MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

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DEPARTMENT OF INFORMATION TECHNOLOGY

Subject: Internet Technology Lab

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1. Write a program in JavaScript to convert from Celsius to Fahrenheit.

Code:

```html
<!-- 1. Write a program in JavaScript to convert from Celsius to Fahrenheit. -->
<!DOCTYPE html>
 <html>
 <head>
 <meta charset="utf-8">
 <title>Write a JavaScript program to convert temperatures to and from celsius, fahrenheit</title>
 </head>
 <body>


  <script>

    function cToF(celsius)
    {
       var cTemp = celsius;
       var cToFahr = cTemp * 9 / 5 + 32;
       var message = cTemp+'\xB0C is ' + cToFahr + ' \xB0F.';
       alert(message);
    }


    function fToC(fahrenheit)
    {
       var fTemp = fahrenheit;
```
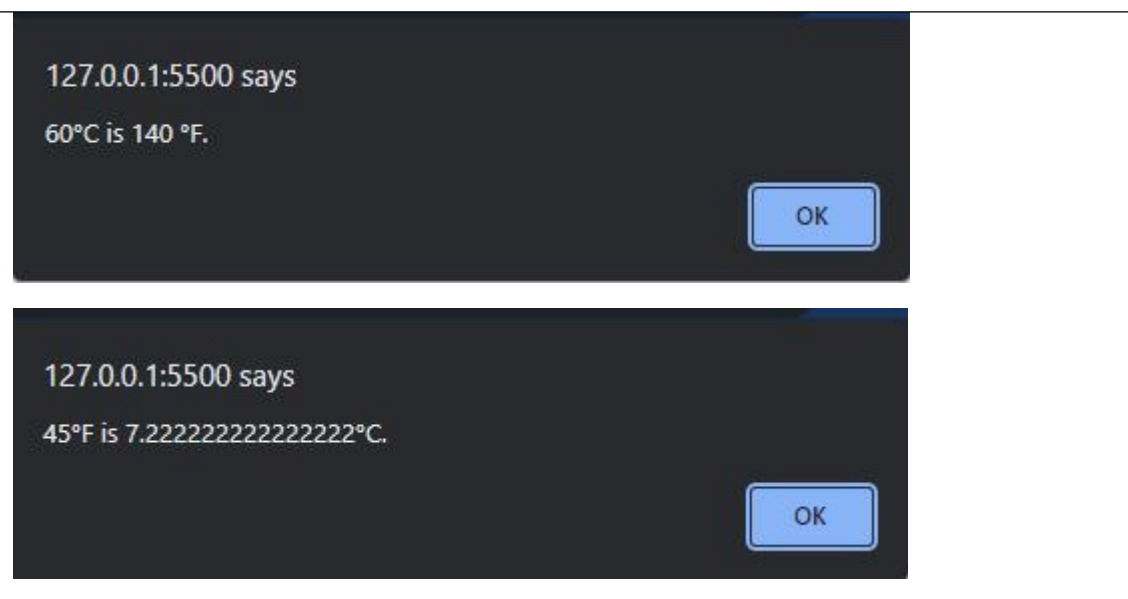
```
        var fToCel = (fTemp - 32) * 5 / 9;

        var message = fTemp+'\xB0F is ' + fToCel + '\xB0C.';

        alert(message);

    }

    cToF(60);

    fToC(45);

  </script>

</body>


</html>
```

Output:

127.0.0.1:5500 says

60°C is 140 °F.

OK

127.0.0.1:5500 says

45°F is 7.222222222222222°C.

OK

2. Write a program in JavaScript to check whether a year is leap year or not.

Code:

```
<!-- 2. Write a program in JavaScript to check whether a year is leap year
```

