
      height: 100vh;
      z-index: 0;
    }

    /* Centered Text with breathing animation */
    .text-container {
      position: relative;
      z-index: 2;
      display: flex;
      justify-content: center;
      align-items: center;
      text-align: center;
      width: 100vw;
      height: 100vh;
    }

    .breathe-animation span {
      font-family: 'TheFont';
      font-size: clamp(8vw, 12vw, 18vw); /* Responsive font size for all
screens */
      text-align: center;
      animation: letter-breathe 3s ease-in-out infinite;
      color: white; /* Default text color */
      transition: color 0.5s ease;
    }

    /* Breathing animation for text */
    @keyframes letter-breathe {
      from, to {
        font-variation-settings: 'wght' 100;
      }
      50% {
        font-variation-settings: 'wght' 900;
      }
    }
  </style>
</head>

<body id="body" onclick="nextTheme()">
  <!-- Fullscreen canvas holder -->
  <div id="sketch-holder"></div>

  <!-- Centered Text Section -->
```

```html
  <div class="text-container">
    <div class="breathe-animation">
      <span>you'rE art</span>
    </div>
  </div>

  <script
src="https://cdnjs.cloudflare.com/ajax/libs/p5.js/1.4.0/p5.js"></script>
  <script>
    let capture;
    let currentThemeIndex = 0; // Track current theme

    //colour pairings for every interaction

    const themes = [
      { background: '#fce59f', foreground: '#14a0ad', textColor: '#fc8fac' },
      { background: '#fcf2f0', foreground: '#fc8fac', textColor: '#14a0ad' },
      { background: '#e3fca7', foreground: '#88a2ff', textColor: '#253a82' },
      { background: '#8fddd0', foreground: '#000000', textColor: '#fc8fac' }
    ];

    function setup() {
      let canvas = createCanvas(windowWidth, windowHeight);
      canvas.parent('sketch-holder');

      capture = createCapture({
        audio: false,
        video: {
          width: windowWidth,
          height: windowHeight
        }
      }, function() {
        console.log('capture ready.');
      });
      capture.hide();
      noStroke();

      applyTheme(currentThemeIndex);
    }

    function draw() {
      background(themes[currentThemeIndex].background);
      capture.loadPixels();

      const stepSize = 10; // Step size for pixel sampling

      for (let y = 0; y < height; y += stepSize) {
        for (let x = 0; x < width; x += stepSize) {
          const i = (y * width + x) * 4;
```

```
            const darkness = (255 - capture.pixels[i]) / 255;
            const size = stepSize * darkness;

            fill(themes[currentThemeIndex].foreground);

            if (currentThemeIndex === 0) {
              ellipse(x, y, size, size);
            } else if (currentThemeIndex === 1) {
              rect(x, y, size, size);
            } else if (currentThemeIndex === 2) {
              triangle(
                x, y - size / 2,
                x - size / 2, y + size / 2,
                x + size / 2, y + size / 2
              );
            } else if (currentThemeIndex === 3) {
              ellipse(x, y, size, size);
            }
          }
        }
      }

      function nextTheme() {
        currentThemeIndex = (currentThemeIndex + 1) % themes.length;
        applyTheme(currentThemeIndex);
      }

      function applyTheme(themeIndex) {
        document.getElementById('body').style.backgroundColor =
themes[themeIndex].background;
        document.querySelector('.breathe-animation span').style.color =
themes[themeIndex].textColor;
      }

