

# Java script start

## 1-Introduction

```
<!DOCTYPE html>
<html lang="en">

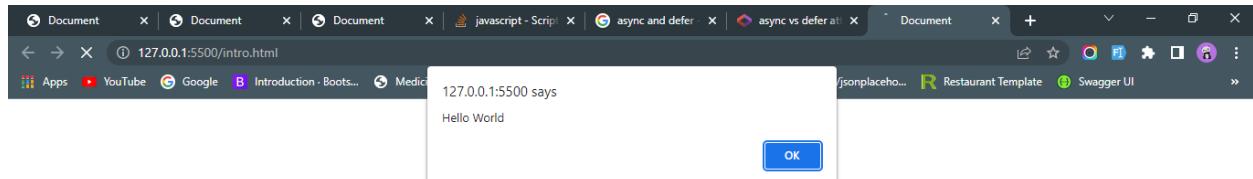
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <script>      /* this is link script.. it is called internal java script */
        alert("Hello World");/* Alert pop up aavse */
    </script>

</head>

<body>
    <div id="mehul">
        <h1>Mehul Balvantbhai waghela</h1>
    </div>
</body>

</html>
```

## Output



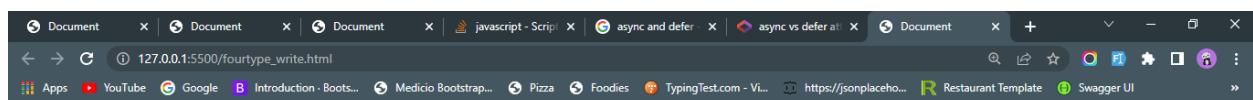
## 2- Four type input method

```
<!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>
</head>
<body>
    <div id="main">
        <h1>Mehul Waghela</h1>
    </div>
    <script src="js/fourtype.js"></script>
</body>
</html>
```

## JS code

```
/* first letter capital then sall samll then first capital is called
camal style */
document.getElementById("main").innerHTML= "Oscar Career Point";/*perticular id
ma changes karva */
/* document means full html ,, getelmentbyid means id thi element pakadva ,,
inner html thi h1 ni under na connect pakdi shakay */
alert("Mehul Waghela");/* alert pop up ma print karva */
document.write("Hi My name  is mehul");/* jya lakhya hoy html ma tyu print thay
*/
console.log("Hi my self M");/* console testing mate use thay.aa vastu console ma
print karva console.log lakhvu */
```

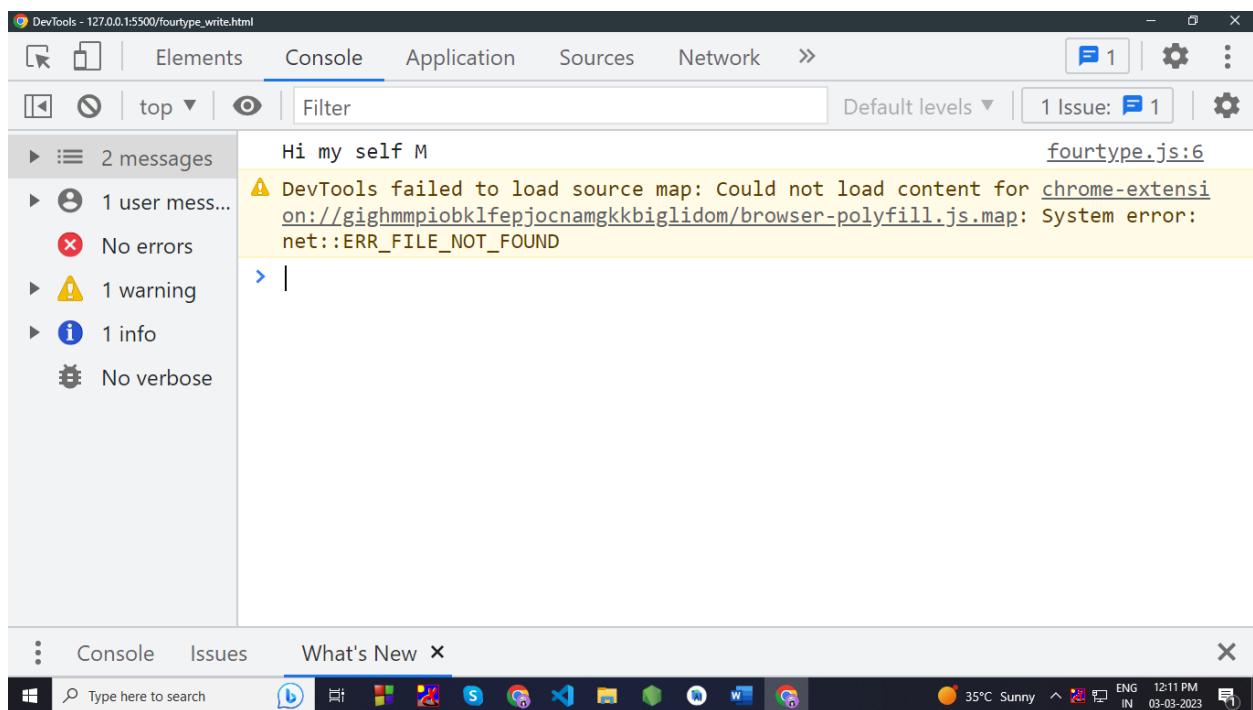
## Output



Oscar Career Point  
Hi My name is mehul



## Console Output



## 3-Async and Defer

```
<!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>
    <script async src="js/external.js"></script>
    <script defer src="js/fourtype.js"></script>
</head>
<body>
    <div id="main">
        <h1>Oscar Career Point</h1>
    </div>
</body>
</html>
```

```
<!----- There are three type of script
=====
1-Normal Script
2-async Script
3-defer Script -->

<!-- for that 4 term learn
1-HTML Parsing
2-HTML Pause
3-JAVA SCRIPT download
4-JAVA SCRIPT Execution-->

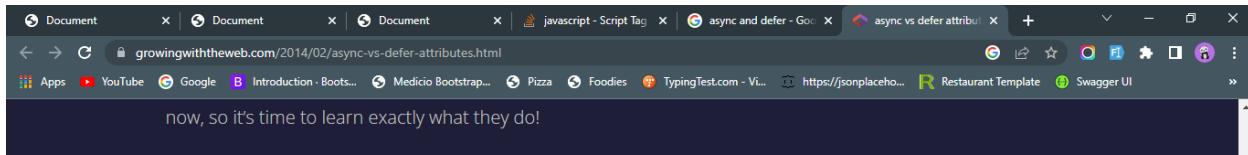
<!-- normal script ma pehla html parsing(reading) thay jyare js male atle reading
stop thay ne js download thay and pachi execution thay pachi pachu html reading
start thay atle jo id thi aapnu hoy ne jo js a id ni pela lakhnu hoy to a work
kare nai. Atle js body ni end ma lakhnu pade -->

<!-- async script ma pehla html parsing(reading) start thay jevu js male atle
reading start rey sathe parallal java script download start thay jevu download
puru thay atle reading stop thay ane execution thay tya sudhi jo id ke tag
vanchaya hoy to output ma aave nai to nai aave -->

<!-- Defer script ma pehla html parsing(reading) start thay jevu js male atle
reading start thay ane jevu js male atle parallel ma download start thay ane
reading pan chalu rehse ane execution aakhu html vanchay pachi thase atle bahda
id and tag vanchay gaya hase atle padhi script nu output lagse -->

<!-- pan amuk function jemke document.write je async ane defer ne support kartu
nathi a only normal script ne support kare che -->

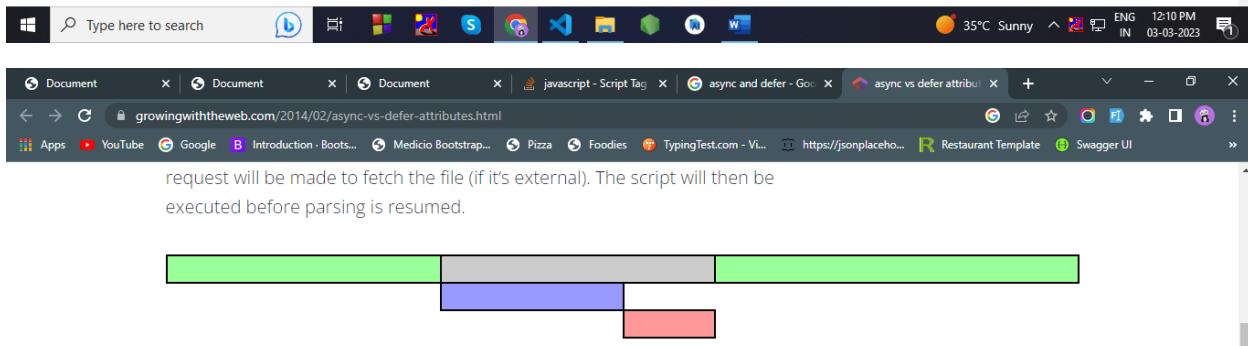
<!-- summary---Atle hamesha js body ma end ma lakhnu -->
```



## Legend

- [Green] HTML parsing
- [Grey] HTML parsing paused
- [Blue] Script download
- [Red] Script execution

### <script>



### <script async>

**async** downloads the file during HTML parsing and will pause the HTML parser to execute it when it has finished downloading.



## Java script variable

```
<!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>
</head>

<body>
    <div id="main">
        <h1>Mehul Waghela</h1>

        </div>
        <!-- variable define -->
        <script> /* variable jene aapre pachi change kari shakiye */
            let x = 35, y = 20; /* Variable ne =====let===== thi ane ==="var"===== thi
pan define kari shakay */
            var z = 50; /* let same as var */
            console.log("value of x=",x); /* variabale ni value print karva ane "" ma
nai lakhvu. variable ne vagar quote a lakhvu */
        </script>
        <!-- string define -->
        <script>
            let a = "Holika"; /* string define kayri value double quote athwa single
quote ma lakhvu*/
            console.log("value of a=",a);

            let b = "Holi'ka1"; /* jyare single quote string ma print karvu hoy to
string double quote ma lakhvu */
            console.log("value of b=",b);

            let c = 'Holi"ka2'; /* jyare print ma double quote print karvu hoy to
string single quote ma lakhvu */
            console.log("value of c=",c);

        </script>

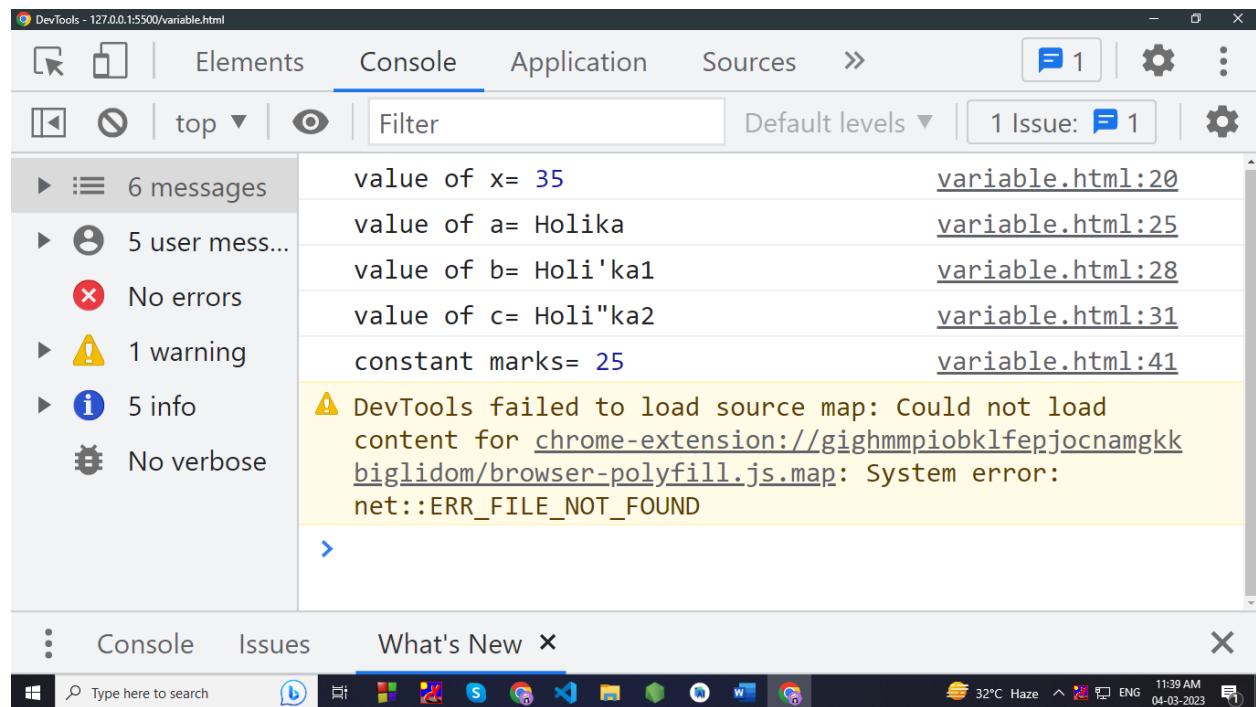
        <!-- constant define -->
        <!-- constant pachi thi change nai thay -->
```

```
<script>
    const marks=25,grade=1;
    // marks=20; constant ne change nai kari shakay nai to error aape
    console.log("constant marks=",marks);
</script>

</body>

</html>
```

## Output



# Operator

```
<!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>
</head>

<body>
    <div>
        <h1>MEHUL WAGHELA</h1>
    </div>

    <!-- arithmetic operator -->
    <script>
        let a = 21, b = 5;
        console.log(a + b);
        console.log(a - b);
        console.log(a * b);
        console.log(a / b);
        console.log(a % b);
    </script>
    <!-- assignment operator -->
    <script>
        let c = 40, d = 70;
        console.log("value of c=", c, "value of d=", d);
        console.log("c+=5", c += 5);
        console.log("c+=d", c += d);
        console.log("c-=5", c -= 5);
        console.log("c*=5", c *= 5);
        console.log("c/=5", c /= 5);
        console.log("c%=5", c %= 5);
    </script>
    <!-- increment decrement operator -->
    <script>
        let e = 12, f = 15, g = 10;
        console.log("e=", e, "f=", f);
        e++;
        console.log("e++=", e);
        e++;
        console.log("e++=", e);
    </script>
```

```

f--;
console.log("f---", f);
f--;
console.log("f---", f);
console.log("g=",g);
console.log("G square=",g**2);/* **2 means square **3 cube */

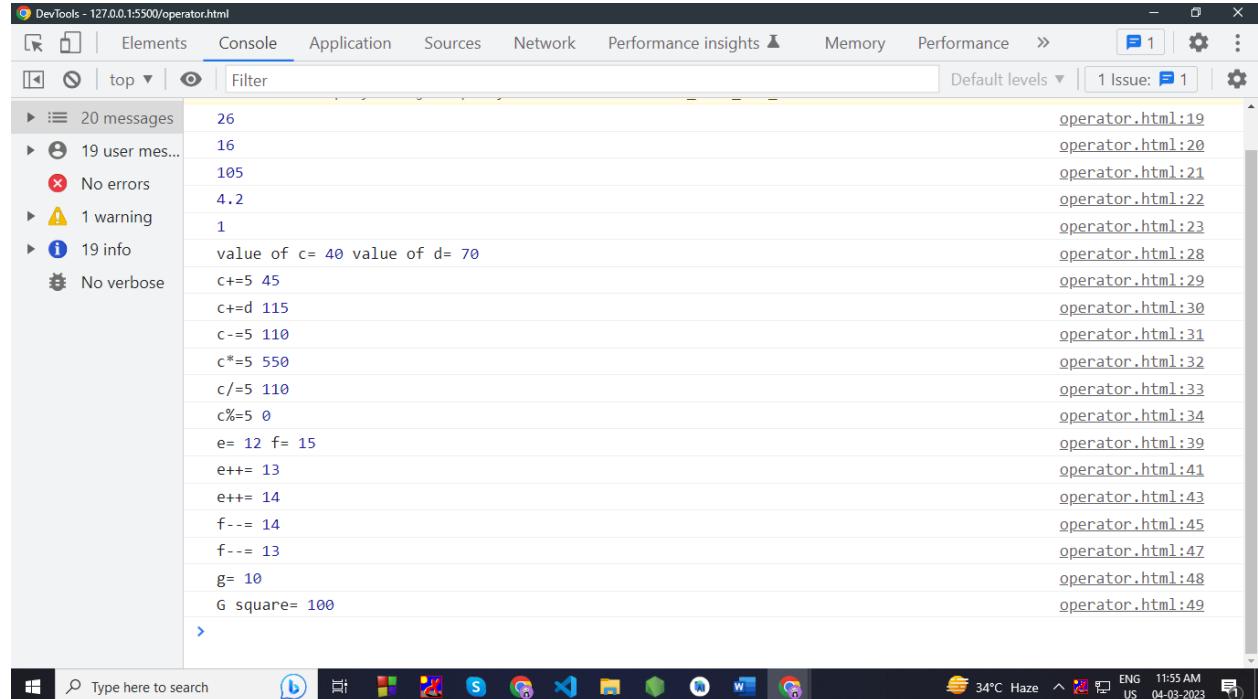
</script>

</body>

</html>

```

## Output



The screenshot shows the Google DevTools Console tab for the file operator.html. The console output is as follows:

```

26
16
105
4.2
1
value of c= 40 value of d= 70
c+=5 45
c+=d 115
c-=5 110
c*=5 550
c/=5 110
c%=5 0
e= 12 f= 15
e++= 13
e++= 14
f--= 14
f--= 13
g= 10
G square= 100

```

The right side of the screenshot lists the corresponding line numbers from the source code:

- operator.html:19
- operator.html:20
- operator.html:21
- operator.html:22
- operator.html:23
- operator.html:28
- operator.html:29
- operator.html:30
- operator.html:31
- operator.html:32
- operator.html:33
- operator.html:34
- operator.html:39
- operator.html:41
- operator.html:43
- operator.html:45
- operator.html:47
- operator.html:48
- operator.html:49

## String Connect

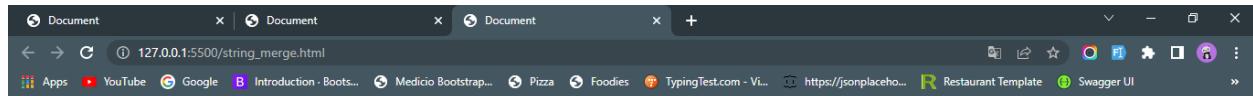
```
<!DOCTYPE html>
<html lang="en">

<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>
</head>

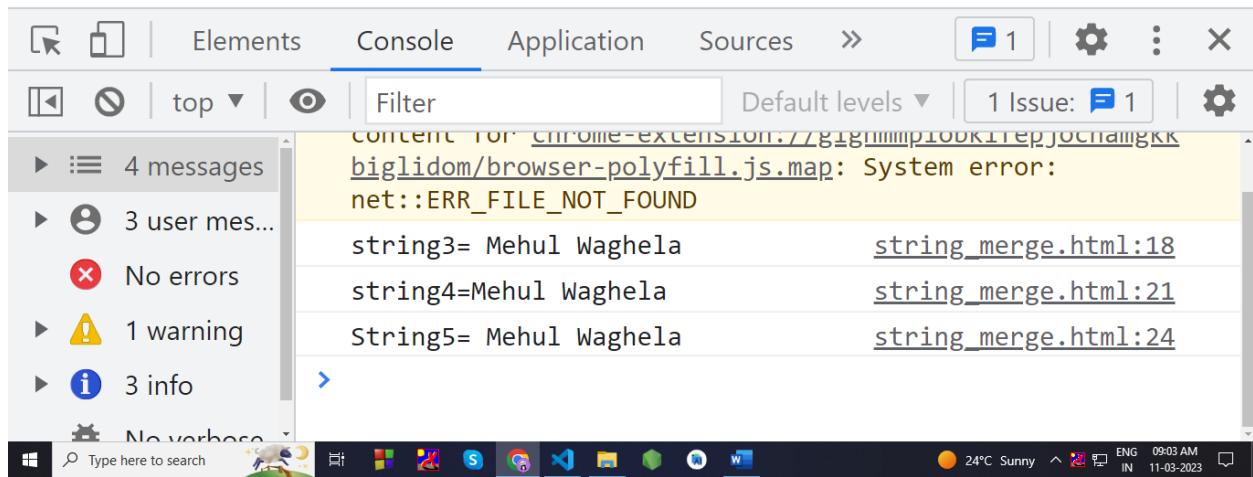
<body>
  <h1>Mehul Waghela</h1>
  <script>
    let str = 'Mehul';
    let str2 = 'Waghela';
    /* Method 1 Using + we can add two number and we can joint two string*/
    let str3 = str + " " + str2;
    console.log("string3=", str3);
    /* Method 2 Template literal*/
    let str4 =`string4=${str} ${str2}`;
    console.log(str4);
    /* Method 3 */
    let str5 = str.concat(" ", str2);
    console.log("String5=", str5);
  </script>
</body>

</html>
```

## Output



Mehul Waghela



## Prompt with ternary operator Grade program

```
<!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>
</head>

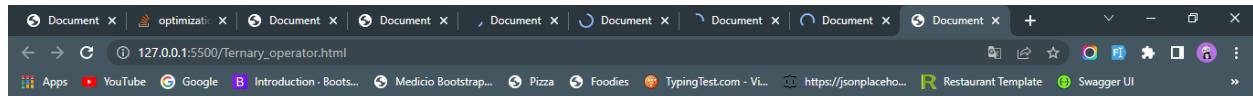
<body>
    <div>
        <h1>Mehul Waghela</h1>
    </div>
    <script>
        let marks = prompt("Please Enter your marks");
        (marks >= 90) ? console.log("grade A+") :
        ((marks >= 80) ? console.log("grade B+") :
        ((marks >= 70) ? console.log("grade A") :
        ((marks >= 60) ? console.log("grade B") :
        ((marks >= 50) ? console.log("grade C") :
        ((marks >= 40) ? console.log("grade D") :
```

```
        console.log("Fail")))));
    </script>
</body>

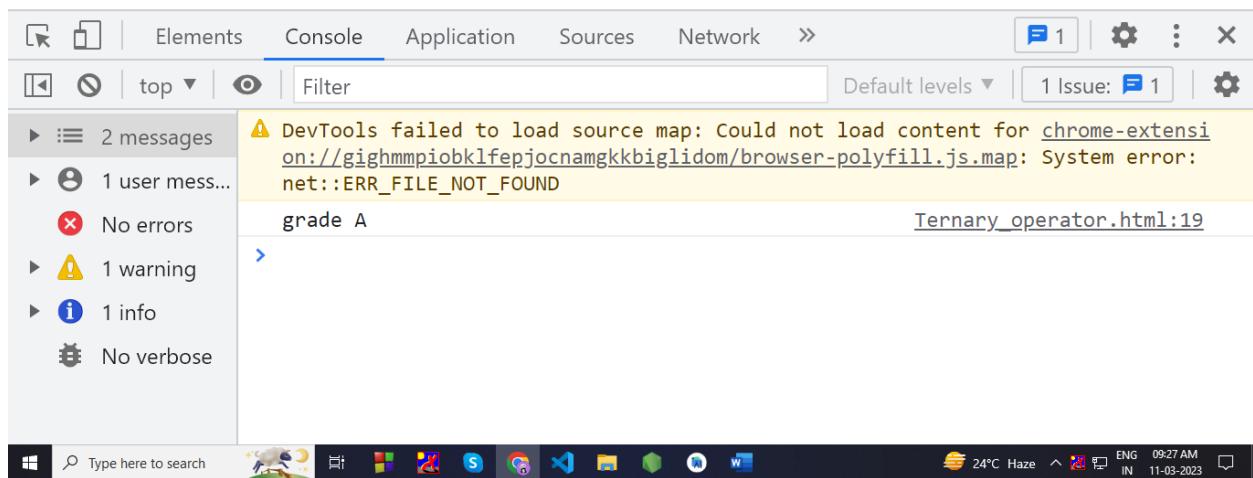
</html>
```

## Output

The screenshot shows a browser window with multiple tabs open. The active tab is titled "127.0.0.1:5500/Ternary\_operator.html". A modal dialog box is displayed, asking "Please Enter your marks" with a text input field containing "7q" and two buttons: "OK" and "Cancel". Below the browser is the Chrome DevTools interface, specifically the "Console" tab. On the left, a sidebar lists log levels: 1 message (yellow warning icon), No user me... (grey info icon), No errors (red error icon), 1 warning (yellow warning icon), No info (blue info icon), and No verbose (grey info icon). The main console area contains a single yellow warning message: "⚠ DevTools failed to load source map: Could not load content for chrome-extension://gighmmppiobk1fepjocnamgkkbiglidom/browser-polyfill.js.map: System error: net::ERR\_FILE\_NOT\_FOUND". The status bar at the bottom shows the Windows taskbar with various pinned icons and the system tray with weather information (24°C Haze) and system details (ENG IN 09:27 AM 11-03-2023).



Mehul Waghele



## Switch case

```
<!DOCTYPE html>
<html lang="en">

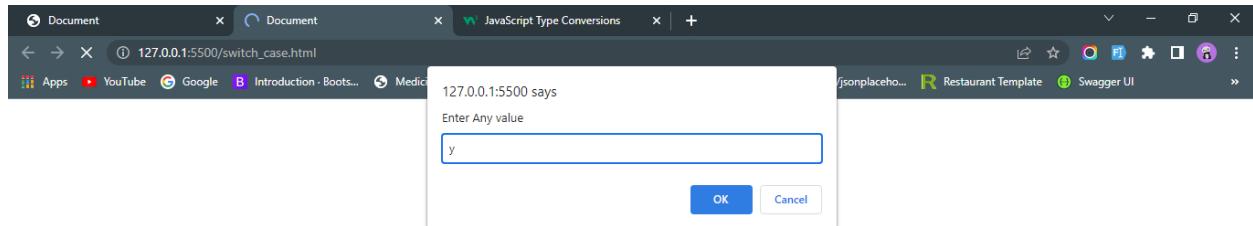
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>

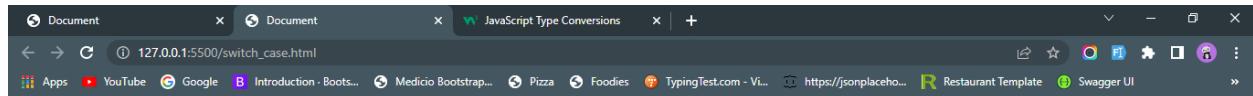
<body>
    <h1>Switch case</h1>
    <script>
        let input = prompt("Enter Any value");/* prompt take value in string
therefor we take 1 in string */
        switch (input) /* Switch case is work as === means it is check data and
also data type*/
        {
            case '1':
            case 'y':
                document.write("Yes");
                break;
            case '0':
```

```
case 'n':
    document.write("No");
    break;
default:
    document.write("Wrong Input");
}
</script>
</body>

</html>
```

## Output





## Switch case

Yes



## For loop

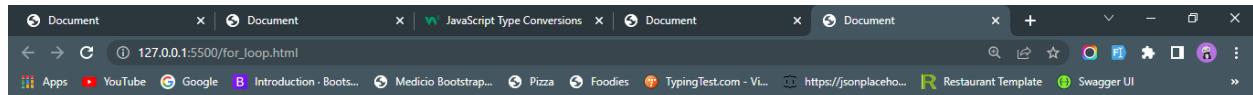
```
<!DOCTYPE html>
<html lang="en">

<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>
</head>

<body>
    <h1>For Loop</h1>
    <script>
        for (let i = 1; i <= 10; i++)
        {
            document.write(i);
            document.write("<br>");
        }
    </script>
</body>

</html>
```

## Output



## For Loop

1 2 3 4 5 6 7 8 9 10



## Break

```
<!DOCTYPE html>
<html lang="en">

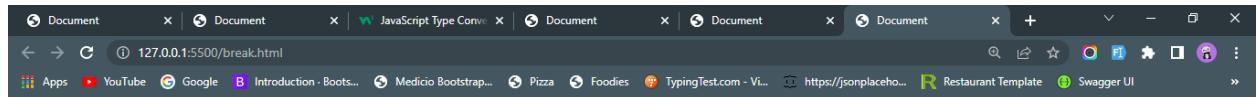
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>

<body>
    <h1>For Loop</h1>
    <script>
        for (let i = 1; i <= 10; i++)
        {
            document.write(i);
            document.write("<br>");
            if(i==5)
                break;
        }
    </script>
</body>

```

```
{  
    break;  
}  
}  
</script>  
</body>  
  
</html>
```

## Output



## For Loop

```
1  
2  
3  
4  
5
```



## Sum of even number

```
<!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>  
</head>
```

```

<body>
    <h1>For Loop</h1>
    <script>
        let sum = 0;
        for (let i = 1; i <= 10; i++) {

            if (i % 2 != 0) { sum += i; }

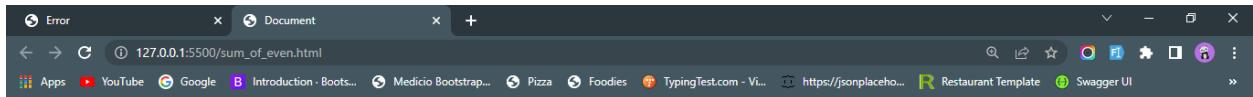
        }
        document.write("Sum=",sum);

    </script>
</body>

</html>

```

## Output



# For Loop

Sum=25



Odd number multiplication

```

<!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>
</head>

<body>
<h1>For Loop</h1>
<script>
    let mul = 1;
    for (let i = 1; i <= 10; i++) {

        if (i % 2 != 0) { mul *= i; }

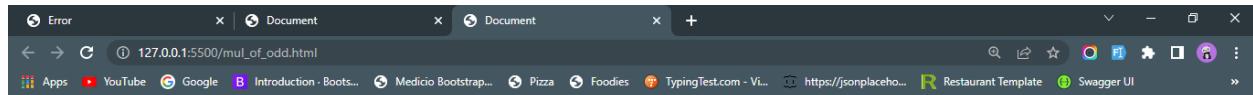
    }
    document.write("Multiplication=", mul);

</script>
</body>

</html>

```

## Output



# For Loop

Multiplication=945



## Prime number or not

```
<!DOCTYPE html>
<html lang="en">

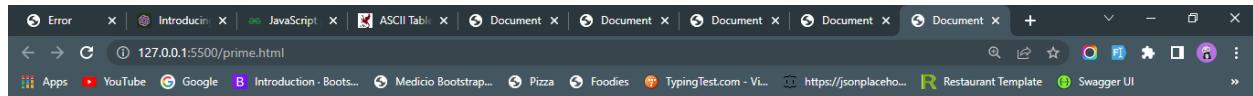
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>

<body>

    <h1>Prime or not</h1>
    <script>
        let n = prompt("Enter any number"), count = 0;
        Number(n);
        // document.write(typeof(n)); Prompt by default take string input
        for (let i = 1; i <= n; i++) {
            if (n % i == 0) {
                count++;
            }
        }
        if (count == 2) {
            document.write(n, " is prime number")
        }
        else {
            document.write(n, " is not prime number")
        }
    </script>
</body>

</html>
```

## Output



# Prime or not

7 is prime number



Break loop by its name

```
<!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>
</head>

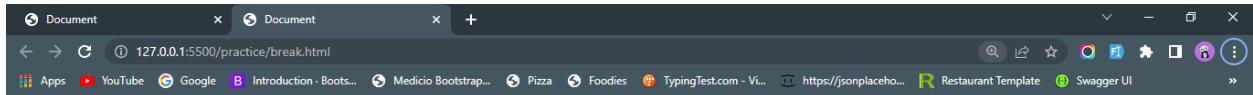
<body>
    <h1>For Loop</h1>
    <script>
        mehul: for (let i = 1; i <= 10; i++) {
            document.write(i);
            document.write("<br>");
            for (let j = 1; j <= 5; j++) {
                document.write("Mehul");
                document.write("<br>");
```

```
        if (i == 3 && j == 2) {
            break mehul;
        }

    }
</script>
</body>

</html>
```

## Output



## For Loop

```
1
Mehul
Mehul
Mehul
Mehul
Mehul
Mehul
2
Mehul
Mehul
Mehul
Mehul
Mehul
Mehul
3
Mehul
Mehul
```



## Prompt

```
<!DOCTYPE html>
<html lang="en">

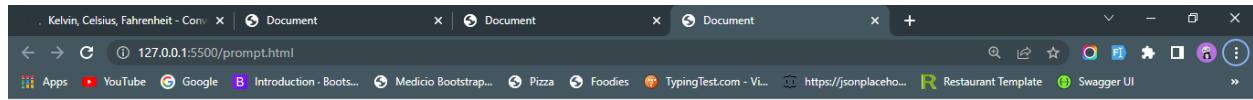
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
</head>

<body>
    <h1>Prompt</h1>
    <script>
        let age = prompt("Enter your age");
        console.log("age=", age);
        /* Only age lakhe means ke age ne response male toj a condition sach
pade */
        if (age) {
            if (age >= 18) { document.write("You can vote because your age is ", age) }
            else { document.write("You can not vote because your age is ", age) }
        }
        else {
            document.write("Enter your age again");
        }
    </script>
</body>

</html>
```

## Output



# Prompt

You can vote because your age is 50



## Temperature conversion

```
<!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>
</head>

<body>
    <h1>Temperature Conversion</h1>
    <script>
        let temp = prompt("Enter any 1 of 3,1=celcius ,2=feranhit,3=kalvin",
"celcius"), f = 0, c = 0, k = 0;
        switch (temp) {
            case "celcius":
                c = prompt("Enter temperature in celcius", 20);
                c = Number(c);
                f = (1.8 * (c) + 32);
                document.write(` ${c} Celcius=${f} Feranhit`);
```

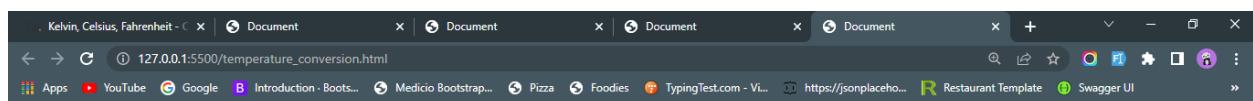
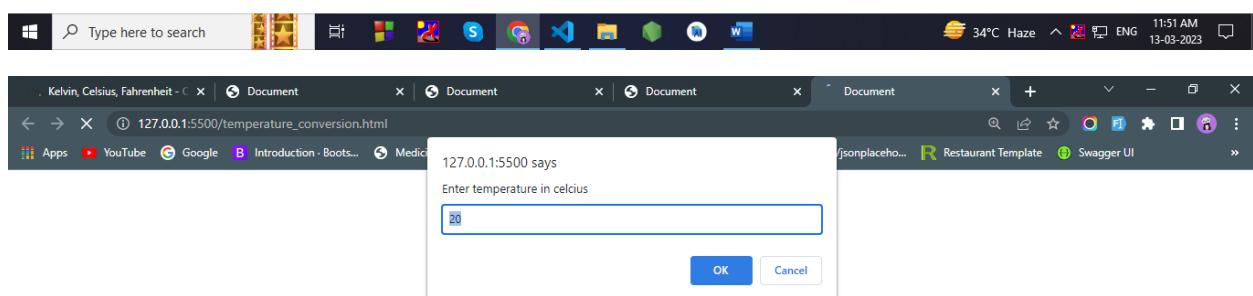
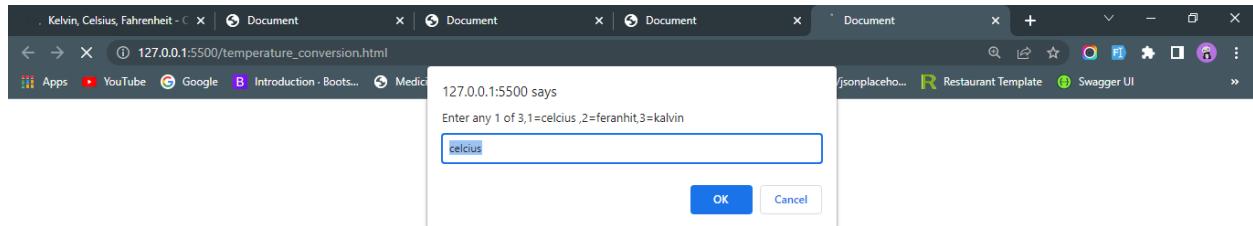
```

        document.write("<br>");
        k = (c + 273);
        document.write(` ${c} Celcius=${k} Kelvin`);
        document.write("<br>");
        break;
    case "feranhit":
        f = prompt("Enter temperature in Feranhit", 20);
        f = Number(f);
        c = ((f - 32) / 1.8);
        document.write(` ${f} Feranhit=${c} Celcius`);
        document.write("<br>");
        k = ((5 / 9) * (f - 32) + 273.15);
        document.write(` ${f} Feranhit=${k} Kelvin`);
        document.write("<br>");
        break;
    case "kalvin":
        k = prompt("Enter temperature in Kelvin", 20);
        k = Number(k);
        f = (1.8 * (k - 273) + 32);
        document.write(` ${k} Kelvin=${f} Feranhit`);
        document.write("<br>");
        c = (k - 273);
        document.write(` ${k} Kelvin=${c} Celcius`);
        document.write("<br>");
        break;
    }
</script>
</body>

</html>

```

## Output



# Temperature Conversion

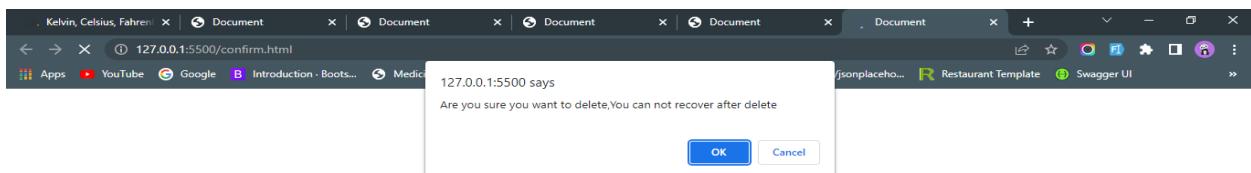
20 Celcius=68 Feranhit  
20 Celcius=293 Kelvin

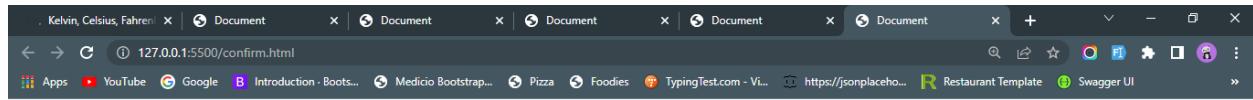


# Confirm

```
<!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>
</head>
<body>
    <h1>Confirm</h1>
    <script>
        let c=confirm("Are you sure you want to delete,You can not recover after
delete");
        if(c)
        {
            document.write("DELETED");
        }
        else{
            document.write("NOT DELETED");
        }
    </script>
</body>
</html>
```

# Output





# Confirm

DELETED



Slash n and slash t

```
<!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>
</head>

<body>
    <h1>Slash N and slash T</h1>

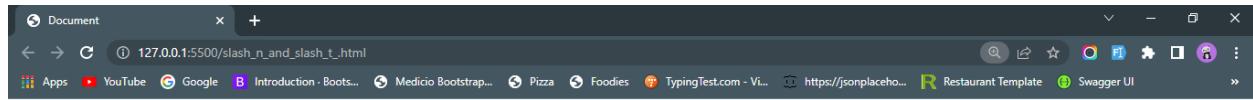
    <script>
        /* slash n and slash t is use only in alert and console for
document.write br is use to give space */
        alert("Mehul \nB \nWaghela");
        console.log("Mehul \nB \nWaghela");
        document.write("Mehul");
        document.write("<br>");
        document.write("B");
    </script>

```

```
document.write("<br>");  
document.write("Waghela");  
document.write("<br>");  
  
</script>  
</body>  
  
</html>
```

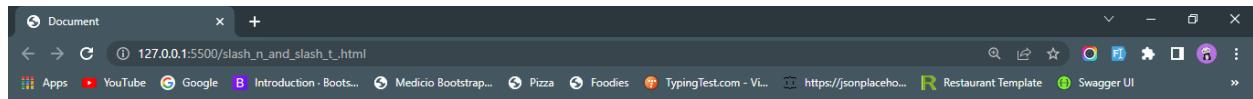
## Output



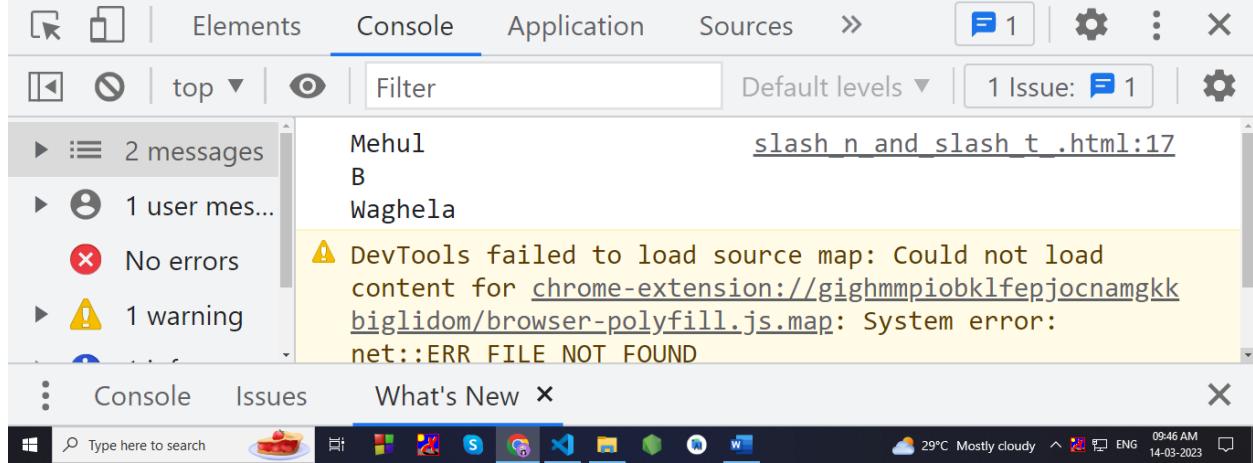


# Slash N and slash T

Mehul  
B  
Waghela



# Slash N and slash T



## String manipulation

```
<!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>
</head>

<body>
    <h1>String_manipulation</h1>
    <script>
        //Joint string
        let str1 = "Mehul";
        let str2 = "Waghela";
        /* method 1 */
        let str3 = str1 + " " + str2;
        console.log("Str3", str3);
        /* method 2 */
        let str4 = `${str1} ${str2}`;
        console.log("Str4", str4);
        /* method 3 */
        let str5 = str1.concat(" ", str2, " ", str3);
        console.log("Str5", str5);
        /* Index value start from zero */
        //access by index
        console.log("Str5 index 3=", str5[3])
        /* lenth starts from1 */
        //lenth of index
        console.log("lenth of str5=", str5.length);
        //access string by for loop
        for (let i = 0; i < str5.length; i++) {
            console.log(str5[i]);
        }
        //index of to find place value of some word
        let str6 = "I am mehul waghela, i am in from surat guajrat,i have in
completed graduation 'in' electrical engineer'in'g";
        let str7 = str6.indexOf("in");
        console.log("index of in from start using 'indexOf'=", str7);
        let str8 = str6.lastIndexOf("in");
        console.log("index of in from end using 'lastIndexOf'=", str8);

        //index of perticular word from perticular section
        /* index of 26 che a 26 pachina word ma in sodhine starting mathi in
sodhse */
        let str9 = str6.indexOf("in", 26);
```

```

        console.log("index of search 'in' from start after 26 place using
'indexOf ,26'=", str9);
        let str10 = str6.lastIndexOf("in", 50);
        console.log("lastindex of search 'in' from end in first 50 character
by'lastindexOf ,50'=", str10);

        /* compare string */
        let str11 = "mehul";
        let str12 = "Mehul";
        console.log("str11==str12=>", str11 == str12);

        /* substring */
        let str13 = "Mehul waghela From surat";
        console.log("Str13=", str13);
        let str14 = str13.substr(6, 7);/* sub str 6= is place value from we want
string and 7 is lenth of string */
        console.log("Sub string of str14 by str13.substr(6,7) 6=index 7=lenth=>",
str14);
        let str15 = str13.substring(6, 13);/* sub str 6= is place value from we
want string and 13 is end index of string we want*/
        console.log("Sub string of str14 by str13.substring(6,13) 6=index 13=end
index=>", str15);

        /* Space kadhva using trim */
        let str16 = "      Mehul Waghela is      "
        console.log("Str16=", str16);
        console.log("Trim Start", str16.trimStart());
        console.log("Trim End", str16.trimEnd());
        console.log("Trim", str16.trim());

        /* upper case lower case */
        console.log("Upper case ma karva Touppercase", str16.toUpperCase());
        console.log("Lower case ma karva Touppercase", str16.toLowerCase());

        /* perticular word string ma che ke nai te find karva */
        console.log("Str 16 find is using 'includes(\"is\")'
",str16.includes("is"));

        /* String repeat karva */
        console.log("repeat 3 vaar karva str16.repeat(3)",str16.repeat(3));

        /* String na pertciular word ne replace karva */
        console.log('str16.replace("is","is my name")',str16.replace("is","is my
name"));

```

```

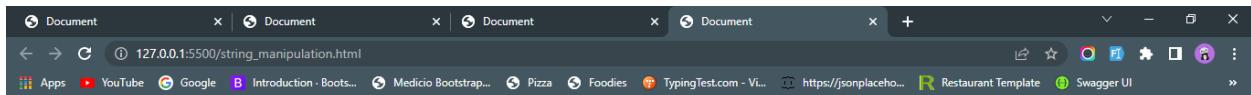
/* String start with endswith */
let str17="mehul waghela is my name";
console.log("Str17=", str17);
console.log('str17.startsWith("mehul")',str17.startsWith("mehul"));
console.log('str17.endsWith("mehul")',str17.endsWith("name"));

</script>
</body>

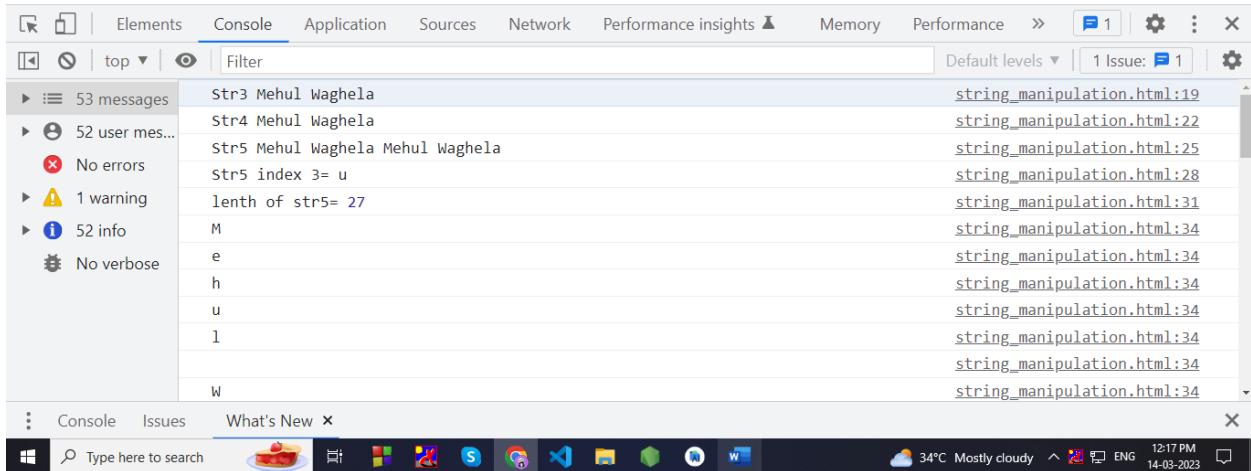
</html>

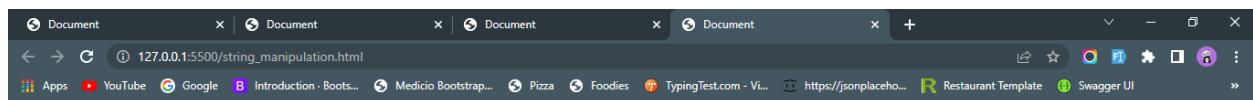
```

