

2024 CpSc Q15

Section: Web Design and Development

Topic: CSS — Grouping Selectors to Simplify Styles

Question Summary

A section of the CSS code for styling a website is shown below:

```
main {background-color: red;}
section {background-color: red; padding: 5px;}
p {padding: 5px;}
h1 {color: white; font-size: 22px; padding: 5px;}
h2 {padding: 5px;}
```

Use grouping selectors to re-write the code to make it more efficient.

Worked Solution

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Grouping selectors allow you to apply the same styles to several elements in one rule, separated by commas. This reduces duplication and makes the CSS easier to maintain.

Here, main and section both share background-color: red;, and several elements share the same padding.

The rewritten CSS is:

```
main, section {
```

```
    background-color: red;
}
```

```
section, p, h1, h2 {
    padding: 5px;
}
```

```
h1 {
    color: white;
    font-size: 22px;
}
```

Explanation

- The first rule groups main and section to share the red background.
- The second rule groups all elements that use padding: 5px;.
- The h1 rule remains separate because it has unique styles (color and font size).

This version is shorter, easier to update, and still produces exactly the same visual result.

Final Answer

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```
main, section {background-color: red;}
section, p, h1, h2 {padding: 5px;}
h1 {color: white; font-size: 22px;}
```

Revision Tips

- Use commas to group selectors that share identical declarations.

- Keep unique properties (like color or font-size) in separate rules.
- Grouping selectors reduces repetition and makes maintenance easier.
- Browsers apply styles to all elements in the list — identical to writing separate rules.

Exam Alignment

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Matches 2024 MI: correctly groups main and section for background color, and section, p, h1, h2 for padding. The h1 rule remains separate for unique styles.