or not. -->

```html
<!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>
      // program to check leap year
      function checkLeapYear(year) {
        //three conditions to find out the leap year
        if ((0 == year % 4 && 0 != year % 100) || 0 == year % 400) {
          alert(year + " is a leap year");
        } else {
          alert(year + " is not a leap year");
        }
      }

      // take input
      const year = prompt("Enter a year:");

      checkLeapYear(year);
```
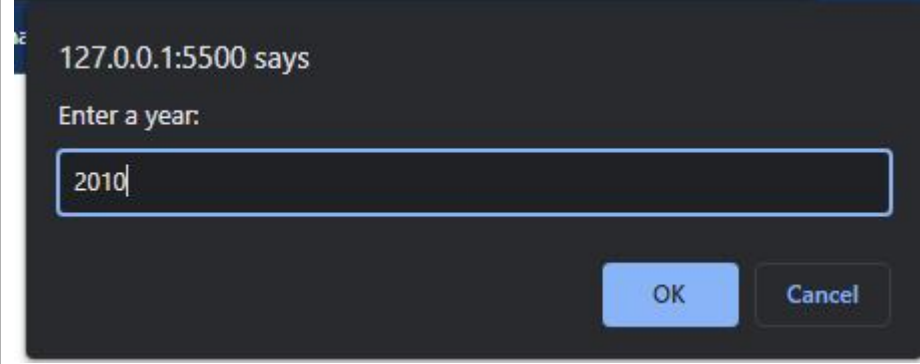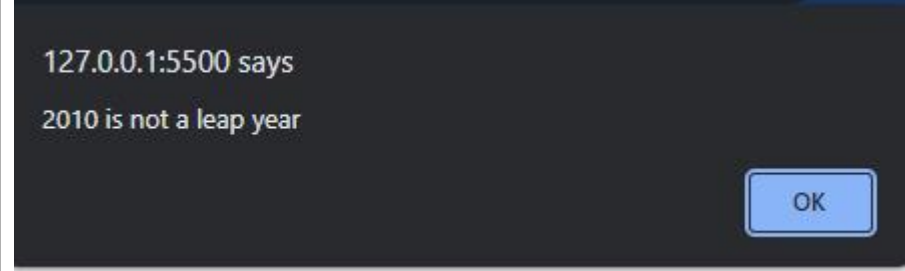
```
    </script>

  </body>

</html>
```

Input:

Output:

Input:

Output:

127.0.0.1:5500 says

2020 is a leap year

OK

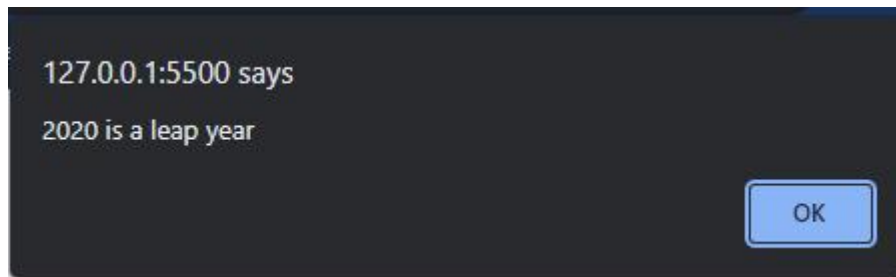3. Write a program in JavaScript to show the use of break and continue.

Code:

```html
<!--3.  Write a program in JavaScript to show the use of break and
continue. -->

<!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>

    <p id="ele"></p>

    <script>

        // program to print the value of i

for (let i = 1; i <= 5; i++) {

    // break condition
```
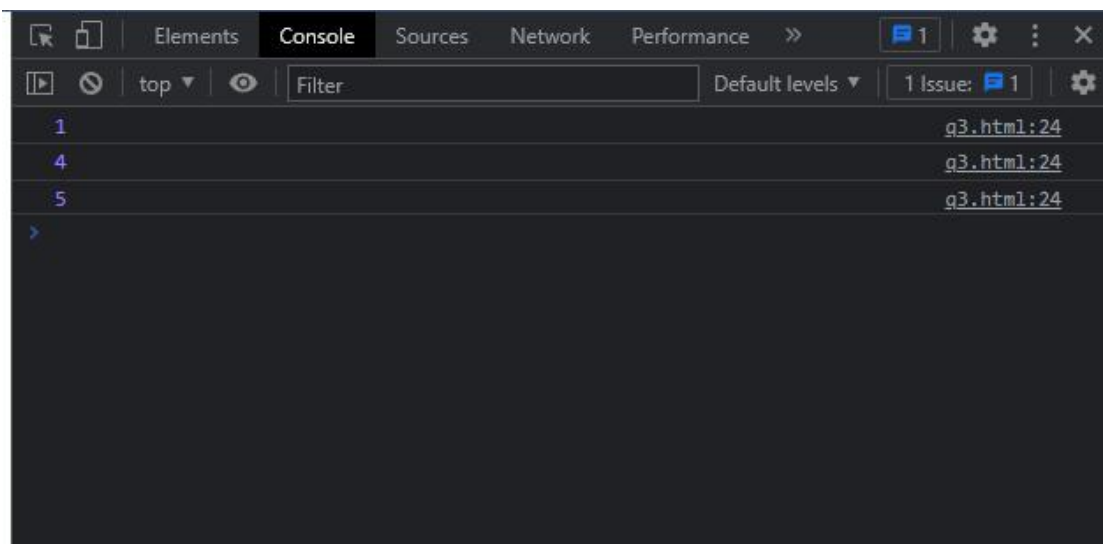
```
    if (i == 3) {

        break;

    }else if(i==2){

        i++;

        continue;

    }


    console.log(i);

}

    </script>

</body>

</html>
```

