CSS precedence

As we learned last week, in order for the computer to decide which of several rules may apply to a given element an a particular context, there is a well defined "precedence" to define which rule should apply. Theoretically we should be able to always figure out which rule applies by using the precedence rules, but in practice it can be quite complicated, especially when conflicting rules are in different .css files.

Nevertheless, that can cause problems when you have different rules that could apply to the same element. Consider the following example:

```
<style>
    h1 {
        color: blue;
        font-size: 2rem;
    }
    chapter h1 {
        color: black;
        font-size: 1.4rem;
    }
    section h1 {
        color: grey;
        font-size: 1.2rem;
    }
</style>

<h1>My Book</h1>
<chapter>
    <h1>Chapter 1</h1>
    <section>
        <h1>Section 1.1</h1>

        <p> . . . </p>
    </section>
    <section>
        <h1>Section 1.2</h1>

        <p> . . . </p>
    </section>
</chapter>
```

My Book

Chapter 1

Section 1.1

. . .

Section 1.2

. . .

Looking at the style rules we see there are three different possibilities for the size and color

of an <h1> element. In this case the application of the rules seems pretty intuitive. The outermost heading is neither in a Chapter or a Section, so it is blue and largest of the three. The one that's in the Chapter, but not in the section is black and of medium size.

Finally the heading in the section is the smallest and shows up as grey.

Your intuition may be thinking along these lines - "section h1" is more specific than "chapter h1" or "h1", and therefore it takes precedence resulting in smaller gray text. But when you re-arrange the rules you get a different result

```
<style>
    section h1 {
        color: grey;
        font-size: 1.2rem;
    }
    chapter h1 {
        color: black;
        font-size: 1.4rem;
    }
    h1 {
        color: blue;
        font-size: 2rem;
    }
</style>

<h1>My Book</h1>
<chapter>
    <h1>Chapter 1</h1>
    <section>
        <h1>Section 1.1</h1>

        <p> . . . </p>
    </section>
    <section>
        <h1>Section 1.2</h1>

        <p> . . . </p>
    </section>
</chapter>
```

My Book

Chapter 1

Section 1.1

. . .

Section 1.2

. . .

What happened? To answer that question, we'll turn to the debugger.