

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

```
<html  
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lan  
g="en"  
>
```

```
<head>  
  
  <meta charset="UTF-8">  
  
  <meta name="viewport" content="width=device-width,  
initial-scale=1.0">  
  
  <title>String and Math functions</title>  
  
  <style>  
  
    div {  
  
      text-align: center;  
  
      border-bottom: 2px solid black;  
  
      padding-bottom: 2em;  
  
    }  
  
  
    h2 {  
  
      text-transform: uppercase;  
  
      text-align: center;  
  
      margin-top: 2em;  
  
      width: 100%;  
  
      padding: 5px;  
  
      color: #222324;  
  
      font-family: 'Courier New', Courier, monospace;
```

```
        box-shadow: 0 4px 10px 0 rgba(0, 0, 0, 0.2), 0 4px 20px 0
        rgba(0, 0, 0, 0.19);
    }
```

```
table,
tr,
td,
th {
    padding: 1em;
}
```

```
table {
    width: 100%;
}
```

```
th {
    text-align: left;
}
```

```
.selector {
    padding: .5em;
    background-color: #002607;
    color: white;
    border: none;
    outline: none;
    border-radius: 5px;
    font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida
Grande', 'Lucida Sans Unicode', Geneva, Verdana, sans-serif;
}
```

```
li {
```

```

        text-align: left;

        margin-top: 5px;

        padding: 10px;
    }

    ul {

        background-color: #1a1b1c;

        color: white;

    }
</style>
</head>

<body>
    <div>

        <h2>String Functions</h2>

        <table>

            <tbody>

                <tr>

                    <th>Enter a text</th>

                    <td> <input type="text" id="input_srting"
name="input_s"></td>
                </tr>

                <tr>

                    <th>Search a text</th>

                    <td> <input type="text" id="input_search"
name="input_search"></td>
                </tr>

                <tr>

                    <th>Slice start</th>

```

<input id="slice_s" name="slice_s" type="text"/>	
<th>Slice end</th>	Slice end
<input id="slice_e" name="slice_e" type="text"/>	
<th>Replace the word</th>	Replace the word
<input id="replace_f" type="text"/>	
<th>Replace with</th>	Replace with
<input id="replace_s" type="text"/>	

Math Functions

--

```

        <tr>

            <th>Enter a Number</th>

            <td> <input type="text" id="input_num"></td>

        </tr>

        <tr>

            <th>Power term</th>

            <td> <input type="text" id="input_pow"></td>

        </tr>

    </tbody>

</table>

```

```

        <input type="button" value="Generate" class="selector"
onclick="math_func()">

```

```

        <br><br>

        <ul id="output_math"> </ul>

</div>

```

```

<script>

    function string_func() {

        let input = document.getElementById('input_srting').value;

        let search = document.getElementById('input_search').value;

        let slice_s = document.getElementById('slice_s').value;

        let slice_e = document.getElementById('slice_e').value;

        let replace_f = document.getElementById('replace_f').value;

        let replace_s = document.getElementById('replace_s').value;
    }

```

```

        let li_O = '<li>';

        let li_C = '</li>';

        let list_items;

        list_items = li_O + 'Length of string is : ' + input.length
+ li_C;

        list_items += li_O + 'First index of ' + search + ' is ' +
input.indexOf(search) + li_C;

        list_items += li_O + 'Last index of ' + search + ' is ' +
input.lastIndexOf(search) + li_C;

        list_items += li_O + 'Index with search starting position 5
of ' + search + ' is ' + input.indexOf(search, 5) + li_C;

        list_items += li_O + 'Search ' + search + ' is ' +
input.search(search) + li_C;

        list_items += li_O + 'Slice[' + slice_s + ' : ] is ' +
input.slice(slice_s) + li_C;

        list_items += li_O + 'Slice[' + slice_s + ' : ' + slice_e +
'] is ' + input.slice(slice_s, slice_e) + li_C;

        list_items += li_O + 'Substring[' + slice_s + ' : ' + slice_e
+ ']' is ' + input.substring(slice_s, slice_e) + li_C;

        list_items += li_O + 'Substr[' + slice_s + ' : ] is ' +
input.substr(slice_s) + li_C;

        list_items += li_O + 'Substr[' + slice_s + ' : ] with length '
+ slice_e + ' is ' + input.substr(slice_s, slice_e) + li_C;

        list_items += li_O + 'replace ' + replace_f + ' with ' +
replace_s + ' is ' + input.replace(replace_f, replace_s) + li_C;

        list_items += li_O + 'Uppercase : ' + input.toUpperCase() +
li_C;

        list_items += li_O + 'lowercase : ' + input.toLowerCase() +
li_C;

        document.getElementById('output').innerHTML = (list_items);
    }

```

```

function math_func() {

    let input = document.getElementById('input_num').value;

    let power = document.getElementById('input_pow').value;

    let li_O = '<li>';

```

```

        let li_C = '</li>';

        let list_items;

        list_items = li_O + 'Value of PI   : ' + Math.PI + li_C;

        list_items += li_O + 'Round of   '+input+' is : ' +
Math.round(input) + li_C;

        list_items += li_O + ''+input+' raise to '+power+' is : ' +
Math.pow(input,power) + li_C;

        list_items += li_O + 'Square root of   '+input+' is : ' +
Math.sqrt(input) + li_C;

        list_items += li_O + 'Absolute value   of   '+input+' is : ' +
Math.abs(input) + li_C;

        list_items += li_O + 'Ceil value   of   '+input+' is : ' +
Math.ceil(input) + li_C;

        list_items += li_O + 'Floor value   of   '+input+' is : ' +
Math.floor(input) + li_C;

        list_items += li_O + 'Sin value   of   '+input+' is : ' +
Math.sin(input* Math.PI / 180) + li_C;

        list_items += li_O + 'Cos value   of   '+input+' is : ' +
Math.cos(input* Math.PI / 180) + li_C;

        list_items += li_O + 'Minimum of (0, 150, 30, 20, -8, -200)
is : ' + Math.min(0, 150, 30, 20, -8, -200) + li_C;

        list_items += li_O + 'Maximum of (0, 150, 30, 20, -8, -200)
is : ' + Math.max(0, 150, 30, 20, -8, -200) + li_C;

        list_items += li_O + 'A Random number is : ' + Math.random()
+ li_C;


        document.getElementById('output_math').innerHTML =
(list_items);
    }

</script>

</body>

</html>

```