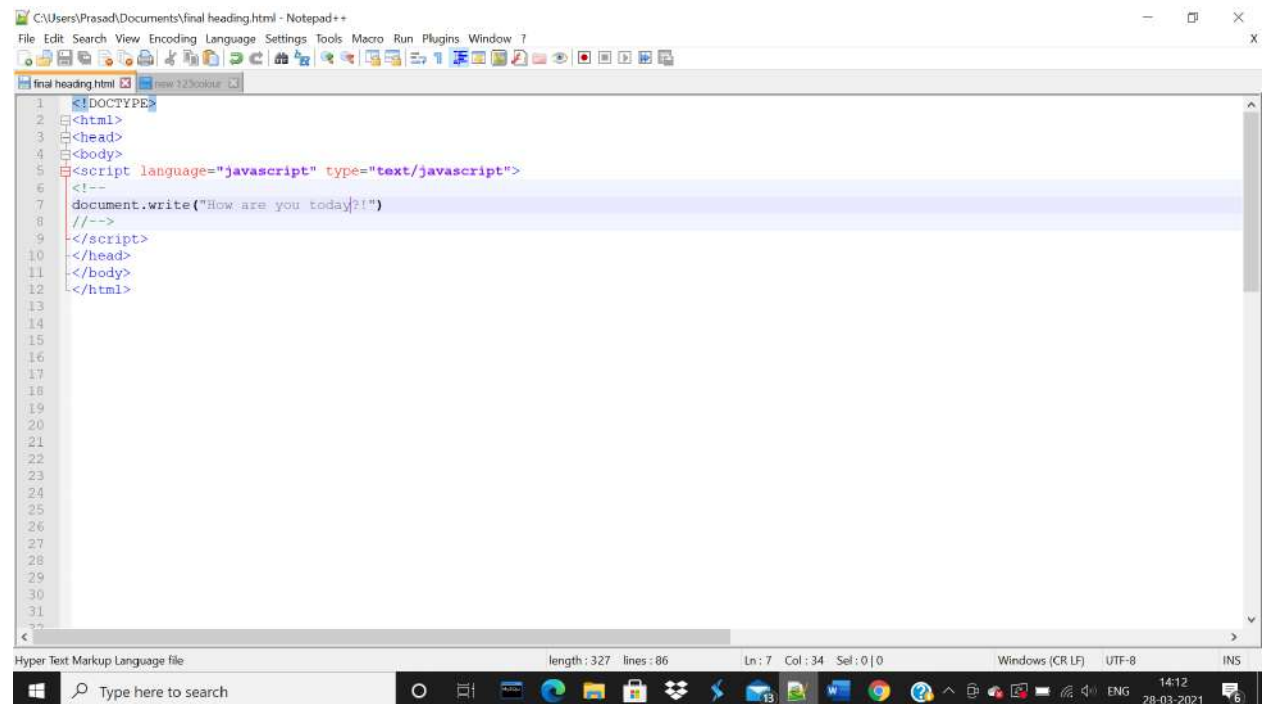


10. Working with JavaScript basics

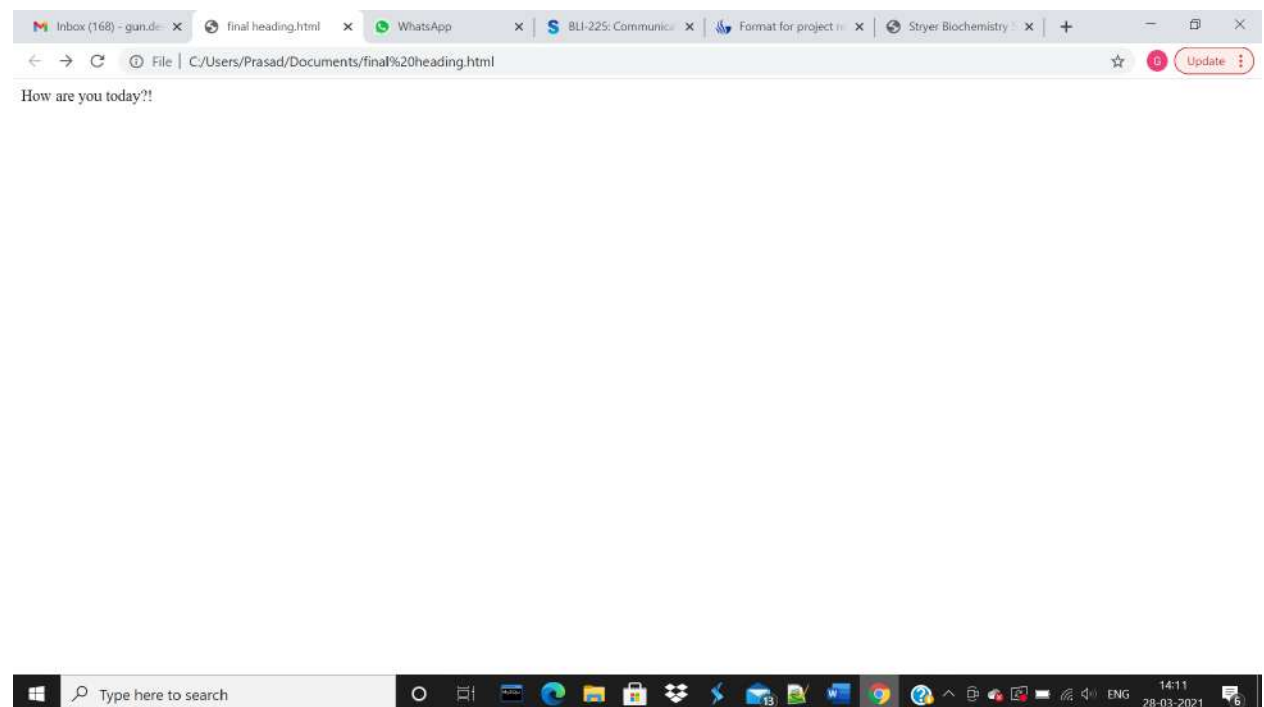
1. Write a simple program using internal JavaScript to display a message on the screen.