## Output

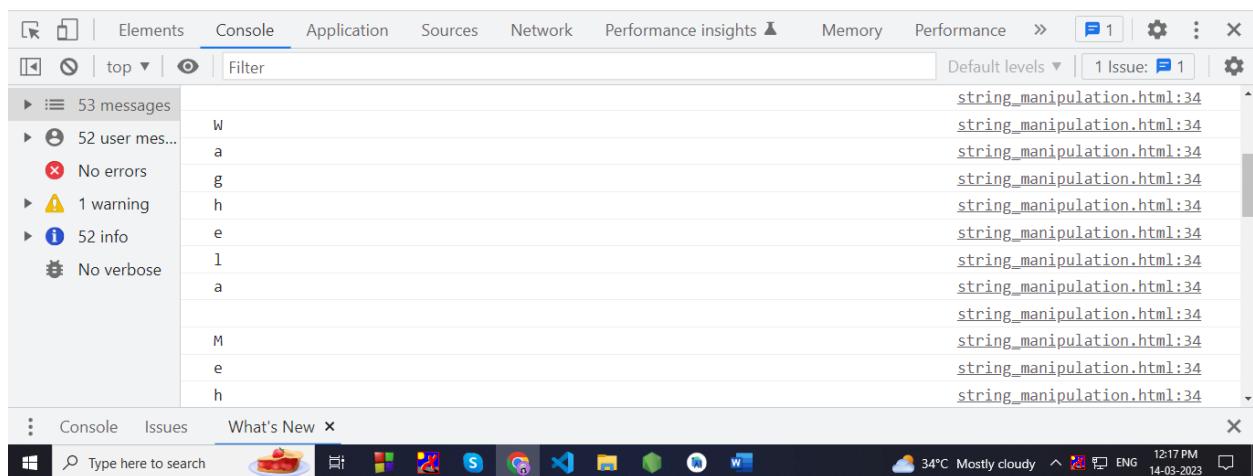


### String\_manipulation

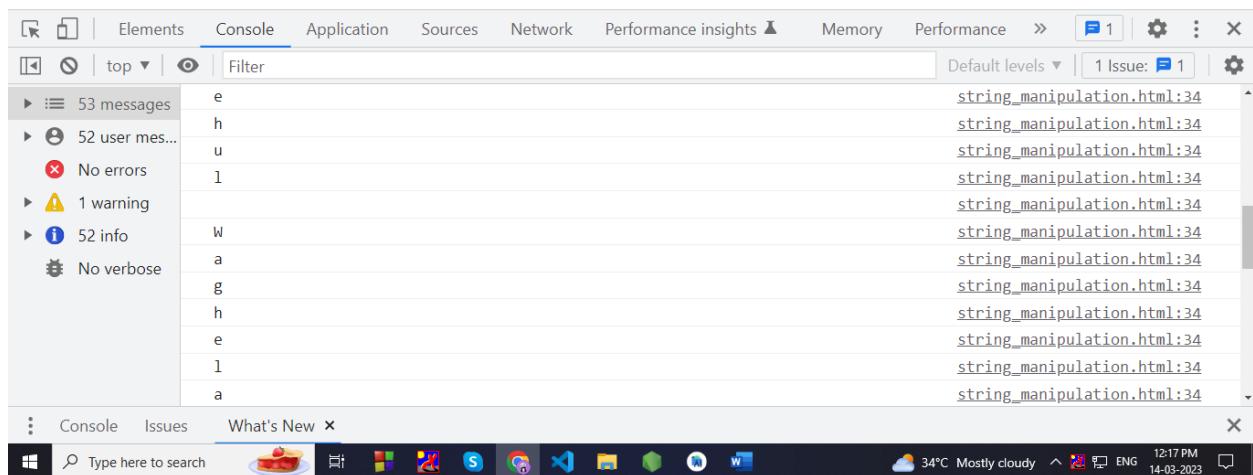


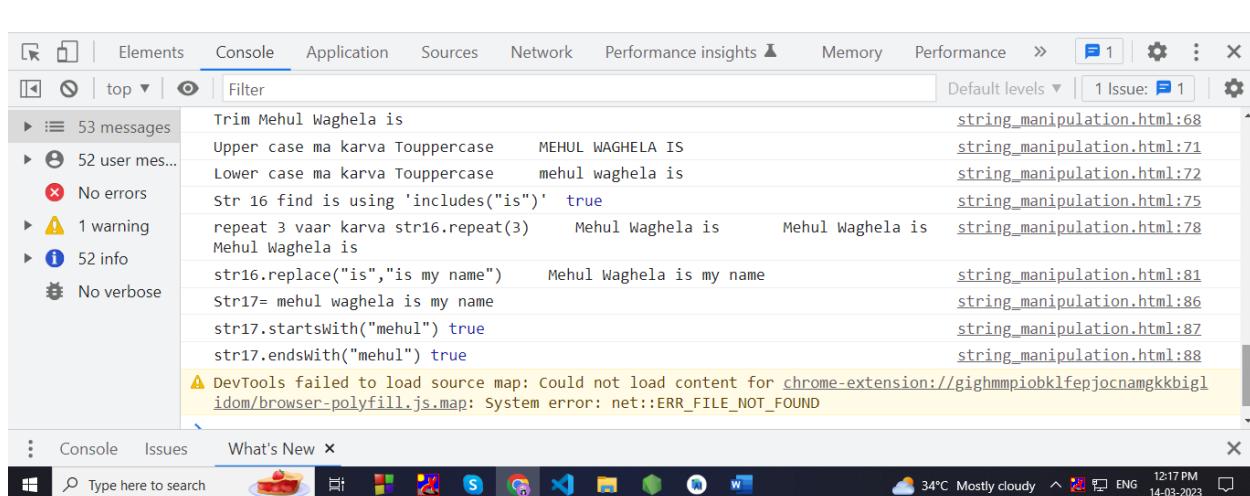
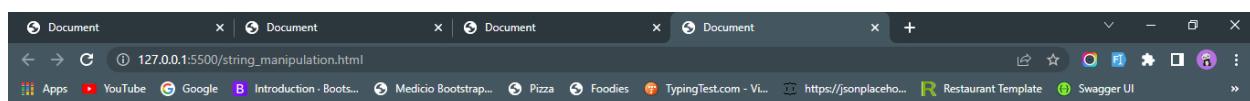
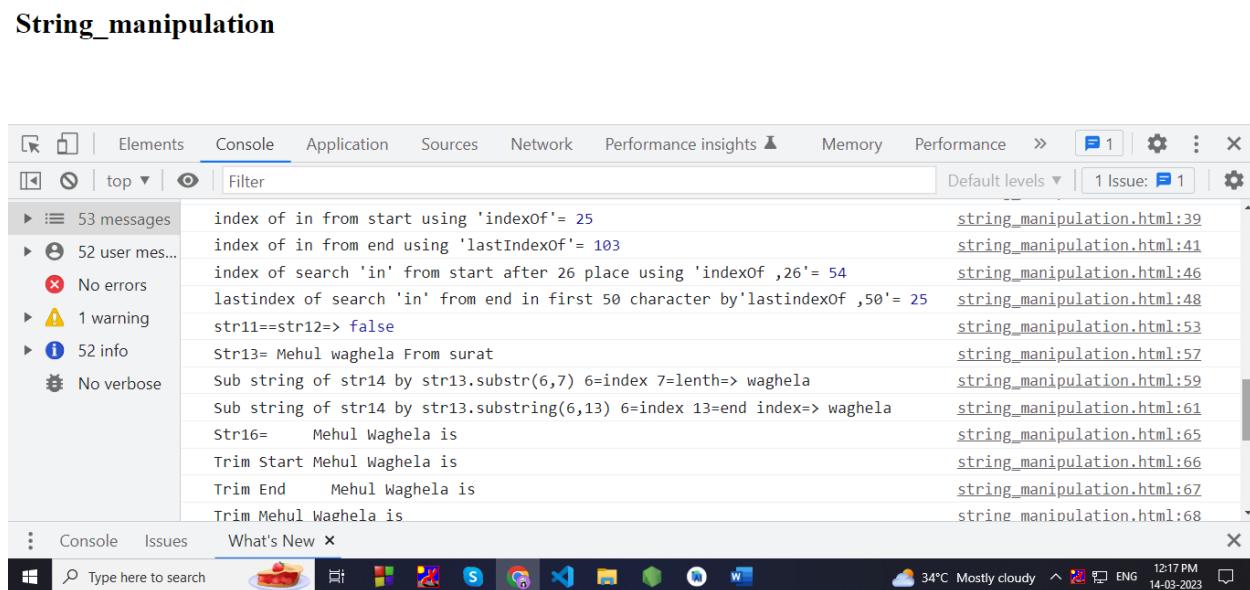
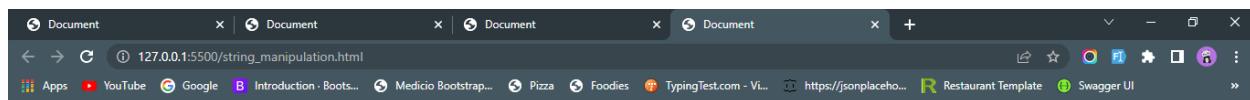


## String\_manipulation



## String\_manipulation





# Array manipulation

```
<!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>
</head>

<body>
    <h1>Array-manipulation</h1>
    <script>
        //===== Array define=====
        let arr = [10, 20, "mehul", "waghela", 1, 0, NaN, true, false, undefined,
        "", " "];
        console.log("All array element",arr);
        //=====Truthy and falsy element=====
        for (let i = 0; i < arr.length; i++) {
            if (arr[i]) /* from this condition only truthy element pass */
                //Truthy element
                console.log("Truthy element=", arr[i]);
                //output ->Truthy element=10,20,mehul,waghela,1,true," "(space)
            }
            else {
                console.log("Falsy element=", arr[i]);
                //output ->Falsy element=0,NaN,false,""(blank)
            }
        }
        //===== Array length =====
        console.log("Array arr length=",arr.length);
        //===== For of loop Element access =====
        // foe of loop for("variable" of "array")
        for (let x of arr) {
            console.log(x);
        }
        //===== 
        let book1 = ["maths", "physics", "bio", "chem", "science"];
        console.log("book1 all element",book1);
        //===== Change element by index no =====
        book1[1]="English";
        console.log("Physics replace by english",book1);
        //===== Empty array by 2 method=====
```

```

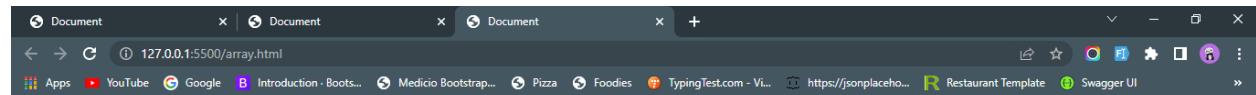
book1=[];
book1.length=0
console.log("book1 empty by book1.lenth =0 or book1=[];",book1);
//===== element pachithi array ni pela add karva unshift
=====
let book = ["maths", "physics", "bio", "chem", "science"];
book.unshift("Mehul");
console.log('Add mehul in start using unshift/("mehul/")',book);
//===== element pachithi array ni end ma add karva push
=====
book.push("Pratik");
console.log('Add pratik in end using push/("pratik/")',book);
//===== starting no 1st element remove karva shift
=====
book.shift();
console.log("Remove 1st element in array by book.shift()",book);
//===== end no 1st element remove karva pop vapray
=====
book.pop();
console.log("Remove last element in array by book.pop()",book);
//===== vachhena koi pan element remove karva splice
=====
book.splice(1,2);/* 1 index thi 2 elment kadhi nakhse */
console.log("index 1 thi 2 element remove karya using
book.splice(1,2);",book);
let book2 = ["maths", "physics", "bio", "chem", "science"];
book2.splice(1);/* 1 index thi badha element kadhi nakhe */
console.log("Remove all element from 1 index using
book2.splice(1);",book2);
//===== variable a array che ke ni te check karva
=====
let book3 = ["maths", "physics", "bio", "chem", "science"];
let book4="maths";
console.log("book3=",book3)
console.log("book4=",book4)
console.log("Check variable is array or not using
console.log(Array.isArray(book3));",Array.isArray(book3));
console.log("Check variable is array or not using
console.log(Array.isArray(book4));",Array.isArray(book4));
//Array ma element ni position check karva
let book5 = ["maths", "physics", "bio", "chem", "science"];
console.log("index of bio=",book5.indexOf("bio"));

</script>
</body>

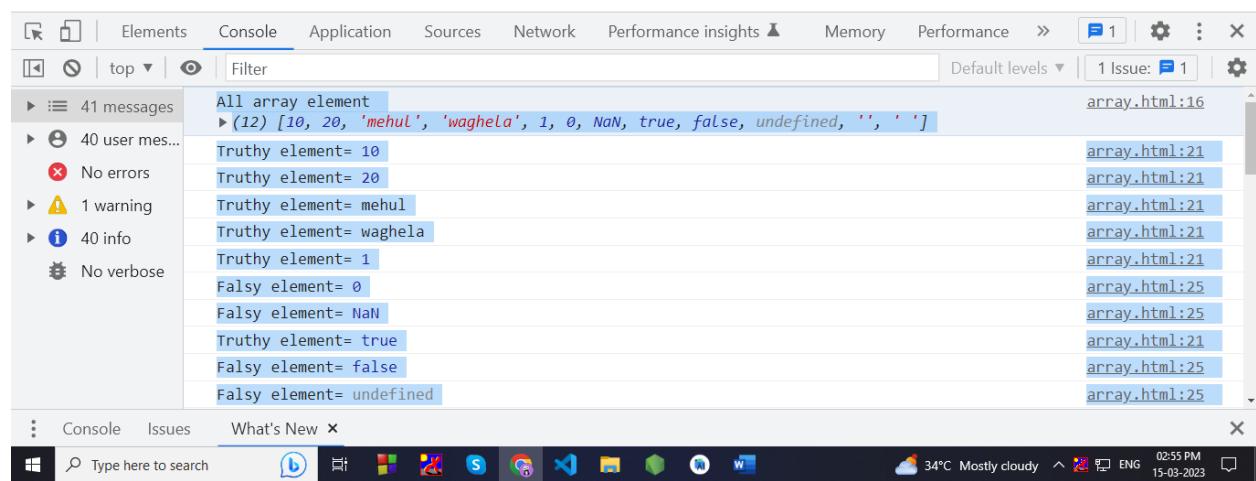
```

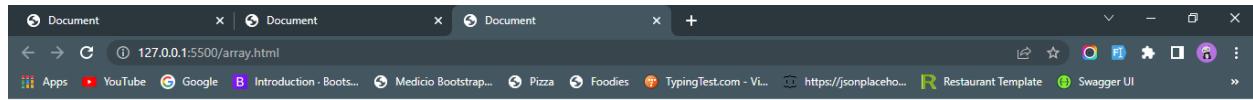
```
</html>
```

# Output

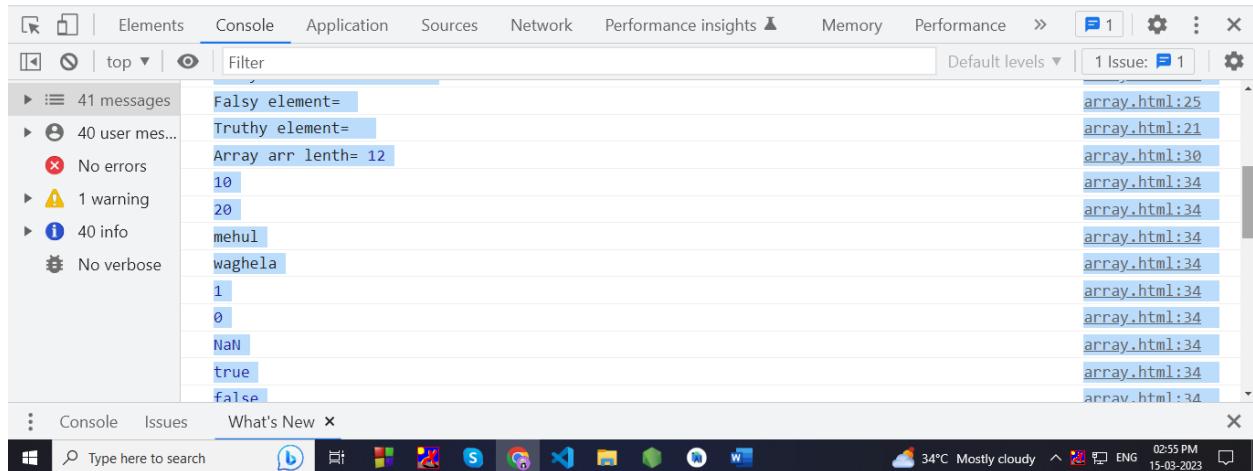


## Array-manipulation

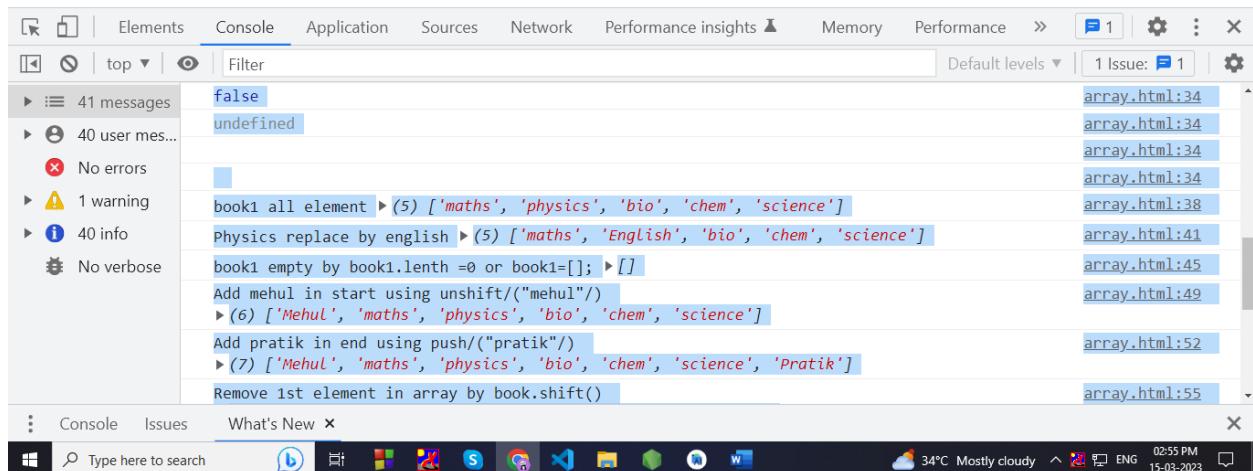


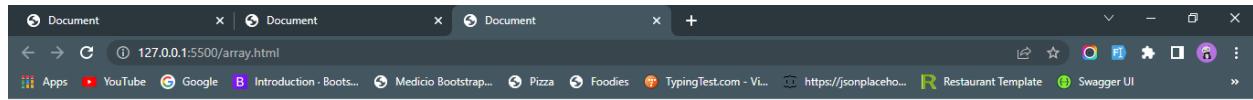


## Array-manipulation

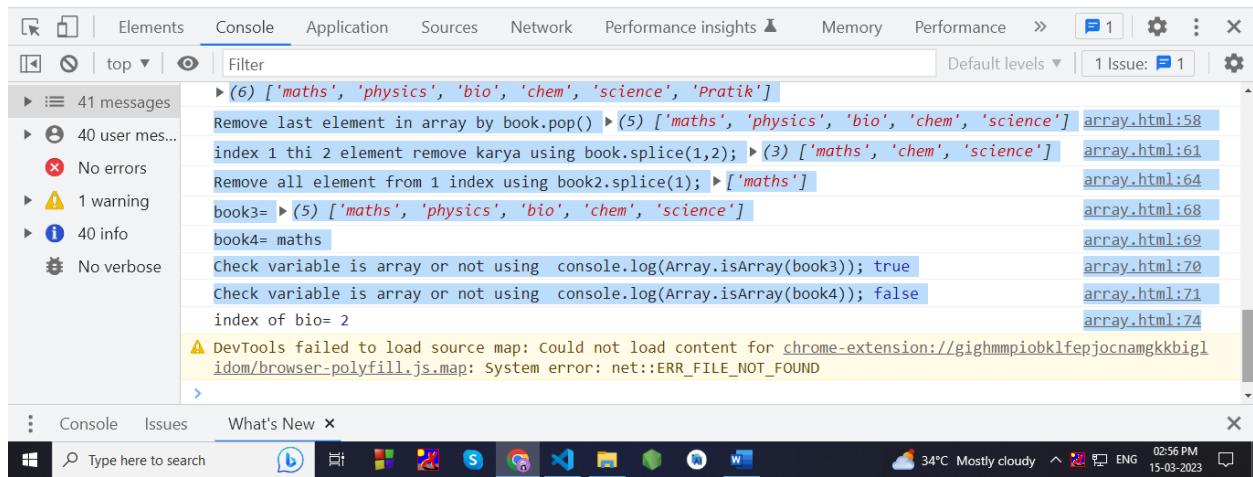


## Array-manipulation





## Array-manipulation

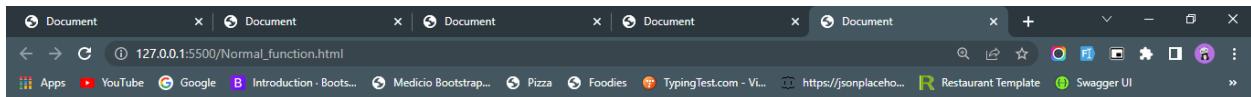


## Normal Function

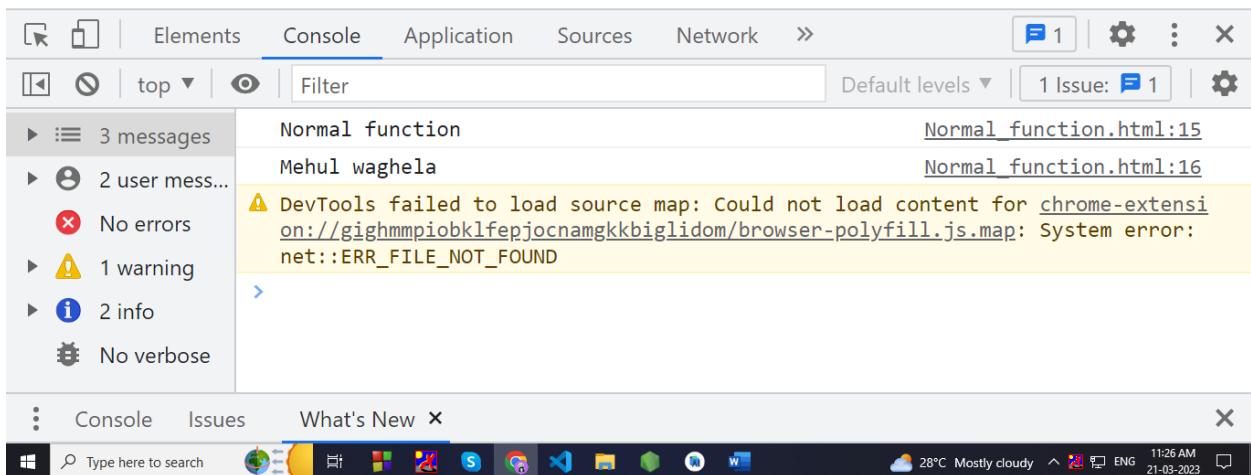
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <h1>Normal function</h1>
    <script>
        /* this is normal function with function name argument and parameter */
        function show(x,y)/* this x is call =====parameter===== */
        {
            console.log(x);
            console.log(y);
        }
        show("Normal function","Mehul waghela");/* in this ()normal function and
mehul waghela is =====argument===== */
    </script>
</body>
```

```
</html>
```

## Output



### Normal function



## Anonymous Function

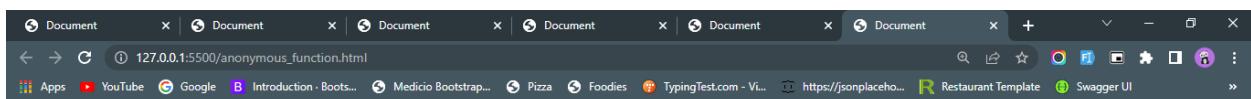
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <h1>Anonymous Function</h1>
    <script>
        /* this is anonymous function */
        let x= function (x,y)/* this x is call =====parameter===== */
        {
            console.log(x);
        }
    </script>
</body>
</html>
```

```

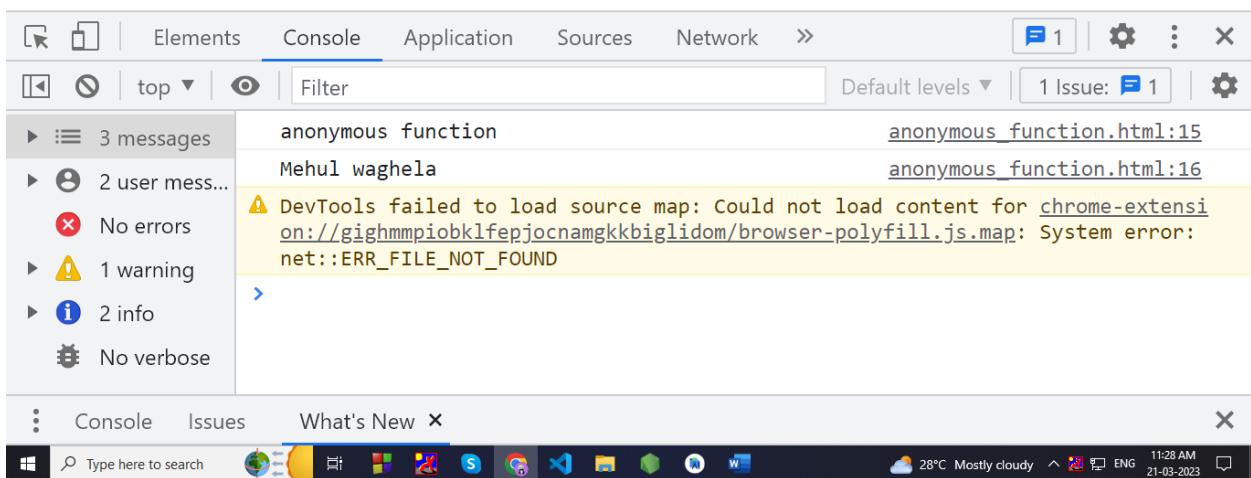
        console.log(y);
    }
    x("anonymous function","Mehul waghela");/* in this () anonymous function
and mehul waghela is =====argument===== */
</script>
</body>
</html>

```

## Output



### Anonymous Function



## Immediately invoked Function

```

<!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>
</head>
<body>

```

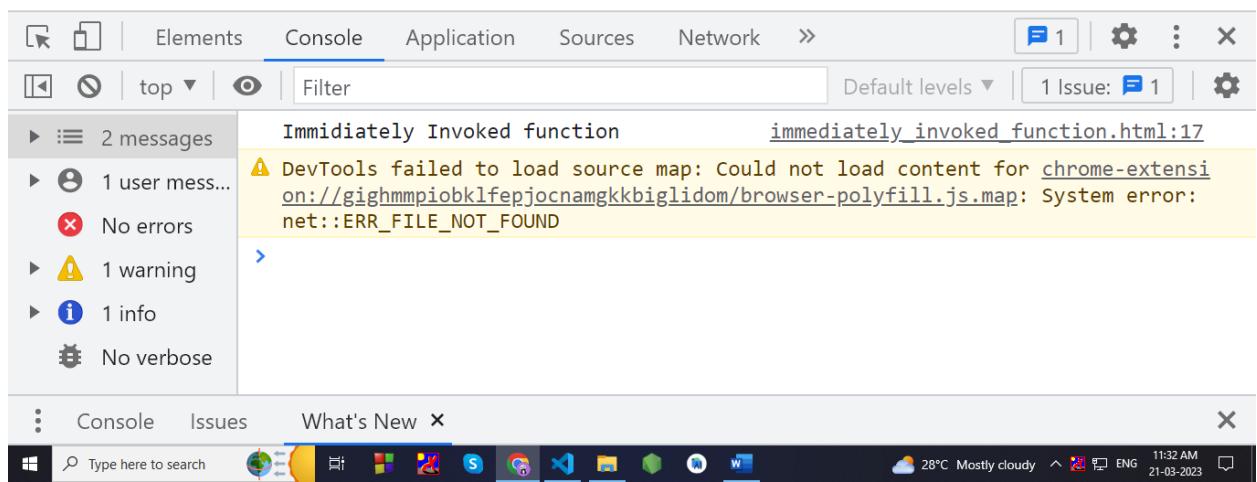
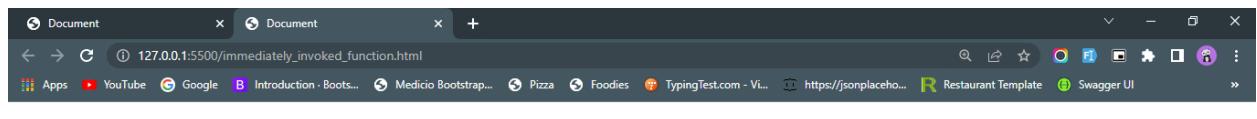
```

<!-- immidiately invoked fuction is not take permanent space ,it is take
space one time during execution and it is delete after execution.Also its
variable is delete and it leave its place in ram therefore space optimization we
can do using immidaiately invoked function -->
<h1>Immidiately Invoked Function</h1>
<script>
    // (Anonymous Function)(); Syntax

    (function ()
    {
        console.log("Immidiately Invoked function");
    })();
</script>
</body>
</html>

```

## Output



3<sup>rd</sup> party code run in our code

```
<!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>
</head>

<body>
    <h1>3rd party code how to use</h1>
    <script>
        /* immidiatly invoked fuction is use for one time work or run third
        party code and it is not affeceted by internal variable name define in that
        program. it is one time execute and its variable and function delete after
        execution. It is not take parmenant space in RAM */

        //This is normal function
        let x = function()
        {
            console.log("oscar career point")
        };
        x();

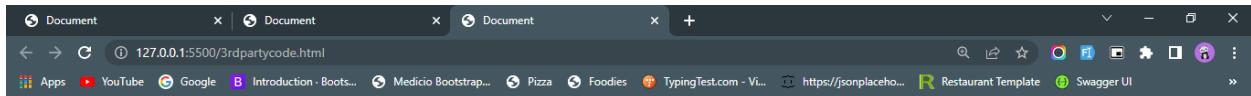
        //this is immidiatly invoked function

        (function () {
            //Third party code write in immidiatly invoke function in curly
            bracket
                let x = function () {
                    console.log("Mehul Waghele");
                }
                x();
            })();
        </script>
    </body>

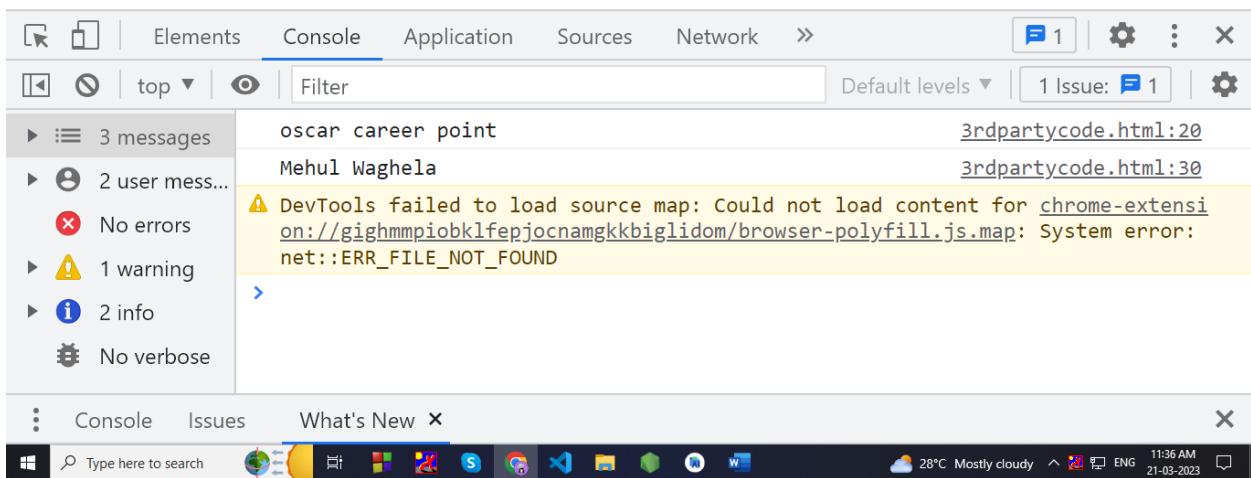
</html>

```

## Output



## 3rd party code how to use



## Arrow Function

```
<!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>
</head>
<body>
    <h1>Arrow function</h1>
    <script>
        //Arrow function same work as normal function but we can write it in
single line
        //Syntax of arrow function let x= () => {};
        // Then call arrow function x();
        /* =====Some rules of arrow function===== */
        //in arrow function if we have only 1 parameter then if we not make () then ok
        //in arrow function if only one line code then {} is not compulsory and
return write not require
        //for multiple line all (),{},return write require
    </script>
</body>
</html>
```

```
//1--Normal function vs arrow function
function x(para1)
{
    return para1 + " " +"waghela";
}
console.log(x("mehul"));

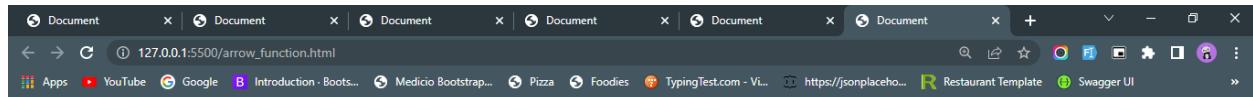
let y = () => {
    console.log("Arrow function");
}
y();

//2--only one parameter pass that time if we not use () then its ok
let z= parameter1 => {
    console.log(parameter1);
}
z("only one parameter pass");

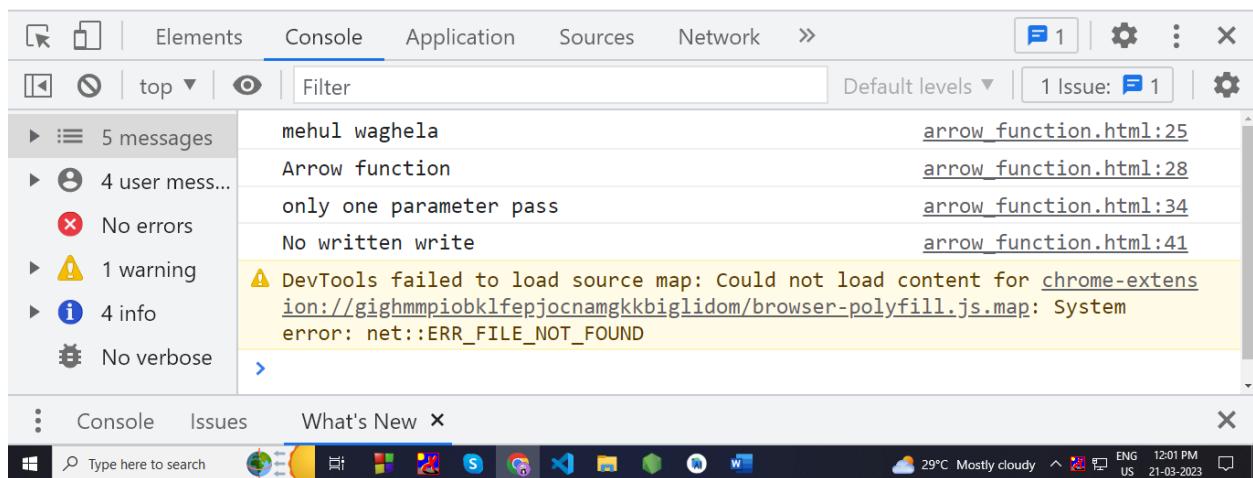
//3--if only one line work then not require return and {}
let abc= () =>
    "No written write" /* if we not write return but that string
return to function */
    console.log(abc());


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

# Output



## Arrow function



## Array Assignment task

```
<!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>
</head>

<body>
    <h1>Assignment</h1>
    <script>
        let arr = [1, 3, "Test", 0, "", -1, null, undefined, "Hello World",
        "hello", "world", 54, false, true, "-0",
        "null"
        ]
        //task-1,Get all number from array
        let task1 = [];
    </script>
</body>

```

```

let arr1 = arr.filter((e) => {
  if (typeof e == "number") {
    task1.push(e);
  }
});
/* output:-[1, 3, 0, -1, 54] */
console.log(task1);

//task-2 ,Get all string from array
let task2 = [];
let arr2 = arr.filter((e) => {
  if (typeof e === "string") {
    task2.push(e);
  }
});
/* output:- ['Test', '', 'Hello World', 'hello', 'workd', '-0', 'null'] */
*/
console.log(task2);

// //task-3 Get all falsy values from array
let task3 = [];
let arr3 = arr.filter((e) => {
  if (e) { }
  else {
    task3.push(e);
  }
});
/* output:- [0, '', null, undefined, false]*/
console.log(task3);

//task-4 Get all truthy values from array
let task4 = [];
let arr4 = arr.filter((e) => {
  if (e) {
    task4.push(e);
  }
});
/* output:- [1, 3, 'Test', -1, 'Hello World', 'hello', 'workd', 54, true,
'-0', 'null']*/
console.log(task4);

//task-5 Get sum of all number
let sum = 0;
let arr5 = arr.forEach((e) => {
  if (typeof e === "number") {

```

```

        sum = sum + e;
    }
});
/* output:- 57*/
console.log(sum);

//task-6,Get all NAN from array
let task6 = [];
let arr6 = arr.filter((e) => {
    if (isNaN(e)) {
        task6.push(e);
    }
})
/* output:- [ 'Test', undefined, 'Hello World', 'hello', 'workd',
'null']*/
console.log(task6);

//task-7 Get all value which includes "e"
let task7 = [];
let arr7 = arr.filter((e) => {
    if (typeof e === "string") {
        if (e.includes("e")) {
            task7.push(e);
        }
    }
});
/* output:- [ 'Test', 'Hello World', 'hello'] */
console.log(task7);

// //task-8 Get all value which ends with "d"
let task8 = [];
let arr8 = arr.filter((e) => {
    if (typeof e === "string") {
        if (e.endsWith("d")) {
            task8.push(e);
        }
    }
})
/* output:- [ 'Hello World', 'workd']*/
console.log(task8);

//task-9,Get count of falsy value from array
let count = 0;
let arr9 = arr.filter((e) => {
    if (e) { }
})

```

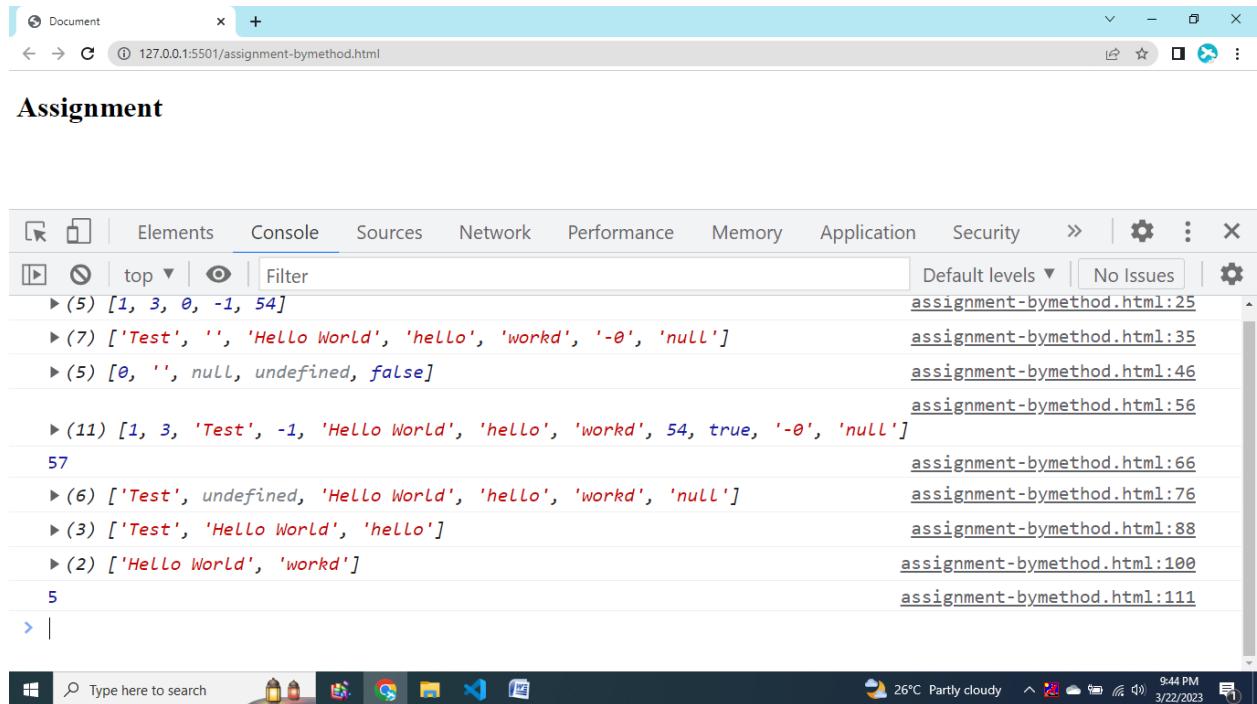
```

        else {
            count++;
        }
    })
    /* output:- 5*/
    console.log(count);
</script>
</body>

</html>

```

## Output



## Array assignment task using for loop

```

<!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>
</head>

```

```
<body>
    <h1>Assignment</h1>
    <script>
        let arr = [1, 3, "Test", 0, "", -1, null, undefined, "Hello World",
        "hello", "world", 54, false, true, "-0",
        "null"
        ]
        //task-1,Get all number from array
        let task1 = [];
        for (let i = 0; i < arr.length; i++) {

            if (typeof arr[i] === 'number') {

                task1.push(arr[i]);
            }

        }
        console.log(task1);

        //task-2 ,Get all string from array
        let task2 = [];
        for (let i = 0; i < arr.length; i++) {
            if (typeof arr[i] === 'string') {
                task2.push(arr[i]);
            }
        }
        console.log(task2);

        //task-3 Get all falsy values from array
        let task3 = [];
        for (let i = 0; i < arr.length; i++) {
            if (!arr[i]) {

            } else {
                task3.push(arr[i]);
            }
        }
        console.log(task3);

        //task-4 Get all truthy values from array
        let task4 = [];
        for (let i = 0; i < arr.length; i++) {
            if (arr[i]) {
                task4.push(arr[i]);
            }
        }
    </script>

```

```
        }
    }
    console.log(task4);

    //task-5,Get all no sum from array
    let sum = 0;
    for (let i = 0; i < arr.length; i++) {
        if (typeof arr[i] === "number") {
            sum+=arr[i];
        }
    }
    console.log(sum);

    //task-6,Get all NaN from array
    let task6 = [];
    for (let i = 0; i < arr.length; i++) {
        if (isNaN(arr[i])) {
            task6.push(arr[i]);
        }
    }
    console.log(task6);
    //task-7 Get all value which includes "e"
    let task7 = [];
    for (let i = 0; i < arr.length; i++) {
        if (typeof (arr[i]) === "string") {
            if (arr[i].includes("e")) {
                task7.push(arr[i]);
            }
        }
    }
    console.log(task7);
    //task-7 Get all value which ends with "d"
    let task8 = [];
    for (let i = 0; i < arr.length; i++) {
        if (typeof (arr[i]) === "string") {
            if (arr[i].endsWith("d")) {
                task8.push(arr[i]);
            }
        }
    }
    console.log(task8);

    //task-5,Get all falsy value count from array
    let count=0;
    for (let i = 0; i < arr.length; i++) {
```

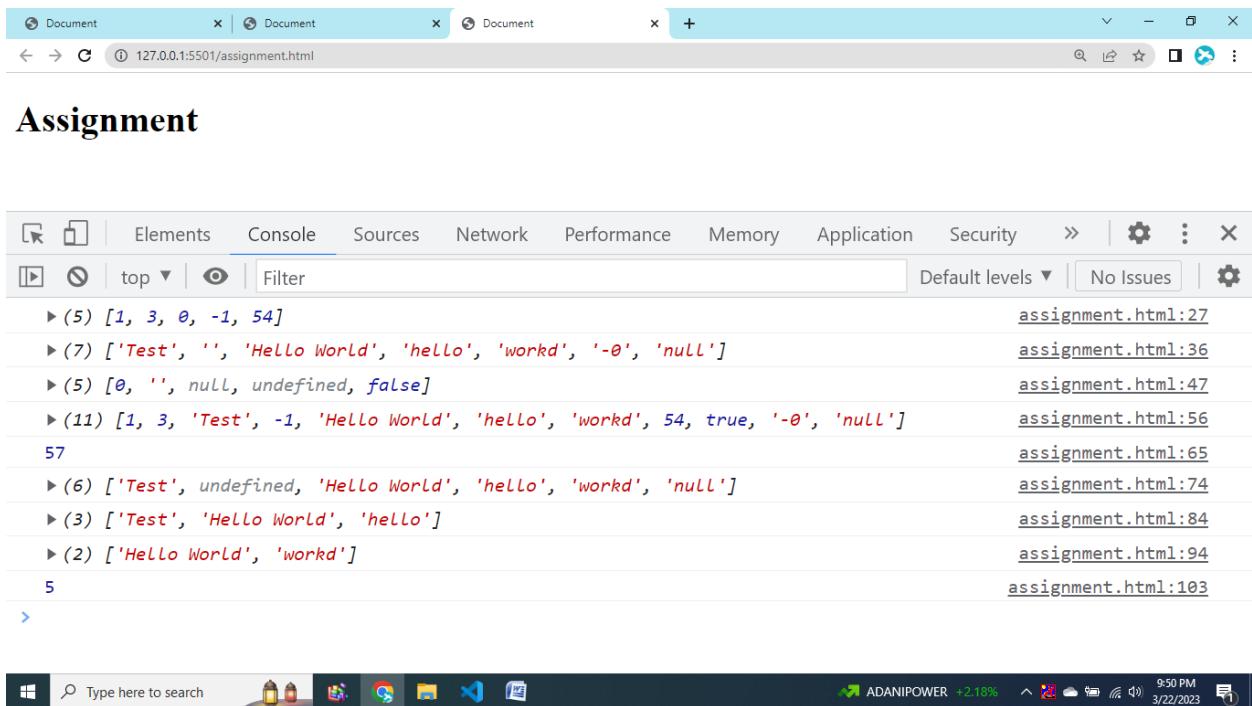
```

        if (arr[i]) {} else {
            count++;
        }
    }
    console.log(count);
</script>
</body>

</html>

```

## Output



## Word and character count-1

```

<!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>
</head>

<body>
    <h1>how many time character repeat</h1>
    <!-- <script>
        let str = prompt("Enter any string"), count = 0, str1 = 0, str2 = 0;
        if (str) {
            str1 = str.indexOf("a");
            if (str1 >= 0) {
                count++;
            }
            while (str1 != (-1)) {
                str1 = str.indexOf("a", str2);
                if (str1 > 0) {
                    count++;
                }
                str2 = str1 + 1;
            }
            document.write("count=", count);
        }
        else
        {
            document.write("Please enter any string");
        }
    </script> -->
    <script>
        let strh = prompt("Enter any string");
        let st = strh.match(/a/gi);
        console.log(st.length);
    </script>
</body>

</html>

```

## Output

```

<!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>
</head>

<body>
    <h1>how many time character repeat</h1>
    <!-- <script>
        let str = prompt("Enter any string"), count = 0, str1 = 0, str2 = 0;
        if (str) {
            str1 = str.indexOf("a");
            if (str1 >= 0) {
                count++;
            }
            while (str1 != (-1)) {
                str1 = str.indexOf("a", str2);
                if (str1 > 0) {
                    count++;
                }
                str2 = str1 + 1;
            }
            document.write("count=", count);
        }
        else
        {
            document.write("Please enter any string");
        }
    </script> -->
    <script>
        let strh = prompt("Enter any string");
        let st = strh.match(/a/gi);
        console.log("Word=", st.length);
        console.log("Character=", strh.length);
    </script>
</body>

</html>

```

## Word and character count-2

```

<!DOCTYPE html>
<html lang="en">

<head>

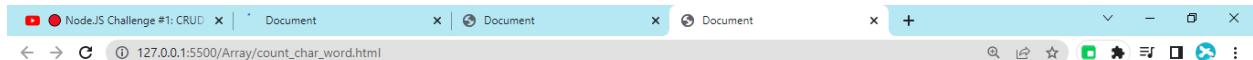
```

```
<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>
</head>

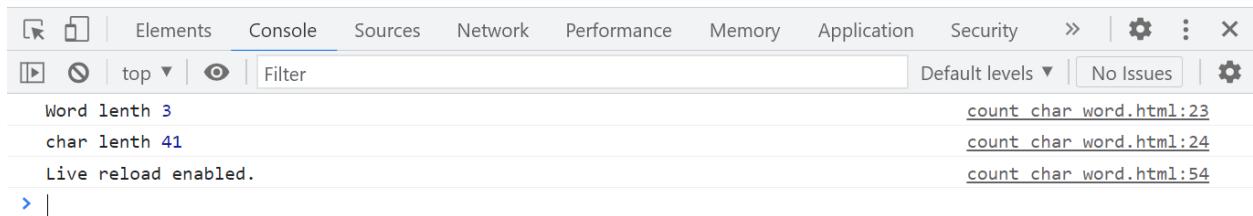
<body>
    <h1>Count word and character</h1>
    <script>
        let str = "      oscar             career           point   ", count =
0;
        let str1 = str.trim();
        let arr = str.split(" ");
        for (let i = 0; i < arr.length; i++) {
            if (arr[i] != "") {
                count++;
            }
        }
        console.log("Word length", count);
        console.log("char length", str1.length);
    </script>
</body>

</html>
```

## Output



## Count word and character



## Word and character count-3

```
<!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>
</head>

<body>
    <script>

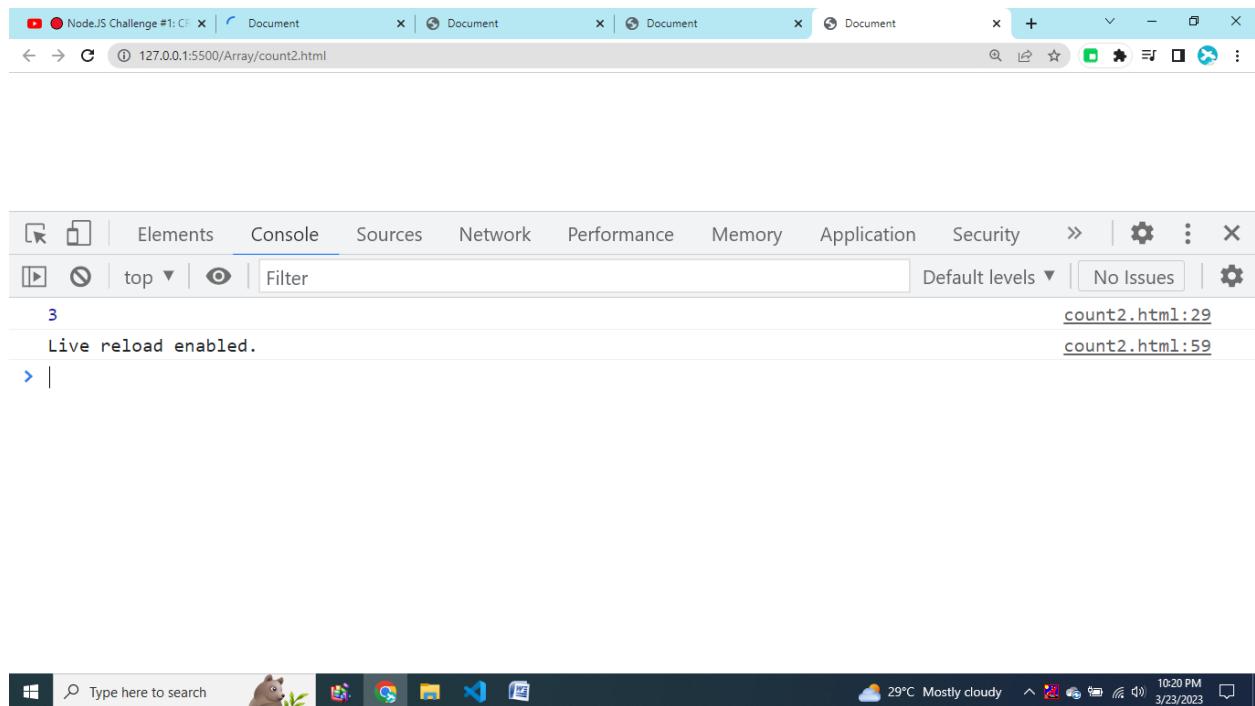
        let str = " oscar career           point   ", count = 0;
        str = str.trim();
        a:for (let i = 0; i < str.length; i++) {
            if (str[i] != " ") {
                count++;
                i++;
                while (str[i] != " ") {
                    i++;
                    if(i==(str.length-1))
                }
            }
        }
    </script>

```

