1. What is JQuery?

Ans.

* jQuery is a fast, small, and feature-rich JavaScript library designed to simplify client-side scripting in HTML. It was released in 2006 and quickly gained popularity due to its ease of use and powerful functionality.
* jQuery allows developers to write shorter, more efficient JavaScript code by providing a simple and consistent API for manipulating HTML documents, handling events, and creating animations. It also provides built-in support for making AJAX requests, which allows developers to dynamically update the content of a webpage without requiring a full page refresh.
* In addition to its core features, jQuery has a large ecosystem of plugins and extensions that add even more functionality, such as complex animations, interactive charts and graphs, and advanced form validation.
* Overall, jQuery has had a significant impact on web development by making it easier for developers to create interactive, responsive, and dynamic web pages with less code and fewer cross-browser compatibility issues.

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

Ans.

* Applying CSS using JQuery:

JQuery provides several methods to apply CSS styles to HTML elements. The most commonly used methods are the **.css()** method and the **.addClass()** method.

1. The **.css()** method:

The **.css()** method is used to set one or more CSS properties for the selected element(s).

Ex.

$("p").css("color", "red");

In this example, all **<p>** elements will have their

text color set to red.

1. The **.addClass()** method:

The **.addClass()** method is used to add one or more CSS classes to the selected element(s).

Ex.

$("p").addClass("myClass");

In this example, all **<p>** elements will have the **myClass** class added to them.

Removing a class using JQuery:

The **.removeClass()** method is used to remove one or more CSS classes from the selected element(s).

Ex.

$("p").removeClass("myClass");

In this example, all **<p>** elements with the **myClass** class will have that class removed.

JQuery Animation:

JQuery provides several methods for animating HTML elements, including the **.animate()** method and the **.fadeIn()**, **.fadeOut()**, and **.fadeToggle()** methods.

1.the ‘animate()’ method:

The **.animate()** method is used to animate an

element's CSS properties.

Ex.

$("div").animate({left: '250px'});

In this example, all **<div>** elements will move

1. xels to the right.
2. The **.fadeIn()**, **.fadeOut()**, and **.fadeToggle()**

methods:

These methods are used to fade an element in or out.

$("div").fadeIn();

$("div").fadeOut();

$("div").fadeToggle();

In these examples, all **<div>** elements will fade

in, fade out, or toggle their fade state,

respectively.

**(3) How to create slider with animation?**

**Ans -**

jQuery has the following slide methods:

slideDown()

slideUp()

slideToggle()

slideDown() :

$("#flip").click(function(){

$("#panel").slideDown();

});

slideUp() :

$("#flip").click(function(){

$("#panel").slideUp();

});

slideToggle() :

$("#flip").click(function(){

$("#panel").slideToggle();

});