The following exercises are related to the use of the MERN technology Stack.

1. Create a git repository for your answers to this problem sheet. Push the repository to GitHub. Make a commit and push it to GitHub after each exercise.

2. In our lab we got our React application sending and receiving data from out Node/Express Server and reading and writing this information to our Mongo database. The final solution to the lab can be found at `https://github.com/Data-Rep-MERN-Application/lab_seven`. Clone this application if you did not finish the application last week. To clone the application:
   git clone `https://github.com/Data-Rep-MERN-Application/lab_seven`

   if the application does not run you must install the project dependencies

   ```
   npm install
   ```

3. Add the edit functionality for the application. When a user clicks the edit button a new window will open with the entire book shown on this new component. This new component will allow the user to edit the book information and save the updated book information. Use the following code to write a functional component for edit.js:

```
import React from 'react';
import { useParams } from 'react-router-dom';
import { useState, useEffect } from 'react';
import axios from 'axios';
import { useNavigate } from "react-router-dom";

export function Edit(props) {
    // The useParams hook returns an object of key/value pairs of
    // the dynamic params from the current URL that were matched by
    //the <Route path>.
    let { id } = useParams();
    // update arrays using the React useState()
    // and without the Array object's push() method
    const [title, setTitle] = useState("");
    const [cover, setCover] = useState("");
    const [author, setAuthor] = useState("");
    // useNavigate return a function that we can use to navigate
    const navigate = useNavigate();

    //useEffect Hook is similar componentDidMount
    useEffect(() => {
        //axios is a promised based web client
        //make a HTTP Request with GET method and pass as part of the
        //url.
        axios.get('http://localhost:4000/api/books/' + id)
```

```
            .then((response) => {
                // Assign Response data to the arrays using useState.
                setTitle(response.data.title);
                setCover(response.data.cover);
                setAuthor(response.data.author);
            })
            .catch(function (error) {
                console.log(error);
            })
    }, []);

    const handleSubmit = (event) => {
        event.preventDefault();

        const newBook = {
            id: id,
            title: title,
            cover: cover,
            author: author
        };

        axios.put('http://localhost:4000/api/book/' + id, newBook)
            .then((res) => {
                console.log(res.data);
                navigate('/read');
            });
    }

    return (
        <div>

            <form onSubmit={handleSubmit}>
                <div className="form-group">
                    <label>Add Book Title: </label>
                    <input type="text"
                        className="form-control"
                        value={title}
                        onChange={(e) => setTitle(e.target.value)}
                    />
                </div>
                <div className="form-group">
                    <label>Add Release Year: </label>
                    <input type="text"
                        className="form-control"
```

```
                        value={cover}
                        onChange={(e) => setCover(e.target.value)}
                    />
                </div>
                <div className="form-group">
                    <label>Add Poster Url: </label>
                    <input type="text"
                        className="form-control"
                        value={author}
                        onChange={(e) => setAuthor(e.target.value)}
                    />
                </div>
                <div className="form-group">
                    <input type="submit" value="Edit Book" className="btn btn-primary
                </div>
            </form>
        </div>
    );
}
```