Output:

4. Write a program in JavaScript to print the following pattern:

```
*

* *

* * *

* * * *
```

Code:

```
<!-- 4. Write a program in JavaScript to print the following pattern:

    *

    * *

    * * *

    * * * *

-->
<!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>
    <p id="pattern"></p>
    <script>
      let n = 5;
      let string = "";
```

```
    for (let i = 1; i <= n; i++) {

      for (let j = 0; j < i; j++) {

        string += "*";



      }




      string += "<br>";



  }

  console.log(string);

  document.getElementById("pattern").innerHTML = string;

  </script>

 </body>

</html>
```

Output:

```
*
**
***
****
*****
```

5. Write a program in JavaScript to concatenate two arrays.

Code:

```
<!--5. Write a program in JavaScript to concatenate two arrays. -->
<!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>
    <h3 class="oldcar">
        These are old car List
    </h3>
    <p id="oldcarcontent"></p>


    <h3 class="Newcar">
        These are new car List
    </h3>
    <p id="newcarcontent"></p>


    <h3 class="Newcar">
        These are all car List
    </h3>
```

```
  <p id="allcarcontent"></p>
  <script>
    let newcar=["Tata Nexon ", " Mahindra Thar  . "];
    let oldcar=[" Honda City  ", "  MS Alto 800"];



    let totalcar=newcar+oldcar;



    document.getElementById("oldcarcontent").innerHTML=oldcar;
    document.getElementById("newcarcontent").innerHTML=newcar;
    document.getElementById("allcarcontent").innerHTML=totalcar;
    console.log(totalcar);
  </script>
</body>
</html>
```

Output:

These are old car List

Honda City , MS Alto 800

These are new car List

Tata Nexon , Mahindra Thar .

These are all car List

Tata Nexon , Mahindra Thar . Honda City , MS Alto 800

6. Write a program in JavaScript to find the reverse of a string.

Code:

```html
<!-- 6. Write a program in JavaScript to find the reverse of a string. -->
<!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>
```

```html
<h1>String</h1>

<h3 id="string">MAKAUT</h3>

<h1>Reverse String</h1>

<h3 id="revstring"></h3>

<script>

    let s = document.getElementById("string").innerHTML;

    let ans="";

    for(let i=s.length-1;i>=0;i--){

        console.log(s[i]);

        ans+=s[i];

        document.getElementById("revstring").innerHTML=ans;

    }

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

Output:

String

MAKAUT

Reverse String

TUAKAM

7. Write a program in JavaScript to display alert box.

Code:

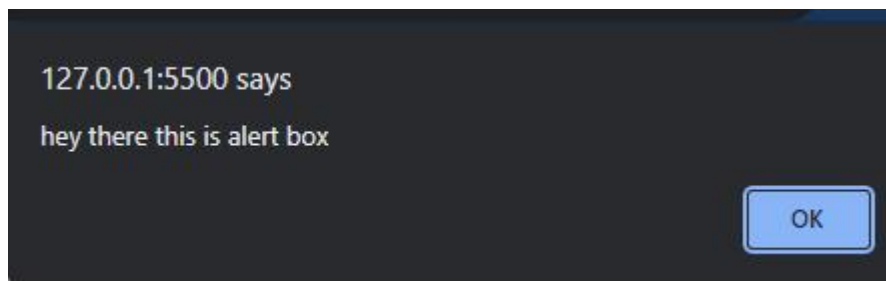```
<!-- 7. Write a program in JavaScript to display alert box. -->
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
```

```
    <script>

        alert("hey there this is alert box");

    </script>

</body>

</html>
```
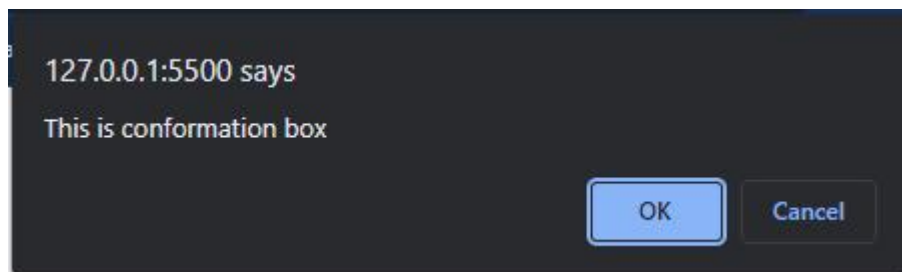
Output:



```
127.0.0.1:5500 says

hey there this is alert box

                                        OK
```

