

jQuery Handbook

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jQuery is a JavaScript library which helps you perform operations with JavaScript and css (combined) by writing less code.

You just have to include jquery file in your html page.

jQuery JavaScript file can be downloaded from <http://www.jquery.com>

IDE for writing jQuery code is WebStorm

Following are the steps to download and include jquery JavaScript file in your html file.

Open [jQuery](#)

Go to Download Page

Download the compressed, production jQuery 3.7.0

Now the jquery file name would be like (jquery-3.7.0.min.js)

Include this file through script command

```
<script src="jquery-3.7.0.min.js">
```

```
</script>
```

Following is the complete html code to include jquery javascript file in html page and do a simple task like on a button (name as btnClick) click background color of paragraph (named as myPara) changes to pink color.

```
<html>
```

```
<head>
```

```
  <title>My First jquery Page</title>
```

```
  <script src="jquery-3.7.0.min.js"></script>
```

```
  <script>
```

```
    $(document).ready(function() {
```

```
      $("#btnClick").click(function() {
```

```
        $("#myPara").css("background-color", "pink");
```

```
      });
```

```
    });
```

```
  </script>
```

```
</head>
```

```
<body>
```

```
<p id="myPara">First jQuery</p>
```

```
<button id="btnClick">Click Me!!!</button>
```

```
</body>
```

```
</html>
```

Explanation of the above code

First of all we have included jquery javascript file using script tag.

Second notice the `$(document.ready` statement which means execute the function written inside round brackets when document is completed loaded in the browser.

What does the `$` sign means?

`$` sign means that a new jquery statement is starting.

when button `btnClick` is clicked the function

```
$("#btnClick").click(function(){
```

is executed

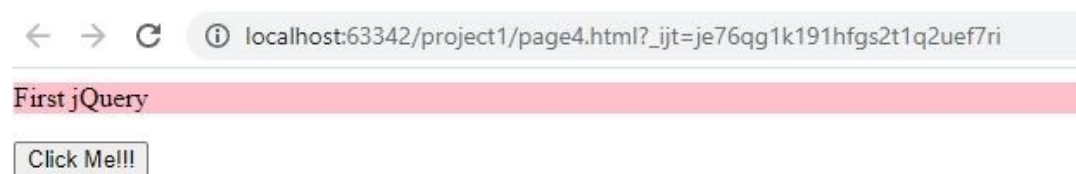
then function

```
$("#myPara").css("background-color", "pink");
```

is executed, so when `btnClick` button is clicked the background color of `myPara` Paragraph changes to pink.

Above is the explanation to the above html code.

Following is the output on clicking on button `btnClick`



Following is the code that changes color of a link to pink on a button click.

```
<html>
<head>
  <title>My First jquery Page</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script>
    $(document).ready(function() {
      $("#btn2").click(function() {
        $("#link1").css("color", "pink");
      })
    });
  </script>
</head>
<body>
  <a id="link1" href="http://www.rdsuniversity.com">RDS University</a>
  <button id="btn2">Click</button>
</body>
</html>
```

Following is the program to select all the tags and change there css

Run the following code in IDE WebStorm.

```
<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("#btnFirst").click(function() {
        $("*").css("background-color", "yellow");
      });
    })
  </script>
</head>
<body>
<ol class="subject">
  <li id="sub1">English</li>
  <li id="sub2">Mathematics</li>
  <li id="sub3">Physics</li>
  <li id="sub4">Chemistry</li>
  <li id="sub5">History</li>
  <li id="sub6">Geography</li>
</ol>
<ul id="department">
  <li>Sales</li>
  <li>HR</li>
  <li>Marketing</li>
  <li>Accounts</li>
</ul>
<p id="firstPara">First Paragraph. First Paragraph. First Paragraph. First Paragraph. First Paragraph.</p>
<p id="secondPara">Second Paragraph. Second Paragraph. Second Paragraph. Second Paragraph. Second Paragraph.</p>
<button id="btnFirst">First Button</button>
<button id="btnSecond">Second Button</button>
</body>
</html>
```

Following code changes the css of a tag based on its name

```
<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("#btnFirst").click(function() {
        $("p").css("background-color", "yellow");
        //$("ol").css("background-color", "yellow");
        //$("li").css("background-color", "yellow");
        //$("button").css("background-color", "yellow");
      });
    })
  </script>
</head>
<body>
<ol class="subject">
```

```

    <li id="sub1">English</li>
    <li id="sub2">Mathematics</li>
    <li id="sub3">Physics</li>
    <li id="sub4">Chemistry</li>
    <li id="sub5">History</li>
    <li id="sub6">Geography</li>
</ol>
<ul id="department">
    <li>Sales</li>
    <li>HR</li>
    <li>Marketing</li>
    <li>Accounts</li>
</ul>
<p id="firstPara">First Paragraph. First Paragraph. First Paragraph. First
Paragraph. First Paragraph.</p>
<p id="secondPara">Second Paragraph. Second Paragraph. Second Paragraph.
Second Paragraph. Second Paragraph.</p>
<button id="btnFirst">First Button</button>
<button id="btnSecond">Second Button</button>
</body>
</html>