```
        break a;
    }
}
}
console.log(count);
</script>
</body>

</html>
```

## Output



## Word and character count-4

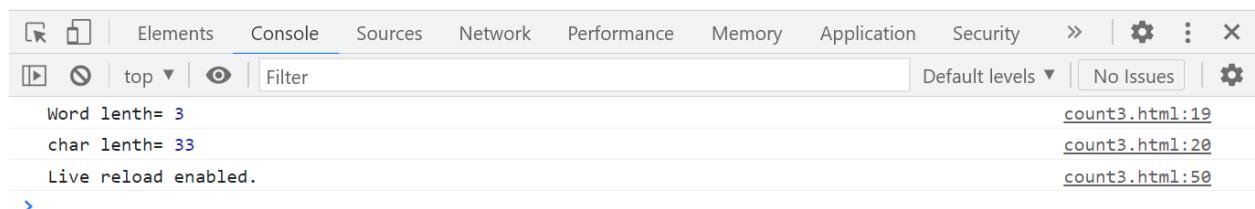
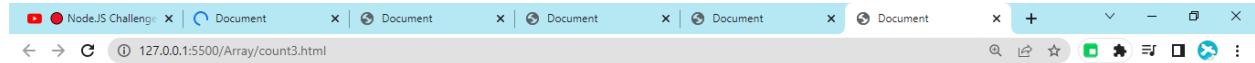
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
```

```

<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
</head>
<body>
<script>
    let str = "oscar career point", count = 0;
    str=str.trim();
    let space = ' ';
    let arr = str.split(" ");
    let arrn=arr.sort();
    let arrn1=arrn.join(" ");
    let arrn2=arrn1.trim();
    let arrn3=arrn2.split(" ");
    console.log("Word length=",arrn3.length);
    console.log("char length=", str.length);
</script>
</body>
</html>

```

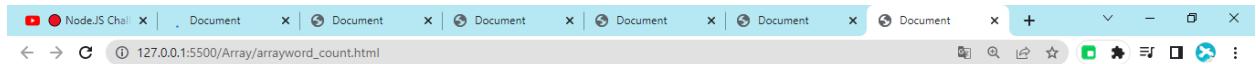
## Output



## Array word count-5

```
<!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>
</head>
<body>
    <h1>array char count</h1>
    <script>
        let str=" oscar      career      point",count=0;
        str=str.trim();
        let arr=str.split(" ");
        for(let i=0;i<arr.length;i++)
        {
            if(arr[i])
            {
                count++;
            }
        }
        console.log("Word=",count)
        console.log("Character length=",arr.length);
    </script>
</body>
</html>
```

## Output



## array char count

Word= 3  
Character length= 9  
Live reload enabled.

arrayword\_count.html:22  
arrayword\_count.html:23  
arrayword\_count.html:53



## String is palindrome or not

```
<!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>
</head>

<body>
    <h1>String palindrome or not</h1>
    <script>
        let str = prompt("Enter any string");
        let arr = str.split("");
        let arrrev = arr.reverse();
        let strrev = arrrev.join("");
        if (str == strrev) {
            console.log(str, "is palindrome");
        }
        else {

```

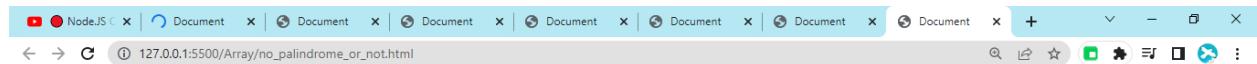
```

        console.log(str, "is not palindrome");
    }
</script>
</body>

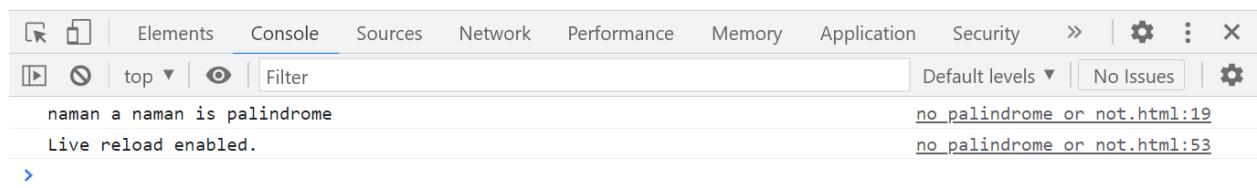
</html>

```

## Output



### String palindrome or not



### Word in ascending order with capital

```

<!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>
</head>

```

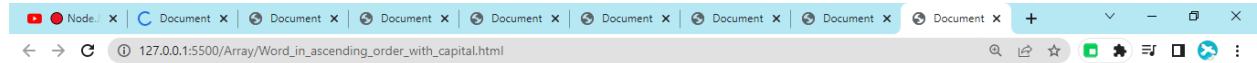
```

<body>
    <h1>Word in ascending order with capital output</h1>
    <script>
        let str = prompt("Enter any name");
        console.log(str);
        let strarr = str.split(" ");
        console.log(strarr);
        let asce = strarr.sort();
        console.log(asce);
        for(let i=0;i<asce.length;i++)
        {
            asce[i]=asce[i].charAt(0).toUpperCase() + asce[i].slice(1);
        }
        let str1 = asce.join(" ");
        console.log(str1);
    </script>
</body>

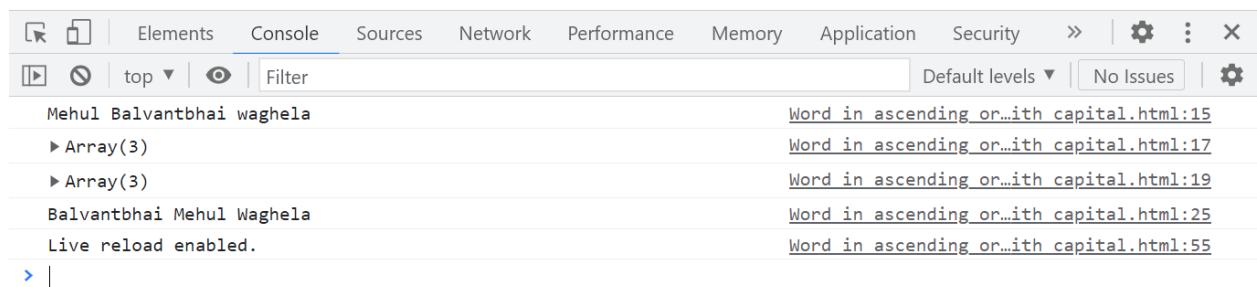
</html>

```

## Output



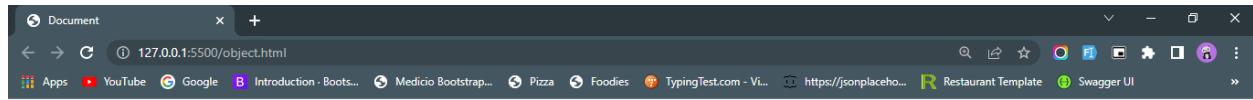
### Word in ascending order with capital output



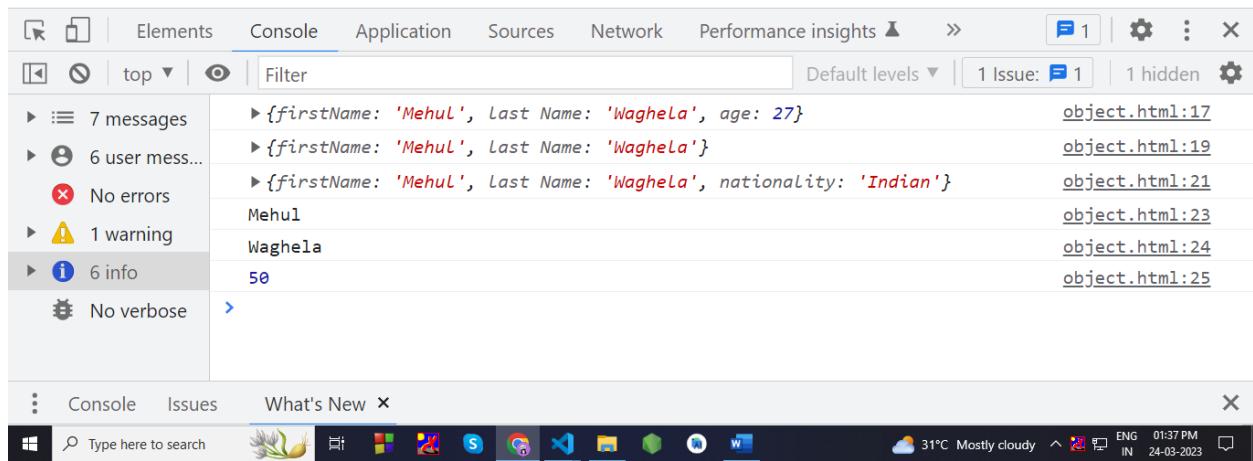
# Object

```
<!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>
</head>
<body>
    <h1>Object</h1>
    <script>
        let person={
            firstName:"Mehul",
            'last Name':"Waghela",
            age:27
        }
        console.log(person);
        delete person.age; /* delete perticular property */
        console.log(person);
        person.nationality="Indian"; /* add another property */
        console.log(person);
        person.age=50; /* modify object value */
        console.log(person.firstName); /* access property by first method porperty
name without space */
        console.log(person['last Name']); /* access property by second method if
space given in name[ ' ' ] */
        console.log(person.age);
    </script>
</body>
</html>
```

# Output



## Object

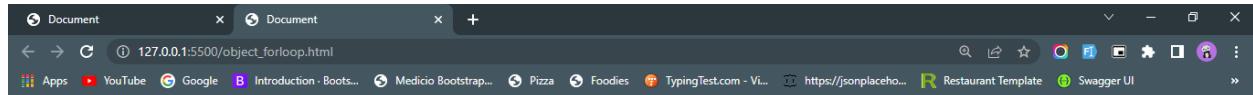


## Object for loop

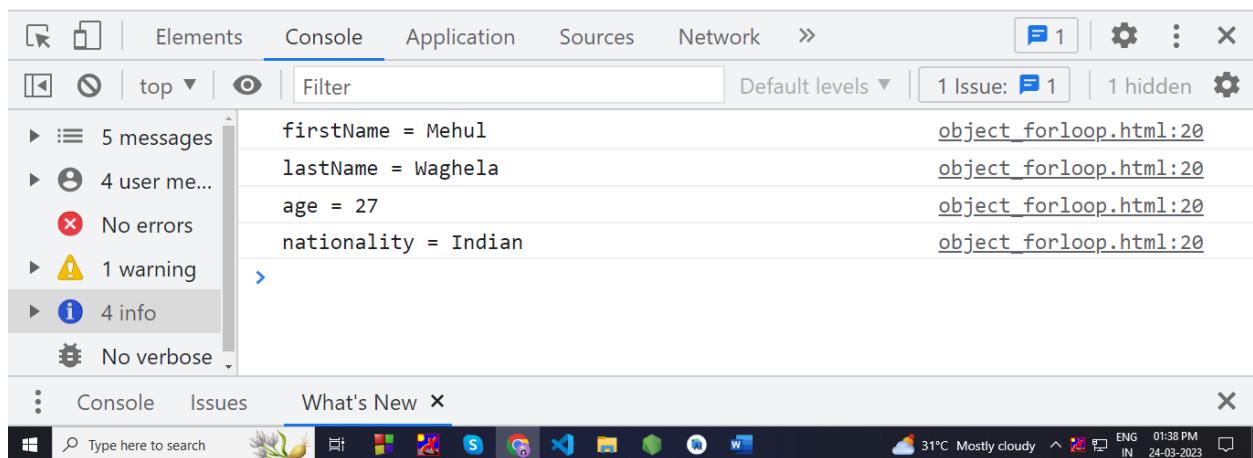
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <h1>Object for loop</h1>
    <script>
        let person={
            firstName:"Mehul",
            lastName:"Waghela",
            age: 27,
            nationality:"Indian"
        }
        for(let x in person)
        {
            console.log(`$x = ${person[x]}`); /* perosn.x aa method loop ma work nai kare */
        }
    </script>
```

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

## Output



## Object for loop



## Object Method

```
<!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>  
</head>  
  
<body>  
    <h1>Object method</h1>  
    <script>  
        let person = {  
            firstname: "Mehul",
```

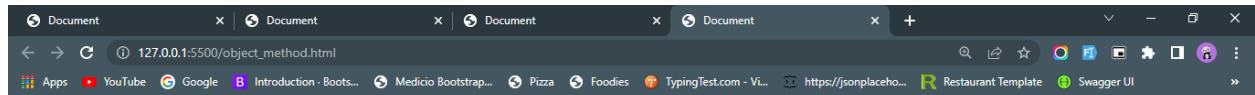
```
        lastname: "Waghela",
        age: 27
    }
//Method 1
person.sayHello = function () {
    console.log("Jay shree ram...!");
}
person.sayHello();
//Method 2
function show()
{
    console.log("Jay shree ram2...!");
}
person.sayHello1=show;
person.sayHello1();
//Method 3
let person1 = {
    firstname: "Mehul",
    lastname: "Waghela",
    age: 27,
    sayhello3:function()
    {
        console.log("Jay shree ram3...!");
    }
}
person1.sayhello3();
//Method 4
let person2 = {
    firstname: "Mehul",
    lastname: "Waghela",
    age: 27,
    sayhello4()
    {
        console.log("Jay shree ram3...!");
    }
}
person2.sayhello4();

</script>
<script src="math.js"></script>

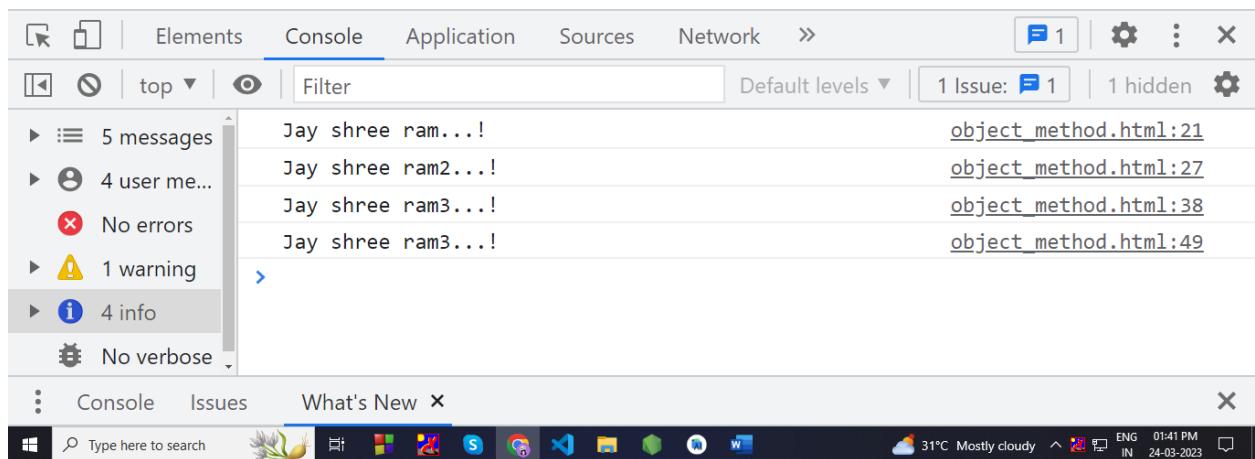
</body>

</html>
```

# Output



## Object method



## Object Math

```
//Pi ni value lavava mate
let piv=Math.PI;
console.log(piv);
/* E ni value print karva */
let unary=Math.E;
console.log(unary);
//roundoffkarva
let ro=Math.round(5.7); /* .5 athwa a karta vadhare hoy to upper value aape */
let ro1=Math.round(5.2); /* .5 karta ocha hoy to lower limit aave */
console.log(ro);
console.log(ro1);
let ro3=Math.ceil(5.2); /* koi pan point ma hoy to pan upper limit aape ceiling */
let ro4=Math.floor(5.2); /* koi pan point ma hoy to pan lower limit aape floor */
let ro5=Math.trunc(5.2); /* koi pan point ma hoy, point kadhi nakhse */
let ro6=Math.pow(2,5); /* 2 ni power 5 =32*/
let ro7=Math.sqrt(49); /* squareroot of 49 is 7 */
console.log(ro3);
console.log(ro4);
console.log(ro5);
```

```
console.log(ro6);
console.log(ro7);
```

## Output

The screenshot shows the Visual Studio Code interface with the title bar "math.js - Object - Visual Studio Code". The left sidebar has an "EXPLORER" view with several files listed under "OPEN EDITORS": "Welcome", "object\_method.html", "this\_object.html", "JS this\_object.js", "JS math.js" (which is currently selected), "object.html", and "object\_forloop.html". Below this, there's a section titled "OBJECT" containing "JS math.js", "object\_forloop.html", "JS object\_method.html", "JS object.html", and "JS this\_object.html". The main workspace shows a terminal window with the command "D:\Mehul Waghela\JAVA SCRIPT\Daily task\Object>node math.js" and its output:  
3.141592653589793  
2.718281828459045  
6  
5  
6  
5  
5  
32  
7

## Object method

```
<!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>
</head>

<body>
    <h1>Object make method</h1>
    <script>
```

```

//method 1
let person = {
    firstname: "Mehul",
    middlename: "Balvantbhai"
}
//method 2
let method2 = new Object();
method2.firstname = "pratik";
method2.lastname = "chasiya";
method2.fun1 = function () {
    console.log(50 + 100);
}
method2.fun1();
console.log(person)
console.log(method2)
</script>
</body>

</html>

```

## Output



### Object make method

Output	File	Line
150	newObject.html	24
▶ {firstname: 'Mehul', middlename: 'Balvantbhai'}	newObject.html	27
▶ {firstname: 'pratik', lastname: 'chasiya', fun1: f}	newObject.html	28



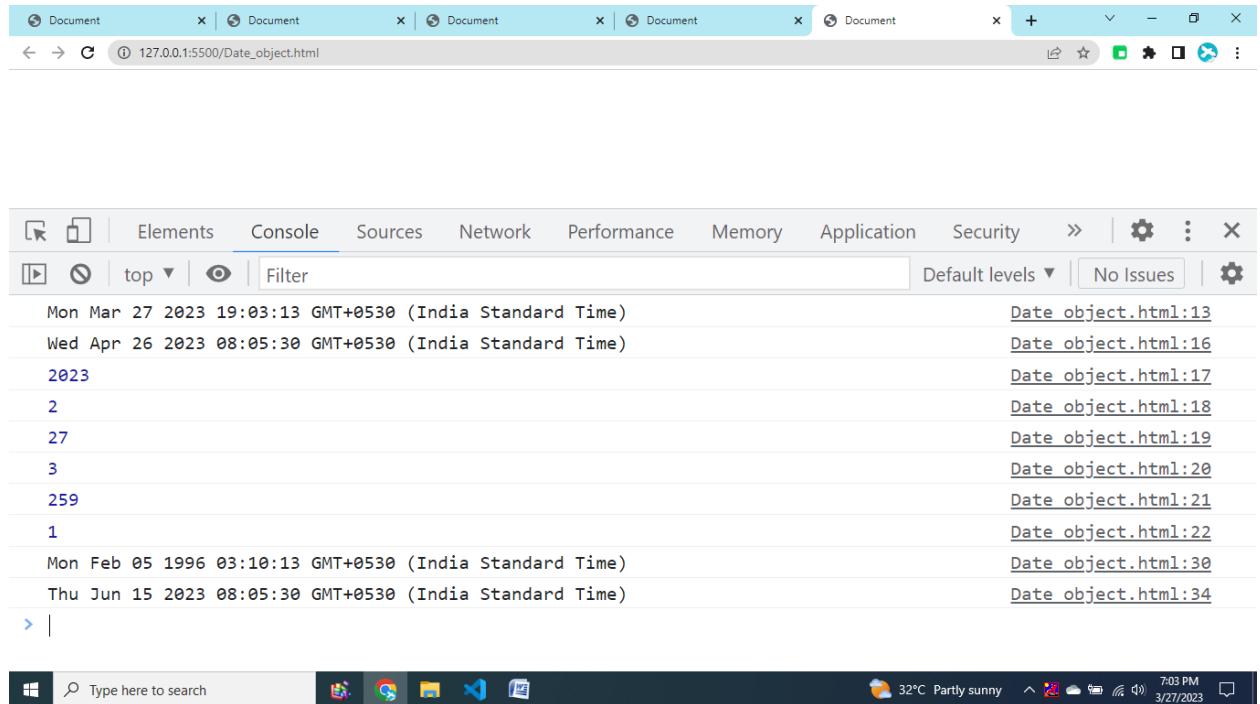
## Date object

```
<!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>
</head>
<body>
    <script>
        //Date() when blank it give output of current date
        let x=new Date();
        console.log(x);
        //we give 7 attribute// {year,month(index 0-
11),date,hour,minute,second,milisecond};
        let y=new Date(2023,3,26,8,5,30,32);
        console.log(y);
        console.log(x.getFullYear());/* give only year */
        console.log(x.getMonth());/* give month */
        console.log(x.getDate());/* give date */
        console.log(x.getMinutes());/* give Minute */
        console.log(x.getMilliseconds());/* give milisecond */
        console.log(x.getDay());/* give day from sun to sat (index 0-6) 0-sunday
*/
        let x1=x.setDate(5)//Date =5
        let x2=x.setMonth(1)//Feb according to index
        let x3=x.setFullYear(1996)//this is year
        let x4=x.setMilliseconds(200)//0-1000 second
        let x5=x.setMinutes(10)//minute =10
        let x6=x.setHours(3)//hour =3
        console.log(x);

        //if we want date after 50 day from Date of y
        let y1=y.setDate((y.getDate() + 50));
        console.log(y);

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

# Output



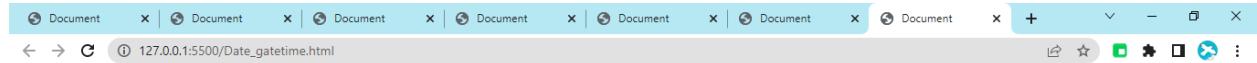
## Gate time Date object

```
<!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>
</head>
<body>
    <h1>Get time</h1>
    <script>
        let x=new Date();/* get time give output in mili second */
        let y=new Date("sep 12 1996"); //1000 mili second= 1sec,60
second=1minute,60 minute=1 hour,24 hour day devide this give output in day
        let xTime=Math.trunc(x.getTime()/(1000*60*60*24));//From 1 jan 1970(this
is reference date) to today
        let yTime=Math.trunc(y.getTime()/(1000*60*60*24));//From 1 jan 1970(this
is reference date) to sep 12 1996
        let day=xTime - yTime;
```

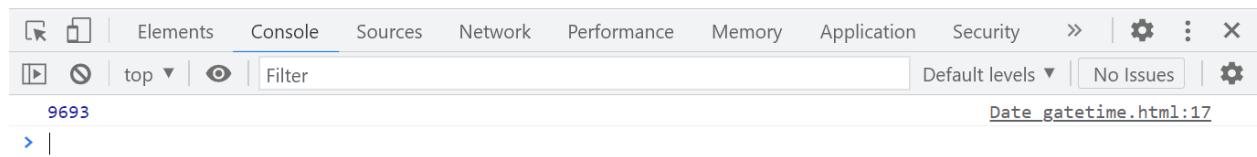
```
console.log(day);

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

## Output



### Get time



## Hex code

```
<!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>
        section {
            width: 200px;
            background-color: bisque;
            margin: 150px auto;
            padding: 50px;
```

```

        text-align: center;
        border: 1px solid black;
    }
</style>
</head>

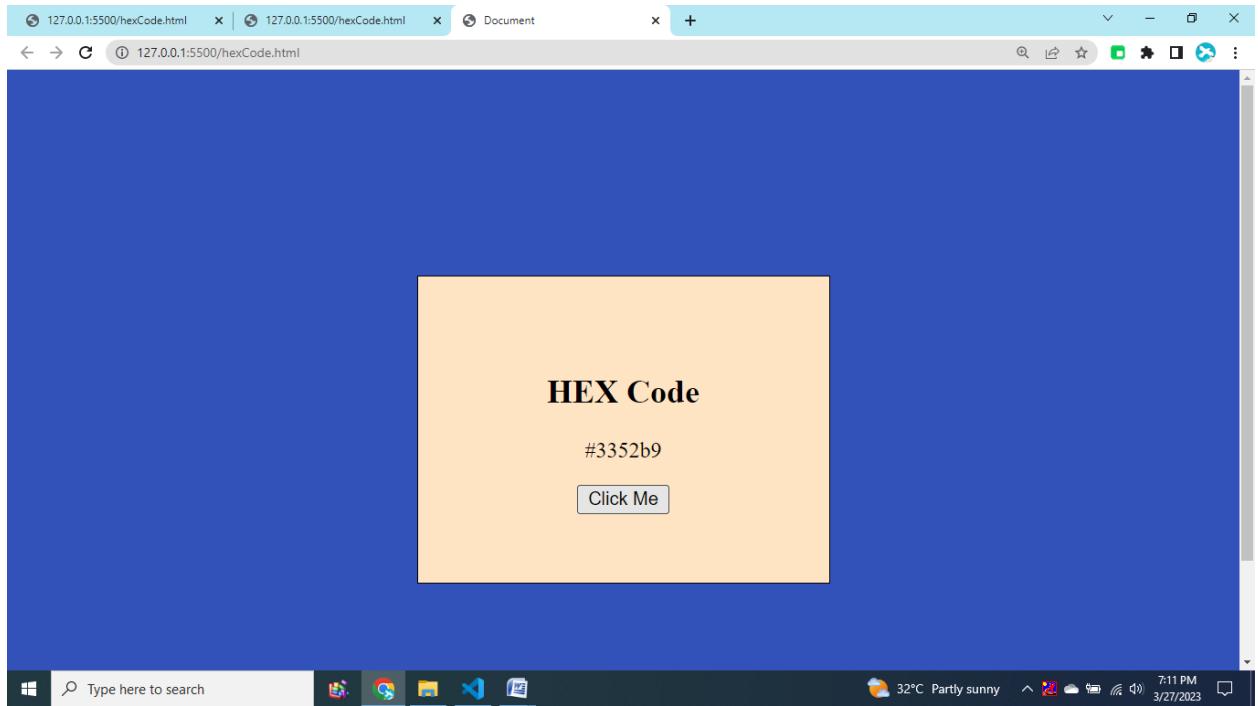
<body>
<section>
    <h1>HEX Code</h1>
    <p id="main"></p>
    <button onclick="hex()">Click Me</button>
</section>
<script>
    function hex() {
        let arr = [1, 2, 3, 4, 5, 6, 7, 8, 9, "a", "b", "c", "d", "e", "f"];
        let code = "#";
        for (let i = 0; i < 6; i++) {
            let r = Math.trunc(Math.random() * arr.length);
            //math.random give no from 0 to 0.99 and after multiply by
arr.length give 0 to 14
            code += arr[r];//from this random index number we can get random
no from that arr element and hex code is 6 letter therefore loop run from 0 to 6
        }
        let p=document.getElementById("main");
        p.innerHTML=code
        document.body.style.backgroundColor=code;
    }

</script>
</body>

</html>

```

## Output



## Constructor object

```
<!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>
</head>

<body>
    <h1>Object Constructor</h1>
    <script>
        //Object=>constructor function is use when key is same but value is
        different for multiple object
        function Student(fn, ln, age, id) {
            this.firstName = fn;
            this.lastName = ln;
            this.age = age;
            this.id = id;
            this.show = function () {
                return this.firstName + " " + this.lastName;
            }
        }
    </script>
</body>

```

```

        }
    }
let student1 = new Student("Mehul", "waghela", "25", "1");
let student2 = new Student("pratik", "chasiya", "30", "2");
let student3 = new Student("Darshan", "patel", "35", "3");
//prototype is use when we want to add another property from outside of
object constructor
Student.prototype.nationality = "Indian";
//add object method from outside of function
Student.prototype.upper = function() {
    let x="My name is mehul waghela";
    return x;
}
//if we want only one extra prototype in particular object
student1.award="Oscar Award";
console.log(student1);
//Output=>Student {firstName: 'Mehul', lastName: 'waghela', age: '25',
id: '1', show: f, ...}
    console.log(student1.show()); /* call function to join firstname and
lastname */
    //Output=>Mehul waghela
    console.log(student1.upper());
    //Output=>My name is mehul waghela
    console.log(student2);
    //Output=>Student {firstName: 'pratik', lastName: 'chasiya', age: '30',
id: '2', show: f}
    console.log(student3);
    //Output=>Student {firstName: 'Darshan', lastName: 'patel', age: '35',
id: '3', show: f}
</script>
</body>

</html>
```

## Nested object

```

<!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>
</head>

<body>
    <h1>Nested Array</h1>
    <script>
        let person = {
            firstName: "Mehul",
            lastName: "Waghela",
            address: {
                House_no: 71,
                society: "Deepnagar society",
                contact: {
                    mono: 6355173787,
                    telno: 2621238349,
                },
            },
        }
        console.log(person);

        //Access nested array element
        console.log(person.address.contact.telno);
        //Output=>2621238349

    </script>
</body>

</html>

```

## Hoisting and use strict

```

<!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>
</head>

<body>

```

```
<h1>Hoisting</h1>
<!-- Hoisting is work with only var not with let
    Hoisting means if we console x before it is define then it is hoist var x;
declaration above that console
    But it can not hoist value means var x=7; not it is hoist only hoist var x; --
->
    <!-- if some time we not define variable like let or var but we can use it is
due to javascript libralization
        if we write ======="use strict" in script then we have to compulsary
follow this javascript rules
        if not follow then give error -->
<script>
    "use strict"
    //=====use strict=====/* this is use for
javascript run according to rules and regulation */
    // write in starting of line

    x = 7;
    console.log(x);
    var x;

    //Output=7

    // y = 8;
    // console.log(y);
    // let y;
    //Output=>Uncaught ReferenceError: Cannot access 'y' before
initialization

    // z=10;
    // console.log(z);
    //Output=>10; /* javasscript automatically recognize z as a variable */

    //biji badhi language ma pela function define karvu pade pachij call thay
java call pela kare to pan chalse
    show();
    function show()
    {
        console.log("mehul");
    }
</script>
</body>

</html>
```

# Main Object task

```
<!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>
</head>

<body>
  <h1>Main object task</h1>
  <script>
    let main ={
      "200_Painting_area": 11205.55,
      "201_Anodes": 29.98,
      "202_Beam": 46.58,
      "203_Boat_Landing_Fenders_Rub_Strips": 5.97,
      "204_Diaphragm_Closures": 1.03,
      "205_Fasteners": 0.54,
      "206_Fittings_CS_LTCS": 0.0,
      "207_Flanges_CS_LTCS": 0.0,
      "208_Flooding_GROUTING_Valves_Fittings": 0.61,
      "209_Gaskets": 0.02,
      "210_Gratings_&_Stair_Treads": 10.44,
      "211_GROUT_PACKERS_GROUT_seal_Pile_Wiper": 0.57,
      "212_Heat_Shrink_Sleeves": 0.0,
      "213_Jacket_Installation_Aids_&_Sea_Fastening": 1.47,
      "214_Monel_Sheet": 3.76,
      "215_Plate": 98.66,
      "216_Rigging_Consumables": 0.11,
      "217_Security_Fencing_Helideck_Netting": 1.94,
      "218_Shapes": 14.04,
      "219_Tubular": 1458.39,
      "220_Saw_Tubulars": 1277.18,
      "221_Seamless_tubulars": 160.19,
      "222_Installation_Aids_including_seafastening": 120.34,
      "223_E&I_Bulks_and_Tagged": 1.0,
      "224_Jacket_Mhrs": 81098.0,
      "225_Piles_Mhrs": 4330.06,
      "226_Conductors_Manhours": 7000.51,
      "227_Boatlanding_Mhrs": 32729.72,
      "228_Barge_Bumper_Mhrs": 1479.51,
    }
  </script>
</body>
```

```
"229_Installation_aids": 6587.02,
"230_Engineering_manhours": 3653.5,
"231_MWB_Infield_Duration": 6.48,
"233_Infield_Duration": 10.83,
"200_Painting_area_lower": 10160.71,
"201_Anodes_lower": 28.12,
"202_Beam_lower": 46.43,
"203_Boat_Landing_Fenders_Rub_Strips_lower": 5.21,
"204_Diaphragm_Closures_lower": 0.0,
"205_Fasteners_lower": 0.54,
"206_Fittings_CS_LTCS_lower": 0.0,
"207_Flanges_CS_LTCS_lower": 0.0,
"208_Flooding_GROUTING_Valves_Fittings_lower": 0.0,
"209_Gaskets_lower": 0.01,
"210_Gratings_&_Stair_Treads_lower": 8.26,
"211_GROUT_Packers_GROUT_seal_Pile_Wiper_lower": 0.0,
"212_Heat_Shrink_Sleeves_lower": 0.0,
"213_Jacket_Installation_Aids_&_Sea_Fastening_lower": 1.45,
"214_Monel_Sheet_lower": 3.7,
"215_Plate_lower": 86.57,
"216_Rigging_Consumables_lower": 0.08,
"217_Security_Fencing_Helideck_Netting_lower": 0.0,
"218_Shapes_lower": 12.22,
"219_Tubular_lower": 1371.39,
"220_Saw_Tubulars_lower": 1057.81,
"221_Seamless_tubulars_lower": 143.01,
"222_Installation_Aids_including_seafastening_lower": 39.68,
"223_E&I_Bulks_and_Tagged_lower": 1.0,
"224_Jacket_Mhrs_lower": 77095.67,
"225_Piles_Mhrs_lower": 3976.81,
"226_Conductors_Manhours_lower": 6260.0,
"227_Boatlanding_Mhrs_lower": 31767.97,
"228_Barge_Bumper_Mhrs_lower": 713.3,
"229_Installation_aids_lower": 5907.5,
"230_Engineering_manhours_lower": 2276.0,
"231_MWB_Infield_Duration_lower": 5.29,
"233_Infield_Duration_lower": 7.95,
"200_Painting_area_upper": 11750.6,
"201_Anodes_upper": 44.56,
"202_Beam_upper": 46.89,
"203_Boat_Landing_Fenders_Rub_Strips_upper": 6.03,
"204_Diaphragm_Closures_upper": 1.94,
"205_Fasteners_upper": 0.64,
"206_Fittings_CS_LTCS_upper": 0.0,
"207_Flanges_CS_LTCS_upper": 0.0,
```

```
"208_Flooding_GROUTING_Valves_Fittings_upper": 0.9,
"209_Gaskets_upper": 0.09,
"210_Gratings_&_Stair_Treads_upper": 12.63,
"211_GROUT_Packers_GROUT_seal_Pile_Wiper_upper": 2.31,
"212_Heat_Shrink_Sleeves_upper": 0.01,
"213_Jacket_Installation_Aids_&_Sea_Fastening_upper": 1.48,
"214_Monel_Sheet_upper": 3.76,
"215_Plate_upper": 208.38,
"216_Rigging_Consumables_upper": 0.12,
"217_Security_Fencing_Helideck_Netting_upper": 2.15,
"218_Shapes_upper": 14.39,
"219_Tubular_upper": 1564.1,
"220_Saw_Tubulars_upper": 1409.28,
"221_Seamless_tubulars_upper": 166.09,
"222_Installation_Aids_including_seafastening_upper": 250.13,
"223_E&I_Bulks_and_Tagged_upper": 1.0,
"224_Jacket_Mhrs_upper": 99770.07,
"225_Piles_Mhrs_upper": 4454.0,
"226_Conductors_Manhours_upper": 9718.42,
"227_Boatlanding_Mhrs_upper": 33379.03,
"228_Barge_Bumper_Mhrs_upper": 1543.0,
"229_Installation_aids_upper": 10017.37,
"230_Engineering_manhours_upper": 5016.0,
"231_MWB_Infield_Duration_upper": 8.8,
"233_Infield_Duration_upper": 12.0,
"232_OTHERS_Infield_Duration": "",
"232_OTHERS_Infield_Duration_upper": "",
"232_OTHERS_Infield_Duration_lower": "",
"124_Avg_Leg_Length_pred": 43.9411810099,
"125_Avg_dia_of_Jacket_Legs_pred": 48.0,
"126_Avg_thk_of_Jacket_Legs_pred": 1.125403525,
"127_Avg_dia_of_Jacket_Braces_pred": 19.3948836931,
"128_Avg_thk_of_Jacket_Braces_pred": 0.7080480789,
"129_Mudmat_weight_pred": 55.9826890533,
"130_Mudmat_area_pred": 259.23079,
"134_Weight_of_Risers_pred": 0.0,
"141_Weight_of_J_Tubes_pred": 14.5061838938,
"151_No_of_Pile_Sections_pred": 3.0,
"152_Weight_of_Chaser_Piles_pred": 0.0,
"153_Weight_of_Piles_pred": 450.716837334,
"160_No_of_Conductor_Sections_KM_pred": 1.0,
"164_Weight_of_Conductors_pred": 359.2854822432,
"170_Weight_of_Boatlanding_pred": 209.2133588,
"172_Weight_of_Barge_Bumper_pred": 12.33314495,
"124_Avg_Leg_Length_pred_lower": 42.4035909794,
```

```
"125_Avg_dia_of_Jacket_Legs_pred_lower": 48.0,
"126_Avg_thk_of_Jacket_Legs_pred_lower": 1.0521310101,
"127_Avg_dia_of_Jacket_Braces_pred_lower": 18.3881374322,
"128_Avg_thk_of_Jacket_Braces_pred_lower": 0.679249669,
"129_Mudmat_weight_pred_lower": 55.28624747,
"130_Mudmat_area_pred_lower": 259.23079,
"134_Weight_of_Risers_pred_lower": 0.0,
"141_Weight_of_J_Tubes_pred_lower": 9.579776164,
"151_No_of_Pile_Sections_pred_lower": 3.0,
"152_Weight_of_Chaser_Piles_pred_lower": 0.0,
"153_Weight_of_Piles_pred_lower": 444.3080678,
"160_No_of_Conductor_Sections_KM_pred_lower": 1.0,
"164_Weight_of_Conductors_pred_lower": 299.5182223301,
"170_Weight_of_Boatlanding_pred_lower": 209.2133588,
"172_Weight_of_Barge_Bumper_pred_lower": 12.33314495,
"124_Avg_Leg_Length_pred_upper": 45.4787710404,
"125_Avg_dia_of_Jacket_Legs_pred_upper": 48.0,
"126_Avg_thk_of_Jacket_Legs_pred_upper": 1.156548268,
"127_Avg_dia_of_Jacket_Braces_pred_upper": 20.4016299539,
"128_Avg_thk_of_Jacket_Braces_pred_upper": 0.720588177,
"129_Mudmat_weight_pred_upper": 62.90476806,
"130_Mudmat_area_pred_upper": 259.23079,
"134_Weight_of_Risers_pred_upper": 0.0,
"141_Weight_of_J_Tubes_pred_upper": 15.85931983,
"151_No_of_Pile_Sections_pred_upper": 3.0,
"152_Weight_of_Chaser_Piles_pred_upper": 0.0,
"153_Weight_of_Piles_pred_upper": 478.555005295,
"160_No_of_Conductor_Sections_KM_pred_upper": 1.0,
"164_Weight_of_Conductors_pred_upper": 419.0527421562,
"170_Weight_of_Boatlanding_pred_upper": 209.2133588,
"172_Weight_of_Barge_Bumper_pred_upper": 12.33314495,
"Weight_105_Number_of_jackets_in_the_project": "LOW",
"Weight_107_Field": "HIGH",
"Weight_108_Service": "HIGH",
"Weight_109_Type": "HIGH",
"Weight_110_Electrified": "MEDIUM",
"Weight_111_Project_duration": "LOW",
"Weight_112_Water_Depth": "HIGH",
"Weight_113_No_of_Bays": "MEDIUM",
"Weight_114_No_of_Legs": "MEDIUM",
"Weight_115_No_of_Dummy_Legs": "LOW",
"Weight_116_No_of_Well_Slots": "HIGH",
"Weight_117_Fully_painted": "LOW",
"Weight_118_Painting_below_splash_zone": "LOW",
"Weight_119_Above_Splash_Zone_Elevation": "LOW",
```

```
"Weight_120_Below_Splash_Zone_Elevation": "LOW",
"Weight_121_Loadout_Method": "LOW",
"Weight_122_Installation_Method": "LOW",
"Weight_123_Fabrication_location": "LOW",
"Weight_124_Avg_Leg_Length_pred": "MEDIUM",
"Weight_125_Avg_dia_of_Jacket_Legs_pred": "HIGH",
"Weight_126_Avg_thk_of_Jacket_Legs_pred": "MEDIUM",
"Weight_127_Avg_dia_of_Jacket_Braces_pred": "MEDIUM",
"Weight_128_Avg_thk_of_Jacket_Braces_pred": "MEDIUM",
"Weight_129_Mudmat_weight_pred": "HIGH",
"Weight_130_Mudmat_area_pred": "HIGH",
"Weight_131_Weight_of_Jacket": "HIGH",
"Weight_132_No_of_Risers": "LOW",
"Weight_133_Avg_dia_of_Risers_inch": "LOW",
"Weight_134_Weight_of_Risers_pred": "LOW",
"Weight_135_Risers_Location": "LOW",
"Weight_136_Riser_Guard": "LOW",
"Weight_137_No_of_Riser_Clamps": "LOW",
"Weight_138_ICCP JTUBES": "LOW",
"Weight_139_No_of_J_Tubes": "LOW",
"Weight_140_Avg_dia_of_J_Tubes": "LOW",
"Weight_141_Weight_of_J_Tubes_pred": "MEDIUM",
"Weight_142_J_Tubes_Location": "LOW",
"Weight_143_J_Tubes_Location": "LOW",
"Weight_144_No_of_J_Tube_Clamps": "LOW",
"Weight_145_Target_penetration": "MEDIUM",
"Weight_146_Type_of_pile_Main": "LOW",
"Weight_147_Method_of_Piling": "LOW",
"Weight_148_No_of_Piles": "LOW",
"Weight_149_Avg_dia_of_Piles": "LOW",
"Weight_150_Avg_thk_of_Jacket_Piles": "MEDIUM",
"Weight_151_No_of_Pile_Sections_pred": "LOW",
"Weight_152_Weight_of_Chaser_Piles_pred": "LOW",
"Weight_153_Weight_of_Piles_pred": "HIGH",
"Weight_154_Weight_of_Insurance_Piles_KM": "LOW",
"Weight_155_Weight_of_Insert_Piles_KM": "LOW",
"Weight_156_Conductor_penetration": "LOW",
"Weight_157_No_of_Conductors_KM": "LOW",
"Weight_158_Avg_dia_of_Conductors": "LOW",
"Weight_159_Avg_thk_of_Conductors_KM": "LOW",
"Weight_160_No_of_Conductor_Sections_KM_pred": "LOW",
"Weight_161_No_of_Curved_Conductor": "LOW",
"Weight_162_No_of_Straight_Conductor": "LOW",
"Weight_163_No_of_Pre_Installed_Conductor": "LOW",
"Weight_164_Weight_of_Conductors_pred": "MEDIUM",
```

```
"Weight_165_No_of_full_Boatlanding": "LOW",
"Weight_166_No_of_half_Boatlanding_DELETE": "LOW",
"Weight_167_Avg_Width_of_Boatlanding": "LOW",
"Weight_168_Type_of_boatlanding": "LOW",
"Weight_169_Avg_No_of_Connections_to_Jkt_for_Boatlanding": "LOW",
"Weight_170_Weight_of_Boatlanding_pred": "HIGH",
"Weight_171_No_of_Barge_Bumper": "LOW",
"Weight_172_Weight_of_Barge_Bumper_pred": "MEDIUM",
"Weight_173_Type_of_barge_bumper": "LOW",
"Weight_174_Average_Number_of_Connections_to_Jacket_for_the_Barge_bumper": "LOW",
"Weight_175_Average_length_of_Barge_Bumper_in_Mtrs": "LOW",
"Weight_175_Average_Width_of_Barge_Bumper_in_Mtrs": "LOW",
"Weight_200_Painting_area": "MEDIUM",
"Weight_201_Anodes": "MEDIUM",
"Weight_202_Beam": "LOW",
"Weight_203_Boat_Landing_Fenders_Rub_Strips": "LOW",
"Weight_204_Diaphragm_Closures": "LOW",
"Weight_205_Fasteners": "LOW",
"Weight_206_Fittings_CS_LTCS": "LOW",
"Weight_207_Flanges_CS_LTCS": "LOW",
"Weight_208_Flooding_GROUTING_Valves_Fittings": "LOW",
"Weight_209_Gaskets": "LOW",
"Weight_210_Gratings_&_Stair_Treads": "LOW",
"Weight_211_GROUT_Packers_GROUT_seal_Pile_Wiper": "LOW",
"Weight_212_Heat_Shink_Sleeves": "LOW",
"Weight_213_Jacket_Installation_Aids_&_Sea_Fastening": "LOW",
"Weight_214_Monel_Sheet": "MEDIUM",
"Weight_215_Plate": "MEDIUM",
"Weight_216_Rigging_Consumables": "LOW",
"Weight_217_Security_Fencing_Helideck_Netting": "LOW",
"Weight_218_Shapes": "LOW",
"Weight_219_Tubular": "MEDIUM",
"Weight_220_Saw_Tubulars": "HIGH",
"Weight_221_Seamless_tubulars": "MEDIUM",
"Weight_222_Installation_Aids_including_seafastening": "MEDIUM",
"Weight_223_E&I_Bulks_and_Tagged": "LOW",
"Weight_224_Jacket_Mhrs": "HIGH",
"Weight_225_Piles_Mhrs": "MEDIUM",
"Weight_226_Conductors_Manhours": "MEDIUM",
"Weight_227_Boatlanding_Mhrs": "HIGH",
"Weight_228_Barge_Bumper_Mhrs": "LOW",
"Weight_229_Installation_aids": "MEDIUM",
"Weight_230_Engineering_manhours": "MEDIUM",
"Weight_231_MWB_Infield_Duration": "HIGH",
```

