1.What is jQuery?

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

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

$().css(propertyname, value);

$().css(properties);

There are many types of CSS methods, which means that each method has the same name but takes different parameters. We will discuss only two methods, one of which is used to change a single CSS property, while the other is used to change multiple CSS properties simultaneously. With the second method, you can pass a [JSON string object](https://www.geeksforgeeks.org/javascript-json-objects/)as a parameter that you want to apply to the HTML element.

* Add class in Jquery Jquery has method called addClass() which can be used to add one or more class to the DOM elements. ...
* Remove class using Jquery Jquery has method called removeClass() which can be used to remove one or more class from the DOM elements. ...
* Toggle class in Jquery We can use removeClass and addClass together to toggle the classes. ...

The jQuery animate() method is used to create custom animations.

**Syntax:**

$(*selector*).animate({*params*}*,speed,callback*);

The required params parameter defines the CSS properties to be animated.

The optional speed parameter specifies the duration of the effect. It can take the following values: "slow", "fast", or milliseconds.

The optional callback parameter is a function to be executed after the animation completes.

3. How to create slider with animation?

* The first step would be creating a new HTML page and defining the **div** in the HTML.
* The **div** will be defined under the body section and will be responsible for holding the slider carousel.
* We will be adding the left and right buttons in the carousel to let the user navigate between the multiple slides available.
* We will be using CSS for designing the components. Commonly used CSS properties are font-size, padding, margin, etc.
* In the last we will be creating a JavaScript function that will provide the carousel with the scroll functionality.
* **CSS (<style>)** − In the style tag we have added the CSS that will be used for enhancing the User Experience. This section is very important for producing the slider effect. The left and right arrows are used for moving the slider to the left and right. All the slides have the image and the caption defined. These captions are placed on top of the image.
* **JS(<script>)**: The JS is used for recording the events when left or right arrows are clicked. On clicking the buttons, the JS will navigate toward the next image.

Example:-

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <style>

        .conteiner{

            height: 500px;

            width: 1000px;

            margin: 50px auto;

            border: 1px solid;

            position: relative;

            overflow: hidden;

            box-shadow: 0px 0px 10px gray;

        }

        img{

            width: 100%;

            position: absolute;

           transition: 1s;

        }

        .nav{

            text-align: center;

            margin: 20px 0;

        }

        button{

            font-size: 25px;

        }

    </style>

</head>

<body>

<div class="conteiner">

    <img src="https://picsum.photos/id/137/1000/500" class="img" alt="">

    <img src="https://picsum.photos/id/237/1000/500" class="img" alt="">

    <img src="https://picsum.photos/id/337/1000/500" class="img" alt="">

    <img src="https://picsum.photos/id/437/1000/500" class="img" alt="">

    </div>

    <div class="nav flex">

        <button onclick="goPrev()">

            prev

        </button>

        <button onclick="gonext()">

            next

        </button>

    </div>

    <script>

        const slide = document.querySelectorAll('.img')

        <!-- console.log(slide) -->

        let cont = 0

        slide.forEach(

            (img,index) => {

                img.style.left = `${index \* 100}%`

            }

        )

        const slideImage = () => {

            slide.forEach(

                (img) => {

                    img.style.transform = `translateX(-${ cont \* 100}%)`

                }

            )

        }

        const goPrev = () => {

            cont--

            if(cont<slide.length-1)

            {

                cont=0

            }

            slideImage()

        }

        const gonext = () => {

            console.log(slide.length)

            cont++

            if(cont > slide.length-1){

                cont=0

            }

            slideImage()

        }

    </script>

</body>

</html>