

TRIBUTE PAGE

Name
Brief description/ Active years

Photograph
Work done
----- ----- ----- -----
Achievement/Impact
----- ----- -----

Project Goal: The goal of this project is to create a simple tribute page using HTML and CSS

Brief Description:

Today's Objectives:

- Explore internal and external CSS
- Use Internal CSS to style a webpage
- Use external CSS to style a webpage

Learning Outcomes:

By the end of this session, students will be able to:

- Understand different CSS techniques
- Differentiate between inline, internal, and external CSS
- Understand and explain when to use each CSS technique

Topic-wise breakdown:

Topic	Method	Time
Introduction	<ul style="list-style-type: none"> Explain internal CSS to the students. 	5 min
Technical Activity	<ul style="list-style-type: none"> Ask them to watch and follow for the first few steps. Afterwards, instruct them to apply internal CSS by themselves. For the external CSS part of the activity, ask them to follow steps provided. 	20 min
Review	<ul style="list-style-type: none"> Ask students questions to evaluate their progress and learnings. 	1 min
Closure	<ul style="list-style-type: none"> Encourage them to discuss CSS and its possibilities. 	4 min

Introduction:

In the last session, we used inline CSS.

In inline CSS, we add CSS code inside an HTML element as an attribute in opening tags. The attribute name **style** is always used.

Syntax:

```
<start tag style="property: value"> content </end tag>
```

Attribute used to add CSS in HTML is **style**.

Properties in the style attribute are color, background-color, font-size etc.

Value sets the property. For example, color attribute can have values like red, blue, green etc.

Colon (:) sets the value for an attribute.

Semi-colon (;) is used as a separator between two properties.

Internal CSS is another method we will learn about.

Internal CSS

In internal CSS, all CSS code is added at a single place inside the `<head>` tag. A special element `<style> </style>` is added with CSS instructions written inside the `<style>` tags.

```
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport"
       content="width=device-width,
       initial-scale=1.0">
6    <title>Ratan Tata</title>
7    <style>
8      |
9    </style>
10   </head>
```

The syntax to add CSS is:

```
selector {  
    property1: value1;  
    property2: value3;  
}
```

For example:

For inline CSS, we added code to the **h1** element to change text colour.

```
<h1 style = "color: blue"> Ratan Tata </h1>
```

In internal CSS, we add the following code inside **<style>** tags for the same result:

```
h1 {  
    color: blue;  
}
```

With this code, the text colour in all h1 tags will change.

Why use Internal CSS?

Inline CSS does the job of adding CSS properties quite well. However, it has some disadvantages:

- Adding inline code can be tedious if we have a long HTML code and a large document.
- If the same CSS style is applied across multiple HTML elements, and there is a need to make a change, we have to go through every single one of those elements and make changes throughout the page.

Given these challenges, **internal CSS** is preferred over **inline CSS**. As we will see in this session, internal CSS makes it easier to add and edit CSS code.

Steps to apply internal CSS to specific tags/elements

- Decide on the element to style
- Insert curly brackets – open and close { }
- Inside curly brackets, type **attribute name: value;**
- Press **Enter**.
- Use a different line to add each attribute

Technical Activity:

In today's session, we will use internal and external CSS and to stylise our webpage.

Ratan Tata
1937 - Present



Summary
Born: 28 December, 1937
Education: B. Arch Cornell University
Awarded Padma Vibhushan by Government of India

Life TimeLine

- Born on 28th December, 1937 in Mumbai To Naval Tata
- He studied at the Campion School, Mumbai till the 8th class, followed by Cathedral and John Connon School, Mumbai and at Bishop Cotton School in Shimla
- Graduated from Riverdale Country School, New York City in 1955 and received his degree in Architecture from Cornell University in 1959
- Joined the Tata Group in 1952 and his first job involved working with the Tata Steel division in Jamshedpur
- Appointed, Director-in-Charge of the National Radio & Electronics Company Limited (Nelco) in 1971
- Became Chairman of Tata Industries in 1991
- Was honored with Padma Vibhushan by the government of India, in the year 2000

