

**1) What is jQuery?**

* jQuery is a JavaScript library designed to simplify web development tasks.
* It streamlines operations like traversing and modifying HTML documents, managing events, creating animations.
* jQuery removes the complexities of working with the DOM and event handling, making it easier to write efficient and compatible code.

**2) How to Apply CSS Using jQuery, How to Add Class and Remove Class in Jquery ,**

**jQuery Animation?**

* We can apply CSS styles to elements using jQuery's .css()  
  example:   
  $(selector).CSS({

"color": "red",

"font-size": "20px",

"background-color": "yellow"})

* We can add or remove classes from elements using jQuery's .addClass() and .removeClass()  
  example:  
  $(selector).addClass(new Class);

$(selector).removeClass(old Class);

* We can create animations such as .animate(), .slideDown(), .slideUp(), .fadeIn(), and .fadeOut()  
  example:  
  $(selector).animate({

width: "500px"

}, 1000);

**3) How to create slider with animation?   
  
HTML code**

<div class="slider">

<div class="slide active">Slide 1</div>

<div class="slide">Slide 2</div>

<div class="slide">Slide 3</div>

</div>

<button id="prevBtn">Previous</button>

<button id="nextBtn">Next</button>  
  
**jQuery Code**$(document).ready(function() {

var currentIndex = 0;

var slides = $('.slide');

slides.eq(currentIndex).addClass('active');

$('#prevBtn').on('click', function() {

slides.eq(currentIndex).removeClass('active').fadeOut(500);

currentIndex = (currentIndex - 1 + slides.length) % slides.length;

slides.eq(currentIndex).addClass('active').fadeIn(500);

});

$('#nextBtn').on('click', function() {

slides.eq(currentIndex).removeClass('active').fadeOut(500);

currentIndex = (currentIndex + 1) % slides.length;

slides.eq(currentIndex).addClass('active').fadeIn(500);

});

});