

jQuery

What is jQuery?

- jQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development.

jQuery download (<http://jquery.com/>)

- jQuery is a lightweight, "write less, do more", JavaScript library.
- The purpose of jQuery is to make it much easier to use JavaScript on your website.
- jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.
- jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

The jQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

Examples of JQuery Websites:

1. Google also using jQuery (www.google.com).
2. Entertainment Arts uses jQuery (www.ea.com).
3. Wordpress (wordpress.org)
4. Twitter (<http://twitter.com>)

Adding jQuery to Your Web Pages

There are several ways to start using jQuery on your web site. You can:

- Download the jQuery library from [jQuery.com](https://jquery.com)
- Include jQuery from a CDN, like Google

Downloading jQuery

There are two versions of jQuery available for downloading:

- Production version - this is for your live website because it has been minified and compressed
- Development version - this is for testing and development (uncompressed and readable code)

Both versions can be downloaded from [jQuery.com](https://jquery.com).

The jQuery library is a single JavaScript file, and you reference it with the HTML `<script>` tag (notice that the `<script>` tag should be inside the `<head>` section):

```
<head>
<script src="jquery-3.2.1.min.js"></script>
</head>
```

jQuery CDN

If you don't want to download and host jQuery yourself, you can include it from a CDN (Content Delivery Network).

Both Google and Microsoft host jQuery.

To use jQuery from Google or Microsoft, use one of the following:

Google CDN:

```
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/
jquery.min.js"></script>
</head>
```

Microsoft CDN:

```
<head>
<script src="https://ajax.aspnetcdn.com/ajax/jquery/jquery-3.2.1.min.js"></
script>
</head>
```

jQuery Syntax

The jQuery syntax is tailor-made for **selecting** HTML elements and performing

some **action** on the element(s).

Basic syntax is: **\$(selector).action()**

- A \$ sign to define/access jQuery
- A (selector) to "query (or find)" HTML elements
- A jQuery action() to be performed on the element(s)

First Program::

```
$(document).ready(function(){
    // jQuery methods go here...
    alert("hello JQuery");
    $("#div1").html("hai JQuery how are you?");

    //setting inner html (using jquery)
    //document.getElementById("div1").innerHTML = "hai how are you"; //setting
    inner html (using javascript)
});
```

//Tip: The jQuery team has also created an even shorter method for the document ready event:

```
// $(function(){
//     // jQuery methods go here...
// });
```

What are Events?

All the different visitor's actions that a web page can respond to are called events.

An event represents the precise moment when something happens.

Examples:

- moving a mouse over an element
- selecting a radio button
- clicking on an element

Click :

```
$("#button1").click(fun1);
    function fun1()
    {
        var msg = "Welcome to JQuery";
        $("#div1").html(msg);
    }
```

Val():

```
$("#button1").click(fun1);
```

```

        function fun1()
        {
            var s = $("#textbox1").val();
            //for <input> and <select> tags we should use val()
            // but in javascript we will Use value

            var msg = "hai " + s;
            $("#div1").html(msg);

            //for any other tag we should use html()
        }

```

Calculate ::

```

Price: <input type="text" id="textbox1"> <br>
Discount: <input type="text" id="textbox2"> <br>
<input type="button" id="button1" value="Calculate">

<br>
Net Price: <input type="text" id="textbox3"> <br>

<script type="text/javascript">
    $("#textbox1").val(30);
    $("#textbox2").val(40);

    $("#button1").click(fun1);
    function fun1()
    {
        var price = parseInt( $("#textbox1").val());
        var discount = parseInt( $("#textbox2").val() );
        var netprice = price - discount;
        $("#textbox3").val(netprice);
    }
</script>

```

Focus And Blur::

```

Username:
    <input type="text" id="TextBox1">
    <span id="span1" style="color:green; display:none">Use letters,
numbers and hyphens</span>
    <script type="text/javascript">

        $("#TextBox1").focus(fun1);
        $("#TextBox1").blur(fun2);
        function fun1()
        {
            $("#span1").show();
        }
    </script>