Social Work

1. Endowed a \$28 million Tata Scholarship Fund, allowing Cornell University to provide financial aid to undergraduate students in India
2. Donated \$50 million for construction of an executive center at Harvard Business School
3. Tata Consultancy Services (TCS) gave \$35 million, the largest ever donation by a company, to Carnegie Mellon University (CMU) for a facility to research in cognitive systems and autonomous vehicles

Part 1: Internal CSS

Step 1: Add internal CSS to the <body> tag

- Copy the inline CSS code we added to the body tag. You only need to copy the CSS properties.

```
<html lang="en">
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title> Tribute Page </title>
</head>
```

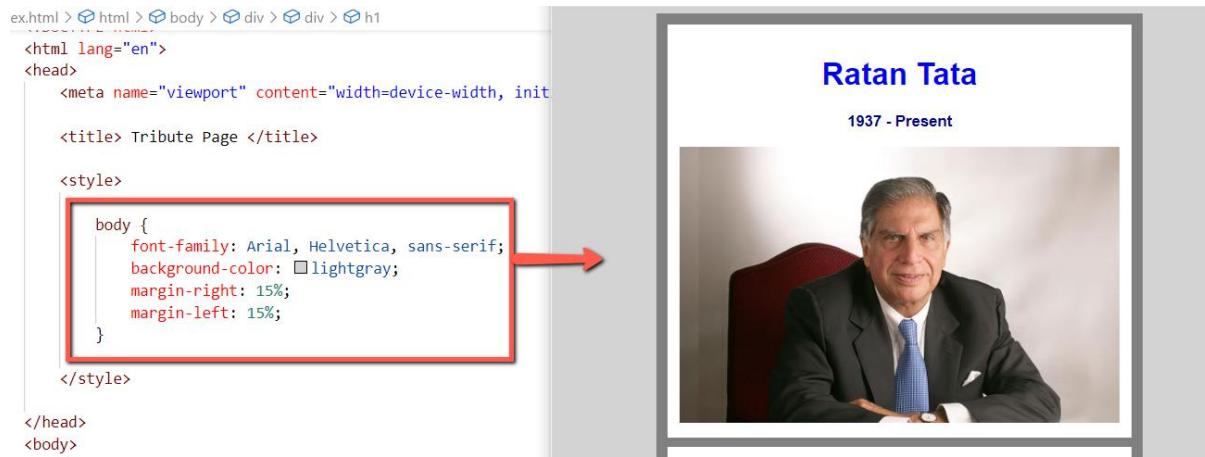
```
<body style="font-family: Arial, Helvetica, sans-serif; background-color: #lightgray;
margin-right: 15%; margin-left: 15%;">
```

- Create a body tag inside the style tag. Within curly brackets, paste the CSS code.

```
lex.html > ⌂ html > ⌂ body
    <!DOCTYPE html>
    <html lang="en">
        <head>
            <meta name="viewport" content="width=device-width, initial-scale=1.0">
            <title> Tribute Page </title>
            <style>
                body {
                    font-family: Arial, Helvetica, sans-serif;
                    background-color: #lightgray;
                    margin-right: 15%;
                    margin-left: 15%;
                }
            </style>
        </head>
        <body>
```

No CSS here

Notice that the output remains the same. We have only changed the way CSS properties are applied.



```
ex.html > html > body > div > div > h1
<html lang="en">
<head>
  <meta name="viewport" content="width=device-width, init
  <title> Tribute Page </title>
  <style>
    body {
      font-family: Arial, Helvetica, sans-serif;
      background-color: #f0f0f0;
      margin-right: 15%;
      margin-left: 15%;
    }
  </style>
</head>
<body>
```

Note:

CSS class selector

In an HTML page, we have multiple HTML tags with the same names. Our current project contains several **div**, **heading** and **paragraph** tags. Suppose we want to apply different designs to the same HTML element. In such cases, we assign a **class** to a specific element and then apply **CSS properties** to that class.

