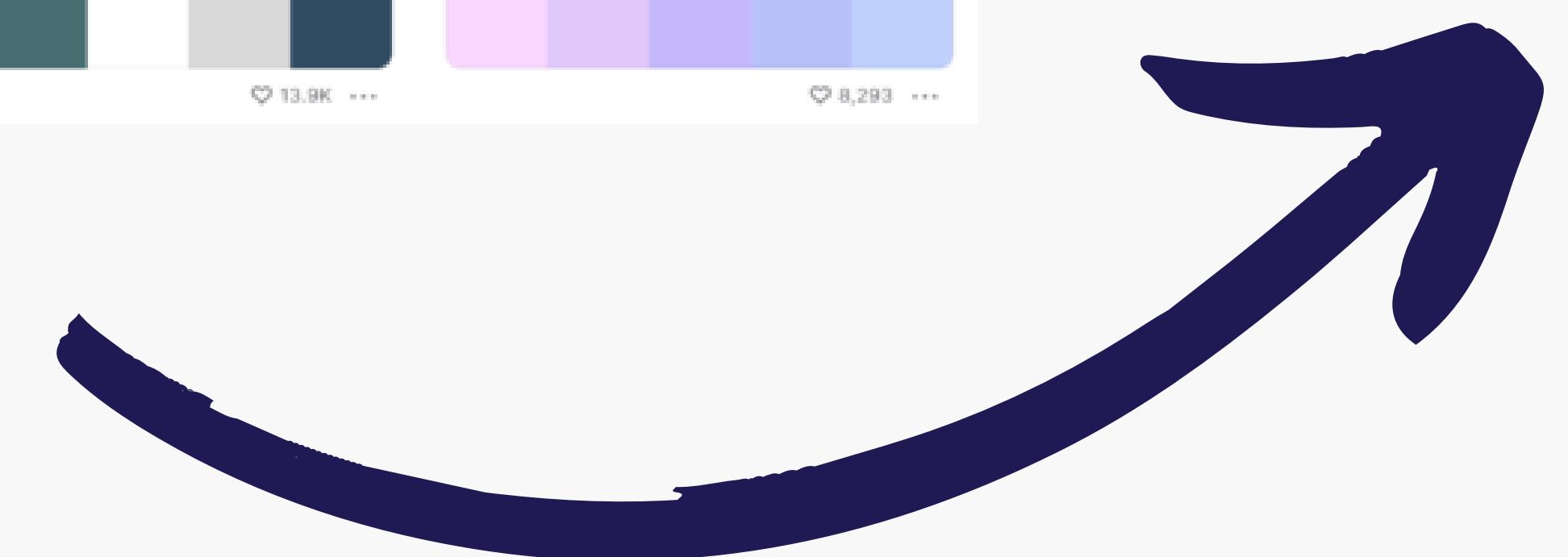
