Name: Likhith B A
Reg. No: 23BCE1098

Experiment 10

JavaScript

Question 01

Code:

HTML

```html
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>23BCE1098</title>
 <style>
  body {
    font-family: Arial, sans-serif;
    margin: 20px;
  }
  table {
    width: 50%;
    border-collapse: collapse;
    margin-top: 10px;
  }
  th,
  td {
    border: 1px solid black;
    padding: 8px;
    text-align: left;
  }
  th {
    background-color: #f2f2f2;
  }
  input,
  button {
    margin: 5px;
    padding: 5px;
  }
 </style>
</head>
<body>
 <h2>Hospital Patient Data</h2>
```

```html
<h3>(i) Sorted Patient Data (Descending by Age)</h3>
<button onclick="displaySortedPatients()">Show Sorted Data</button>
<table id="patientTable">
  <thead>
    <tr>
      <th>P-Id</th>
      <th>Name</th>
      <th>Age</th>
    </tr>
  </thead>
  <tbody>
    <!-- Data will be inserted here dynamically -->
  </tbody>
</table>
<h3>(ii) Check if a Patient ID Exists</h3>
<input type="number" id="searchId" placeholder="Enter P-Id">
<button onclick="checkPatient()">Check</button>
<p id="checkResult"></p>
<h3>(iii) Filter Patients by Age Range</h3>
<input type="number" id="minAge" placeholder="Min Age">
<input type="number" id="maxAge" placeholder="Max Age">
<button onclick="filterPatients()">Filter</button>
<table id="filteredTable">
  <thead>
    <tr>
      <th>P-Id</th>
      <th>Name</th>
      <th>Age</th>
    </tr>
  </thead>
  <tbody>
    <!-- Filtered data will be inserted here dynamically -->
  </tbody>
</table>
<script src="question1.js"></script>
</body>
</html>
```

JavaScript

```javascript
const patients = [
 { PId: 1, Name: "Alen", Age: 39 },
 { PId: 2, Name: "Deena", Age: 47 },
 { PId: 3, Name: "Diana", Age: 21 },
 { PId: 4, Name: "Jack", Age: 54 },
 { PId: 5, Name: "Jain", Age: 23 },
 { PId: 6, Name: "Kelvin", Age: 61 },
```

```javascript
  { PId: 7, Name: "Louis", Age: 69 },
  { PId: 8, Name: "Rex", Age: 49 }
];

function sortPatientsByAgeDesc() {
  return patients.slice().sort((a, b) => b.Age - a.Age);
}

function displaySortedPatients() {
  const sortedPatients = sortPatientsByAgeDesc();
  const tableBody = document.querySelector("#patientTable tbody");
  tableBody.innerHTML = "";
  sortedPatients.forEach(patient => {
    const row = `<tr>
      <td>${patient.PId}</td>
      <td>${patient.Name}</td>
      <td>${patient.Age}</td>
    </tr>`;
    tableBody.innerHTML += row;
  });
}

function isPatientPresent(PId) {
  return patients.some(patient => patient.PId === PId);
}

function checkPatient() {
  const PId = parseInt(document.getElementById("searchId").value);
  const resultText = isPatientPresent(PId) ? `Patient with P-Id ${PId} is present.` : `Patient with P-Id ${PId} is NOT present.`;
  document.getElementById("checkResult").textContent = resultText;
}

function filterPatientsByAge(minAge, maxAge) {
  return patients.filter(patient => patient.Age >= minAge && patient.Age <= maxAge);
}

function filterPatients() {
  const minAge = parseInt(document.getElementById("minAge").value);
  const maxAge = parseInt(document.getElementById("maxAge").value);
  const filteredPatients = filterPatientsByAge(minAge, maxAge);
  const tableBody = document.querySelector("#filteredTable tbody");
  tableBody.innerHTML = "";
  filteredPatients.forEach(patient => {
    const row = `<tr>
      <td>${patient.PId}</td>
```

```
        <td>${patient.Name}</td>
        <td>${patient.Age}</td>
      </tr>`;
    tableBody.innerHTML += row;
  });
}
```

Output:

Hospital Patient Data

(i) Sorted Patient Data (Descending by Age)

Show Sorted Data

P-Id	Name	Age
7	Louis	69
6	Kelvin	61
4	Jack	54
8	Rex	49
2	Deena	47
1	Alen	39
5	Jain	23
3	Diana	21

(ii) Check if a Patient ID Exists

5   Check

Patient with P-Id 5 is present.

