

Day 23

“Web Development + Security”

CSS Variables:

What are CSS Variables?

CSS Variables are reusable values defined in CSS that can be used throughout a stylesheet. They make your code more consistent, easier to maintain, and simpler to update.

Basic Syntax:

```
:root {
  --main-color: blue;

  --font-size: 18px;
}
```

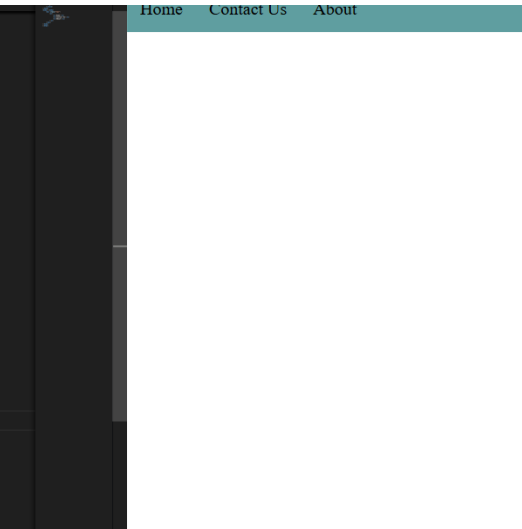
Now, to understand, let's do some coding!

Example: basic code where we have just removed the marker of the

```
index.html > html
2 <html lang="en">
3 <head>
7 <style>
8 *{
9   margin: 0;
10  padding: 0;
11 }
12 .nav{
13   background-color: cadetblue;
14 }
15 ul li{
16   list-style: none;
17   padding: 12px;
18 }
19 </style>
20 </head>
21 <body></body>
22 <div class="nav">
23 <ul>
24 <li>Home</li>
25 <li>Contact Us</li>
26 <li>About</li>
27 </ul>
28 </div>
29 </body>
30 </html>
```

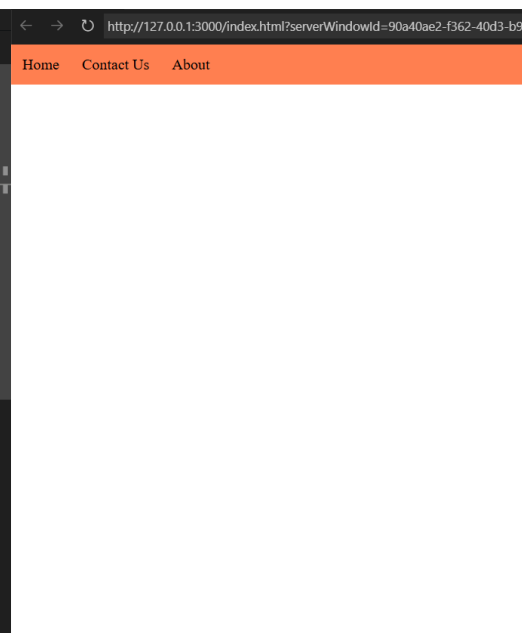
Now, we want to make the items of in the same line, we will use the display:flex in the ul selector:

```
7   <style>
8     *{
9       margin: 0;
10      padding: 0;
11    }
12    .nav{
13      background-color: cadetblue;
14    }
15    ul{
16      display: flex;
17    }
18    ul li{
19      list-style: none;
20      padding: 12px;
21    }
22  </style>
23 </head>
24 <body></body>
25 <div class="nav">
26   <ul>
27     <li>Home</li>
28     <li>Contact Us</li>
29     <li>About</li>
30   </ul>
31 </div>
```

