Assignment: Implementing Infinite Scroll with Pagination in React

Objective:

Create a React application that implements infinite scroll functionality to display a list of products. Once the user scrolls and loads up to 200 products (10 pages), a pagination component should be displayed, allowing the user to navigate between the pages.

Requirements:

1. Initial Setup:
   - Create a new React application using `Vite` or any other boilerplate.
   - Use functional components and React hooks.
2. Data Source:
   - Simulate an API that provides product data. Each page should return 20 product items.
   - You can use a static array of products or generate mock data using a library like `faker.js.`
3. Infinite Scroll:
   - Implement the infinite scroll to load more products as the user scrolls down.
   - Load 20 products per page until 10 pages (200 products) are loaded.
   - Show a loading spinner or a message while fetching the data.
   - Make a custom hook to achieve this functionality
4. Product Cards:
   - Each product should be displayed in a card format. The card should display at least the product's name, image, price, and description.
   - Style the product cards using CSS or a UI library of your choice.
5. Pagination Component:
   - Once 200 products are loaded, display a pagination component.
   - The pagination component should allow the user to navigate between pages (1 to 10).
   - Clicking on a page number should display the products for that specific page.
6. Responsiveness:
   - Ensure the application is responsive and works well on different screen sizes.