CODE

8a_LoginForm.js

```javascript
import React, { useState } from
"react";

function LoginForm() {

  // Form Data State
  const [formData, setFormData] =
useState({
    username: "",
    email: "",
    password: ""
  });

  // Error State
  const [errors, setErrors] =
useState({});

  // Success Message State
  const [success, setSuccess] =
useState("");

  // Handle Input Change
  const handleChange = (e) => {
    const { name, value } = e.target;

    setFormData({
      ...formData,
      [name]: value
    });
  };

  // Validation Function
  const validate = () => {
    let validationErrors = {};

    if (!formData.username) {
      validationErrors.username =
"Username is required";
    }

    if (!formData.email) {
      validationErrors.email = "Email
is required";
    } else if
(!formData.email.includes("@")) {
      validationErrors.email = "Invalid
email format";
    }

  }

    if (!formData.password) {
      validationErrors.password =
"Password is required";
    } else if (formData.password.length
< 6) {
      validationErrors.password =
"Password must be at least 6
characters";
    }

    return validationErrors;
  };

  // Handle Form Submit
  const handleSubmit = (e) => {
    e.preventDefault();

    const validationErrors =
validate();

    if
(Object.keys(validationErrors).length >
0) {
      setErrors(validationErrors);
      setSuccess("");
    } else {
      setErrors({});
      setSuccess("Login Successful
✅");

      // Reset form
      setFormData({
        username: "",
        email: "",
        password: ""
      });
    }
  };

  return (
    <div>
      <h2>Login Form</h2>

      <form onSubmit={handleSubmit}>

        <div>
```

```jsx
        <input
          type="text"
          name="username"
          placeholder="Enter
Username"
          value={formData.username}
          onChange={handleChange}
        />
        <p style={{ color: "red"
}}>{errors.username}</p>
      </div>

      <div>
        <input
          type="text"
          name="email"
          placeholder="Enter Email"
          value={formData.email}
          onChange={handleChange}
        />
        <p style={{ color: "red"
}}>{errors.email}</p>
      </div>

      <div>
        <input
          type="password"
          name="password"
          placeholder="Enter
Password"
          value={formData.password}
          onChange={handleChange}
        />
        <p style={{ color: "red"
}}>{errors.password}</p>
      </div>

        <button
type="submit">Submit</button>
      </form>

        <p style={{ color: "green"
}}>{success}</p>

        <hr />

        <h3>Entered Data:</h3>
        <p>Username:
{formData.username}</p>
        <p>Email: {formData.email}</p>

      </div>
  );
}

export default LoginForm;
```
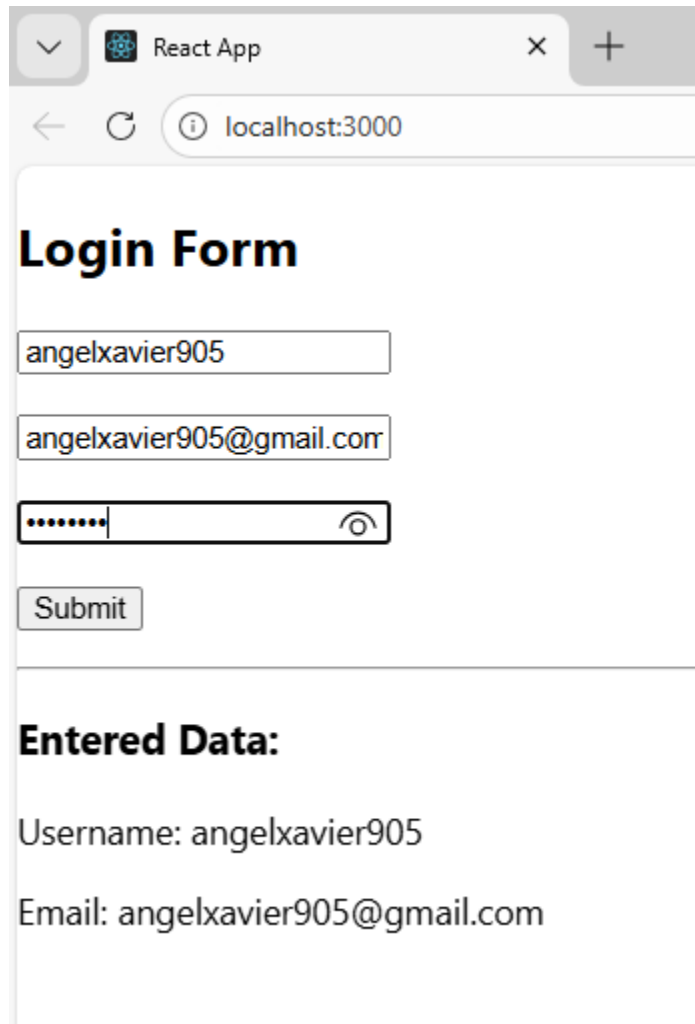
App.js
```jsx
import React from "react";
import LoginForm from "./8a_LoginForm";
function App() {
  return (
    <div>
      <LoginForm />
    </div>
  );
}
export default App;
```
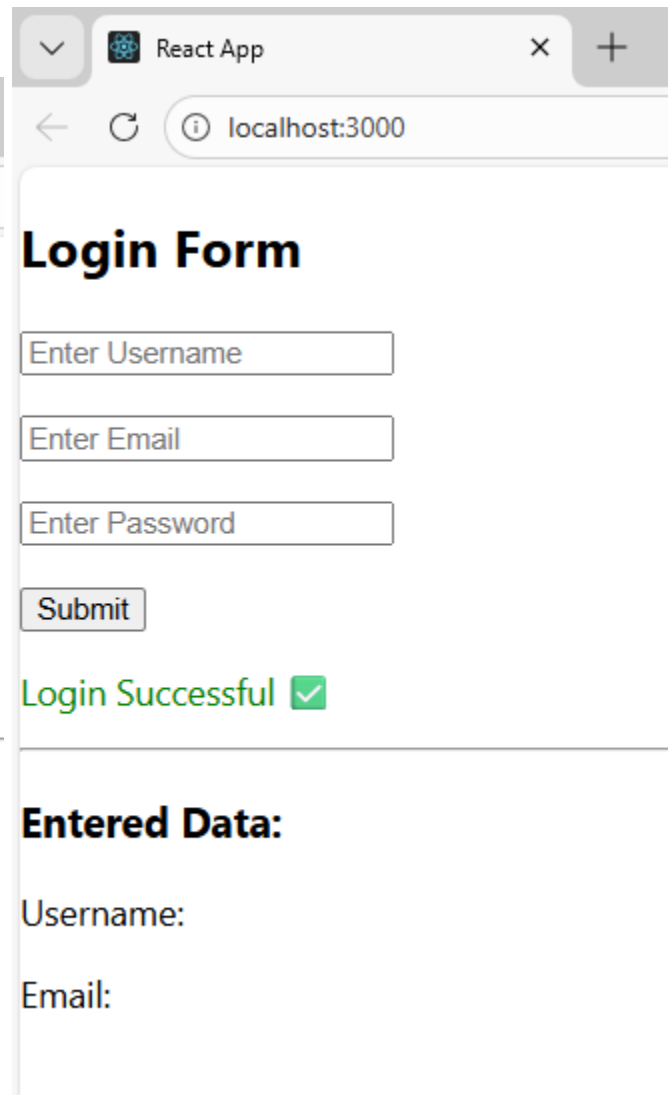
OUTPUT

