

Web Programming

Assignment – 10

Q1

CODE:

```
let patients = [  
  { P_Id: 1, Name: "Alen", Age: 39 },  
  { P_Id: 2, Name: "Deena", Age: 47 },  
  { P_Id: 3, Name: "Diana", Age: 21 },  
  { P_Id: 4, Name: "Jack", Age: 54 },  
  { P_Id: 5, Name: "Jain", Age: 23 },  
  { P_Id: 6, Name: "Kelvin", Age: 61 },  
  { P_Id: 7, Name: "Louis", Age: 69 },  
  { P_Id: 8, Name: "Rex", Age: 49 }  
];  
  
function sortByAgeDescending() {  
  let sortedPatients = patients.slice().sort((a, b) => b.Age - a.Age);  
  console.log("Sorted by Age (Descending):");  
  sortedPatients.forEach(p => console.log(`P-Id: ${p.P_Id}, Name: ${p.Name},  
Age: ${p.Age}`));  
}  
  
function checkPId(pId) {  
  let isPresent = patients.some(p => p.P_Id === pId);  
  if (isPresent) {  
    console.log(`P-Id ${pId} is present in the list.`);  
  } else {  
    console.log(`P-Id ${pId} is NOT present in the list.`);  
  }  
}
```

```

    }
}

function filterByAgeRange(minAge, maxAge) {
    let filteredPatients = patients.filter(p => p.Age >= minAge && p.Age <=
maxAge);
    console.log(`Patients with Age between ${minAge} and ${maxAge}:`);
    if (filteredPatients.length > 0) {
        filteredPatients.forEach(p => console.log(`P-Id: ${p.P_Id}, Name:
${p.Name}, Age: ${p.Age}`));
    } else {
        console.log("No patients found in this age range.");
    }
}

sortByAgeDescending();
checkPId(3);
checkPId(10);
filterByAgeRange(40, 60);
filterByAgeRange(20, 25);

```

OUTPUT:

```

PS D:\Coding\Web Dev> node "d:\Coding\Web Dev\9\10\tempCodeRunnerFile.js"
Sorted by Age (Descending):
P-Id: 7, Name: Louis, Age: 69
P-Id: 6, Name: Kelvin, Age: 61
P-Id: 4, Name: Jack, Age: 54
P-Id: 8, Name: Rex, Age: 49
P-Id: 2, Name: Deena, Age: 47
P-Id: 1, Name: Alen, Age: 39
P-Id: 5, Name: Jain, Age: 23
P-Id: 3, Name: Diana, Age: 21
P-Id 3 is present in the list.
P-Id 10 is NOT present in the list.
Patients with Age between 40 and 60:
P-Id: 2, Name: Deena, Age: 47
P-Id: 4, Name: Jack, Age: 54
P-Id: 8, Name: Rex, Age: 49
Patients with Age between 20 and 25:
P-Id: 3, Name: Diana, Age: 21
P-Id: 5, Name: Jain, Age: 23
PS D:\Coding\Web Dev>

```

Q2

CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>DOM Manipulation</title>
</head>
<body>
  <script src="q2.js"></script>
</body>
</html>
```

```
// (a) getElementById Example
let h1 = document.createElement("h1");
h1.id = "main-title";
h1.textContent = "Original Title";
document.body.appendChild(h1);

// (b) getElementsByName Example
let inputUsername = document.createElement("input");
inputUsername.type = "text";
inputUsername.name = "username";
inputUsername.placeholder = "Enter your name";
document.body.appendChild(inputUsername);

let br1 = document.createElement("br");
let br2 = document.createElement("br");
document.body.appendChild(br1);
document.body.appendChild(br2);

let maleLabel = document.createElement("label");
maleLabel.innerHTML = `<input type="radio" name="gender" value="Male"> Male`;
document.body.appendChild(maleLabel);

let femaleLabel = document.createElement("label");
femaleLabel.innerHTML = `<input type="radio" name="gender" value="Female"> Female`;
```

```
document.body.appendChild(femaleLabel);

// (c) getElementsByTagName Example
let para1 = document.createElement("p");
para1.textContent = "This is a paragraph.";
document.body.appendChild(para1);

let para2 = document.createElement("p");
para2.textContent = "Another paragraph.";
document.body.appendChild(para2);

let ul = document.createElement("ul");
let li1 = document.createElement("li");
li1.textContent = "Item 1";
ul.appendChild(li1);

let li2 = document.createElement("li");
li2.textContent = "Item 2";
ul.appendChild(li2);

let li3 = document.createElement("li");
li3.textContent = "Item 3";
ul.appendChild(li3);

document.body.appendChild(ul);