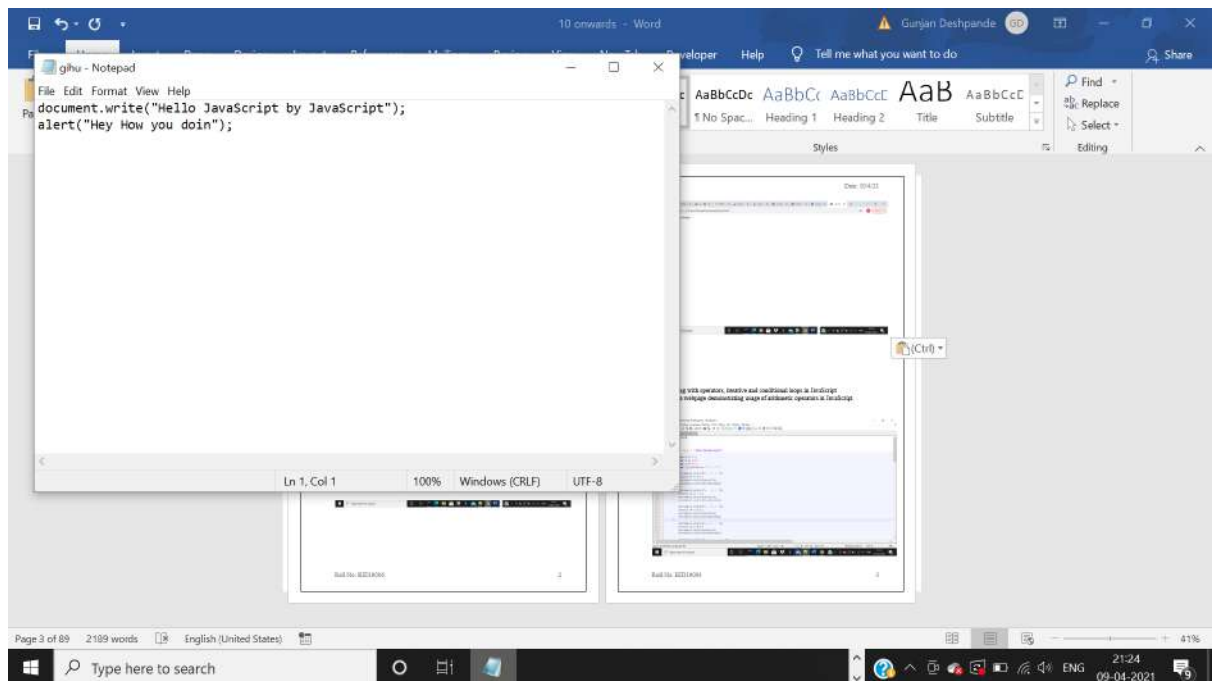
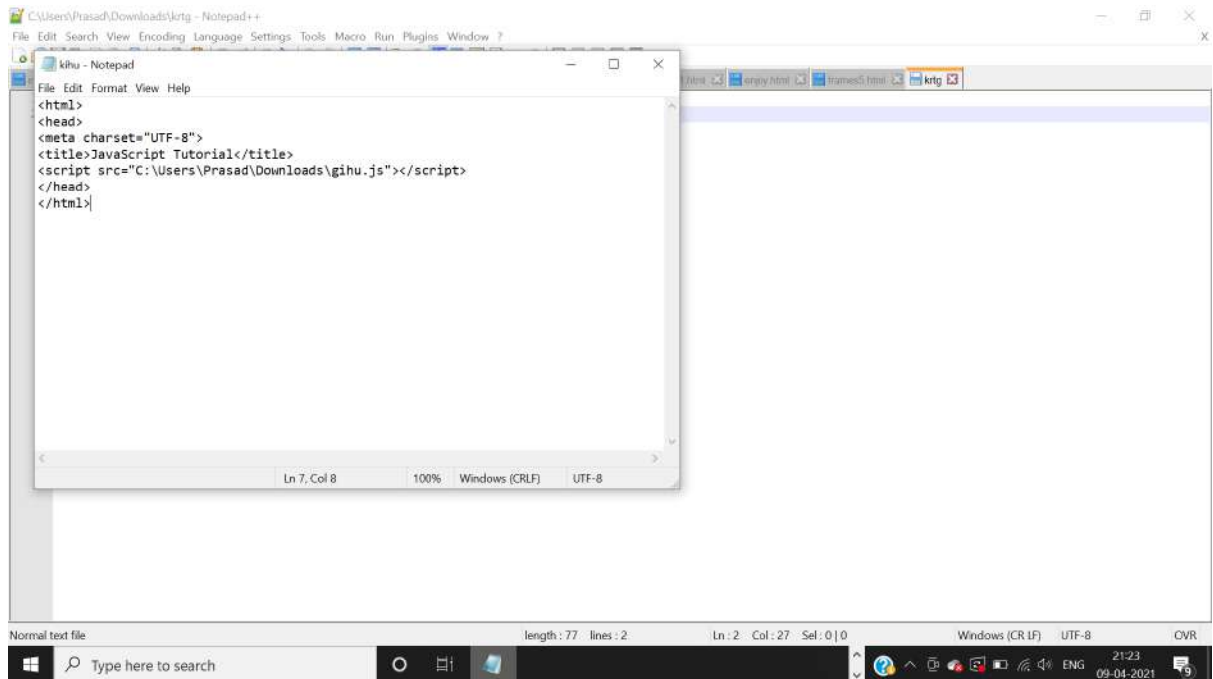
The screenshot shows the Notepad++ editor with a file named 'final heading.html'. The code is as follows:

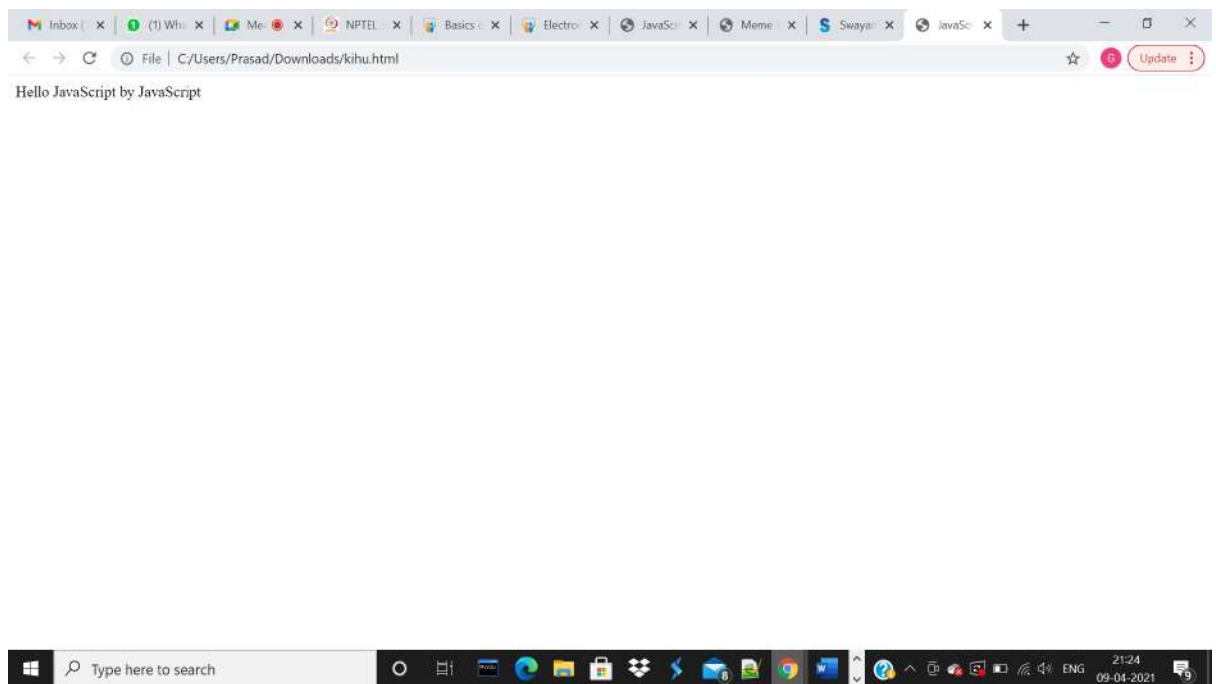
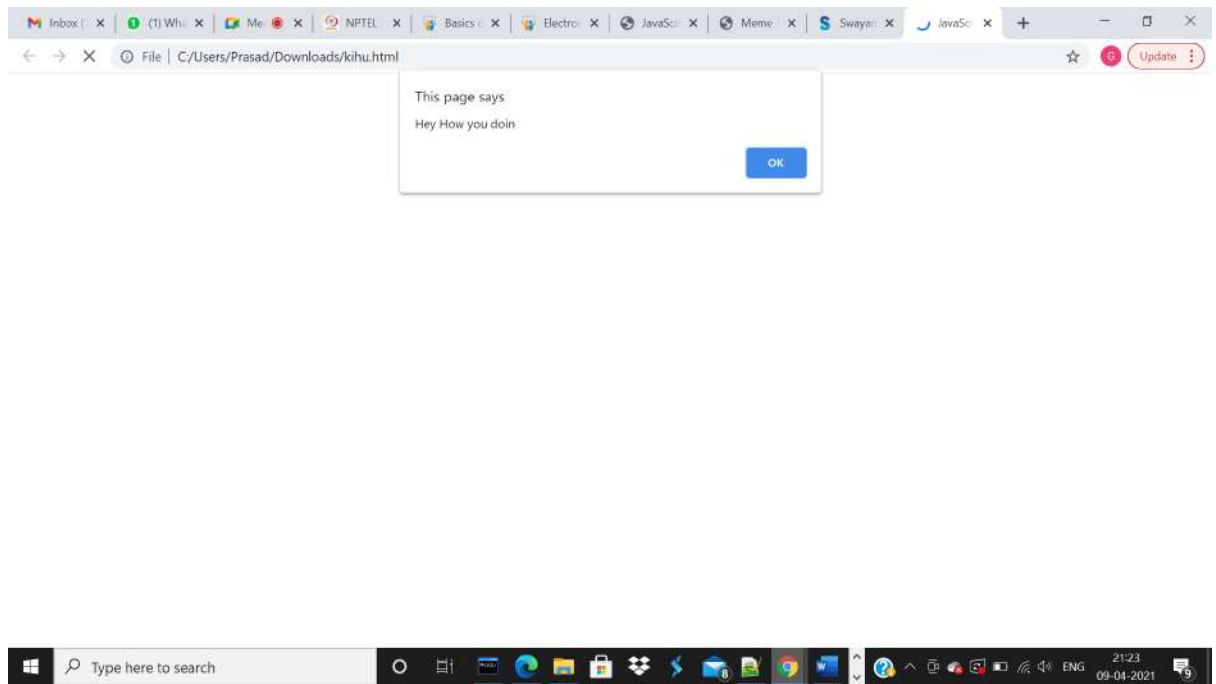
```
1 <!DOCTYPE>
2 <html>
3 <head>
4 <body>
5 <script language="javascript" type="text/javascript">
6 <!--
7 document.write("How are you today?!")
8 //-->
9 </script>
10 </head>
11 </body>
12 </html>
```

