HTML

**Answer.1 HTML**

<!DOCTYPE html> is the first line of code required in every HTML document. The DOCTYPE declaration is an instruction to the web browser about what version of HTML the page is written in. This ensures that the web page is parsed the same way by different web browsers.

**Answer.2 HTML**

Semantic tags in HTML refer to the use of specific HTML elements that carry meaning and describe the structure and purpose of the content they enclose. These elements provide contextual information to both browsers and developers, making it easier to understand and interpret the content of a web page.

<header>, <nav>, <main>, <section> are some example of semantic tags.

Semantic tags were introduced in HTML5 to address the problem of using non-descriptive or generic tags (such as <div> or <span>) to structure web documents. By using semantic tags, developers can provide more meaningful and self-explanatory markup, improving the accessibility, maintainability, and search engine optimization (SEO) of a website.

**Answer.3 HTML**

HTML Tags: HTML tags are the building blocks of HTML markup. They are used to define the structure and formatting of the content within an HTML document. Tags are enclosed within angle brackets (< >) and usually come in pairs: an opening tag and a closing tag. The opening tag indicates the beginning of an element, and the closing tag marks the end.

For example:

<p>This is a paragraph.</p>

In the above example, <p> is the opening tag, and </p> is the closing tag. Together, they define a paragraph element.

HTML Elements: HTML elements consist of both the opening and closing tags along with the content they enclose. They represent a complete unit within an HTML document. Elements are created by placing tags around the desired content. For example, in the paragraph element mentioned above, <p> is the opening tag, </p> is the closing tag, and "This is a paragraph." is the content of the element.

**Answer.4 HTML**

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| --- | --- |
| github repo link | **https://github.com/GopalkrishaRao/Placement\_Assignment\_Gopalkrishna\_H\_R/tree/main/HTML/Q4-Resume** |
| **Deployed Pjoect link** | [**https://html-resume-gkrao-aaa94b.netlify.app/**](https://html-resume-gkrao-aaa94b.netlify.app/) |

**Answer.5 HTML**

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| github repo link |  |
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**Answer.6 HTML**

HTML5 introduced several advancements and new features over its previous versions, offering numerous advantages for web development. Some of the key advantages of HTML5 are:

* Improved Semantics: HTML5 introduced a set of semantic elements (e.g., <header>, <nav>, <article>) that provide a clearer and more meaningful structure to web pages. This helps search engines better understand the content and improves accessibility.
* Native Multimedia Support: HTML5 introduced native support for audio and video elements (<audio> and <video>). This eliminates the need for third-party plugins like Flash and enables developers to embed multimedia content directly into web pages.
* Canvas and SVG: HTML5 introduced the <canvas> element, which allows for dynamic and interactive rendering of graphics and animations using JavaScript. Additionally, HTML5 brought support for Scalable Vector Graphics (SVG), which enables the use of vector-based graphics that scale smoothly across different screen sizes.
* Offline Capabilities: HTML5 introduced the Application Cache (<appcache>) and Local Storage (localStorage) features, which enable web applications to work offline or in low-connectivity situations. Developers can cache resources and store data locally, enhancing the user experience and allowing offline functionality.
* Enhanced Forms: HTML5 introduced several new input types (<input type="date">, <input type="email">, <input type="range">, etc.) and form validation features. This simplifies form handling, improves user experience, and reduces the need for custom JavaScript validations.
* Responsive Design: HTML5 provides better support for responsive web design, allowing developers to create fluid and adaptive layouts that adjust to different screen sizes and devices. This is achieved through features like media queries and new layout elements such as <section> and <article>.
* Improved Performance: HTML5 includes various performance optimizations, such as the ability to load scripts asynchronously (async and defer attributes), which improves page loading speed. Additionally, HTML5 introduced the Web Workers API, enabling multi-threading and background processing for complex tasks.
* Geo-location: HTML5 introduced the Geolocation API, which allows web applications to retrieve the user's location information (with user consent). This feature enables location-based services and enhances the functionality of location-aware web applications.
* Cross-platform Compatibility: HTML5 is designed to work consistently across different platforms and devices, promoting cross-platform compatibility. It reduces the need for platform-specific coding and ensures a more unified experience for users.

**Answer.7 HTML**

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**Answer.8 HTML**

<img> tag is used specifically for displaying images, while the <figure> tag is used to group self-contained content, such as an image, and its associated caption. The <figure> tag provides additional semantic meaning and aids in the representation and understanding of the relationship between the content and its description.

**Answer.9 HTML**

* HTML Tags: HTML tags are the building blocks of HTML documents. They define the structure and meaning of the content within an HTML document. Tags are enclosed within angle brackets (< >) and usually come in pairs: an opening tag and a closing tag.
* HTML Attributes: HTML attributes provide additional information about an HTML element. They are used within the opening tag of an element and modify the element's behavior, appearance, or define specific characteristics. Attributes consist of a name and a value and are placed inside the opening tag of an element.
* Global attributes are a set of attributes that can be used on most HTML elements. They provide common functionality and are not specific to any particular element. class, id, title etc are some examples of html global attributes.

**Answer.10 HTML**

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**CSS**

**Answer.1 CSS**

**Answer.2 CSS**

**Answer.3 CSS**

**Answer.4 CSS**

**Answer.5 CSS**

**Answer.6 CSS**

**Answer.7 CSS**

**Answer.8 CSS**

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| github repo link | **https://github.com/GopalkrishaRao/Placement\_Assignment\_Gopalkrishna\_H\_R/tree/main/CSS/Q8-Periodic%20table** |
| **Deployed Pjoect link** | [**https://css-periodic-table-8588d.netlify.app/**](https://css-periodic-table-8588d.netlify.app/) |

**Answer.9 CSS**

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| github repo link | **https://github.com/GopalkrishaRao/Placement\_Assignment\_Gopalkrishna\_H\_R/tree/main/CSS/Q9-image** |
| **Deployed Pjoect link** | [**https://assignmetn-css-q9-daee3c.netlify.app/**](https://assignmetn-css-q9-daee3c.netlify.app/) |

**Answer.10 CSS**

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**Answer.11 CSS**

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| github repo link |  |
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**Answer.12 CSS**

**JavaScript**

**Answer.1 JavaScript**

**Answer.2 JavaScript**

**Answer.3 JavaScript**

**Answer.4 JavaScript**

**Answer.5 JavaScript**

**Answer.6 JavaScript**

**Answer.7 JavaScript**

**Answer.8 JavaScript**

**Answer.9 JavaScript**

**Answer.10 JavaScript**

**Answer.11 JavaScript**

**Answer.12 JavaScript**

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| github repo link |  |
| **Deployed Pjoect link** |  |

**React**

**Answer.1 React**

**Answer.2 React**

**Answer.3 React**

**Answer.4 React**

**Answer.5 React**

**Answer.6 React**

**Answer.7 React**

**Answer.8 React**

**Answer.9 React**

**Answer.10 React**

**Answer.11 React**

**Answer.12 React**

**Answer.13 React**

**Answer.14 React**

**Answer.15 React**

**Answer.16 React**

**Express**

**Answer.1 Express**

**Answer.2 Express**

**Answer.3 Express**

**Answer.4 Express**

**Answer.5 Express**

**Answer.6 Express**

**Answer.7 Express**

**Answer.8 Express**

**Answer.9 Express**