8. Write a program in JavaScript to display confirmation box.

Code:

```
<!-- 8. Write a program in JavaScript to display confirmation 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>

</head>

<body>
```

```
    <script>

        confirm("This is conformation box");

    </script>

</body>

</html>
```

Output:

9. Write a program in JavaScript to display prompt box.

Code:

```
<!-- 9. Write a program in JavaScript to display prompt 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>

</head>

<body>
```
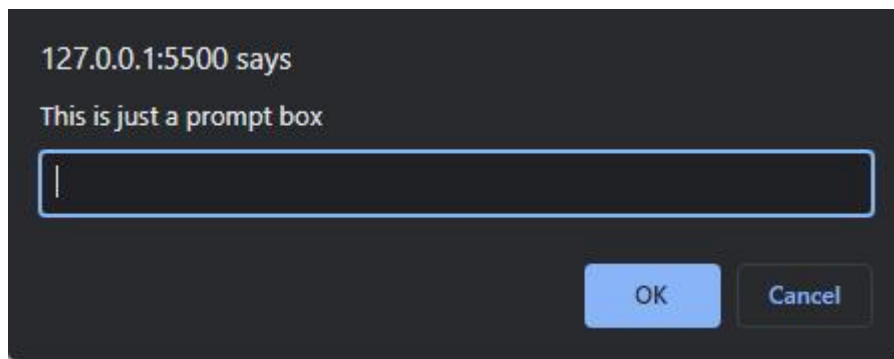
```
    <script>

      prompt("This is just a prompt box")

    </script>

</body>

</html>
```

Output:

10. Write a program in JavaScript to show the use of onkeypress event.

Code:

```
<!-- 10. Write a program in JavaScript to show the use of onkeypress
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>
```

```html
</head>
<body>

  <h3>On clicking in the text box a function will trigger</h3>
  <input type="text" onkeypress="trigger()">
  <h3 id="trig"></h3>
  <script>
    function trigger(){

        document.getElementById("trig").innerHTML="This is effect after
clicking in the text box";
    }

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

Output:

On clicking in the text box a function will trigger

[text box]

On clicking in the text box a function will trigger

[text box]

This is effect after clicking in the text box

11. Write a program in JavaScript to perform the textbox required validation.

Code:

```
<!-- 11. Write a program in JavaScript to perform the textbox required
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>
```
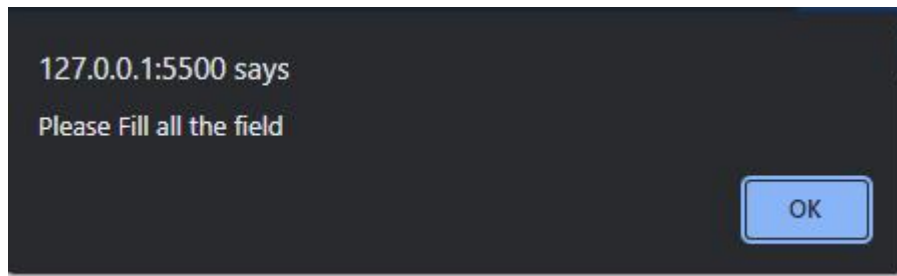
```html
</head>
<body>
  <form name="myForm"  action=" "onsubmit="return
validateTheForm()" method="post">
  Name: <input type="text" name="Name">
  <input type="submit" value="Submit">
  </form>
  <script>
    function validateTheForm(){
      let x=document.forms["myForm"]["Name"].value;
      if(x==""){
        alert("Please Fill all the field");
        return false;
      }
    }
  </script>
</body>
</html>
```

Output:

127.0.0.1:5500 says

Please Fill all the field

OK

12. Write a program in JavaScript to validate an email.

Code:

```
<!-- 12. Write a program in JavaScript to validate an email. -->

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>JavaScript form validation - checking email</title>


</head>

<body onload='document.form1.text1.focus()'>

<div class="mail">

<h2>Input an email and Submit</h2>

<form name="form1" action="#">

<ul>

<li><input type='text' name='text1'/></li>

<li> </li>

<li class="submit"><input type="submit" name="submit"
value="Submit" onclick="ValidateEmail(document.form1.text1)"/></li>

<li> </li>

</ul>
```
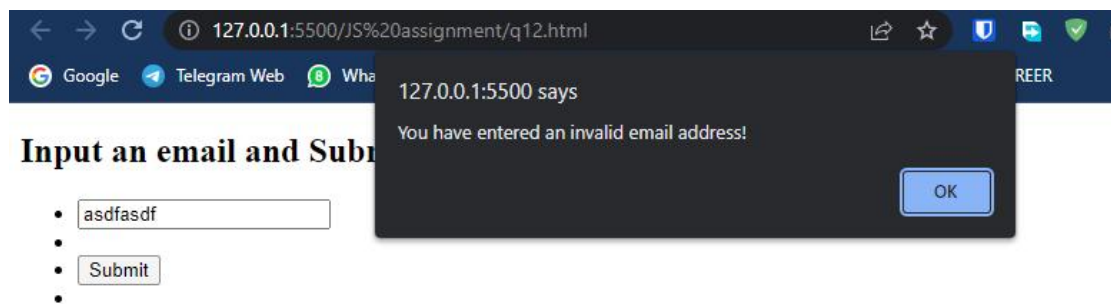
```
</form>

</div>

<script>

    function ValidateEmail(inputText)

{

var mailformat = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;

if(inputText.value.match(mailformat))

{

alert("Valid email address!");

document.form1.text1.focus();

return true;

}

else

{

alert("You have entered an invalid email address!");

document.form1.text1.focus();

return false;

}

}


</script>

</body>

</html>
```

Output:

13. Write a program in JavaScript to validate letter and number in a text field.

Code:

```html
<!-- 13. Write a program in JavaScript to validate letter and number in a
text field. -->