(iii) Filter Patients by Age Range

30   50   Filter

P-Id	Name	Age
1	Alen	39
2	Deena	47
8	Rex	49

Question 02

Code:

```html
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>23BCE1098</title>
</head>
<body>

   <h1 id="main-title">Original Title</h1>

   <input type="text" name="username" placeholder="Enter name">

   <h3>Select Gender:</h3>
   <input type="radio" name="gender" value="Male"> Male
   <input type="radio" name="gender" value="Female"> Female

   <h3>Paragraphs:</h3>
   <p class="info">Info paragraph 1</p>
   <p class="info">Info paragraph 2</p>
   <p>Other paragraph 1</p>
   <p>Other paragraph 2</p>

   <h3>List Items:</h3>
   <ul>
      <li>List Item 1</li>
      <li>List Item 2</li>
      <li>List Item 3</li>
   </ul>
   <h3>Input Fields:</h3>
   <input type="text" class="input-field" placeholder="Field 1">
   <input type="text" class="input-field" placeholder="Field 2">
   <h3>Select Hobbies:</h3>
   <input type="checkbox" class="hobby" value="Reading"> Reading
   <input type="checkbox" class="hobby" value="Traveling"> Traveling
   <input type="checkbox" class="hobby" value="Gaming"> Gaming
   <br><br>
   <button onclick="executeDOMManipulations()">Run Script</button>
   <script src="question2.js"></script>
</body>
</html>
```
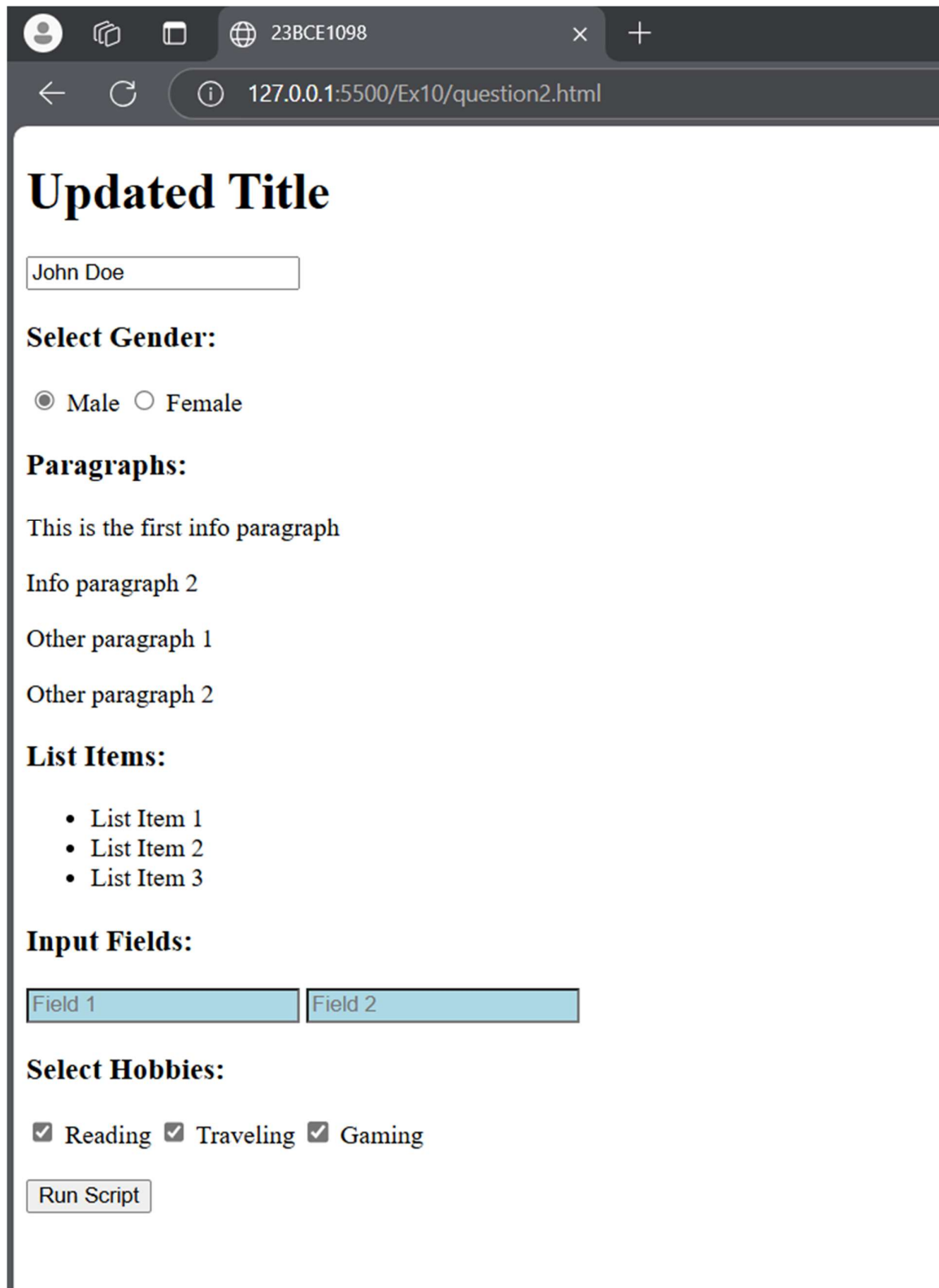
Output:

Updated Title

John Doe

Select Gender:

◉ Male ○ Female

Paragraphs:

This is the first info paragraph

Info paragraph 2

Other paragraph 1

Other paragraph 2

List Items:

- List Item 1
- List Item 2
- List Item 3

Input Fields:

Field 1   Field 2

Select Hobbies:

☑ Reading ☑ Traveling ☑ Gaming

Run Script

Question 03

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>23BCE1098</title>
<style rel="stylesheet" href="style.css">
</head>
<body>

 <div class="container">
   <h2>Grocery Order Form</h2>

   <input type="text" id="name" placeholder="Customer Name">
   <input type="text" id="phone" placeholder="Phone Number">
   <input type="email" id="email" placeholder="Email">

   <h3>Products</h3>
   <div class="products">
    <div class="product-item">
     <img
src="https://th.bing.com/th/id/OIP.hVjhVt5EiigNSJr1QK93AAHaIJ?rs=1&pid=ImgDetMain"
width="30">
     <label>Apple $10</label>
     <input type="checkbox" class="product" value="Apple,10">
     <input type="number" class="quantity" min="1" max="10" placeholder="kg" disabled>
    </div>

    <div class="product-item">
     <img
src="https://th.bing.com/th/id/OIP.emjzYKViT1SKMALrVmqujQHaE8?rs=1&pid=ImgDetMain"
width="30">
     <label>Banana $5</label>
     <input type="checkbox" class="product" value="Banana,5">
     <input type="number" class="quantity" min="1" max="10" placeholder="kg" disabled>
    </div>

    <div class="product-item">
     <img src="https://th.bing.com/th/id/OIP.MVtMfAGHDYMBIAXKLMk-
zAHaF4?rs=1&pid=ImgDetMain" width="30">
     <label>Avocado $7</label>
     <input type="checkbox" class="product" value="Avocado,7">
```

