**4. ReactJS-HOL**

**App.js**

import React from 'react';

import Posts from './Posts';

function App() {

  return (

    <div style={{ fontFamily: 'sans-serif' }}>

      <header style={{ background: '#f4f4f4', padding: '10px 20px', textAlign: 'center' }}>

        <h1>Blog Posts</h1>

      </header>

      <main style={{ padding: '20px' }}>

        <Posts />

      </main>

    </div>

  );

}

export default App;

**Post.js**

class Post {

  constructor(id, title, body) {

    this.id = id;

    this.title = title;

    this.body = body;

  }

}

export default Post;

**Posts.js**

import React from 'react';

class Posts extends React.Component {

  constructor(props) {

    super(props);

    this.state = {

      posts: [],

      error: null

    };

  }

  loadPosts() {

    fetch('https://jsonplaceholder.typicode.com/posts')

      .then(response => {

        if (!response.ok) {

          throw new Error('Network response was not ok');

        }

        return response.json();

      })

      .then(json => this.setState({ posts: json }))

      .catch(error => {

        console.error("Fetch Error:", error);

        this.setState({ error: 'Failed to load posts.' });

      });

  }

  componentDidMount() {

    this.loadPosts();

  }

  componentDidCatch(error, info) {

    console.error("Error caught:", error, info);

    alert(`An error occurred: ${error.message}`);

  }

  render() {

    const { posts, error } = this.state;

    if (error) {

      return <div>Error: {error}</div>;

    }

    if (posts.length === 0) {

      return <div>Loading...</div>;

    }

    return (

      <div>

        <h1>All Posts</h1>

        {posts.map(post => (

          <article key={post.id} style={{ borderBottom: '1px solid #eee', paddingBottom: '1rem', marginBottom: '1rem' }}>

            <h2 style={{ fontSize: '1.2rem' }}>{post.title}</h2>

            <p>{post.body}</p>

          </article>

        ))}

      </div>

    );

  }

}

export default Posts;

**Output:**