// (d) getElementsByClassName Example
let input1 = document.createElement("input");
input1.type = "text";
input1.className = "input-field";
input1.placeholder = "Field 1";
document.body.appendChild(input1);

let input2 = document.createElement("input");
input2.type = "text";
input2.className = "input-field";
input2.placeholder = "Field 2";
document.body.appendChild(input2);

// (e) querySelector Example
let infoPara1 = document.createElement("p");
infoPara1.className = "info";
infoPara1.textContent = "Information 1";
document.body.appendChild(infoPara1);

let infoPara2 = document.createElement("p");
infoPara2.className = "info";
infoPara2.textContent = "Information 2";
```

```

document.body.appendChild(infoPara2);

// (f) querySelectorAll Example
let hobby1 = document.createElement("label");
hobby1.innerHTML = `<input type="checkbox" class="hobby" value="Reading">
Reading`;
document.body.appendChild(hobby1);

let hobby2 = document.createElement("label");
hobby2.innerHTML = `<input type="checkbox" class="hobby" value="Coding">
Coding`;
document.body.appendChild(hobby2);

let hobby3 = document.createElement("label");
hobby3.innerHTML = `<input type="checkbox" class="hobby" value="Gaming">
Gaming`;
document.body.appendChild(hobby3);

// Now perform the required actions

// (a) Using getElementById
let mainTitle = document.getElementById("main-title");
mainTitle.textContent = "Updated Title";

// (b) Using getElementsByName
let usernameField = document.getElementsByName("username")[0];
usernameField.value = "Divyansh Mishra";

let genderButtons = document.getElementsByName("gender");
genderButtons.forEach(button => {
    if (button.checked) {
        console.log("Selected Gender:", button.value);
    }
});

// (c) Using getElementsByTagName
let paragraphs = document.getElementsByTagName("p");
console.log("Total number of <p> elements:", paragraphs.length);

let listItems = document.getElementsByTagName("li");
console.log("List items in <ul>:");
for (let item of listItems) {
    console.log(item.textContent);
}

// (d) Using getElementsByClassName
let inputFields = document.getElementsByClassName("input-field");
for (let field of inputFields) {

```

```
    field.style.backgroundColor = "lightblue";
}

// (e) Using querySelector
let firstInfoPara = document.querySelector(".info");
firstInfoPara.textContent = "This is the first info paragraph";

let firstGenderRadio = document.querySelector("input[name='gender']");
firstGenderRadio.checked = true;

// (f) Using querySelectorAll
let allInfoParas = document.querySelectorAll(".info");
allInfoParas.forEach((para, index) => {
    console.log(`Info Paragraph ${index + 1}:`, para.textContent);
});

let hobbyCheckboxes = document.querySelectorAll(".hobby");
hobbyCheckboxes.forEach(checkbox => {
    checkbox.checked = true;
    console.log("Checked Hobby:", checkbox.value);
});
```

OUTPUT:

Updated Title

Divyansh Mishra

☒ Male ☐ Female

This is a paragraph.

Another paragraph.

- Item 1
- Item 2
- Item 3

Field 1

Field 2

This is the first info paragraph

Information 2

☒ Reading ☒ Coding ☒ Gaming

Q3

CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Grocery Order Form</title>
<style>
  body {
    background-color: #a0a98c;
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
  }
  .order-form {
    background-color: #7a8466;
    border-radius: 10px;
    padding: 20px;
    width: 350px;
    color: #fff;
  }
  h2 {
    text-align: center;
  }
  input[type="text"] {
    width: 100%;
    padding: 5px;
    margin: 10px 0;
    border-radius: 5px;
    border: none;
  }
  .product {
    display: flex;
    align-items: center;
    margin: 10px 0;
  }
  .product img {
    width: 40px;
    height: 40px;
    border-radius: 50%;
    margin-right: 10px;
  }
  .product label {
    flex-grow: 1;
  }
  .product input[type="number"] {
    width: 50px;
    margin-left: 5px;
  }
  .submit-btn {
```



```

        background-color: #a67d4e;
        color: white;
        border: none;
        padding: 10px;
        width: 100%;
        border-radius: 5px;
        cursor: pointer;
    }
</style>
</head>
<body>
    <form class="order-form" onsubmit="saveOrderData(event)">
        <h2>Grocery Order Form</h2>
        <input type="text" name="customerName" placeholder="Customer Name"
required>
        <input type="text" name="phoneNumber" placeholder="Phone Number"
required>
        <input type="text" name="email" placeholder="Email" required>
        <h3>Products</h3>
        <div class="product">
            
            <input type="checkbox" name="apple">
            <label>Apple $10</label>
            <input type="number" name="appleQty" min="0" placeholder="kg">
        </div>
        <div class="product">
            
            <input type="checkbox" name="banana">
            <label>Banana $5</label>
            <input type="number" name="bananaQty" min="0" placeholder="kg">
        </div>
        <div class="product">
            
            <input type="checkbox" name="avocado">
            <label>Avocado $7</label>
            <input type="number" name="avocadoQty" min="0" placeholder="kg">
        </div>
        <button type="submit" class="submit-btn">SUBMIT</button>
    </form>

    <script>
        function saveOrderData(event) {
            event.preventDefault();

            const customerName =
document.querySelector('input[name="customerName"]').value;
            const phoneNumber =
document.querySelector('input[name="phoneNumber"]').value;