```

```
function fun2()
{
    $("#span1").hide();
}
```

KeyUp::

Username:

```
<input type="text" id="textbox1">
<div id="div1">div1</div>
```

```
<script type="text/javascript">
```

```
    $("#textbox1").keyup(fun1);
    function fun1()
    {
        var s = $("#textbox1").val();
        var msg = "Hai " + s;
        $("#div1").html(msg);
    }
</script>
```

KeyPress::

Person Name:

```
<input type="text" id="textbox1">
```

```
<script type="text/javascript">
    $("#textbox1").keypress(fun1);
```

```
    function fun1(event)
    {
        alert("event fired");
        //event = browser given information
        var ch = event.which;
        //ascii value of currently pressed character

        if ( (ch >=97 && ch <=122) || (ch >=65 && ch <= 90)
|| (ch == 32) || (ch == 8) )
        {
            //accept the character automatically
        }
        else
        {
            event.preventDefault(); //reject the character
        }
    }
</script>
```

DoubleClick::

```

$("#div1").dblclick(fun1);
    function fun1()
    {
        var msg = "Thanx for double clicking me";
        $("#div1").html(msg); //setting html
    }

```

DropDown::

```

Country:<br>
<select id="DropDownList1">
    <option>Please Select</option>
    <option>India</option>
    <option>China</option>
    <option>United Kingdom</option>
    <option>United States</option>
</select>
<br>
<span id="span1" style="color:green">Please Select Some country</
span>

<script type="text/javascript">
    $("#DropDownList1").change(fun1);

    function fun1()
    {
        if ($("#DropDownList1").val() == "Please Select")
        {
            $("#span1").html("Please Select Some country");
        }
        else
        {
            var s = ($("#DropDownList1").val());
            var msg = "You selected: " + s;
            $("#span1").html(msg);
            this.preventDefault();
        }
    }
</script>

```

Mouse Events::

```

$("#div1").mouseover(fun1);
$("#div1").mouseout(fun2);
$("#div1").mousemove(fun3);
function fun1()
{
    $(this).html("Thanx");
    //this = current element = div1
}

```

```

function fun2()
{
    $(this).html("hover me");
}
function fun3(event)
{
    var x = event.pageX;
    var y = event.pageY;
    var msg = x + ", " + y;
    $("#span1").html(msg);
}

```

Hover ::

```

<div id="div1">
    hover me
</div>

<span id="span1" style="color:blue">span1</span>
<script type="text/javascript">
//toogleMethod : MouseOver,MouseOut

    $("#div1").hover(fun1, fun2);
//    $("#div1").mousemove(fun3);
    function fun1()
    {
        $(this).html("Thanx");
        $("#span1").html("mouse over done");
    }
    function fun2()
    {
        $(this).html("hover me");
        $("#span1").html("mouse out done");
    }
    function fun3(event)
    {
        var x = event.pageX;
        var y = event.pageY;
        var msg = x + ", " + y;
        $("#span1").html(msg);
    }
</script>

```

Disable Cut Copy Paste ::

```

<input type="text" id="TextBox1" class="class1">
<input type="text" id="TextBox2" class="class1">
<input type="text" id="TextBox3" class="class1">

<div id="box"> hello</div>

```

```
<script type="text/javascript">
```

//bind : Combination Of Events Or Execute More events at same time

```
$("#box").bind({  
    click: function() {  
        $("#box").html("single click");  
    },  
    dblclick: function() {  
        $("#box").html("double click");  
    }  
});
```

//bind : Combination Of Events Or Execute More events at same time

```
$(".class1").bind("cut copy paste", fun1);  
  
function fun1(event)  
{  
    alert("cut copy paste not allowed");  
    event.preventDefault();  
    //default functionality will be stopped  
}  
//event = browser given information  
</script>
```