What is a class?

- Class is an attribute in HTML used to apply CSS to a specific set of content
- A class can have multiple CSS attributes. We can add it to an element or div section
- Multiple elements can have the same class and the same CSS properties will be applied to them

Class selector

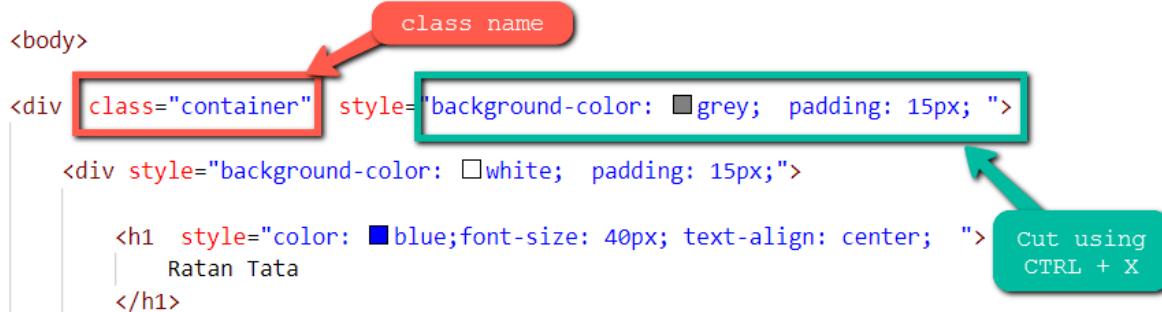
Say you want a specific box — or div container —to have a certain style. Assign a class name to it. To stylise a class or select a class, use a “.” dot selector before the class name.

Syntax

```
.class-name {  
    attribute 1: value;  
    attribute 2: value;  
}
```

Step 2: Add internal CSS to the main container

- Give a class name **container** to the main container. Cut the existing CSS properties.



```
<body>  
    <div class="container" style="background-color: grey; padding: 15px;">  
        <div style="background-color: white; padding: 15px;">  
            <h1 style="color: blue; font-size: 40px; text-align: center;">  
                Ratan Tata  
            </h1>  
        </div>  
    </div>
```

- Inside the **style** tag, create a reference to the **container** class using the **dot operator**. Paste the existing CSS properties within the curly brackets.

```
<style>
  body {
    font-family: Arial, Helvetica, sans-serif;
    background-color: # lightgray;
    margin-right: 15%;
    margin-left: 15%;
  }
  .container {
    background-color: # grey;
    padding: 15px;
  }
</style>
</head>
<body>
  <div class="container">
```

Step 3: Add internal CSS to the header container

- Give the container a class **header** and cut the existing code.
- Create the **header class** using the dot operator. Paste the CSS code within curly brackets.

```
<style>
  .header {
    background-color: # white;
    padding: 15px;
  }
</style>
</head>
<body>
  <div class="container">
    <div class="header">
      <h1 style="color: # blue; font-size: 40px; text-align: center;">
        Ratan Tata
      </h1>
    </div>
  </div>

```



Note:**Selecting a tag inside a div container**

If we don't want to apply changes to all the tags inside div, we can specify the tags.

Syntax –

```
.class_name tag_name {  
    attribute: value;  
}
```

Steps to apply CSS to specific tags inside a class

- Start with .class-name. Add a space and type the tag name.
- Open and close curly brackets. Inside the curly brackets, follow same syntax as above and enter attribute: value.

Now you know how internal CSS works! Finish designing the rest of the webpage with internal CSS.

Hint:

- Change the header styles
- Fix the image width
- Add margins and padding
- Use different card classes for different page sections

Fl—

Ask students to complete the activity on their own. If they are stuck anywhere, help them using following code.

