1. When considering the design of a web page, it is important to separate structure from presentation. Explain how this is done, and why it is a good idea.

It is important to separate structure from the presentation, this is done by writing all the presentation details in CSS and not in the HTML code. This is a good idea because when writing responsive CSS you need to be able to change all style items of the page and you can't if you hardcoded an element to have a certain width, it creates problems that add extra time to your development cycle. Therefore it is a good idea to separate structure from presentation.

2. CSS allows you to match/select structural elements at different levels of granularity. Explain how this works and why it is beneficial. Provide some examples of when you would use one selection criteria over another.

CSS stands for cascading style sheets, and it allows you to describe how you want the HTML page to be shown. You describe the page by selecting elements by name or adding classes or ids to them in the HTML code and applying styles with CSS. You can change colors, backgrounds, font, text size, border, margin, animations, and much much more. This is beneficial because it allows you to style each element, class, or id individually and allows for beautiful, functional pages. If I wanted to make all of the paragraph text green, for example, I would select the HTML tag to apply the style to instead of adding classes or ids. If I wanted a few unrelated tags to have red text I would create a class and assign it to all the elements I wanted to have red text and use CSS to define that class to make the text red. Ids are the same except you can only apply an id to one element.

3. Tables clearly represent a common structural component in many documents, but have fallen out of favor with many web designers. Do you agree? What are the pros and cons of using tables versus some other mechanism to organize/represent the data on our web pages?

Yes, I agree, tables should not be used for the layout of pages. The only pro to using tables over other structures is when showing tabular data. The biggest con is their lack of flexibility with modern web design, they aren't fluid and you can't control them to make them responsive so if you do it right the worst thing is your page looks beautiful except for the table and your users have to scroll. However, if you do it wrong it messes up your whole page and makes it painful to use.

4. What are regular expressions good for? Include in your discussion a hypothetical problem/task; an example of a regular expression (other than the currency example); and an explanation for why using regular expressions is a good fit for addressing that problem.

Regular expressions are good for finding patterns in data. An example of a regular expression is "([A-Z a-z]+)". When searching a document with the aforementioned regular expression the result would be any string that contains one or more upper or lower case letters or spaces. I used this to identify the states column in a document so I could find the next columns and get the data. A regular expression was a good fit to solve this problem because there was only one column that had data formated that certain way and I was able to identify a regex that would match the data.

5. Defend or refute the following statement: "Data that appears on professional, publicly available pages can be scraped using a simple program" Consider both technical and ethical concerns before you answer.

Yes, data that appears on professional, publicly available pages can be scraped using a simple

program. From the technical aspect it wouldn't be too difficult to write a program to do it. Ethically it might be wrong, before you do any web scraping it is always a good idea to check the robots.txt file to make sure the server doesn't disallow you from scraping if it doesn't you are good to go and can scrape with good consience.