The status bar at the bottom indicates 'Hyper Text Markup Language file', 'length: 327 lines: 86', 'Ln: 7 Col: 34 Sel: 0 | 0', 'Windows (CR LF)', 'UTF-8', and 'INS'.



2. Write a simple program using external JavaScript to display a message on the screen.





11. Working with operators, iterative and conditional loops in JavaScript

1. Create a webpage demonstrating usage of arithmetic operators in JavaScript.

```

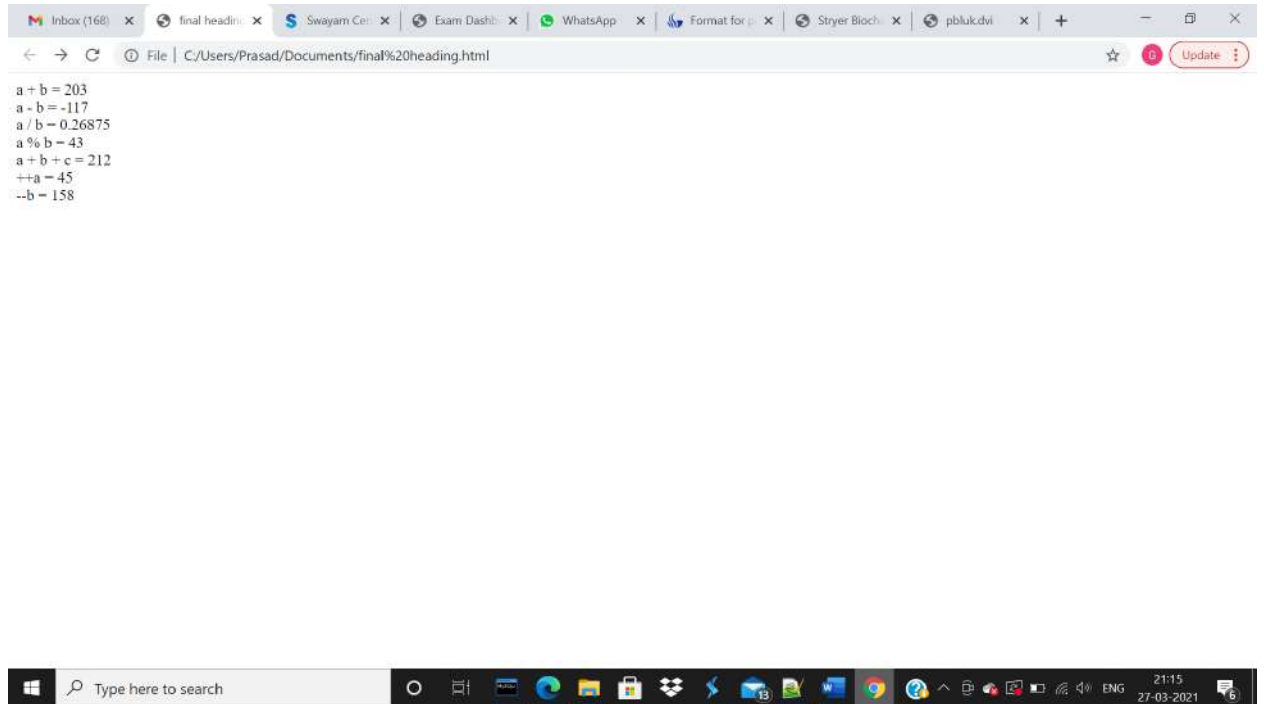
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <script type = "text/javascript">
6      <!--
7          var a = 43;
8          var b = 160;
9          var c = 09;
10         var linebreak = "<br />";
11
12         document.write("a + b = ");
13         result = a + b;
14         document.write(result);
15         document.write(linebreak);
16
17         document.write("a - b = ");
18         result = a - b;
19         document.write(result);
20         document.write(linebreak);
21
22         document.write("a / b = ");
23         result = a / b;
24         document.write(result);
25         document.write(linebreak);
26
27         document.write("a % b = ");
28         result = a % b;
29         document.write(result);
30         document.write(linebreak);
31         document.write("a + b + c = ");

