Methodology

To develop the Subnetting Tutorial Website, I utilized HTML, CSS, and JavaScript to create a responsive, user-friendly interface that effectively teaches subnetting concepts. HTML and CSS were used to structure and style the website, ensuring that content is both visually engaging and easy to navigate. JavaScript powers the interactive components, allowing users to input values, calculate subnetting details, and visualize results in real time. In addition to the technical aspects, I applied pedagogical principles to design content that builds users’ understanding progressively—from binary IP conversion to subnetting the given IP address. By incorporating clear explanations, step-by-step guidance, and practical examples, the tool supports varied learning paces and enhances comprehension, making one of the complex networking topics more accessible.