```
"Weight_232_OTHERS_Infield_Duration": "LOW",
"Weight_233_Infield_Duration": "MEDIUM",
"1_100_Bid_Number": 7088,
"1_101_Project_Name": "13 Jackets",
"1_102_Contract_No": "BI-10-02016 & BI-01263",
"1_103_Year": 2018,
"1_104_Client": "Aramco",
"1_105_Number_of_jackets_in_the_project": 13,
"1_106_Facility_Structure_Name": "ZULF 2010\\\\/-2019 WI",
"1_107_Field": "Zulf",
"1_108_Service": "Water injection",
"1_109_Type": "STD",
"1_110_Electrified": "YES",
"1_111_Project_duration": 14,
"1_112_Water_Depth": 36,
"1_113_No_of_Bays": 3,
"1_114_No_of_Legs": 4,
"1_115_No_of_Dummy_Legs": 0,
"1_116_No_of_Well_Slots": 12,
"1_117_Fully_painted": "Partial",
"1_118_Painting_below_splash_zone": "NO",
"1_119_Above_Splash_Zone_Elevation": 7.01,
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"1_135_Risers_Location": 0,
"1_136_Riser_Guard": "45 & 65",
"1_137_No_of_Riser_Clamps": "Main Pile",
"1_138_ICCP JTUBES": "Hammer",
"1_139_No_of_J_Tubes": 4,
"1_140_Avg_dia_of_J_Tubes": 42,
"1_141_Weight_of_J_Tubes_pred": 38,
"1_142_J_Tubes_Location": 52.62966165,
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"1_143_J_Tubes_Location": 278.5170252,
"1_144_No_of_J_Tube_Clamps": 17,
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"1_146_Type_of_pile": 32,
"1_147_Method_of_Piling": 25.4,
"1_148_No_of_Piles": 0,
"1_149_Avg_dia_of_Piles": 10,
"1_150_Avg_thk_of_Jacket_Piles": 0,
"1_151_No_of_Pile_Sections_pred": 2,
"1_152_Weight_of_Chaser_Piles_pred": 1,
"1_153_Weight_of_Piles_pred": 16.70666667,
"1_154_Weight_of_Insurance_Piles_KM": "U-SHAPE",
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"1_156_Conductor_penetration": 2,
"1_157_No_of_Conductors_KM": "Fender w\o Shockcell",
"1_158_Avg_dia_of_Conductors": 4,
"1_159_Avg_thk_of_Conductors_KM": 1,
"1_160_No_of_Conductor_Sections_KM_pred": 10.7,
"1_161_No_of_Curved_Conductor": 43.94118101,
"1_162_No_of_Straight_Conductor": 48,
"1_163_No_of_Pre_Installted_Conductor": 1.125403525,
"1_164_Weight_of_Conductors_pred": 19.39488369,
"1_165_No_of_full_Boatlanding": 0.708048079,
"1_166_No_of_half_Boatlanding_DELETE": 55.98268905,
"1_167_Avg_Width_of_Boatlanding": 259.23079,
"1_168_Type_of_boatlanding": 0,
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"1_202_Beam": 46.58,
"1_203_Boat_Landing_Fenders_Rub_Strips": 5.97,
"1_204_Diaphragm_Closures": 1.03,
"1_205_Fasteners": 0.54,
"1_206_Fittings_CS_LTCS": 0.0,
"1_207_Flanges_CS_LTCS": 0.0,
"1_208_Flooding_GROUTING_Valves_Fittings": 0.61,
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"1_217_Security_Fencing_Helideck_Netting": 1.94,
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"1_220_Saw_Tubulars": 1277.18,
"1_221_Seamless_tubulars": 160.19,
"1_222_Installation_Aids_including_seafastening": 120.34,
"1_223_E&I_Bulks_and_Tagged": 1.0,
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"1_225_Piles_Mhrs": 4330.06,
"1_226_Conductors_Manhours": 7000.51,
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"2_107_Field": "Zulf",
"2_108_Service": "Water injection",
"2_109_Type": "STD",
"2_110_Electrified": "YES",
"2_111_Project_duration": 14,
"2_112_Water_Depth": 36,
"2_113_No_of_Bays": 3,
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"2_115_No_of_Dummy_Legs": 0,
"2_116_No_of_Well_Slots": 12,
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"2_122_Installation_Method": "Vertical",
"2_123_Fabrication_location": "Dubai",
"2_124_Avg_Leg_Length_pred": 628.8437434,
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"2_127_Avg_dia_of_Jacket_Braces_pred": "inside",
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"2_129_Mudmat_weight_pred": 0,
"2_130_Mudmat_area_pred": "YES",
"2_131_Weight_of_Jacket": 3,
"2_132_No_of_Risers": 11.375,
"2_133_Avg_dia_of_Risers_inch": 1,
"2_134_Weight_of_Risers_pred": 2,
"2_135_Risers_Location": 0,
"2_136_Riser_Guard": "45 & 65",
"2_137_No_of_Riser_Clamps": "Main Pile",
"2_138_ICCP JTUBES": "Hammer",
"2_139_No_of_J_Tubes": 4,
"2_140_Avg_dia_of_J_Tubes": 42,
"2_141_Weight_of_J_Tubes_pred": 38,
"2_142_J_Tubes_Location": 52.62966165,
"2_143_J_Tubes_Location": 278.5170252,
"2_144_No_of_J_Tube_Clamps": 17,
"2_145_Target_penetration": 10,
"2_146_Type_of_pile": 32,
"2_147_Method_of_Piling": 25.4,
"2_148_No_of_Piles": 0,
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"2_150_Avg_thk_of_Jacket_Piles": 0,
"2_151_No_of_Pile_Sections_pred": 2,
"2_152_Weight_of_Chaser_Piles_pred": 1,
"2_153_Weight_of_Piles_pred": 16.70666667,
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"2_155_Weight_of_Insert_Piles_KM": 14,
"2_156_Conductor_penetration": 2,
"2_157_No_of_Conductors_KM": "Fender w/o Shockcell",
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"2_160_No_of_Conductor_Sections_KM_pred": 10.7,
"2_161_No_of_Curved_Conductor": 43.94118101,
"2_162_No_of_Straight_Conductor": 48,
"2_163_No_of_Pre_Installted_Conductor": 1.125403525,
"2_164_Weight_of_Conductors_pred": 19.39488369,
"2_165_No_of_full_Boatlanding": 0.708048079,
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"2_166_No_of_half_Boatlanding_DELETE": 55.98268905,
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"2_169_Avg_No_of_Connections_to_Jkt_for_Boatlanding": 14.50618389,
"2_170_Weight_of_Boatlanding_pred": 3,
"2_171_No_of_Barge_Bumper": 0,
"2_172_Weight_of_Barge_Bumper_pred": 450.7168373,
"2_173_Type_of_barge_bumper": 1,
"2_174_Average_Number_of_Connections_to_Jacket_for_the_Barge_bumper": 359.2854822,
"2_175_Average_length_of_Barge_Bumper_in_Mtrs": 209.21,
"2_175_Average_Width_of_Barge_Bumper_in_Mtrs": 12.33,
"2_200_Painting_area": 11205.55,
"2_201_Anodes": 29.98,
"2_202_Beam": 46.58,
"2_203_Boat_Landing_Fenders_Rub_Strips": 5.97,
"2_204_Diaphragm_Closures": 1.03,
"2_205_Fasteners": 0.54,
"2_206_Fittings_CS_LTCS": 0.0,
"2_207_Flanges_CS_LTCS": 0.0,
"2_208_Flooding_GROUTING_Valves_Fittings": 0.61,
"2_209_Gaskets": 0.02,
"2_210_Gratings_&_Stair_Treads": 10.44,
"2_211_GROUT_GROUT_Packers_GROUT_seal_Pile_Wiper": 0.57,
"2_212_Heat_Shrink_Sleeves": 0.0,
"2_213_Jacket_Installation_Aids_&_Sea_Fastening": 1.47,
"2_214_Monel_Sheet": 3.76,
"2_215_Plate": 98.66,
"2_216_Rigging_Consumables": 0.11,
"2_217_Security_Fencing_Helideck_Netting": 1.94,
"2_218_Shapes": 14.04,
"2_219_Tubular": 1458.39,
"2_220_Saw_Tubulars": 1277.18,
"2_221_Seamless_tubulars": 160.19,
"2_222_Installation_Aids_including_seafastening": 120.34,
"2_223_E&I_Bulks_and_Tagged": 1.0,
"2_224_Jacket_Mhrs": 81098.0,
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"2_227_Boatlanding_Mhrs": 32729.72,
"2_228_Barge_Bumper_Mhrs": 1479.51,
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"3_102_Contract_No": "BI-10-02016 & BI-01263",
"3_103_Year": 2018,
"3_104_Client": "Aramco",
"3_105_Number_of_jackets_in_the_project": 13,
"3_106_Facility_Structure_Name": "ZULF 2010\\\\/-2019 WI",
"3_107_Field": "Zulf",
"3_108_Service": "Water injection",
"3_109_Type": "STD",
"3_110_Electrified": "YES",
"3_111_Project_duration": 14,
"3_112_Water_Depth": 36,
"3_113_No_of_Bays": 3,
"3_114_No_of_Legs": 4,
"3_115_No_of_Dummy_Legs": 0,
"3_116_No_of_Well_Slots": 12,
"3_117_Fully_painted": "Partial",
"3_118_Painting_below_splash_zone": "NO",
"3_119_Above_Splash_Zone_Elevation": 7.01,
"3_120_Below_Splash_Zone_Elevation": 36,
"3_121_Loadout_Method": "Trailer",
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"3_123_Fabrication_location": "Dubai",
"3_124_Avg_Leg_Length_pred": 628.8437434,
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"3_129_Mudmat_weight_pred": 0,
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"3_132_No_of_Risers": 11.375,
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"3_134_Weight_of_Risers_pred": 2,
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"3_139_No_of_J_Tubes": 4,
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"3_141_Weight_of_J_Tubes_pred": 38,
"3_142_J_Tubes_Location": 52.62966165,
"3_143_J_Tubes_Location": 278.5170252,
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"3_144_No_of_J_Tube_Clamps": 17,
"3_145_Target_penetration": 10,
"3_146_Type_of_pile": 32,
"3_147_Method_of_Piling": 25.4,
"3_148_No_of_Piles": 0,
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"3_160_No_of_Conductor_Sections_KM_pred": 10.7,
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"3_162_No_of_Straight_Conductor": 48,
"3_163_No_of_Pre_Installted_Conductor": 1.125403525,
"3_164_Weight_of_Conductors_pred": 19.39488369,
"3_165_No_of_full_Boatlanding": 0.708048079,
"3_166_No_of_half_Boatlanding_DELETE": 55.98268905,
"3_167_Avg_Width_of_Boatlanding": 259.23079,
"3_168_Type_of_boatlanding": 0,
"3_169_Avg_No_of_Connections_to_Jkt_for_Boatlanding": 14.50618389,
"3_170_Weight_of_Boatlanding_pred": 3,
"3_171_No_of_Barge_Bumper": 0,
"3_172_Weight_of_Barge_Bumper_pred": 450.7168373,
"3_173_Type_of_barge_bumper": 1,
"3_174_Average_Number_of_Connections_to_Jacket_for_the_Barge_bumper": 359.2854822,
"3_175_Average_length_of_Barge_Bumper_in_Mtrs": 209.21,
"3_175_Average_Width_of_Barge_Bumper_in_Mtrs": 12.33,
"3_200_Painting_area": 11205.55,
"3_201_Anodes": 29.98,
"3_202_Beam": 46.58,
"3_203_Boat_Landing_Fenders_Rub_Strips": 5.97,
"3_204_Diaphragm_Closures": 1.03,
"3_205_Fasteners": 0.54,
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"3_207_Flanges_CS_LTCS": 0.0,
"3_208_Flooding_GROUTING_Valves_Fittings": 0.61,
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    "3_213_JACKET_INSTALLATION_AIDS_&SEA_FASTENING": 1.47,
    "3_214_MONEL_SHEET": 3.76,
    "3_215_PLATE": 98.66,
    "3_216_RIGGING_CONSUMABLES": 0.11,
    "3_217_SECURITY_FENCING_HELIDECK_NETTING": 1.94,
    "3_218_SHAPES": 14.04,
    "3_219_TUBULAR": 1458.39,
    "3_220_SAW_TUBULARS": 1277.18,
    "3_221_SEAMLESS_tubulars": 160.19,
    "3_222_Installation_Aids_including_seafastening": 120.34,
    "3_223_E&I_Bulks_and_Tagged": 1.0,
    "3_224_Jacket_Mhrs": 81098.0,
    "3_225_Piles_Mhrs": 4330.06,
    "3_226_Conductors_Manhours": 7000.51,
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    "3_228_Barge_Bumper_Mhrs": 1479.51,
    "3_229_Installation_aids": 6587.02,
    "3_230_Engineering_manhours": 3653.5,
    "3_231_MWB_Infield_Duration": 6.48,
    "3_232_OTHERS_Infield_Duration": null,
    "3_233_Infield_Duration": 10.83
}
let arr = [];
for (let x in main) {
    arr.push(x);
}
console.log(arr);

//Task 1=>Get all the Keys starting from 2
let task1 = arr.filter((arr) =>
    (arr.startsWith(2)));
console.log(task1);
//Output array of length 213

//Task 2=>Get all the Keys starting from 1
let task2 = arr.filter((arr) =>
    (arr.startsWith(1)));
console.log(task2);
//Output array of length 159

//Task 3. Get all numbers from the Object
let task3ans = []
let task3 = arr.filter((arr) => {

```

```
if (typeof (main[arr]) == "number") {
    task3ans.push(main[arr]);
}
});
console.log(task3ans);

//Task 4. Get all falsy values from Object
let task4ans = []
let task4 = arr.filter((arr) => {
    if ((main[arr])) { }
    else {
        task4ans.push(main[arr]);
    }
});
console.log(task4ans);

//Task 5. Get all string from Object
let task5ans = []
let task5 = arr.filter((arr) => {
    if ((typeof main[arr]) === "string") {
        task5ans.push(main[arr]);
    }
});
console.log(task5ans);

//Task 6. Get all LOW values from Object
let task6ans = []
let task6 = arr.filter((arr) => {
    if ((main[arr]) === "LOW") {
        task6ans.push(main[arr]);
    }
});
console.log(task6ans);

//Task7. Get all values which has space in it
let task7ans = []
let task = arr.filter((arr) => {
    if (typeof main[arr] === "string") {
        if (main[arr].includes(" ")) {
            task7ans.push(main[arr]);
        }
    }
});
console.log(task7ans);
```

```

    </script>
</body>

</html>
```

## Output

DevTools - 127.0.0.1:5500/main\_object.html

Elements    Console    Sources    Network    Performance    Memory    Application    Security    Lighthouse    >>

top    Filter    Default levels ▾    No Issues   

```
main_object.html:608
(588) ['200_Painting_area', '201_Anodes', '202_Beam', '203_Boat_Landing_Fenders_Rub_Strips', '204_Diaphragm_Closures', '205_Fasteners', '206_Fittings_CS_LTCS', '207_Flanges_CS_LTCS', '208_Flooding_GROUTING_Valves_Fittings', '209_Gaskets', '210_Gratings_&_Stair_Treads', '211_GROUT_PACKERS_GROUT_seal_Pile_Wiper', '212_Heat_Shrink_Sleeves', '213_Jacket_Installation_Aids_&_Sea_Fastening', '214_Monel_Sheet', '215_Plate', '216_Rigging_Consumables', '217_Security_Fencing_Helideck_Netting', '218_Shapes', '219_Tubular', '220_Saw_Tubulars', '221_Seamless_tubulars', '222_Installation_Aids_including_seafastening', '223_E&I_Bulks_and_Tagged', '224_Jacket_Mhrs', '225_Piles_Mhrs', '226_Conductors_Manhours', '227_Boatlanding_Mhrs', '228_Barge_Bumper_Mhrs', '229_Installation_aids', '230_Engineering_manhours', '231_MWB_Infield_Duration', '233_Infield_Duration', '200_Painting_area_lower', '201_Anodes_lower', '202_Beam_lower', '203_Boat_Landing_Fenders_Rub_Strips_lower', '204_Diaphragm_Closures_lower', '205_Fasteners_lower', '206_Fittings_CS_LTCS_lower', '207_Flanges_CS_LTCS_lower', '208_Flooding_GROUTING_Valves_Fittings_lower', '209_Gaskets_lower', '210_Gratings_&_Stair_Treads_lower', '211_GROUT_PACKERS_GROUT_seal_Pile_Wiper_lower', '212_Heat_Shrink_Sleeves_lower', '213_Jacket_Installation_Aids_&_Sea_Fastening_lower', '214_Monel_Sheet_lower', '215_Plate_lower', '216_Rigging_Consumables_lower', '217_Security_Fencing_Helideck_Netting_lower', '218_Shapes_lower', '219_Tubular_lower', '220_Saw_Tubulars_lower', '221_Seamless_tubulars_lower', '222_Installation_Aids_including_seafastening_lower', '223_E&I_Bulks_and_Tagged_lower', '224_Jacket_Mhrs_lower', '225_Piles_Mhrs_lower', '226_Conductors_Manhours_lower', '227_Boatlanding_Mhrs_lower', '228_Barge_Bumper_Mhrs_lower', '229_Installation_aids_lower', '230_Engineering_manhours_lower', '231_MWB_Infield_Duration_lower', '233_Infield_Duration_lower', '200_Painting_area_upper', '201_Anodes_upper', '202_Beam_upper', '203_Boat_Landing_Fenders_Rub_Strips_upper', '204_Diaphragm_Closures_upper', '205_Fasteners_upper', '206_Fittings_CS_LTCS_upper', '207_Flanges_CS_LTCS_upper', '208_Flooding_GROUTING_Valves_Fittings_upper', '209_Gaskets_upper', '210_Gratings_&_Stair_Treads_upper', '211_GROUT_PACKERS_GROUT_seal_Pile_Wiper_upper', '212_Heat_Shrink_Sleeves_upper', '213_Jacket_Installation_Aids_&_Sea_Fastening_upper', '214_Monel_Sheet_upper', '215_Plate_upper', '216_Rigging_Consumables_upper', '217_Security_Fencing_Helideck_Netting_upper', '218_Shapes_upper', '219_Tubular_upper', '220_Saw_Tubulars_upper', '221_Seamless_tubulars_upper', '222_Installation_Aids_including_seafastening_upper', '223_E&I_Bulks_and_Tagged_upper', '224_Jacket_Mhrs_upper', '225_Piles_Mhrs_upper', '226_Conductors_Manhours_upper', '227_Boatlanding_Mhrs_upper', '228_Barge_Bumper_Mhrs_upper', '229_Installation_aids_upper', '230_Engineering_manhours_upper', '231_MWB_Infield_Duration_upper', '233_Infield_Duration_upper', '232_OTHERS_Infield_Duration', ...]
```

main\_object.html:613

```
(213) ['200_Painting_area', '201_Anodes', '202_Beam', '203_Boat_Landing_Fenders_Rub_Strips', '204_Diaphragm_Closures', '205_Fasteners', '206_Fittings_CS_LTCS', '207_Flanges_CS_LTCS', '208_Flooding_GROUTING_Valves_Fittings', '209_Gaskets', '210_Gratings_&
```

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## Getter and setter function

```
<!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>
</head>

<body>
    <h1>Getter and Setter</h1>
    <script>
        //Normal function
        let person = {
            firstName: "Mehul",
            lastName: "Waghela",
            age: 25,
            show: function () {
                return this.firstName.toUpperCase();
            }
        }
        console.log(person.show());

        //Getter function
        //Getter function use to manipulate data send to the 3rd party
        //by getter function original object not change
        //by getter function we can call function as a property
        let person1 = {
            firstName: "Pratik",
            lastName: "Chasiya",
            age: 25,
            get show() {
                return this.firstName.toUpperCase();
            }
        }
        console.log(person1.show);
        console.log(person);

        //Setter function
        //Setter function use to manipulate data send to the 3rd party
        //by Setter function original object also change
        //by setter function we can call function as a property and compulsory we
have to send one parameter
        let person2 = {
            firstName: "Darshan",
            lastName: "patel",
```

```

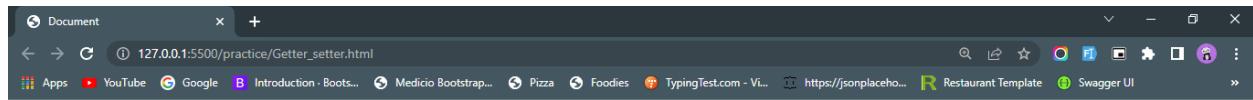
        age: 25,
        set show(n) {
            return this.firstName = n.toUpperCase();
        }
    }
    console.log(person2);
    person2.show = person2.firstName;
    console.log(person2);

</script>
</body>

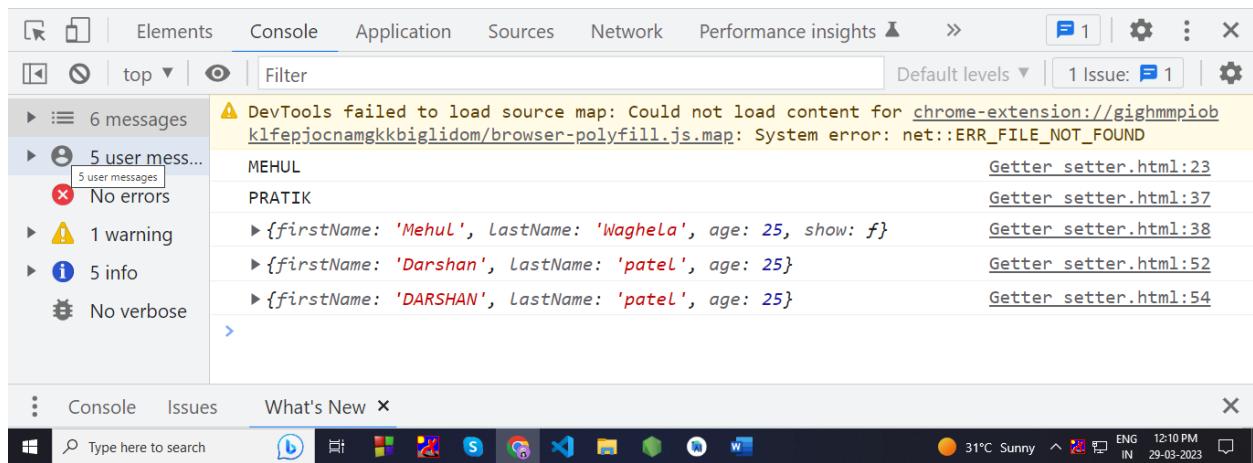
</html>

```

## Output



### Getter and Setter



## DOM-Document object modal

```

<!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>
</head>
<body>
    <h1 class="h1" id="main">Mehul</h1>
    <p class="h1">Waghela</p>
    <h1 class="h1">Mehul</h1>
    <p class="h1">Waghela</p>
    <h1 class="h1">Mehul</h1>
    <p class="h1">Waghela</p>
    <script>
        //by get element by id we can select element by id name
        let x=document.getElementById("main");
        x.innerHTML="My name is mehul waghela";
    </script>
</body>

</html>

```

## Output

```

<!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>
</head>
<body>
    <h1 class="h1" id="main">Mehul</h1>
    <p class="h1">Waghela</p>
    <h1 class="h1">Mehul</h1>
    <p class="h1">Waghela</p>
    <h1 class="h1">Mehul</h1>
    <p class="h1">Waghela</p>
    <script>
        //by get element by id we can select element by id name
        let x=document.getElementById("main");
        x.innerHTML="My name is mehul waghela";
    </script>

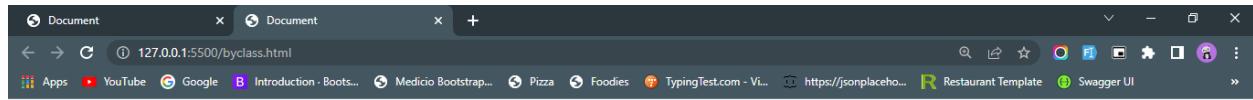
```

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

## Byclass

```
<!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>  
</head>  
<body>  
    <h1 class="h1" id="main">Mehul</h1>  
    <p class="h1">Waghela</p>  
    <h1 class="h1">Mehul</h1>  
    <p class="h1">Waghela</p>  
    <h1 class="h1">Mehul</h1>  
    <p class="h1">Waghela</p>  
    <script>  
        //getElementbyclassname make array of class element  
        let x=document.getElementsByClassName("h1");  
        //By for of loop  
        for(let i of x)  
        {  
            i.innerHTML="My name is mehul waghela";  
        }  
        //By normal for loop  
        // for(let i=0;i<x.length;i++)  
        // {  
        //     x[i].innerHTML="My name is mehul waghela";  
        // }  
    </script>  
</body>  
  
</html>
```

## Output



# My name is mehul waghela

My name is mehul waghela

# My name is mehul waghela

My name is mehul waghela

# My name is mehul waghela

My name is mehul waghela



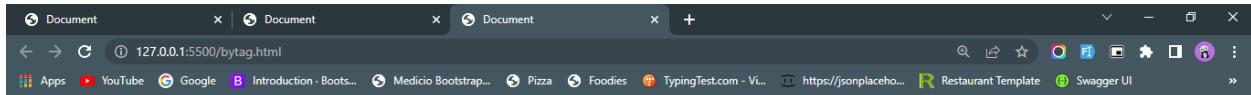
## Bytag

```
<!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>
</head>
<body>
    <h1 class="h1" id="main">Mehul</h1>
    <p class="h1">Waghela</p>
    <h1 class="h1">Mehul</h1>
    <p class="h1">Waghela</p>
    <h1 class="h1">Mehul</h1>
    <p class="h1">Waghela</p>
    <script>
        //select element by tag name
        let x=document.getElementsByTagName("h1");
        //By for of loop
        for(let i of x)
        {
```

```
i.innerHTML="My name is mehul waghela";
}
</script>
</body>

</html>
```

## Output



**My name is mehul waghela**

Waghela

**My name is mehul waghela**

Waghela

**My name is mehul waghela**

Waghela



## Query selector

```
<!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>
</head>
<body>
    <h1 class="cls" id="main">Mehul</h1>
    <p class="cls">Waghela</p>
    <h1 class="cls">Mehul</h1>
    <p class="cls">Waghela</p>
```

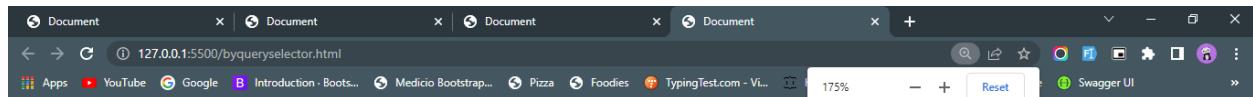
```

<h1 class="cls">Mehul</h1>
<p class="cls">Waghela</p>
<script>
    /* query selector only select first element which has p tag and class cls */
    let x=document.querySelector("p.cls");
    x.innerHTML="My name is mehul waghela";
</script>
</body>

</html>

```

## Output



**Mehul**

My name is mehul waghela

**Mehul**

Waghela

**Mehul**

Waghela



## Query selector all

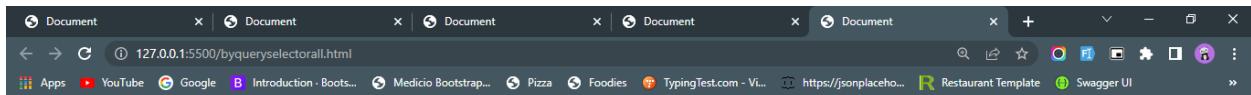
```

<!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>
</head>
<body>
    <h1 class="cls" id="main">Mehul</h1>
    <p class="cls">Waghela</p>
    <h1 class="cls">Mehul</h1>
    <p class="cls">Waghela</p>
    <h1 class="cls">Mehul</h1>
    <p class="cls">Waghela</p>
    <script>
        /* query selector all element which has class cls and tag h1 */
        let x=document.querySelectorAll("h1.cls");
        //By for of loop
        for(let i of x)
        {
            i.innerHTML="My name is mehul waghela";
        }
    </script>
</body>
</html>
```

## Output



# **My name is mehul waghela**

Waghela

# **My name is mehul waghela**

Waghela

# **My name is mehul waghela**

Waghela



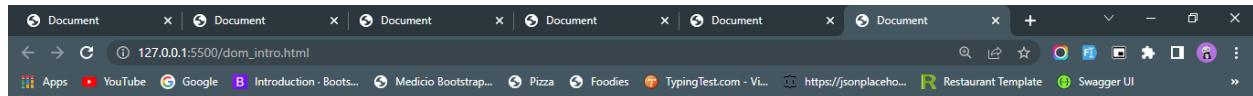
## Dom intro

```
<!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>
</head>
<body>
    <h1>Unorder list</h1>
    <ul>
        <li class="cls cls1">Mehul</li>
        <li id="main">Balvantbhai</li>
        <li class="cls">Waghela</li>
    </ul>
    <script>
        let x=document.getElementById("main");
        x.innerHTML=<h1> Balvantbhai </h1>;

        let y=document.getElementsByClassName("cls");/* in
getElementbyclassname it make array of element of class */
        console.log(y);
        for(let i=0;i<y.length;i++)
        {
            y[i].innerHTML=<h2>Hello</h2>;
        }
        let z=document.getElementsByClassName("cls cls1");/* we want work
with taht which have both class that time this type use*/
        console.log(z.length);
        for(let i=0;i<z.length;i++)
        {
            z[i].innerHTML=<h2>Hello</h2>;
        }

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

## Output



## Unorder list

- Hello
- Balvantbhai
- Hello



## Array method

Key,entries,some,every

```
<!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>
</head>

<body>

    <script>
        //entries badha array element ni index and value no array banavi aapse
        let arr =["a","b","c"];
        let aa=[];
        let iterator=arr.entries();
        for(let x of iterator)
        {
            aa.push(x);
        }
    </script>

```

```

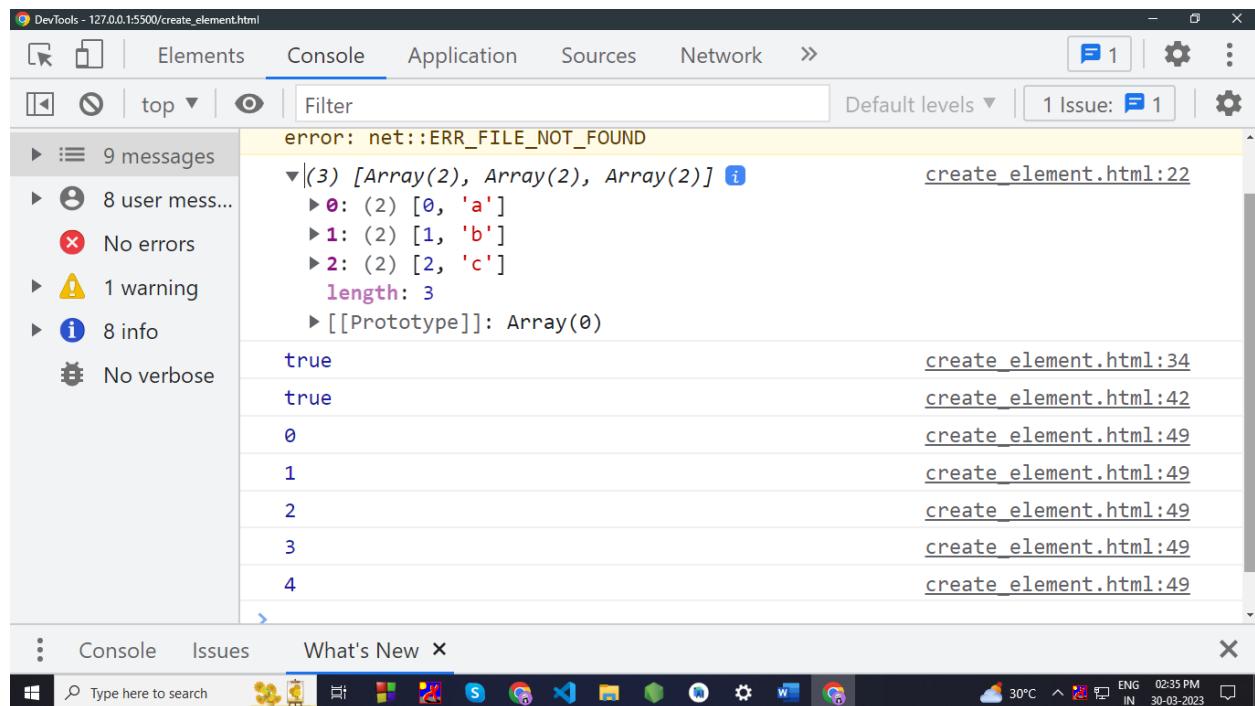
console.log(aa);
/*Output=>[
  0[0,a]
  1[1,b]
  2[2,c]
] */
//some check the return value with original arr,is any one element same
in both array then give true else false
let ar=[1,2,3,4,5,6,7,8,9,10];
function noadd(ele)
{
  return (ele%2==0);
}
console.log(ar.some(noadd));
//output=>true
//some check the return value with original arr,if all element is even
then true else false
let ar1=[2,4,6,8,10];
function noadd(ele)
{
  return (ele%2==0);
}
console.log(ar1.every(noadd))
//output=>true
//Key method --this give array all element index
let ar2=[2,4,6,8,10];
let iterator2=ar2.keys();
for(let x of iterator2)
{
  console.log(x);
}
//output=>0 1 2 3 4 5

</script>
</body>

</html>

```

## Output



## Array all methods

```
<!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>
</head>

<body>
  <script>
    //1-Values method =>which give all element values one by one
    let arr = ["java", "python", "html"];
    let iterator = arr.values();
    for (let x of iterator) {
      console.log(x);
    }
    //Output=>java
    // python
    // html
  </script>

```

```

//2-Array object
//create array from string
let array = Array.from("abc");
console.log(array);

//Output=>[ 'a', 'b', 'c' ]

//3-constructor
//this property return constructor function
let arr1 = ["java", "python", "html"];
let construct = arr1.constructor;
console.log(construct);

//Output=>f Array() { [native code] }

//4-Copywithin

let arr9 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
//jo 2 j element aapiye to according to[target,start] End by default
array no last element thase
arr9.copyWithin(5, 1);
console.log(arr9);

//Output=>[1,2,3,4,5,2,3,4,5,6]

let arr7 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
arr7.copyWithin(3, 5, 8);
console.log(arr7);
/* target =index 3,,Start=index 5 ,, and copy end index is 8
   in this case copy start from index 5 and end at 7 index,it is not copy 8
th index
   and according to target that copied elment paste start from index
3,,there are copy elements are 3 therefore
   array become [1,2,3,6,7,8,7,8,9,10] */
//Output==[1,2,3,6,7,8,7,8,9,10]

//Example of copy within

let arr8 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
arr8.copyWithin(5, 1, 3);
console.log(arr8);

```

```

//Output=>[1,2,3,4,5,2,3,8,9,10]

let arr10 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
//jo 1j elemnet pass karyo hoy to a element [target] ganase ne start by
default 0 ane end by default last element of array
arr10.copyWithin(4);
console.log(arr10);

//Output=>[1,2,3,4,1,2,3,4,5,6]

//copies element from index 0 and pest at index 3
//syntax arr.copywithin(target,start,end)
let arr6 = ["apple", "ball", "cat", "dog"];
arr6.copyWithin(3, 0);
console.log(arr6);

//Modifies the original array
//Output=>['apple', 'ball', 'cat', 'apple']

//5=>Flat method
//depth na according aagarthi nested array break thay 1 lekhyu hot to 4no
ni aagarno array break thate
//depth 2 lakhyu che atle 4 ni aagarno ane 7 ni aagarno array tute che
let arr11 = [1, 2, 3, [4, 5, 6, [7, 8, 9, [5, 6, 7, 8, 9]]]];
let arr12 = arr11.flat(2);
console.log(arr12);
//Output in node js =[1,2,3,4,5,6,7,8,9,[5,6,7,8,9]]
//Output in console=>[1, 2, 3, 4, 5, 6, 7, 8, 9, Array(5)]

//6=>FlatMap method
//map take element according to parameter given()
//in this example we take (a) therefore it take only one element at a
time and it add with sum and return to arr14
//map function return array
//map give permission to do operation on array element
//map function not change in original array
let sum = 0;
let arr13 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
let arr14 = arr13.map((a) => sum += a);
console.log(arr14);

//Output=[1, 3, 6, 10, 15, 21, 28, 36, 45, 55]
//7-Flat map =>this method is same as map method and flat only remove
nested array if any nested array available

```

```

let arr15 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
let arr16 = arr15.flatMap((a, b) => (a + b))
console.log(arr16);
//first a=1 and b=0,after that a=2,b=1 so on
//Output=>[1, 3, 5, 7, 9, 11, 13, 15, 17, 19]

//8-Filter methhod
//filter method not give permission to do operation on array element like
add sub or any other
//it is only filter element of array according to condition given
// in filter method condition is necessary
//return output in array

let arr17 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
/* from this array if we only want even no then we can use filter method
*/
let arr18 = arr17.filter((a) => {
    if (a % 2 == 0) {
        return a;
    }
})
console.log(arr18);
//Output=>[2, 4, 6, 8, 10]

//Filter method example in which we make operation but operation not work
because filter method not permit
let arr19 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
let arr20 = arr19.filter((a) => {
    if (a % 2 == 0) {
        return (a + 5);
    }
})
console.log(arr20);
//Output=>[2, 4, 6, 8, 10]/* it can not do operation a+5 */

//9-For each method
//foreach method can not return element
//it can do operation
//it can not give output in array
let sumele = 0;
let arr21 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
let arr22 = arr21.forEach((a) => {
    sumele += a;
})

```

```

console.log("Sum=", sumele);
//Output=>Sum=55

//10-toLocaleString convert array in to string
let prices = [689, 100, 4577, 56];

let resultingString = prices.toLocaleString("en-US", {
    style: "currency",
    currency: "USD",
});

console.log(resultingString);
//Outpu=>$689.00,$100.00,$4,577.00,$56.00

//11-Array.isArray()=>Check x is array or not
let x = [1, 2, 3, 4, 5, 6];
let y = Array.isArray(x);
console.log(y);
//Output=>true

//12-Reduce
//reduce method is use to reduce array by any operation and it is depend
on accumulator and return value
let suma = 0
let arr23 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
//           a=accumulator and b=currentvalue
//first a=1 and b=2,,,
//second a=(1+2)=3 and b=3
//three  a=(6) and b=4 and so on
let arr24 = arr23.reduce((a, b) => a + b);
console.log(arr24);

//Output=>55

//13-Reduceright   from right to left
//reduceright method same as reduce but only accumlator start from array
last element and current value is 2nd last element
let sub = 0
let arr25 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 60];
//           a=accumulator and b=currentvalue
//first a=60 and b=9,,,
//second a=(60-9)=51 and b=8
//three  a=(43) and b=7 and so on
let arr26 = arr25.reduceRight((a, b) => a - b);

```

```

console.log(arr26);
//Output=>15

//14-includes
//includes check "PYTHON" from array if available then true else false
and it is case sensitive
let arr27 = ["java", "python", "html", "css"];
let include = arr27.includes("PYTHON");
console.log(include);
//Output=>False Because this PYTHon is capital and in array python is
small

//Example 1--python search from index 2 therefore python not found
let arr28 = ["java", "python", "html", "css"];
let include1 = arr28.includes("python", 2);
console.log(include1);
//Output=>False

//Example 2--python search from left to right but from last 3rd element
let arr29 = ["java", "python", "html", "css"];
let include2 = arr29.includes("python", -3);
console.log(include2);
//Output=>True

//15-find
//This method returns the value of the first array element that satisfies
the provided test function.
let arr30 = [1, 2, 3, 4, 5, 6, 7, 8, 9];
let str = arr30.find((a) => {
  if (a % 2 == 0) {
    return a;
  }
})
console.log(str);
//Output=>2 this function return first even number from array

//Find with object
//First element from object which has age greater than 18
const team = [
  { name: "Bill", age: 10 },
  { name: "Linus", age: 15 },
  { name: "Alan", age: 20 },
  { name: "Steve", age: 34 },
]
let adultMember = team.find(({ age }) => age >= 18);

```

```

        console.log(adultMember);

        //Output=>{name: 'Alan', age: 20}

        //16-findIndex
        //This method returns the value of the first array element that satisfies
the provided test function.
        let arr31 = [1, 3, 5, 6, 7, 8, 9];
        let str1 = arr31.findIndex((a) => {
            if (a % 2 == 0) {
                return a;
            }
        })
        console.log(str1);
        //Output=>3  this function return first even number index from array

        //17-slice use for copy perticular portion of function in another array
        let arr32 = [1, 3, 5, 6, 7, 8, 9];
        //Syntax  arr.slice(start,end)
        let arr33 = arr32.slice(1, 3);/* from index 1 to to element 3 copy*/
        console.log(arr33);
        //Output=>[3, 5]

        let arr34 = [1, 3, 5, 6, 7, 8, 9];
        //Syntax  arr.slice(start,end)
        let arr35 = arr34.slice(1);/* copy from index 1 to th end*/
        console.log(arr35);
        //Output=>[3,5,6,7,8,9]

        let arr36 = [1, 3, 5, 6, 7, 8, 9];
        //Syntax  arr.slice(start,end)
        let arr37 = arr36.slice(1,-1);/* copy from index 1 to array second last
element*/
        console.log(arr37);
        //Output=>[3,5,6,7,8]
    </script>
</body>

</html>

```

## Output

```
DevTools - file:///C:/Users/waghela/OneDrive/Programming/JS/Practice/allMethod.html
Elements Console Sources Network Performance Memory Application Security > | 
Default levels ▾ | No Issues | 
java
python
html
▶(3) ['a', 'b', 'c']
f Array() { [native code] }
▶(10) [1, 2, 3, 4, 5, 2, 3, 4, 5, 6]
▶(10) [1, 2, 3, 6, 7, 8, 7, 8, 9, 10]
▶(10) [1, 2, 3, 4, 5, 2, 3, 8, 9, 10]
▶(10) [1, 2, 3, 4, 1, 2, 3, 4, 5, 6]
▶(4) ['apple', 'ball', 'cat', 'apple']
▶(10) [1, 2, 3, 4, 5, 6, 7, 8, 9, Array(5)]
▶(10) [1, 3, 6, 10, 15, 21, 28, 36, 45, 55]
▶(10) [1, 3, 5, 7, 9, 11, 13, 15, 17, 19]
▶(5) [2, 4, 6, 8, 10]
▶(5) [2, 4, 6, 8, 10]
Sum= 55
$689.00.$100.00.$4.577.00,$56.00
Windows Type here to search 25°C Partly cloudy 11:21 PM 3/30/2023
```

```
DevTools - file:///C:/Users/waghela/OneDrive/Programming/JS/Practice/allMethod.html
Elements Console Sources Network Performance Memory Application Security > | 
Default levels ▾ | No Issues | 
▶(5) [2, 4, 6, 8, 10]
Sum= 55
$689.00,$100.00,$4,577.00,$56.00
true
55
15
false
false
true
2
▶{name: 'Alan', age: 20}
3
▶(2) [3, 5]
▶(6) [3, 5, 6, 7, 8, 9]
▶(5) [3, 5, 6, 7, 8]
>
Windows Type here to search 25°C Partly cloudy 11:21 PM 3/30/2023
```

Next Previous

```
<!DOCTYPE html>
<html lang="en">
```

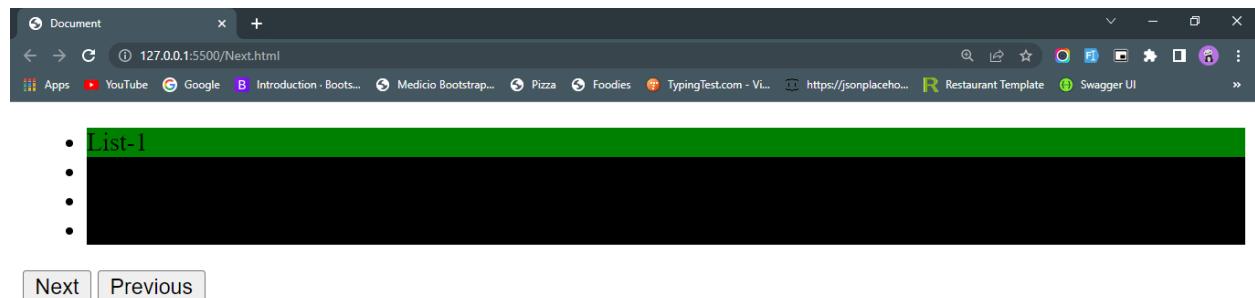
```
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>

<body>
    <ul id="main">
        <li>List-1</li>
        <li>List-2</li>
        <li>List-3</li>
        <li>List-4</li>
    </ul>
    <button id="btn1">Next</button>
    <button id="btn2">Previous</button>
    <script>
        let ul = document.getElementById("main");
        let child = ul.children;
        let btn1 = document.getElementById("btn1");
        let i = 0;
        let z;
        btn1.addEventListener("click", show1)
        function show1() {
            if (z == 0) {
                z = 1;
                if (i == 0) { i = 2 }
                else if (i == 1) { i = 3 }
                else if (i == 2) { i = 0 }
                else if (i == 3) { i = 1 }
            }
            for (let i = 0; i < child.length; i++) {
                child[i].style.backgroundColor = "black";
            }
            child[i].style.backgroundColor = "green";
            i++;
            if (i == 4) {
                i = 0;
            }
            console.log(i);
            z = 1;
        }
        btn2.addEventListener("click", show2)
        function show2() {
```

```
if (z == 1) {
    z = 0;
    if (i == 0) { i = 2 }
    else if (i == 1) { i = 3 }
    else if (i == 2) { i = 0 }
    else if (i == 3) { i = 1 }
}
for (let i = 0; i < child.length; i++) {
    child[i].style.backgroundColor = "black";
}
child[i].style.backgroundColor = "green";
if (i == 0) {
    i = 4;
}
i--;
console.log(i);
z = 0;
}
</script>
</body>

</html>
```

## Output



## First child element

```
<!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>
</head>

<body>
  <ul id="prt">
    <li id>list-1</li>
    <li>list-2</li>
    <li>list-3</li>
    <li>list-4</li>
  </ul>
  <button id="btn1">List 1</button>
  <button id="btn2">List 2</button>
  <button id="btn3">List 3</button>
  <button id="btn4">List 4</button>
  <script>
    let prt = document.getElementById("prt");

    //To select first child from parent
    let fchild = prt.firstElementChild;
    console.log(fchild)
    let btn1 = document.getElementById("btn1");
    btn1.addEventListener("click", show)
    function show()
    {
      fchild.style.color = "red";
    }

    //To select last child from parent
    let lchild = prt.lastElementChild;
    let btn4 = document.getElementById("btn4");
    btn4.addEventListener("click", show1)
    function show1()
    {
```

```
lchild.style.color = "yellow";
}

//To select second element by nextElementSibling

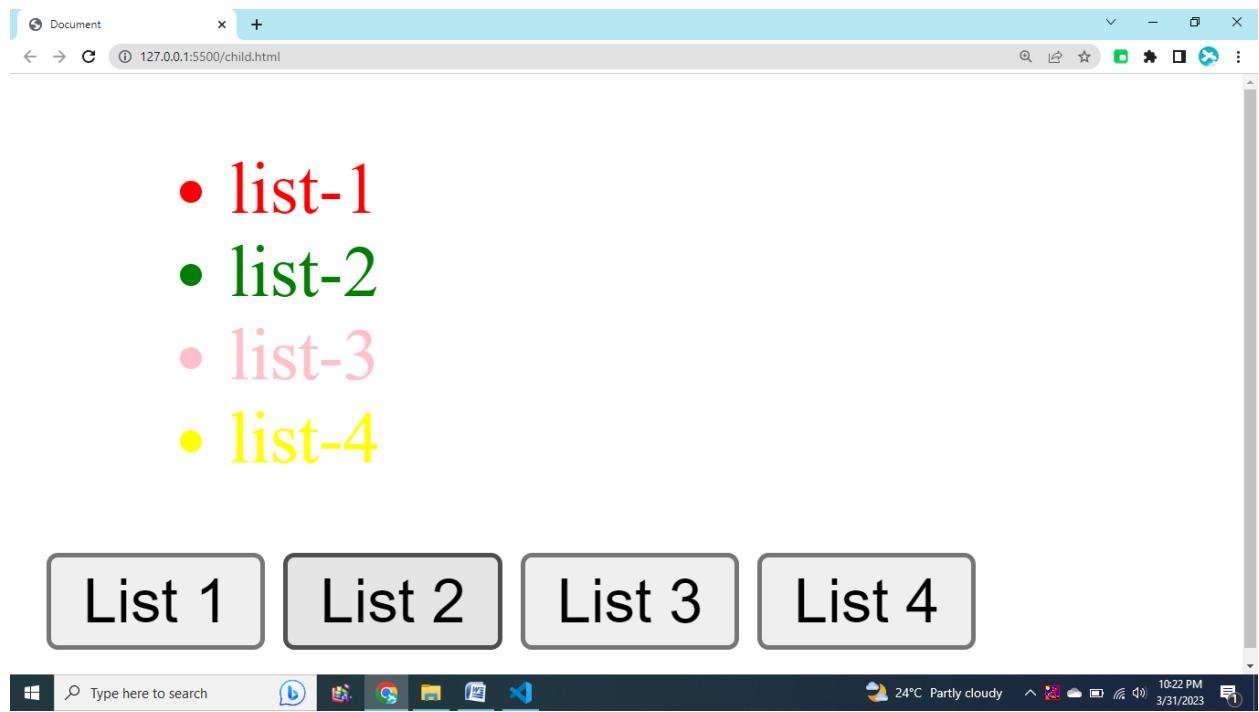
let list2=fchild.nextElementSibling;
let btn2 = document.getElementById("btn2");
btn2.addEventListener("click", show2)
function show2()
{
    list2.style.color = "green";
}

let list3=lchild.previousElementSibling;
let btn3 = document.getElementById("btn3");
btn3.addEventListener("click", show3)
function show3()
{
    list3.style.color = "pink";
}

</script>
</body>

</html>
```

## Output



## Parent Element

```
<!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>
</head>

<body>
    <ul>
        <li id="child">list-1</li>
        <li>list-2</li>
        <li>list-3</li>
        <li>list-4</li>
    </ul>
    <script>
        let chi = document.getElementById("child");
        let prt = chi.parentElement;
        prt.style.backgroundColor = "green";
    </script>
</body>
```

```
</html>
```

## Output



- list-1
- list-2
- list-3
- list-4



## Children –all children

```
<!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>
</head>
<body>
    <ul id="main">
        <li>list 1</li>
        <li>list 2</li>
        <li>list 3</li>
        <li>list 4</li>
    </ul>
</body>
</html>
```

```
</ul>
<script>
    let ul=document.getElementById("main");
    let chil=ul.children;
    for (let x of chil)
    {
        /* background Cis in camel case */
        x.style.backgroundColor="red";
    }
</script>
</body>
</html>
```

## Output



- list 1
- list 2
- list 3
- list 4



## Tab view

```
<!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>
    .img img {
        width: 200px;
        height: 250px;
        float: left;
    }

    * {
        /* border: 1px solid black; */
        box-sizing: border-box;
    }

    .img {
        padding: 20px;
        float: left;
    }

    p {
        padding: 10px;
        font-size: 17px;
        width: calc(700px - 300px);
    }

    #m {
        width: 700px;
        margin: 100px auto;
        overflow: hidden;
        /* border: 1px solid black; */
    }

    #btn {
        display: flex;
        justify-content: space-between;
        width: 700px;
    }

    .abc {
        width: 25%;
        padding: 15px;
        border-radius: 10px 10px 0 0;
        font-size: 20px;
        font-weight: 600;
    }

```

```

        }

.aaa {
    margin: auto 0;
    /* background-color: aquamarine; */
    float: right;
    text-align: center;
    padding: 20px;
}

#tab1,
#tab2,
#tab3,
#tab4 {
    background-color: chocolate;
    float: left;
    justify-content: space-between;
    width: 700px;
    border: 1px solid grey;
}

.none {
    display: none;
}

.color{
    background-color:chartreuse;
}

.abc:hover {
    background-color: chartreuse;
    cursor: pointer;
}

</style>
</head>

<body>
    <div id="m">
        <div id="btn">
            <button id="btn1" class="abc color" onclick="show(0)">Tab-1</button>
            <button id="btn2" class="abc" onclick="show(1)">Tab-2</button>
            <button id="btn3" class="abc" onclick="show(2)">Tab-3</button>
            <button id="btn4" class="abc" onclick="show(3)">Tab-4</button>
        </div>
        <div id="tab1" class="section">
            <div class="img"></div>
            <div class="aaa">

```

```
<p>Section 1 sit amet consectetur adipisicing elit. Magnam  
numquam consequuntur rem animi maxime  
assumenda magni consectetur voluptatum aliquid. In,  
cupiditate voluptatibus. Aut quisquam quidem  
maiores  
porro, excepturi libero et eligendi dolorem odio natus.  
Maiores, animi veritatis nihil esse dolorum  
quos  
quasi nemo! Laboriosam, neque. Ducimus qui, amet labore ipsum  
iusto alias voluptatum aut expedita  
explicab.</p>  
</div>  
</div>  
<div id="tab2" class="section none">  
    <div class="img"></div>  
    <div class="aaa">  
        <p>Section 2 sit amet consectetur adipisicing elit. Magnam  
numquam consequuntur rem animi maxime  
assumenda magni consectetur voluptatum aliquid. In,  
cupiditate voluptatibus. Aut quisquam quidem  
maiores  
porro, excepturi libero et eligendi dolorem odio natus.  
Maiores, animi veritatis nihil esse dolorum  
quos  
quasi nemo! Laboriosam, neque. Ducimus qui, amet labore ipsum  
iusto alias voluptatum aut expedita  
explicab.</p>  
    </div>  
</div>  
<div id="tab3" class="section none">  
    <div class="img"></div>  
    <div class="aaa">  
        <p>Section 3 sit amet consectetur adipisicing elit. Magnam  
numquam consequuntur rem animi maxime  
assumenda magni consectetur voluptatum aliquid. In,  
cupiditate voluptatibus. Aut quisquam quidem  
maiores  
porro, excepturi libero et eligendi dolorem odio natus.  
Maiores, animi veritatis nihil esse dolorum  
quos  
quasi nemo! Laboriosam, neque. Ducimus qui, amet labore ipsum  
iusto alias voluptatum aut expedita  
explicab.</p>  
    </div>  
</div>
```

```

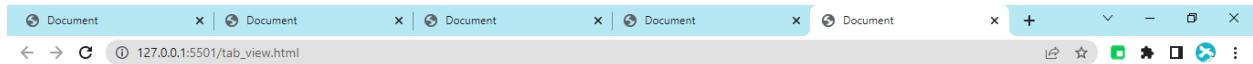
<div id="tab4" class="section none">
    <div class="img"></div>
    <div class="aaa">
        <p>Section4 sit amet consectetur adipisicing elit. Magnam numquam
consequuntur rem animi maxime
            assumenda magni consectetur voluptatum aliquid. In,
cupiditate voluptatibus. Aut quisquam quidem
                maiores
                porro, excepturi libero et eligendi dolorem odio natus.
Maiores, animi veritatis nihil esse dolorum
                quo
                quasi nemo! Laboriosam, neque. Ducimus qui, amet labore ipsum
iusto alias voluptatum aut expedita
                explicab.</p>
    </div>
</div>
</div>
<script>
    let tabs = document.getElementsByClassName("section");
    let btn = document.getElementsByClassName("abc");
    function show(index) {
        for (let x of tabs) {
            x.classList.add("none");
        }
        tabs[index].classList.remove("none");

        for(let x of btn)
        {
            x.classList.remove("color");
        }
        btn[index].classList.add("color");
    }
</script>
</body>

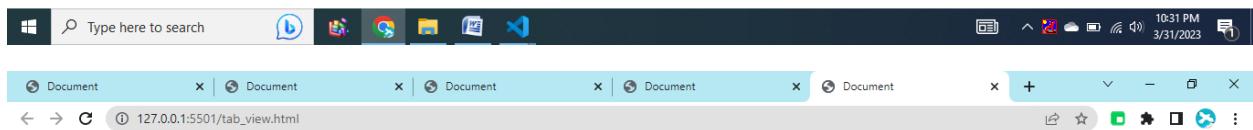
</html>

```

## Output

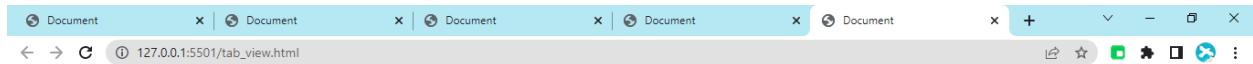


Tab-1	Tab-2	Tab-3	Tab-4
			
			<p> </p> <p> </p> <p> </p> <p> </p>

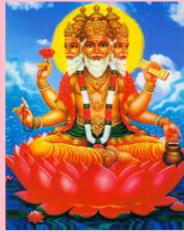


Tab-1	Tab-2	Tab-3	Tab-4
			
			<p> </p> <p> </p> <p> </p> <p> </p>

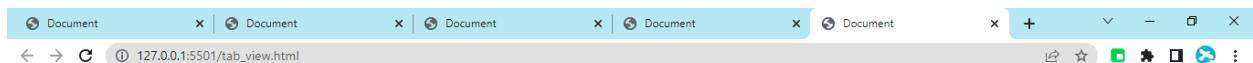




Tab-1 Tab-2 Tab-3 Tab-4



Lorem ipsum dolor sit amet consectetur adipisicing elit. Magnam numquam consequuntur rem animi maxime assumenda magni consectetur voluptatum aliquid. In, cupiditate voluptatibus. Aut quisquam quidem maiores porro, excepturi libero et eligendi dolorem odio natus. Maiores, animi veritatis nihil esse dolorum quos quasi nemo! Laboriosam, neque. Ducimus qui, amet labore ipsum iusto alias voluptatum aut expedita explicab.