CODE

8b_Counter.js

```js
import React, { useState } from
"react";

function Counter() {

  // Counter State
  const [count, setCount] =
useState(0);

  // Step State
  const [step, setStep] = useState(1);
```

```js
  // Handle Step Input Change
(Controlled Input)
  const handleStepChange = (e) => {
    const value = e.target.value;

    // Convert input to number, default
to 0 if empty
    setStep(value === "" ? 0 :
Number(value));
  };

  // Increase Function
  const increase = () => {
    setCount(count + step);
  };
```

```jsx
// Decrease Function
const decrease = () => {
  setCount(count - step);
};

// Reset Function
const reset = () => {
  setCount(0);
};

return (
  <div>
    <h2>Counter App</h2>

    <div>
      <label>Step Value: </label>
      <input
        type="number"
        value={step}
        onChange={handleStepChange}
      />
    </div>

    <h3>Counter Value: {count}</h3>
```

```jsx
      <button
onClick={increase}>Increase</button>
      <button
onClick={decrease}>Decrease</button>
      <button
onClick={reset}>Reset</button>
    </div>
  );
}

export default Counter;
```

App.js
```jsx
import React from "react";
import Counter from "./8b_Counter";

function App() {
  return (
    <div>
      <Counter />
    </div>
  );
}

export default App;
```

OUTPUT

Counter App

Step Value: 3

Counter Value: -3

Increase Decrease Reset