<!DOCTYPE html>

<html lang="en">

 <head>

  <meta charset="utf-8" />

  <title>JavaScript form validation - checking all letters and
numbers</title>

 </head>

 <body onload="document.form1.text1.focus()">

  <div class="mail">

   <h2>Enter your Registration Number and Submit</h2>

   <form name="form1" action="#">

    <ul>

     <li><input type="text" name="text1" /></li>
```
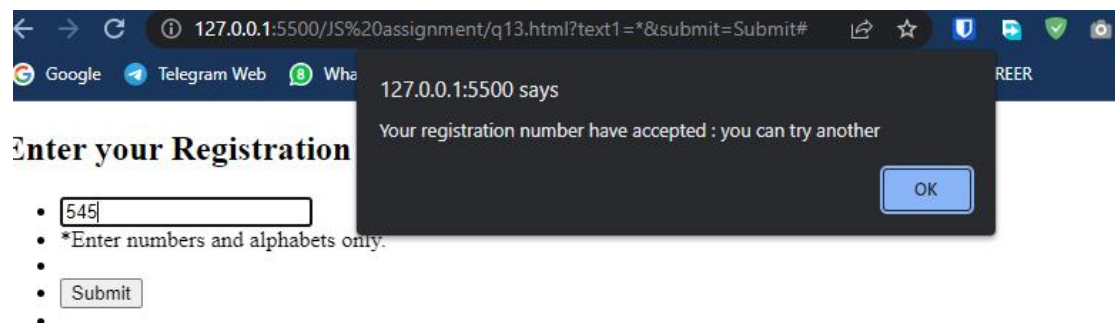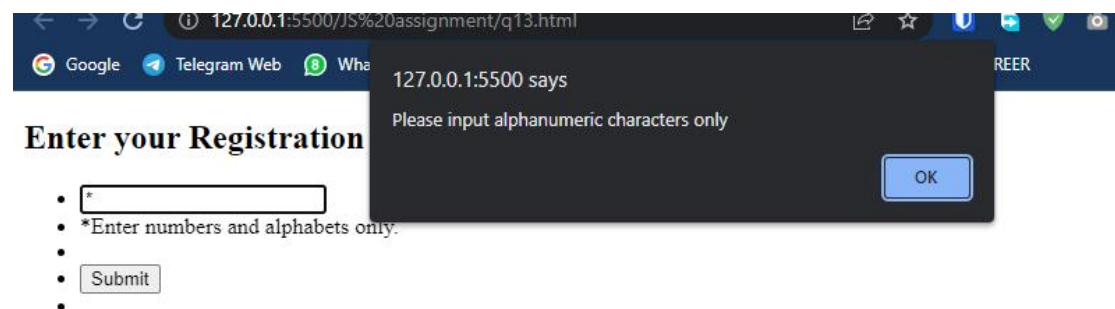
```html
        <li class="rq">*Enter numbers and alphabets only.</li>
        <li> </li>
        <li>
         <input
          type="submit"
          name="submit"
          value="Submit"
          onclick="alphanumeric(document.form1.text1)"
         />
        </li>
        <li> </li>
      </ul>
    </form>
  </div>
  <script>
    function alphanumeric(inputtxt) {
      var letters = /^[0-9a-zA-Z]+$/;
      if (inputtxt.value.match(letters)) {
        alert("Your registration number have accepted : you can try another");
        document.form1.text1.focus();
        return true;
      } else {
        alert("Please input alphanumeric characters only");
        return false;
      }
```

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

Output:

14. Write a program in JavaScript to validate an ip address.

Code:

```
<!-- 14. Write a program in JavaScript to validate an ip address. -->
<!-- Write a program in JavaScript to validate an ip address. -->
<!DOCTYPE html>
```

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

<head>
  <meta charset="utf-8">
  <title>JavaScript form validation - checking ip address</title>
</head>

<body>
  <h2>Input Ip addres</h2>
  <form name="form1" action="#">
    <ul>
      <input type='text' name='text1' />
      <input type="submit" name="submit" value="Submit" onclick="ValidateIPaddress(document.form1.text1)" />
    </ul>
  </form>
  <script>
    function ValidateIPaddress(inputText) {
      var IP = /^(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$/;

      if (inputText.value.match(IP)) {
        alert("Valid IP");
        document.form1.text1.focus();
        return true;
      }
      else {
```
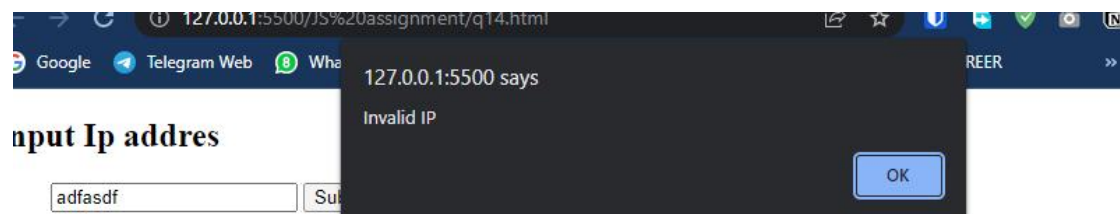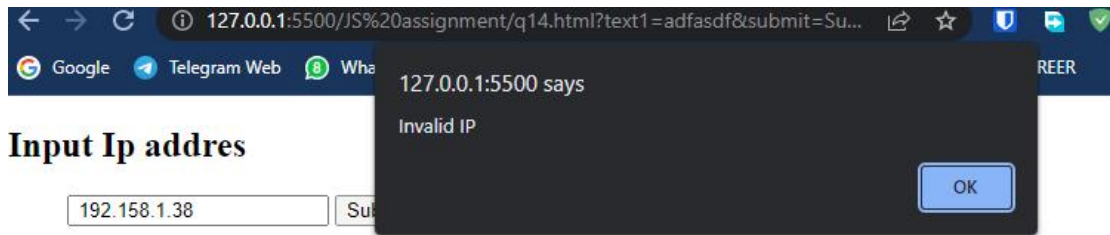
```
            alert("Invalid IP");

            document.form1.text1.focus();

            return false;

        }

    }


    </script>
</body>


</html>
```

Output:

15. Write a program in JavaScript to disable the back button.

Code:

<!-- 15.Write a program in JavaScript to disable the back button. -->

<!DOCTYPE html>

<html>

<head>

  <title> Blocking Back Button using javascript</title>

</head>

<body>

  <h1>Block back Button </h2>

    <p>

      Click here to Goto

      <a href="q12.html">

        Link to second page

```
        </a>
    </p>


    <script>
      window.history.forward();
      function noBack() {
          window.history.forward();
      }
    </script>
</body>


</html>
```

Output:

Block back Button

Click here to Goto Link to second page

16. Write a program in JavaScript to disable mouse right click.

Code:

```
<!-- 16.Write a program in JavaScript to disable mouse right click. -->
```

```html
<!DOCTYPE HTML>
<html>
    <head>
        <title>
            Disable right click on my web page
        </title>
    </head>

    <body style = "text-align:center;">

        <h1>
            Click on the button to disable right click
        </h1>


        <button onclick = "run_func()">
            Disable
        </button>

        <p id = "down" style =
            "color:green; font-size: 20px; font-weight: bold;">
        </p>

        <script>
            var el_up = document.getElementById("up");
            var el_down = document.getElementById("down");
```
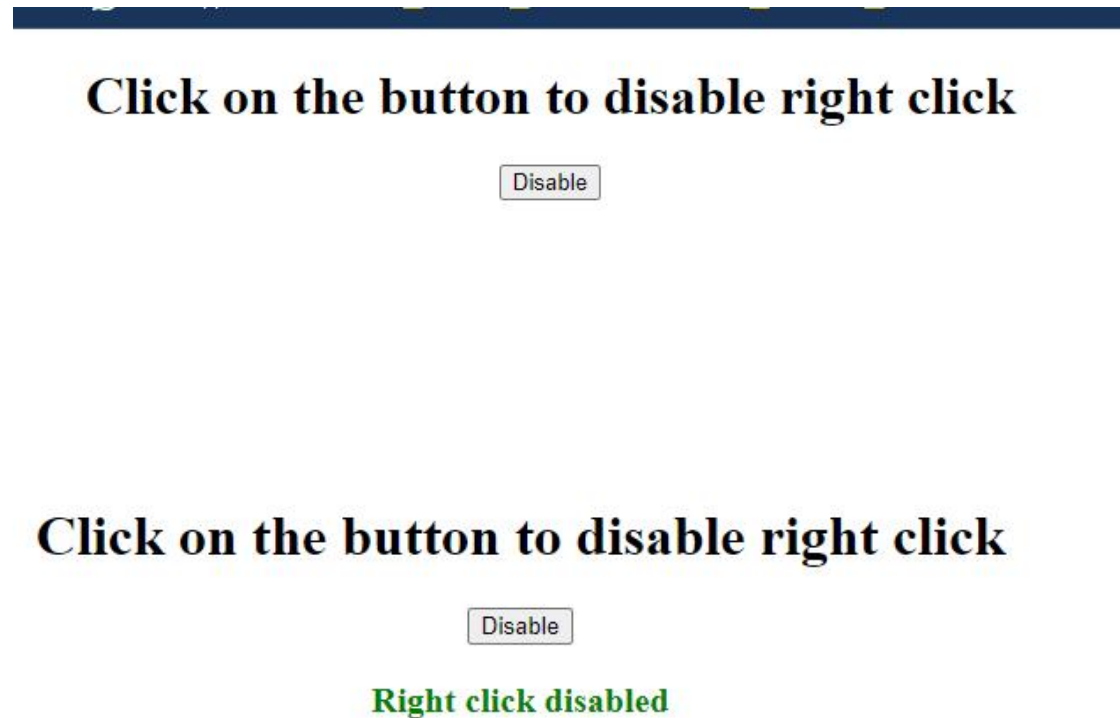
```
                    el_up.innerHTML = "Click on the button to disable
right click";


                    function run_func() {
                            document.addEventListener('contextmenu',
                                    event => event.preventDefault());
                            el_down.innerHTML = "Right click disabled";
                    }
            </script>
        </body>
</html>
```

Output:

Click on the button to disable right click

Disable

Click on the button to disable right click

Disable

Right click disabled

17. Write a program in JavaScript for date countdown timer.

Code:

```
<!-- 17.Write a program in JavaScript for date countdown timer. -->

<!DOCTYPE HTML>
<html>

<head>
  <title>Timer</title>
</head>
```

```
<body>
  <h2>
    Timer
  </h2>
  <p id="demo"></p>
  <script>
    var deadline = new Date("Nov 19, 2030 15:37:25").getTime();
    var x = setInterval(function () {
      var now = new Date().getTime();
      var t = deadline - now;
      var days = Math.floor(t / (1000 * 60 * 60 * 24));
      var hours = Math.floor((t % (1000 * 60 * 60 * 24)) / (1000 * 60 * 60));
      var minutes = Math.floor((t % (1000 * 60 * 60)) / (1000 * 60));
      var seconds = Math.floor((t % (1000 * 60)) / 1000);
      document.getElementById("demo").innerHTML = days + "d "
        + hours + "h " + minutes + "m " + seconds + "s ";
    }, 1000);
  </script>

</body>

</html>
```

Output:

Timer

2940d 21h 22m 56s

18. Write a program in JavaScript for checkbox validation.

Code:

```
<!-- 18.Write a program in JavaScript for checkbox 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>Checkbox validation</title>
```

```html
</head>

<body>
  <form action="#" onsubmit="return checkCheckBoxes(this);">
    <p><input type="CHECKBOX" name="MyCheckbox"
value="This..."></p>
    <p><input type="SUBMIT"></p>
    <p id="alert"></p>
  </form>

  <script>
    function checkCheckBoxes(theForm) {
      if (
        theForm.MyCheckbox.checked == false) {
          document.getElementById("alert").innerHTML="Not
Cheaked";
          document.getElementById("alert").style.color="red";
        return false;
      } else {
        document.getElementById("alert").innerHTML="Cheaked";
        document.getElementById("alert").style.color="green";
      }
    }
  </script>
</body>
```

```
</html>
```

Output:

19. Write a program in JavaScript to check whether a radio button is selected or not.

Code:

```
<!-- 19.Write a program in JavaScript to check whether a radio button is
selected
```

or not. -->

<html>

<body>

   `<input type="radio" id="Radio" value="Radio">Radio`

   `<button type="button" onclick=" checkButton()"> Submit </button>`

   `<h3 id="aleart" style="color:green"> </h3>`

`</body>`

`<script>`

```
  function checkButton() {
    if (document.getElementById('Radio').checked) {
      document.getElementById("aleart").innerHTML
        = document.getElementById("Radio").value
        + " is checked";
    }
    else {
      document.getElementById("aleart").innerHTML
        = "Radio is not checked";
      document.getElementById("aleart").style.color
        = "red";
    }
  }
```
`</script>`

```
</html>
```

Output:

○ Radio [Submit]

Radio is not checked

⦿ Radio [Submit]

Radio is checked

20. Write a program in JavaScript to print a page.

Code:

```
<!-- 20.Write a program in JavaScript to print a page. -->

<!DOCTYPE html>
<html>

<head>
    <title>Print a Page</title>
</head>

<body>
    <p>This is the print content.</p>
    <button onclick="display()">Click to Print</button>
    <script>
        function display() {
            window.print();
        }
    </script>
</body>

</html>
```

Output:

This is the print content.

Click to Print

10/31/22, 6:20 PM   Print a Page

This is the print content.
Click to Print

127.0.0.1:5500/JS assignment/q20.html   1/1

Print   **1 page**

Destination   📄 Save as PDF   ▼

Pages   All   ▼

Layout   Portrait   ▼

More settings   ⌄

                                  Save   Cancel