Tab-1 Tab-2 Tab-3 Tab-4



Lorem ipsum dolor sit amet consectetur adipisicing elit. Magnam numquam consequuntur rem animi maxime assumenda magni consectetur voluptatum aliquid. In, cupiditate voluptatibus. Aut quisquam quidem maiores porro, excepturi libero et eligendi dolorem odio natus. Maiores, animi veritatis nihil esse dolorum quos quasi nemo! Laboriosam, neque. Ducimus qui, amet labore ipsum iusto alias voluptatum aut expedita explicab.



## Next and previous

```
<!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>
</head>

<body>
  <ul id="main">
    <li>List-1</li>
    <li>List-2</li>
    <li>List-3</li>
    <li>List-4</li>
  </ul>
  </ul>
  <button id="btn1">Next</button>
  <button id="btn2">Previous</button>
  <script>
    let prt = document.getElementById("main")
    let child = prt.children;
    prt.style.backgroundColor = "yellow";
    let btn1 = document.getElementById("btn1");
    btn1.addEventListener('click', show);
    let j = 0;
    let next;
    let prev;
    function show() {
      if (prev == 1) {
        if (j == 0) { j = 2 }
        else if (j == 1) { j = 3 }
        else if (j == 2) { j = 0 }
        else if (j == 3) { j = 1 }
      }
      next = 1;

      for (let i = 0; i < child.length; i++) {
        child[i].style.backgroundColor = "white";
      }
      // console.log(j);
      child[j].style.backgroundColor = "red";
      j++;

      if (j == 4) {

```

```

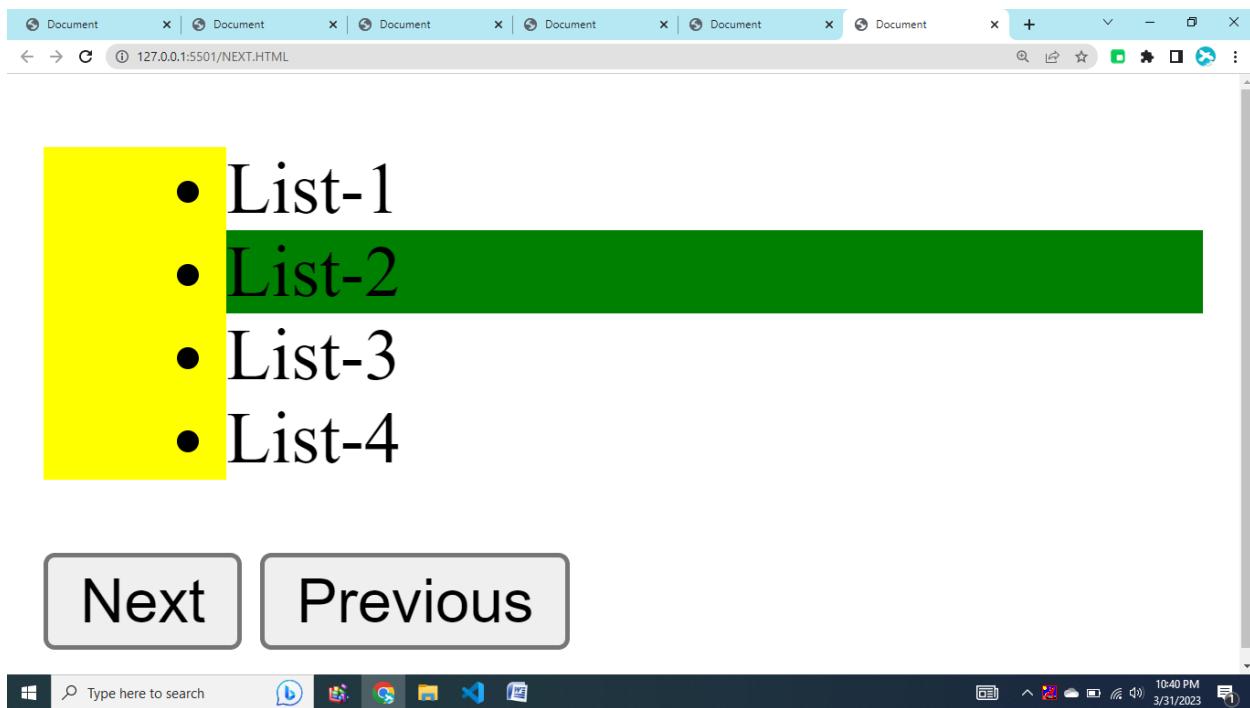
        j = 0;
    }
    // console.log(j);
    if (next == 1) {
        prev = 0;
    }
}

let btn2 = document.getElementById("btn2");
btn2.addEventListener('click', show1);

function show1() {
    if (next == 1) {
        if (j == 0) { j = 2 }
        else if (j == 1) { j = 3 }
        else if (j == 2) { j = 0 }
        else if (j == 3) { j = 1 }
    }
    prev = 1;
    for (let i = 0; i < child.length; i++) {
        child[i].style.backgroundColor = "white";
    }
    child[j].style.backgroundColor = "green";
    if (j == 0) {
        j = 4;
    }
    j--;
    // console.log(j);
    if (prev == 1) {
        next = 0;
    }
}
</script>
</body>

</html>
```

## Output



## Date difference

```
<!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>
        #main {
            width: 400px;
            background-color: aqua;
            padding: 50px;
            margin: 20px auto;
            text-align: center;
        }

        #date {
            display: flex;
```

```
        flex-wrap: wrap;
        align-content: center;
        width: 100%;
    }

    #btn {
        cursor: pointer;
        width: 100%;
        height: 30px;
    }

    .dd {
        display: flex;
        width: 100%;
        padding: 10px 0;
    }

    .dd label {
        width: 40%;
    }

    .dd input {
        width: 60%;
    }

    #output {
        text-align: center;
        color: chocolate;
        width: 100%;
    }
</style>
</head>

<body>
    <div id="main">
        <div id="sub">
            <h1>Date Difference Example</h1>
        </div>
        <div id="date">
            <div class="dd"><label for="fd">First Date</label>
                <input type="Date" name="" id="fdm">
            </div>
            <div class="dd"><label for="sd">Second Date</label>
                <input type="Date" name="" value="" id="sdm">
            </div>
        </div>
    </div>
</body>
```

```
</div>
<div class="dd">
    <h3 id="output"></h3>
</div>
<button id="btn">CALCULATE DIFFERENCE</button>
</div>

</div>
<script>
let btn = document.getElementById("btn");
btn.addEventListener("click", show);
function show() {
    let x1 = document.getElementById("fdm").value;
    let y1 = document.getElementById("sdm").value;
    let birthd = new Date(x1);
    let curd = new Date(y1);
    birthd.setMonth((birthd.getMonth() + 1));
    curd.setMonth((curd.getMonth() + 1));
    console.log(birthd);
    console.log(curd);
    let bd = birthd.getDate();
    let bm = birthd.getMonth();
    let by = birthd.getFullYear();
    let cd = curd.getDate();
    let cm = curd.getMonth();
    console.log("cm", cm);
    let cy = curd.getFullYear();
    let Year = 0;
    let Month = 0;
    let Day = 0;
    let R_day = 0;
    let a1 = 0;
    let x = (birthd.getTime()) / (1000 * 60 * 60 * 24);
    let y = (curd.getTime()) / (1000 * 60 * 60 * 24);
    Year = Math.trunc((y - x) / 365);
    Day = Math.trunc((y - x));
    if (bd > cd && bm > cm) {
        Month = (11 - bm) + (cm - 1);
        if (((cm) == 0) || ((cm) == 2) || ((cm) == 4) || ((cm) == 6) ||
((cm) == 7) || ((cm) == 9) || ((cm) == 11)) {
            a1 = 31;
            if ((((cm) == 0) || ((cm) == 2) || ((cm) == 4) || ((cm) == 6) ||
((cm) == 7) || ((cm) == 9) || ((cm) == 11)) && (bd == 31)) {
                a1 = 0;
                bd = 0;
```

```

        cd++;
    }
}
else if (((cm) == 3) || ((cm) == 5) || ((cm) == 8) || ((cm) ==
10)) {
    a1 = 30;
    if (((cm) == 3) || ((cm) == 5) || ((cm) == 8) || ((cm) ==
10)) && (bd == 30)) {
        a1 = 0;
        bd = 0;
        cd++;
    }
}
else {
    if (cy % 400 == 0 || (cy % 100 != 0 && cy % 4 == 0)) {
        a1 = 29;
        if ((cy % 400 == 0 || (cy % 100 != 0 && cy % 4 == 0)) &&
bd == 29) {
            a1 = 0;
            bd = 0;
            cd++;
        }
    }
    else {
        a1 = 28;
        if (bd == 28) {
            a1 = 0;
            bd = 0;
            cd++;
        }
    }
}
R_day = (a1 - (bd - 1)) + (cd - 1);
console.log("R_day", R_day);
console.log("a1", a1);
console.log("bd", bd);
console.log("cd", cd);
}
if (bd < cd && bm < cm) {
    Month = (11 - bm) + (cm) - 12;
    R_day = cd - bd;
}

if (bd < cd && bm > cm) {
    Month = (11 - bm) + (cm);
}

```

```

        R_day = cd - bd;
    }
    if (bd > cd && cm < cm) {
        Month = (11 - bm) + (cm - 1) - 12;
        if (((cm) == 0) || ((cm) == 2) || ((cm) == 4) || ((cm) == 6) ||
((cm) == 7) || ((cm) == 9) || ((cm) == 11)) {
            a1 = 31;
            if (((cm) == 0) || ((cm) == 2) || ((cm) == 4) || ((cm) == 6) ||
((cm) == 7) || ((cm) == 9) || ((cm) == 11)) && (bd == 31)) {
                a1 = 0;
                bd = 0;
                cd++;
            }
        }
        else if (((cm) == 3) || ((cm) == 5) || ((cm) == 8) || ((cm) ==
10)) {
            a1 = 30;
            if (((cm) == 3) || ((cm) == 5) || ((cm) == 8) || ((cm) ==
10)) && bd == 30) {
                a1 = 0;
                bd = 0;
                cd++;
            }
        }
        else {
            if (cy % 400 == 0 || (cy % 100 != 0 && cy % 4 == 0)) {
                a1 = 29;
                if ((cy % 400 == 0 || (cy % 100 != 0 && cy % 4 == 0)) &&
bd == 29) {
                    a1 = 0;
                    bd = 0;
                    cd++;
                }
            }
            else {
                a1 = 28;
                if (bd == 28) {
                    a1 = 0;
                    bd = 0;
                    cd++;
                }
            }
        }
    }
    R_day = (a1 - (bd - 1)) + (cd - 1);
}

```

```

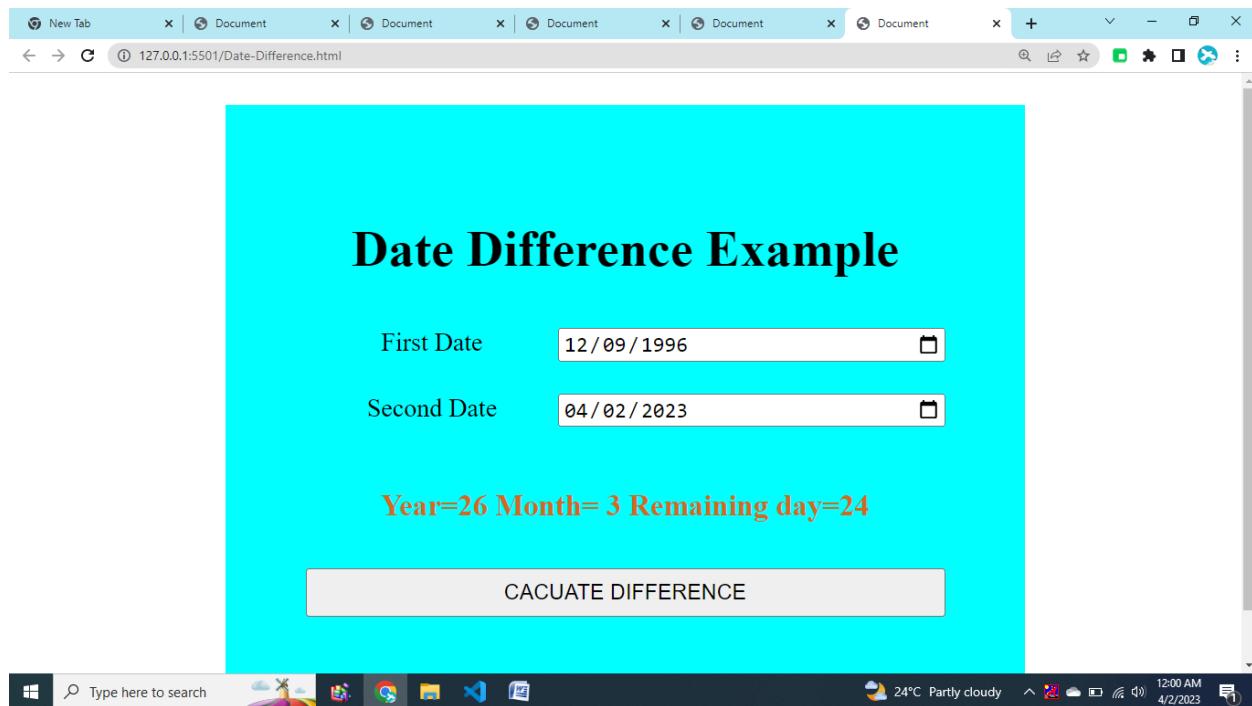
        if (bd == cd) {
            R_day = 0;
        }
        console.log("Year", Year, "Day", Day, "Month", Month + 1, "Remaining
day", R_day);
        let output = `Year=${Year} Month= ${Month + 1} Remaining
day=${R_day}`;
        let out = document.getElementById("output");
        out.innerHTML = output;

    }
</script>
</body>

</html>

```

## Output



## Check Uncheck

```

<!DOCTYPE html>
<html lang="en">

<head>

```

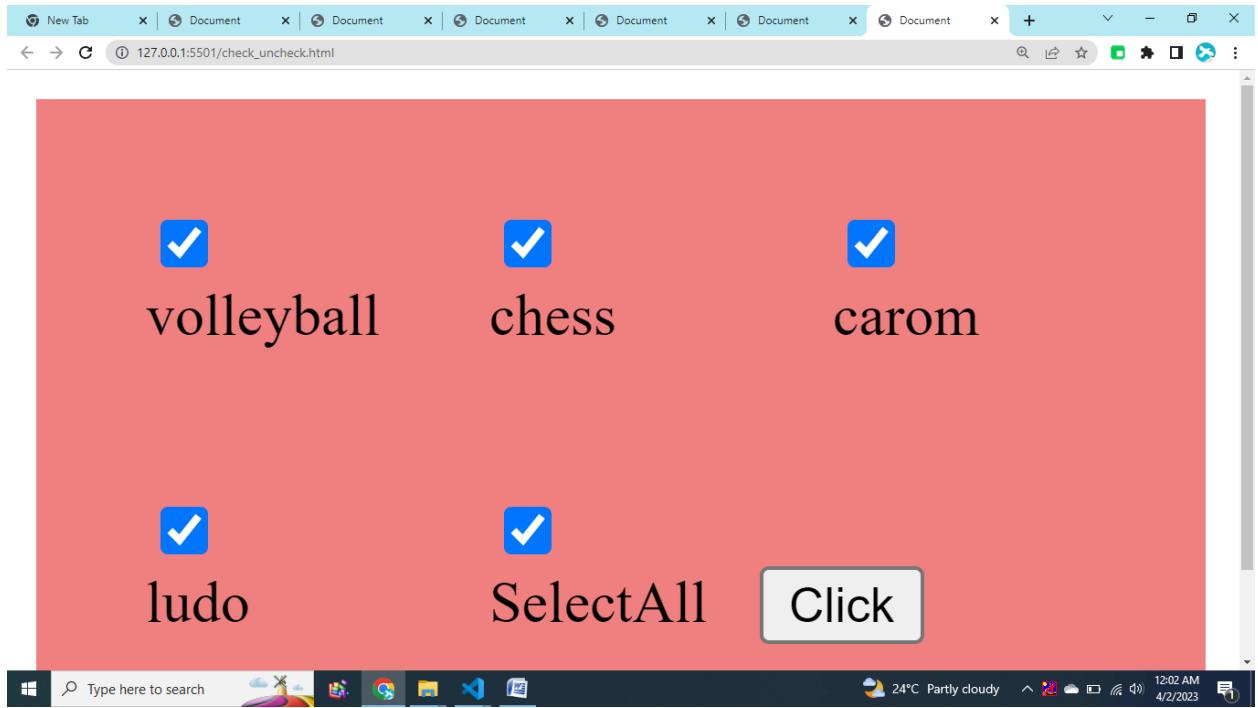
```
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
<style>
    #main {
        width: 300px;
        background-color: lightcoral;
        padding: 10px;
    }
    .cls{
        width: 50px;
        display: inline-block;
        padding: 20px;
    }
</style>
</head>

<body>
    <div id="main">
        <div class="cls">
            <input type="checkbox" name="volleyball" value="volleyball" id="volleyball">
            <label for="volleyball">volleyball</label>
        </div>
        <div class="cls">
            <input type="checkbox" name="chess" value="chess" id="chess">
            <label for="chess">chess</label>
        </div>
        <div class="cls">
            <input type="checkbox" name="carom" value="carom" id="carom">
            <label for="carom">carom</label>
        </div>
        <div class="cls">
            <input type="checkbox" name="ludo" value="ludo" id="ludo">
            <label for="ludo">ludo</label>
        </div>
        <div class="cls">
            <input type="checkbox" name="SelectAll" value="SelectAll" id="SelectAll">
            <label for="SelectAll">SelectAll</label>
        </div>
        <button id="a">Click</button>
    </div>
    <script>
```

```
let y = document.getElementById("a");
let x = document.getElementById("volleyball");
let x1 = document.getElementById("chess");
let x2 = document.getElementById("carom");
let x3 = document.getElementById("ludo");
let x4 = document.getElementById("SelectAll");
y.addEventListener("click", check);
function check() {
    if (x.checked == true && x1.checked == true && x2.checked == true &&
x3.checked == true) {
        x4.checked = true;
    }
    else if (x4.checked == true) {
        x.checked = true;
        x1.checked = true;
        x2.checked = true;
        x3.checked = true;
    }
}
</script>
</body>

</html>
```

## Output



Tells head

```
<!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>
</head>

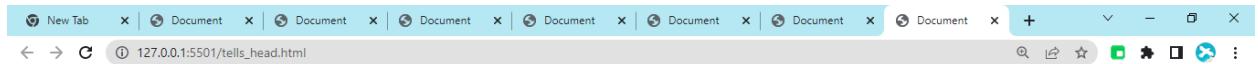
<body>
    <select name="" id="selection">
        <option value="T">T</option>
        <option value="H">H</option>
    </select>
    <table>
        <tr>
            <th id="00"></th>
            <td id="10"></td>
            <td id="20"></td>
            <td id="30"></td>
            <td id="40"></td>
            <td id="50"></td>
```

```
<td id="60"></td>
</tr>
<tr id>
    <th id="01"></th>
    <td id="11"></td>
    <td id="21"></td>
    <td id="31"></td>
    <td id="41"></td>
    <td id="51"></td>
    <td id="61"></td>
</tr>
<tr id>
    <th id="02"></th>
    <td id="12"></td>
    <td id="22"></td>
    <td id="32"></td>
    <td id="42"></td>
    <td id="52"></td>
    <td id="62"></td>
</tr>
<tr>
    <th id="03"></th>
    <td id="13"></td>
    <td id="23"></td>
    <td id="33"></td>
    <td id="43"></td>
    <td id="44"></td>
    <td id="45"></td>
</tr>
<th id="d4"></th>
</table>
<button id="btn">Click me</button>
<script>
    let btn = document.getElementById("btn");
    btn.addEventListener("click", show)
    let digit1 = 0;
    let digit2 = 0;
    let t_count = 0;
    let h_count = 0;
    function show() {
        let v = document.getElementById("selection").value;
        console.log(t_count);
        console.log(h_count);
        if (v == "T") {
            if (h_count == 1) {
```

```
        digit1++;
        h_count = 0;
        digit2 = 0;
    }
    digit2++;
    t_count = 1;
}
if (v == "H") {
    if (t_count == 1) {
        digit1++;
        t_count = 0;
        digit2 = 0;
    }
    digit2++;
    h_count = 1;
}
let innerhtml1 = String(digit1) + String(digit2);
console.log("v", v);
console.log(innerhtml1);
let put1 = document.getElementById(innerhtml1);
put1.innerHTML = v;
}
</script>
</body>

</html>
```

## Output



H ▾

T H T H

T T H

T H

Click me



## Remove child

```
<!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>
</head>
<body>
    <ul id="main">
        <li>List 1</li>
        <li id="list2">List 2</li>
        <li>List 3</li>
        <li>List 4</li>
        <li>List 5</li>
    </ul>
    <script>
        //for remove list2
        let ul=document.getElementById("main"); //select parent from which we want
        to remove element
    </script>

```

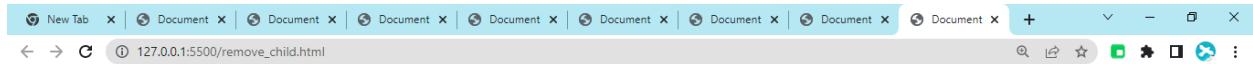
```

        let list2=document.getElementById("list2");//select element which we want
to remove
        ul.removeChild(list2);//syntax =>parent.removeChild(name of element we
want to remove)

        //for remove ul
        //ul parent is body
        // let body=document.body;
        //body.removeChild(ul);//remove ul from body
    </script>
</body>
</html>

```

## Output



- List 1
- List 3
- List 4
- List 5



## Create append Element

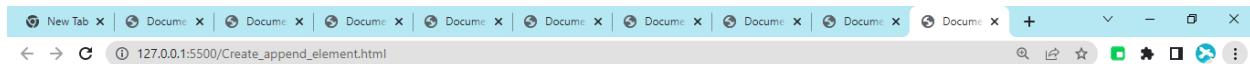
```

<!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>

```

```
</head>
<body>
    <div id="intro">
        <p>Hello</p>
    </div>
    <script>
        let x=document.getElementById("intro");
        let h1=document.createElement("h1");//make h1 element
        let text=document.createTextNode("Thi is h1 tag");//make text for h1
        h1.textContent="Oscar ";//2nd method for make text data
        h1.appendChild(text);//text append in h1
        h1.className="cls";//give class to h1
        h1.id="h1";//give id to h1
        document.body.appendChild(h1);//this created event append in body
        let p=x.firstChild;
        console.log(p);
        console.log(p.textContent);//tag na innerhtml nu content check karva mate
    </script>
</body>
</html>
```

## Output



Hello

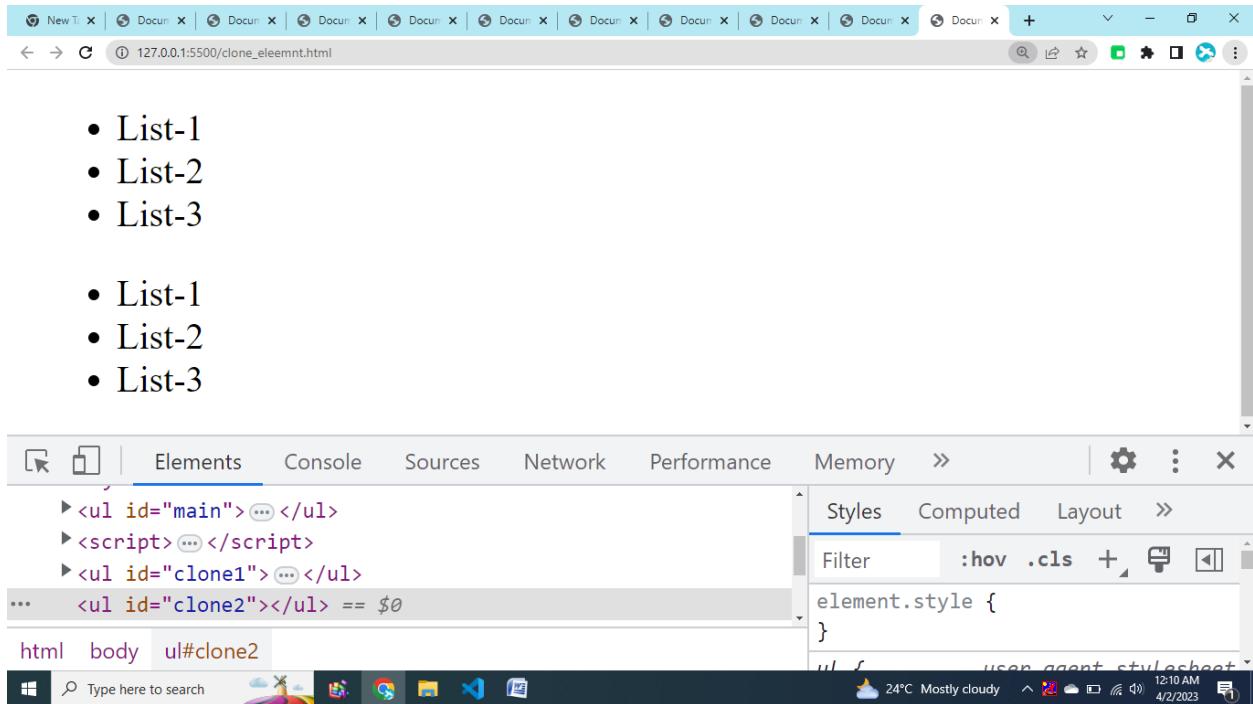
Oscar Thi is h1 tag



## Clone make

```
<!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>
</head>
<body>
    <ul id="main">
        <li>List-1</li>
        <li>List-2</li>
        <li>List-3</li>
    </ul>
    <script>
        let ul=document.getElementById("main");//select ul by id
        let clone1=ul.cloneNode(true);//copy ul by clone node ,if we dont write
true then only ul select but children not select
        console.log(clone1)
        document.body.appendChild(clone1);
        clone1.id="clone1";//add id to this new copied element
        let clone2=ul.cloneNode();//True not write therefore only ul copy but li
not copy
        clone2.id="clone2";//add id to this new copied element
        document.body.appendChild(clone2);//append this new element in body
    </script>
</body>
</html>
```

## Output



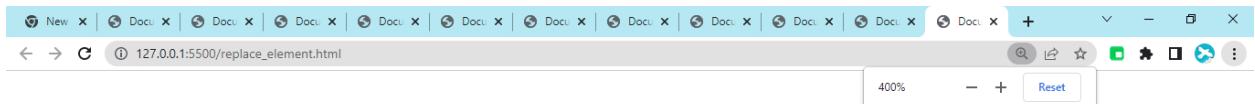
## Replace Element

```
<!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>
</head>
<body>
    <ul id="main">
        <li>List1</li>
        <li>List2</li>
        <li id="list3">List3</li>
        <li>List4</li>
    </ul>
    <script>
        let list3=document.getElementById("list3");
        let newElm=document.createElement("h3");
        newElm.textContent="this is replace element";
        let parent=document.getElementById("main");
        parent.replaceChild(newElm,list3);
        // syntax parent element(what we want to replae, at which place we want
        to replace)
    </script>

```

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

## Output



- List1
- List2

**this is replace element**

- List4



**Insert AdjacentHTML**

**Insert AdjacentElement**

```
<!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>
        #main{
            background-color: cadetblue;
        }
    </style>

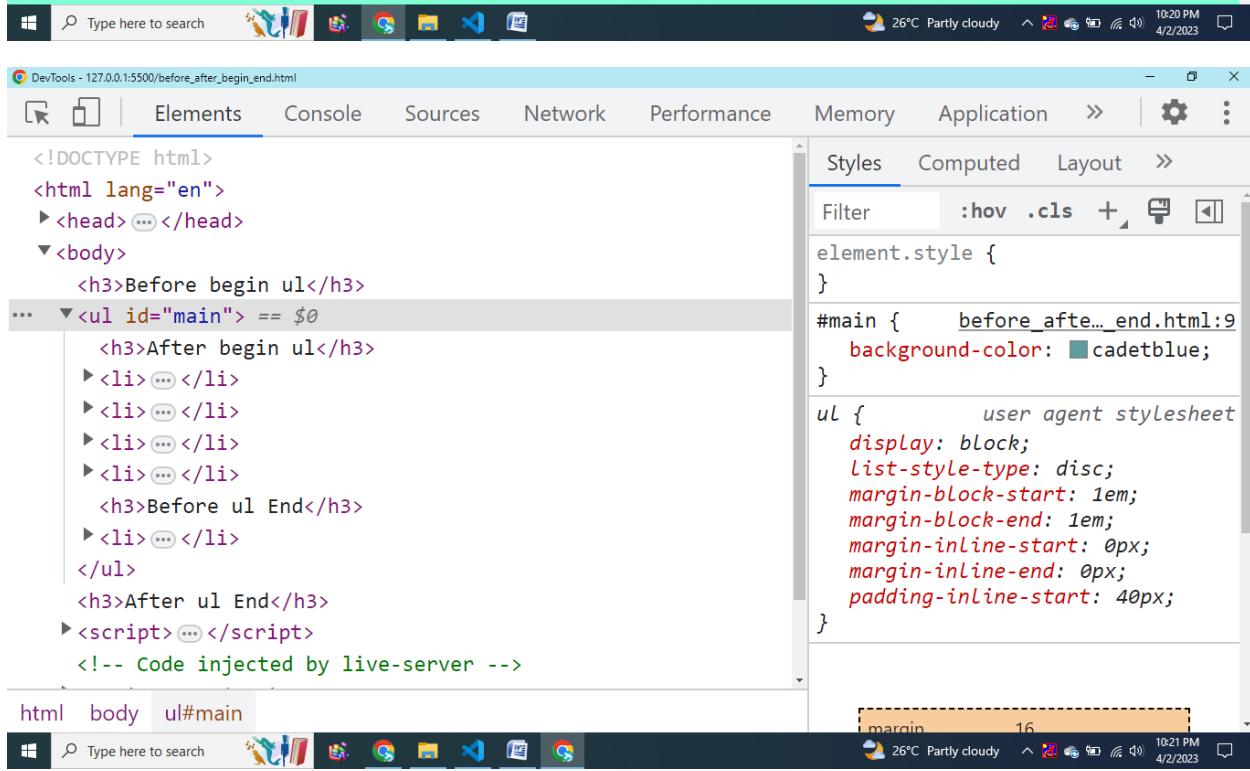
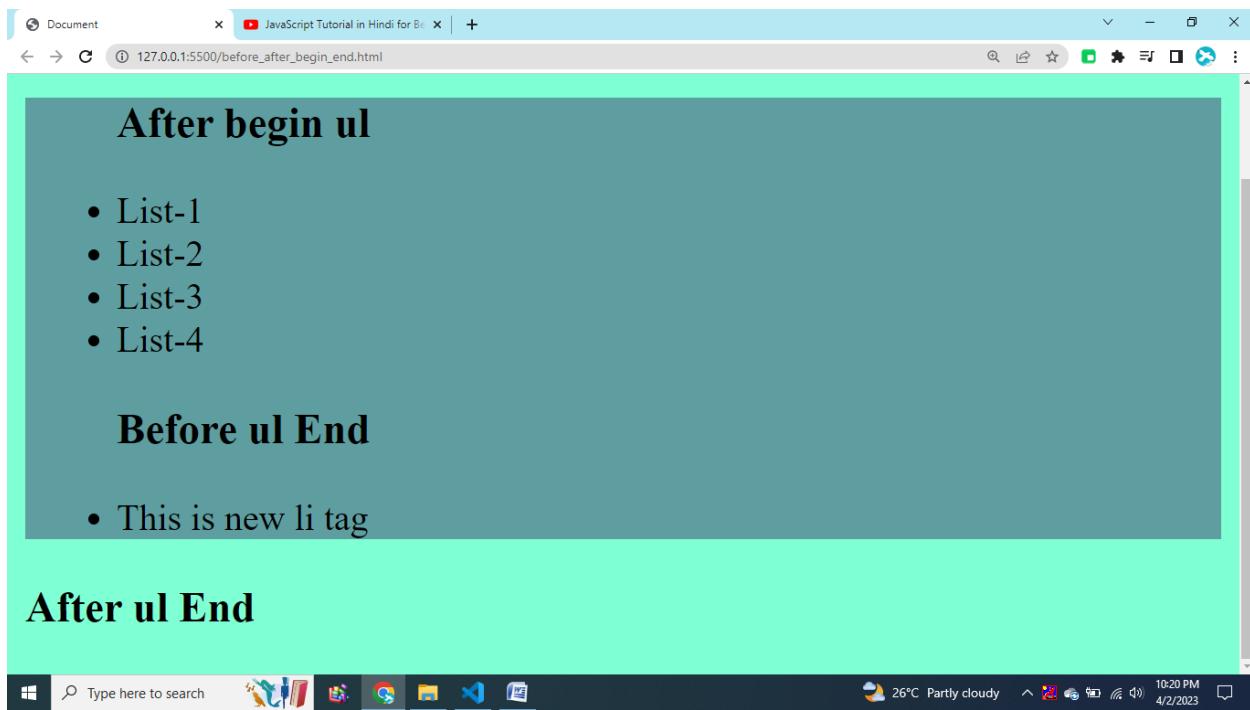
```

```

body{
    background-color: aquamarine;
}
</style>
</head>
<body>
<ul id="main">
    <li>List-1</li>
    <li>List-2</li>
    <li>List-3</li>
    <li>List-4</li>
</ul>
<script>
    let ul=document.getElementById("main");
    let parent=document.body;
    let list1=document.firstChild;
    let li=document.createElement("li");
    let text=document.createTextNode("This is new li tag");
    li.appendChild(text);
    let li1=<h3>Before begin ul</h3>; //This is another method to make tag
    let li2=<h3>After begin ul</h3>;
    let li3=<h3>Before ul End</h3>;
    let li4=<h3>After ul End</h3>;
    //If element made using above given method then insertAdjacentHTML karvupade
    ul.insertAdjacentHTML("beforebegin",li1);
    ul.insertAdjacentHTML("afterbegin",li2);
    ul.insertAdjacentHTML("beforeend",li3);
    ul.insertAdjacentHTML("afterend",li4);
    //if element create by createElement then we have to write
    insertAdjacentElement
        ul.insertAdjacentElement("beforeend",li);
        /* syntax=>reference Element.insertAdjacentHTML("position",which element
we want to add) */
        //position=before begin,after begin,before end,after end
        //before begin means in this example before ul
    </script>
</body>
</html>

```

## Output



## Attribute Add

```
<!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>
</head>
<body>
  <div>
    <button id="btn">Click Me</button>
  </div>
  <script>
    let btn=document.getElementById("btn");
    btn.setAttribute("class","abc");/* new attribute add in button */
  </script>
</body>
</html>
```

## Output

The screenshot shows the Google DevTools Elements tab for a page named "change\_attribute.html". The element selected is a `<div>` containing a `<button>`. The `<button>` has an `id="btn"` and a newly added `class="abc"`. The browser's status bar at the bottom indicates it's 25°C, Partly cloudy, 10:33 PM, 4/2/2023.

## Inline style

```
<!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>
</head>
<body>
    <h1 id="main">Mehul Waghela</h1>
    <script>
        //add inline style and attribute
        let tagg=document.getElementById("main");
        //if we give multiple time inline style then it is overlap style and last
given style only work
        tagg.style.cssText="font-size:10px";//Method1 to add inline style
        tagg.setAttribute("style","color:green;background-
color:yellow");//Method2 to add inline style
        tagg.style.cssText="background:red; color:white";//Method1 to add inline
style
        //jo same element ma style add karvu hoy ane aagar ni style ne remove
karvi hot to += karine aapvu padse
        tagg.style.cssText += "border:1px solid black";//append new style
        let allcss=getComputedStyle(tagg);//getcomputedstyle use to get all style
given to that element
        console.log(allcss);
    </script>
</body>
</html>
```

## Output



## CSS Classes

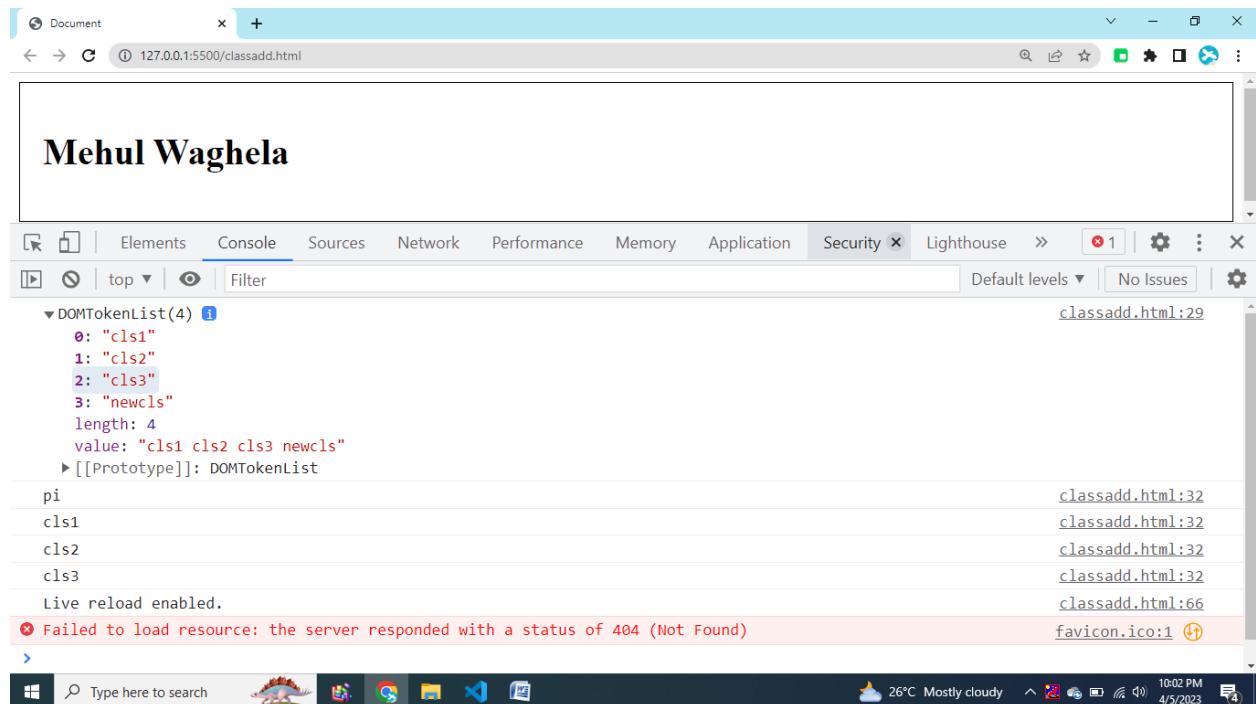
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        .pi{
            padding: 20px;
            border: 1px solid black;
        }
        .cls{
            background-color: cadetblue;
            color: crimson;
        }
        .newcls{
            padding: 20px;
            border: 1px solid black;
        }
    </style>
</head>
<body>
```

```

<div id="main" class="pi cls1 cls2 cls3">
    <h1>Mehul Waghela</h1>
</div>
<script>
    let div=document.getElementById("main");
    console.log(div.classList); //classList give array of all class given to element
    for(let x of div.classList)
    {
        console.log(x);
    }
    div.classList.add("cls"); //element.classList.add=>add class in element
    div.classList.remove("pi"); //by this we can remove any class
    div.classList.replace("cls","newcls") //Replace cls class by newcls
</script>
</body>
</html>

```

## Output



## Toggle

```

<!DOCTYPE html>
<html lang="en">

```

```

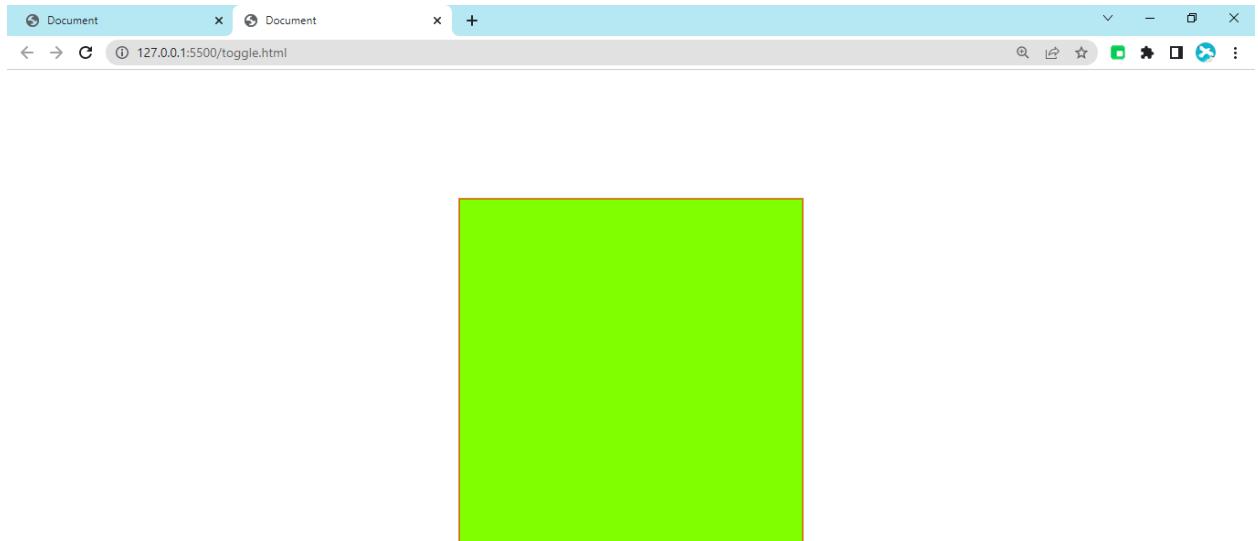
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        #main {
            height: 300px;
            width: 300px;
            border: 1px solid red;
            position: absolute;
            top: 50%;
            left: 50%;
            transform: translate(-50%, -50%);
        }
        .cls{
            background-color: chartreuse;
        }
    </style>
</head>

<body>
    <div class="cls" id="main"></div>
</body>
<script>
    //toggle only work with class
    //toggle means jo class hoy to kadhi nakhe ne nai hoy to kadhi nakhe
    //ekvaar click kare tyare class aavi jaay biji vaar click kare tyare class
    nikdi jaay
    let div = document.getElementById("main");
    div.addEventListener("click", function () {
        div.classList.toggle("cls");
    })
</script>

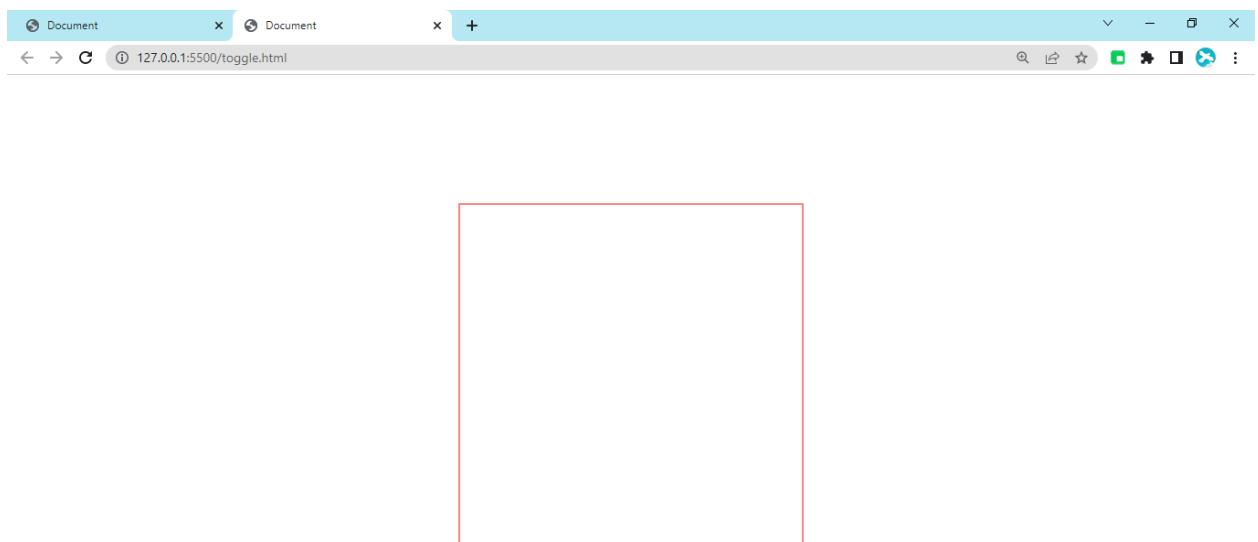
</html>

```

## Output



After click



Offset and client height width

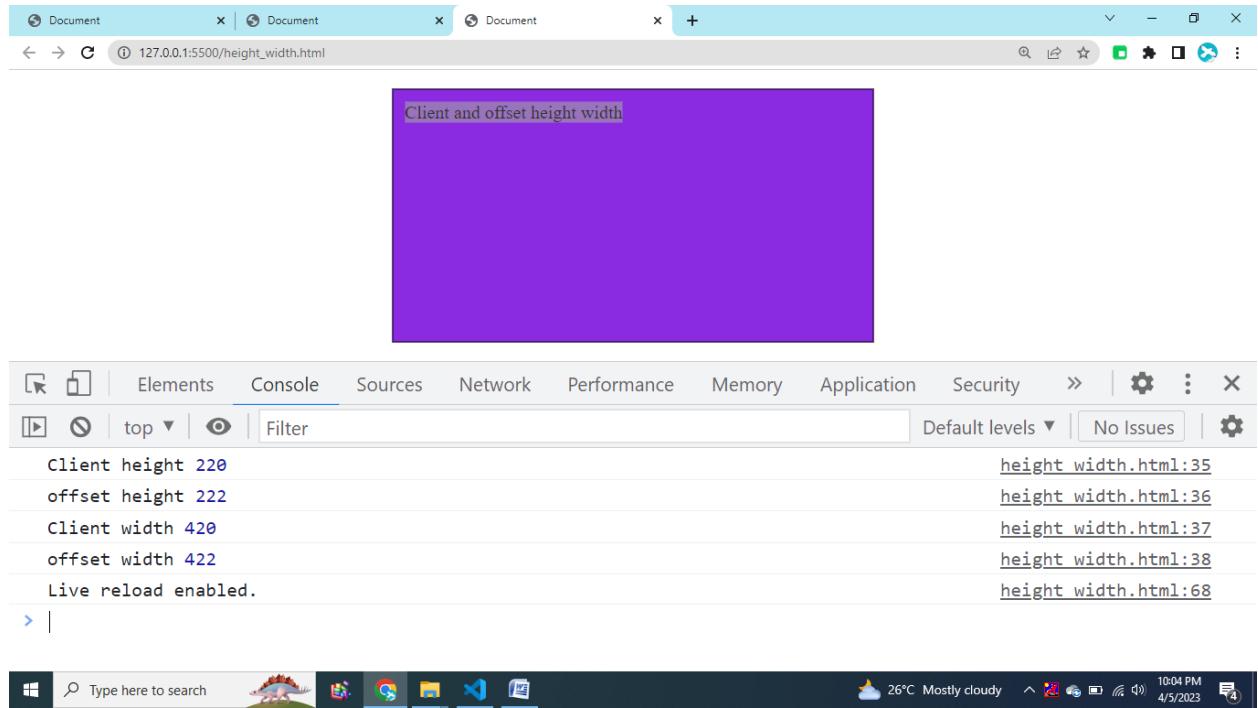
```
<!DOCTYPE html>
<html lang="en">
```

```
<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>
        #main {
            height: 200px;
            width: 400px;
            padding: 10px;
            border: 1px solid black;
            background-color: blueviolet;
            position: absolute;
            top: 50%;
            left: 50%;
            transform: translate(-50%, -50%);
        }
    </style>
</head>