```

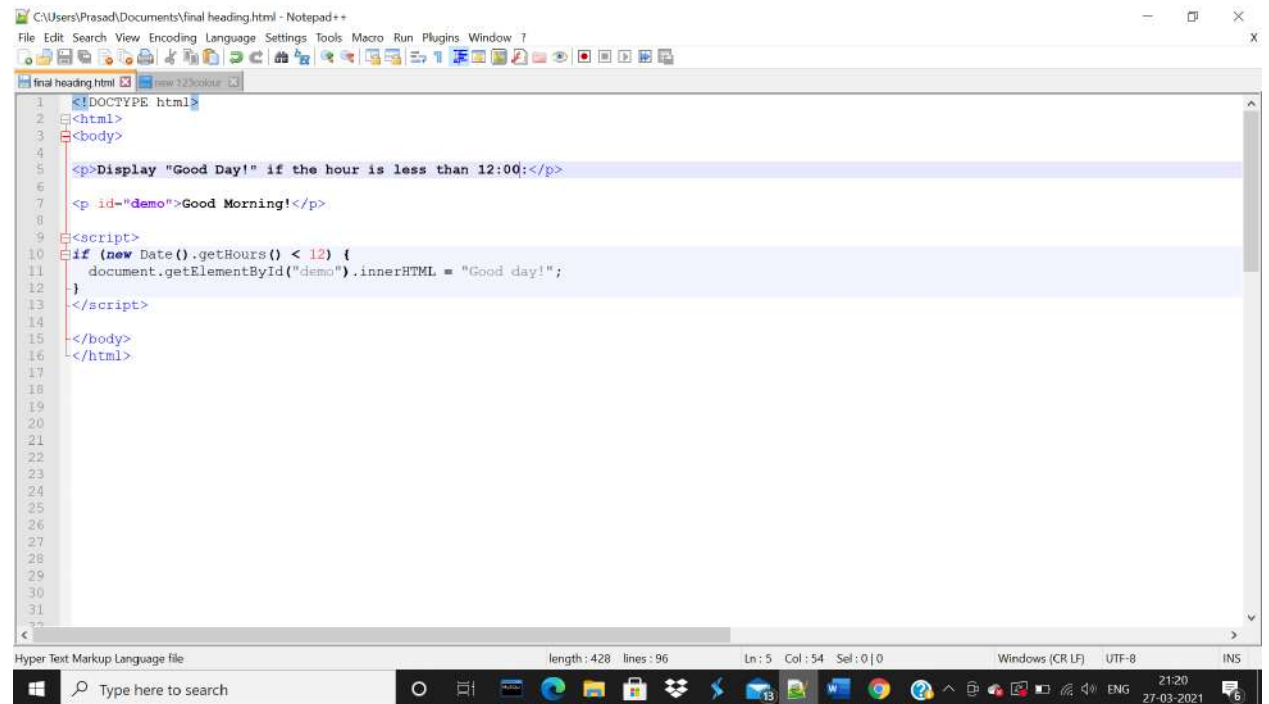
```

22         document.write("a / b = ");
23         result = a / b;
24         document.write(result);
25         document.write(linebreak);
26
27         document.write("a % b = ");
28         result = a % b;
29         document.write(result);
30         document.write(linebreak);
31
32         document.write("a + b + c = ");
33         result = a + b + c;
34         document.write(result);
35         document.write(linebreak);
36
37         a = ++a;
38         document.write("++a = ");
39         result = ++a;
40         document.write(result);
41         document.write(linebreak);
42
43         b = --b;
44         document.write("--b = ");
45         result = --b;
46         document.write(result);
47         document.write(linebreak);
48     //-->
49 </script>
50 </body>
51 </html>

```



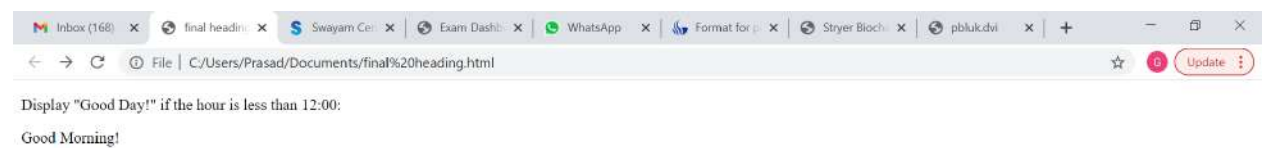
2. Create a webpage demonstrating usage of if statement in JavaScript



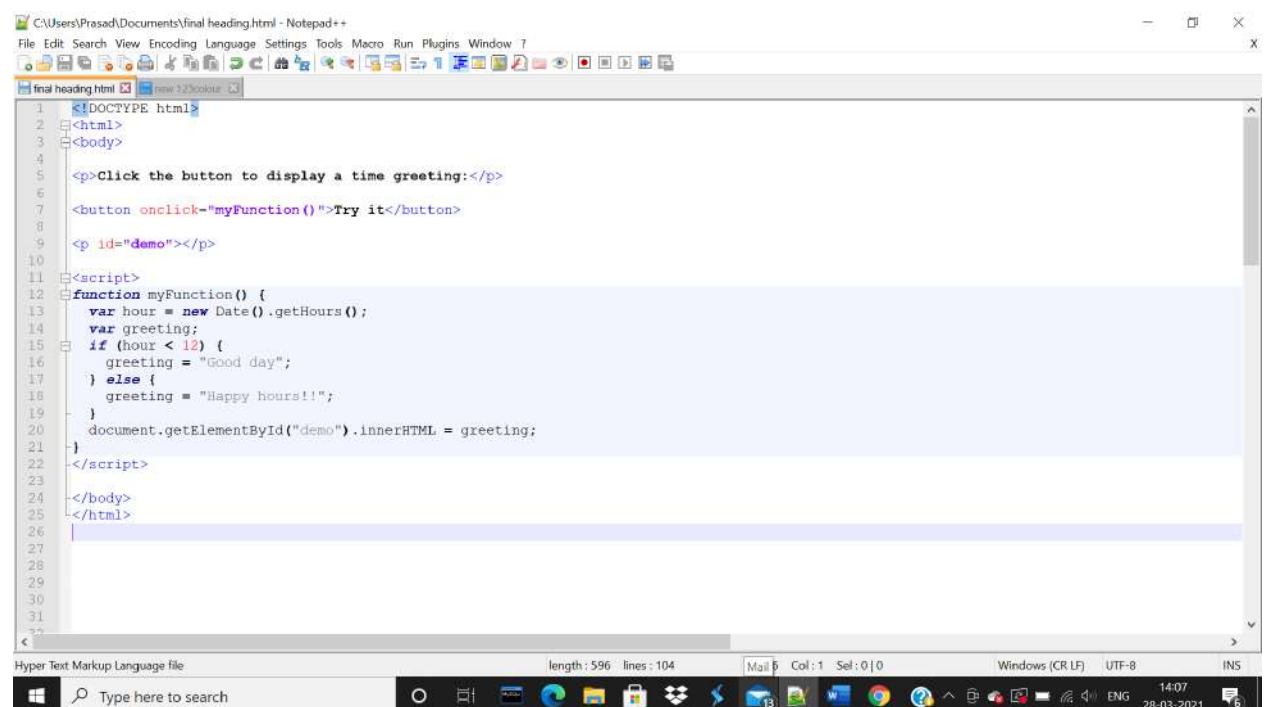
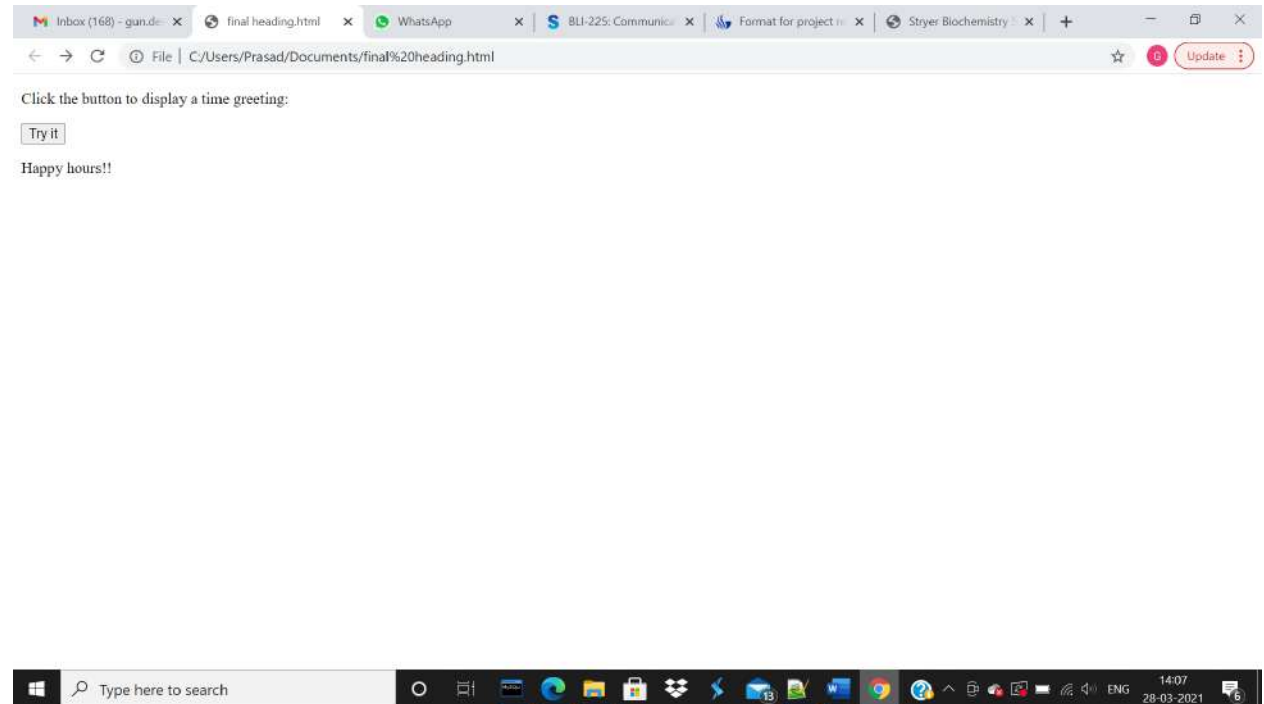
The screenshot shows the Notepad++ editor with a file named 'final heading.html'. The code is as follows:

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <p>Display "Good Day!" if the hour is less than 12:00:</p>
6
7 <p id="demo">Good Morning!</p>
8
9 <script>
10 if (new Date().getHours() < 12) {
11     document.getElementById("demo").innerHTML = "Good day!";
12 }
13 </script>
14
15 </body>
16 </html>
```

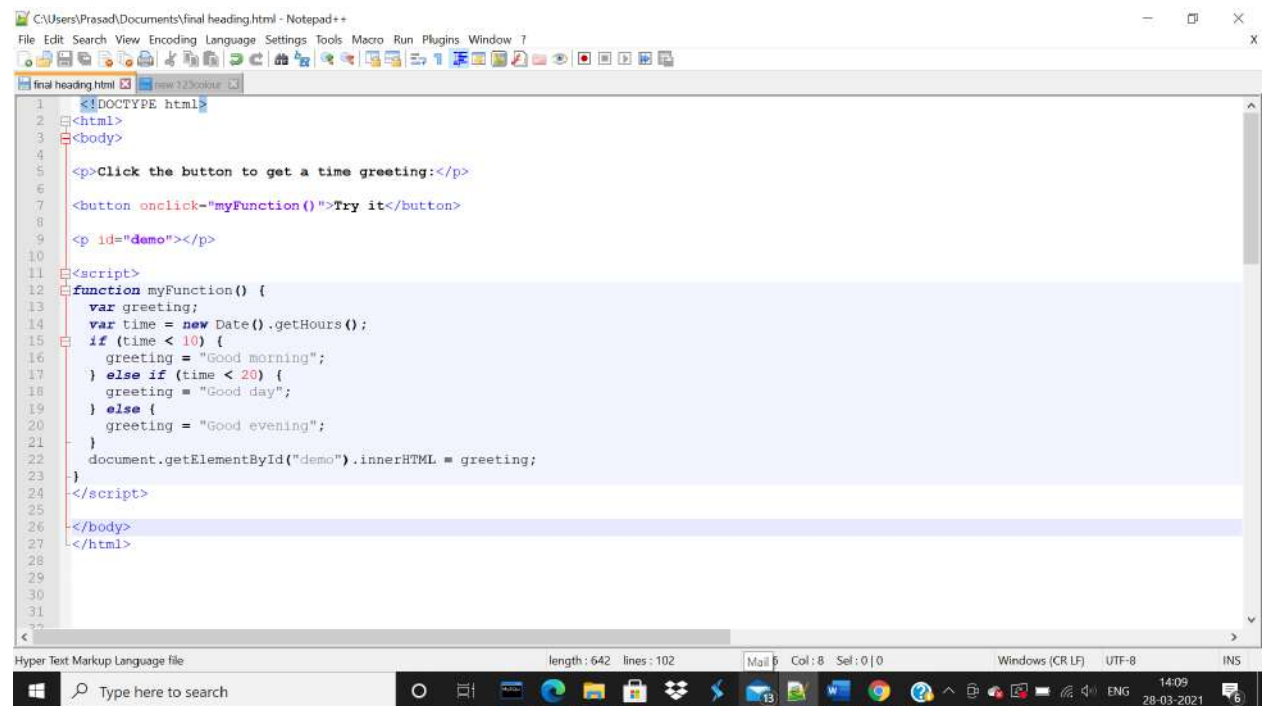
The status bar at the bottom indicates 'Hyper Text Markup Language file', 'length: 428 lines: 96', 'Ln: 5 Col: 54 Sel: 0 | 0', 'Windows (CR LF)', 'UTF-8', and 'INS'.



3. Create a webpage demonstrating usage of if...else statement in JavaScript



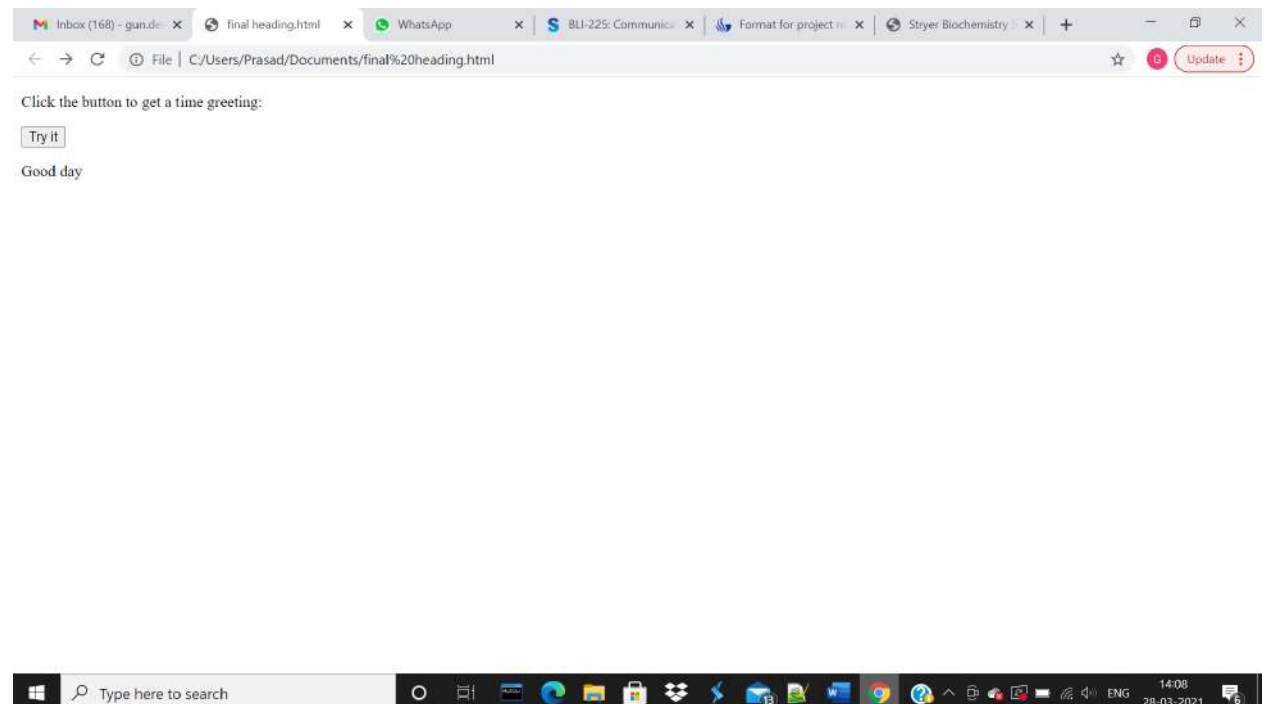
4. Create a webpage demonstrating usage of if... else if statement in JavaScript



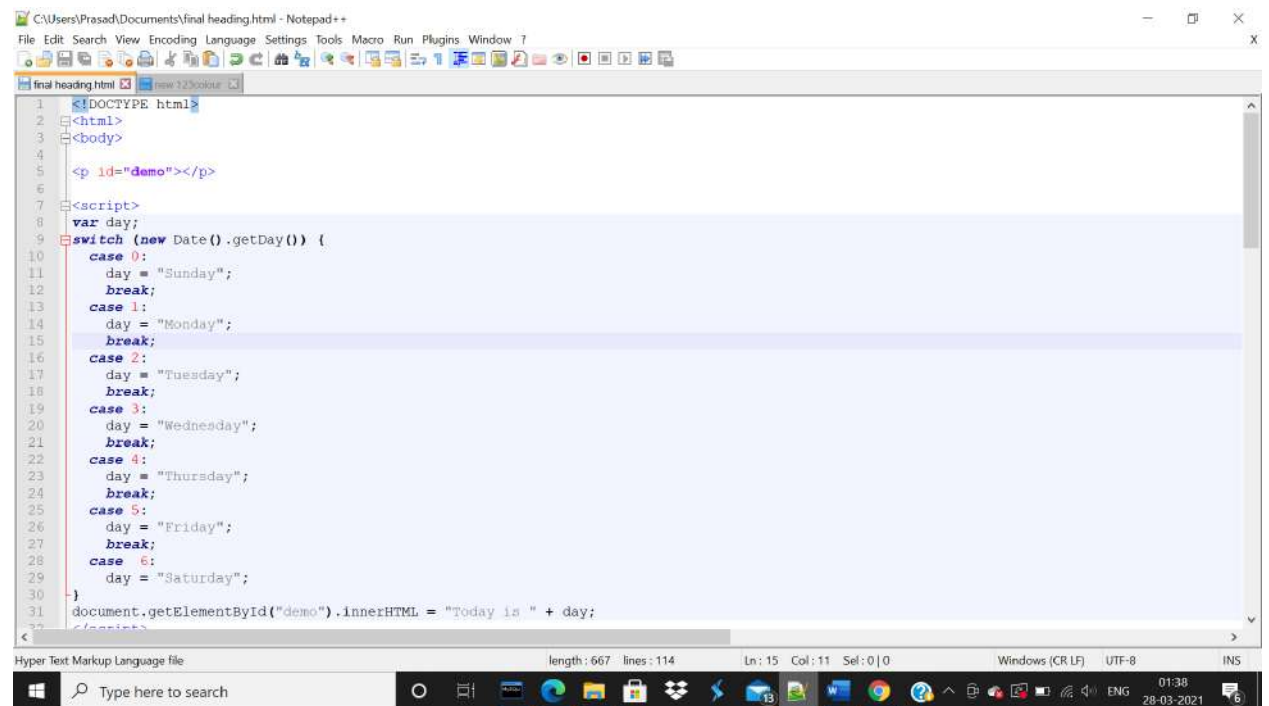
```

