



# Methods of DOM – Part 1





# Topics

- `getElementById()`
- `getElementsByClassName()`
- `getElementsByTagName()`
- `querySelector()`
- `querySelectorAll()`





# getElementById()

The **getElementById** method searches for an element with the specified ID within the entire document and returns the element if found. If no element with the given ID is found, it returns null.

## index.html

```
<h1 class="title" id="title">Lorem ipsum dolor sit amet </h1>
```

## style.css

```
const title = document.getElementById("title")
const description = document.getElementById("description")

console.log("title", title)
console.log("description", description)
```

## console

```
title ► <h1 id="title"> ◻
```

```
description null
```



# getElementsByClassName():

The **getElementsByClassName** method is a JavaScript function used to retrieve a collection of elements in a document that has a specific class.

## index.html

```
<h1 class="title" id="title">
  Lorem ipsum dolor sit amet
</h1>

<p class="paragraph">Lorem ipsum dolor sit amet consectetur
adipisicing elit. Molestiae, architecto.</p>
<p class="paragraph"> Lorem ipsum dolor sit amet consectetur
adipisicing elit. Molestiae, architecto.</p>
```

## script.js

```
const paragraph = document.getElementsByClassName("paragraph")
console.log("paragraph" ,paragraph)
```

## console

```
► HTMLCollection { 0: p.paragraph , 1: p.paragraph , length: 2 }
```





# getElementsByTagName()

**getElementsByTagName** method is a JavaScript function used to retrieve a collection of elements in a document that has a specific tag name.

## index.html

```
<h1 class="title" id="title">
  Lorem ipsum dolor sit amet
</h1>
<p>Lorem ipsum dolor sit amet consectetur adipisicing elit.
Molestiae, architecto.</p>
<p> Lorem ipsum dolor sit amet consectetur adipisicing elit.
Molestiae, architecto.</p>
```

## script.js

```
const paragraph = document.getElementsByTagName("p")
console.log(paragraph)
```

## console

```
► HTMLCollection { 0: p.paragraph , 1: p.paragraph , length: 2 }
```



# querySelector()

The **querySelector** method returns the **first element that matches the specified selector**. It takes a CSS selector as a parameter and returns the first matching element or **null** if no element is found.

## index.html

```
<h1 id="title">
  Lorem ipsum dolor sit amet
</h1>
<div class="description">
  <p>Lorem ipsum dolor sit amet
consectetur adipisicing elit. Molestiae,
architecto.</p>
  <p>Lorem ipsum dolor sit amet
consectetur adipisicing elit. Molestiae,
architecto.</p>
</div>
```

## script.js

```
// select by tag name
const paragraph =
document.querySelector("p")

// select by className
const selectClass =
document.querySelector(".unknownClass")

// select by id
const selectTitleById =
document.querySelector("#title")
```

## console

```
paragraph: ► <p class="paragraph"> ⚙
```

```
selectClass: null
```

```
selectTitleById: ► <h1 id="title"> ⚙
```





# querySelectorAll()

The **querySelectorAll** method searches for all elements that match the given CSS selector and return a static **NodeList**. If no element matches, it returns an **empty NodeList**.

## index.html

```
<h1 id="title">
  Lorem ipsum dolor sit amet
</h1>
<div class="description">
  <p>Lorem ipsum dolor sit amet
consectetur adipisicing elit. Molestiae,
architecto.</p>
  <p>Lorem ipsum dolor sit amet
consectetur adipisicing elit. Molestiae,
architecto.</p>
</div>
```

## script.js

```
// select all the p tag
const pTags=document.querySelectorAll("p")

// select all elements whose class is
unknownClass
const unknownClass=
document.querySelectorAll(".unknownClass")

console.log("pTags", pTags)
console.log("unknownClass", unknownClass)
```

## console

```
pTags ► NodeList [ p , p ]
```

```
unknownClass ► NodeList []
```



▶ THANK YOU ◀