Disable RightClick::

```
<input type="text" id="TextBox1" >  
<input type="text" id="TextBox2">  
<input type="text" id="TextBox3">  
  
<script type="text/javascript">  
  
    $(document).bind("contextmenu", fun1);  
  
    function fun1(event)  
    {  
        alert("right click not allowed");  
        event.preventDefault();  
    }  
  
    //event = browser given information  
</script>
```

One ::

```
<input type="button" id="button1" value="click me">  
<div id="div1">1</div>
```



```
<button>Click me!</button>
```

```
    <script type="text/javascript">
// one is event only one time trigger

// bind, on will trigger more times

        $("#button1").one("click", fun1);

// $("#button1").click(fun1);

        function fun1()
        {
            var n = parseInt( $("#div1").html() ); //getting html
            n++;
            $("#div1").html(n); //setting html
        }

// $("button").on("click", function(){
//     alert("On event is working");
// });

// $("button").click(function(){
//     alert("Button Clicked");
// });

// $(document).ready(function(){
//     $("button").live("click", function(){
//         alert("live is working");
//     });
// });

// Note:Note: The live() method was deprecated in jQuery version 1.7, and
removed in version 1.9. We have used an earlier version of jQuery (1.7 in the
script tag), for this example to work.

    </script>
```

fadeOut fadeIn::

```
<div id="div1">Lorem Ipsum is simply dummy text of the printing and
typesetting industry. Lorem Ipsum is simply dummy text of the printing and
typesetting industry.</div><br/>
```

```
<input type="button" id="button1" value="fade out">
<input type="button" id="button2" value="fade in">
```

```
<script type="text/javascript">
```

```

$("#button1").click(fun1);
$("#button2").click(fun2);

function fun1()
{
    $("#div1").fadeOut(2000); //1000 milli sec = 1 sec
}

function fun2()
{
    $("#div1").fadeIn(2000);
}

```

SlideUp slideDown :

<div id="div1">Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div></br>

<input type="button" id="button1" value="slide up">
<input type="button" id="button2" value="slide down">

```

<script type="text/javascript">
    $("#button1").click(fun1);
    $("#button2").click(fun2);

    function fun1()
    {
        $("#div1").slideUp(2000);
    }

    function fun2()
    {
        $("#div1").slideDown(1000);
    }
</script>

```

Hide Show ::

<div id="div1">Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div></br>

<input type="button" id="button1" value="hide">
<input type="button" id="button2" value="show">

```

<script type="text/javascript">
    $("#button1").click(fun1);
    $("#button2").click(fun2);

```

```

function fun1()

```

```

    {
        $("#div1").hide(1000);
    }
    function fun2()
    {
        $("#div1").show(1000);
    }
</script>

```

Toogle ::

<div id="div1">Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div></br>

```

<input type="button" id="button1" value="fade toggle">
<input type="button" id="button2" value="slide toggle">
<input type="button" id="button3" value="show/hide toggle">

```

```

<script type="text/javascript">
    $("#button1").click(fun1);
    $("#button2").click(fun2);
    $("#button3").click(fun3);

    function fun1()
    {
        $("#div1").fadeToggle(1000); //fadeOut or fadeIn
    }

    function fun2()
    {
        $("#div1").slideToggle(1000); //slideUp or slideDown
    }

    function fun3()
    {
        $("#div1").toggle(1000); //hide or show
    }

```

FadeOut ::

```

<div id="div1" class="class1">1</div>
<div id="div2" class="class1">2</div>
<div id="div3" class="class1">3</div>
<div id="div4" class="class1">4</div>
<div id="div5" class="class1">5</div>

<script type="text/javascript">

    $("div.class1").click(fun1);

```

```

        function fun1()
        {
            $(this).fadeOut(2000);
            //this = current element (div), which is currently clicked
        }
    </script>