```

Following code changes css of multiple tags separated by comma.

```

<!DOCTYPE html>
<html>
<head>
    <title>Selectors</title>
    <script src="jquery-3.7.0.min.js"></script>
    <script type="text/javascript">
        $(document).ready(function() {
            $("#btnFirst").click(function() {
                $("button, p").css("background-color", "yellow");
                // $("ol, p").css("background-color", "yellow");
            });
        })
    </script>
</head>
<body>
<ol class="subject">
    <li id="sub1">English</li>
    <li id="sub2">Mathematics</li>
    <li id="sub3">Physics</li>
    <li id="sub4">Chemistry</li>
    <li id="sub5">History</li>
    <li id="sub6">Geography</li>
</ol>
<ul id="department">
    <li>Sales</li>
    <li>HR</li>
    <li>Marketing</li>
    <li>Accounts</li>
</ul>
<p id="firstPara">First Paragraph. First Paragraph. First Paragraph. First
Paragraph. First Paragraph.</p>
<p id="secondPara">Second Paragraph. Second Paragraph. Second Paragraph.
Second Paragraph. Second Paragraph.</p>
<button id="btnFirst">First Button</button>
<button id="btnSecond">Second Button</button>

```

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

Following code changes css of a tag based on its ide

```
<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("#btnFirst").click(function() {
        $("#sub1").css("background-color", "blue");
        //$("#sub1").css("color", "blue");
        //$("#sub1, #sub3, #firstPara").css("color", "blue");
      });
    })
  </script>
</head>
<body>
<ol class="subject">
  <li id="sub1">English</li>
  <li id="sub2">Mathematics</li>
  <li id="sub3">Physics</li>
  <li id="sub4">Chemistry</li>
  <li id="sub5">History</li>
  <li id="sub6">Geography</li>
</ol>
<ul id="department">
  <li>Sales</li>
  <li>HR</li>
  <li>Marketing</li>
  <li>Accounts</li>
</ul>
<p id="firstPara">First Paragraph. First Paragraph. First Paragraph. First Paragraph. First Paragraph.</p>
<p id="secondPara">Second Paragraph. Second Paragraph. Second Paragraph. Second Paragraph. Second Paragraph.</p>
<button id="btnFirst">First Button</button>
<button id="btnSecond">Second Button</button>
</body>
</html>
```

Following code changes css based on the class of the element

```
<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("#btnFirst").click(function() {
        $(".subject").css("color", "blue");
      });
    })
  </script>
</head>
```

```

<body>
<ol class="subject">
  <li id="sub1">English</li>
  <li id="sub2">Mathematics</li>
  <li id="sub3">Physics</li>
  <li id="sub4">Chemistry</li>
  <li id="sub5">History</li>
  <li id="sub6">Geography</li>
</ol>
<ul id="department">
  <li>Sales</li>
  <li>HR</li>
  <li>Marketing</li>
  <li>Accounts</li>
</ul>
<p id="firstPara">First Paragraph. First Paragraph. First Paragraph. First Paragraph. First Paragraph. First Paragraph.</p>
<p id="secondPara">Second Paragraph. Second Paragraph. Second Paragraph. Second Paragraph. Second Paragraph. Second Paragraph.</p>
<button id="btnFirst">First Button</button>
<button id="btnSecond">Second Button</button>
</body>
</html>

```

You can see in the above code it is (.subject) which means change css of all the tags where class is subject.

Following code is another example of changing css based on class.

```

<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <style>
    th{
      font-weight: bold;
    }
  </style>
  <script type="text/javascript">
    $(document).ready(function() {
      $(".odd").css("background-color", "lightblue");
      $(".even").css("background-color", "lightgray");
    });
  </script>
</head>
<body>
<table>
  <tr>
    <th>ID</th><th>First Name</th><th>Last Name</th><th>Email</th>
  </tr>
  <tr class="odd">
    <td>1</td><td>John</td><td>Smith</td><td>johnsmith@abc.com</td>
  </tr>
  <tr class="even">
    <td>2</td><td>James</td><td>White</td><td>james.white@test.com</td>
  </tr>
  <tr class="odd">
    <td>3</td><td>Nancy</td><td>Turner</td><td>nancytr@gmail.com</td>
  </tr>
</table>

```

```

</tr>
<tr class="even">
  <td>4</td><td>Joseph</td><td>Allen</td><td>josallen@abc.com</td>
</tr>
<tr class="odd">
  <td>5</td><td>Mary</td><td>Brown</td><td>brownmary@yahoo.com</td>
</tr>
</table>
</body>
</html>

```

Following is the output of above html page

ID	First Name	Last Name	Email
1	John	Smith	johnsmith@abc.com
2	James	White	james.white@test.com
3	Nancy	Turner	nancytr@gmail.com
4	Joseph	Allen	josallen@abc.com
5	Mary	Brown	brownmary@yahoo.com

