

## 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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functions.html

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```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="style.css">
  <link rel="preconnect" href="https://fonts.gstatic.com">
  <link href="https://fonts.googleapis.com/css2?family=Fascinate&display=swap"
rel="stylesheet">
  <title>Document</title>
</head>

<body>
  <div class="header" id="header">
    <div class="navbar">
      <ul>
        <li><a href="#header">Home</a></li>
        <li><a href="#docs">Documents</a></li>
        <li><a href="">Contact</a></li>
        <li><a href="#about">About</a></li>
      </ul>
    </div>
    <h1>JAVASCRIPT FUNCTIONS</h1>
  </div>
  <h2 align="center" id="docs">PREDEFINED FUNCTIONS</h2>
  <hr width="35%">
  <div class="docs" style="margin-top:4em;">
    <div class="row">
      <div class="content">
        <h3 align="center">substr()</h3>
        <hr width="45%" color="#989898">
        <p> Returns the characters in a string beginning at the specified location through the
          specified number of characters.</p>
      </div>
      <div class="content">
        <h3 align="center">toLowerCase()</h3>
        <hr width="45%" color="#989898">
        <p>Returns the calling string value converted to lower case.</p>
      </div>
    </div>
  </div>
</body>
</html>
```

```

</div>
<div class="content">
  <h3 align="center">toUpperCase()</h3>
  <hr width="45%" color="#989898">
  <p>Returns the calling string value converted to uppercase.</p>
</div>
</div>
<div class="row">
  <div class="content">
    <h3 align="center">charCodeAt()</h3>
    <hr width="45%" color="#989898">
    <p> Returns a number indicating the Unicode value of the character at the given index.
    </p>
  </div>
  <div class="content">
    <h3 align="center"> charAt()</h3>
    <hr width="45%" color="#989898">
    <p>Returns a string containing the source of the Boolean object; you can use this string to
    create an
    equivalent object..</p>
  </div>
  <div class="content">
    <h3 align="center">concat()</h3>
    <hr width="45%" color="#989898">
    <p>Combines the text of two strings and returns a new string.</p>
  </div>
</div>
<div class="row">
  <div class="content">
    <h3 align="center"> indexOf()</h3>
    <hr width="45%" color="#989898">
    <p> Returns the index within the calling String object of the first occurrence of the
    specified value,
    or -1 if not found.</p>
  </div>
  <div class="content">
    <h3 align="center">length()</h3>
    <hr width="45%" color="#989898">
    <p>Returns the length of the string.</p>
  </div>
  <div class="content">
    <h3 align="center"> replace()</h3>
    <hr width="45%" color="#989898">
    <p>Used to find a match between a regular expression and a string, and to replace the
    matched substring
    with a new substring.</p>
  </div>
</div>
<div class="row">
  <div class="content">
    <h3 align="center"> search()</h3>
    <hr width="45%" color="#989898">

```

<p>Executes the search for a match between a regular expression and a specified string.  
</p>  
</div>  
<div class="content">  
 <h3 align="center"> slice()</h3>  
 <hr width="45%" color="#989898">  
 <p>Extracts a section of a string and returns a new string.</p>  
</div>  
<div class="content">  
 <h3 align="center"> split()</h3>  
 <hr width="45%" color="#989898">  
 <p>Splits a String object into an array of strings by separating the string into substrings.  
</p>  
</div>  
</div>

<h2 align="center" style="margin-top: 4em;">Java Script Math Object</h2>  
<hr width="35%">  
<div class="container" style="margin-top:4em;margin-bottom: 5em;">  
 <div class="desc">  
 <p>The JavaScript Math object allows you to perform mathematical tasks on numbers.<br><br>  
 Unlike other objects, the Math object has no constructor.<br><br>  
 The Math object is static.<br><br>  
 All methods and properties can be used without creating a Math object first.<br><br>  
 </p>  
 </div>  
 <div class="example">  
 The syntax for any Math property is : <span  
 style="border:1px solid #FBD285;padding: 4px;margin-right: 2px;">  
 Math.property</span><br>  
 <p style="margin-top:2.5em;"> JavaScript provides 8 mathematical constants that can be  
 accessed as Math  
 properties:<br><br></p>  
 <pre>  
 Math.E // returns Euler's number  
 Math.PI // returns PI  
 Math.SQRT2 // returns the square root of 2  
 Math.SQRT1\_2 // returns the square root of 1/2  
 Math.LN2 // returns the natural logarithm of 2  
 Math.LN10 // returns the natural logarithm of 10  
 Math.LOG2E // returns base 2 logarithm of E  
 Math.LOG10E // returns base 10 logarithm of E</pre>  
 </div>  
</div>  
<div class="obj" style="color:#989898;padding: 1.5em;">  
 <h2 align="center">Math methodes</h2>  
 <hr width="35%">  
 <p align="center" style="margin-left:20px;margin-top:4em;">The syntax for any Math  
 property is : <span  
 style="border:1px solid #FBD285;padding: 4px;margin-right: 2px;">  
 Math.methode(number)</span><br></p>