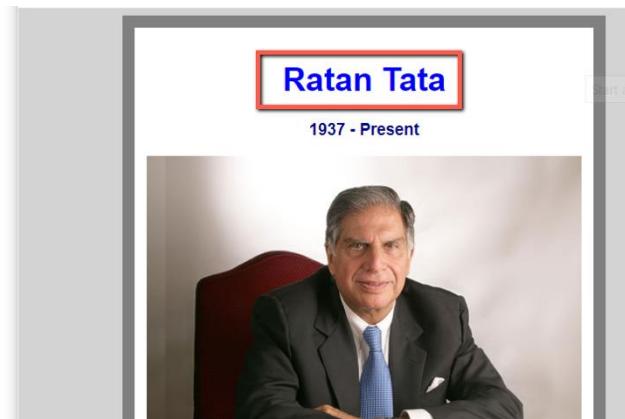
Step: Internal CSS for heading tags inside the header container

- Inside the **style tag**, refer to the **h1** tag. Paste existing CSS properties from the heading tag.

```

    .header h1 {
        color: blue;
        font-size: 40px;
        text-align: center;
    }


```



Note: Notice that we indirectly accessed an HTML element inside a div container

- Repeat the same process for the **h3** tag.

```

    .header h3 {
        color: darkblue;
        font-size: 20px;
        text-align: center;
    }


```



Step: Internal CSS for the image tag.

- We directly using the **img** tag inside the style tag. We don't need a class name since there is only one image.

```
    img {  
        width: 100%;  
    }  
  
    </style>  
  
</head>  
  
<body>  
  
<div class="container">  
  
    <div class="header">  
        <h1> Ratan Tata </h1>  
        <h3> 1937 - Present </h3>  
          
    </div>
```



Step – Internal CSS for the Summary, Lifeline and Social Work containers

For these three containers, we want to use same CSS design properties. Instead of assigning different class names, we can assign the same class to all three containers.

```
<div style="background-color: #white; margin-top: 2%; padding: 15px;">
    <h2 style="color: #teal;"> Summary </h2>
    <p> Born: 28 December, 1937 </p>
    <p> Education: B. Arch Cornell University </p>
    <p> Awarded Padma Vibhushan by Government of India </p>
</div>

<div style="background-color: #white; margin-top: 2%; padding: 15px;">
    <h2 style="color: #teal;"> Life TimeLine </h2>
    <ul>
        <li> Born on 28th December, 1937 in Mumbai To Naval Tata </li>
        <li> He studied at the Campion School, Mumbai till the 8th class, followed by Cathedral
        <li> Graduated from Riverdale Country School, New York City in 1955 and received his de
        <li> Joined the Tata Group in 1962 and his first job involved working with the Tata Ste
        <li> Appointed, Director-in-Charge of the National Radio & Electronics Company Limited
        <li> Became Chairman of Tata Industries in 1991</li>
        <li> Was honored with Padma Bhushan by the government of India, in the year 2000 </li>
    </ul>
</div>

<div style="background-color: #white; margin-top: 2%; padding: 25px;">
    <h2 style="color: #teal;"> Social Work </h2>
    <ol>
        <li> Endowed a $28 million Tata Scholarship Fund, allowing Cornell University to provide
        <li> Donated $50 million for construction of an executive center at Harvard Business Sch
        <li> Tata Consultancy Services (TCS) gave $35 million, the largest ever donation by a c
    </ol>
</div>
```

