Assignment 1: Create a JavaScript object representing a user with properties for name, email, and age. Write functions that manipulate this object, such as changing the name, updating the email, and calculating the user's birth year.

```
const user = {
   name: "Sreenath Gandra",
   email: "Sreenath.Gandra@example.com",
   age: 30,
};

// Function to change the user's name
function changeName(newUser, newName) {
  newUser.name = newName;
}

// Function to update the user's email
function updateEmail(newUser, newEmail) {
  newUser.email = newEmail;
}

// Function to calculate birth year
function calculateBirthYear(newUser) {
  const currentYear = new Date().getFullYear();
  return currentYear - newUser.age;
}

// Example usage:
changeName(user, "Sreenath G");
updateEmail(user, "sreenath.g@example.com");
const birthYear = calculateBirthYear(user);

console.log("Updated user:", user);
console.log("Birth year:", birthYear);
```
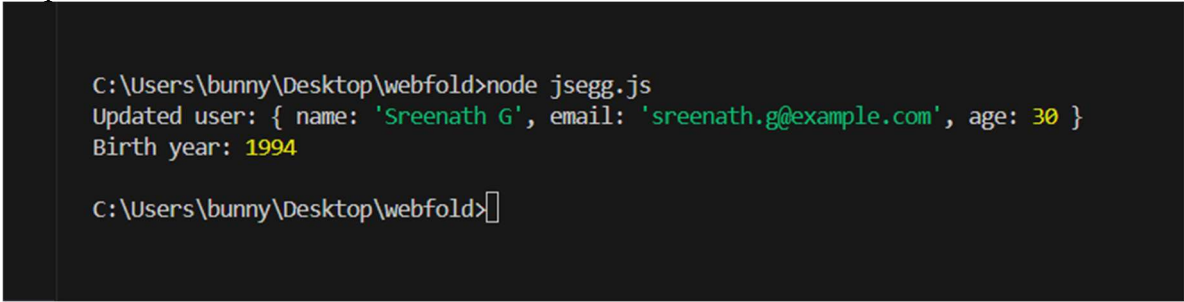
output:

```
C:\Users\bunny\Desktop\webfold>node jsegg.js
Updated user: { name: 'Sreenath G', email: 'sreenath.g@example.com', age: 30 }
Birth year: 1994

C:\Users\bunny\Desktop\webfold>
```

Assignment 2: Use regular expressions in JavaScript to validate the email address entered in the form. It should check for the correct format of the email and display a message to the user if the format is incorrect.

```javascript
function validateEmail(email) {
    // Regular expression for email validation
    const emailRegex = /^[A-Za-z0-9._%-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,4}$/;

    if (emailRegex.test(email)) {
      console.log("Valid email address:", email);
      return true;
    } else {
      console.log("Invalid email address:", email);
      return false;
    }
}


  const userEmail = "sreenath.g@example.com";
  validateEmail(userEmail);
```

Output:

```
   Birth year: 1994

C:\Users\bunny\Desktop\webfold>node jsegg1.js
Valid email address: sreenath.g@example.com
```