```

FadeTo::

```

<div id="div1" class="class1">1</div>
<div id="div2" class="class1">2</div>
<div id="div3" class="class1">3</div>
<div id="div4" class="class1">4</div>
<div id="div5" class="class1">5</div>

<script type="text/javascript">
    $("div").click(fun1);
    function fun1()
    {
        $(this).fadeTo(2000, 0.4); //Syntax: fadeTo(milli sec,
opacity)                          //fade value range is 0.0 to 1.0
                                   //0.0 Complete Disapper
                                   // 1.0 Full appear
    }
</script>

```

FadeTo :

```

<div id="div1" class="class1">1</div>
<div id="div2" class="class1">2</div>
<div id="div3" class="class1">3</div>
<div id="div4" class="class1">4</div>
<div id="div5" class="class1">5</div>

<script type="text/javascript">

    $(".class1").click(fun1);
    $(".class1").data("flag", "0");
    function fun1()
    {
        var n = $(this).data("flag");
        if (n == "0")
        {
            $(this).fadeTo(1000, 0.4); //milli sec, opacity
            $(this).data("flag", "1");
        }
        else
        {

```

```

        $(this).fadeOut(1000, 1.0); //milli sec, opacity
        $(this).data("flag", "0");
    }
}
</script>

```

AddClass::

```

.class1
{
    background-color: darkred;
    color: cyan;
    font-size: 50px;
}

```

<div id="div1" >Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div>

```

<input type="button" id="button1" value="add class">
<script type="text/javascript">
    $("#button1").click(fun1);

    function fun1()
    {
        $("#div1").addClass("class1");
    }
</script>

```

Remove Class:

```

.class1
{
    background-color: yellow;
}

```

<div id="div1" class="class1 red">Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div>

```

<input type="button" id="button1" value="remove class">
<script type="text/javascript">

// click button for remove class1
$("#button1").click(fun1);

function fun1()
{
    $("#div1").removeClass("class1");
}
</script>

```

Toggle Class ::

```
.class1
{
    background-color: yellow;
}
```

<div id="div1">Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div>

```
<input type="button" id="button1" value="toggle class">
<script type="text/javascript">
    $("#button1").click(fun1);

    function fun1()
    {
        $("#div1").toggleClass("class1");
    }
    //toggleClass = addClass + removeClass

</script>
```

Has Class ::

```
.class1
{
    background-color: darkred;
    color: cyan;
}
```

<div id="div1" >Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div>

```
<input type="button" id="button1" value="has class">
<div class='classname' id='your_id_name'>
</div>
```

```
<script type="text/javascript">
    $("#button1").click(fun1);
    function fun1()
    {
        var b = $("#div1").hasClass("class1");
        alert(b);
    }
</script>
```

Set CSS:

<div id="div1">Lorem Ipsum is simply dummy text of the printing and

typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div>

```
<input type="button" id="button1" value="set a css property">

<script type="text/javascript">
//var x = document.getElementsByName("span").style.background-
color="red"; // Javascript
    $("#button1").click(fun1);
    function fun1()
    {
        $("#div1").css("color", "#ff0099");
    }
</script>
```

Set More properties CSS::

<div id="div1">Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div>

```
<input type="button" id="button1" value="set a css property">
<script type="text/javascript">
    $("#button1").click(fun1);

    function fun1()
    {
        //var x = document.getElementsByName("span").style.background-
color="red"; // Javascript

        //$("#div1").addClass("myClass");
        $("#div1").css( { "color": "yellow", "background-color":
"darkblue", "font-size": "30px", "font-weight": "bold", "font-family": 'Segoe UI' } );
    }
</script>
```

Get CSS :

<div id="div1" class="class1">Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum is simply dummy text of the printing and typesetting industry.</div>

```
<input type="button" id="button1" value="get css property">
<script type="text/javascript">
    $("#button1").click(fun1);
    function fun1()
    {
        var item = $("#div1").css("font-size");
        var color=$("#div1").css("color");
        alert("color value is " + color + "Font-size is" + item);
    }
}
```

```
</script>
```

