Java Script Assignments

DOM.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>Category Highlighter</title>
  <style>
    .category {
      cursor: pointer;
      padding: 5px;
    }
  </style>
</head>
<body>

  <div class="sidebar">
    <h3>Categories</h3>
    <ul>
      <li class="category">Technology</li>
      <li class="category">Health</li>
      <li class="category">Travel</li>
      <li class="category">Food</li>
    </ul>
  </div>
```

```html
    <script src="Index.js"></script>
  </body>
</html>
```

Form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>Contact Form</title>
</head>
<body>

  <form id="contactForm">
    <label for="nameInput">Name:</label>
    <input type="text" id="nameInput" name="name" required />
    <button type="submit">Submit</button>
  </form>

  <script src="Index.js">

  </script>

</body>
</html>
```

Index.js


```js
import { toCelsius, toFahrenheit } from './utils.js'
//ASSIGNMENT 1

let bookTitle="Hello_world"
let price=300
let quantity=2
let taxrate=2

subTotal=price*quantity
console.log(`You bought ${quantity} copies of "${bookTitle}`)

console.log(`Subtotal: ${subTotal}`)
tax=subTotal*(taxrate/100);
console.log(`Tax: ${tax}`)

total=subTotal+tax;
console.log(`Total: ${total}`)


//ASSIGNMENT 2

playlist=[{ title: "Song 1", artist: "Artist A" },
   { title: "Song 2", artist: "Artist B" },
   { title: "Song 3", artist: "Artist C" }
];
```

```javascript
playlist.forEach((song,index)=>{
    console.log( `${index+1} ${song.title} by ${song.artist}`)
})

//Assignment 3

function calculateTripDays(startDate, endDate){
    const start = new Date(startDate);
    const end = new Date(endDate);



  const diffMs = end - start;


  const diffDays = diffMs / (1000 * 60 * 60 * 24);


  return Math.round(diffDays);


}

const days = calculateTripDays('2025-07-01', '2025-07-10');
console.log(`Trip duration: ${days} days`);

//Assignment 4
```

```javascript
let age=prompt("enter the age");
age=Number(age);
if(age>=18){
    console.log("Access to all movies")
}else if(age>=13){
    console.log("Access to PG-13 and below")
}else{
    console.log("Access to kids' movies only")
}


//Assignment 5
cart =[10,20,30,40,50]
let total=0;
for(let i=0;i<cart.length;i++){
    total+=cart[i];
}
console.log(`cart Total: ${total}`)

//Assignment 6
  const currentCategory = "Travel";


const categories = document.querySelectorAll('.category');

categories.forEach(el => {
  el.style.fontWeight = 'normal';

  // Check if element text matches currentCategory
```

```javascript
    if (el.textContent.trim() === currentCategory) {
      el.style.fontWeight = 'bold';
      el.style.color="blue" // Highlight it
    }
  });

  //Assignment 7

  const form = document.getElementById('contactForm');
  const nameInput = document.getElementById('nameInput');


  form.addEventListener('submit', function(event) {
    event.preventDefault();

    const name = nameInput.value.trim();

    if (name) {
      alert(`Thank you, ${name}, for contacting us!`);
    } else {
      alert('Please enter your name.');
    }
  });

  //Assignment 8

  const button = document.getElementById('getJoke');
  const container =
document.getElementById('jokeContainer');
```

```javascript
    button.addEventListener('click', () => {
      container.textContent = 'Loading...'; // show loading
message

      fetch('https://api.chucknorris.io/jokes/random')
        .then(response => {
         if (!response.ok) {
          throw new Error('Network response was not ok');
         }
         return response.json();
        })
        .then(data => {
         container.textContent = data.value;
        })
        .catch(error => {
         container.textContent = 'Failed to fetch joke. Please try
again.';
         console.error('Error fetching joke:', error);
        });
    });

    // Assignment 9

    function Book(title, author) {
        this.title = title;
        this.author = author;

        }
```

```javascript
Book.prototype.getSummary = function() {

return `${this.title} by ${this.author}`;

};
const book1 = new Book("The Great Gatsby", "F. Scott
Fitzgerald");
const book2 = new Book("1984", "George Orwell");
const book3=new Book("hp","idk")
console.log(book3.getSummary())

 //Assignment 10

 console.log(toCelsius(100));

console.log(toFahrenheit(0));
```

Joke.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8" />
 <title>Joke Fetcher</title>
</head>
<body>
```

```html
    <button id="getJoke">Get a Joke</button>
    <div id="jokeContainer" style="margin-top:20px; font-weight:bold;"></div>

    <script src="Index.js">

    </script>

</body>
</html>
```

Index.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Age Check</title>
</head>
<body>
  <h1>Movie Access Checker</h1>


  <script src="index.js"></script>
</body>
```

```
</html>
```

Utils.js

```javascript
export function toCelsius(f) {

return ((f - 32) * 5) / 9;

}


export function toFahrenheit(c) {

return (c * 9) / 5 + 32;

}
```