HTML CODE:

```html
<!DOCTYPE html>
<html>
  <head>
        <title>Ayush_Rawat MCA-B 26</title>
  </head>
  <body>
     <p>All primes between 2 and 250 are: </p>
        <div id="output"></div>
        <script>
         primes = []

         for (let i = 2; i <= 250; i++) {
           let isPrime = true;
           for (let j = 2; j <= Math.sqrt(i); j++) {
                if (i % j == 0) {
                isPrime = false;
                break;
                }
           }
           if (isPrime) {
                primes.push(i);
           }
         }

        document.getElementById("output").innerHTML = primes.join(", ");
        </script>
  </body>
</html>
```

OUTPUT:

All primes between 2 and 250 are:

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149, 151, 157, 163, 167, 173, 179, 181, 191, 193, 197, 199, 211, 223, 227, 229, 233, 239, 241

HTML CODE:

```html
<!DOCTYPE html>
<html>
 <head>
        <title>Ayush_Rawat MCA-B 26</title>
 </head>
 <body>
    <p id='words'></p>
    <p id='characters'></p>
    <p id='vowels'></p>
    <p id='consonants'></p>
        <script>
                const inputString = prompt("Enter a string:");

                let numWords = 0;
                let numChars = 0;
                let numVowels = 0;
                let numConsonants = 0;

                if (inputString) {
                  numWords = 1;
                  for (let i = 0; i < inputString.length; i++) {
                        let ch = inputString[i].toLowerCase();

                        if (ch == ' ') {
                        numWords++;
                        }
                        if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u') {
                        numVowels++;
                        } else if (ch >= 'a' && ch <= 'z') {
                        numConsonants++;
                        }

                        numChars++;
                 }
                }

                let words = `Number of words: ${numWords}`;
                let characters = `Number of characters: ${numChars}`;
                let vowels = `Number of vowels: ${numVowels}`;
                let consonants = `Number of consonants: ${numConsonants}`;

                document.getElementById('words').innerHTML = words;
                document.getElementById('characters').innerHTML = characters;

                document.getElementById('vowels').innerHTML = vowels;
```
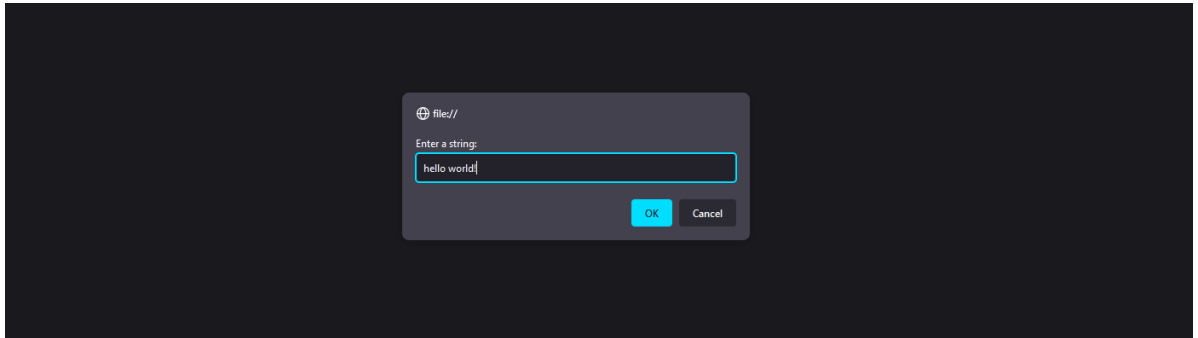
```
                    document.getElementById('consonants').innerHTML = consonants;
            </script>
    </body>
</html>
```
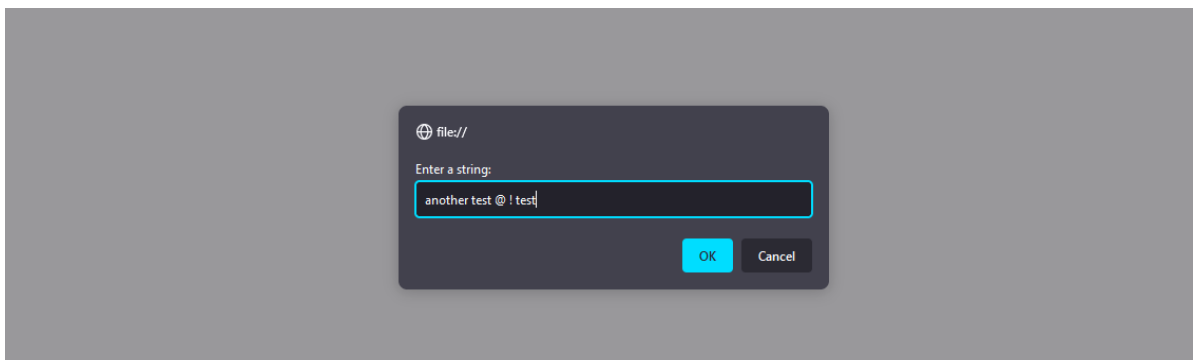
OUTPUT:

Number of words: 2

Number of characters: 12

Number of vowels: 3

Number of consonants: 7

Number of words: 5

Number of characters: 21

Number of vowels: 5

Number of consonants: 10

HTML CODE:

```html
<!DOCTYPE html>
<html>
<head>
 <title>Ayush_Rawat MCA-B 26</title>
</head>
<body>
 <button onclick="openWindow()">Open New Window</button>
 <script>
      function openWindow() {
      let newWindow = window.open("", "Test", "height=400,width=400");

      newWindow.document.write('<h1>test</h1>');

      let closeWindow = confirm("Do you want to close the window?");

      if (closeWindow) {
      newWindow.close();
      }
      }
 </script>
</body>
</html>
```
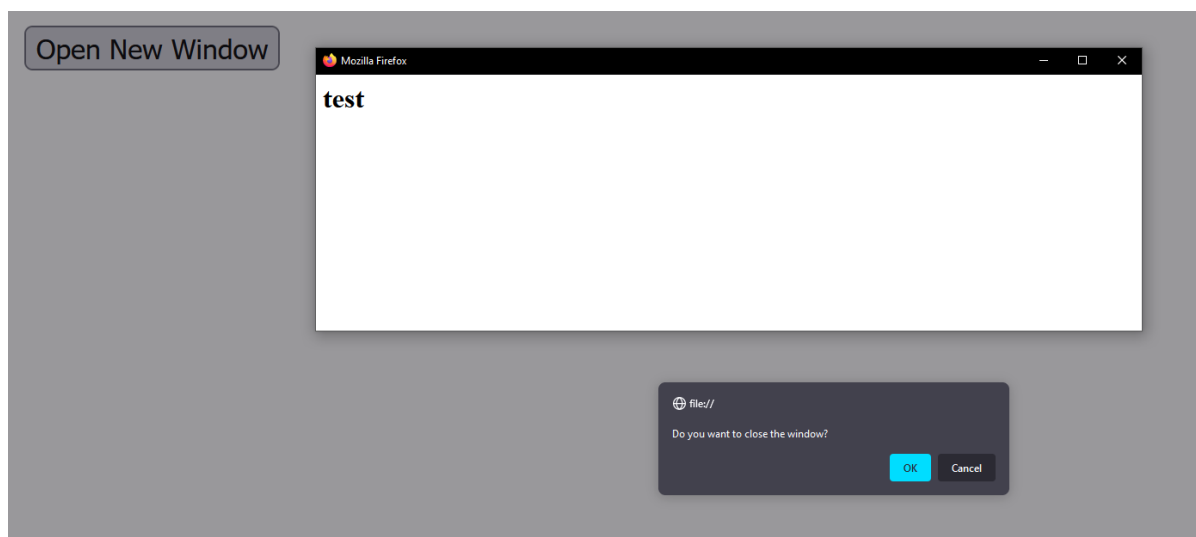
OUTPUT:

HTML:

```html
<!DOCTYPE html>
<html>
<head>
  <title>Ayush_Rawat MCA-B 26</title>

  <style>
        .highlight {
        color: red;
        background-color: yellow;
        font-size: 24px;
        }

        #output {
        border: solid black 5px;
        padding: 30px;
        }
  </style>
</head>
<body>
  <form id="inputForm">
        <label for="inputText">Enter some text:</label><br>
        <textarea name="" id="inputText" cols="30" rows="10"></textarea><br>
        <input type="submit" value="Submit">
  </form>

  <p>
        The following is the text entered in the textbox above but font is colored red and
background color is yellow. :)
        <br>
        <div id="output" style='white-space:pre'></div>
  </p>

  <script>
        document.getElementById('inputForm').addEventListener('submit', function(event)
{
        event.preventDefault();

        var input = document.getElementById('inputText').value;
        var output = '<span class="highlight">' + input + '</span>';

        document.getElementById('output').innerHTML = output;
        });
  </script>
</body>
</html>
```

OUTPUT:

Enter some text:

```
just a test
```

Submit

The following is the text entered in the textbox above but font is colored red and background color is yellow. :)

just a test

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>Ayush_Rawat MCA-B 26</title>
</head>

<body>
        <form id="registrationForm">
        <label for="name">Name:</label><br>
        <input type="text" id="name" name="name"><br>
        <span id="nameError" style="color:red"></span><br>

        <label for="age">Age:</label><br>
        <input type="text" id="age" name="age"><br>
        <span id="ageError" style="color:red"></span><br>

        <input type="submit" value="Submit">
        </form>

        <script>
        document.getElementById('registrationForm').addEventListener('submit', function
(event) {
        event.preventDefault();

        var name = document.getElementById('name').value;
        var age = document.getElementById('age').value;
        var isValid = true;

        if (!name || !age) {
                isValid = false;
                alert('All fields are required');
        }

        if (isNaN(age) || age < 18) {
                isValid = false;
                document.getElementById('ageError').innerHTML = 'Age must be a number
greater than 18';
        } else {
                document.getElementById('ageError').innerHTML = '';
        }
```
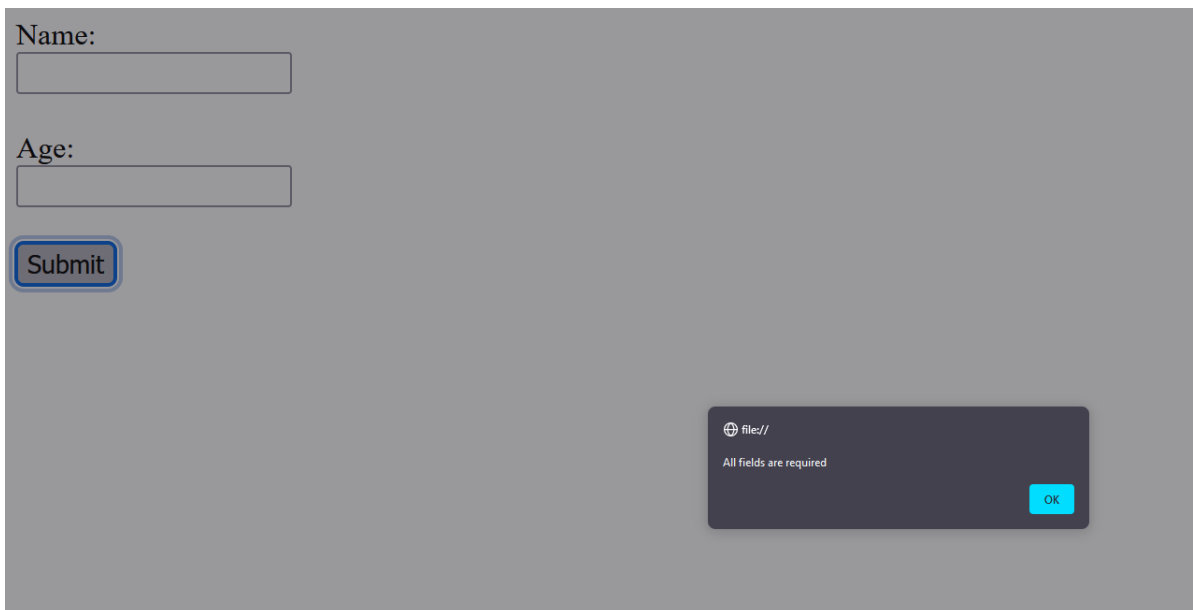
```
        if (/[^a-zA-Z]/.test(name)) {
                isValid = false;
                document.getElementById('nameError').innerHTML = 'Name must contain
only letters';
        } else {
                document.getElementById('nameError').innerHTML = '';
        }

        if (isValid) {
                this.submit();
        }
        });
        </script>
</body>
</html>
```

OUTPUT:

Name:

Age:

Submit

file://

All fields are required

OK

Name:

test1

Name must contain only letters

Age:

17

Age must be a number greater than 18

Submit