<body>
    <div id="main">Client and offset height width</div>
    <script>
        //client and offset is use to get height width of any element
        //in client padding is include
        //in offset padding and border both include
        //therefore client height= 200 + padding both side(+20)=220
        //therefore offset height= 200 + border both side(+2)+padding both
        side(+20)=222
        //therefore client width= 400 + padding both side(+20)=420
        //therefore offset width= 400 + border both side(+2)+padding both
        side(+20)=422
        let div = document.getElementById("main");
        console.log("Client height", div.clientHeight);
        console.log("offset height", div.offsetHeight);
        console.log("Client width", div.clientWidth);
        console.log("offset width", div.offsetWidth);
    </script>
</body>

</html>
```

# Output



## Task1

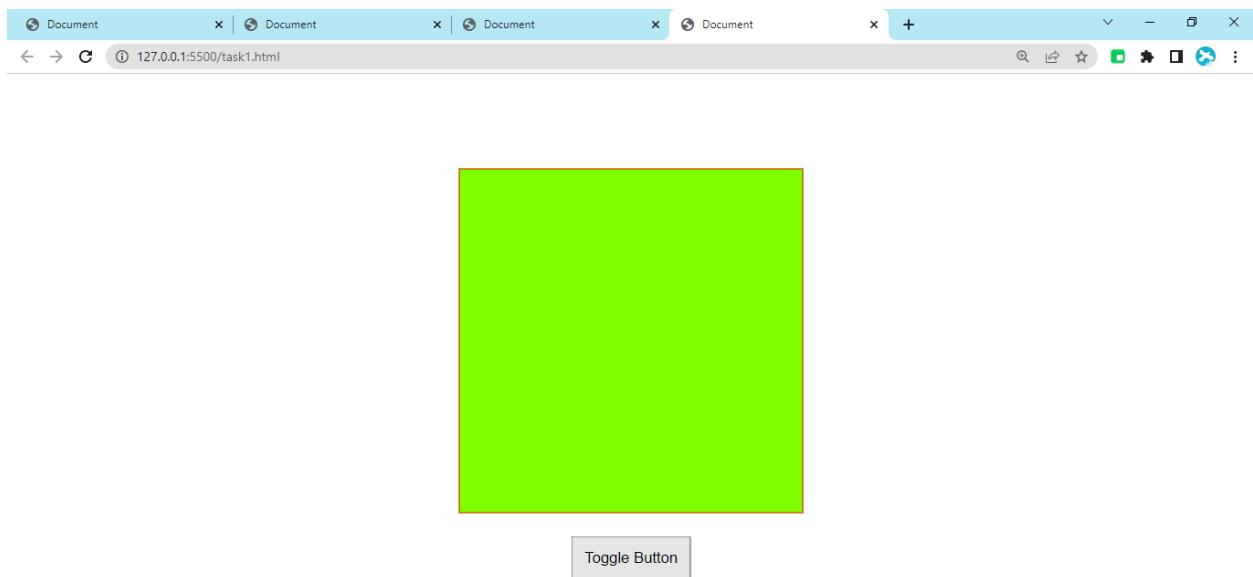
```
<!DOCTYPE html>
<html lang="en">

<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>
        #main {
            height: 300px;
            width: 300px;
            border: 1px solid red;

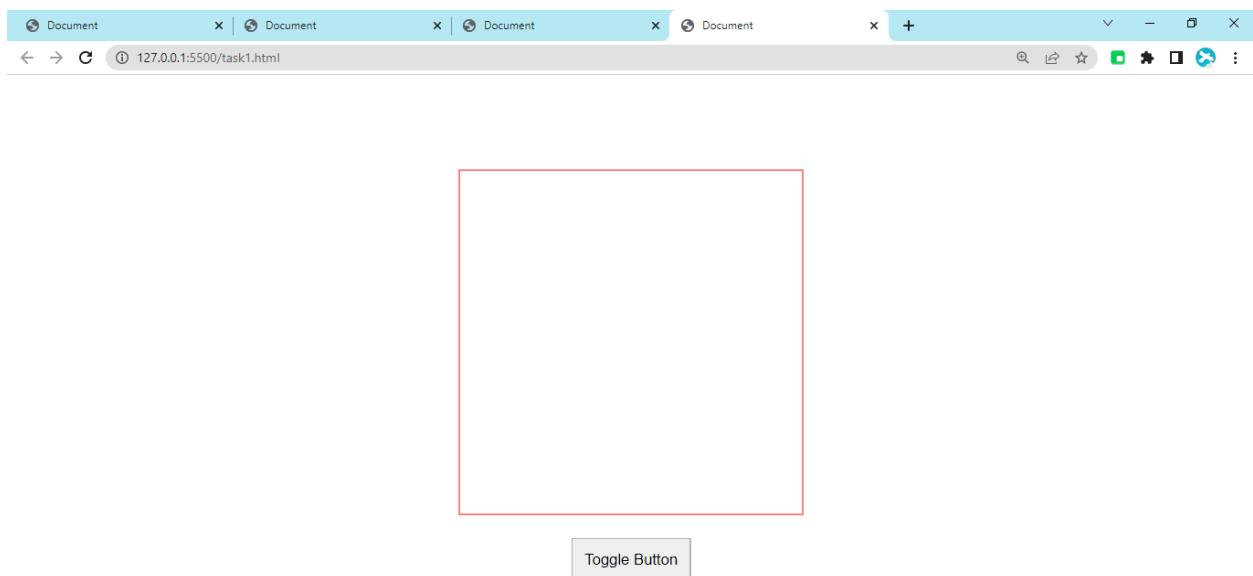
        }
        .cls{
            background-color: chartreuse;
        }
        #pos{
            position: absolute;
            top: 50%;
        }
    </style>
</head>
<body>
    <div class="cls" id="main"></div>
    <div id="pos">Client and offset height width</div>
</body>
</html>
```

```
        left: 50%;  
        transform: translate(-50%, -50%);  
    }  
    #button{  
        width: 100%;  
        text-align: center;  
    }  
    button{  
        padding: 10px;  
        margin-top: 20px;  
    }  
    </style>  
</head>  
  
<body>  
    <div id="pos">  
        <div class="cls" id="main"></div>  
        <div id="button"><button>Toggle Button</button></div>  
    </div>  
</body>  
<script>  
  
    let div = document.getElementById("main");  
    let btn=document.getElementById("button").firstElementChild;  
    btn.addEventListener("click", function () {  
        div.classList.toggle("cls");  
    })  
</script>  
  
</html>
```

## Output



## After click



## Task2

```
<!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>
        header {
            display: flex;
            justify-content: space-between;
        }

        .main {
            height: 300px;
            width: 300px;
            border: 1px solid red;
        }

        .cls {
            background-color: chartreuse;
        }

        .button {
            width: 100%;
            text-align: center;
        }

        button {
            padding: 10px;
            margin-top: 20px;
        }

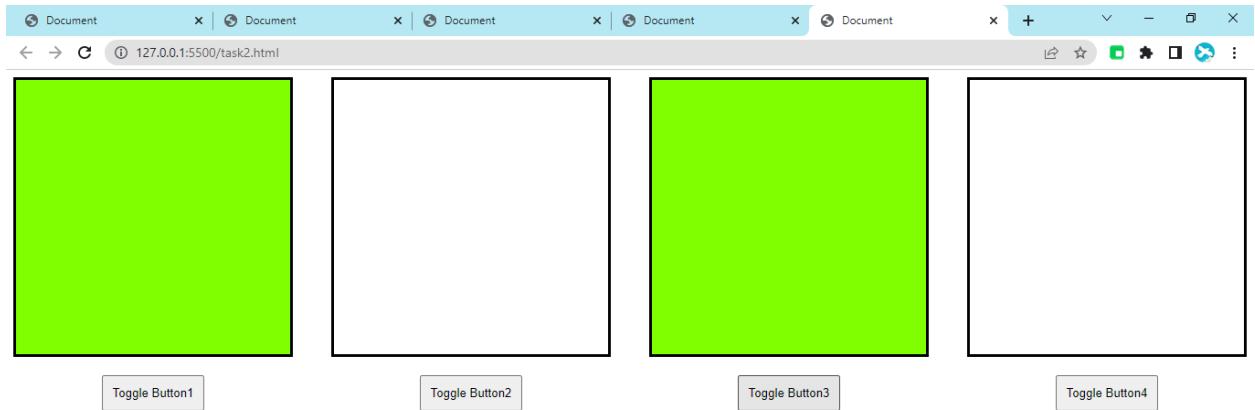
        .cls1 {
            width: 300px;
            height: 300px;
            border: 3px solid black;
        }
    </style>
</head>

<body>
```

```
<header>
  <div class="pos">
    <div class="cls1"></div>
    <div class="button"><button>Toggle Button1</button></div>
  </div>
  <div class="pos">
    <div class="cls1"></div>
    <div class="button"><button>Toggle Button2</button></div>
  </div>
  <div class="pos">
    <div class="cls1"></div>
    <div class="button"><button>Toggle Button3</button></div>
  </div>
  <div class="pos">
    <div class="cls1"></div>
    <div class="button"><button>Toggle Button4</button></div>
  </div>
</header>
</body>
<script>
  let main = document.getElementsByClassName("pos");
  console.log(main);
  for (let x of main) {
    x.lastElementChild.addEventListener("click", function () {
      x.firstElementChild.classList.toggle("cls");
    })
  }
</script>

</html>
```

## Output



## Task3

```
<!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>
        header {
            display: flex;
            justify-content: space-between;
        }

        .main {
            height: 300px;
            width: 300px;
            border: 1px solid red;
        }

        .cls {
            background-color: chartreuse;
        }
    </style>

```

```
.button {
    width: 100%;
    text-align: center;
}

button {
    padding: 10px;
    margin-top: 20px;
}

.cls1 {
    width: 300px;
    height: 300px;
    border: 3px solid black;
}

</style>
</head>

<body>
<header>
    <div class="pos">
        <div class="cls1"></div>
        <div class="button"><button>Toggle Button1</button></div>
    </div>
    <div class="pos">
        <div class="cls1"></div>
        <div class="button"><button>Toggle Button2</button></div>
    </div>
    <div class="pos">
        <div class="cls1"></div>
        <div class="button"><button>Toggle Button3</button></div>
    </div>
    <div class="pos">
        <div class="cls1"></div>
        <div class="button"><button>Toggle Button4</button></div>
    </div>
</header>
</body>
<script>
    let main = document.getElementsByClassName("pos");
    for (let x of main) {
        x.lastElementChild.addEventListener("click", function () {
            x.firstElementChild.classList.toggle("cls");
            for (let y of main) {

```

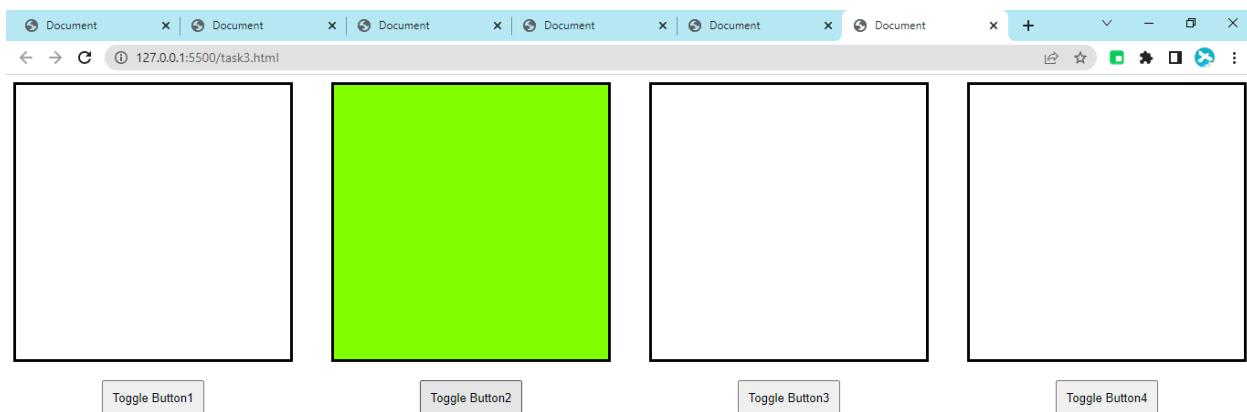
```

        if (y != x) { y.firstChild.classList.remove("cls"); }
    }
})
</script>

</html>

```

## Output-only one out



## Client and offset

```

<!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>
        #main {
            height: 200px;
            width: 400px;

```

```

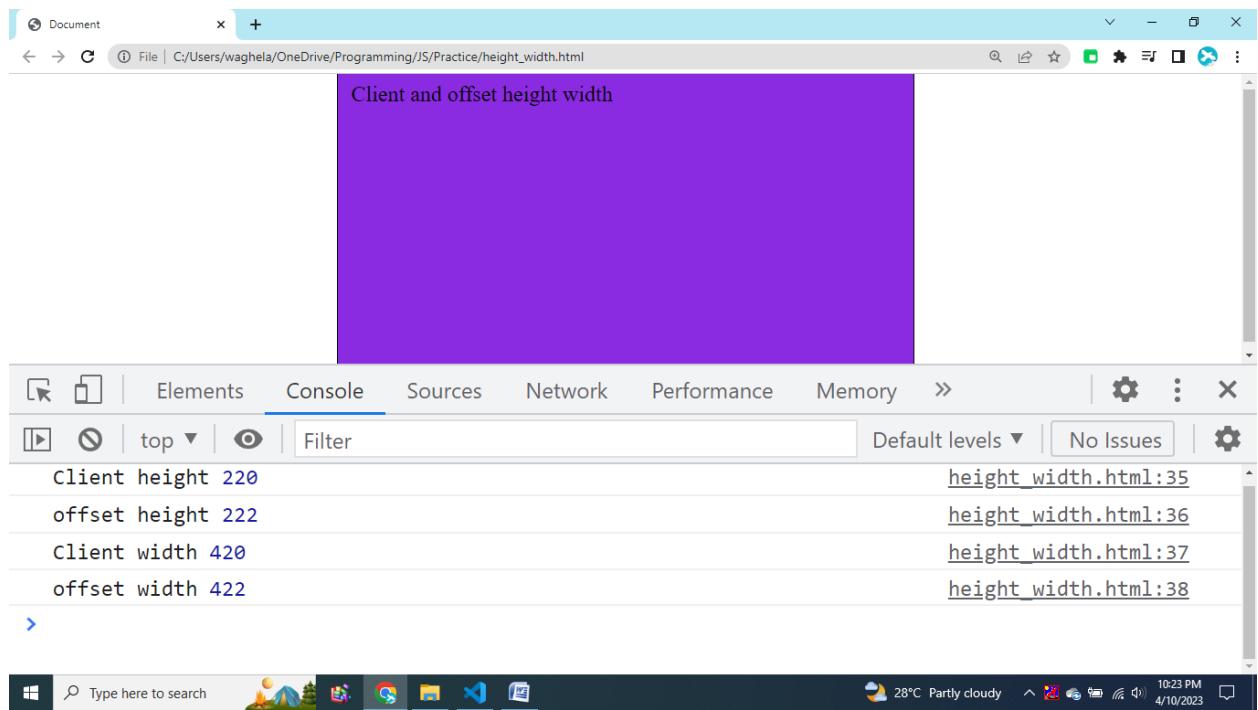
padding: 10px;
border: 1px solid black;
background-color: blueviolet;
position: absolute;
top: 50%;
left: 50%;
transform: translate(-50%, -50%);
}
</style>
</head>

<body>
<div id="main">Client and offset height width</div>
<script>
//client and offset is use to get height width of any element
//in client padding is include
//in offset padding and border both include
//therefore client height= 200 + padding both side(+20)=220
//therefore offset height= 200 + border both side(+2)+padding both
side(+20)=222
//therefore client width= 400 + padding both side(+20)=420
//therefore offset width= 400 + border both side(+2)+padding both
side(+20)=422
let div = document.getElementById("main");
console.log("Client height", div.clientHeight);
console.log("offset height", div.offsetHeight);
console.log("Client width", div.clientWidth);
console.log("offset width", div.offsetWidth);
</script>
</body>

</html>

```

## Output



## Mouse Event

```
<!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>
        #main {
            height: 200px;
            width: 500px;
            border: 1px solid black;
            text-align: center;
            position: absolute;
            top: 50%;
            left: 50%;
            transform: translate(-50%, -50%);
        }

        #btn {
            position: absolute;
            top: 75%;
```

```

        left: 50%;
        transform: translate(-50%, -50%);
    }
    #ul{
        border: 1px solid black;
        height: 150px;
        width: 300px;
    }

```

</style>

</head>

<body>

- mouseover
- mouseout
- mousedown
- mouseup

</ul>

<button id="btn">Click me</button>

<ul id="ul">

- click
- dblclick
- contextmenu
- mouseover

</ul>

<button id="btn1">Click me</button>

<script>

```

let prt = document.getElementById("main");
let btn = document.getElementById("btn");
// MOUSEOVER THI APRE JENE EVENT API HOI ANA PR MOUSE LAI JSE ATLE EVENT
LAGSE
    btn.addEventListener('mouseover', function () {
        prt.firstChild.style.backgroundColor = "pink";
    });
    // MOUSEOUT THI APRE JENE EVENT API HOI ANA PR MOUSE LAI NE PA6A
KHADEDIYE TYREANA PR EVENT LAGSE
    btn.addEventListener('mouseout', function () {
        prt.firstChild.nextSibling.style.backgroundColor =
"skyblue";
    });
    // MOUSEDOWN THI APRE JENA PR EVENT LAGADVI HOI TENA PR JAI MOUSE NU
BUTTON JYA SUDHI DABAVI RAKHSU TYA SUDHI A EVENT REHSE
    btn.addEventListener('mousedown', function () {

```

```

        prt.lastElementChild.previousElementSibling.style.backgroundColor =
"blue";
    });
    // MOUSEUP THI APRE JENA PR EVENT LAGADVI HOI TENA PR JAI MOUSE NU
BUTTON ANA PR DABAVI NE PA6U KHASEDSU TYRE A EVENT LAGSE
    btn.addEventListener('mouseup', function () {
        prt.lastElementChild.style.backgroundColor = "grey";
    });

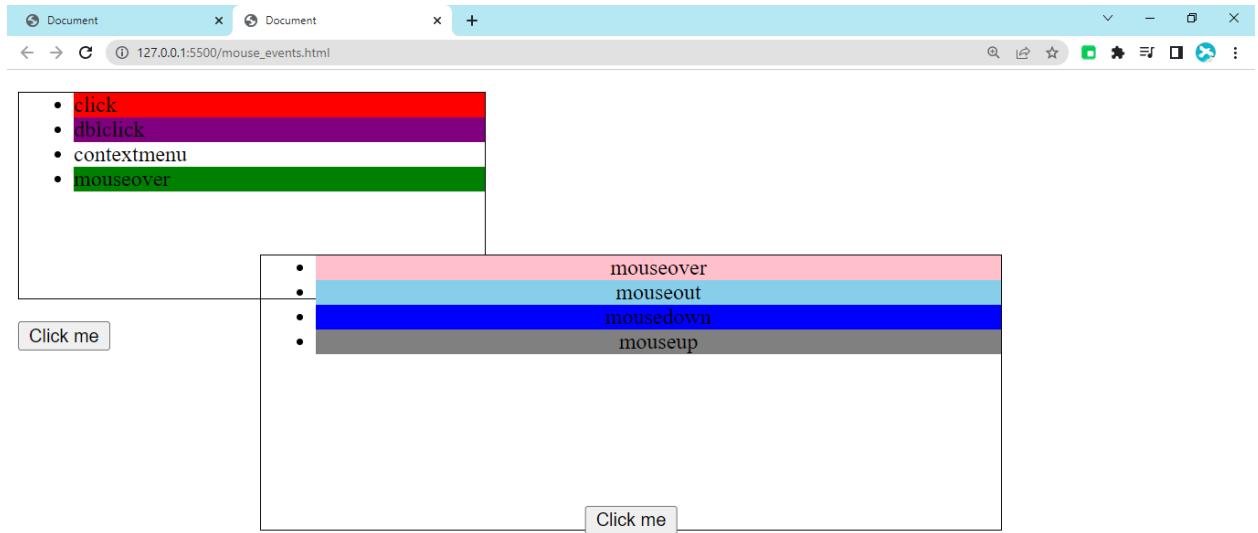
let prt1 = document.getElementById("ul");
let btn1 = document.getElementById("btn1");
// CLICK THI JENE EVENT API HSE TENA PR CLICK KARVATHI A EVENT LAGI JSE
btn1.addEventListener('click',function(){
    prt1.firstChild.style.backgroundColor = "red";
});
// DBLCLICK THI JENE EVENT API HSE ANA PR DOUBLE CLICK KRSU TYRE A EVENT
LAGI JSE
    btn1.addEventListener('dblclick',function(){
        prt1.firstChild.nextSibling.style.backgroundColor =
"purple";
    });
    // CONTEXTMENU THI JENE EVENT APVANI HSE TENA PR RIGHT CLICK KARVATHI A
EVENT LAGI JSE
    btn1.addEventListener('contextmenu',function(){
        prt1.lastElementChild.previousElementSibling.style.backgroundColor =
"wheat";
    });
    btn1.addEventListener('mouseover',function(){
        prt1.lastElementChild.style.backgroundColor = "green";
    });

</script>
</body>

</html>

```

## Output



## Eventlistner method

```
<!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>
</head>

<body>
    <ul id="main">
        <li>List-1</li>
        <li>List-2</li>
        <li>List-3</li>
        <li>List-4</li>
    </ul>
    <button id="btn">Click me</button>
    <script>
        // ADD EVENT LISTENER METHOD NI UNDER LAKAHY
        // EK EVENT PAR MULTIPLE EVENT LISTENER LAGAVI SAKAY
        let btn = document.getElementById("btn");
        let prt = document.getElementById("main");
    </script>
</body>
```

```

btn.addEventListener('click', function () {
    let child = prt.style.backgroundColor = "yellow";
})
btn.addEventListener('mouseover', function () {
    let child = prt.style.backgroundColor = "green";
})
btn.addEventListener('mouseout', function () {
    let child = prt.style.backgroundColor = "pink";
})
</script>
</body>

</html>

```

## Output



- List-1
- List-2
- List-3
- List-4

Click me



## Onclick Event

```

<!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>
</head>
<body>
    <ul id="main">
        <li>List-1</li>
        <li>List-2</li>
        <li>List-3</li>
        <li>List-4</li>
    </ul>
    <button id="btn" onclick="show()">Click me</button>
    <script>
        let btn = document.getElementById("btn");
        let prt = document.getElementById("main");
        function show(){
            let child = prt.lastElementChild.previousElementSibling;
            child.style.color = "green";
        }
    </script>
</body>
</html>

```

## Output



- List-1
- List-2
- List-3
- List-4

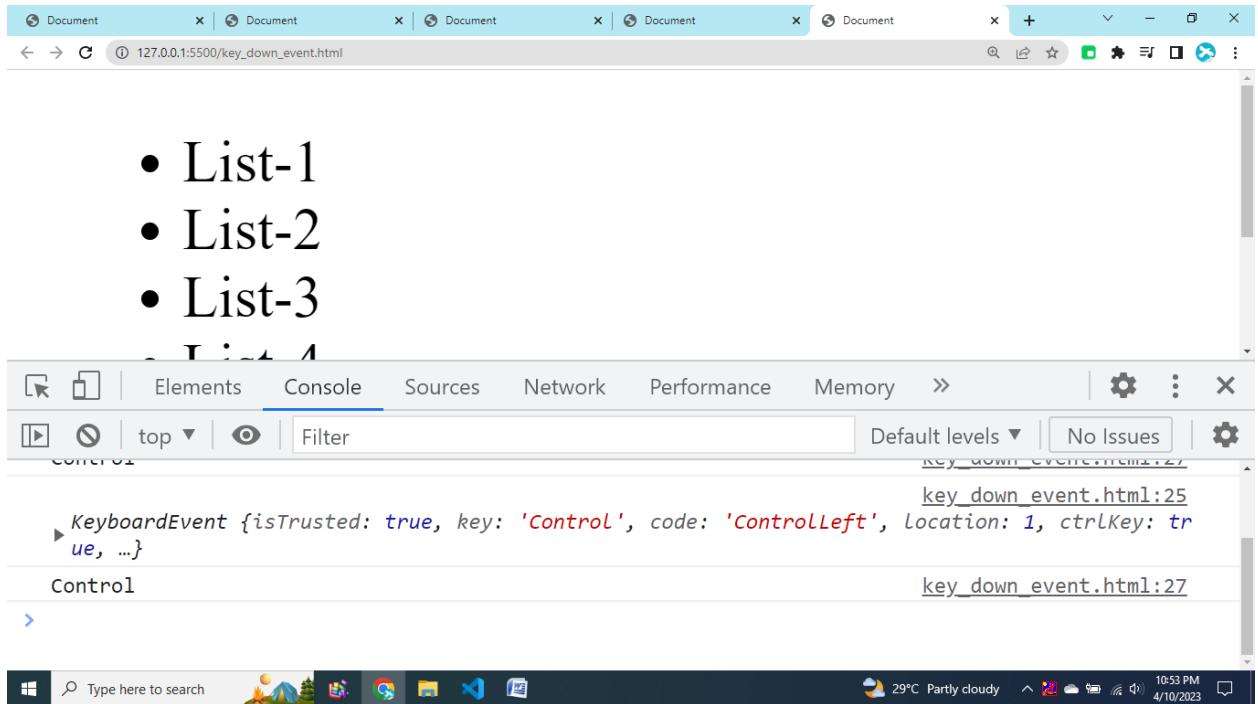
**Click me**

# KeyDown Event

```
<!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>
</head>
<body>
  <ul id="main">
    <li>List-1</li>
    <li>List-2</li>
    <li>List-3</li>
    <li>List-4</li>
  </ul>
  <button id="btn">Click me</button>
<script>
  // KEY DOWN MA FUNCTION MA KOI PN PARAMETER PASS KRVANO HOI
  // KEY EVENT MA AAPRNE WINDOW MA USE THSE ATLE DOCUMENT NI JAGYA A WINDOW
LAKHVN P6I EVENT APVI
  // WINDOW NI EVENT CHE
  let prt = document.getElementById("main");
  let btn = document.getElementById("btn");
  window.addEventListener('keydown', show);
  function show(event){
    console.log(event);
    // AHI ONLY EVENT LAKSU CONSOLE MA TO ANO OBJECT BANSE N A RITE DEKHSE
CONSOLE MA
    console.log(event.key);
    // EVENT.KEY LAKHSU TO ANI KEY DEKHSE MATLAB APRE KEYBORD MA J PE TYPE
KRSU TE DEKHSE CONSOLE MA
  }

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

# Output



## Key Up Event

```
<!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>
</head>

<body>
    <ul id="main">
        <li>List-1</li>
        <li>List-2</li>
        <li>List-3</li>
        <li>List-4</li>
    </ul>
    <button id="btn">Click me</button>
    <script>
        // KEY PRESS KRI NE CHODSU TYRE AA EVENT LAGSE
        // WINDOW NI EVENT CHE
        let prt = document.getElementById("main");
        let btn = document.getElementById("btn");
```

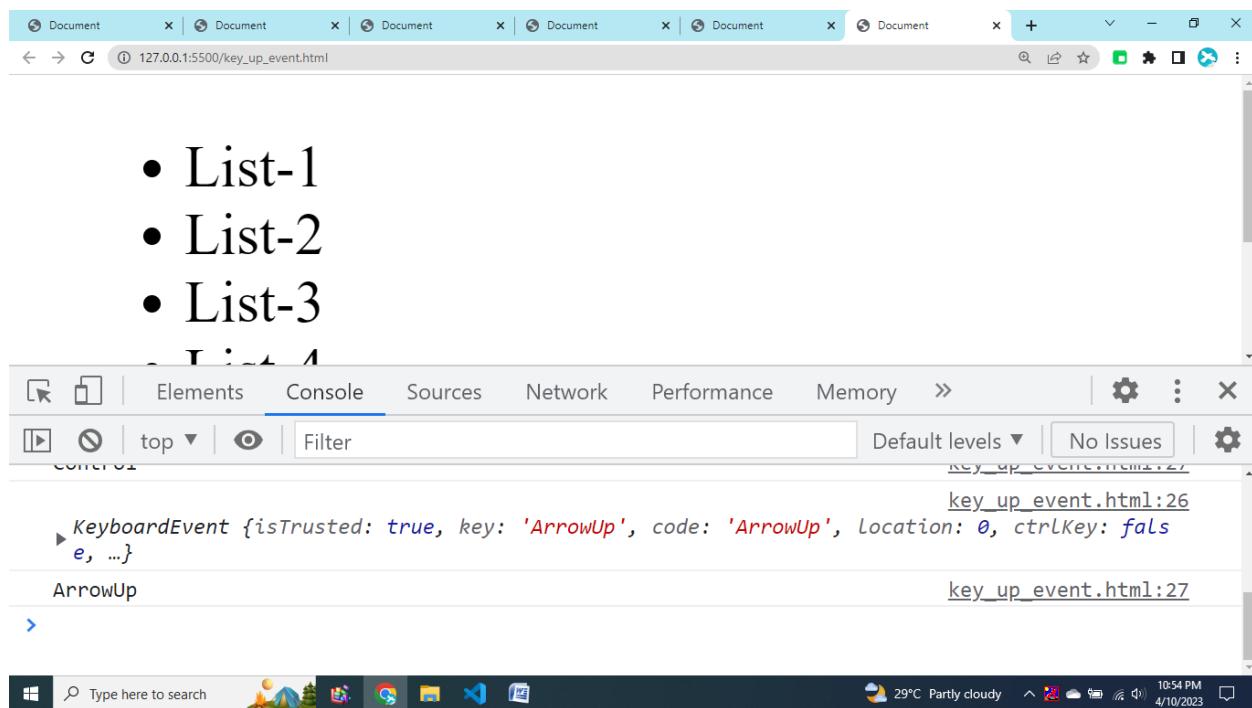
```

window.addEventListener('keyup',show);
function show(event){
    console.log(event);
    console.log(event.key);
}
</script>
</body>

</html>

```

## Output



## Page offset

```

<!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>

```

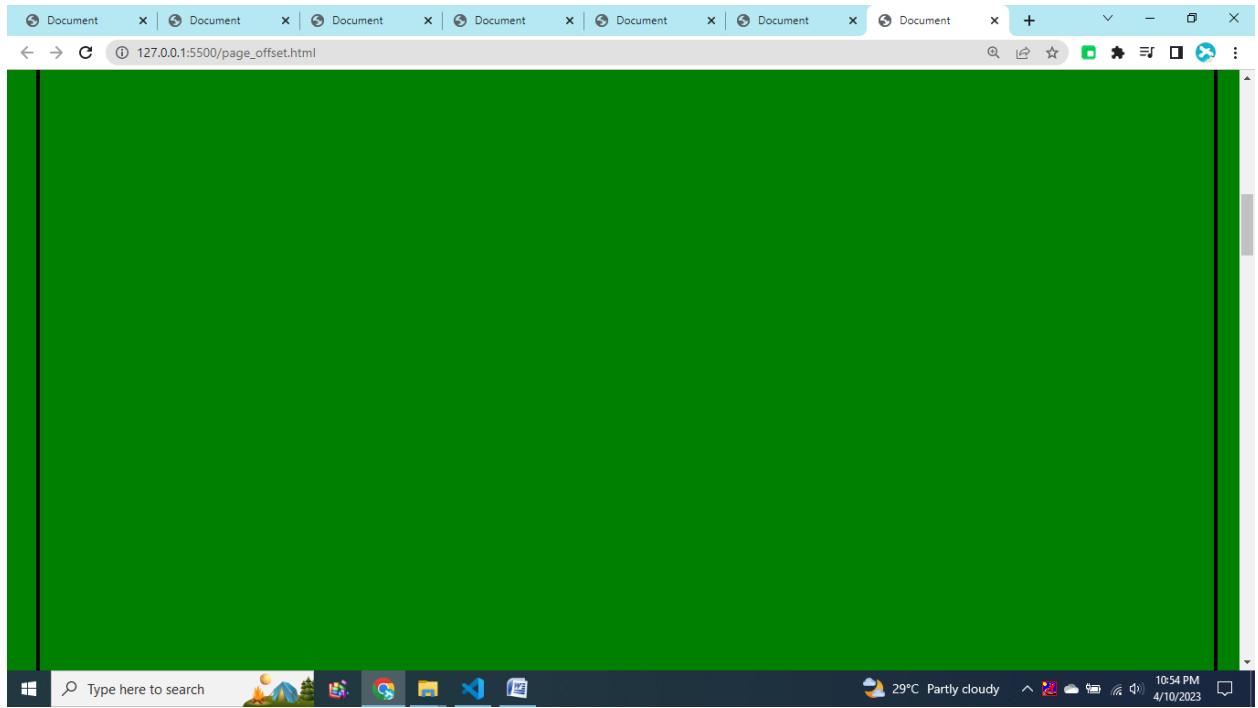
```

<style>
    div{
        height: 1500px;
        width: 100%;
        border: 1px solid black;
    }
</style>
</head>
<body>
    <div>

    </div>
    <script>
        // PAGE Y OFFSET === VERTICAL MATE USE THY
        // PAGE X OFFSET === HORIZONTAL MATE USE THY
        // AMUK PIXEL HEIGHT P6I SCROLL THYY P6I TE OUTPUT JOVU HOI MEANS DETECT
KARVU HOI TO SCROLL EVENT MA APRE WINDOW MA APRE AMUK HEIGHT P6I KAI KRVU HOI TO
ANE WINDOW.PAGE OFFSET X KA TO YE API NE OUTPUT LAVI SAKAY
        window.addEventListener('scroll',function(){
            if(window.pageYOffset > 150){
                document.body.style.backgroundColor = "green";
            }
            // 150 PX P6I SCROLL KRSU TO BACKGROUND COLOR GREEN THAI JSE
            if(window.pageYOffset > 400){
                document.body.style.backgroundColor = "pink";
            }
            // 400 PX P6I SCROLL KRSU TO BACKGROUND COLOR PINK THAI JSE
            if(window.pageYOffset > 700){
                document.body.style.backgroundColor = "skyblue";
            }
            // 700 PX P6I SCROLL KRSU TO BACKGROUND COLOR SKYBLUE THAI JSE
        })
    </script>
</body>
</html>

```

## Output



## Remove event listener

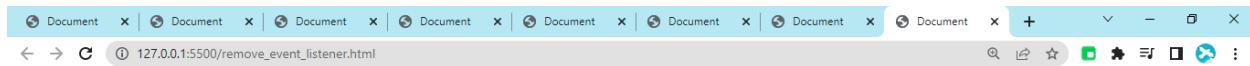
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <ul id="main">
        <li>List-1</li>
        <li>List-2</li>
        <li>List-3</li>
        <li>List-4</li>
    </ul>
    <button id="btn">Click me</button>
    <script>
        // KOI EVENT ADD KARAVI HOI AND ANE REMOVE KARAVI HOI TO REMOVE
        // EVENTLISTNER LAGAVAY
        let btn = document.getElementById("btn");
        let prt = document.getElementById("main");
```

```

btn.removeEventListener('click', function () {
    let child = prt.style.backgroundColor = "yellow";
})
// AHI CLICK NAME NI EVENT REMOVE THAI JSE EWMOVE EVENT LISTNER THI
btn.addEventListener('mouseover', function () {
    let child = prt.style.backgroundColor = "green";
})
btn.addEventListener('mouseout', function () {
    let child = prt.style.backgroundColor = "pink";
})
</script>
</body>
</html>

```

## Output



- List-1
- List-2
- List-3
- List-4

Click me



## Scroll event

```

<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">

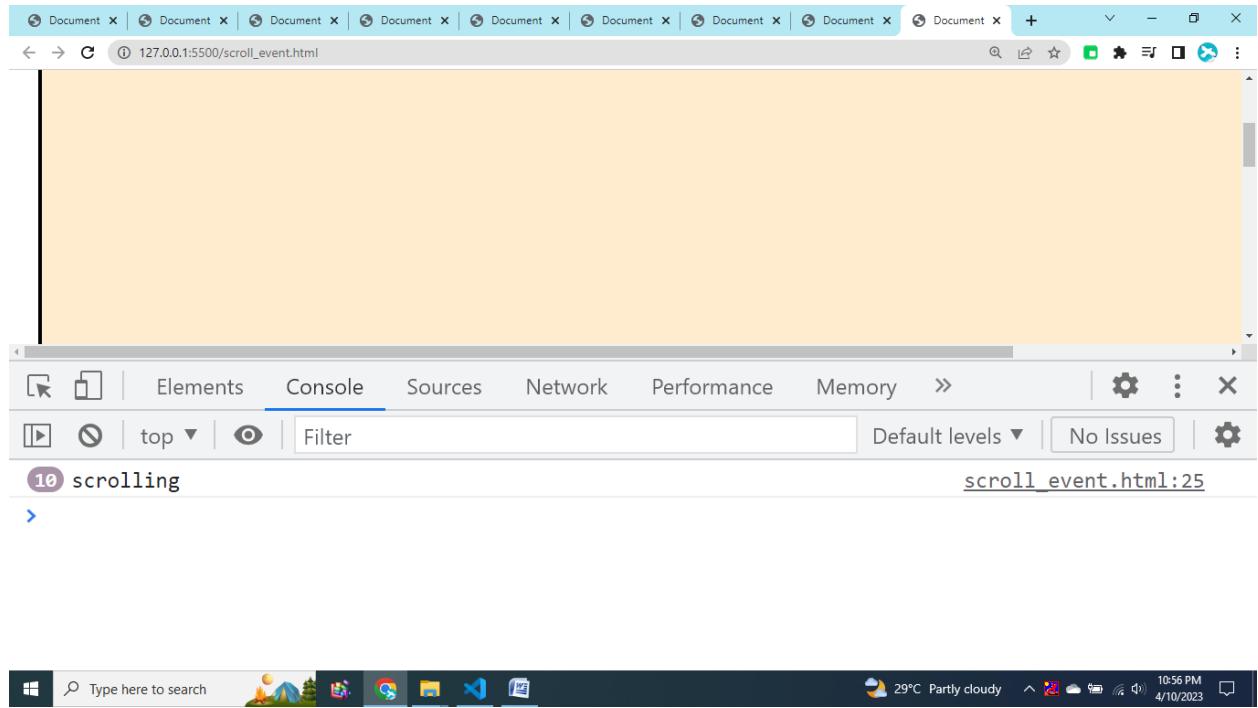
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
<style>
    div{
        height: 400px;
        width: 400px;
        border: 1px solid black;
        background-color: blanchedalmond;
    }
</style>
</head>
<body>
<div>

</div>
<script>
    // JYRE APRE SCROLL KARIYE TYRE SCROLL DETECT KRVA SCROLL EVENT USE THY
    window.addEventListener('scroll', function () {
        console.log("scrolling"); // JYRE SCROLL KRSU TYRE OUTPUT JOVA MLSE
    })
</script>
</body>

</html>
```

## Output



## Wheel Event

```
<!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>
        div{
            height: 400px;
            width: 400px;
            border: 1px solid black;
            background-color: blanchedalmond;
        }
    </style>
</head>
<body>
    <div>

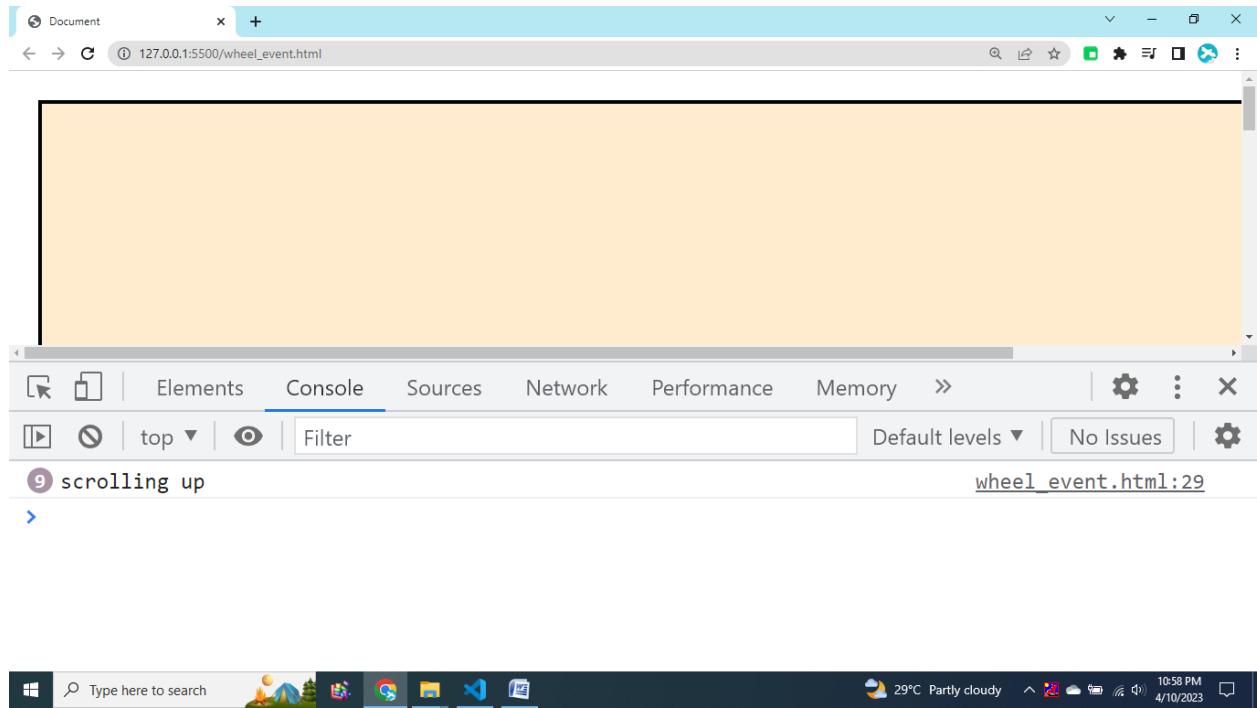
    </div>
    <script>
```

```

// SCROLL UP THY CHE K DOEN TE DETECT KARVA WHEEL EVENT USE THY
// DELTA Y VERTICAL MATE USE THY
// DELTA X HORIZONTAL MATE USE THY
// EVENT.DELTA Y JYRE SCROLL THTU NAI HOI TYRE TENI VALUE ZERO HSE
// WHEEL EVENT MA PARAMETER PASS KRVO PDSE
window.addEventListener('wheel',function(event){
    if(event.deltaY < 0){
        console.log("scrolling up");
        // JYRE DELTA Y 0 THI LESS HSE MEANS APRE SCROLL UP KRSU TE
        DETECT KRSE
    }
    else if(event.deltaY > 0){
        console.log("scrolling down");
        // JYRE DELTA Y 0 THI VADHRE HSE MEANS APRE SCROLL DOWN KRSU TE
        DETECT KRSE
    }
})
</script>
</body>
</html>

```

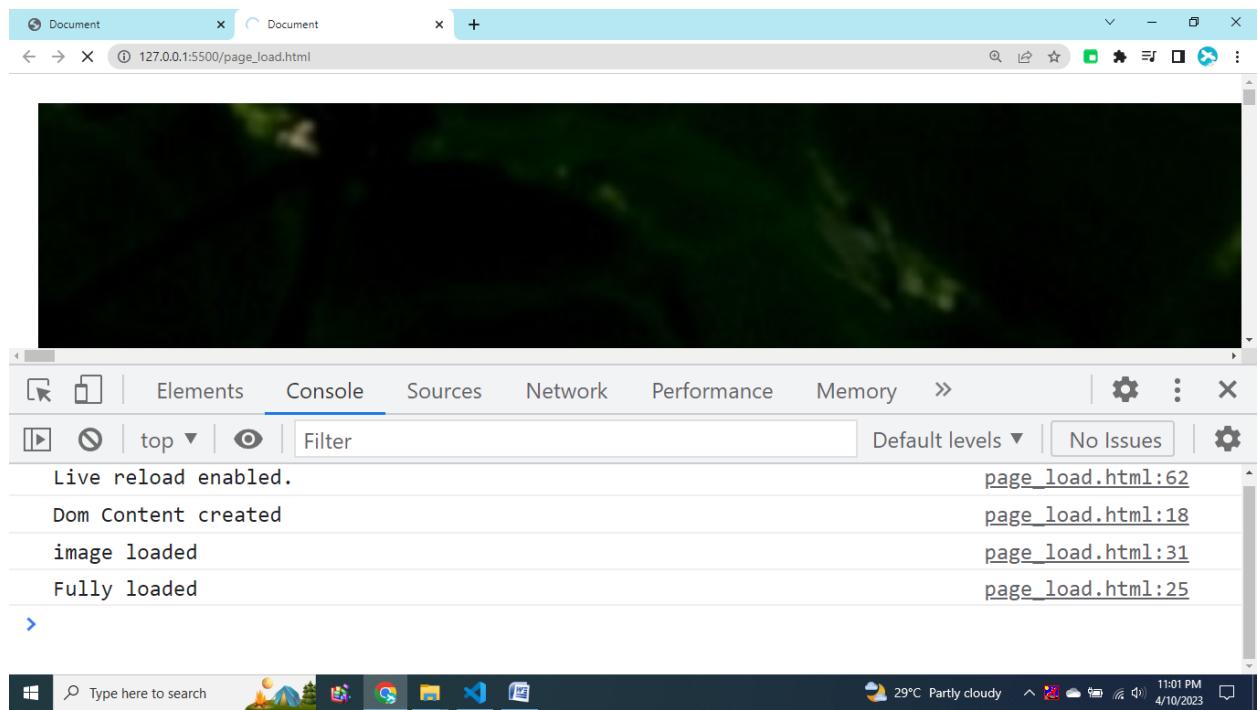
## Output



## Page load event

```
<!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>
</head>
<body>
    <div id="main">
        
    </div>
    <script>
        // DOMContentLoaded event use to check DOM Tree loaded
        // do
        window.addEventListener("DOMContentLoaded",function()
        {
            console.log("Dom Content created");
        })
        //Load event is use when we want to work after all external file and full
website loaded
        //External files are---css,js,img etc
        //internal files are HTML tags only
        window.addEventListener("load",function()
        {
            console.log("Fully loaded");
        })
        //jo koi particular image load thayu ke nai acheck karvu hoi to
        let img=document.getElementById("img");
        img.addEventListener("load",function()
        {
            console.log("image loaded");
        })
    </script>
</body>
</html>
```

## Output



## Input Event

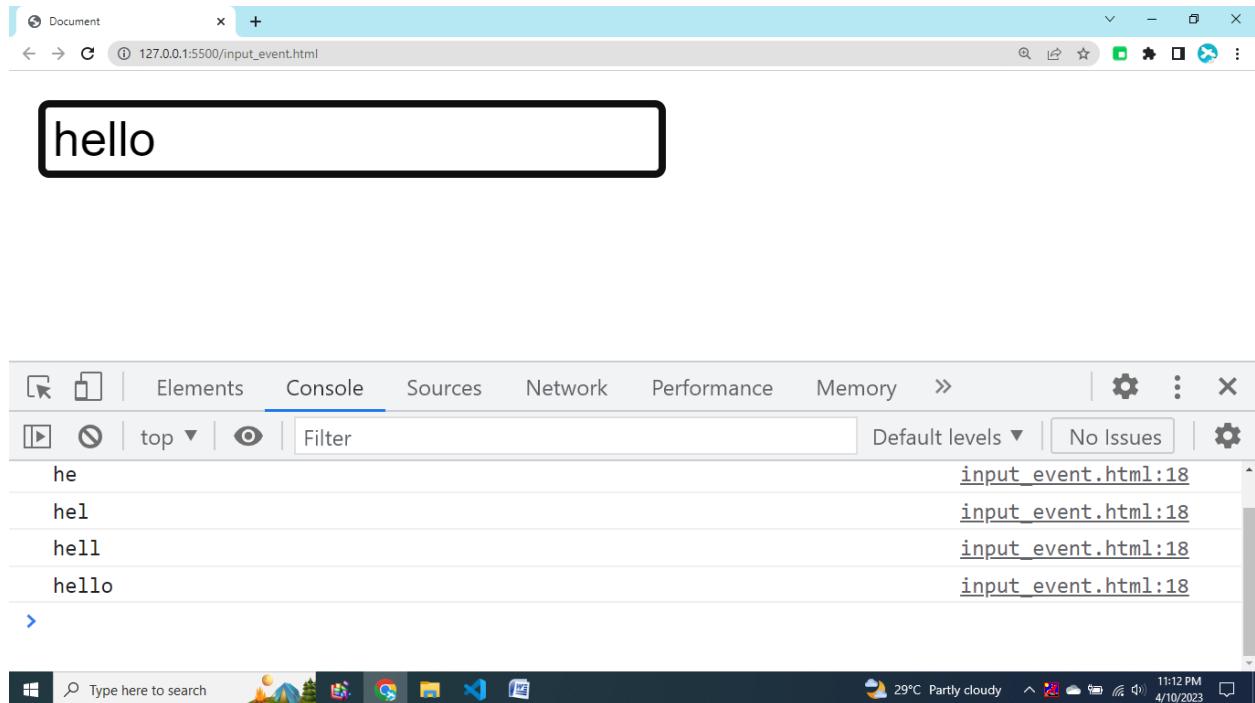
```
<!DOCTYPE html>
<html lang="en">

<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>
</head>

<body>
    <input type="text" id="mehul">
    <script>
        //input event is use to immidiate output
        //input no koi tag lidho che a tag ma koi value enter kare che to tarataj
        a fuction call kare.
        let main = document.getElementById("mehul");
        main.addEventListener("input", function () {
            console.log(this.value);
        })
    </script>
```

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

## Output



## Change Event

```
<!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>  
</head>  
  
<body>  
    <input type="text" id="mehul">  
    <script>
```

```

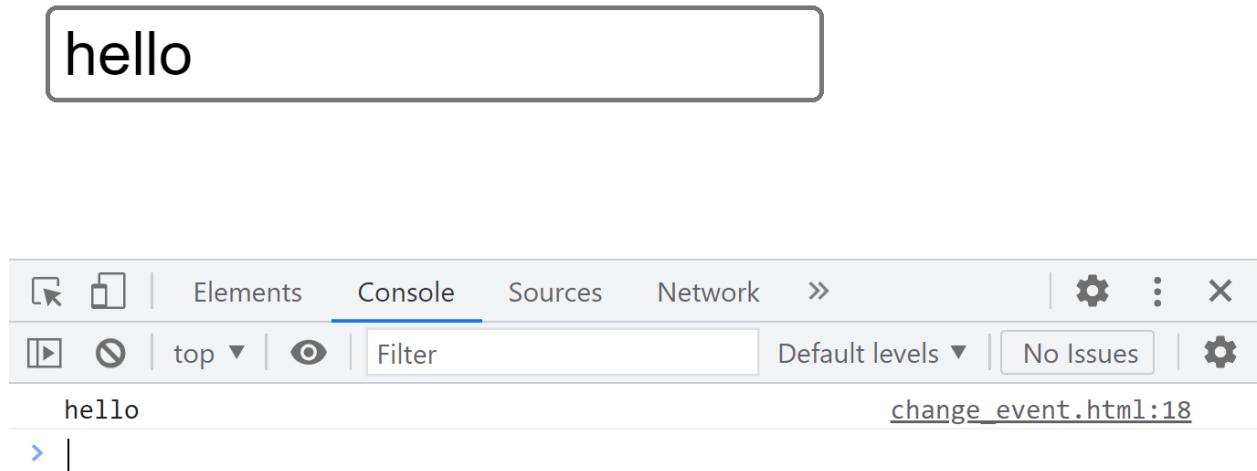
//change event is use for output after click or enter
//input no koi tag lidho che a tag ma koi value enter kare pachi enter
athwa baar kase click kare tyare output aaape jo aagar je input aapnu hoy tena
karta alag hoy
let main = document.getElementById("mehul");
main.addEventListener("change", function () {
    console.log(this.value);
});