- Cut the existing code and give all the containers a class “**card**”.

```
<div class="card">  
  <h2 style="color: teal;"> Summary </h2>  
  <p> Born: 28 December, 1937 </p>  
  <p> Education: B. Arch Cornell University </p>  
  <p> Awarded Padma Vibhushan by Government of India </p>  
</div>  
  
<div class="card">  
  <h2 style="color: teal;"> Life Timeline </h2>  
  <ul>  
    <li> Born on 28th December, 1937 in Mumbai To Naval Tata </li>  
    <li> He studied at the Campion School, Mumbai till the 8th class, followed by Cat  
    <li> Graduated from Riverdale Country School, New York City in 1955 and received  
    <li> Joined the Tata Group in 1962 and his first job involved working with the Ta  
    <li> Appointed, Director-in-Charge of the National Radio & Electronics Company Li  
    <li> Became Chairman of Tata Industries in 1991</li>  
    <li> Was honored with Padma Bhushan by the government of India, in the year 2000  
  </ul>  
</div>  
  
<div class="card" >  
  <h2 style="color: teal;"> Social Work </h2>  
  <ol>  
    <li> Endowed a $28 million Tata Scholarship Fund, allowing Cornel University to p  
    <li> Donated $50 million for construction of an executive center at Harvard Busine  
    <li> Tata Consultancy Services (TCS) gave $35 million, the largest ever donation  
  </ol>  
</div>
```

- Inside the style tag, using the dot operator, refer to the **card** class. Paste CSS properties within the curly brackets

```

        img {
            width: 100%;
        }

        .card {
            background-color: white;
            margin-top: 2%;
            padding: 15px;
        }

    
```

</style>

</head>

<body>

<div class="container">

 <div class="header">

 <h1> Ratan Tata </h1>

 <h3> 1937 - Present </h3>

Summary

Born: 28 December, 1937
 Education: B. Arch Cornell University
 Awarded Padma Vibhushan by Government of India

Life TimeLine

- Born on 28th December, 1937 in Mumbai To Naval Tata
- He studied at the Campion School, Mumbai till the 8th class, followed by Cathedral and John Connon School, Mumbai and at Bishop Cotton School in Shimla
- Graduated from Riverdale Country School, New York City in 1955 and received his degree in Architecture from Cornell University in 1959
- Joined the Tata Group in 1962 and his first job involved working with the Tata Steel division in Jamshedpur
- Appointed, Director-in-Charge of the National Radio & Electronics Company Limited (Nelco) in 1971
- Became Chairman of Tata Industries in 1991
- Was honored with Padma Bhushan by the government of India, in the year 2000

Social Work

1. Endowed a \$20 million Tata Scholarship Fund, allowing Cornell University to provide financial aid to undergraduate students in India
2. Donated \$50 million for construction of an executive center at Harvard Business School
3. Tata Consultancy Services (TCS) gave \$35 million, the largest ever donation by a company, to Carnegie Mellon University (CMU) for a facility to research in cognitive systems and autonomous vehicles

Step – Internal CSS for h2 tags inside the card container

- To access the **h2** tag inside the **card container**, we use the class name and then the h2 tag: **.card h2**
- Inside the style tag, access the **h2** tag and paste the existing CSS code in curly brackets.

```

        .card {
            background-color: white;
            margin-top: 2%;
            padding: 15px;
        }

        .card h2 {
            color: teal;
        }

    
```

•

Summary

Born: 28 December, 1937

Education: B. Arch Cornell University

Awarded Padma Vibhushan by Government of India

Life TimeLine

- Born on 28th December, 1937 in Mumbai To Naval Tata
- He studied at the Campion School, Mumbai till the 8th class, followed by Cathedral and John Connon School, Mumbai and at Bishop Cotton School in Shimla
- Graduated from Riverdale Country School, New York City in 1955 and received his degree in Architecture from Cornell University in 1959
- Joined the Tata Group in 1962 and his first job involved working with the Tata Steel division in Jamshedpur
- Appointed, Director-in-Charge of the National Radio & Electronics Company Limited (Nelco) in 1971
- Became Chairman of Tata Industries in 1991
- Was honored with Padma Bhushan by the government of India, in the year 2000

Social Work

1. Endowed a \$28 million Tata Scholarship Fund, allowing Cornell University to provide financial aid to undergraduate students in India
2. Donated \$50 million for construction of an executive center at Harvard Business School
3. Tata Consultancy Services (TCS) gave \$35 million, the largest ever donation by a company, to Carnegie Mellon University (CMU) for a facility to research in cognitive systems and autonomous vehicles

