

COP2500 Laboratory 9

Introduction: The goal of this assignment is to allow you to become familiar with properties and methods of the *String* objects. You will be able to change string's appearance and manipulate a string. The first three parts of this assignment will let you get more familiar with string processing and in PART 4 you will write your own code to create, manipulate, and display strings. PART 4 is the only part that will be graded and must be uploaded to the drop box.

Procedures:

PART 1: String formatting methods that mimic the HTML tags

- Open a text editor window.
- Create an html document and name it "lab9.html", then copy the following script in it.

```
<script language="JavaScript">
var str1="String formatting methods!";
document.write("<h3> Part1 </h3>"+ "<br>");
document.write("Big: "+str1.big()+"<br>");
document.write("Small: "+str1.small()+"<br>");
document.write("Bold: "+str1.bold()+"<br>");
document.write("Italic: "+str1.italics()+"<br>");
document.write("Fixed: "+str1.fixed()+"<br>");
document.write("Strike: "+str1.strike()+"<br>");
document.write("Fontcolor: "+str1.fontcolor("Red")+"<br>");
document.write("Fontsize: "+str1.fontSize(5)+"<br>");
document.write("Lowercase: "+str1.toLowerCase()+"<br>");
document.write("Uppercase: "+str1.toUpperCase()+"<br>");
document.write("Subscript: "+str1.sub()+"<br>");
document.write("Superscript: "+str1.sup()+"<br>");
document.write("<hr>");
</script>
```

PART 2: String manipulation method

- Then add the following script at the bottom of the script developed in part1.

```
var str2="Working with String manipulation method!";
document.write("<h3> Part2 </h3>"+ "<br>");
document.write("The first 'm' is at position: "+str2.indexOf("m")+"<br>");
document.write("The last 'm' is at position: "+str2.lastIndexOf("m")+"<br>");
//count number of 't'
var count = 0;
for (i=0;i< str2.length;i++){
if (str2.charAt(i) == 't'){
count++;
}
}
document.write("The number of 't' in this string 'str2' are: "+count+"<br>");
document.write("The substring from position 8 with length 11 is :
```

```
" + str2.substr(8, 11) + "<br>");  
document.write("<hr>");
```

PART 3: Array of string

- Then add the following script at the bottom of the script developed in part3:

```
var str3 = new Array(3);  
str3[0] = "Java";  
str3[1] = "Script";  
str3[2] = "Program";  
  
document.write("<h3> Part3 </h3>" + "<br>");  
document.write(str3.join(" ") + "<br/>");  
document.write(str3.join(",") + "<br />");  
document.write(str3.join(".") + "<br/>");  
document.write("<hr>");
```

PART 4: Perform steps in 1 – 4 and display the results. When completed, upload your code to the drop box as **cop2500lab9-part4**

1. Create a String object containing "Maria lived in Santa Maria for many years."
2. Write the JavaScript to find the index for the second Maria.
3. Write the JavaScript code to find the indices and the frequency of the substring 'ear' in the following string: "While everyone was earning a living and yearning for an ear of corn, the earnest farmers kept working for years and years."
4. Use JavaScript methods to display the string "This part tests our ability to use JavaScript methods that mimic the HTML tags." in a blue, italic font, point size 12, all uppercase.