(JQuery Basic, Effects & Advanced)– 5

1. What is jQuery?

jQuery is a fast, small, and feature-rich JavaScript library that simplifies and enhances the process of interacting with HTML documents, handling events, performing animations, and making AJAX (Asynchronous JavaScript and XML) Requests.

Key features of jQuery include: DOM Manipulation
Event Handling
Animations
Plugin Ecosystem

2. How to Apply CSS Using JQuery, How to Add Class and Remove Class in Jquery ,JQuery Animation?

Applying CSS Using jQuery: You can use the .css() method in jQuery to apply CSS styles to selected elements.

Ex —
```
<!DOCTYPE html>
<html>
<head>
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<style>
        .highlight { background-color: yellow; }
 </style>
</head>
<body>
        <button id="applyStyles">Apply Styles</button>
        <div id="targetElement">This is a target element.</div>
 <script>
            $(document).ready(function() {
            $('#applyStyles').click(function() {
```

```
      $('#targetElement').css('color', 'blue');
      $('#targetElement').css('font-size', '20px');
      $('#targetElement').addClass('highlight');
    });
  });
 </script>
</body>
</html>
```

Adding and Removing Classes in jQuery: jQuery provides methods to easily add and remove classes from elements.

Ex —

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=, initial-scale=1.0">
    <title>Document</title>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
    <style>
      .highlight {
        background-color: yellow;
      }
      .italic {
        font-style: italic;
      }
    </style>
</head>
<body>
    <div id="targetElement">This is the target element.</div>
    <button id="addClassBtn">Add Class</button>
    <button id="removeClassBtn">Remove Class</button>


    <script>
      $(document).ready(function() {
    $('#addClassBtn').click(function() {
      $('#targetElement').addClass('highlight');
    });

    $('#removeClassBtn').click(function() {
      $('#targetElement').removeClass('highlight');
    });
  });
```

```
    </script>
</body>
</html>
```

jQuery Animations: jQuery provides methods for creating animations, like `.animate()`, which can animate changes in CSS properties over time.

Ex —

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
    <style>
      .box {
        width: 100px;
        height: 100px;
        background-color: blue;
        position: relative;
      }
    </style>
</head>
<body>
    <div class="box"></div>
    <button id="animateButton">Animate</button>
    <script>
      $(document).ready(function() {
    $('#animateButton').click(function() {
      $('.box').animate({
        left: '+=100px',
        opacity: 0.5,
        width: '200px',
        height: '200px'
      }, 1000);
    });
  });
```

```html
    </script>
</body>
</html>
```