--

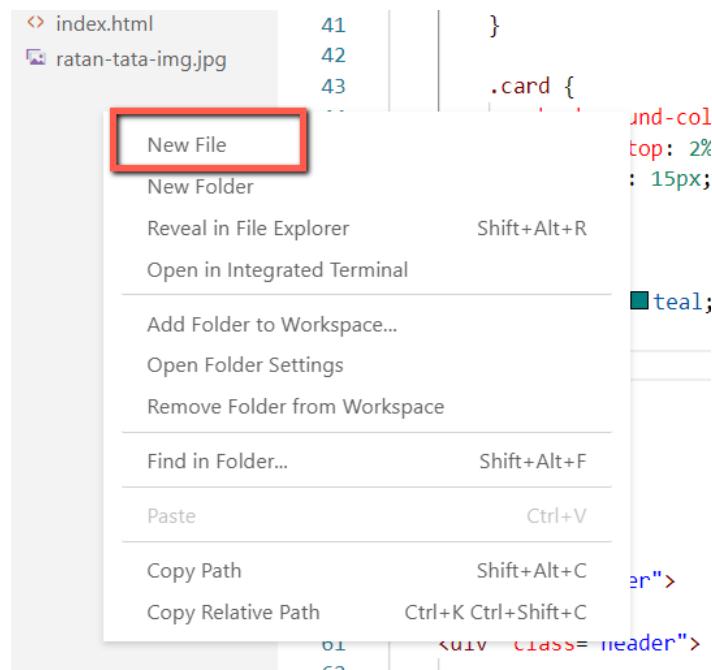
We have finished adding internal CSS to our webpage! Now, let's look at external CSS.

Part 2: External CSS

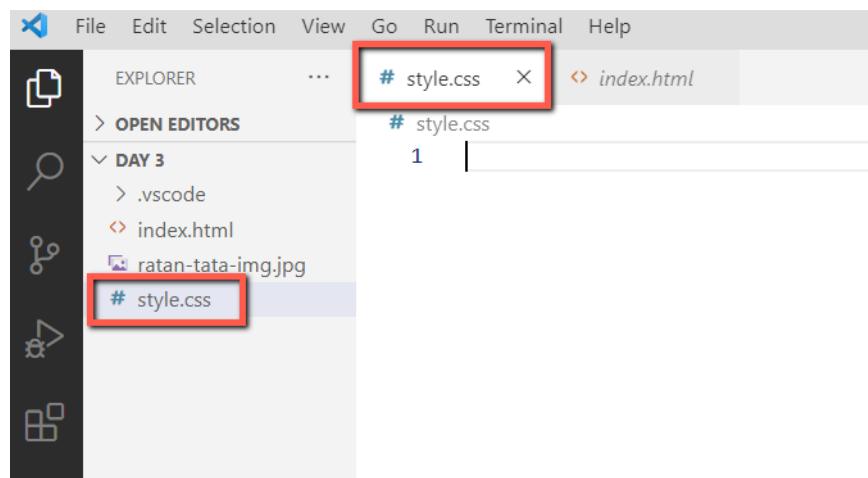
This is the last and the most commonly used method to apply CSS. We create a separate file for all the CSS code. The file extension is **.css**

Step 1: Create an external CSS file

- Right click on the sidebar in VS Code and select **New File**.



- Name the file **style.css**.