Following example changes code of current selected tag using this keyword.

```

<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("#btnFirst").click(function() {
        $(this).css("background-color", "blue");
      });
      /* $("p").hover(function() {
        $(this).css("color", "blue");
      }); */
    })
  </script>
</head>
<body>
<ol class="subject">
  <li id="sub1">English</li>
  <li id="sub2">Mathematics</li>
  <li id="sub3">Physics</li>
  <li id="sub4">Chemistry</li>
  <li id="sub5">History</li>
  <li id="sub6">Geography</li>
</ol>
<ul id="department">
  <li>Sales</li>
  <li>HR</li>
  <li>Marketing</li>
  <li>Accounts</li>

```

```

</ul>
<p id="firstPara">First Paragraph. First Paragraph. First Paragraph. First
Paragraph. First Paragraph.</p>
<p id="secondPara">Second Paragraph. Second Paragraph. Second Paragraph.
Second Paragraph. Second Paragraph.</p>
<button id="btnFirst">First Button</button>
<button id="btnSecond">Second Button</button>
</body>
</html>

```

Following code is another example of this keyword it also demonstrate blur and focus function of input tag.

```

<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("input").focus(function() {
        $(this).css("background-color", "lightgray");
      });
      $("input").blur(function() {
        $(this).css("background-color", "white");
      });
    });
  </script>
</head>
<body>
  <label for="fName">First Name:</label>
  <input type="text" id="fName" /><br />
  <label for="lName">Last Name:</label>
  <input type="text" id="lName" />
</body>
</html>

```

Following example demonstrate attribute based selectors.

There are two attributes of a tag class and id

this example changes css of a tag based on it's class and id

```

<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("#btnClick").click(function() {
        $(".[class]").css("color", "red");
        //$("[id]").css("color", "red");
        //$("[id=firstDiv]").css("color", "red");
        //$("[class=paras]").css("color", "red");
        //$("p[class!=paras]").css("color", "red");
      });
    });
  </script>

```

```

    });
</script>
</head>
<body>
<table>
  <p id="first-para" class="paras">First Paragraph. First Paragraph.</p>
  <p id="second-para">Second Paragraph. Second Paragraph.</p>
  <p id="third-para">Third Paragraph. Third Paragraph.</p>
  <div id="firstDiv">First div</div>
  <div id="divSecond" class="divs">Second div</div>
  <div id="divFourth">Fourth div</div>
  <div id="divFifth" class="divs">Fifth div</div><br />
  <button id="btnClick">Click!!!</button>
</body>
</html>

```

Following code changes css of tag based on the end and start of the id attribute.

```

<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("#btnClick").click(function() {
        $("#[id ^= first]").css("color", "red");
        //$("#[id $= th]").css("color", "red");
        //$("#[id $= para]").css("color", "red");
        //$("#[id *= first]").css("color", "red");
      });
    });
  </script>
</head>
<body>
<table>
  <p id="first-para" class="paras">First Paragraph. First Paragraph.</p>
  <!--
  <p id="pafirstra" class="paras">First Paragraph. First Paragraph.</p>
  -->
  <p id="second-para">Second Paragraph. Second Paragraph.</p>
  <p id="third-para">Third Paragraph. Third Paragraph.</p>
  <div id="firstDiv">First div</div>
  <div id="divSecond" class="divs">Second div</div>
  <div id="divFourth">Fourth div</div>
  <div id="divFifth" class="divs">Fifth div</div><br />
  <button id="btnClick">Click!!!</button>
</body>
</html>

```

Following code changes css of a tag if attribute contains a word

```

<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">

```

```

    $(document).ready(function() {
        $("#btnClick").click(function() {
            $("#[id |= first]").css("color", "red");
            //$("[id ~= first]").css("color", "red");
        });
    });
</script>
</head>
<body>
<table>
    <p id="first-para" class="paras">First Paragraph. First Paragraph.</p>
    <p id="second-para">Second Paragraph. Second Paragraph.</p>
    <p id="third-para">Third Paragraph. Third Paragraph.</p>
    <div id="first">First div</div>
    <div id="divSecond" class="divs">Second div</div>
    <div id="divFourth">Fourth div</div>
    <div id="divFifth" class="divs">Fifth div</div><br />
    <button id="btnClick">Click!!!</button>
</body>
</html>

```

Following code changes css of a tag based on its index in the html page

```

<!DOCTYPE html>
<html>
<head>
    <title>Selectors</title>
    <script src="jquery-3.7.0.min.js"></script>
    <script type="text/javascript">
        $(document).ready(function() {
            $("#btnClick").click(function() {
                $("p:first").css("color", "red");
                //$("li:first").css("color", "red");
                //$("tr:first").css("color", "red");
                //$("tr:last, li:last, p:last").css("color", "red");
                //$("tr:first, li:last, p:last").css("color", "red");
                //$("li:even").css("color", "red");
                //$("tr:even").css("color", "red");
                //$("p:even").css("color", "red");
                //$("p:odd").css("color", "red");
                //$("li:odd").css("color", "red");
            });
        });
    </script>
</head>
<body>
<p id="first para">First Paragraph. First Paragraph.</p>
<ol>
    <li>John Smith</li>
    <li>Aaron White</li>
    <li>Sarah Brown</li>
    <li>Aidan Jones</li>
    <li>Maria Williams</li>
</ol>
<p id="second-para">Second Paragraph. Second Paragraph.</p>
<table>
    <tr><th>ID</th><th>Name</th><th>Department</th></tr>
    <tr><td>1</td><td>John Smith</td><td>Accounts</td></tr>
    <tr><td>2</td><td>Aaron White</td><td>Sales</td></tr>
    <tr><td>3</td><td>Sarah Brown</td><td>Sales</td></tr>