```html
    <input type="number" class="quantity" min="1" max="10" placeholder="kg" disabled>
   </div>
  </div>
  <button class="submit-btn" onclick="submitOrder()">SUBMIT</button>
 </div>
 <script src="question3.js"></script>
</body>
</html>
```

CSS

```css
    body {
       font-family: Arial, sans-serif;
       background-color: #a0a98f;
       text-align: center;
    }
    .container {
       width: 50%;
       margin: auto;
       background: #79856f;
       padding: 20px;
       border-radius: 10px;
    }
    input, button {
       padding: 10px;
       margin: 5px;
       width: 80%;
    }
    .products {
       text-align: left;
       margin: 10px auto;
       width: 80%;
    }
    .product-item {
       display: flex;
       align-items: center;
       justify-content: space-between;
       margin-bottom: 10px;
    }
    .submit-btn {
       background-color: #b5835a;
       color: white;
       font-weight: bold;
       cursor: pointer;
       border: none;
       width: 50%;
    }
```

JavaScript

```javascript
document.addEventListener("DOMContentLoaded", function () {
  let products = document.querySelectorAll(".product");
  let quantities = document.querySelectorAll(".quantity");

  // Enable quantity input when product is checked
  products.forEach((checkbox, index) => {
    checkbox.addEventListener("change", function () {
      quantities[index].disabled = !this.checked;
      if (!this.checked) {
        quantities[index].value = ""; // Reset value if unchecked
      }
    });
  });
});
function submitOrder() {
  let name = document.getElementById("name").value;
  let phone = document.getElementById("phone").value;
  let email = document.getElementById("email").value;

  let selectedProducts = [];
  let products = document.querySelectorAll(".product");
  let quantities = document.querySelectorAll(".quantity");

  products.forEach((checkbox, index) => {
    if (checkbox.checked) {
      let [productName, price] = checkbox.value.split(",");
      let quantity = quantities[index].value;
      selectedProducts.push({ name: productName, price: price, quantity: quantity });
    }
  });

  let orderDetails = {
    name: name,
    phone: phone,
    email: email,
    products: selectedProducts
  };

  // Store order details in localStorage
  localStorage.setItem("order", JSON.stringify(orderDetails));

  // Redirect to receipt page
  window.location.href = "receipt.html";
}
```

Receipt.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Order Receipt</title>
   <style>
      body {
         font-family: Arial, sans-serif;
         background-color: #f4f4f4;
         text-align: center;
      }
      .container {
         width: 50%;
         margin: auto;
         background: white;
         padding: 20px;
         border-radius: 10px;
         box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
      }
      .product-list {
         text-align: left;
         margin-top: 10px;
      }
   </style>
</head>
<body>

   <div class="container">
      <h2>Order Receipt</h2>
      <p><strong>Name:</strong> <span id="customer-name"></span></p>
      <p><strong>Phone:</strong> <span id="customer-phone"></span></p>
      <p><strong>Email:</strong> <span id="customer-email"></span></p>

      <h3>Products Ordered:</h3>
      <div class="product-list" id="product-list"></div>

      <h3>Total Cost: $<span id="total-cost">0</span></h3>
   </div>

   <script>
      document.addEventListener("DOMContentLoaded", function () {
         let order = JSON.parse(localStorage.getItem("order"));
```

```
        if (order) {
          document.getElementById("customer-name").textContent = order.name;
          document.getElementById("customer-phone").textContent = order.phone;
          document.getElementById("customer-email").textContent = order.email;

          let productList = document.getElementById("product-list");
          let totalCost = 0;

          order.products.forEach(product => {
            let item = document.createElement("p");
            let cost = product.price * product.quantity;
            item.textContent = `${product.name} - ${product.quantity}kg @ $${product.price}/kg
 = $${cost}`;
            productList.appendChild(item);
            totalCost += cost;
          });

          document.getElementById("total-cost").textContent = totalCost;
        }
      });
   </script>

</body>
</html>
```