

# DOM

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- ✱ DOM is a (document object model ).
- ✱ It is a programming interface in web development that allows to interact and manipulating(change) the html documents.
- ✱ When webpage is loaded, the browser creates DOM of the webpage.
- ✱ When html file is loaded into the browser, the java script cannot understand html document directly.

## DOM:

- ✉ Dom is a basically representation of same html document in the form of tree like structure composed of objects.
- ✉ Html DOM allows java script to access (to get) and modify all elements in html document.

## Key points:

- Structure: the DOM represents the structure of html document as tree, each node in tree represents the element, ana attribute, text.
- Manipulation: using JS ,you can interact with elements(buttons, h, p). We can modify , add , remove elements and change styles.
- Event handling

## ● W3c= world wide web Co-sortium.

---> In DOM html elements are defined objects

---> property: is a value is set to the objects.

----> method: an action(like add or delete)

### Methods of document object:

→ Getting element:

Getting an element by id

Getting an element by class

Getting an element by tag name

Ex:

```
</head>
<body>
<h1 class="a">Malli</h1>
<h1 class="b">gopi</h1>
<h1 class="c">ganesh</h1>
<h1 class="d">nani</h1>
<h1 class="e">yash</h1>
<h1 class="f">raviteja</h1>
<h1 class="g">venky</h1>
<h1 class="h">narendra</h1>
<h1 class="i">anwar</h1>
<h1 class="j">chandra</h1>
<h1 class="k">sravan</h1>
<style>
.a{
  color: green;
  text-align: center;
  background-color: red;
}
.b{
  color: red;
  text-align: center;
  background-color: black;
}
.c{
  color: black;
  text-align: center;
```

```

        background-color: blue;
    }
    .d{
        color: blue;
        text-align: center;
        background-color: navy;
    }
    .e{
        color: navy;
        text-align: center;
        background-color: yellow;
    }
    .f{
        color: yellow;
        text-align: center;
        background-color: orange;
    }
    .g{
        color: orange;
        text-align: center;
        background-color: skyblue;
    }
    .h{
        color: skyblue;
        text-align: center;
        background-color: red;
    }
    .i{
        color: red;
        text-align: center;
        background-color: aqua;
    }
    .j{
        color: aqua;
        text-align: center;
        background-color: violet;
    }
    .k{
        color: violet;
        text-align: center;
        background-color: green;
    }
</style>
<script>
let x=document.getElementsByTagName("hi");
document.write(x);
for(let i=0;i<x.length;i++){
    document.write(x[i])
}

```

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

Output:



[object HTMLCollection]

getElementByClassName:

- ▶ Returns all the elements having the same class name  
**getelementbyclassname().method** returns an html document collection object.
- ▶ An html collection is array like list of html elements.length property provides the size of the collection

Example:

```
<body>
<h1 class="a">malli</h1>
<h1 class="b">nani</h1>
<h1 class="c">gopi</h1>
<h1 class="d">yash</h1>
  <script>
    let x=document.getElementsByClassName('a');
    //document.write(x);
    for(let i=0;i<x.length;i++){
      document.write(x[i])
    }
  </script>
```

Output:

Malli

Nani

Gopi

Yash

Gettinelementbytagname:

```
<body>
<h1 class="a">malli</h1>
<h1 class="b">nani</h1>
<h1 class="c">gopi</h1>
<h1 class="d">yash</h1>
  <script>
    let x=document.getElementsByClassName('a');
    //document.write(x);
    for(let i=0;i<x.length;i++){
      document.write(x[i])
    }
  </script>
```

Output:

Malli  
Nani  
Gopi  
Yash

Query selector:

---> used to select html element by its class name, tag name;it selects only the firstelement.

Example:

```

<body>
<h1 class="a">malli</h1>
<h3 class="b">nani</h1>
<h3 class="a">gopi</h1>
<h3 class="b">yash</h1>
  <script>
    let x=document.querySelector('h1');
    document.write(x);
  </script>

```

Output:

Malli

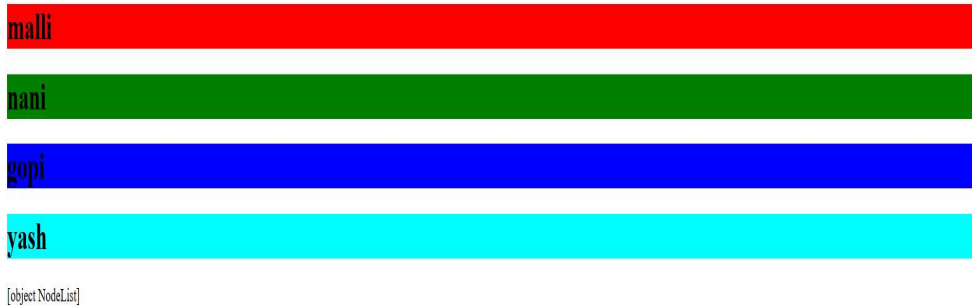
Example2:

```

<body>
<h1 class="a">malli</h1>
<h1 class="b">nani</h1>
<h1 class="c">gopi</h1>
<h1 class="d">yash</h1>
<style>
  .a{
    background-color: red;
  }
  .b{
    background-color: green;
  }
  .c{
    background-color: blue;
  }
  .d{
    background-color: aqua;
  }
</style>
  <script>
    let x=document.querySelectorAll('h1');
    document.write(x);
  </script>
</body>

```

## Output:



## Example3:

```
<body>
<h1 class="a">malli</h1>
<h1 class="b">nani</h1>
<h1 class="c">gopi</h1>
<h1 class="d">yash</h1>
<style>
  .a{
    background-color: red;
  }
  .b{
    background-color: green;
  }
  .c{
    background-color: blue;
  }
  .d{
    background-color: aqua;
  }
</style>
<script>
  let x=document.createElement('h2');
  x.className='e'
  x.textContent="hello yaswanth, you are very good and excellent in coding
and also very good in spelling writing"
  document.write(x);
</script>
</body>
```

Output:

"hello yaswanth, you are very good and excellent in coding and also very good in spelling writing"