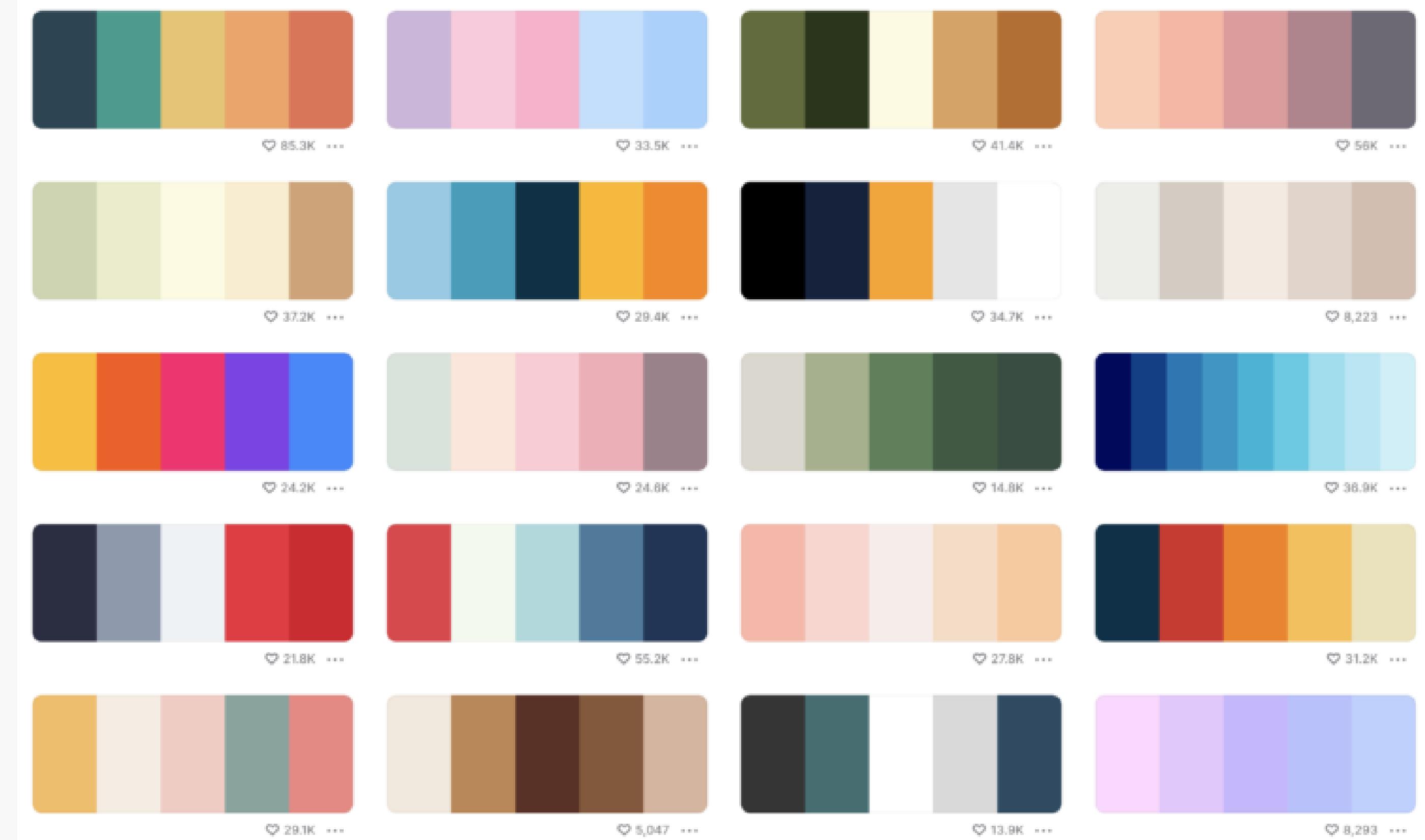


