1.What is client-side and server-side in web development, and what is the main difference between the two?
Ans: In web development, the terms "client-side" and "server-side" refer to the execution of code, respectively, on the user's device (usually in a web browser) and the server. The primary distinction between the two types of code is that client-side code executes on the user's computer and controls the website's presentation and interactivity, whereas server-side code executes on the server and manages data processing, storage, and system communication.

2.What is an HTTP request and what are the different types of HTTP requests?
Ans: A message delivered to a server by a client (such as a web browser) in order to start a certain activity or obtain data is known as an HTTP request. The many HTTP requests include:
 GET: This command gets a resource off the server.
 POST: Submits data for the server to process; frequently used for adding new resources.
 PUT: Updates a resource that already exists on the server.
 DELETE: Destroys a specific server resource.
 PATCH: Modifies an existing resource just partially.

3.What is JSON and what is it commonly used for in web development?
Ans: A lightweight data transfer format that is frequently used in web development is JSON (JavaScript Object Notation). It is a text-based format that uses key-value pairs to express structured data. Data transmission between servers and web applications, as well as between various systems, frequently uses JSON. In various computer languages, it is simple to parse and create.

4.What is a middleware in web development, and give an example of how it can be used.
Ans: Middleware, in the context of web development, refers to computer programs or operations that are used in between a web application and a server. By intercepting and handling requests and responses, it gives the program new capability. For instance, authentication middleware can be used to verify a user's authentication status before allowing access to a certain application route.

5.What is a controller in web development, and what is its role in the MVC architecture?
Ans: A controller in web development is a part that manages user requests and regulates an application's flow. In the MVC (Model-View-Controller) architecture, it interacts with the model and view components after processing user input received through the interface (such as a web browser). The controller is in charge of rendering the proper visual for the response and changing the model in response to user activities.