- Go to the **index.html** file and copy the entire CSS code from the **style** tag.

```
<style>

    body {
        font-family: Arial, Helvetica, sans-serif;
        background-color: #lightgray;
        margin-right: 15%;
        margin-left: 15%;
    }

    .container {
        background-color: #grey;
        padding: 15px;
    }

    .header {
        background-color: #white;
        padding: 15px;
    }

    .header h1 {
        color: #blue;
        font-size: 40px;
        text-align: center;
    }

    .header h3 {
        color: #darkblue;
        font-size: 20px;
        text-align: center;
    }

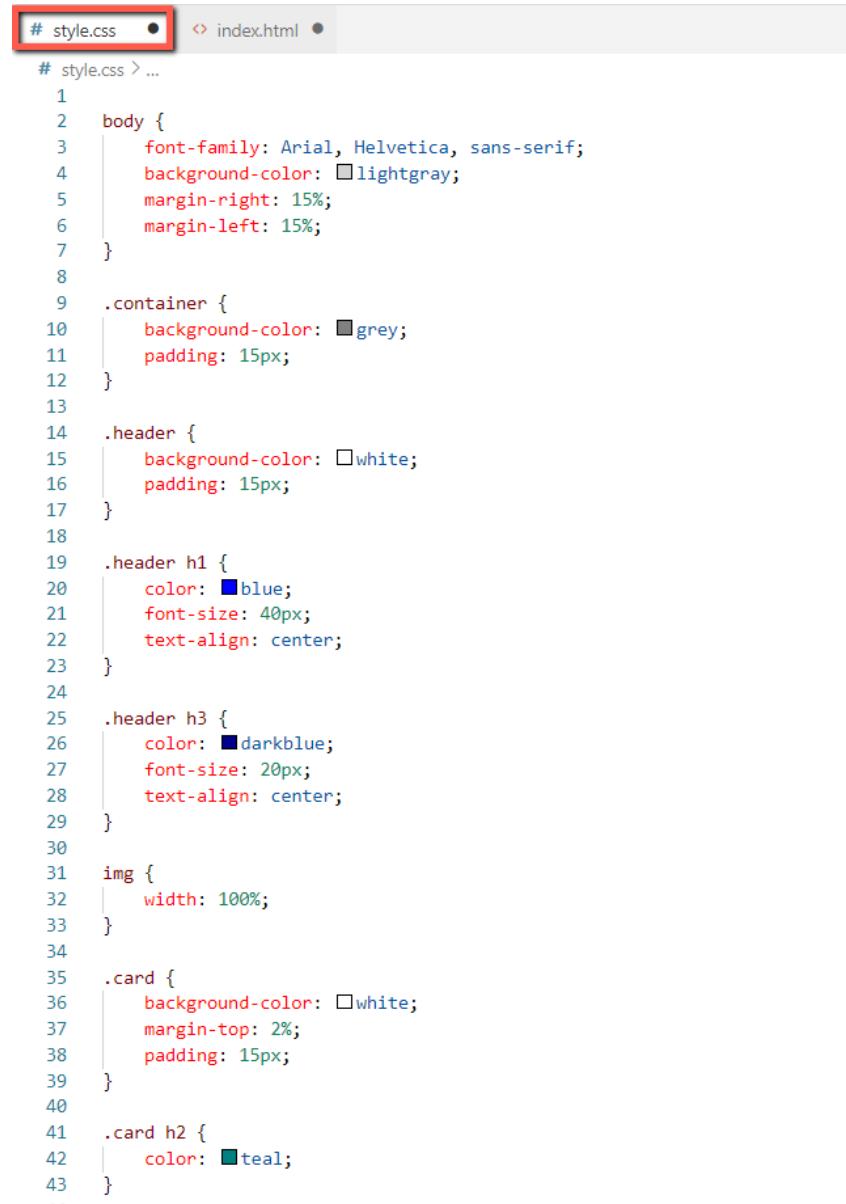
    img {
        width: 100%;
    }

    .card {
        background-color: #white;
        margin-top: 2%;
        padding: 15px;
    }

    .card h2 {
        color: #teal;
    }

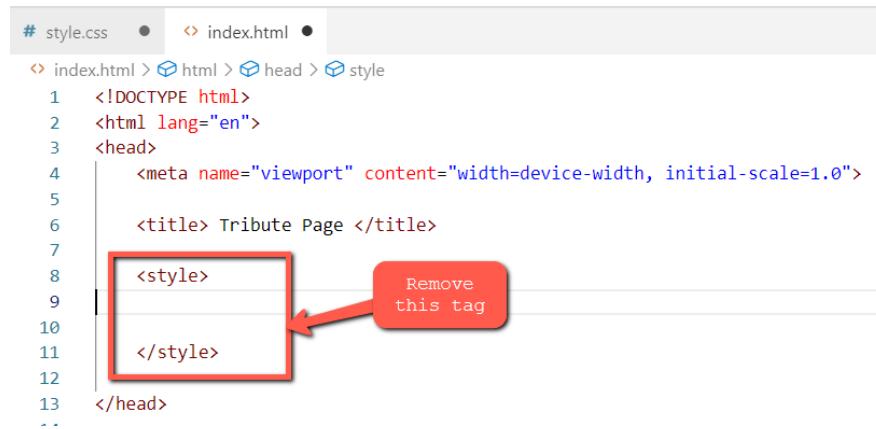
</style>
```

