React – JSON-server and Firebase Real Time Database

• Question 1: What do you mean by RESTful web services?

**RESTful web services** are web services that adhere to the principles of **REST (Representational State Transfer)**, an architectural style for designing networked applications. RESTful services allow communication between systems over the web using standard protocols, typically HTTP.

• Question 2: What is Json-Server? How we use in React ?

**JSON-Server** is a lightweight, easy-to-setup development tool used to create a mock REST API by using a JSON file as a database. It allows developers to simulate server behavior and quickly prototype front-end applications without needing to set up a backend server.

Question 3: How do you fetch data from a Json-server API in React? Explain the role of fetch() or axios() in making API requests.

To fetch data from a JSON-Server API, you use either the fetch() method (built-in JavaScript function) or a library like axios.

fetch():

Built into modern browsers, no need for installation.

Returns a promise that resolves to the HTTP response.

axios():

Includes built-in support for request/response interceptors, automatic JSON parsing, and timeout management.

Question 4: What is Firebase? What features does Firebase offer?

**Firebase** is a **Backend-as-a-Service**  platform developed by Google. It provides a wide range of tools and services to help developers build, manage, and scale applications efficiently. Firebase supports integration with Android, iOS, web, and Unity, making it versatile for cross-platform development.

• Question 5: Discuss the importance of handling errors and loading states when working with APIs in React

When working with APIs in React, **handling errors and loading states** is essential to ensure a smooth and user-friendly experience. Proper management of these states enhances reliability, provides feedback to users, and prevents application crashes.