Set Attribute ::

```

  <br>
  <input type="button" id="button1" value="set attribute">
  <script type="text/javascript">
    $("#button1").click(fun1);

    function fun1()
    {
        $("#myImage").attr("src", "img2.jpg");
        $("#myImage").attr("title", "Srinivas");
    }
  </script>
```

Set More Attributes ::

```

  <br>
  <input type="button" id="button1" value="set multiple attributes">
  <script type="text/javascript">

    $("#button1").click(fun1);
    function fun1()
    {
        $("#myImage").attr( { "src": "img4.jpg", "title": "This is
My Image", "alt": "this is alternate text", "width": "300px", "height": "300px;" } );
    }
  </script>
```

Remove Attribute ::

```

  <br>

  <input type="button" id="button1" value="remove attribute">
  <script type="text/javascript">
    $("#button1").click(fun1);
    function fun1()
    {
        $("#myImage").removeAttr("title");
    }
  </script>
```

Get Attribute ::


```


<br>
<input type="button" id="button1" value="get attribute">

<script type="text/javascript">
    $("#button1").click(fun1);

    function fun1()
    {
        var s = $("#myImage").attr("id");
        alert(s);
    }
</script>

```

Animation Width::

```

<div id="div1">Hello World</div>
<br>
<input type="button" id="button1" value="animate width">

<script type="text/javascript">
    $("#button1").click(fun1);
    function fun1()
    {
        $("#div1").animate( {"width":"230px"}, 3000);
    }
</script>

```

Animation Height ::

```

<div id="div1">Hello World</div>
<br>
<input type="button" id="button1" value="animate height">

<script type="text/javascript">
    $("#button1").click(fun1);

    function fun1()
    {
        $("#div1").animate({"height":"600px"}, 2000);
    }
</script>

```

Animate Width and Height ::

```

$("#div1").animate( {"width": "200px", "height":"200px"}, 2000);

```

Animate Width Then Stay and Height ::

```

$("#div1").animate({"width": "300px"}, 1000).delay(1000).animate({"height":

```

```
"300px"},1000).fadeOut(3000);
```

multiple properties:

```
$("#div1").animate( { "font-size": "30px", "border-width": "10px", "left": "30px",  
"top": "50px", "color" : "FFFFFF" }, 2000);
```

Selectors ::

```
selector          $("p").css("background-color", "lightgreen"); // element
```

```
selector          $("#p1,#p2").css("background-color", "lightgreen"); //id
```

```
selector          $(".p1,.p2").css("background-color", "lightgreen"); //class
```

```
                  $("p.class1, h1.class1").css("background-color",  
"lightgreen"); // compound selector
```

```
                  $(".class1,.class2").css("background-color",  
"lightgreen"); //grouping selector
```

```
                  $("div p").css("background-color", "lightgreen"); //It  
selects all <div> tags and all <p> tags
```

//Descendent Selector or Child Selector

```
//It selects all the <p> tags that are children of <div>  
$("div>p").css("background-color", "lightgreen");
```

```
                  $("#p1+img").css("border", "10px solid lightgreen");  
//Adjacent One Sibling Selector  
//It selects one <img> tag, which is immediately next to  
</p>
```

```
                  $("#p1~img").css("border", "10px solid lightgreen");  
//Adjacent Sibling Selector  
//It selects all <img> tags, which are next to </p>
```

```
                  $("p:first").css("background-color", "lightgreen");  
//first - filter  
//It selects the first <p>
```

```
                  $("p:last").css("background-color", "lightgreen");  
//last - filter  
//It selects the last <p>
```

```
                  ("p:even").css("background-color", "lightgreen");
```

selects 0, 2, 4, 6, 8 ... //It selects the even <p>. Index starts from 0. Means it selects 0, 2, 4, 6, 8 ...

filter \$("p:odd").css("background-color", "lightgreen"); //odd -
//It selects the odd <p>. Means 1, 3, 5, 7, 9, ...

equal - function \$("p:eq(3)").css("background-color", "lightgreen");
//equal - filter
//\$("p").eq(3).css("background-color", "lightgreen"); //

starts from zero (0). //It selects the <p> which index position is "3". Index starts from zero (0).

than - filter \$("p:gt(3)").css("background-color", "lightgreen");
//greater than - filter
//It selects the <p> which index position is greater than "3". Index starts from zero (0).