- Paste the code in the **style.css** file.



```
# style.css • index.html •
# style.css > ...
1 2  body {
3     font-family: Arial, Helvetica, sans-serif;
4     background-color: #lightgray;
5     margin-right: 15%;
6     margin-left: 15%;
7 }
8
9  .container {
10    background-color: #grey;
11    padding: 15px;
12 }
13
14  .header {
15    background-color: #white;
16    padding: 15px;
17 }
18
19  .header h1 {
20    color: #blue;
21    font-size: 40px;
22    text-align: center;
23 }
24
25  .header h3 {
26    color: #darkblue;
27    font-size: 20px;
28    text-align: center;
29 }
30
31  img {
32    width: 100%;
33 }
34
35  .card {
36    background-color: #white;
37    margin-top: 2%;
38    padding: 15px;
39 }
40
41  .card h2 {
42    color: #teal;
43 }
44
```

- Remove the style tag from **index.html** since there is no CSS code in it anymore.



```

# style.css
index.html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta name="viewport" content="width=device-width, initial-scale=1.0">
5
6      <title> Tribute Page </title>
7
8      <style>
9
10     </style>
11
12 </head>
13

```

Step 2: Link external CSS file with index.html

Finally, we need to link the **style.css** file with the **index.html** file. If we skip this step, the HTML file will not be able to display the CSS.

- In the **index.html** file, create a **link tag**. Specify the **style.css** file within the **href** attribute.
- View the page on the browser. The webpage should include the CSS now!

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title> Tribute Page </title>
    <link rel="stylesheet" href="style.css">
</head>

```

Final Output

Ratan Tata

1937 - Present

A professional portrait of Ratan Tata, an elderly man with grey hair, wearing a dark suit, white shirt, and a blue patterned tie. He is seated in a red office chair, looking directly at the camera with a slight smile. The background is a plain, light-colored wall.

Summary

Born: 28 December, 1937

Education: B. Arch Cornell University

Awarded Padma Vibhushan by Government of India

Life TimeLine

- Born on 28th December, 1937 in Mumbai To Naval Tata
- He studied at the Campion School, Mumbai till the 8th class, followed by Cathedral and John Connon School, Mumbai and at Bishop Cotton School in Shimla
- Graduated from Riverdale Country School, New York City in 1955 and received his degree in Architecture from Cornell University in 1959
- Joined the Tata Group in 1962 and his first job involved working with the Tata Steel division in Jamshedpur
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Social Work

1. Endowed a \$28 million Tata Scholarship Fund, allowing Cornell University to provide financial aid to undergraduate students in India
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3. Tata Consultancy Services (TCS) gave \$35 million, the largest ever donation by a company, to Carnegie Mellon University (CMU) for a facility to research in cognitive systems and autonomous vehicles

Review:

- What is the difference between internal and external CSS?

Closure:

Discuss with your classmates which CSS style is efficient for larger websites.

FI—This is an open-ended question.