```

```

    <tr><td>4</td><td>Aidan Jones</td><td>Accounts</td></tr>
    <tr><td>5</td><td>Maria Williams</td><td>Marketing</td></tr>
</table>
<p id="third-para">Third Paragraph. Third Paragraph.</p>
<button id="btnClick">Click!!!</button>
</body>
</html>

```

Following code changes css of tag based on the position of the tag when position is equal to an index or less than or greater than an index.

```

<!DOCTYPE html>
<html>
<head>
    <title>Selectors</title>
    <script src="jquery-3.7.0.min.js"></script>
    <script type="text/javascript">
        $(document).ready(function() {
            $("#btnClick").click(function() {
                $("li:eq(3)").css("color", "red");
                //$("tr:eq(3)").css("color", "red");
                //$("tr:lt(3)").css("color", "red");
                //$("li:lt(2)").css("color", "red");
                //$("li:gt(2)").css("color", "red");
            });
        });
    </script>
</head>
<body>
<p id="first para">First Paragraph. First Paragraph.</p>
<ol>
    <li>John Smith</li>
    <li>Aaron White</li>
    <li>Sarah Brown</li>
    <li>Aidan Jones</li>
    <li>Maria Williams</li>
</ol>
<p id="second-para">Second Paragraph. Second Paragraph.</p>
<table>
    <tr><th>ID</th><th>Name</th><th>Department</th></tr>
    <tr><td>1</td><td>John Smith</td><td>Accounts</td></tr>
    <tr><td>2</td><td>Aaron White</td><td>Sales</td></tr>
    <tr><td>3</td><td>Sarah Brown</td><td>Sales</td></tr>
    <tr><td>4</td><td>Aidan Jones</td><td>Accounts</td></tr>
    <tr><td>5</td><td>Maria Williams</td><td>Marketing</td></tr>
</table>
<p id="third-para">Third Paragraph. Third Paragraph.</p>
<button id="btnClick">Click!!!</button>
</body>
</html>

```

Following code is an example of relationship based selectors.

```

<!DOCTYPE html>
<html>
<head>
    <title>Selectors</title>

```

```

<style>
  .style{
    border:2px solid black;
    width:35%;
    height:100px;
    padding:10px;
    margin:10px;
  }
  p{
    border:1px solid red;
    background-color:pink;
    width:80px;
    height:80px;
    float:left;
    padding:5px;
    margin:5px;
  }
  span{
    border:1px solid blue;
    background-color:lightblue;
    width:40px;
    height:40px;
    float:left;
    padding:5px;
    margin:5px;
  }
  #first{
    border:1px solid gray;
    background-color:silver;
    width:60px;
    height:60px;
    float:left;
    padding:5px;
    margin:5px;
  }
</style>
<script src="jquery-3.7.0.min.js"></script>
<script type="text/javascript">
  $(document).ready(function(){
    $("#btnClick").click(function(){
      $("p:first-child").hide(2000);
      //$("span:first-child").hide(2000);
      //$("p:last-child").hide(2000);
      //$("span:last-child").hide(2000);
    });
  });
</script>
</head>

<body>
<div id="main" class="style">
  <p>Paragraph</p>
  <span>Span</span>
  <p>Paragraph</p>
</div>
<div id="sub" class="style">
  <span>Span</span>
  <div id="first">Div</div>
  <p>Paragraph</p>
</div>
  <span>Span</span>

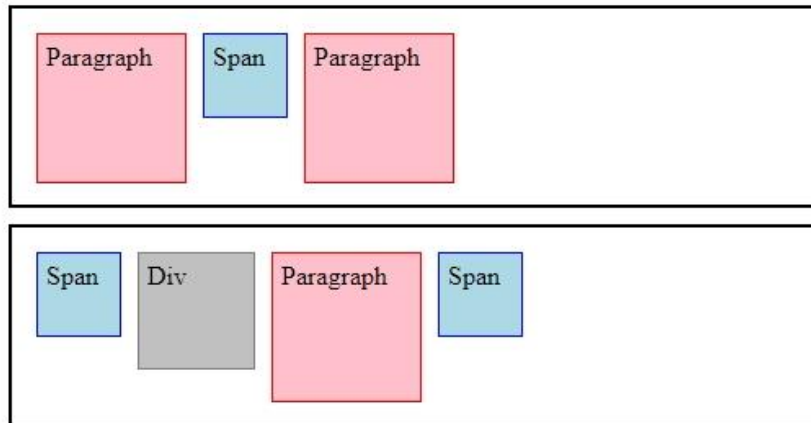
```

```

</div>
<!--
    <span>Span</span>
-->
</div> <br />
<button id="btnClick">Click!!!</button>
</body>
</html>

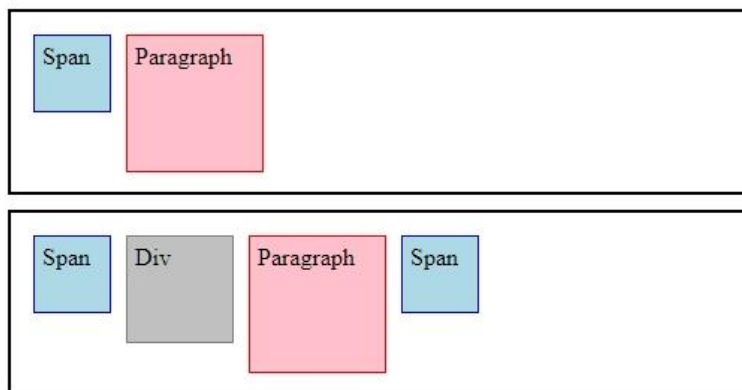
```