Index starts from zero (0). //It selects the <p> which index position is less than "3". Index starts from zero (0).

"lightgreen"); //not - filter //It selects the <p> which index position is not equal to "3".

"lightgreen"); //It selects the <p> which index position is equal to "3" and "5".

"lightgreen"); //not - filter
//It selects the <p> which index position is not equal to "3" and "5".\

width="100px" \$("img[width='100px']").css("border", "4px solid red");
//attribute selector
//It selects the tag that have an attribute called width="100px"

red"); //attribute selector - not
//\$("img:not(img[width='100px'])").css("border", "4px solid red"); //attribute selector - not
//It selects the tag that width is not equal to

"100px"

with "img".

```
$("#img[src^='img']").css("border", "4px solid red");  
//attribute selector - starts with  
//It selects <img> tag that has "src" attribute that starts
```

with "jpg".

```
$("#img[src$='jpg']").css("border", "4px solid red");  
//attribute selector - ends with  
//It selects <img> tag that has "src" attribute that ends
```

contains "p".

```
$("#img[src*='p']").css("border", "4px solid red");  
//attribute selector - contains  
//It selects <img> tag that has "src" attribute that
```

solid red");

```
//$("img[src*='5'],img[src*='2']").css("border", "4px  
//attribute selector - contains  
//It selects <img> tag that has "src" attribute that
```

contains "5" or "2".

"lightgreen");

```
$("#p:contains('you')").css("background-color",  
//contains  
//It selects <p> that has content "you"
```

```
$("#p:has('span')").css("background-color", "lightgreen");  
// $("#p span").css("background-color", "green");  
//has  
//It selects the <p> tags that have a child called <span>
```

```
$("#p:empty").css("border", "3px solid red");  
//empty - filter  
//It selects the empty <p> tags
```

parent.

```
$("#p:first-child").css("background-color", "lightgreen");  
//first-child  
//It selects the <p> tag, which is the first child or its
```

parent.

```
$("#p:last-child").css("background-color", "lightgreen");  
//last-child  
//It selects the <p> tag, which is the last child or its
```

```
$("#p:nth-child(3)").css("background-color", "lightgreen");  
//nth-child. Index starts from '1'.  
//It selects the <p> tag, which index position is "2" in its
```

parent.

```
$("#p:only-child").css("background-color", "lightgreen");  
//only-child  
//It selects the <p> tag that is only one child of its
```

parent.

```
$("#p1").parent().css("background-color", "lightgreen");  
//The "parent()" function returns the parent tag of "#p1"
```

```
$("#p1").next().css("background-color", "lightgreen");  
//The "next()" function returns next tag, which is present
```

after "#p1".

```
$("#p1").prev().css("background-color", "lightgreen");  
//The "prev()" function returns the previous tag, which is
```

present before "#p1".

```
$("#p1").siblings().css("background-color", "lightgreen");  
//It selects all tags that are siblings (brothers) of "#p1".
```

```
$("#div1").children().css("background-color",  
"lightgreen");  
//It selects all tags that are children of "#div1".
```

Table CSS::

```
$("#table1").addClass("class1");  
$("#table1 tr:even").addClass("class2");  
$("#table1 tr:odd").addClass("class3");  
$("#table1 tr td, #table1 tr th").addClass("class4");  
$("#table1 tr:first").addClass("class5");  
$("#table1 tr:gt(0)").hover(fun1, fun2);  
  
function fun1()  
{  
    $(this).addClass("class6");  
}  
function fun2()  
{  
    $(this).removeClass("class6");  
}
```

