Cascading Style Sheet (CSS)

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Three ways of inserting CSS

- An **inline style** applies to a single HTML element

   This text will be red

- An **internal** style sheet applies styles over a single page, and is defined within the <style> element of the <head> section of an HTML page

```
<head>
<style>
/* make all paragraphs red */
p {color:red}
</head>
</style>
```

- An **external** style sheet applies styles over multiple pages, by having each page reference the style sheet in the <head> section of the page:

```
<head>
<link rel="stylesheet" type="text/css" href="mystyle.css">
</head>
```

How CSS is used

- CSS allows you to separate the style from the content https://www.w3schools.com/css/css_intro.asp
- CSS allows you to specify the style of one or more elements, classes, or ids, or combinations thereof (see https://www.w3schools.com/css/css_combinators.asp)

```
<script>

/* style for both h1 headings and paragraphs */
h1, p {color:blue}

/* style for paragraphs with class = “italic” */
p.italic {color:black; font-style: italic}

/* style for paragraphs with id = “intro”
p#intro {color:black; font-size: 1.5em}

/* style for all paragraphs that are inside of a div */
div p {color:red}

</script>
```

CSS Specificity – What happens when one element has two (or more) styles?

- Inline styles take precedence over internal and external styles
- For other cases, the most *specific* style is used:
  - Classes are more specific than elements
    - *p.class* is more specific than *p*
  - Ids are more specific than classes
    - *p#id* is more specific than *p.class*
- Specificity is determined using a scoring system explained here: https://www.w3.org/TR/selectors-3/#specificity
- Specificity (within a category) increases with the number of classes, ids, or elements
  - *div p* is more specific than *p*
- In the event of a tie, the most recently applied style will be used

“Advanced” CSS

- A pseudo-class defines a special state of an element, such as when the user hovers over it.

```
/* display a border on hover */
p:hover {border: 1px solid black}
```

- Tooltips or messages can be displayed by toggling between *display: none* and *display: block* (or inline) when a user hovers over an element. Note: there is also a *visibility* property that can be set to *hidden* or *visible*, but *hidden* elements take up space on a page
- Navigation bars can be created by styling an unordered list of links, as in the posted example

Examples

- display.html
- navbar.html
- hide.html