Output of the above code is



Click!!!

Output after clicking on button Click is



Click!!!

Following code is an example of child and sibling selectors

```

<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <style>
    .style{
      border:2px solid black;
    }
  </style>
</head>
<body>
  <div>
    <div class="style">
      <p>Child Selector</p>
    </div>
    <div>
      <p>Sibling Selector</p>
    </div>
  </div>
</body>
</html>

```

```

        width:35%;
        height:100px;
        padding:10px;
        margin:10px;
    }
    p{
        border:1px solid red;
        background-color:pink;
        width:80px;
        height:80px;
        float:left;
        padding:5px;
        margin:5px;
    }
    span{
        border:1px solid blue;
        background-color:lightblue;
        width:40px;
        height:40px;
        float:left;
        padding:5px;
        margin:5px;
    }
    .first{
        border:1px solid gray;
        background-color:silver;
        width:60px;
        height:60px;
        float:left;
        padding:5px;
        margin:5px;
    }
</style>
<script src="jquery-3.7.0.min.js"></script>
<script type="text/javascript">
    $(document).ready(function() {
        $("#btnClick").click(function() {
            $("div > span").hide(2000);
            //$("div > p").hide(2000);
            //$("div span").hide(2000);
            //$("p + span").hide(2000);
            //$("p ~ span").hide(2000);
        });
    });
</script>
</head>
<body>
<div id="main" class="style">
    <p>Paragraph</p>
    <span>Span</span>
    <div class="first">Div</div>
    <span>Span</span>
</div>

<div id="sub" class="style">
    <p>Paragraph</p>
    <span>Span</span>
    <div class="first">Div</div>
    <p>Paragraph<span>Span inside</span></p>
</div>
    <span>Span</span>

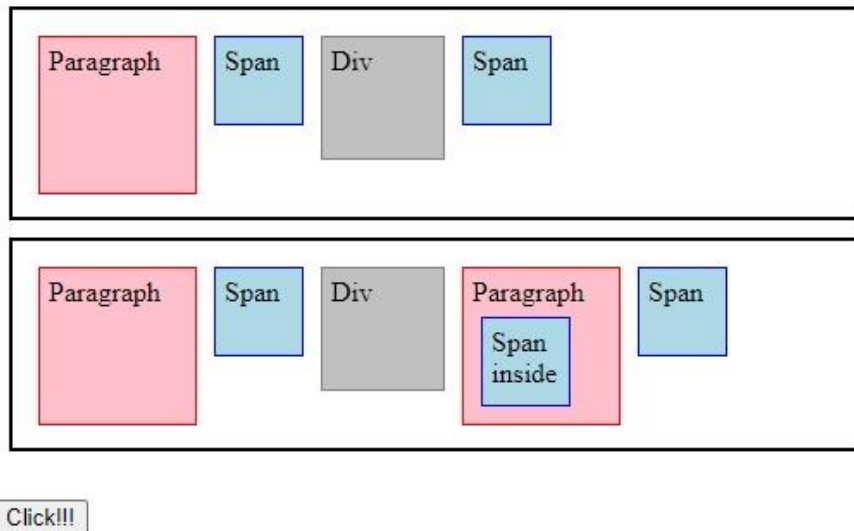
```

```

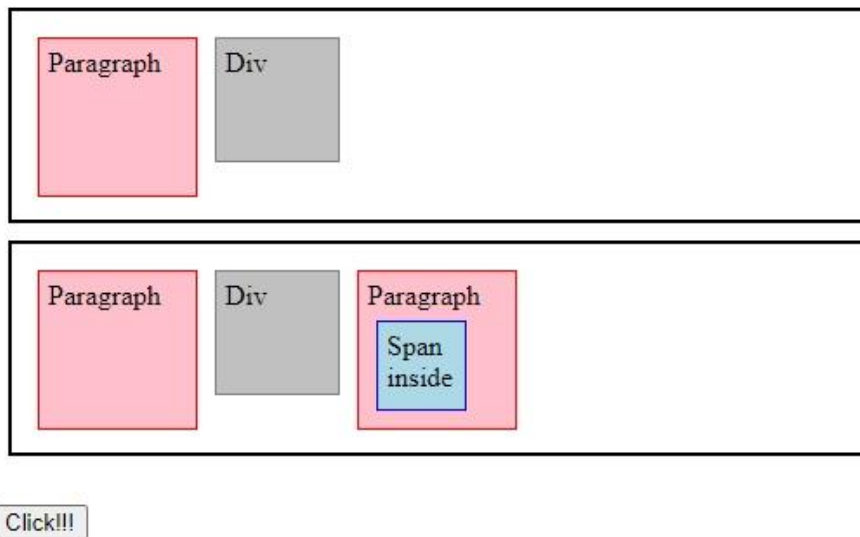
    </div>
</div> <br />
<button id="btnClick">Click!!!</button>
</body>
</html>