      function windowResized() {
        resizeCanvas(windowWidth, windowHeight);
      }
    </script>
</body>
</html>
```
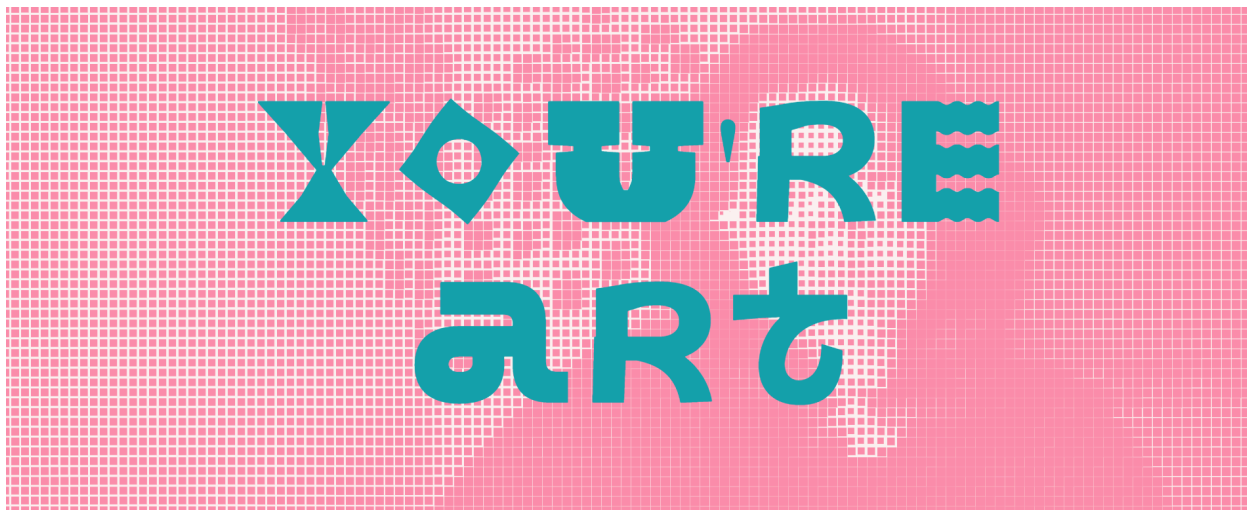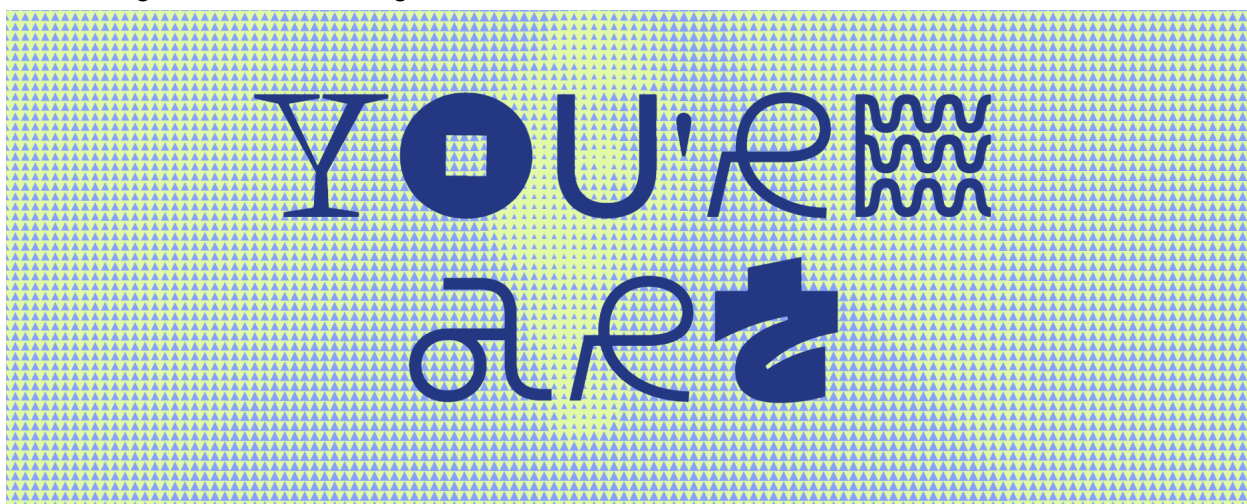
Code output :
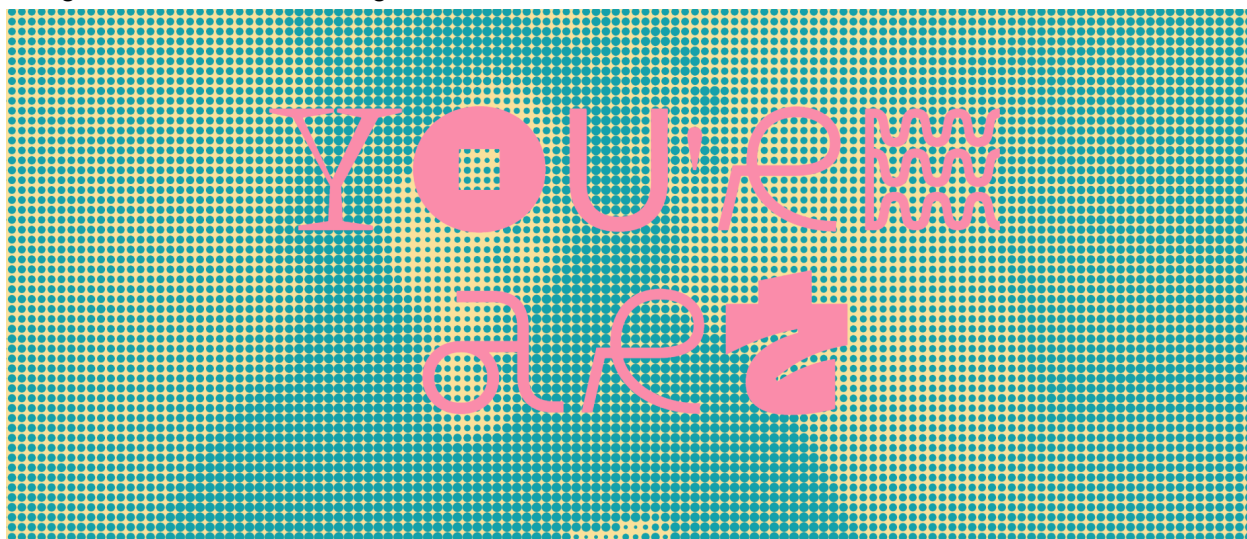Using squares to form the image

Used triangles to form the image

Using circles to form the image

Using circles to form the image :

For more details about the assignment, please check out my Github :

https://github.com/sruju003/CreativeCode