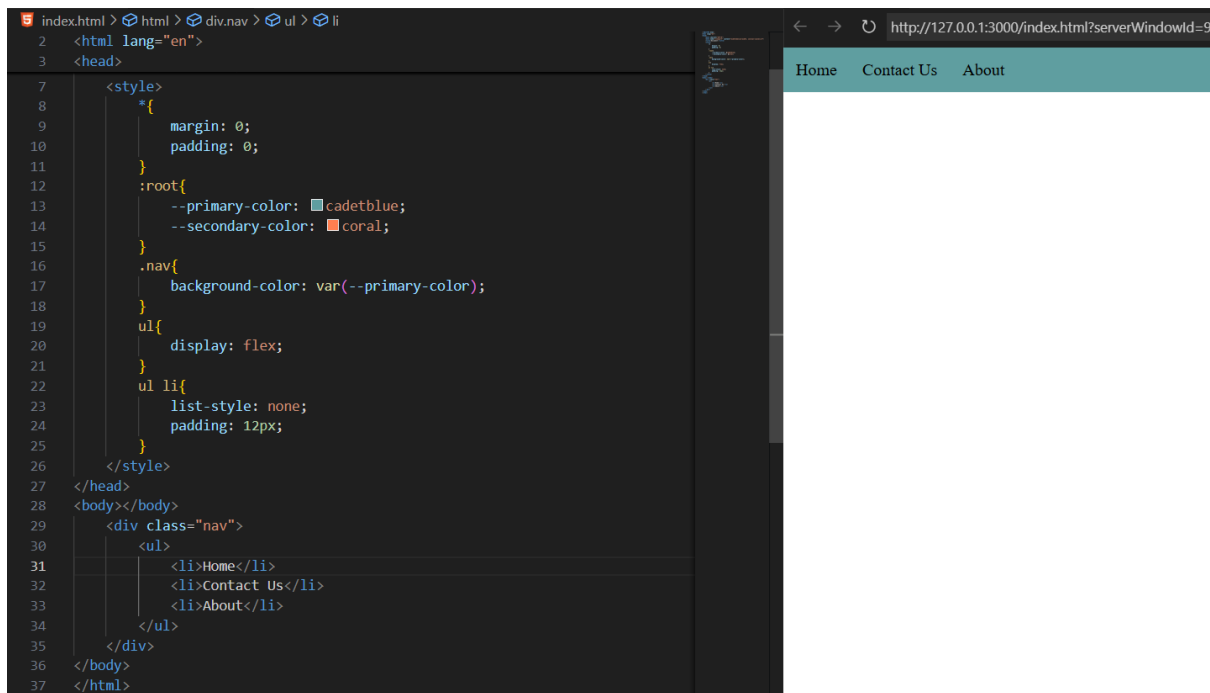


Now, we are introducing the variables: --primary-color & --secondary-color are the variable created by me. Also, we can see that in .nav var(--secondary-color) is written in order to provide the color of that variable to the nav class.

