

- 1) **Form Validation (Required Fields)** Build a signup form with fields like Name and Email. Before submission, check that none of the fields are empty and that the email is in the correct format. Show a warning message if validation fails.

**Source Code:**

```
<html>
<head>
  <title>question 1</title>
  <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>

  <h3>Signup Form</h3>
  <form id="signupForm">
    <label>Name:</label><br>
    <input type="text" id="name" placeholder="Enter your name"><br><br>
    <label>Email:</label><br>
    <input type="text" id="email" placeholder="Enter your email"><br><br>
    <button type="submit">Submit</button>
  </form>

  <p id="msg" style="color:red;"></p>

  <script>
    $(document).ready(function(){
      $("#signupForm").submit(function(event){
        event.preventDefault();
        let isValid = true;
        let message = "";
        $("#signupForm input").each(function(){
          if($(this).val().trim() === ""){
            isValid = false;
            message = "All fields are required.";
            return false; // exit loop early
          }
        });

        if(isValid){
          let email = $("#email").val().trim();
```

```

        let emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
        if(!emailPattern.test(email)){
            isValid = false;
            message = "Please enter a valid email address.";
        }
    }
    if(isValid){
        $("#msg").css("color", "green").text("Form submitted successfully!");
    } else {
        $("#msg").css("color", "red").text(message);
    }
    });
</script>
</body>
</html>

```

## 2) Accordion for FAQ Section

**Create a list of frequently asked questions. When a user clicks on a question, the answer should slide down. If another question is clicked, the previous answer should close.**

**Source code:**

```

<html>
<head>
    <title>question 2</title>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>

    <h2>FAQ Section</h2>
    <div class="faq">
        <p class="question"></p>
        <p class="answer" style="display:none;"></p>
    </div>

    <div class="faq">
        <p class="question"></p>
        <p class="answer" style="display:none;"></p>
    </div>

```

```

</div>

<div class="faq">
  <p class="question"></p>
  <p class="answer" style="display:none;"></p>
</div>

<script>
  $(document).ready(function(){
    $(".question").click(function(){
      let answer = $(this).next(".answer");
      $(".answer").not(answer).slideUp();
      answer.slideToggle();
    });
  });
</script>
</body>
</html>

```

### 3) Character Counter in Textarea

**Add a textarea for typing (like posting a tweet). Below it, display how many characters are remaining out of 100. Update the counter as the user types.**

#### Source Code:

```

<html>
<head>
  <title>question 3</title>
  <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>

  <h3>Post Something</h3>
  <textarea id="myText" rows="4" cols="40" maxlength="100"
placeholder="Type here..."></textarea>
  <p id="counter">100 characters remaining</p>

  <script>
    $(document).ready(function(){

```

```

$("#myText").keyup(function(){
    let max = 100;
    let currentLength = $(this).val().length;
    let remaining = max - currentLength;

    $("#counter").text(remaining + " characters remaining");
});
});
</script>
</body>
</html>

```

#### 4) Scroll-to-Top Button

**On long pages, add a "Scroll to Top" button that only appears after the user scrolls down a few hundred pixels. When clicked, it smoothly scrolls the page back to the top.**

#### Source Code:

```

<html>
<head>
    <title>question 4</title>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
    <style>
        body {
            height: 2500px;
        }
        #topBtn {
            display: none;
            position: fixed;
            bottom: 30px;
            right: 30px;
            padding: 10px 15px;
            font-size: 16px;
            cursor: pointer;
        }
    </style>
</head>
<body>

```

```

<button id="topBtn">Top</button>

<script>
$(document).ready(function(){
    $(window).scroll(function(){
        if ($(this).scrollTop() > 300) {
            $("#topBtn").fadeIn();
        } else {
            $("#topBtn").fadeOut();
        }
    });

    $("#topBtn").click(function(){
        $("html, body").animate({scrollTop: 0}, 800);
    });
});
</script>
</body>
</html>

```

## 5) Tab Navigation

**Build a tab system with multiple tabs like "Home", "About", "Contact". Clicking each tab should display its related content while hiding the others.**

### Source Code:

```

<html>
<head>
    <title>question 5</title>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>

    <h3>Tabs Switch</h3>
    <button class="tabBtn" data-tab="home">Home</button>
    <button class="tabBtn" data-tab="about">About</button>
    <button class="tabBtn" data-tab="contact">Contact</button>

    <div id="home" class="tabContent">Welcome to the Home page!</div>

```

```
<div id="about" class="tabContent" style="display:none;">This is the
About page.</div>
<div id="contact" class="tabContent" style="display:none;">Contact us at
xyz@gmail.com.</div>
```

```
<script>
$(document).ready(function(){
    $(".tabBtn").click(function(){
        let tabId = $(this).data("tab");
        $(".tabContent").hide();
        $("#" + tabId).show();
    });
});
</script>
</body>
</html>
```

## 6) Disable Submit Until Terms Checked

**On a signup form, add a "Terms and Conditions" checkbox. The "Submit" button should stay disabled until the checkbox is selected.**