1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <p>Click the button to get a time greeting:</p>
6
7 <button onclick="myFunction()">Try it</button>
8
9 <p id="demo"></p>
10
11 <script>
12 function myFunction() {
13     var greeting;
14     var time = new Date().getHours();
15     if (time < 10) {
16         greeting = "Good morning";
17     } else if (time < 20) {
18         greeting = "Good day";
19     } else {
20         greeting = "Good evening";
21     }
22     document.getElementById("demo").innerHTML = greeting;
23 }
24 </script>
25
26 </body>
27 </html>

```



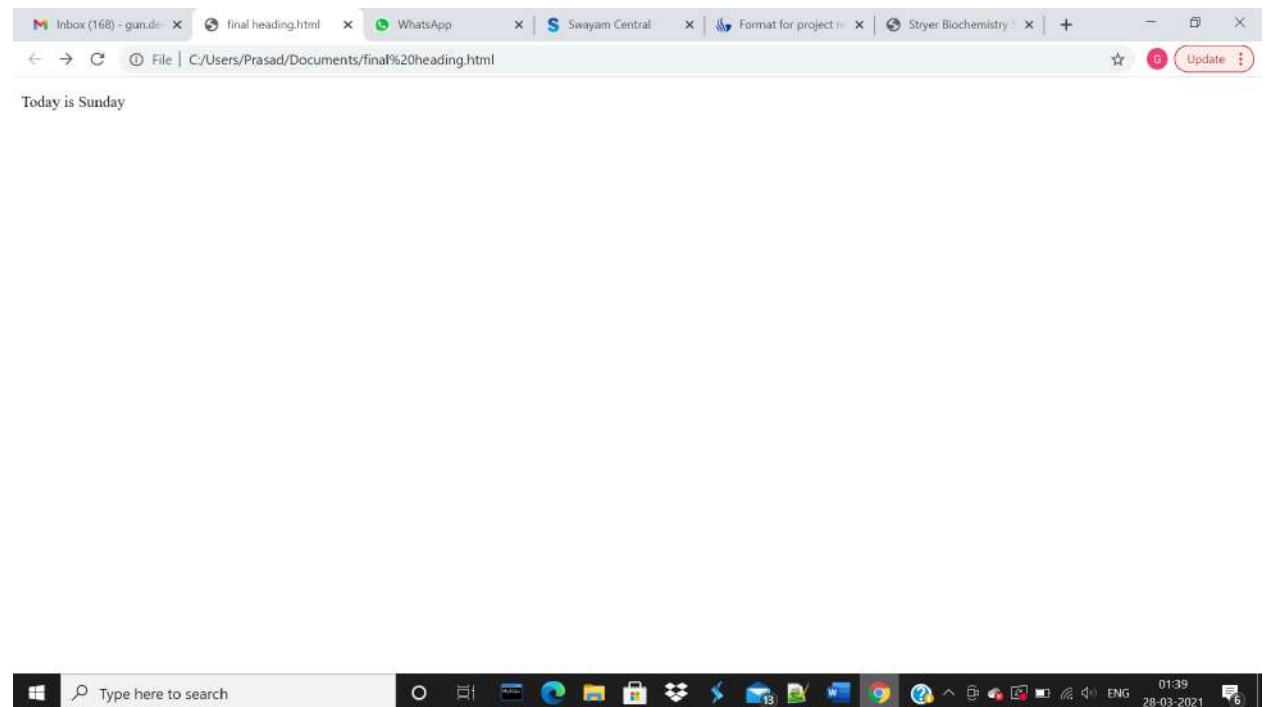
5. Create a webpage demonstrating use of switch in JavaScript



The screenshot shows the Notepad++ editor with a file named 'final heading.html'. The code is as follows:

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <p id="demo"></p>
6
7 <script>
8   var day;
9   switch (new Date().getDay()) {
10     case 0:
11       day = "Sunday";
12       break;
13     case 1:
14       day = "Monday";
15       break;
16     case 2:
17       day = "Tuesday";
18       break;
19     case 3:
20       day = "Wednesday";
21       break;
22     case 4:
23       day = "Thursday";
24       break;
25     case 5:
26       day = "Friday";
27       break;
28     case 6:
29       day = "Saturday";
30   }
31   document.getElementById("demo").innerHTML = "Today is " + day;
32 </script>
```

The status bar at the bottom indicates 'Hyper Text Markup Language file', 'length: 667 lines: 114', 'Ln: 15 Col: 11 Sel: 0 | 0', 'Windows (CR LF)', 'UTF-8', and 'INS'.



