

CSS Specificity & Cascade / Cheat Sheet

1. Specificity

Specificity is how browsers decide which CSS property values are the most relevant to an HTML element and, therefore, will be applied.

The following list of CSS Selectors is in the lowest to highest order by specificity.

Type (tag name) Selector

Class Selector

ID Selector

1.1 Type Selector & Class Selector

A Class Selector is more specific compared to Type (tag name) Selector as it selects only the HTML elements that have a specific class attribute value in the HTML document.

Sample -1

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<link rel="stylesheet"
```

```
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous"/>
```

```
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"
crossorigin="anonymous"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-9/reFTGAW83EW2RDu2S0VKalzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN"
crossorigin="anonymous"></script>
```

```
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPIYxofvL8/KUEfYiJOMMV+rV"
crossorigin="anonymous"></script>
```

```
<style>
```

```
@import
```

```
url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobst
```

```
er&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+S  
C:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:it  
al,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work  
+Sans:ital,wght@0,400;0,700;1,700&display=swap");
```

```
h1 {  
  color: grey;  
  font-family: "Roboto";  
  font-size: 22px;  
}  
.heading {  
  color: blue;  
  font-weight: bold;  
}  
</style>  
</head>  
<body>  
  <h1>Heading 1</h1>  
  <h1>Heading 2</h1>  
  <h1 class="heading">Heading 3</h1>  
  <h1 class="heading">Heading 4</h1>  
  <h1 class="heading">Heading 5</h1>  
</body>  
</html>
```

Output:

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Note:-

It doesn't overwrite the entire CSS Ruleset but only overwrites the CSS properties that are the same.

1.2 Class Selector & ID Selector

An ID Selector is more specific when compared to a Class Selector as we provide a unique ID within the HTML document and it selects only a single HTML Element.

Sample -2

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous"/>
```

```
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"
crossorigin="anonymous"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-9/reFTGAW83EW2RDu2S0VKalzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN"
crossorigin="anonymous"></script>
```

```
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPIYxofvL8/KUEfYiJOMMV+rV"
crossorigin="anonymous"></script>
```

```
<style>
```

```
@import
url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap");
```

```
h1 {
  color: grey;
  font-family: "Roboto";
  font-size: 22px;
}
```

```
.heading {
  color: blue;
  font-weight: bold;
}
```

```
#heading5 {
  color: green;
  font-size: 28px;
  font-style: italic;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>Heading 1</h1>
```

```
<h1>Heading 2</h1>
```

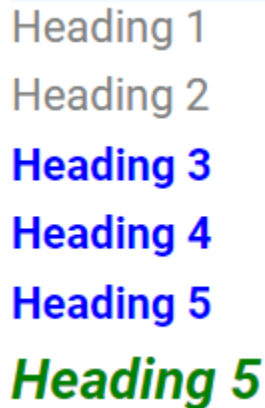
```
<h1 class="heading">Heading 3</h1>
```

```
<h1 class="heading">Heading 4</h1>
```

```
<h1 class="heading">Heading 5</h1>
```

```
<h1 class="heading" id="heading5">Heading 5</h1>
</body>
</html>
```

Output



Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

2. Inline Styles

The Inline styles are applied directly to an HTML element. They use the HTML style attribute, with CSS property values defined within it.

Syntax:

```
<tag style = "property1: value1; property2: value2; ..." >Content</tag>
```

A HTML style attribute value can consist of one or more CSS property values.

Sample-3

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous"/>
  <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"
crossorigin="anonymous"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-9/reFTGAW83EW2RDu2S0VKalzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN"
crossorigin="anonymous"></script>
```

```
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPIYxofvL8/KUEfYijJOMMV+rV"
crossorigin="anonymous"></script>
```

```
<style>
```

```
@import
```

```
url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap");
```

```
h1 {
```

```
  color: grey;
```

```
  font-family: "Roboto";
```

```
  font-size: 22px;
```

```
}
```

```
.heading {
```

```
  color: blue;
```

```
  font-weight: bold;
```

```
}
```

```
#heading5 {
```

```
  color: green;
```

```
  font-size: 28px;
```

```
  font-style: italic;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>Heading 1</h1>
<h1>Heading 2</h1>
<h1 class="heading">Heading 3</h1>
<h1 class="heading">Heading 4</h1>
<h1 class="heading" id="heading5" style="color: white; background-color: orange;">Heading 5</h1>
</body>
</html>
```

Output

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Note

Inline Styles have the highest specificity. They overwrite any other styles specified using CSS Selectors.

Using Inline Styles is not recommended because

Inline Styles are not reusable.

Writing HTML and CSS separately increases code readability.

3. CSS Cascade

The source order of CSS Rulesets matters. When two CSS Rulesets have equal specificity, the one that comes last in the CSS is applied. The source order of CSS Rulesets matters. When two CSS Rulesets have equal specificity, the one that comes last in the CSS is applied.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-
```

```
JcKb8q3iqJ61gNV9Kgb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"  
crossorigin="anonymous"/>
```

```
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-  
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"  
crossorigin="anonymous"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"  
integrity="sha384-9/reFTGAW83EW2RDu2S0VVKalzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN"  
crossorigin="anonymous"></script>
```

```
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"  
integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPIYxofvL8/KUEfYijJOMMV+rV"  
crossorigin="anonymous"></script>
```

```
<style>
```

```
@import
```

```
url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobst  
er&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+S  
C:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:it  
al,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work  
+Sans:ital,wght@0,400;0,700;1,700&display=swap");
```

```
.style-1 {
```

```
color: green;
```

```
}
```

```
.style-2 {
```

```
color: orange;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1 class="style-2 style-1">About India</h1>
```

```
</body>
```

```
</html> output
```

About India

Note

The styles that apply to the HTML Elements are not determined by the order the classes defined in the HTML class attribute, but instead the order in which they appear in the CSS.

3.1 The !important exception

It is a special piece of CSS used to make a particular CSS property and value the most specific thing, irrespective of source order and specificity.

```
<h1 class="style-1">About India</h1>
```

```
.style-1 {  
  color: green;  
}  
  
h1 {  
  color: orange !important;  
}
```

The only way to override a !important property value is to include another !important property value. The added property value should either come later in the order or should be of higher specificity.

```
<!DOCTYPE html>  
  
<html>  
  
  <head>  
  
    <link rel="stylesheet"  
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"  
crossorigin="anonymous"/>  
  
    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"  
crossorigin="anonymous"></script>  
  
    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"  
integrity="sha384-9/reFTGAW83EW2RDu2S0VKalzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN"  
crossorigin="anonymous"></script>  
  
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"  
integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPLYxofvL8/KUEfYiJOMMV+rV"  
crossorigin="anonymous"></script>
```

```

<style>

@import
url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap");

.style-1 {
  color: green !important;
}

h1 {
  color: orange !important;
}

.style-2 {
  color: blue !important;
}

<style>
</head>

<body>

  <h1 class="style-2 style-1">About India</h1>

</body>
</html>

```

Note

Always look for a way to use specificity before even considering !important.

Only use !important when you want to override foreign CSS (from external libraries, like Bootstrap).