### Source Code:

```
<html>
<head>
    <title>question 6</title>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>

    <h3>Signup Form</h3>
    <form id="signupForm">
        <label>Name:</label><br>
        <input type="text" id="name" placeholder="Enter your name"><br><br>

        <label>Email:</label><br>
        <input type="email" id="email" placeholder="Enter your
email"><br><br>
```

```
<input type="checkbox" id="terms"> I agree to the Terms and  
Conditions<br><br>
```

```
<button type="submit" id="submitBtn" disabled>Submit</button>  
</form>
```

```
<script>  
$(document).ready(function(){  
  $("#terms").change(function(){  
    $("#submitBtn").prop("disabled", !this.checked);  
  });  
});  
</script>  
</body>  
</html>
```

## 7) Dynamic Table Filter

**Create an employee table with columns like Name, Department, and Email. Above the table, add a search box. As the user types in the box, show only the rows that match the text.**

### Source Code:

```
<html>  
<head>  
  <title>question 7</title>  
  <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>  
</head>  
<body>  
  
  <h3>Employee Table</h3>  
  <input type="text" id="search" placeholder="Search  
employees..."><br><br>  
  <table border="1" id="empTable" cellpadding = 5 cellspacing = 0>  
    <thead>  
      <tr>  
        <th>Name</th>  
        <th>Department</th>  
        <th>Email</th>  
      </tr>
```

```

</thead>
<tbody>
  <tr>
    <td>Rish</td>
    <td>Sales</td>
    <td>rish@example.com</td>
  </tr>
</tbody>
</table>

<script>
$(document).ready(function(){
  $("#search").keyup(function(){
    let value = $(this).val().toLowerCase();

    $("#empTable tbody tr").filter(function(){
      $(this).toggle($(this).text().toLowerCase().indexOf(value) > -1)
    });
  });
});
</script>
</body>
</html>

```

- 8) Shopping Cart Calculation** Design a shopping cart table with product names, prices, and quantity input boxes. When the quantity changes, automatically recalculate and update the total cost.

**Source Code:**

```

<html>
<head>
  <title>question 8</title>
  <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>

  <h3>Shopping Cart</h3>
  <table border="1" id="cartTable" cellpadding = 5 cellspacing = 0>
    <thead>

```



```

<tr>
  <th>Product</th>
  <th>Price ($)</th>
  <th>Quantity</th>
  <th>Subtotal ($)</th>
</tr>
</thead>
<tbody>
  <tr>
    <td>Apple</td>
    <td class="price">2</td>
    <td><input type="number" class="qty" value="1" min="0"></td>
    <td class="subtotal">2</td>
  </tr>
  <tr>
    <td>Banana</td>
    <td class="price">1</td>
    <td><input type="number" class="qty" value="2" min="0"></td>
    <td class="subtotal">2</td>
  </tr>
  <tr>
    <td>Orange</td>
    <td class="price">3</td>
    <td><input type="number" class="qty" value="1" min="0"></td>
    <td class="subtotal">3</td>
  </tr>
</tbody>
<tfoot>
  <tr>
    <td colspan="3" style="text-align:right;"><strong>Total
($):</strong></td>
    <td id="total">7</td>
  </tr>
</tfoot>
</table>

<script>
$(document).ready(function(){
  function calculateTotal(){
    let total = 0;

```

```

        $("#cartTable tbody tr").each(function(){
            let price = parseFloat($(this).find(".price").text());
            let qty = parseInt($(this).find(".qty").val());
            let subtotal = price * qty;
            $(this).find(".subtotal").text(subtotal);
            total += subtotal;
        });
        $("#total").text(total);
    }
    $(".qty").change(calculateTotal);
    calculateTotal();
});
</script>
</body>
</html>

```

**9) Simple AJAX Call Add a button "Load Users". When clicked, fetch a JSON list of users (like name and email) from a file or API and display them in a list on the page.**

**Source Code:**

```

<html>
<head>
    <title>question 9</title>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>
<body>

    <h3>User List</h3>
    <button id="loadBtn">Load Users</button>
    <ul id="userList"></ul>

    <script>
        $(document).ready(function(){
            $("#loadBtn").click(function(){
                $.getJSON("https://jsonplaceholder.typicode.com/users",
function(data){
                $("#userList").empty();
                $.each(data, function(index, user){

```

```

        $("#userList").append("<li>" + user.name + " (" + user.email +
    ")</li>");
    });
    }).fail(function(){
        alert("Error loading user data.");
    });
    });
    });
</script>
</body>
</html>

```

**10) Dark Mode Toggle** Add a switch button that lets the user switch between light and dark themes for the page. Change background and text colors accordingly.

#### Source Code:

```

<html>
<head>
    <title>question 10</title>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
    <style>
        body {
            background-color: white;
            color: black;
            transition: background 0.3s, color 0.3s;
        }

        .dark-mode {
            background-color: #121212;
            color: #f0f0f0;
        }

        #toggleBtn {
            margin: 20px 0;
            padding: 10px 15px;
            cursor: pointer;
        }
    </style>

```

```
</head>
<body>

  <h2>Toggle Dark Mode</h2>
  <button id="toggleBtn">Dark Mode</button>

  <p>My name is Rishvan.</p>

  <script>
    $(document).ready(function(){
      $("#toggleBtn").click(function(){
        $("body").toggleClass("dark-mode");
      });
    });
  </script>
</body>
</html>
```