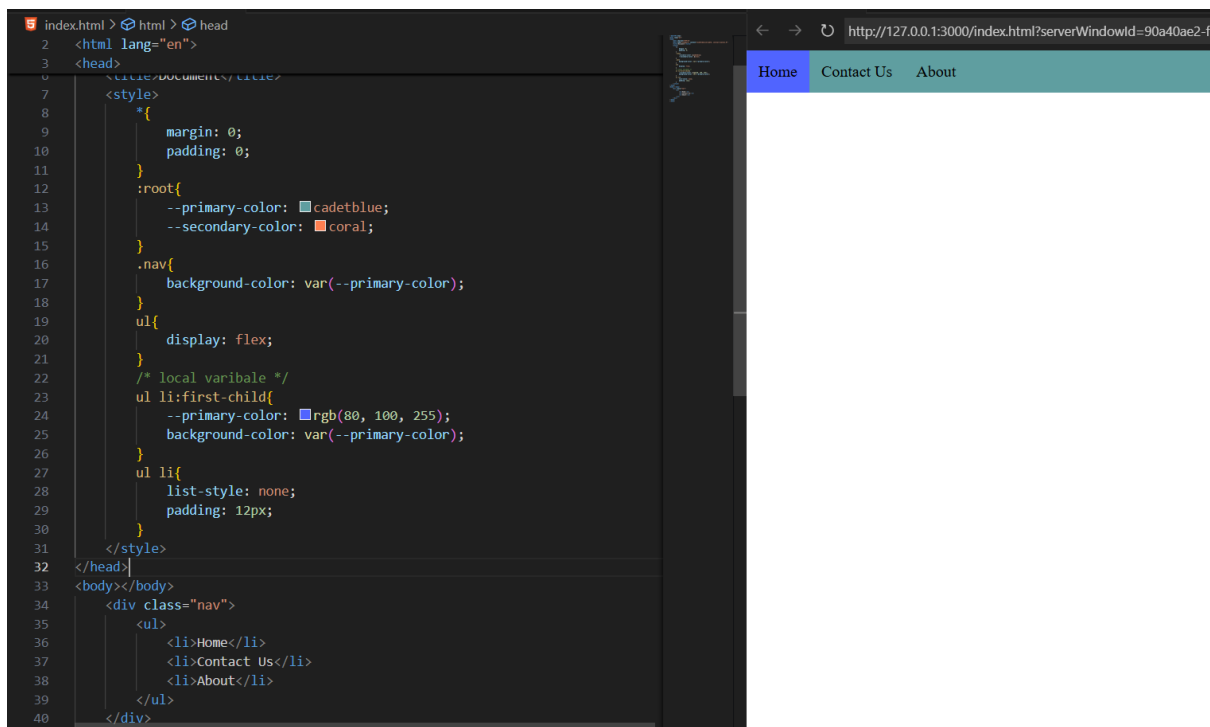
```
index.html > html > head > style > .nav
2   <html lang="en">
3   <head>
4     <title>
5     </title>
6   </head>
7   <style>
8     *{
9       margin: 0;
10      padding: 0;
11    }
12    :root{
13      --primary-color: cadetblue;
14      --secondary-color: coral;
15    }
16    .nav{
17      background-color: var(--secondary-color);
18    }
19    ul{
20      display: flex;
21    }
22    ul li{
23      list-style: none;
24      padding: 12px;
25    }
26  </style>
27 </head>
28 <body></body>
29 <div class="nav">
30   <ul>
31     <li>Home</li>
32     <li>Contact Us</li>
33     <li>About</li>
34   </ul>
35 </div>
36 </body>
37 </html>
```



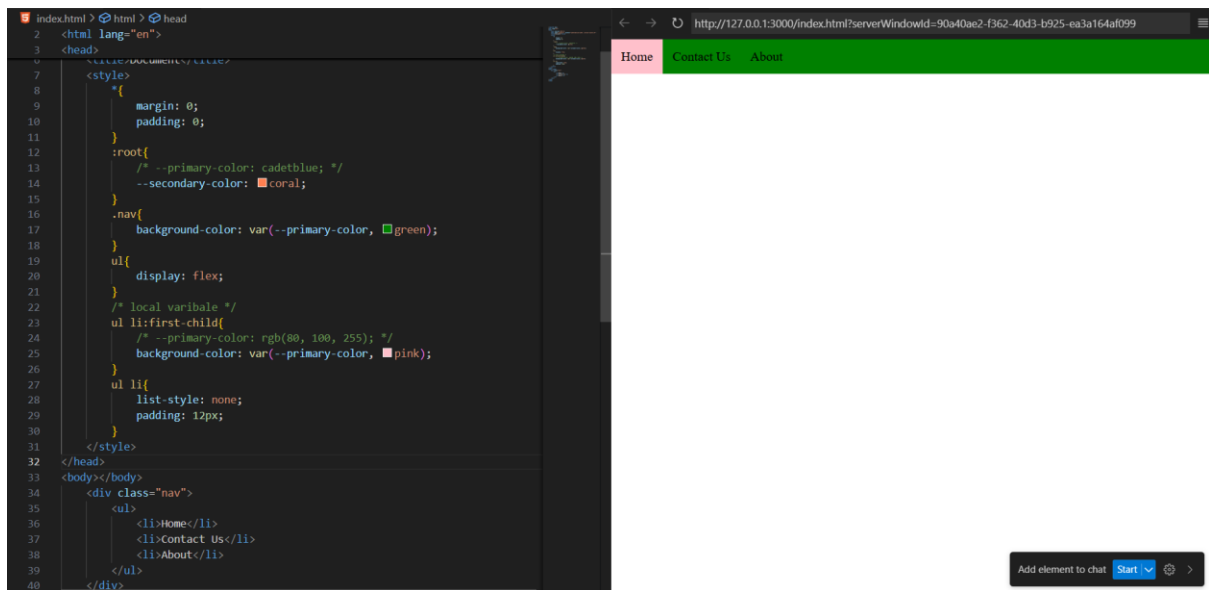
In case we change it to `var(--primary-color)` it will change its color as shown below:



