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.

```
let user = {
  name: "UDAYAKUMAR",
 email: "udhya2001@kumar.com",
  age: 30,
  changeName: function(newName) {
    this.name = newName;
  },
  updateEmail: function(newEmail) {
    this.email = newEmail;
  },
  calculateBirthYear: function(currentYear) {
    return currentYear - this.age;
  },
  displayDetails: function() {
    console.log("Name:", this.name);
```

```
console.log("Email:", this.email);
    console.log("Age:", this.age);
  }
};
console.log("Initial User Details:");
user.displayDetails();
user.changeName("uday");
user.updateEmail("udhya2000@example.com");
let currentYear = new Date().getFullYear();
let birthYear = user.calculateBirthYear(currentYear);
console.log("\nUpdated User Details:");
user.displayDetails();
console.log("Birth Year:", birthYear);
```

## **OUTPUT:**

```
node /tmp/opoSRjqVM4.js
Initial User Details:
Name: UDAYAKUMAR
Email: udhya2001@kumar.com
Age: 30

Updated User Details:
Name: uday
Email: udhya2000@example.com
Age: 30
Birth Year: 1994
```

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.

```
function validateEmail(email) {
  const re = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
  return re.test(email);
}

const email = "udaya@email.com";
if (validateEmail(email)) {
  console.log(`${email} is a valid email address.`);
} else {
  console.log(`${email} is not a valid email address.`);
}
```

## **OUTPUT:**

```
node /tmp/T0cSIPvqQ1.js
udaya@email.com is a valid email address.
```