```

Output of the above code is



Output after clicking on click button



Following code is an example of form based selectors

```

<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">

```

```

$(document).ready(function() {
    $("#btnClick").click(function() {
        alert("There are " + $(':input').length + " inputs in this
webpage.");
        //alert("There are " + $(':text').length + " text inputs in this
webpage.");
        //alert("There is/are " + $(':password').length + " password
input(s) in this webpage.");
        //alert("There is/are " + $(':image').length + " image input(s) in
this webpage.");
        //alert("There is/are " + $(':radio').length + " radio input(s) in
this webpage.");
        //alert("There is/are " + $(':checkbox').length + " checkbox(es) in
this webpage.");
        //alert("There is/are " + $(':file').length + " file(s) in this
webpage.");
        //alert("There is/are " + $(':button').length + " button(s) in this
webpage.");
        //alert("There is/are " + $(':reset').length + " reset button(s) in
this webpage.");
    });
});
</script>
</head>
<body>
<label for="name">Name:</label>
<input type="text" id="user" /><br />
<label for="uName">User Name:</label>
<input type="text" id="uName" hidden/><br />
<label for="pwd"></label>
<input type="password" id="pwd" /><br />
<label for="gender">Gender:</label>
<input type="radio" name="sex" value="m" checked>Male
<input type="radio" name="sex" value="f">Female<br />
<label for="appliances">Home appliances you own:</label><br />
<select name="appliances" multiple="multiple">
    <option selected>Refrigerator</option>
    <option>Washing Machine</option>
    <option>Microwave Oven</option>
</select><br />
<label for="flower">Which flower you like?</label>
<input type="checkbox" name="flower" value="dahlia">Dahlia
<input type="checkbox" name="flower" value="tulips" checked>Tulips<br />
<input type="image" src="flower1.jpeg">
<input type="image" src="flower2.jpeg"><br />
<input type="reset" value="Reset">
<button id="btnClick">Submit</button>
</body>
</html>

```

Following is the output of the above html page

Name:

User Name:

Gender: ☒ Male ☐ Female


Home appliances you own:


Refrigerator

Washing Machine

Microwave Oven

Which flower you like? ☐ Dahlia ☒ Tulips

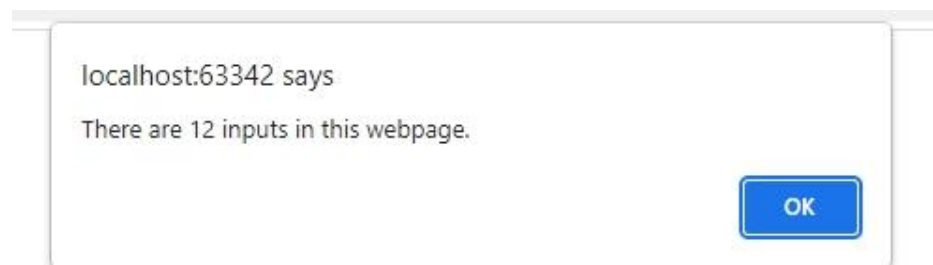
 Submit

 Submit

Reset

Submit

Following is the output after clicking on Submit Button



Following is an example of content based selectors which means you are changing css tags based on there content

```
<!DOCTYPE html>
<html>
<head>
  <title>Selectors</title>
  <style>
    .style{
      border:2px solid black;
      width:35%;
      height:100px;
      padding:10px;
      margin:10px;
    }
    p{
      border:1px solid red;
      background-color:pink;
      width:80px;
      height:80px;
      float:left;
      padding:5px;
      margin:5px;
    }
    span{
      border:1px solid blue;
      background-color:lightblue;
```

```

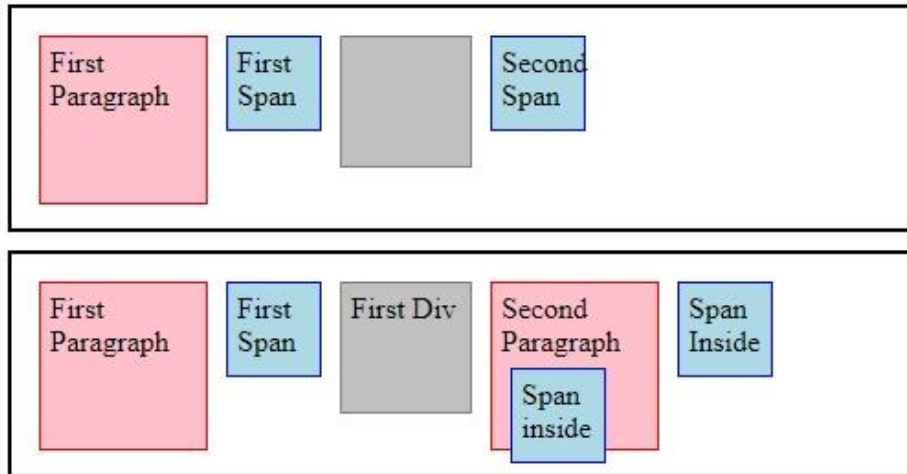
        width:40px;
        height:40px;
        float:left;
        padding:5px;
        margin:5px;
    }
    .first{
        border:1px solid gray;
        background-color:silver;
        width:60px;
        height:60px;
        float:left;
        padding:5px;
        margin:5px;
    }
</style>
<script src="jquery-3.7.0.min.js"></script>
<script type="text/javascript">
    $(document).ready(function() {
        $("#btnClick").click(function() {
            $("p:contains(First)").css("background-color", "red");
            //$("p:contains(first)").css("background-color", "red");
            //$("span:contains(First)").css("background-color", "red");
            //$("p:has(span)").css("background-color", "red");
            //$(":empty").css("background-color", "red");
            //$(":parent").css("background-color", "red");
            //$(":parent").css("color", "red");
            //$(":not(:parent)").css("background-color", "red");
        });
    });
</script>
</head>

<body>
<div id="main" class="style">
    <p>First Paragraph</p>
    <span>First Span</span>
    <div class="first"></div>
    <span>Second Span</span>
</div>

<div id="sub" class="style">
    <p>First Paragraph</p>
    <span>First Span</span>
    <div class="first">First Div</div>
    <p>Second Paragraph<span>Span inside</span></p>
    <div>
        <span>Span Inside</span>
    </div>
</div> <br />
<button id="btnClick">Click!!!</button>
</body>
</html>

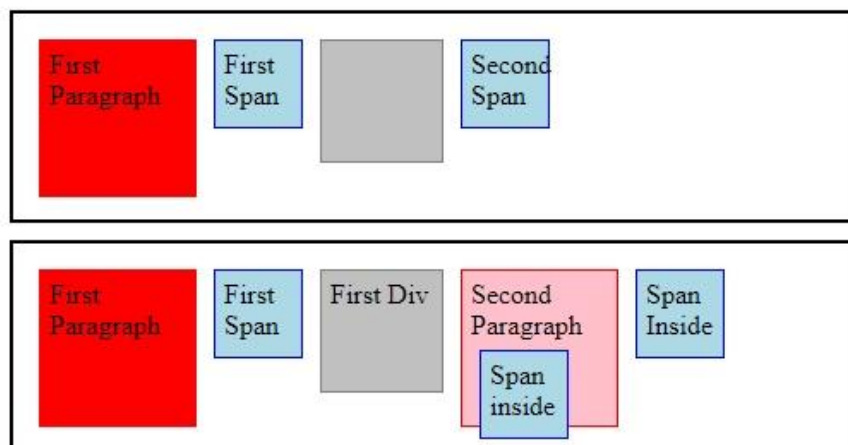
```

Output of the above code is



Click!!!

Output after clicking on click button



Click!!!

Following section starts with event handling

which means start an action when an event is performed.

Following code changes background color of div with id as box to pink when button is clicked on this div with id as box

Following is the code for mouse events

```
<!DOCTYPE html>
<html>
<head>
  <title>Events</title>
  <style>
    #box{
      width:200px;
      height:200px;
```