Get HTML ::

```
//get html (including child tags)  
var s = $("#div1").html();  
alert(s);
```

Get Text ::

```
//get text (excluding child tags)
    var s = $("#div1").text();
    alert(s);
```

Set HTML::

```
//set html
$("#div1").html("I am <b>fine</b>");
```

Set Text ::

```
//set text
$("#div1").text("I <b>am</b> fine");
```

Append ::

```
    //append
    $("#div1").append("how are you");
```

Prepend::

```
//prepend
$("#div1").prepend("Hai ");
```

After ::

```
//after ending tag
    $("#div1").after("<h4>How do you do</h4>");
```

Before ::

```
//before
$("#div1").before("<h4>How do you do</h4>");
```

AppendTo ::

```
    $("#span1").appendTo("#div1");
    //$("#span1").clone().appendTo("#div1");
```

prependTo ::

```
    $("#span1").prependTo("#div1");
    //$("#span1").clone().prependTo("#div1");
```

Insert After ::

```
    //insert after ending tag
    $("#span1").insertAfter("#div1");
```

Insert Before ::

```
//insert before starting tag
$("#span1").insertBefore("#div1");
```

Wrap ::

```
$("#p").wrap("<div></div>");
```

WrapAll ::

```
$("#p").wrapAll("<div></div>");
```

Empty ::

```
$("#div1").empty();
```

Remove ::

```
$("#div1").remove();
```

ReplaceWith ::

```
$("#div1").replaceWith("<p>i am fine</p>");
```

JSON :

JSON means Javascript Object Notation

json used for store and transport data from client to server or server to client

json is a data format

json is lightweight

json is text interchange format

json is available with two different built in formats

1. Object { }
2. Array []

1. Object Format :

collection of key-value pairs

collection of property-value pairs

key or property must be a string type

value can be any type it means string,number ,bool,float,null,array,object

key and value separated with : colon

every key-value pair separated with comma ,

2. Array Format :

collection of values

value can be any type it means string,number ,bool,float,null,array,object

values are separated with comma ,

last value doesnot have comma

Validation :

Open browser
<https://jsonlint.com/>
copy paste json text
click on validatejson button

JSON is a text format that is completely language independent.
It is easy for humans to read and write. It is easy for machines to parse and generate.

```
<p>
    Emp ID: <span id="span1"></span><br>
    Emp Name: <span id="span2"></span><br>
    Salary: <span id="span3"></span><br>
</p>

<script type="text/javascript">

    var emp = { "empid": 1, "empname": "Sandeep", "salary":
50000 };

    $("#span1").html(emp.empid);
    $("#span2").html(emp.empname);
    $("#span3").html(emp.salary);

</script>
```

JSON Array::

```
<ul id="list1">
</ul>

<script type="text/javascript">
// Array means a list of objects
var employees =
[
    { "empid": 1, "empname": "srinivas", "salary": 5000 },
    { "empid": 2, "empname": "Srikanth", "salary": 6000 },
    { "empid": 3, "empname": "Suresh", "salary": 7000 },
    { "empid": 4, "empname": "Sandeep", "salary": 8000 },
    { "empid": 5, "empname": "Sridhar", "salary": 9000 }
];

for(i = 0; i < employees.length; i++)
{
    var employee = employees[i];
    var listVal = "<li>" + employee.empname + "</li>";
    $("#list1").append(listVal);
}
```



```
</script>
```

JSON - Object

```
<html>
  <head>
    <title>JavaScript - JSON - Object Example</title>
  </head>
  <body>

    <script type="text/javascript">

var emp={"name":"srinivas","age":32,"salary":12300};

document.write("empname is " + emp.name + "<br>");
document.write("empAge is " + emp.age + "<br>");
document.write("empSalary is " + emp.salary + "<br>");
    </script>

  </body>
</html>
```