**Explain how to consume REST APIs from React applications**

**🔹 What does it mean to consume a REST API in React?**

**Consuming a REST API** in React means sending HTTP requests (GET, POST, PUT, DELETE) from your React app to a remote server and using the response data in your UI.

**🔹 Steps to Consume a REST API in React**

1. **Choose an HTTP client:**
   * Built-in fetch() API
   * External libraries like axios
2. **Use React lifecycle or hooks:**
   * useEffect() for API calls when component mounts
   * useState() to store fetched data

**🔹 Example using fetch()**

import React, { useEffect, useState } from 'react';

function UserList() {

const [users, setUsers] = useState([]);

useEffect(() => {

fetch('https://jsonplaceholder.typicode.com/users') // API URL

.then((response) => response.json())

.then((data) => setUsers(data));

}, []);

return (

<div>

<h2>User List</h2>

<ul>

{users.map((user) => <li key={user.id}>{user.name}</li>)}

</ul>

</div>

);

}

export default UserList;

**🔹 Example using axios**

import axios from 'axios';

import React, { useEffect, useState } from 'react';

function PostList() {

const [posts, setPosts] = useState([]);

useEffect(() => {

axios.get('https://jsonplaceholder.typicode.com/posts')

.then((response) => setPosts(response.data))

.catch((error) => console.error(error));

}, []);

return (

<div>

<h2>Posts</h2>

<ul>

{posts.map(post => <li key={post.id}>{post.title}</li>)}

</ul>

</div>

);

}

export default PostList;

**🔹 When to Use**

* Fetching user data, product lists, comments, etc.
* Posting form data to a backend
* Editing or deleting data via API endpoints