

HTML,CSS AND JAVASCRIPT ASSIGNMENT

1] 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.

Solution :-

Code :-

```
1
2 ▾ let user = {
3   |   name: 'Shweta Jamdade',
4   |   email: 'shweta1@gmail.com',
5   |   age: 24
6   | };
7
8
9 ▾ function changeName(newName) {
10  |   user.name = newName;
11  | }
12
13
14 ▾ function updateEmail(newEmail) {
15  |   user.email = newEmail;
16  | }
17
18
19 ▾ function calculateBirthYear() {
20  |   const currentYear = new Date().getFullYear();
21  |   return currentYear - user.age;
22  | }
23
24
25 console.log("Initial user object:", user);
26
27 changeName('Purva Kambale');
28 console.log("After changing name:", user);
29
30 updateEmail('purva11@gmail.com');
31 console.log("After updating email:", user);
32
33 const birthYear = calculateBirthYear();
34 console.log("User's birth year:", birthYear);
35
```

Output : -

STDIN

Input for the program (Optional)

Output:

```
Initial user object: { name: 'Shweta Jamdade', email: 'shweta1@gmail.com', age: 24 }  
After changing name: { name: 'Purva Kambale', email: 'shweta1@gmail.com', age: 24 }  
After updating email: { name: 'Purva Kambale', email: 'purva11@gmail.com', age: 24 }  
User's birth year: 2000
```

2] 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.

Solution :-

Code :-

```
index.html    styles.css    script.js    +
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Email Validation</title>
7 </head>
8 <body>
9   <form id="emailForm">
10     <label for="email">Email:</label>
11     <input type="text" id="email" name="email">
12     <button type="submit">Submit</button>
13   </form>
14   <p id="message"></p>
15   <script src="script.js"></script>
16 </body>
17 </html>
18
19
```

```
index.html    styles.css    script.js    +
1 document.getElementById('emailForm').addEventListener('submit', function(event) {
2   event.preventDefault();
3
4   const emailInput = document.getElementById('email').value;
5   const message = document.getElementById('message');
6
7   // Regular expression for validating email address
8   const emailPattern = /^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$/;
9
10  if (emailPattern.test(emailInput)) {
11    message.textContent = 'Valid email address.';
12    message.style.color = 'green';
13  } else {
14    message.textContent = 'Invalid email address format.';
15    message.style.color = 'red';
16  }
17 });
18
```

Output :-

Email:

Valid email address.

Email:

Invalid email address format.