6. Create a webpage demonstrating use of
- i. while loop in JavaScript
 - ii. do..while loop in JavaScript
 - iii. for loop
 - iv. For in loop

Code:

```
<html>
```

```
<head>
```

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

```
    var students = new Array("Rahul" , "Raj" , "Aman", "Edwin",  
"Elizabeth");
```

```
    document.write("<b>Using for loops </b><br />");
```

```
    for (i=0;i<students.length;i++)
```

```
    {
```

```
      document.write(students[i] + "<br />");
```

```
    }
```

```
  </script>
```

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

```
    document.write("<b>Using while loops </b><br />");
```

```
    var i = 0, j = 1, k;
```

```
    document.write("Fibonacci series less than 40<br />");
```

```
    while(i<40)
```

```
    {
```

```
      document.write(i + "<br />");
```

```
      k = i+j;
```

```
      i = j;
```

```
      j = k;
```

```
    }
```

```
  </script>
```

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

```
    document.write("<b>Using do...while loops </b><br />");
```

```
    var i = 2;
```

```

        document.write("Even numbers less than 20<br />");

        do

        {

            document.write(i + "<br />");

            i = i + 2;

        }while(i<20)

    </script>

</head>

<body>

</body>

</html>

```

```

1  <html>
2  <head>
3      <script type="text/javascript">
4          var students = new Array("Rahul", "Raj", "Aman", "Edwin", "Elizabeth");
5          document.write("<b>Using for loops </b><br />");
6          for (i=0;i<students.length;i++)
7          {
8              document.write(students[i] + "<br />");
9          }
10     </script>
11
12     <script type="text/javascript">
13         document.write("<b>Using while loops </b><br />");
14         var i = 0, j = 1, k;
15         document.write("Fibonacci series less than 40<br />");
16         while(i<40)
17         {
18             document.write(i + "<br />");
19             k = i+j;
20             i = j;
21             j = k;
22         }
23     </script>
24
25     <script type="text/javascript">
26         document.write("<b>Using do...while loops </b><br />");
27         var i = 2;
28         document.write("Even numbers less than 20<br />");

```

The screenshot shows a Windows desktop environment. At the top, a Notepad++ window is open, editing a file named 'frames5.html'. The code in the editor is as follows:

```

13 <script type="text/javascript">
14   document.write("<b>Using while loops </b><br />");
15   var i = 0, j = 1, k;
16   document.write("Fibonacci series less than 40<br />");
17   while(i<40)
18   {
19     document.write(i + "<br />");
20     k = i+j;
21     i = j;
22     j = k;
23   }
24 </script>
25 <script type="text/javascript">
26   document.write("<b>Using do...while loops </b><br />");
27   var i = 2;
28   document.write("Even numbers less than 20<br />");
29   do
30   {
31     document.write(i + "<br />");
32     i = i + 2;
33   }while(i<20)
34 </script>
35 </head>
36 <body>
37 </body>
38 </html>
39
40

```

Below the Notepad++ window, a web browser is open, displaying the output of the JavaScript code. The browser's address bar shows the file path 'C:/Users/Prasad/Downloads/frames5.html'. The output in the browser is:

Using for loops
Ratul
Raj
Aman
Edwin
Elizabeth
Using while loops
Fibonacci series less than 40
0
1
1
2
3
5
8
13
21
34
Using do...while loops
Even numbers less than 20
2
4
6
8
10
12
14
16
18

The Windows taskbar at the bottom shows the search bar, task view button, and several open applications including a file explorer, a terminal window, and a web browser. The system tray on the right shows the date and time as 17:00 on 07-04-2021.

7. Create a webpage demonstrating use of control statements, break and continue.

Code:

```
<!DOCTYPE html>

<html>

<body>

<h2>JavaScript Loops</h2>

<p>This is a loop with continue <b>continue</b> statement.</p>

<p>This is loop which will skip the step where i = 3.</p>

<p id="demo"></p>

<script>

var text = "";

var i;

for (i = 0; i < 10; i++) {

    if (i === 3) { continue; }

    text += "The number is " + i + "<br>";

}

document.getElementById("demo").innerHTML = text;

</script>

<script>

var text = "";

var i;

for (i = 0; i < 10; i++) {

    if (i === 3) { break; }

    text += "The number is " + i + "<br>";

}

document.getElementById("demo").innerHTML = text;

</script>

</body>

</html>
```

```

1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <h2>JavaScript Loops</h2>
6
7 <p>This is a loop with continue <b>continue</b> statement.</p>
8
9 <p>This is loop which will skip the step where i = 3.</p>
10
11 <p id="demo"></p>
12
13 <script>
14 var text = "";
15 var i;
16 for (i = 0; i < 10; i++) {
17   if (i === 3) { continue; }
18   text += "The number is " + i + "<br>";
19 }
20 document.getElementById("demo").innerHTML = text;
21
22 </script>
23 <script>
24 var text = "";
25 var i;
26 for (i = 0; i < 10; i++) {
27   if (i === 3) { break; }
28   text += "The number is " + i + "<br>";
29 }
30 document.getElementById("demo").innerHTML = text;
31 </script>
32 </body>
33 </html>

```

JavaScript Loops

This is a loop with continue **continue** statement.

This is loop which will skip the step where i = 3.