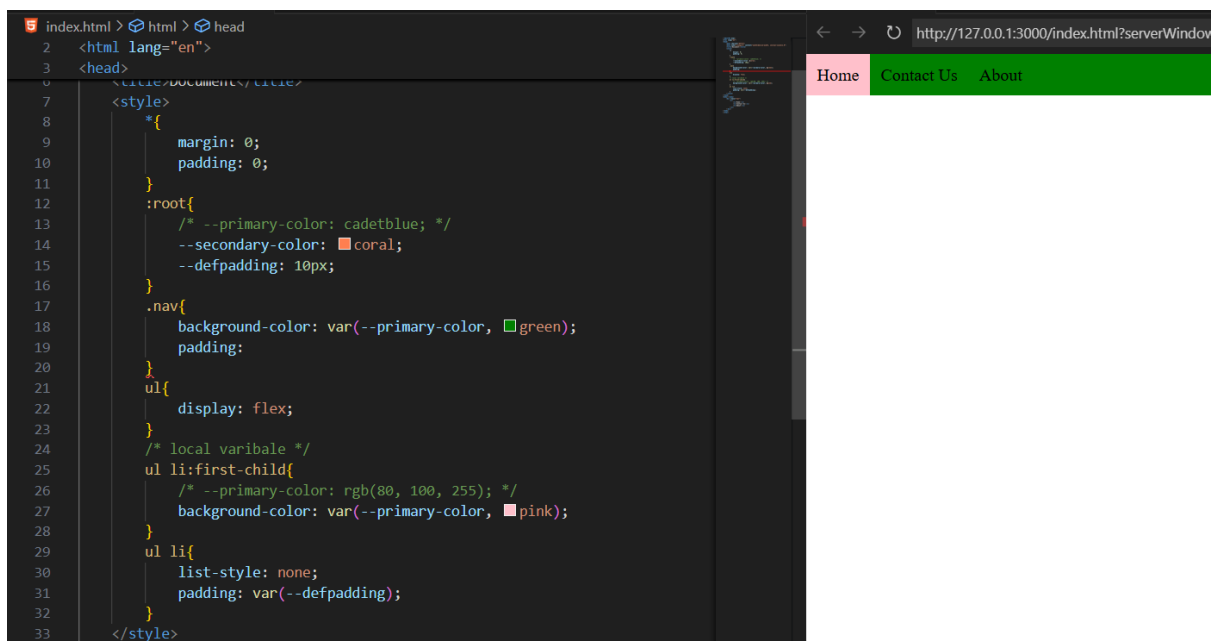
Now, we have the concept of local variable too, let's see: clearly, we can see that we have overwrite the color we had in the `:root` in the `ul li:first-child`.



Suppose we don't have that variable then? We can specify it as shown below:



Also, it is not important that we are using the color properties for the colours only, we can use it for other properties too like padding:



CSS Media Queries:

What Are CSS Media Queries?

Media Queries are used in CSS to make your website responsive — meaning it looks good on all devices (mobile, tablet, laptop, desktop). They apply different styles based on screen size or device type.

Basic syntax:

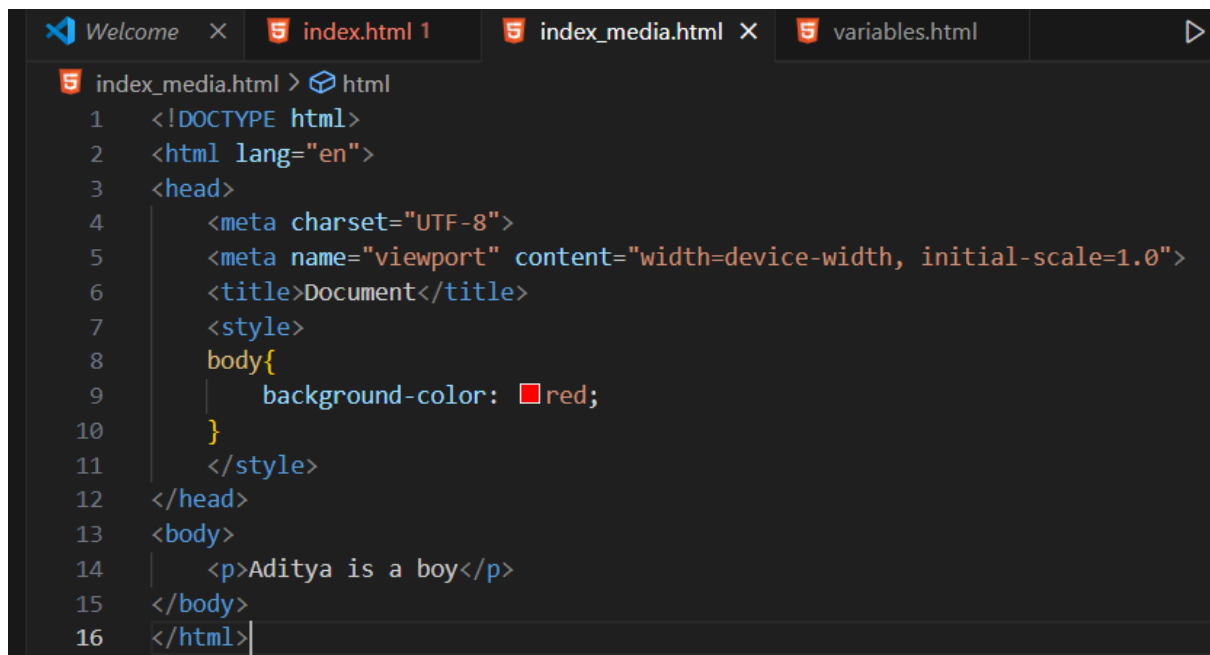
```
@media (condition) {  
    /* CSS rules go here */  
}
```

Conditions:

Condition	Meaning
max-width	Applies when the screen width is up to that value
min-width	Applies when the screen width is at least that value
orientation: portrait	Applies when the screen is taller than wide
orientation: landscape	Applies when the screen is wider than tall

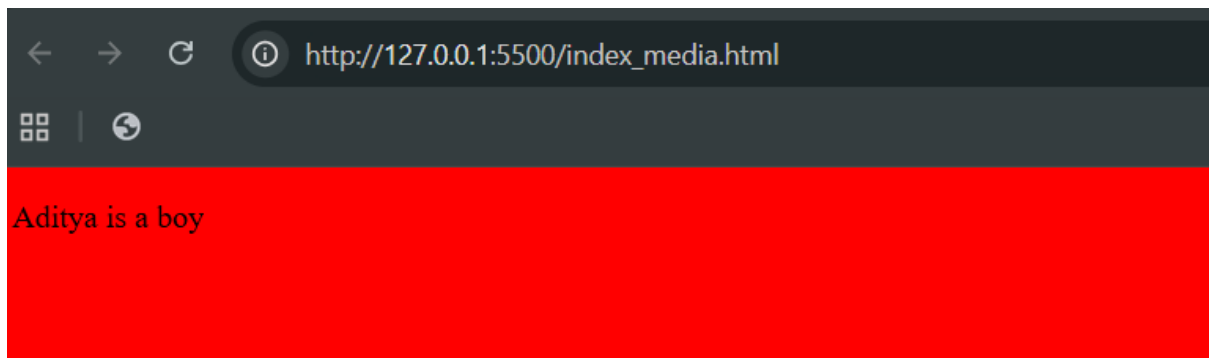
Example: a basic example of red background color

Code:

A screenshot of a code editor with four tabs: 'Welcome', 'index.html 1', 'index_media.html', and 'variables.html'. The 'index_media.html' tab is active, showing the following code:

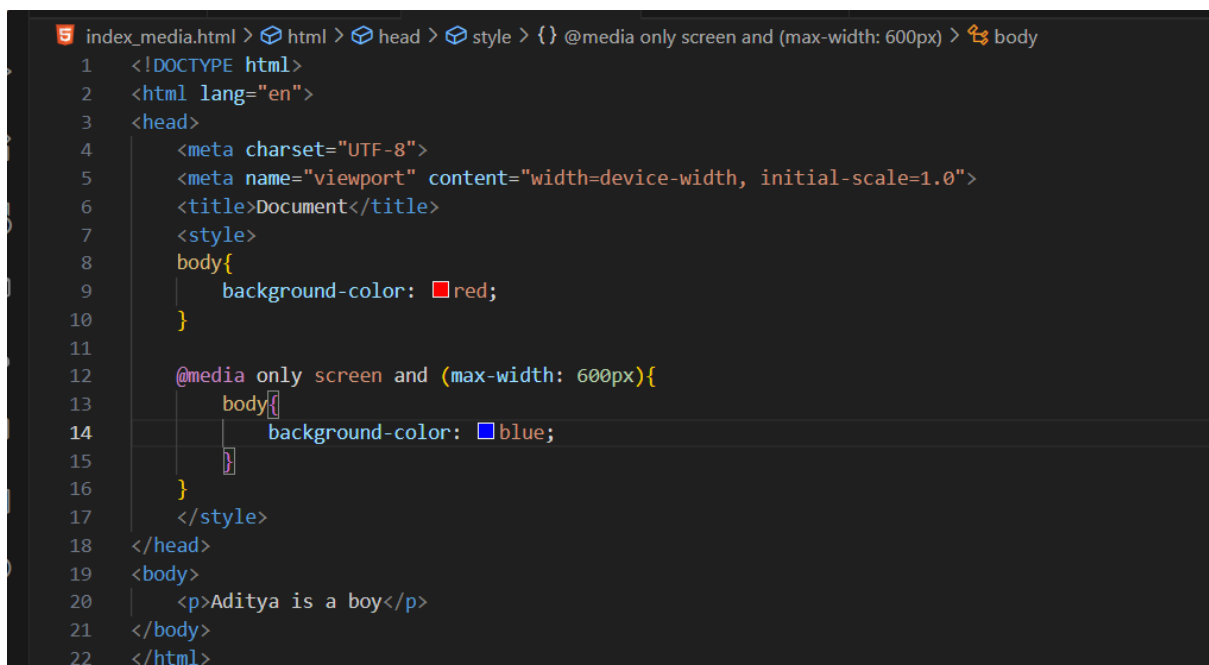
```
1 <!DOCTYPE html>  
2 <html lang="en">  
3 <head>  
4   <meta charset="UTF-8">  
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">  
6   <title>Document</title>  
7   <style>  
8     body{  
9       background-color: red;  
10    }  
11  </style>  
12 </head>  
13 <body>  
14   <p>Aditya is a boy</p>  
15 </body>  
16 </html>
```

Output:

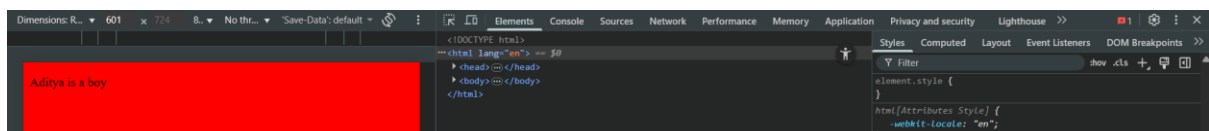


Now, we want that if the device max-width is a certain value then the background colour of the page changes to blue, then for that we will use the media query:

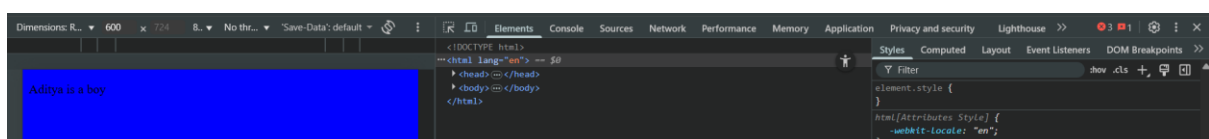
Code:



Output: in the inspect section



The moment we decrease the size to 600 from 601, the moment it changes its colour to blue:



This means that the webpage will have background colour blue for the devices whose max-width of device be 600px.

--The End--