# BUILD A RANDOM HEX COLOR GENERATOR WITH VANILLA JAVASCRIPT



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# THE MARKUP

I decided to make the page very simple, giving it only a heading containing a span tag that will display the value of the current background color, and a button.

```
<body>
  <div class="container">
    <h1>
      Hex Color: <span class="hexValue">#ffffff</span>
    </h1>
    <button id="btn">Click to generate new color</button>
  </div>
</body>;
```

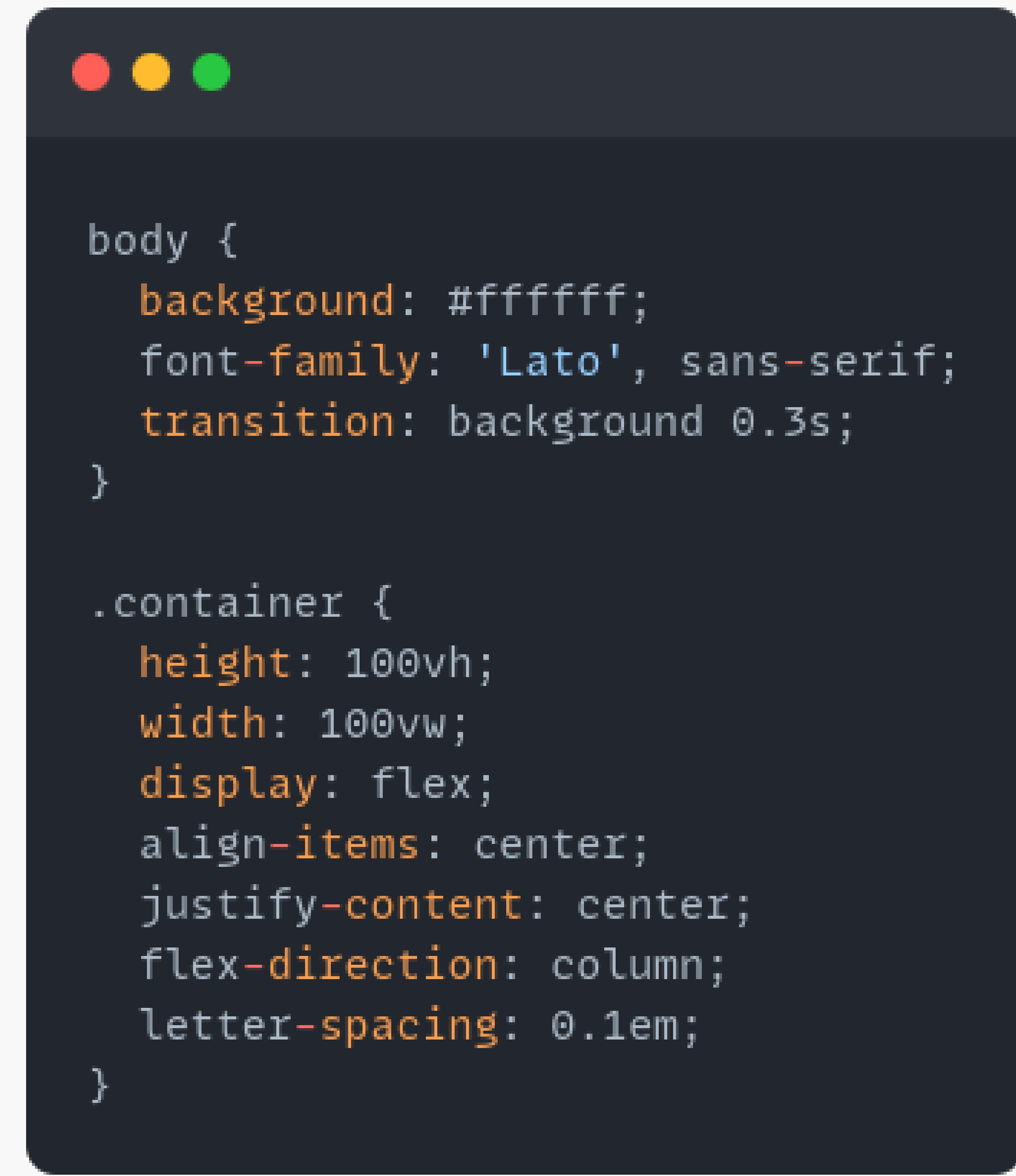


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# STYLES

I gave the page a default background color of white, added a transition effect to make the color change smoother and set its height and width to that of the viewport which is the user's visible area of a web page. Then I went ahead to center the contents of the page using CSS Flexbox:



```
body {  
    background: #ffffff;  
    font-family: 'Lato', sans-serif;  
    transition: background 0.3s;  
}  
  
.container {  
    height: 100vh;  
    width: 100vw;  
    display: flex;  
    align-items: center;  
    justify-content: center;  
    flex-direction: column;  
    letter-spacing: 0.1em;  
}
```



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# FUNCTIONALITY

The first thing I did was create references to the necessary HTML elements and the button in the JS file.

```
const button = document.querySelector('#btn');
const body = document.querySelector('body');
const value = document.querySelector('.hexValue');
```

Then I stored all hexadecimal values in an array and added a click event listener to the button:

```
const hexValues = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 'A', 'B', 'C', 'D', 'E', 'F'];
button.addEventListener('click', changeHex);
```



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I defined the callback function of the event listener as follows:



A screenshot of a browser window showing a dark-themed code editor. The code in the editor is as follows:

```
function changeHex() {
  let hex = '#';

  for (let i = 0; i < 6; i++) {
    const index = Math.floor(Math.random() * hexValues.length);
    hex += hexValues[index];
  }

  value.textContent = hex;
  body.style.backgroundColor = hex;
}
```



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# UPDATING THE PAGE

All that's left is to set the text content of the span tag and the page's background color to be the value of hex. And that's all!

## CONCLUSION

We've successfully built a random hex color generator using HTML, CSS and a few lines of JavaScript. I hope you learnt a lot from my method. You can find the complete code on my GitHub repository. There are certainly other ways to achieve the same result so do check them out and give them a try.



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