</script>
</body>

</html>

```

## Output



## Focus and blur

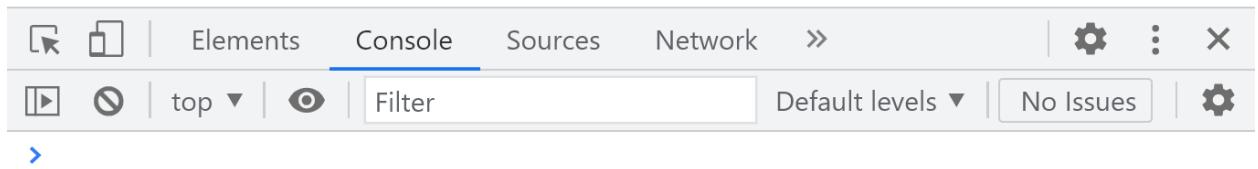
```

<!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>
</head>
<body>
    <input type="text" id="main">
    <script>
        //Focus event=>jyare particular element par focus kariye means ke click
        kari ne select akriye tyare function call karse
        //Blur Event=>Focus kariya pachi baar click kariye tyare function call
        karse
        let main=document.getElementById("main");
        main.addEventListener("focus",function()
        {
            main.style.backgroundColor="red";
        })
        main.addEventListener("blur",function()
        {
            main.style.backgroundColor="white";
        })
    </script>
</body>
</html>
```

## Output



## Dot value

```
<!DOCTYPE html>
<html lang="en">

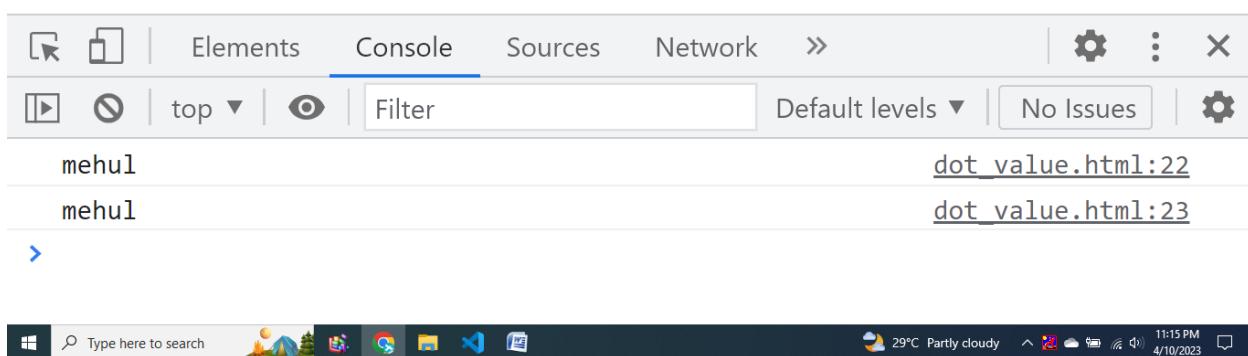
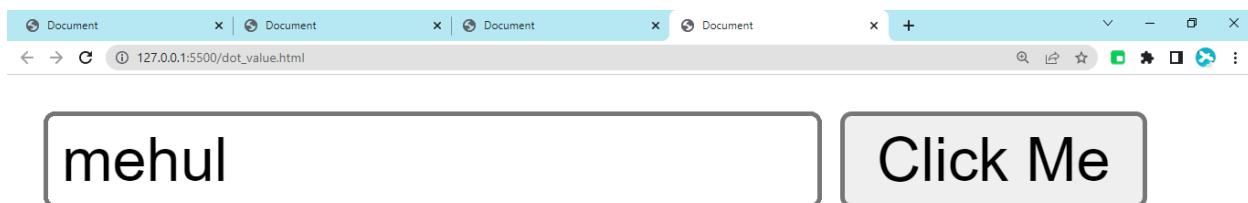
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>

<body>
    <input type="text" id="main">
    <button id="btn">Click Me</button>
    <script>
        //element.value thi koi element jo input type no hoy to ani value input
        kayri hoy a aapse
        //this. means je function call karyu che ani par je karvu hoy a
        let btn = document.getElementById("btn");
        btn.addEventListener("click", function () {
            let main = document.getElementById("main");
            let value = main.value;
            let value1 = this.previousElementSibling.value;
            console.log(value);
    
```

```
        console.log(value1);
    })
</script>
</body>

</html>
```

## Output



## Prevent Default

```
<!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>
        #para {
```

```

        color: red;
    }
    #main{
        width: 500px;
        margin: 200px auto;
        border: 1px solid grey;
    }
}
#form{
    display: flex;
    flex-direction: column;
    text-align: center;
}
</style>
</head>

<body>
<div id="main">
    <form id="form">
        <label for="in">Username</label>
        <input type="text" id="in">
        <label for="in2">Password</label>
        <input type="password" id="in2">
        <input type="submit">
    </form>
    <p id="para"></p>
</div>
<script> //Submit event is of form tag, it use to work on form validation
before submit process
let form = document.getElementById("form");
form.addEventListener("submit", function (e) {
    let input = document.getElementById("in").value.length;
    if ((input == 0) || (input < 8)) {
        e.preventDefault();
        para = document.getElementById("para");
        para.innerHTML = "please enter user name between 1 to 8";
    }
    let password1 = document.getElementById("in2").value;
    let pass=password1.split("");
    let password = document.getElementById("in2").value.length;

    if ((password == 0) || (password < 8) ) {
        e.preventDefault();
        para = document.getElementById("para");
        para.innerHTML = "please Enter valid password";
    }
})
</script>

```

```

        }
    })
</script>
</body>

</html>

```

## Output

The screenshot shows a browser window with multiple tabs open, all titled "Document". The active tab displays a simple HTML form. The form has four input fields: "Username" containing "Hello", "Password" containing "\*\*\*\*\*", and "Submit". Below the form, a red error message "please Enter valid password" is displayed. The browser's developer tools are open, specifically the Elements and Styles tabs. The Elements tab shows the HTML structure, including a script tag with injected code. The Styles tab shows the CSS for the main container and the error message box, which has a border and padding applied.

## Event bubbling capturing

```

<!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>
        #body {
            background-color: cyan;
            padding: 50px;
        }
    </style>

```

```

#main {
    background-color: darkgreen;
    padding: 50px;
}

#btn {
    padding: 10px 20px;
    color: darkkhaki;
    background-color: cadetblue;
}
</style>
</head>

<body>
<div id="body">
    <div id="main">
        <button id="btn">Click here</button>
    </div>
</div>
<script>
    // EVENT BUBBLING MA CHILD TO PARENTS THSE
    // BUTTON PR CLICK KARSU TO BUTTON , DIV , BODY 3 NE NI EVENT LAGSE
    // DIV PR CLICK KRSU TO DIV AND BODY 2 EVENT LAGSE
    // BODY PR CLICK KARSU TO BODY PR NI J EVENT LAGSE
    let body1 = document.getElementById("body");
    body1.addEventListener('click', body);
    // body1.addEventListener('click', body, false); AHIYA 3 PARAMETER HOI PN
EVENT BUBBLING MA BY DEFAULT FALSE VALU PARAMETER HOI J 6 ATLE LAKHVNI JARU NTHI

    let main = document.getElementById("main");
    main.addEventListener('click', div);

    let button = document.getElementById("btn");
    button.addEventListener('click', btn);

    function body() {
        console.log("body clickedd");

    }
    function div() {
        console.log("div clickedd");
    }
    function btn() {
        console.log("button clickedd");
    }
</script>

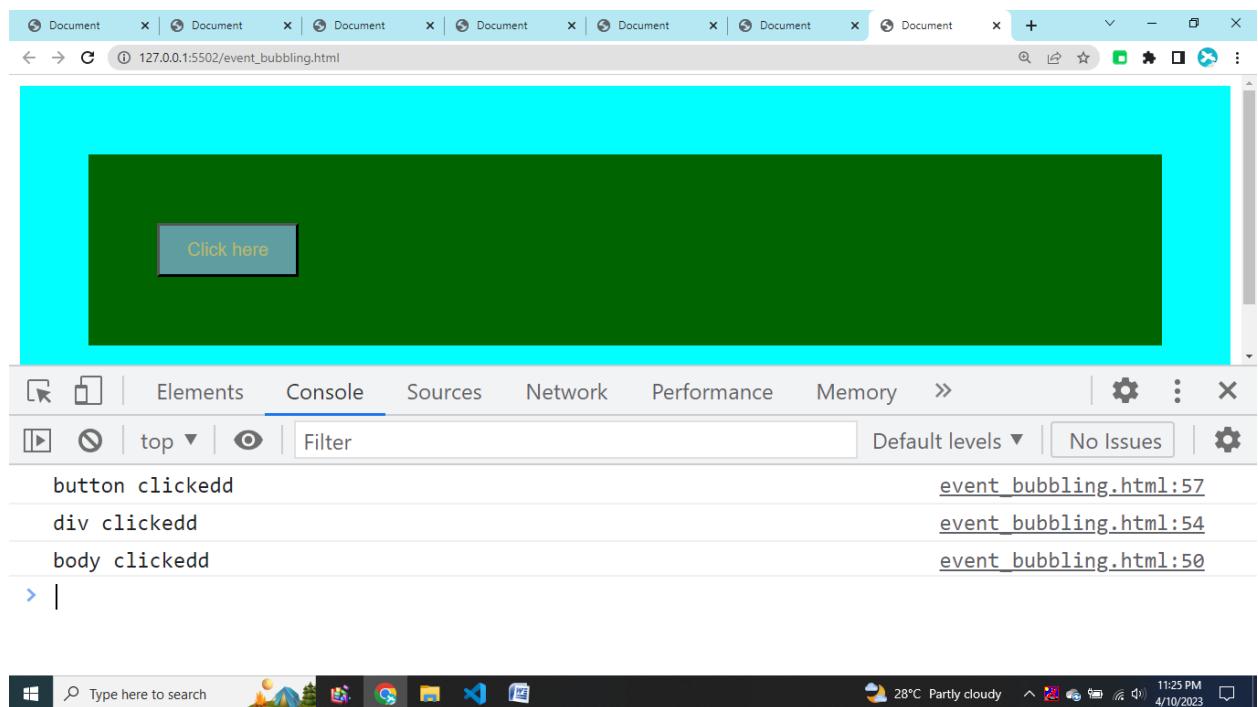
```

```
        }

    </script>
</body>

</html>
```

## Output



## Event capturing

```
<!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>
        #body {
            background-color: cyan;
            padding: 50px;
        }
    </style>
</head>
<body>
    <div>
        <button>Click here</button>
    </div>
</body>
</html>
```

```

#main {
    background-color: darkgreen;
    padding: 50px;
}

#btn {
    padding: 10px 20px;
    color: darkkhaki;
    background-color: cadetblue;
}
</style>
</head>
<body>
    <div id="body">
        <div id="main">
            <button id="btn">Click here</button>
        </div>
    </div>
    <script>
        // EVENT CAPTURING MA PARENT TO CHILD EVENT LAGSE
        // BODY PR CLICK KRSU TO BODY PR EVENT LAGSE
        // DIV PR CLICK KARSU TO BODY AND DIV PR EVENT LAGSE
        // BUTTON PR CLICK KARSU TO BODY DIV AND BUTTON 3 NE PN EVENT LAGSE
        // EVENT CAPTURING MA PARAMETER MA TRUE PARAMETER APVO JARURI 6
        let body1 = document.getElementById("body");
        body1.addEventListener('click', body , true);
        // body1.addEventListener('click',body, true); AHIYA 3 PARAMETER HOI PN
EVENT CAPTURING MA BY DEFAULT FALSE VALI PARAMETER CHANGE KARI NE TRUE KARIYE TO
PARENTS TO CHILD EVENT LAGASE

        let main = document.getElementById("main");
        main.addEventListener('click', div , true);

        let button = document.getElementById("btn");
        button.addEventListener('click', btn , true);

        function body() {
            console.log("body clickedd");

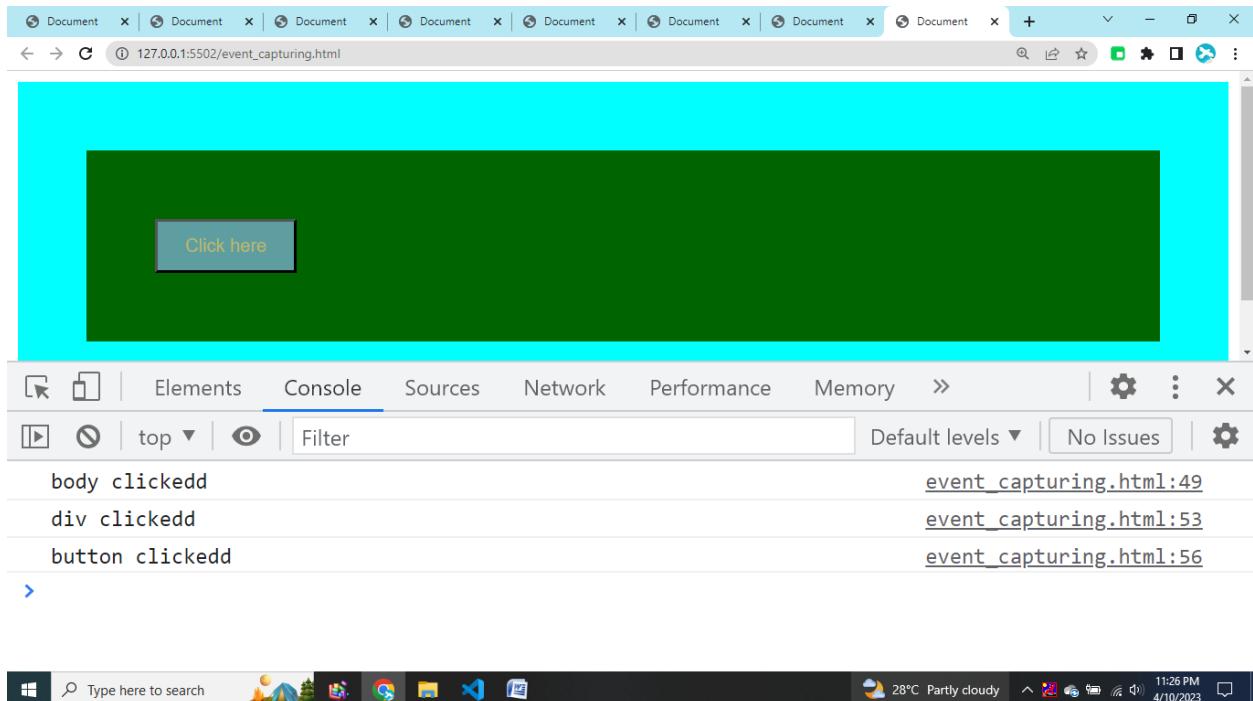
        }
        function div() {
            console.log("div clickedd");
        }
        function btn() {
            console.log("button clickedd");
        }
    </script>

```

```
        }

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

## Output



## Stop propagation

```
<!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>
        #body {
            background-color: cyan;
            padding: 50px;
        }

        #main {
```

```

        background-color: darkgreen;
        padding: 50px;
    }

    #btn {
        padding: 10px 20px;
        color: darkkhaki;
        background-color: cadetblue;
    }

```

</style>

</head>

<body>

<div id="body">

<div id="main">

<button id="btn">Click here</button>

</div>

</div>

<script>

// STOP PROPAGATION A EK METHOD CHE

// STOP PROPAGATION KARIYE TYRE FUNCTION MA EK PARAMETER PASS KARVU JARURI

6

// CHILD NI EVENT PAR THI PARENTS NI EVENT ROKVI HOI TO STOP PROPAGATION()

USE THY

let body1 = document.getElementById("body");

body1.addEventListener('click', body);

let main = document.getElementById("main");

main.addEventListener('click', div);

let button = document.getElementById("btn");

button.addEventListener('click', btn);

function body(event) {

console.log("body clickedd");

}

function div(event ) {

console.log("div clickedd");

}

function btn(event) {

console.log("button clickedd");

event.stopPropagation();

// JENA PR EVENT APVI HOI ANA PR STOP PROPAGATION METHOD LAGADVI M

FUNCTION MA PARAMETER APVU PDE

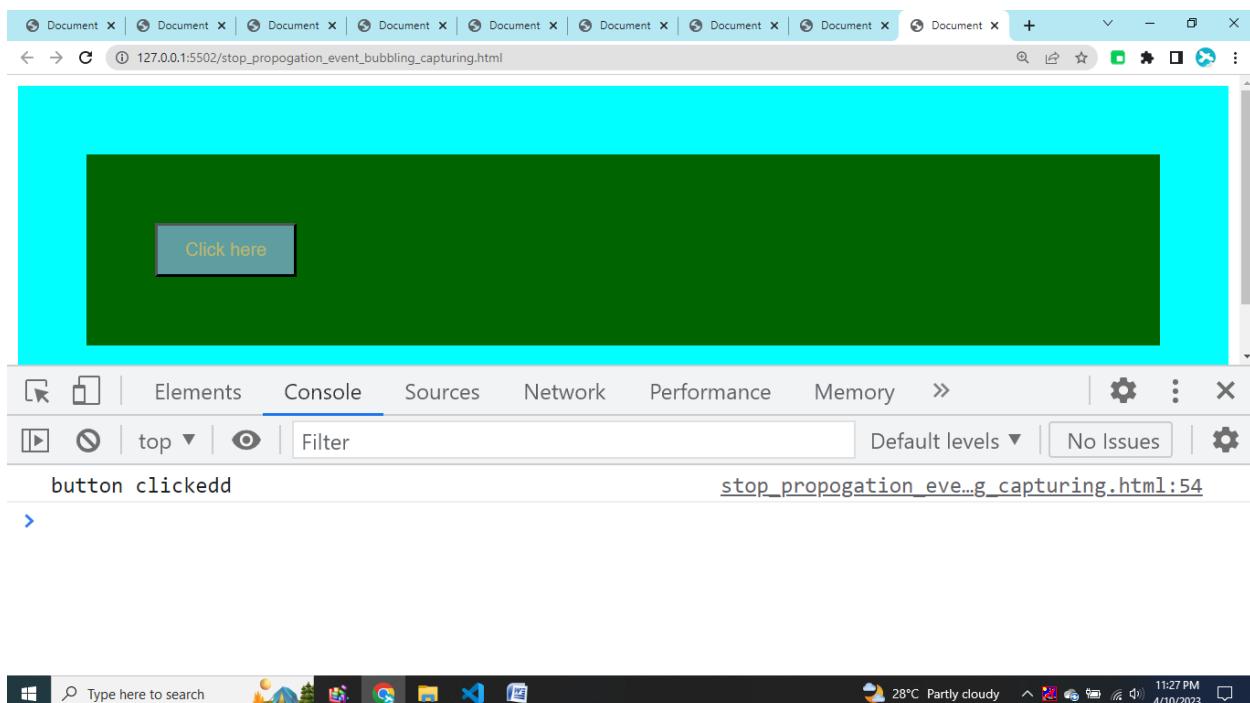
```

        // AHIYA ONLY BUTTON PR J EVENT LAGSE
    }

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

```

## Output



## All task

### 1-Pop up Task

```

<!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>
        @import url(fontawesome-free-6.4.0-web/css/all.min.css);
        #pop{

```

```

        border: 1px solid black;
        box-shadow: 3px 3px 3px blue;
        position: absolute;
        left: 30%;
        top: 30%;
        background-color: blueviolet;
        width: 300px;
        padding: 50px;
        display: none;
    }
    #cross{
        position: absolute;
        right: 2%;
        top: 2%;
        font-size: 20px;
        border: 1px solid white;
        background-color: azure;
    }

```

</style>

</head>

<body>

<div id="main">

<h1>Mehul Waghela</h1>

<p>

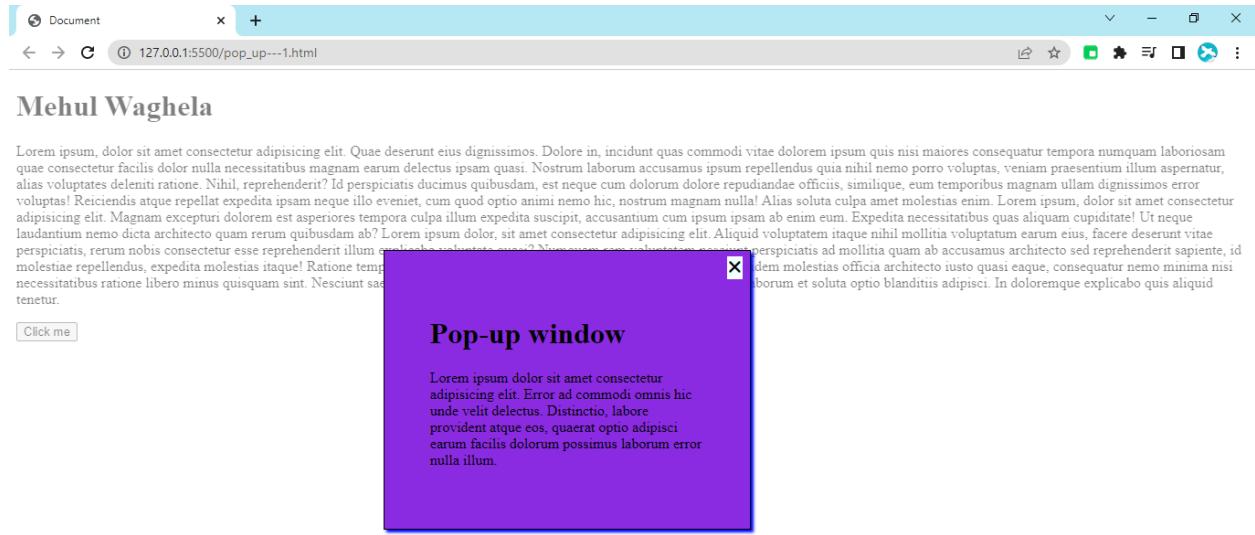
Lorem ipsum, dolor sit amet consectetur adipisicing elit. Quae deserunt eius dignissimos. Dolore in, incidunt quas commodi vitae dolorem ipsum quis nisi maiores consequatur tempora numquam laboriosam quae consectetur facilis dolor nulla necessitatibus magnam earum delectus ipsam quasi. Nostrum laborum accusamus ipsum repellendus quia nihil nemo porro voluptas, veniam praesentium illum aspernatur, alias voluptates deleniti ratione. Nihil, reprehenderit? Id perspiciatis ducimus quibusdam, est neque cum dolorum dolore repudiandae officiis, similique, eum temporibus magnam ullam dignissimos error voluptas! Reiciendis atque repellat expedita ipsam neque illo eveniet, cum quod optio animi nemo hic, nostrum magnam nulla! Alias soluta culpa amet molestias enim.

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Magnam excepturi dolorem est asperiores tempora culpa illum expedita suscipit, accusantium cum ipsum ipsam ab enim eum. Expedita necessitatibus quas aliquam cupiditate! Ut neque laudantium nemo dicta architecto quam rerum quibusdam ab?

Lorem ipsum dolor, sit amet consectetur adipisicing elit. Aliquid voluptatem itaque nihil mollitia voluptatum earum eius, facere deserunt vitae perspiciatis, rerum nobis consectetur esse reprehenderit illum explicabo voluptate quasi? Numquam rem voluptatem nesciunt perspiciatis ad mollitia quam ab accusamus architecto sed reprehenderit sapiente, id molestiae repellendus, expedita molestias itaque! Ratione tempora officia a voluptas vitae odit hic id. Numquam unde ipsa quidem molestias officia architecto iusto quasi eaque,

```
consequatur nemo minima nisi necessitatibus ratione libero minus quisquam sint.  
Nesciunt saepe facere necessitatibus sed earum, nisi harum quaerat. Fugit laborum  
et soluta optio blanditiis adipisci. In doloremque explicabo quis aliquid  
tenetur.  
    </p>  
    <button id="btn">Click me</button>  
  </div>  
  <div id="pop">  
    <h1>Pop-up window</h1>  
    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Error ad  
commodi omnis hic unde velit delectus. Distinctio, labore provident atque eos,  
quaerat optio adipisci earum facilis dolorum possimus laborum error nulla  
illum.</p>  
    <span id="cross"><i class="fa-solid fa-xmark"></i></span>  
  </div>  
  <script>  
    let btn=document.getElementById("btn");  
    let main=document.getElementById("main");  
    let pop=document.getElementById("pop");  
    let cross=document.getElementById("cross");  
    cross.addEventListener("click",show2)  
    btn.addEventListener("click",show);  
    function show(){  
      pop.style.display="block";  
      main.style.opacity="0.5";  
    }  
    function show2(){  
      pop.style.display="none";  
      main.style.opacity="1";  
    }  
  </script>  
</body>  
</html>
```

## Output



## 2-Color switcher

```
<!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>
        * {
            /* border: 1px solid black; */
            box-sizing: border-box;
        }

        h1 {
            margin: 0;
            padding: 20px 0;
        }

        #heading {
            width: 100%;
```

```
        overflow: auto;
    }

#heading_sub {
    border: 1px solid black;
    margin: 50px auto;
    width: 700px;
    overflow: auto;
    box-shadow: 5px 5px 5px grey;
    border-radius: 10px;
}

#main {
    width: 100%;
    background-color: cadetblue;
    box-shadow: 5px 5px 5px darkgoldenrod;
}

h1 {
    text-align: center;
    color: blue;
}

#sub {
    width: 100%;
    overflow: auto;
    background-color: darkcyan;
}

.sub_left {
    width: 50%;
    float: left;
    padding: 10px;
}

.sub_left img {
    width: 100%;
}

.sub_right {
    width: 50%;
    float: right;
    padding: 10px;
}
```

```
#button {
    text-align: center;
    height: 50px;
}

span {
    border: 1px solid black;
}

.cls {
    padding: 10px 20px;
    width: 40px;
    height: 20px;
    border-radius: 50%;
    margin: 0 20px;
}

.para {
    color: white;
    font-size: 17px;
    margin: 0;
    font-weight: 900;
    box-shadow: -5px -5px 5px palevioletred , 5px 5px 5px palevioletred;
    padding: 5px;
}

img {
    border-radius: 50%;
    box-shadow: 3px 5px 3px yellowgreen;
}

</style>
</head>

<body>
    <div id="heading">
        <div id="heading_sub">
            <div id="main">
                <h1>Color Switcher</h1>
                <div id="button">
                    <span class="cls" style="background-color: darkgreen;"></span>
                    <span class="cls" style="background-color: brown;"></span>
                    <span class="cls" style="background-color: cornflowerblue;"></span>
                
```

```

        <span class="cls" style="background-color:
blueviolet;"></span>
            </div>
        </div>
        <div id="sub">
            <div class="sub_left"></div>
            <div class="sub_right">
                <p class="para">Lorem ipsum dolor sit amet consectetur
adipisicing elit. Maxime eveniet sed unde
                    laudantium eum. Blanditiis velit, dolore dolor
voluptatibus ratione fuga harum voluptatum
                    adipisci inventore rerum aspernatur, a ipsum, commodi nam
laborum amet placeat dolorem quo sequi
                    numquam magni ipsa reprehenderit dicta! Tempora, enim!
Harum voluptate explicabo asperiores
                    quasi sunt.</p>
            </div>
        </div>
    </div>
</body>
<script>
    let btn = document.getElementsByClassName("cls");
    let pos = document.getElementById("sub");
    for (let x of btn) {
        x.addEventListener("click", function () {
            value = x.getAttribute("style");
            pos.style.cssText = value;
        })
    }
</script>

</html>

```

## Output



### 3—Scroll top header

```
<!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>
    <link rel="stylesheet" href="fontawesome-free-6.4.0-web/css/all.min.css">
    <style>
        * {
            /* border: 1px solid black; */
            box-sizing: border-box;
        }

        body {
            margin: 0;
        }

        #main {
            width: 100%;
```

```
        height: 1200px;
        position: relative;
    }

    header {
        width: 1000px;
        display: flex;
        justify-content: space-between;
        margin: 0 auto;
        background-color: chocolate;
        position: sticky;
        top: 0;
        border: 2px solid indianred;
    }

    #img {
        width: 10%;
    }

    img {
        width: 100%;
    }

    #ul {
        width: 80%;
        margin: auto;
    }

    ul {
        display: flex;
        justify-content: space-between;
        list-style-type: none;
    }

    li {
        font-size: 20px;
    }
    button{
        position: absolute;
        bottom: 2%;
        right: 12%;
        padding: 10px;
        background-color: chocolate;
    }
</style>
```

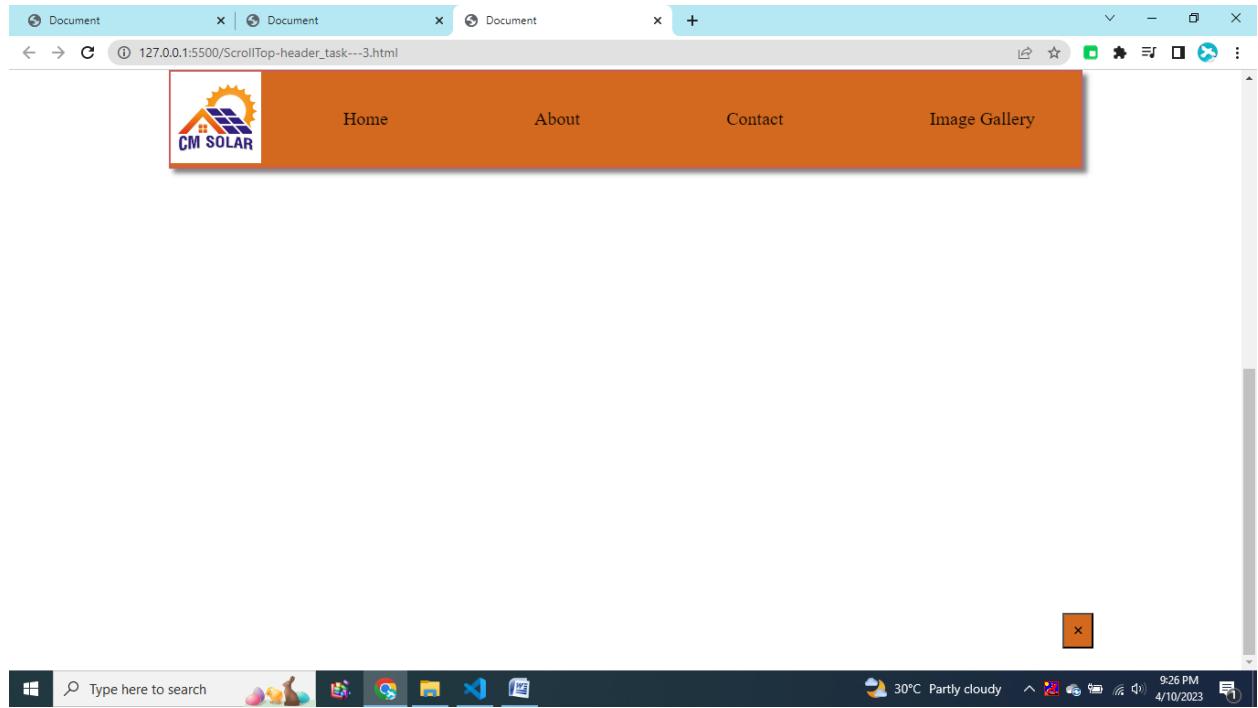
```
</head>

<body>
    <div id="main1"></div>
    <header id="head">
        <span id="img">
            
        </span>
        <span id="ul">
            <ul>
                <li>Home</li>
                <li>About</li>
                <li>Contact</li>
                <li>Image Gallery</li>
            </ul>
        </span>
    </header>
    <div id="main">
        <a href="#main1"><button><i class="fa-solid fa-xmark"></i></button></a>
    </div>
    <script>
        let head = document.getElementById("head");

        window.addEventListener("scroll", function () {
            if (window.pageYOffset > 100) {
                head.style.boxShadow = "5px 5px 5px grey";
            }
            if (window.pageYOffset < 100) {
                head.style.boxShadow = "0px 0px 0px grey";
            }
        })
    </script>
</body>

</html>
```

## Output



## 4—Accordian

```
<!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>
  <link rel="stylesheet" href="fontawesome-free-6.4.0-web/css/all.min.css">
  <style>
    * {
      box-sizing: border-box;
    }

    #main {
      width: 70%;
      margin: 150px auto;
      border: 1px solid black;
    }

    .sub {
```

```
width: 100%;  
}  
  
.sub1 {  
    width: 100%;  
    display: flex;  
    background-color: cadetblue;  
    padding: 0 10px;  
    border: 1px solid black;  
}  
  
h1 {  
    width: 80%;  
}  
  
i {  
    font-size: 50px;  
}  
  
.pos {  
    width: 20%;  
    position: relative;  
}  
  
.pl,  
.mn {  
    position: absolute;  
    right: 10%;  
    top: 15%;  
    color: aliceblue;  
}  
  
h1 {  
    color: aliceblue;  
    text-align: center;  
}  
  
.sub2 {  
    background-color: chocolate;  
    padding: 10px;  
    font-size: 18px;  
    color: chartreuse;  
}
```

```
.toggle {
    display: none;
}
</style>
</head>

<body>
<div id="main">
    <div class="sub">
        <div class="sub1">
            <h1>Section-1</h1>
            <span class="pos">
                <i class="fa-solid fa-plus pl"></i>
                <i class="fa-solid fa-minus mn toggle"></i>
            </span>
        </div>
        <div class="sub2 toggle">
            <p>
                Lorem ipsum dolor sit amet, consectetur adipisicing elit. Nam
                dolores sapiente aliquid debit isste quasi, eaque, deserunt soluta
                quia temporibus illo adipisci doloremque nesciunt aut exercitationem
                odit? Blanditiis maiores, consectetur unde laboriosam, optio fugiat
                eligendi dignissimos beatae soluta repellat corrupti illo molestiae?
                Perferendis, repudiandae veniam! Rem nisi tenetur harum distinctio.
            </p>
        </div>
    </div>
    <div class="sub">
        <div class="sub1">
            <h1>Section-2</h1>
            <span class="pos">
                <i class="fa-solid fa-plus pl"></i>
                <i class="fa-solid fa-minus mn toggle"></i>
            </span>
        </div>
        <div class="sub2 toggle">
            <p>
                Lorem ipsum dolor sit amet, consectetur adipisicing elit. Nam
                dolores sapiente aliquid debit isste quasi, eaque, deserunt soluta
                quia temporibus illo adipisci doloremque nesciunt aut exercitationem
                odit? Blanditiis maiores, consectetur unde laboriosam, optio fugiat
                eligendi dignissimos beatae soluta repellat corrupti illo molestiae?
                Perferendis, repudiandae veniam! Rem nisi tenetur harum distinctio.
            </p>
        </div>
    </div>
</body>
```

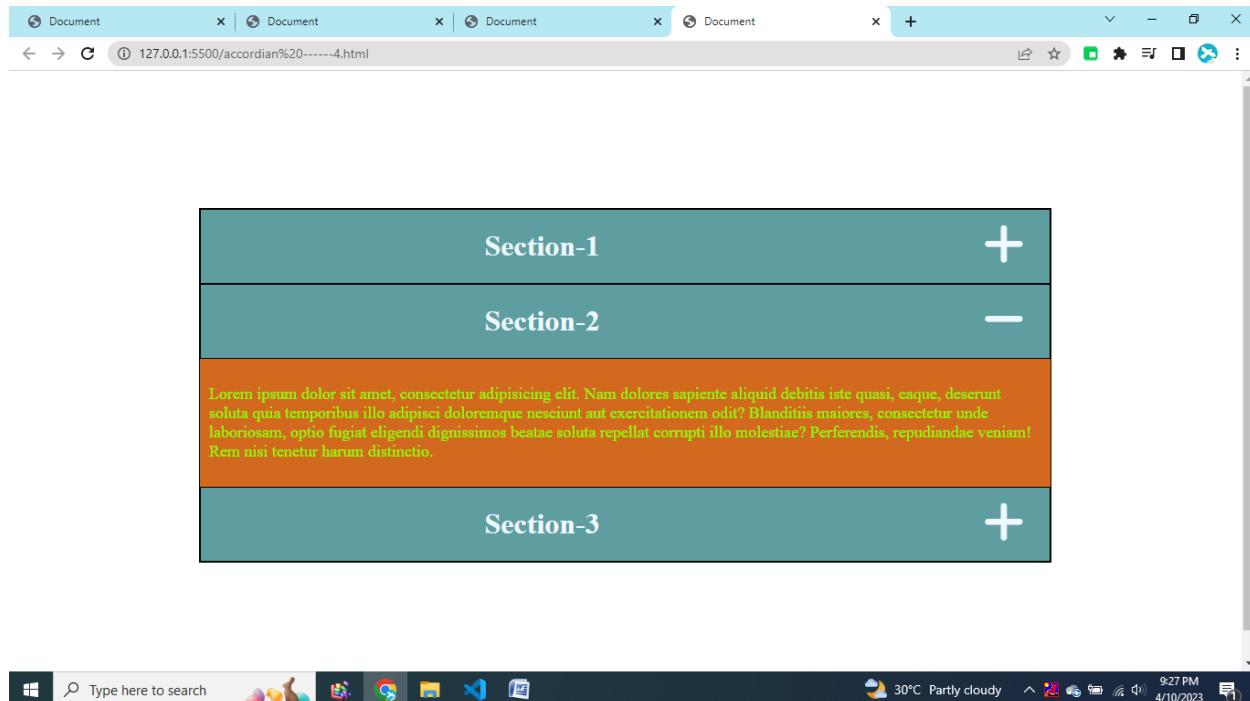
```

</div>
<div class="sub">
    <div class="sub1">
        <h1>Section-3</h1>
        <span class="pos">
            <i class="fa-solid fa-plus pl"></i>
            <i class="fa-solid fa-minus mn toggle"></i>
        </span>
    </div>
    <div class="sub2 toggle">
        <p>
            Lorem ipsum dolor sit amet, consectetur adipisicing elit. Nam
            dolores sapiente aliquid debitis iste quasi, eaque, deserunt soluta
            quia temporibus illo adipisci doloremque nesciunt aut exercitationem
            odit? Blanditiis maiores, consectetur unde laboriosam, optio fugiat
            eligendi dignissimos beatae soluta repellat corrupti illo molestiae?
            Perferendis, repudiandae veniam! Rem nisi tenetur harum distinctio.
        </p>
    </div>
</div>
</div>
<script>
    let sub1 = document.getElementsByClassName("sub1");
    let sub2 = document.getElementsByClassName("sub2");
    let k;
    for (let i = 0; i < sub1.length; i++) {
        sub1[i].addEventListener("click", function () {
            for (let y of sub1) {
                if (k != i) {
                    if
(y.lastElementChild.firstChild.classList.contains("toggle")) {
                        y.lastElementChild.firstChild.classList.remove("toggle");
                        y.lastElementChild.lastElementChild.classList.add("toggle");
                        y.nextElementSibling.classList.add("toggle");
                    }
                }
            }
            sub1[i].lastElementChild.firstChild.classList.toggle("toggle");
            sub1[i].lastElementChild.lastElementChild.classList.toggle("toggle");
            sub1[i].nextElementSibling.classList.toggle("toggle");
            k = i;
            console.log(k=i);
        });
    }
</script>

```

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

## Output



The screenshot shows a web browser window with five tabs, all titled "Document". The active tab's URL is 127.0.0.1:5500/accordion%20-----4.html. The page content is an accordion interface. It consists of three sections: "Section-1" (closed), "Section-2" (expanded), and "Section-3" (closed). Each section has a plus sign (+) icon on its right side. The expanded section, "Section-2", contains placeholder text in green: "Lorem ipsum dolor sit amet, consectetur adipisciing elit. Nam dolores sapiente aliquid debitis iste quasi, eaque, deserunt soluta quia temporibus illo adipisci doloremque nesciunt aut exercitationem odit? Blanditiis maiores, consectetur unde laboriosam, optio fugiat eligendi dignissimos beatae soluta repellat corrupti illo molestiae? Perferendis, repudiandae veniam! Rem nisi tenetur harum distinctio."

## 5—copy text

```
<!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>  
        #main {  
            width: 800px;  
            height: 300px;  
            display: flex;  
            justify-content: space-around;  
            background-color: dimgray;  
            margin: 150px auto;  
        }</style>
```

```
        position: relative;
    }

    .cls {
        width: 30%;
        height: 50px;
        background-color: aqua;
        border-radius: 10px;
        margin: auto;
        font-size: 20px;
        font-weight: 900;
        padding: 10px;
        color: darkred;
    }

    .arrow {
        position: absolute;
        top: 30%;
        font-size: 80px;
        color: red;
    }

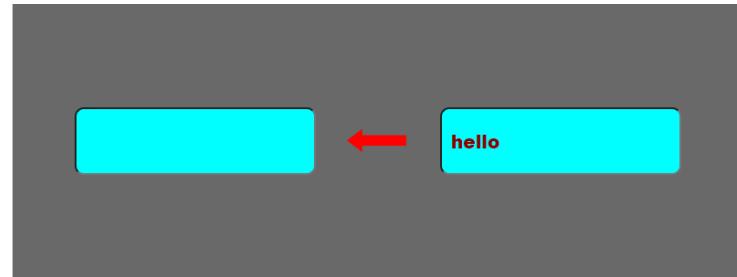
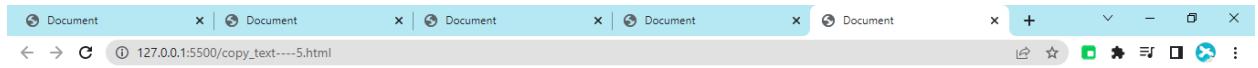
    .none {
        display: none;
    }
</style>
</head>

<body>
    <div id="main">
        <input type="text" id="in1" class="cls">
        <span id="right" class="arrow">&#10145;</span>
        <input type="text" id="in2" class="cls">
        <span id="left" class="arrow none">&#11013;</span>
    </div>
    <script>
        let right = document.getElementById("right");
        let left = document.getElementById("left");
        let in1 = document.getElementById("in1");
        let in2 = document.getElementById("in2");
        let cls = document.getElementsByClassName("cls");
        in1.addEventListener("focus",function()
        {
            in2.value= " ";
        })
    </script>
</body>
```

```
in2.addEventListener("focus",function()
{
    in1.value=" ";
})
in1.addEventListener("change", value1);
function value1() {
    in2.value = in1.value;
    in1.value = " ";
    left.classList.toggle("none");
    right.classList.toggle("none");
}
in2.addEventListener("change", value2);
function value2() {
    in1.value = in2.value;
    in2.value = " ";
    left.classList.toggle("none");
    right.classList.toggle("none");
}
document.getElementById("right").addEventListener("click", value1);
document.getElementById("left").addEventListener("click", value2);
</script>
</body>

</html>
```

## Output



## Date Difference

```
<!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>
        #main {
            width: 400px;
            background-color: aqua;
            padding: 50px;
            margin: 20px auto;
            text-align: center;
        }

        #date {
            display: flex;
            flex-wrap: wrap;
            align-content: center;
        }
    </style>

```

```
        width: 100%;  
    }  
  
    #btn {  
        cursor: pointer;  
        width: 100%;  
        height: 30px;  
    }  
  
.dd {  
    display: flex;  
    width: 100%;  
    padding: 10px 0;  
}  
  
.dd label {  
    width: 40%;  
}  
  
}  
  
.dd input {  
    width: 60%;  
}  
  
#output {  
    text-align: center;  
    color: chocolate;  
    width: 100%;  
}  
}  
</style>  
</head>  
  
<body>  
    <div id="main">  
        <div id="sub">  
            <h1>Date Difference Example</h1>  
        </div>  
        <div id="date">  
            <div class="dd"><label for="fd">First Date</label>  
                <input type="Date" name="" id="fdm">  
            </div>  
            <div class="dd"><label for="sd">Second Date</label>  
                <input type="Date" name="" value="" id="sdm">  
            </div>  
            <div class="dd">
```

```

        <h3 id="output"></h3>
    </div>
    <button id="btn">CALCULATE DIFFERENCE</button>
</div>

</div>
<script>
    let btn = document.getElementById("btn");
    btn.addEventListener("click", show);
    function show() {
        let x1 = document.getElementById("fdm").value;
        let y1 = document.getElementById("sdm").value;
        let birthd = new Date(x1);
        let curd = new Date(y1);
        birthd.setMonth((birthd.getMonth() + 1));
        curd.setMonth((curd.getMonth() + 1));
        console.log(birthd);
        console.log(curd);
        let bd = birthd.getDate();
        let bm = birthd.getMonth();
        let by = birthd.getFullYear();
        let cd = curd.getDate();
        let cm = curd.getMonth();
        console.log("cm", cm);
        let cy = curd.getFullYear();
        let Year = 0;
        let Month = 0;
        let Day = 0;
        let R_day = 0;
        let a1 = 0;
        let x = (birthd.getTime()) / (1000 * 60 * 60 * 24);
        let y = (curd.getTime()) / (1000 * 60 * 60 * 24);
        Year = Math.trunc((y - x) / 365);
        Day = Math.trunc((y - x));
        if ((bd > cd && bm > cm)) {
            Month = (11 - bm) + (cm - 1) ;
            if (((cm) == 0) || ((cm) == 2) || ((cm) == 4) || ((cm) == 6) ||
((cm) == 7) || ((cm) == 9) || ((cm) == 11)) {
                a1 = 31;
                if ((((cm) == 0) || ((cm) == 2) || ((cm) == 4) || ((cm) == 6) ||
((cm) == 7) || ((cm) == 9) || ((cm) == 11)) && (bd == 31)) {
                    a1 = 0;
                    bd = 0;
                    cd++;
                }
            }
        }
    }
</script>

```

```

        }
        else if (((cm) == 3) || ((cm) == 5) || ((cm) == 8) || ((cm) ==
10)) {
            a1 = 30;
            if (((((cm) == 3) || ((cm) == 5) || ((cm) == 8) || ((cm) ==
10)) && (bd == 30)) {
                a1 = 0;
                bd = 0;
                cd++;
            }
        }
        else {
            if (cy % 400 == 0 || (cy % 100 != 0 && cy % 4 == 0)) {
                a1 = 29;
                if ((cy % 400 == 0 || (cy % 100 != 0 && cy % 4 == 0)) &&
bd == 29) {
                    a1 = 0;
                    bd = 0;
                    cd++;
                }
            }
            else {
                a1 = 28;
                if (bd == 28) {
                    a1 = 0;
                    bd = 0;
                    cd++;
                }
            }
        }
        R_day = (a1 - (bd - 1)) + (cd - 1);
        console.log("R_day", R_day);
        console.log("a1", a1);
        console.log("bd", bd);
        console.log("cd", cd);
    }
    if (bd < cd && bm < cm) {
        Month = (11 - bm) + (cm) - 12 ;
        R_day = cd - bd;
    }
    if ((bd < cd && bm > cm) || ((bm == cm) && bd < cd)) {
        Month = (11 - bm) + (cm) ;
        R_day = cd - bd;
    }
    if ((bd > cd && bm < cm) || ((bm == cm) && bd > cd)) {

```

```

        Month = (11 - bm) + (cm - 1) - 12 ;
        if (((cm) == 0) || ((cm) == 2) || ((cm) == 4) || ((cm) == 6) ||
((cm) == 7) || ((cm) == 9) || ((cm) == 11)) {
            a1 = 31;
            if (((cm) == 0) || ((cm) == 2) || ((cm) == 4) || ((cm) == 6)
|| ((cm) == 7) || ((cm) == 9) || ((cm) == 11)) && (bd == 31)) {
                a1 = 0;
                bd = 0;
                cd++;
            }
        }
        else if (((cm) == 3) || ((cm) == 5) || ((cm) == 8) || ((cm) ==
10)) {
            a1 = 30;
            if (((cm) == 3) || ((cm) == 5) || ((cm) == 8) || ((cm) ==
10)) && bd == 30) {
                a1 = 0;
                bd = 0;
                cd++;
            }
        }
        else {
            if (cy % 400 == 0 || (cy % 100 != 0 && cy % 4 == 0)) {
                a1 = 29;
                if ((cy % 400 == 0 || (cy % 100 != 0 && cy % 4 == 0)) &&
bd == 29) {
                    a1 = 0;
                    bd = 0;
                    cd++;
                }
            }
            else {
                a1 = 28;
                if (bd == 28) {
                    a1 = 0;
                    bd = 0;
                    cd++;
                }
            }
        }
        R_day = (a1 - (bd - 1)) + (cd - 1);
    }
    if (bd == cd) {
        R_day = 0;
    }
}

```

```

if (bm == cm) {
    Month = 0;
    if (bd > cd) {

    }
}
console.log("Year", Year, "Day", Day, "Month", Month, "Remaining
day", R_day);
let output = `Year=${Year} Month= ${Month + 1} Remaining
day=${R_day}`;
let out = document.getElementById("output");
out.innerHTML = output;

}
</script>
</body>

</html>

```

## Output

Date Difference Example

First Date

Second Date

**Year=26 Month= 6 Remaining day=29**

CACULATE DIFFERENCE



## 7--Delete table row

```
<!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>
        table {
            border-collapse: collapse;
            scale: 2;
        }

        th {
            padding: 5px;
            background-color: brown;
        }

        td {
            padding: 5px;
            background-color: aquamarine;
        }
        #main
        {
            width: 400px;
            margin: 100px auto;
        }
        body{
            background-color: antiquewhite;
        }
    </style>
</head>

<body>
    <div id="main">
        <table border="1">
            <caption>My Time-Table</caption>
            <tr>
                <th>no</th>
                <th>Name</th>
                <th>Mobile No</th>
                <th>Email id</th>
                <th colspan="2">address</th>
```

```

</tr>
<tr>
    <td>1</td>
    <td>Mehul</td>
    <td>Mobile No</td>
    <td>Email id</td>
    <td>address</td>
    <td><button class="cls">Delete</button></td>
</tr>
<tr>
    <td>2</td>
    <td>Pratik</td>
    <td>Mobile No</td>
    <td>Email id</td>
    <td>address</td>
    <td><button class="cls">Delete</button></td>
</tr>
<tr>
    <td>3</td>
    <td>Darshan</td>
    <td>Mobile No</td>
    <td>Email id</td>
    <td>address</td>
    <td><button class="cls">Delete</button></td>
</tr>
<tr>
    <td>4</td>
    <td>Saimil</td>
    <td>Mobile No</td>
    <td>Email id</td>
    <td>address</td>
    <td><button class="cls">Delete</button></td>
</tr>
</table>
<script>
    let delete1 = document.getElementsByClassName("cls");
    for (let x of delete1) {
        {
            x.addEventListener("click", function () {
                if (confirm("are you sure,you want to delete this row"))
                    x.parentElement.parentElement.style.display = "none";
            })
        }
    }

```

```

        </script>
    </div>
</body>

</html>

```

## Output

The screenshot shows a web browser window with multiple tabs, all titled "Document". The active tab's URL is 127.0.0.1:5500/delete\_table\_row---7.html. A confirmation dialog box is overlaid on the page, containing the text "127.0.0.1:5500 says" and "are you sure,you want to delete this row" with "OK" and "Cancel" buttons. Below the dialog is a table with the following data:

no	Name	Mobile No	Email id	address	
1	Mehul	Mobile No	Email id	address	<button>Delete</button>
2	Pratik	Mobile No	Email id	address	<button>Delete</button>
3	Darshan	Mobile No	Email id	address	<button>Delete</button>
4	Saimil	Mobile No	Email id	address	<button>Delete</button>

The browser's taskbar at the bottom shows various pinned icons and the system status bar indicates it's 30°C, Partly cloudy, 9:30 PM, 4/10/2023.