```

<dl>
  <dt>
    <u>Math.round()</u>
  </dt>
  <dd>
    Math.round(x) returns the nearest integer:
  </dd>
  <dt>
    <u>Math.ceil()</u>
  </dt>
  <dd>
    Math.ceil(x) returns the value of x rounded up to its nearest integer:
  </dd>
  <dt>
    <u> Math.floor()</u>
  </dt>
  <dd>
    Math.floor(x) returns the value of x rounded down to its nearest integer:
  </dd>
  <dt>
    <u>Math.pow()</u>
  </dt>
  <dd>
    Math.pow(x, y) returns the value of x to the power of y:
  </dd>
  <dt>
    <u>Math.sqrt()</u>
  </dt>
  <dd>
    Math.sqrt(x) returns the square root of x:
  </dd>
  <dt>
    <u>Math.abs()</u>
  </dt>
  <dd>
    Math.abs(x) returns the absolute (positive) value of x:
  </dd>
</dl>
</div>
</div>
</div>
<br><br><br><br>
<div id="about"></div>
</body>
</html>

```

style.css

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```

@import url('https://fonts.googleapis.com/css2?
family=Fascinate&family=Ravi+Prakash&display=swap');
*

```

```
{
  box-sizing: border-box;
}
html{
  scroll-behavior: smooth;
}
body{
  width:100%;
  height:100vh;
  padding:0px;
  margin:0px;
  display: block;
  background-color: #403552;

}
.header{
  width: 100%;
  height:100%;
  margin: auto;
}
.navbar{
  height:70px;
  position:sticky;
  top:0px;
}
h1{
  text-align: center;
  color:#FBD285;
  font-family: 'Fascinate', cursive;
  margin-top:5em;
  letter-spacing: 3px;
  font-size: 45px;
}
ul{
  display: flex;
  flex-direction: row;
  justify-content: flex-end;
}
li{
  list-style-type: none;
  padding: 2em;

}
a{
  text-decoration: none;
  color:#FBD285;
  font-family: 'Fascinate', cursive;
  font-family: 'Ravi Prakash', cursive;
}
a:hover{
  color:#A981FF;
  font-weight:bolder;
```

```
}
h2{
  color:#989898;
}
.row{
  display:flex;
  flex-direction: row;
  width: 100%;
  margin-top: 2em;
}
.content{
  margin:1em;
  padding: 1em;
  width:30%;
  height:210px;
  box-shadow: rgba(0, 0, 0, 0.24) 0px 3px 8px;
  border-radius: 5px;
}
.content:hover{
  box-shadow: rgba(0, 0, 0, 0.3) 0px 19px 38px, rgba(0, 0, 0, 0.22) 0px 15px 12px;
  border:none;
}
h3{
  color:#989898;
}
p{
  color:#989898;
}
.container{
  display:flex;
  flex-direction:row;
  width:100%;
}
.desc{
  width: 45%;
  margin:1.5em;
  padding: 2em;
}
.example{
  width:45%;
  margin:1.5em;
  padding:1em;
  color:#989898;
  border: 1px solid #989898;
  border-radius: 5px;
}
.obj{
  width: 60%;
  margin: auto;
  border: 1px solid #989898;
  border-radius: 5px;
}
```

```
dl{
  margin: 2em 0 0 4em;
}
dd,dt{
  margin-top:1.5em;
}
```

Output:



