PROGRAMME-6

Aim:

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Create a HTML page to explain the use of various predefined functions in a string and math object in java script

Code:

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function.html

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

<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Javascript methodes</title>
   <link rel="stylesheet" href="style.css">
   <script src="script.js"></script>
</head>

<body>
   <div class="header">
      <h1 align="center">STRING FUNCTIONS IN JAVASCRIPT</h1>
      <table align="center" cellspacing="10px" cellpadding="5px">
         <tr>
            <td align="right">Enter a string:</td>
            <td><input type="text" id="string"></td>
         </tr>
         <tr>
            <td align="right">Index string:</td>
            <td><input type="text" id="idx_string"></td>
         </tr>
         <tr>
            <td align="right">Search string:</td>
            <td><input type="text" id="srh_string"></td>
         </tr>
         <tr>
            <td align="right">Slice string:</td>
            <td><input type="text" id="slice_string"></td>
         </tr>
         <tr>
            <td align="right">Sub string:</td>
            <td><input type="text" id="sub_string"></td>
         </tr>
         <tr>
            <td align="right">Replacing string:</td>
```

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            <td><input type="text" id="rpc_string"></td>
          </tr>
          <tr>
            <td align="right">Replace with:</td>
            <td><input type="text" id="rpc1_string"></td>
          </tr>
          <tr>
            <td colspan="2" align="center"><input type="button" value="Generate"
                onclick="strResult()"></td>
          </tr>
        </table>

        <div class="string_result" id="string_result">
        </div>
        <h1 align="center">MATH OBJECT IN JAVASCRIPT</h1>
        <table align="center" cellspacing="10px" cellpadding="5px">
          <tr>
            <td align="right">Enter a number</td>
            <td><input type="number" name="num" id="num"></td>
          </tr>
          <tr>
            <td align="right">Enter power</td>
            <td><input type="number" name="pow" id="pow"></td>
          </tr>
          <tr>
            <td colspan="2" align="center"><input type="button" value="Generate"
                onclick="mathRresult()"></td>
          </tr>
        </table>
    </div>
    <div class="math_result" id="math_result">
    </div>
    <br><br>
</body>
</html>
```

script.js

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```
const strResult = (e) => {
    let str_inp = document.getElementById('string').value;
    let str_indx = document.getElementById('idx_string').value;
    let str_srh = document.getElementById('srh_string').value
    let str_slice = document.getElementById('slice_string').value
    let str_sub = document.getElementById('sub_string').value
    let str_rpc = document.getElementById('rpc_string').value
    let str_rpc1 = document.getElementById('rpc1_string').value
    let content = "jazzjohn@jazzjohn-Lenovo-V145-15AST:output$ Length of the string is:" +
      str_inp.length
    content += "<br>The index of the word " + str_indx + " is:" +
      (parseInt(str_inp.indexOf(str_indx)) + 1)
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```
    content += "<br>The last index of the word " + str_indx + " is:" +
      (parseInt(str_inp.lastIndexOf(str_indx)) + 1)
    content += "<br>The position of the searched word " + str_srh + " is:" +
      (parseInt(str_inp.search(str_srh)) + 1)
    content += "<br>The string after slicing  is:" + (str_inp.slice(str_inp.indexOf(str_slice),
      (str_inp.indexOf(str_slice) + str_slice.length)))
    content += "<br>The substring is:" + (str_inp.substr(str_inp.indexOf(str_sub), str_sub.length))
    content += "<br>The string after replacing with " + str_rpc + " is:" + (str_inp.replace(str_rpc1,
      str_rpc))
    content += "<br>The upper case form of the string is:" + str_inp.toUpperCase()
    content += "<br>The Lower case form of the string is:" + str_inp.toLowerCase()
    document.getElementById("string_result").innerHTML = content
    document.getElementById("string_result").style.display="block";
}

const mathRresult = () => {
    let num = document.getElementById("num").value
    let pow = document.getElementById("pow").value
    let content = "jazzjohn@jazzjohn-Lenovo-V145-15AST:output$ " + num + " raised to " + pow +
      " is : " + Math.pow(num, pow)
    content += "<br> Square root of " + num + " is : " + Math.sqrt(num)
    content += "<br> round of " + num + " is: " + Math.round(num)
    content += "<br> ceil value of " + num + " is: " + Math.ceil(num)
    content += "<br> floor value of " + num + " is: " + Math.floor(num)
    content += "<br> absolute value of" + num + " is : " + Math.abs(num)
    content += "<br> sine value of " + num + " is: " + Math.sin(num)
    content += "<br> cosine value of " + num + " is: " + Math.cos(num)
    content += "<br> minimum value in  (0, 150, 30, 20, -8, -200) is : " + Math.min(0, 150, 30, 20, -
      8, -200);
    content += "<br> maximum value in  (0, 150, 30, 20, -8, -200) is : " + Math.max(0, 150, 30, 20, -
      8, -200);
    content += "<br> Randome number is : " + Math.random()
    content += "<br> pi value is : " + Math.PI
    document.getElementById("math_result").innerHTML = content
    document.getElementById("math_result").style.display="block";
}
```

style.css

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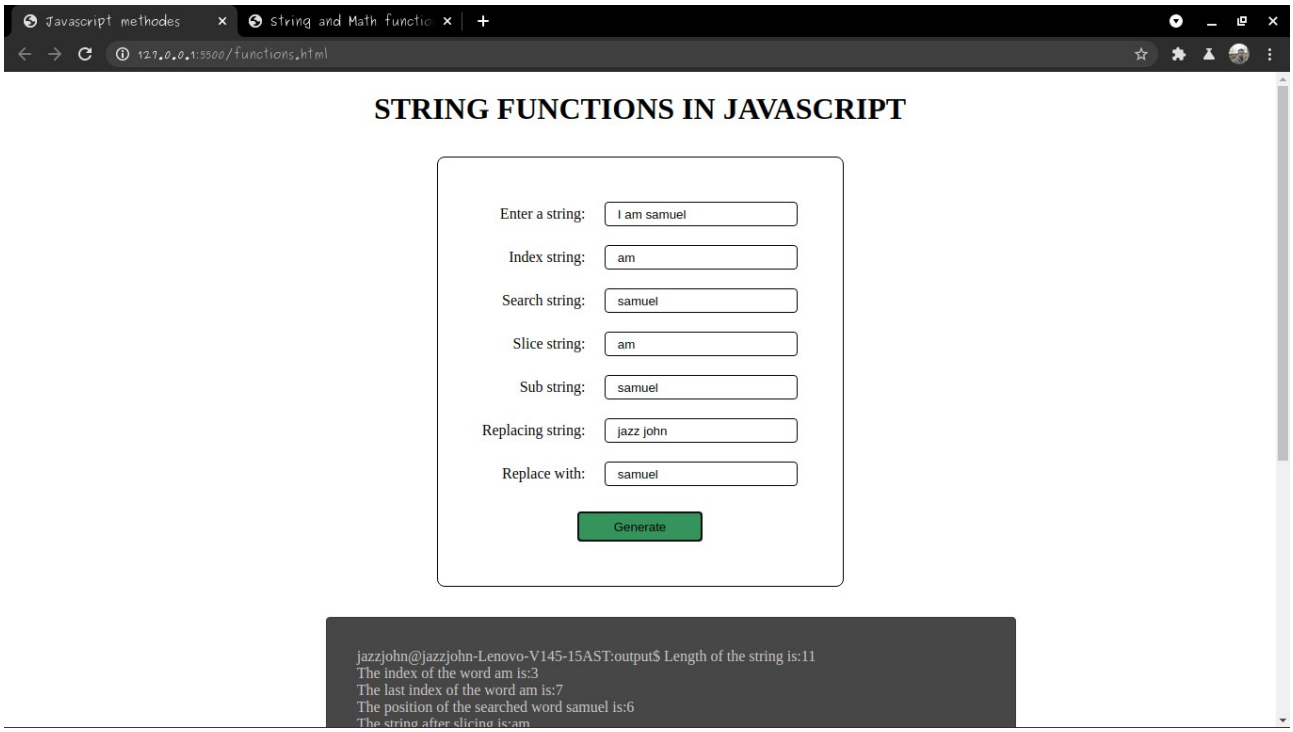
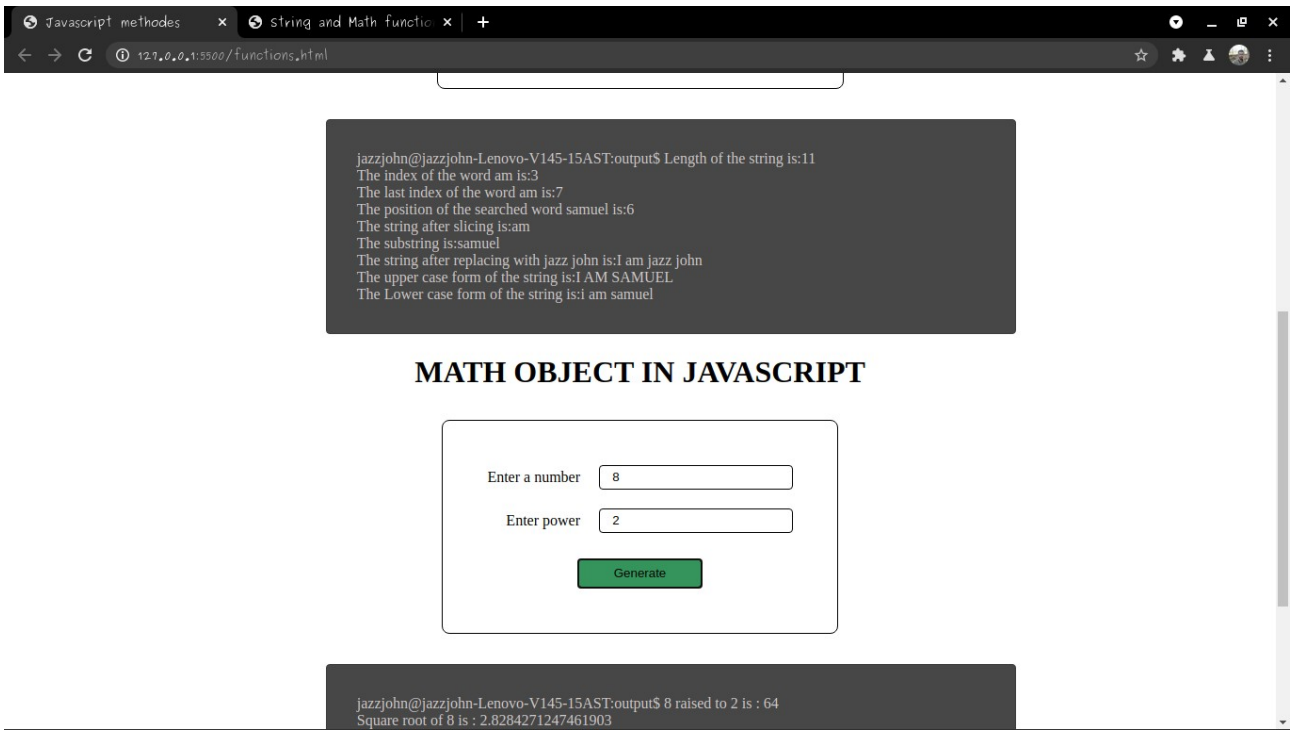
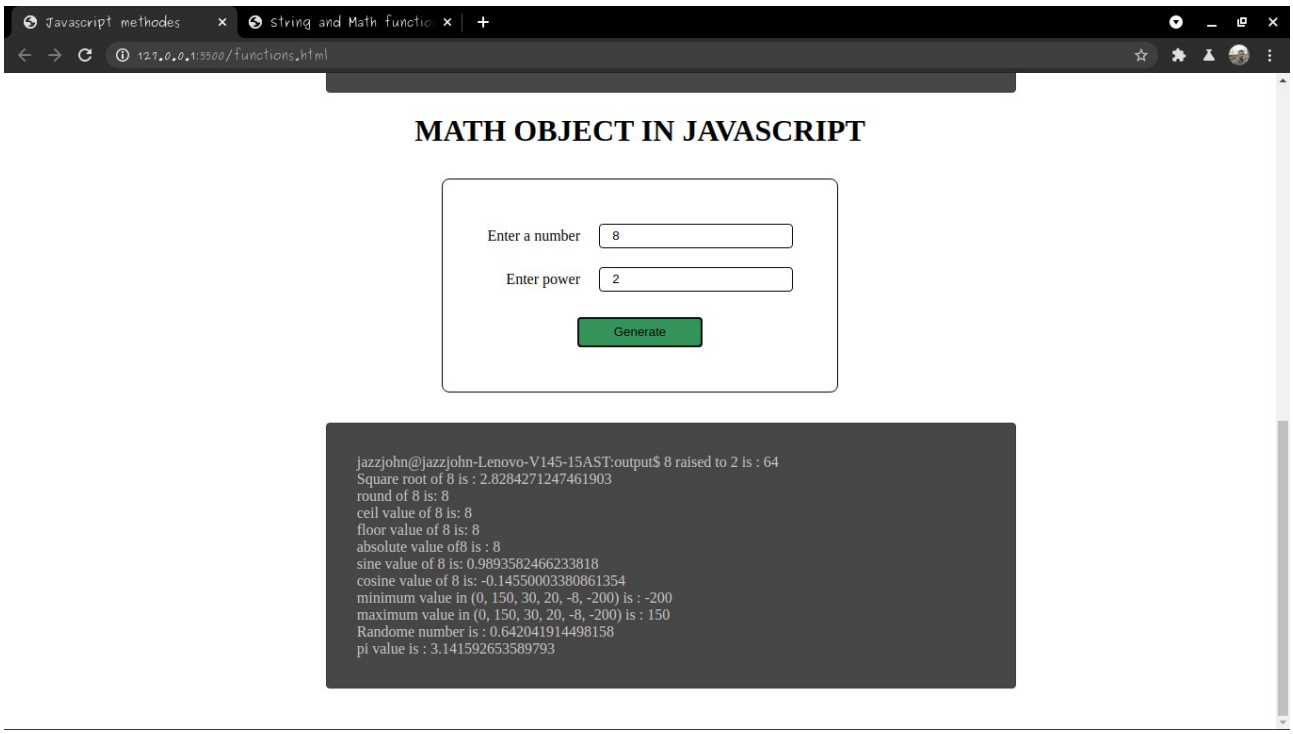
```
table {
  margin-top: 2em;
  padding: 2em;
  border: 1px solid black;
  border-radius: 8px;
}
input[type="button"] {
  margin-top: 0.5em;
  width: 10em;
  background-color: rgb(52, 148, 92);
  padding: 0.5em 1em 0.5em 1em;
  border-radius: 5px;
```

```
}

input[type="text"],
input[type="number"] {
  border-radius: 4px;
  padding: 0 1em 0 1em;
  border: 1px solid black;
  height: 1.8em;
}

.math_result,
.string_result {
  display:none;
  width: 50%;
  padding: 2em;
  align-items: center;
  margin-left: 25%;
  margin-top: 2em;
  border: 1px solid rgb(61, 61, 61);
  color: rgb(206, 200, 200);
  background-color: rgb(71, 71, 71);
  border-radius: 4px;
}
```

Output:




Javascript methodes
String and Math functio
127.0.0.1:5500/functions.html
jazzjohn@jazzjohn-Lenovo-V145-15AST:output$ Length of the string is:11
The index of the word am is:3
The last index of the word am is:7
The position of the searched word samuel is:6
The string after slicing is:am
The substring is:samuel
The string after replacing with jazz john is:I am jazz john
The upper case form of the string is:I AM SAMUEL
The Lower case form of the string is:i am samuel
MATH OBJECT IN JAVASCRIPT
Enter a number
8
Enter power
2
Generate
jazzjohn@jazzjohn-Lenovo-V145-15AST:output$ 8 raised to 2 is : 64
Square root of 8 is : 2.8284271247461903


Javascript methodes
String and Math functio
127.0.0.1:5500/functions.html
MATH OBJECT IN JAVASCRIPT
Enter a number
8
Enter power
2
Generate
jazzjohn@jazzjohn-Lenovo-V145-15AST:output$ 8 raised to 2 is : 64
Square root of 8 is : 2.8284271247461903
round of 8 is: 8
ceil value of 8 is: 8
floor value of 8 is: 8
absolute value of8 is : 8
sine value of 8 is: 0.9893582466233818
cosine value of 8 is: -0.14550003380861354
minimum value in (0, 150, 30, 20, -8, -200) is : -200
maximum value in (0, 150, 30, 20, -8, -200) is : 150
Randome number is : 0.642041914498158
pi value is : 3.141592653589793