## 8- -Temperature conversion

```

<!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>
        #main {
            width: 500px;

```

```
height: 300px;
background-color: darkseagreen;
display: flex;
justify-content: space-between;
margin: 150px auto;
}

.cls {
    width: 30%;
    margin: auto;
    text-align: center;
    font-size: 20px;
    color: crimson;
}

.cls1 {
    height: 30px;
    border-radius: 10px;
    padding: 5px;
}
</style>
</head>

<body>
<div id="main">
    <div id="celcius" class="cls">
        <label for="in1">Celcius</label>
        <input type="number" id="in1" class="cls1">
    </div>
    <div id="feranhit" class="cls">
        <label for="in2">Feranhit</label>
        <input type="number" id="in2" class="cls1">
    </div>
</div>
<script>
    let in1 = document.getElementById("in1");
    let in2 = document.getElementById("in2");
    in1.addEventListener("focus", function () {
        this.style.backgroundColor="lightpink";
    })
    in1.addEventListener("blur", function () {
        this.style.backgroundColor="white";
    })
    //Celcius to feranhit
    in1.addEventListener("input", function () {
```

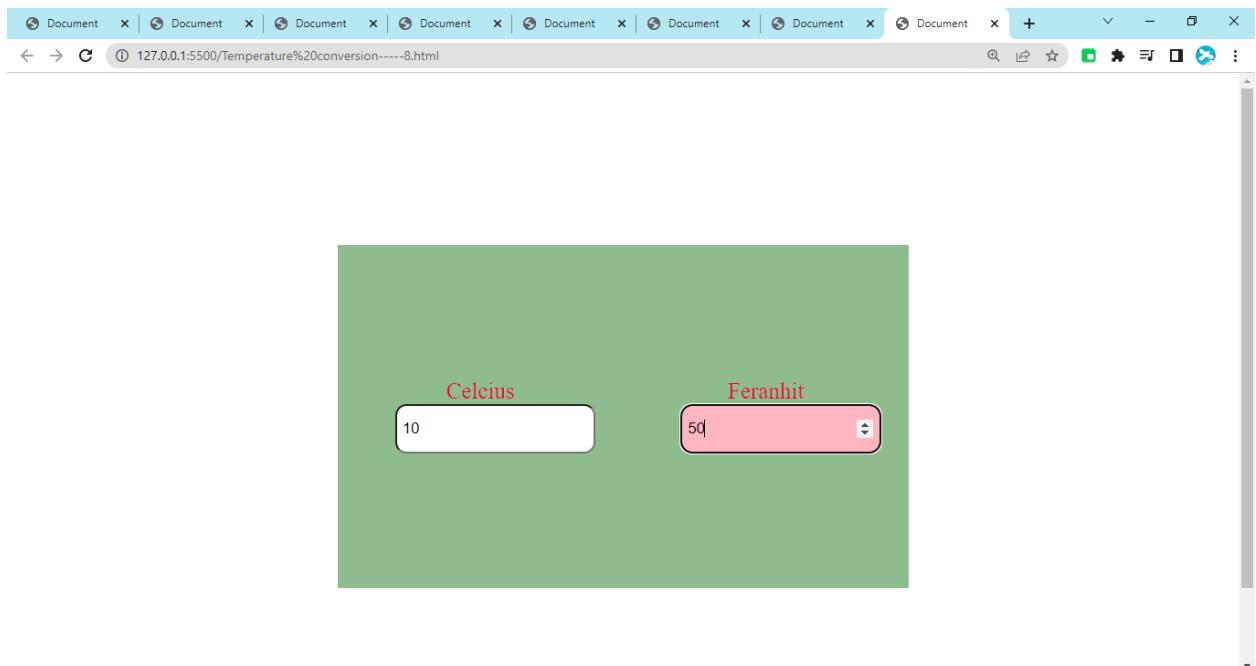
```

        in2.value = Math.trunc((((in1.value) * (9 / 5) + 32) * 10)) / 10;
        if (String(in1.value).length == 0) { in2.value = " " }
    })
    in2.addEventListener("focus", function () {
        this.style.backgroundColor="lightpink";
    })
    in2.addEventListener("blur", function () {
        this.style.backgroundColor="white";
    })
    //Feranhit to celcius
    in2.addEventListener("input", function () {
        in1.value = Math.trunc((((in2.value) - 32) * (5 / 9)) * 10)) / 10;
        if (String(in2.value).length == 0) { in1.value = " " }
    })
</script>
</body>

</html>

```

## Output



## 9-Word Counter

```

<!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>
        #main {
            width: 500px;
            padding: 50px;
            margin: 10px auto;
            background-color: darkslategrey;
            display: flex;
            flex-direction: column;
            flex-wrap: wrap;
            text-align: center;
        }

        h1 {
            color: cornsilk;
            background-color: darkorange;
        }

        div textarea {
            background-color: rgb(229, 237, 240);
        }

        #output {
            color: aquamarine;
            font-size: 20px;
            line-height: 50px;
            letter-spacing: 5px;
            background-color: darkorange;
        }

        #value{
            font-size: 20px;
            color:crimson ;
            border-radius: 10px;
            padding: 10px;
        }
    </style>
</head>

<body>
    <div id="main">
```

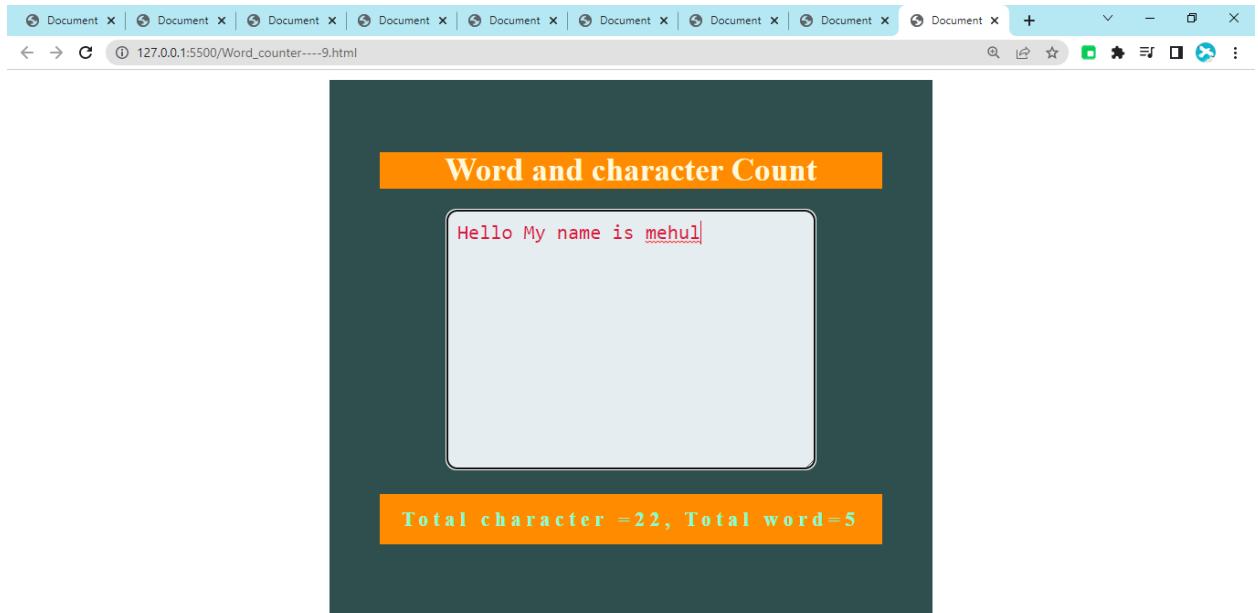
```

<div>
    <h1>Word and character Count</h1>
</div>
<div><textarea id="value" cols="30" rows="10" placeholder="Enter any string"></textarea></div>
<div>
    <h3 id="output">Output</h3>
</div>
</div>
<script>
    let input = document.getElementById("value");
    let output = document.getElementById("output");
    input.addEventListener("input", function () {
        let value = input.value.trim();
        let char = value.length;
        let word = value.split(" ").sort().join(" ").trim().split(" ")
            .length;
        if(value.split(" ").sort().join(" ").trim().split(" ")
            .join(" ").trim() == "")
        {
            word=0;
        }
        output.innerHTML = `Total character =${char}, Total word=${word}`;
    })
</script>
</body>

</html>

```

## Output



## 10- -Image slider

```
<!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>

        .cls {
            width: 80%;
            height: 95vh;
            margin: 0 auto;
        }

        img {
            height: 100%;
            width: 100%;
        }

        #btn1 {
            position: absolute;
```

```

        top: 50%;
        left: 12%;
        background-color: blanchedalmond;
        padding: 10px;
        color: darkred;
    }

    #btn2 {
        position: absolute;
        top: 50%;
        right: 12%;
        background-color: blanchedalmond;
        padding: 10px;
        color: darkred;
    }
    .aa{
        display: none;
    }

```

</style>

</head>

<body>

```

<div id="main">
    <div class="cls">
        
    </div>
    <div class="cls aa">
        
    </div>
    <div class="cls aa">
        
    </div>
    <div class="cls aa">
        
    </div>
    <span id="btn1" onclick="show(-1)">#9664;</span>
    <span id="btn2" onclick="show(1)">#9654;</span>
</div>
<script>
    let btn1 = document.getElementById("btn1");
    let btn2 = document.getElementById("btn2");
    let img = document.getElementsByClassName("cls");
    let i = 0;
    function show(e) {
        for (let i = 0; i < img.length; i++) {

```

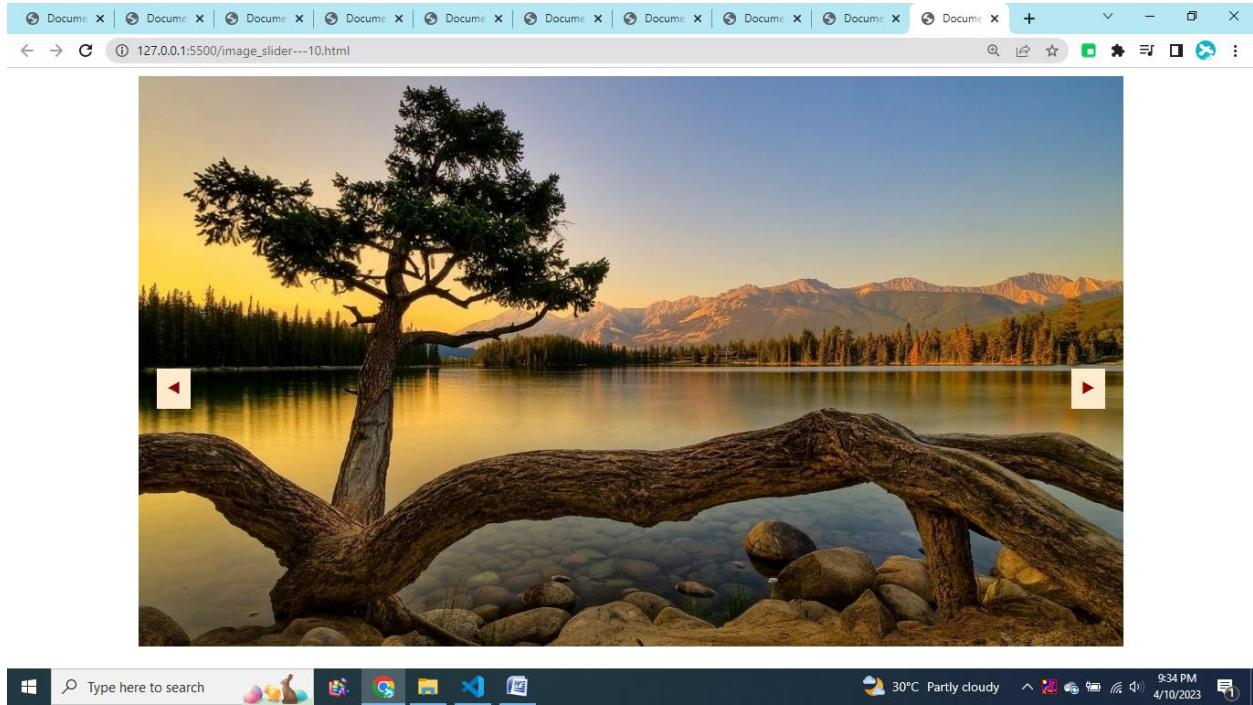
```

        img[i].style.display = "none";
    }
    console.log("one",i);
    i = i + e;
    if (e == 1) {
        if (i == 4) { i = 0 }
        else if (i == -1) { i = 3 }
    }
    console.log("two",i);
    if (e == -1) {
        if (i == 4) { i = 0 }
        else if (i == -1) { i = 3 }
    }
    img[i].style.display = "block";
}
</script>
</body>

</html>

```

## Output



## 10-Image slider—2

```
<!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>
        #main {
            position: relative;
        }

        body {
            margin: 0;
        }

        .slide {
            position: relative;
        }

        .slide img {
            width: 100%;
            height: 100%;
        }

        .caption {
            position: absolute;
            bottom: 20px;
            left: 0;
            width: 100%;
            background-color: rgba(0, 0, 0, 0.9);
            font-size: 25px;
            text-align: center;
            color: aliceblue;
            font-weight: 900;
        }

        .arrow {
            position: absolute;
            top: 45%;
            padding: 15px;
            background-color: black;
        }
    </style>
</head>
<body>
    <div id="main">
        <div class="slide">
            <img alt="A black and white photograph of a landscape with a large tree in the foreground and a body of water in the background." data-bbox="0 0 1000 1000"/>
            <div class="caption">A black and white photograph of a landscape with a large tree in the foreground and a body of water in the background.</div>
        </div>
        <div class="arrow" data-bbox="450 100 550 200"></div>
    </div>
</body>
</html>
```

```
        border-radius: 50%;  
        color: aliceblue;  
        font-size: 25px;  
  
    }  
  
.next {  
    right: 2%;  
}  
  
.prev {  
    left: 2%;  
}  
</style>  
</head>  
  
<body>  
    <div id="main">  
        <div class="slide">  
              
            <span class="caption">Slide-1</span>  
        </div>  
        <div class="slide">  
              
            <span class="caption">Slide-2</span>  
        </div>  
        <div class="slide">  
              
            <span class="caption">Slide-3</span>  
        </div>  
        <div class="slide">  
              
            <span class="caption">Slide-4</span>  
        </div>  
        <span class="arrow prev" onclick="show1(-1)">&lt;&gt;</span>  
        <span class="arrow next" onclick="show1(1)">&gt;</span>  
    </div>  
    <script>  
        let flag = 0;  
        let slide = document.getElementsByClassName("slide");  
        setInterval(show1, 1000 ,1); //syntax setInterval(function name,interval  
time,argument,argument,argument etc)  
  
        function show1(y) {  
            flag=flag + y;  
    </script>
```

```

        if(flag==slide.length)
        {
            flag=0;
        }
        if(flag==-1)
        {
            flag=slide.length-1;
        }
        show(flag);
    }

    function show(a) {
        for (let x of slide) {
            x.style.display = "none";
        }
        slide[a].style.display = "block";
    }

```

</script>

</body>

</html>

## Output



## 11--Form Validation

```
<!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>
        * {
            /* border: 1px solid black; */
            box-sizing: border-box;
        }

        #main {
            background-color: cornflowerblue;
            width: 400px;
            height: 380px;
            margin: 100px auto;
            padding: 20px;
            border-radius: 10px 20px;
        }

        #form {
            width: 100%;
            display: flex;
            flex-direction: column;
            text-align: center;
        }

        .cls {
            padding: 10px 0;
            margin: 5px 0;
            border-radius: 5px;
        }

        #submit {
            margin-top: 15px;
            background-color: brown;
            font-weight: 600;
            color: aliceblue;
            padding: 10px;
        }
    </style>
</head>
<body>
    <div id="main">
        <div id="form">
            <div class="cls"></div>
            <div class="cls"></div>
            <div class="cls"></div>
            <div id="submit">Submit</div>
        </div>
    </div>
</body>
</html>
```

```
        font-size: 18px;
    }

label {
    background-color: chartreuse;
    font-size: 20px;
    color: blue;
}

p {
    height: 20px;
    padding: 0;
    margin: 5px 0;
    color: red;
    font-weight: 900;
}

</style>
</head>

<body>
<div id="main">
    <form id="form">
        <label for="username" class="cls">Username</label>
        <input type="text" id="username" class="cls">
        <p id="para1"></p>
        <label for="pass" class="cls">Password</label>
        <input type="password" id="pass" class="cls">
        <p id="para2"></p>
        <input type="submit" id="submit" class="cls">
    </form>
</div>
<script>
    let form = document.getElementById("form");
    let user = document.getElementById("username");
    let pass = document.getElementById("pass");
    let p1 = document.getElementById("para1");
    let p2 = document.getElementById("para2");

    form.addEventListener("submit", function (e) {
        if (user.value.length < 8 || !(/@/.test(user.value))) {
            e.preventDefault();
            p1.innerHTML = "Enter name character between 1 to 8 and includes @";
        }
    })
</script>

```

```

        if (pass.value.length < 8 || !(/[a-z]/.test(pass.value) && /[A-Z]/.test(pass.value) && /[0-9]/.test(pass.value) && /[-'`~!#*$@%+=.,^&(){\}|;:">?\\]/g.test(pass.value)))) {
            e.preventDefault();
            p2.innerHTML = "Enter password one Uppercase,lowercase,special
char,number";
        }
    })
</script>
</body>

</html>

```

## Output

The screenshot shows a web browser window with a form. The form has two input fields: 'Username' and 'Password'. The 'Username' field contains 'mehulwaghela63' and has a red error message below it: 'Enter name character between 1 to 8 and includes @'. The 'Password' field contains '\*\*\*\*\*' and has a red error message below it: 'Enter password one Uppercase,lowercase,special char,number'. There is a 'Submit' button at the bottom of the form.

## 12---Stop watch

```

<!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>
        * {
            box-sizing: border-box;
        }

        body {
            font-size: 40px;
            background-color: cadetblue;
        }

        #main {
            width: 800px;
            height: 300px;
            margin: 150px auto;
            background-color: chocolate;
            padding: 100px 20px;
            color: aliceblue;
        }

        #button {
            width: 700px;
            padding-top: 40px;
            display: flex;
            justify-content: space-around;
        }

        button {
            padding: 15px 30px;
        }
    </style>
</head>

<body>
    <div id="main">
        Hour = <span id="hour">0</span>
        Minute = <span id="minute">0</span>
        Second = <span id="second">0</span>
        Count = <span id="count">0</span>
        <div id="button">
            <button id="start">Start</button>
    
```

```
<button id="stop">Stop</button>
<button id="reset">Reset</button>
</div>
</div>
<script>
    let hour = document.getElementById("hour");
    let minute = document.getElementById("minute");
    let second = document.getElementById("second");
    let count = document.getElementById("count");
    let start = document.getElementById("start");
    let stop = document.getElementById("stop");
    let reset = document.getElementById("reset");
    let x;
    start.addEventListener("click", function () {
        x = setInterval(show, 10);
        let flag = 0;
        let h = 0;
        let m = 0;
        let s = 0;
        function show() {
            flag++;
            count.innerHTML = flag;
            if (flag == 100) {
                flag = 0;
                s++;
                second.innerHTML = s;
                if (s == 60) {
                    s = 0;
                    m++;
                    minute.innerHTML = m;
                    if (m == 60) {
                        m = 0;
                        h++;
                        hour.innerHTML == h;
                    }
                }
            }
        }
    })
    stop.addEventListener("click", function () {
        clearInterval(x);
    })
    reset.addEventListener("click", function () {
        flag=0;
        s=0;
```

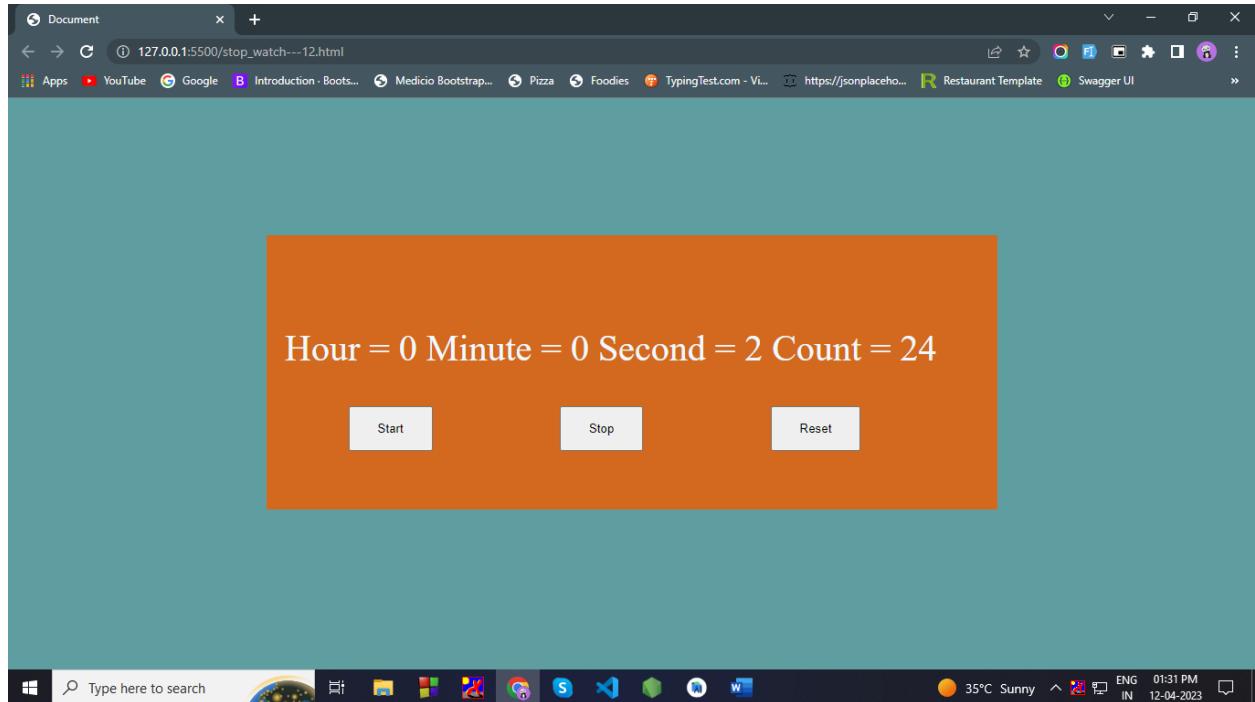
```

m=0;
h=0;
count.innerHTML = flag;
second.innerHTML = s;
minute.innerHTML = m;
hour.innerHTML == h;
})
</script>
</body>

</html>

```

## Output



## 13-check box

```

<!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>
  * {
    box-sizing: border-box;
  }

#main {
  border: 2px solid black;
  width: 500px;
  margin: 100px auto;
  background-color: cornflowerblue;
  border-radius: 10px 20px;
  box-shadow: 5px 5px 3px grey;
}

form {
  background-color: coral;
  padding: 10px;
  border-radius: 10px 20px;
}

.abc {
  outline: 2px solid white;
  outline-offset: 3px;
  display: inline-block;
  padding: 20px 5px;
  background-color: crimson;
  margin: 20px 40px;
  font-size: 20px;
  color: aliceblue;
  border-radius: 10px 20px;
  text-align: center;
  cursor: pointer;
}

fieldset {
  color: darkred;
  font-size: 30px;
  box-shadow: inset -3px -3px 3px darkcyan;
}
</style>
</head>
```

```
<body>
  <div id="main">
    <form id="form">
      <fieldset>
        <legend>My hobby</legend>
        <div class="abc">
          <label for="selectall">Select all</label>
          <input type="checkbox" name="check" id="all">
        </div>
        <div id="check">
          <div class="abc">
            <label for="football">Football</label>
            <input type="checkbox" name="check" class="out">
          </div>
          <div class="abc">
            <label for="cricket">Cricket</label>
            <input type="checkbox" name="check" class="out">
          </div>
          <div class="abc">
            <label for="karate">Karate</label>
            <input type="checkbox" name="check" class="out">
          </div>
          <div class="abc">
            <label for="volleyball">Volleyball</label>
            <input type="checkbox" name="check" class="out">
          </div>
        </div>
      </fieldset>
    </form>
  </div>
  <script>
    let box = document.getElementsByClassName("out");
    let all = document.getElementById("all");
    for (let x of box) {
      x.addEventListener("change", function () {
        let c_length = document.querySelectorAll(".out:checked").length;
        if (c_length == box.length) {
          all.checked = true;
        }
        else {
          all.checked = false;
        }
      })
    }
    all.addEventListener("change", function () {
```

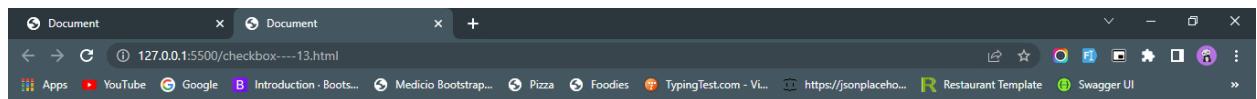
```

        if (all.checked == true) {
            for (let x of box) {
                x.checked = true;
            }
        }
        else {
            for (let x of box) {
                x.checked = false;
            }
        }
    })
</script>
</body>

</html>

```

## Output



## 19—Crud

```

<!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>
    * {
        /* border: 1px solid black; */
        box-sizing: border-box;
    }

    #main {
        background-color: cornflowerblue;
        width: 400px;
        height: 380px;
        margin: -100px auto;
        padding: 20px;
        border-radius: 10px 20px;
        display: none;
    }

    #form {
        width: 100%;
        display: flex;
        flex-direction: column;
        text-align: center;
        position: relative;
        z-index: 100;
    }

    .cls {
        padding: 10px 0;
        margin: 5px 0;
        border-radius: 5px;
    }

    #submit {
        margin-top: 15px;
        background-color: brown;
        font-weight: 600;
        color: aliceblue;
        padding: 10px;
        font-size: 18px;
    }
}
```

```
label {
    background-color: chartreuse;
    font-size: 20px;
    color: blue;
}

p {
    height: 20px;
    padding: 0;
    margin: 5px 0;
    color: red;
    font-weight: 900;
}

table {
    border-collapse: collapse;
    margin: 150px 400px;
    width: 500px;
}
th {
    background-color: yellowgreen;
    padding: 5px 20px;
}

td {
    padding: 5px 20px;
    background-color: cornflowerblue;
}
#add{
    position: absolute;
    top: 5%;
    left: 45%;
    padding: 10px 20px;
    color: crimson;
    font-weight: 700;
    font-size: 20px;
    background-color: cornflowerblue;
}
.cls1{
    background-color: brown;
    padding: 5px;
    padding-right: 5px;
}
</style>
</head>
```

```

<body>
    <div id="table">
        <table border="1" id="tab">
            <tr>
                <th>No</th>
                <th>Name</th>
                <th colspan="2">Password</th>
            </tr>
        </table>
    </div>
    <div id="main">
        <form id="form">
            <h2>Login</h2>
            <input type="text" id="username" class="cls" placeholder="Username">
            <p id="para1"></p>
            <input type="password" id="pass" class="cls" placeholder="Password">
            <p id="para2"></p>
            <input type="submit" id="submit" class="cls">
        </form>
    </div>
    <button id="add">+Add</button>
    <script>
        let form = document.getElementById("form");
        let user = document.getElementById("username");
        let pass = document.getElementById("pass");
        let p1 = document.getElementById("para1");
        let p2 = document.getElementById("para2");
        let table=document.getElementById("tab");
        let tablemain=document.getElementById("table");
        let i=1;
        form.addEventListener("submit", function (e) {
            if (user.value.length < 8 || !(/[@/.test(user.value)))) {
                e.preventDefault();
                p1.innerHTML = "Enter name character between 1 to 8 and includes @";
            }

            if (pass.value.length < 8 || !(/[a-z]/.test(pass.value) && /[A-Z]/.test(pass.value) && /[0-9]/.test(pass.value) && /[-'`~!#*$@_%+=.,^&(){}[\]\|;:>?\\]/g.test(pass.value))) {
                e.preventDefault();
                p2.innerHTML = "Enter password one Uppercase,lowercase,special char,number";
            }
        })
    </script>

```

```
});  
let add = document.getElementById("add");  
add.addEventListener("click", function () {  
    let main = document.getElementById("main");  
    main.style.display = "block";  
    tablemain.style.opacity="0.5";  
});  
form.addEventListener("submit", function (e) {  
    tablemain.style.opacity="1";  
    let tr=document.createElement("tr");  
    let td=document.createElement("td");  
    td.textContent=i;  
    tr.appendChild(td);  
    let td1=document.createElement("td");  
    td1.textContent=user.value;  
    tr.appendChild(td1);  
    tab.appendChild(tr);  
    let td2=document.createElement("td");  
    td2.textContent=pass.value;  
    tr.appendChild(td2);  
    let td3=document.createElement("button");  
    td3.textContent="Delete";  
    tr.appendChild(td3);  
    td3.className="cls1";  
    td3.addEventListener("click",function()  
{  
        if(confirm("Are you sure you want to delete?"))  
        {  
            td3.parentElement.style.display="none";  
        }  
    })  
  
    i++;  
    user.value= "";  
    pass.value="";  
    main.style.display = "none";  
    e.preventDefault();  
})  
  
</script>  
  
</body>  
  
</html>
```

# Output

No	Name	Password
1	mehulwaghela63@gmail.com	galaxy@455114
2	mehulwaghela63@gmail.com	hjndfbjsjhdShjsgdj456

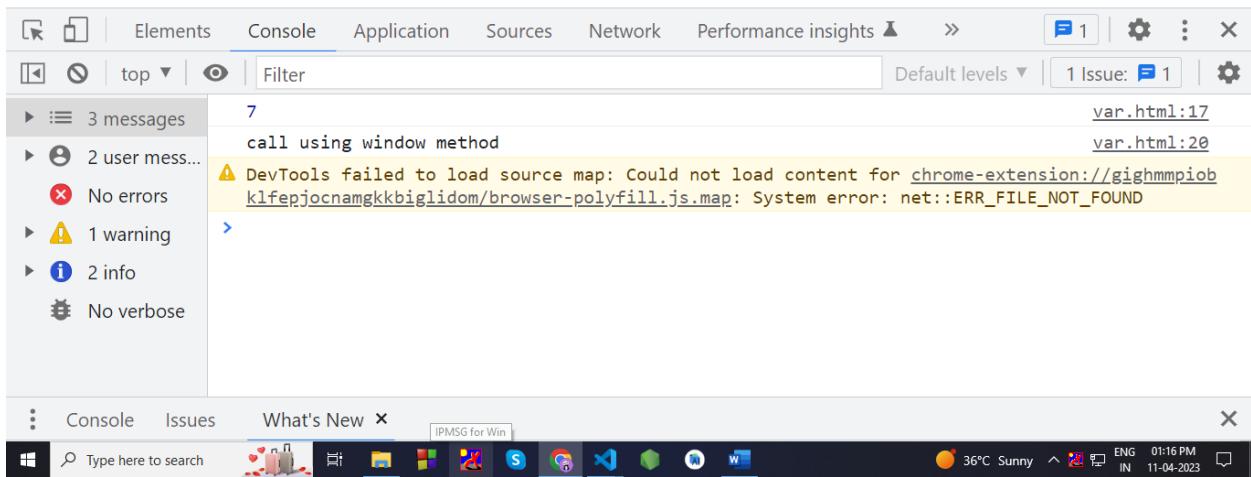
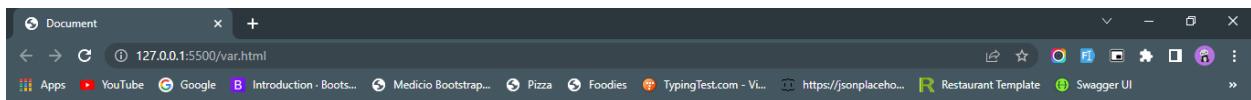


## Object var use

```
<!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>
</head>
<body>
    <script>
        //var thi banavela variable ane function a window na element kevay
        //variable a window object ni property bane
        //function a window object ni method bane
        //let window sathe work karse nahi
        //browser automatically badha script ma lakhela gloabal variable and
        gloabal function ne window object ni family ma samil kare
        var x=7;
        console.log(window.x);
        function show()
```

```
{  
    console.log("call using window method")  
};  
}  
window.show();  
</script>  
</body>  
</html>
```

## Output



## Window open

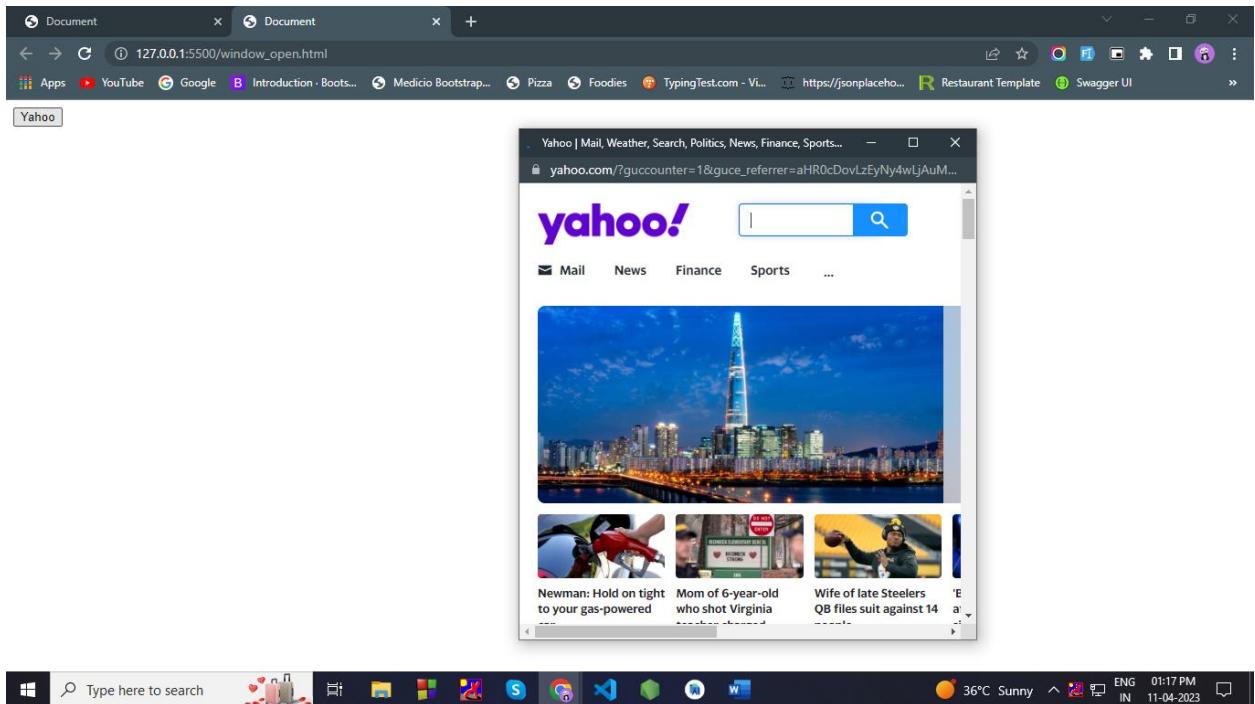
```
<!DOCTYPE html>  
<html lang="en">  
<head>  
    <meta charset="UTF-8">  
    <meta http-equiv="X-UA-Compatible" content="IE=edge">  
    <meta name="viewport" content="width=device-width, initial-scale=1.0">  
    <title>Document</title>  
</head>
```

```

<body>
    <button id="btn">Yahoo</button>
    <script>
        //window.open use for open new window with particular url name and
        functionality
        //syntax=>window.open("url","window-name","window functionality");
        let btn=document.getElementById("btn");
        btn.addEventListener("click",function()
        {
            let x=window.open("https://www.yahoo.com"
            , "mehul", "width=500,height=500");
        })
    </script>
</body>
</html>

```

## Output



## Window close

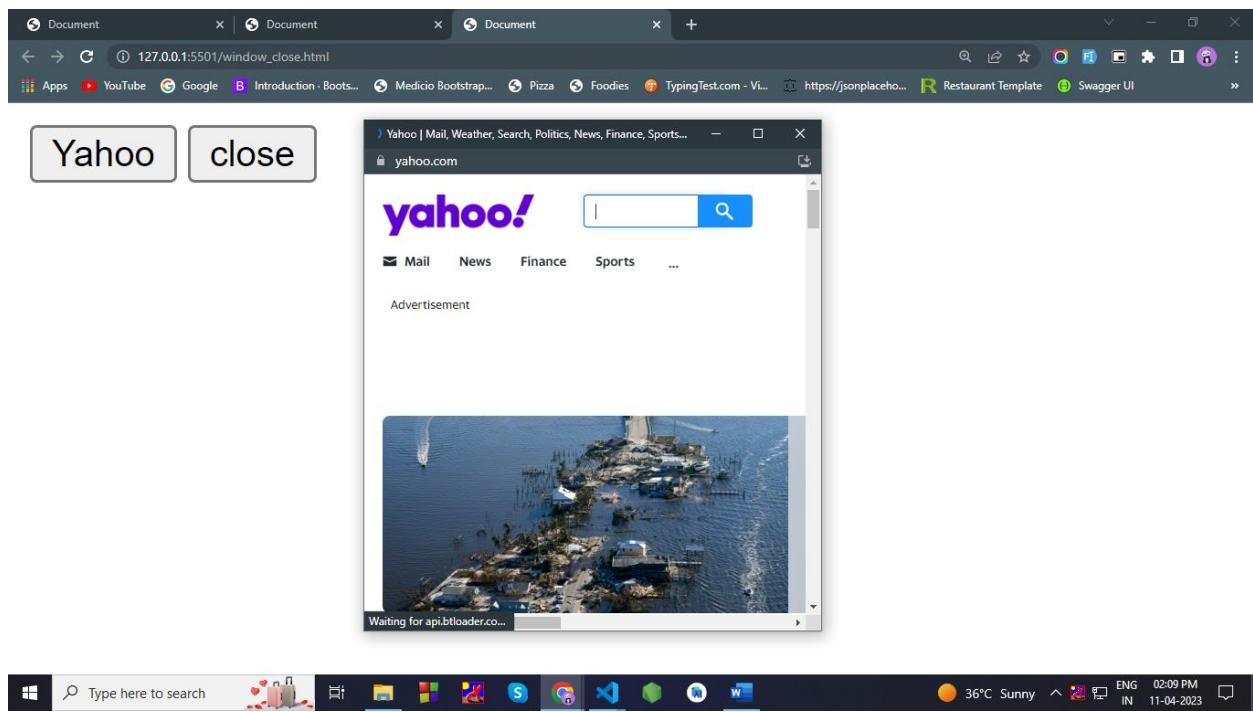
```
<!DOCTYPE html>
```

```

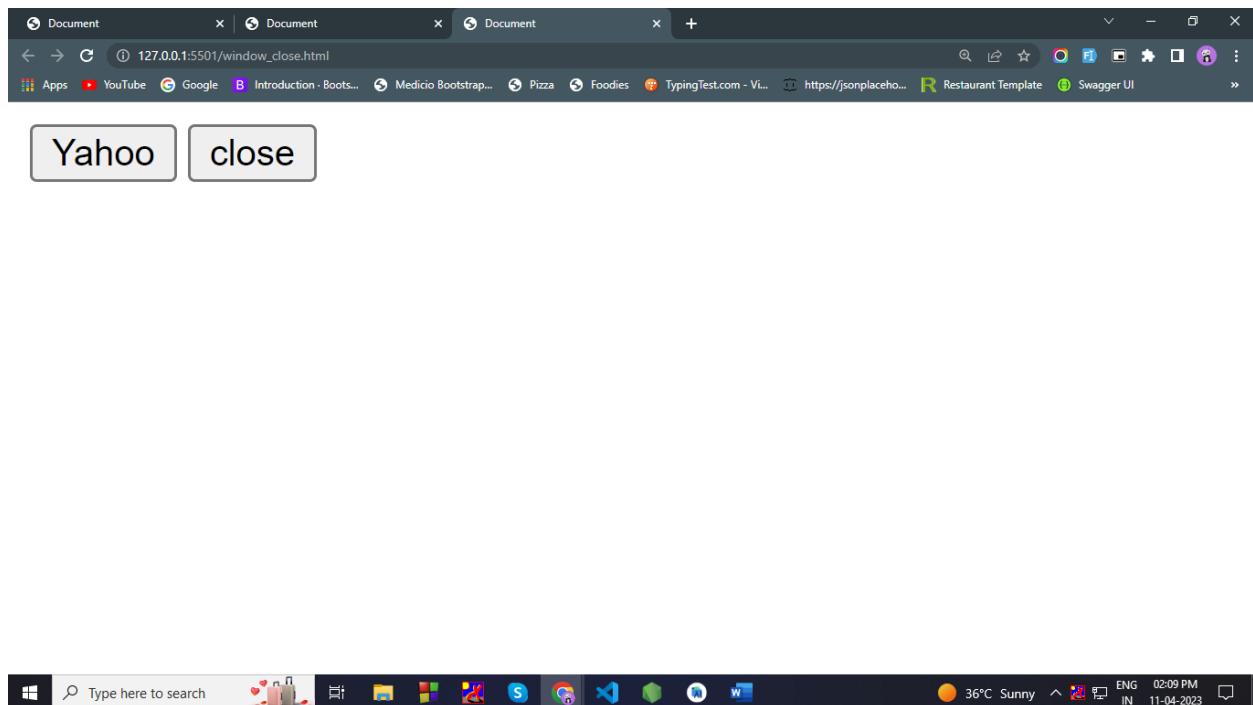
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <button id="btn">Yahoo</button>
    <button id="btn1">close</button>
    <script>
        //window close karva mate pela je window open thai tene variable ma store
        karvo pade
        //window close syntax=>
        //window.open use for open new window with particular url name and
        functionality
        //syntax=>window.open("url","window-name","window functionality");
        let x;
        let btn=document.getElementById("btn");
        btn.addEventListener("click",function()
        {
            x=window.open("https://www.yahoo.com"
,"mehul","width=500,height=500");
        });
        let btn1=document.getElementById("btn1");
        btn1.addEventListener("click",function()
        {
            x.close();
        });
    </script>
</body>
</html>

```

Output-before close click



## After close click



## Window object

```
<!DOCTYPE html>
<html lang="en">
```

```

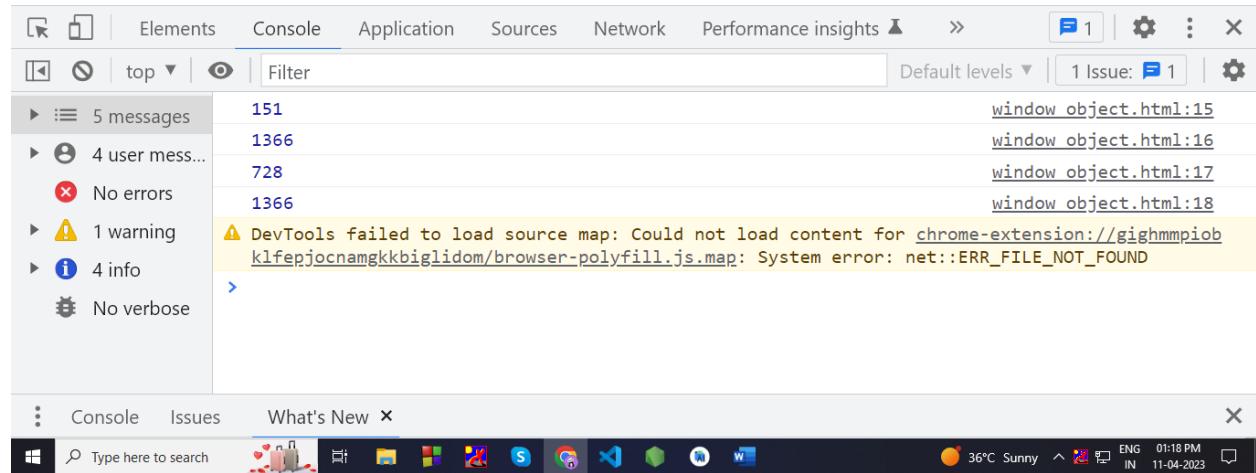
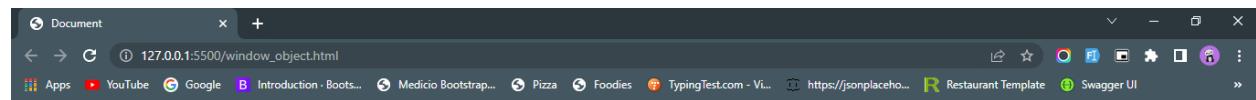
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>

<body>
    <script>
        //innerheight give browser internal height
        //outer height give browser outer height
        console.log(window.innerHeight);
        console.log(window.innerWidth);
        console.log(window.outerHeight);
        console.log(window.outerWidth);
    </script>
</body>

</html>

```

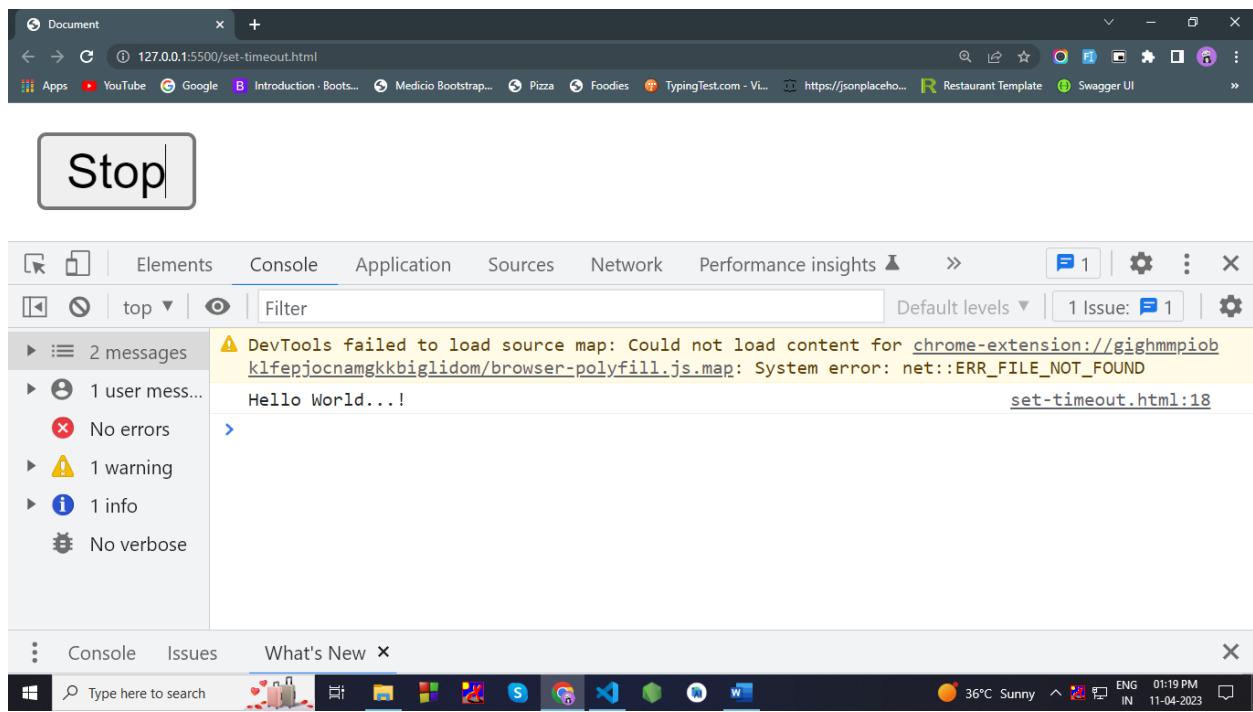
## Output



## Set timeout

```
<!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>
</head>
<body>
    <button id="btn">Stop</button>
    <script>
        //set time out use for work after particular time
        //3000 means 3000ms or 3sec
        //aapre koi particular case ma timeout ne clear pan karavi shakiye
        let x=setTimeout(show,3000);
        function show()
        {
            console.log("Hello World...!");
            let btn=document.getElementById("btn");
        }
        btn.addEventListener("click",function()
        {
            clearTimeout(x);
        })
    </script>
</body>
</html>
```

## Output



## Set time interval

```
<!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>
</head>
<body>
    <button id="btn">Stop</button>
    <script>
        //set time interval use for work after every particular time
        //3000 means 3000ms or 3sec
        //aapre koi particular case ma timeinterval ne clear pan karavi shakiye
        let x=setInterval(show,3000);
        function show()
        {
            console.log("Hello World...!");
            let btn=document.getElementById("btn");
        }
        btn.addEventListener("click",function()
```

```
{  
    clearTimeout(x);  
}  
  
</script>  
</body>  
</html>
```

## Output