The number is 0
The number is 1
The number is 2

12. Working with JavaScript pop-up boxes

1. Create a webpage highlighting a proper scenario of using a dialogue box.

Code:

```
<!DOCTYPE html>

<html>

<title>JavaScript Dialog Box</title>

<head></head>

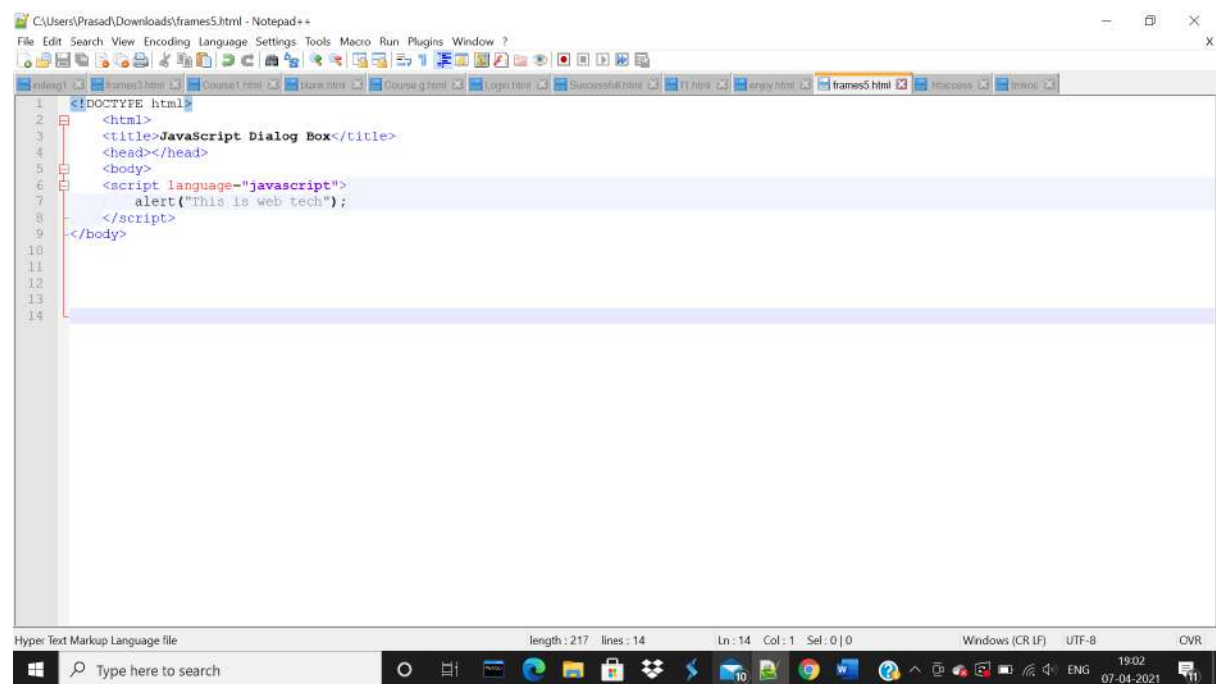
<body>

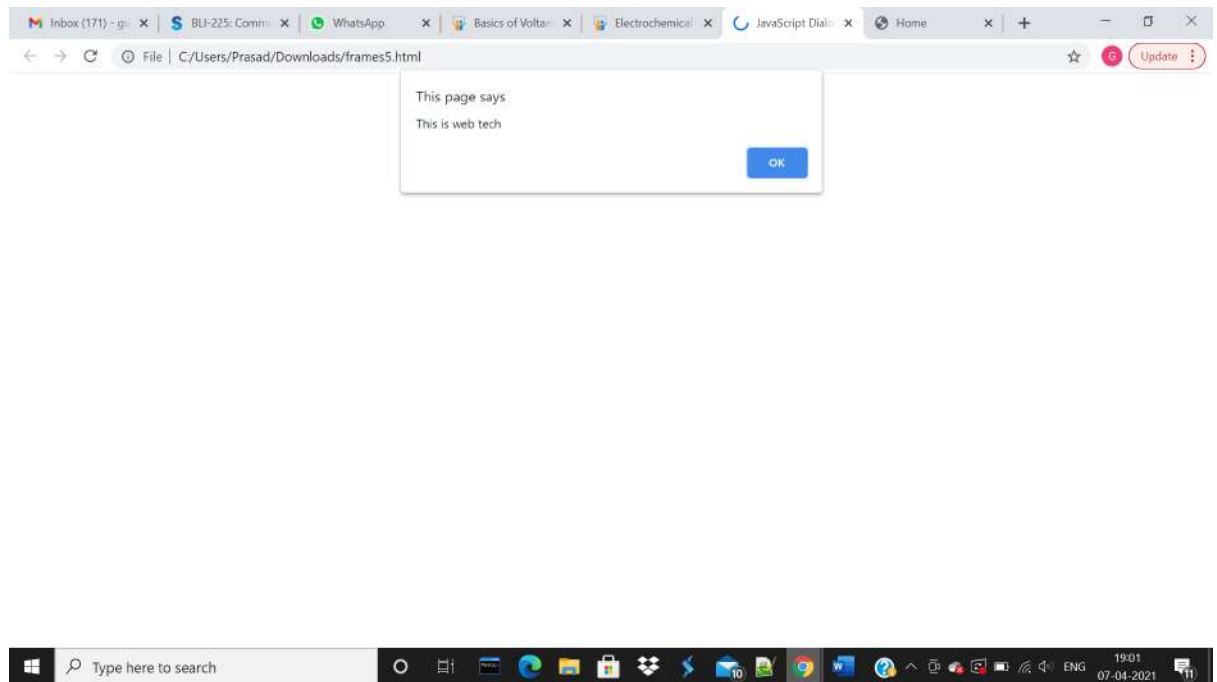
<script language="javascript">

    alert("This is web tech");

</script>

</body>
```





2. Create a webpage highlighting a proper scenario of using a confirm box.

Code:

```
<!DOCTYPE html>

<html>

<head>

    <script type="text/javascript">

        function Confirmation(){

            var Val = confirm("Do you want to continue ?");

            if( Val == true ){

                document.write (" CONTINUED!");

                return true;

            }

            else{

                document.write ("NOT CONTINUED!");

                return false;

            }

        }

    </script>

</head>

<body>

    <p>Click me: </p>

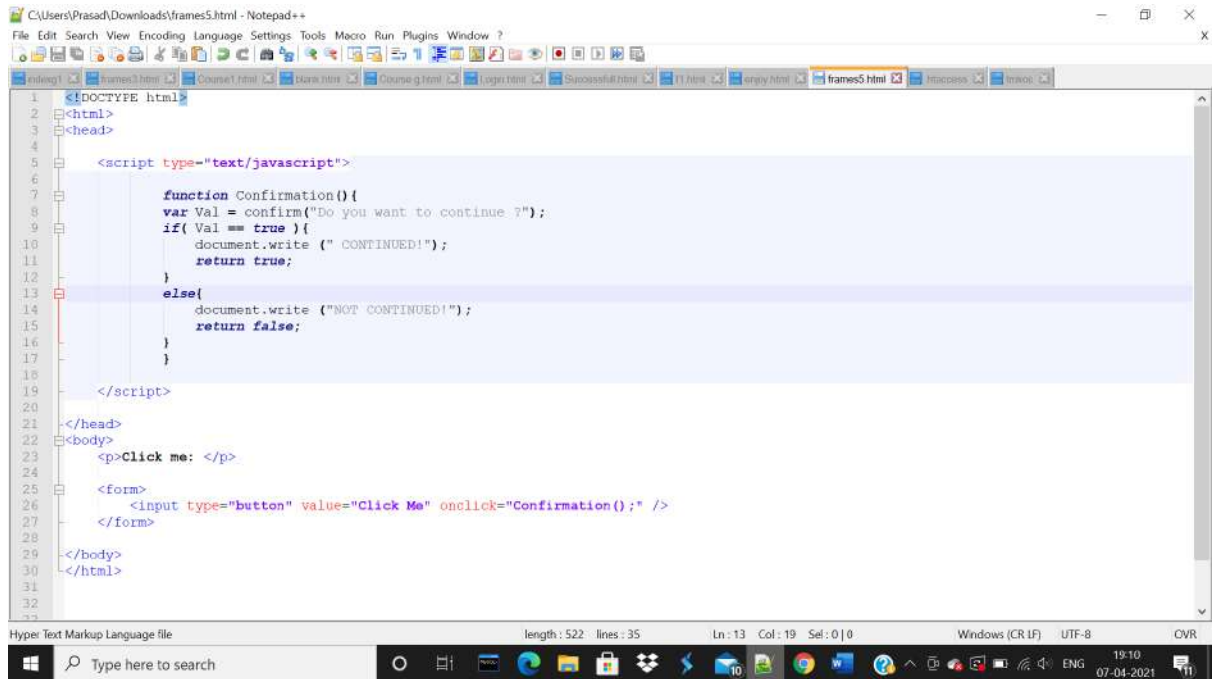
    <form>

        <input type="button" value="Click Me" onclick="Confirmation();" />

    </form>

</body>

</html>
```



```
1<!DOCTYPE html>
2<html>
3<head>
4
5<script type="text/javascript">
6
7    function Confirmation(){
8        var Val = confirm("Do you want to continue?");
9        if( Val == true ){
10            document.write (" CONTINUED!");
11            return true;
12        }
13        else{
14            document.write ("NOT CONTINUED!");
15            return false;
16        }
17    }
18
19</script>
20
21</head>
22<body>
23    <p>Click me: </p>
24
25    <form>
26        <input type="button" value="Click Me" onclick="Confirmation();" />
27    </form>
28
29</body>
30</html>
```

Hyper Text Markup Language file length: 522 lines: 35 Ln: 13 Col: 19 Sel: 0 | 0 Windows (CR LF) UTF-8 OVR