```

```

        const email = document.querySelector('input[name="email"]').value;

        // Product prices
        const prices = {
            apple: 10,
            banana: 5,
            avocado: 7
        };

        // Get selected products and quantities
        const appleQty =
document.querySelector('input[name="apple"]').checked ?
parseInt(document.querySelector('input[name="appleQty"]').value) || 0 : 0;
        const bananaQty =
document.querySelector('input[name="banana"]').checked ?
parseInt(document.querySelector('input[name="bananaQty"]').value) || 0 : 0;
        const avocadoQty =
document.querySelector('input[name="avocado"]').checked ?
parseInt(document.querySelector('input[name="avocadoQty"]').value) || 0 : 0;

        // Calculate total price
        const totalPrice = (appleQty * prices.apple) + (bananaQty *
prices.banana) + (avocadoQty * prices.avocado);

        const order = {
            customerName,
            phoneNumber,
            email,
            apple: appleQty,
            banana: bananaQty,
            avocado: avocadoQty,
            totalPrice // Store total price
        };

        localStorage.setItem('order', JSON.stringify(order));
        window.location.href = 'receipt.html';
    }
</script>
</body>
</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 {
    background-color: #a0a98c;
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
  }
  .receipt {
    background-color: #fff;
    border-radius: 10px;
    padding: 20px;
    width: 300px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);
  }
  h2 {
    text-align: center;
  }
  ul {
    list-style: none;
    padding: 0;
  }
  ul li {
    margin-bottom: 10px;
  }
  .total-price {
    font-weight: bold;
    text-align: right;
  }
</style>
</head>
<body>
  <div class="receipt">
    <h2>Order Receipt</h2>
    <ul>
      <li>Customer Name: <span id="customerName"></span></li>
      <li>Phone Number: <span id="phoneNumber"></span></li>
      <li>Email: <span id="email"></span></li>
    </ul>
    <h3>Products Ordered:</h3>
    <ul>
      <li>Apple: <span id="appleQty">0 kg</span></li>
      <li>Banana: <span id="bananaQty">0 kg</span></li>
      <li>Avocado: <span id="avocadoQty">0 kg</span></li>
    </ul>
  </div>
</body>
```

```

        <h3 class="total-price">Total Price: $<span
id="totalPrice">0</span></h3>
    </div>

    <script>
        const order = JSON.parse(localStorage.getItem('order'));
        document.getElementById('customerName').textContent =
order.customerName;
        document.getElementById('phoneNumber').textContent =
order.phoneNumber;
        document.getElementById('email').textContent = order.email;

        document.getElementById('appleQty').textContent = order.apple + ' kg';
        document.getElementById('bananaQty').textContent = order.banana + '
kg';
        document.getElementById('avocadoQty').textContent = order.avocado + '
kg';
        document.getElementById('totalPrice').textContent = order.totalPrice;
    </script>
</body>
</html>

```

OUTPUT:




Grocery Order Form

Divyansh

999999999

helo@vitstudent.ac.in

Products

	<input checked="" type="checkbox"/> Apple \$10	<input type="text" value="2"/>
	<input checked="" type="checkbox"/> Banana \$5	<input type="text" value="2"/>
	<input checked="" type="checkbox"/> Avocado \$7	<input type="text" value="4"/>

SUBMIT

Order Receipt

Customer Name: Divyansh

Phone Number: 999999999

Email: helo@vitstudent.ac.in

Products Ordered:

Apple: 2 kg

Banana: 2 kg

Avocado: 4 kg

Total Price: \$58