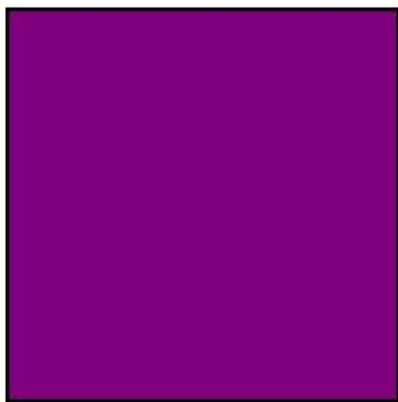
```

        border:2px solid black;
        background-color:purple;
    }
</style>
<script src="jquery-3.7.0.min.js"></script>
<script type="text/javascript">
    $(document).ready(function() {
        $("#box").click(function() {
            $(this).css("background-color", "pink");
        });
        /*$("#box").dblclick(function() {
            $(this).css("background-color", "pink");
        });*/
        /*$("#box").mouseenter(function() {
            $(this).css("background-color", "pink");
        });*/
        /*$("#box").mouseleave(function() {
            $(this).css("background-color", "purple");
        });*/
        /*$("#box").hover(function() {
            $(this).css("background-color", "pink");
        }, function() {
            $(this).css("background-color", "purple");
        });*/
        /*$("#box").mousedown(function() {
            $(this).css("background-color", "pink");
        });
        $("#box").mouseup(function() {
            $(this).css("background-color", "green");
        });*/
    });
</script>
</head>

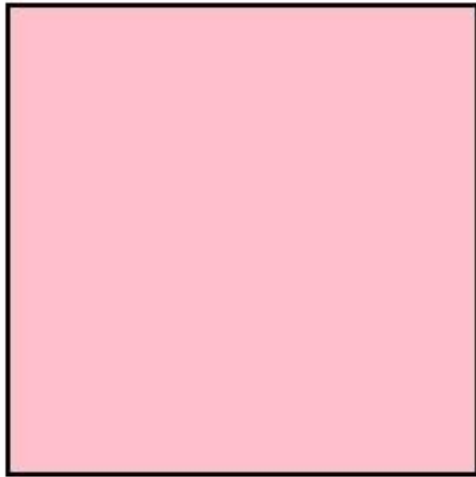
<body>
<form>
    <div id="box"></div>
</body>
</html>

```

Output of the above code is



Output after clicking on div with id as box



Following code is an example of keyboard events

when key is down keydown event is invoked and when key is up keyup event is invoked.

```
<!DOCTYPE html>
<html>
<head>
  <title>Events</title>
  <style>
    #txtName
    {
      font-size: 30px;
    }
  </style>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("#txtName").keydown(function () {
        $(this).css("color", "red");
      });
      $("#txtName").keyup(function () {
        $(this).css("color", "blue");
      });
    });
  </script>
</head>

<body>
<div></div>
<input type="text" id="txtName" />
</body>
</html>
```

Following code is an example of form events.

when you click in text box background color of textbox changes to gray when you remove the focus from the textbox background color changes to white

two functions are used focus and blur.

```

<!DOCTYPE html>
<html>
<head>
  <title>Events</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $(".:text").focus(function() {
        $(this).css("background-color", "gray");
      });
      $(".:text").blur(function() {
        $(this).css("background-color", "white");
      });
      /* $(".fieldset").focusin(function() {
        $(this).css("background-color", "gray");
      });
      $(".fieldset").focus(function() {
        $(this).css("background-color", "gray");
      }); */
      /* $(".fieldset").focusout(function() {
        $(this).css("background-color", "gray");
      });
      $(".fieldset").blur(function() {
        $(this).css("background-color", "gray");
      }); */
    });
  </script>
</head>

<body>
<fieldset style="width:200px;">
  <legend><b>Personal</b></legend>
  <input type="text" id="firstName" placeholder="First Name" /><br />
  <input type="text" id="lastName" placeholder="Last Name" /><br />
  <input type="submit" id="btnSubmit" value="Submit" />
</fieldset>
</body>
</html>

```

Following code demonstrates form events

when you an item in combo box or select control its value is displayed in div tag

```

<!DOCTYPE html>
<html>
<head>
  <title>Events</title>
  <style>
    div{
      color: blue;
      font-size: 20px;
    }
  </style>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("select").change(function() {

```

```

        $("#result").text($(this).val()).show().fadeOut(30000);
    });
    /* $("#text").change(function(){
        $("#result").text($(this).val()).show().fadeOut(3000);
    }); */
    /*$("#text").select(function(){
        $("#result").text($(this).val()).show().fadeOut(3000);
    }); */
    /*$("#form").submit(function(){
        alert($("#salutation").val() + ". " + $("#[name=FirstName]").val()
+ " " + $("#[name=LastName]").val() );
    }); */
    });
</script>
</head>
<body>
<form>
    <fieldset style="width:400px">
        <legend><b>Personal</b></legend>
        Salutation:
        <select id="salutation">
            <option value="Mr">Mr.</option>
            <option value="Miss">Miss.</option>
            <option value="Ms">Ms.</option>
            <option value="Mrs">Mrs.</option>
        </select><br />
        First Name: <input type="text" name="FirstName"/><br />
        Last Name: <input type="text" name="LastName"/><br />
        <input type="submit" id="btnSubmit" value="Submit"/><br />
        <div id="result"></div>
    </fieldset>
</form>
</body>
</html>

```

Output

Personal

Salutation:
First Name:
Last Name:

Output when you select item Ms

Personal

Salutation:
First Name:
Last Name:

Ms

Following code displays an alert dialog box on click of a button

```
<!DOCTYPE html>
<html>
<head>
  <title>Effects</title>
  <script src="jquery-3.7.0.min.js"></script>
  <script type="text/javascript">
    $(document).ready(function() {
      $("button").click(function() {
        alert("Hello World");
      });
    });
  </script>
</head>
<body>
  <button id="btnClick">Click to show an alert dialog box</button>
</body>
</html>
```

Output

