Department of Statistics & Computer Science
University of Kelaniya
Academic Year 2023/2024
COSC 31103/ BECS 31233 - Web & Internet Technologies
Lab Sheet 07

01) Create your first JavaScript program following the instructions below.

- Open the Notepad editor and write the code as shown in the image.

```html
<html>
<head>
    <title>My First JavaScript Code!!</title>
</head>
<body>
    <script type="text/JavaScript">
        document.write("Hello World!");
    </script>
</body>
</html>
```

- Save your HTML document as first.html.

- Open your document on any web browser and check your output.

- **You can use document.write() statement to display data on web page using JavaScript.**

02) Create a JavaScript program to print the following output on a web page.

> Welcome to the First JavaScript Practical Session!!!

03) Create a JavaScript program to print your name, student number and course code.

04) Change the above code to print your name, student number and course code line by line using the **
** tag inside the document.write() statement.

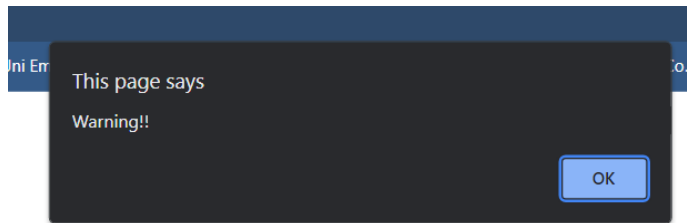05) Create your JavaScript program as an external JavaScript file.

- Open a new file in the Notepad editor and include the following code segment.

```javascript
function message(){
        alert("Warning!!");
}
```

- Save your document as firstjs.js in your work folder.

- Then, create an HTML document and include the following code segment.

```html
<html>
 <head>
    <title>JavaScript Code!!</title>
    <script type="text/JavaScript" src="firstjs.js">
    </script>
 </head>
 <body onload="message()">
 </body>
</html>
```

- Open your document on any web browser and check the output.

- **To include an external JavaScript file to your HTML, you need to give the JavaScript file path as the value of the 'src' attribute.**

- Your output should look as follows.

06) Create a JavaScript program to display the output of question 05), without using an external JavaScript file.

07) Create a JavaScript program to add comments.

- You can use '//' to add single comments in JavaScript.

- You can use '/*' to add muti-line comments in JavaScript.

- Create an HTML document and include the following code segment.

```html
<html>
<head>
    <title>My First JavaScript Code!!</title>
</head>
<body>
    <script type="text/JavaScript">
    //This is a single line comment
    document.write("Welcome to the first JavaScript Practical Session");

    /*This is a
    multi-line
    comment*/
    </script>
</body>
</html>
```

08) Find the output of the following code segment.

```html
<html>
<head></head>
<body>
    <script type="text/javascript">
        var author;
        var bookname;
        var country;

        author="Leo";
        document.write(author);

        author= "Tolstoy";
        document.write(author);
        document.write("<br />");

        bookname="Anna Karenina";
        document.write(bookname);
        document.write("<br />");

        country="Russia";
        document.write(country);
        document.write("<br />");
    </script>
</body>
</html>
```

09) Create a JavaScript program to display the current time with hours, minutes and seconds as the output.

```html
<html>
 <head>
    <script type="text/javascript">
        var d=new Date();
        var hour=d.getHours();
        var minute=d.getMinutes();
        var second=d.getSeconds();

        document.write("Now the time is = " + hour + ":" + minute + " " + second);
    </script>
 </head>
 <body>
 </body>
</html>
```

- **The Date object in JavaScript is a built-in object that represents a single moment in time. Once a Date object is created, a number of methods allow you to operate on it.**

010) Generate the greeting based on the following conditions using JavaScript. The output should be displayed in bold font.

- If the current time is less than 12 noon, then the greeting should be "Good Morning".

- Otherwise, the greeting should be "Good Bye".

```html
<html>
 <head>
    <script type="text/javascript">
        var d=new Date();
        var time=d.getHours();

        if(time<12)
        {
            document.write("<b>Good Morning</b>");
        }
        else{
            document.write("<b>Good Bye</b>");
        }
    </script>
 </head>
 <body>
 </body>
</html>
```

011) Write a JavaScript program that displays a message indicating the part of the day based on the current time, using the following conditions. The output should be in italics format.

- If the time is between 6:00 a.m. and 11:59 a.m., display: "Good Morning!"

- If the time is between 12:00 p.m. and 4:59 p.m., display: "Good Afternoon!"

- If the time is between 5:00 p.m. and 8:59 p.m., display: "Good Evening!"

- If the time is between 9:00 p.m. and 5:59 a.m., display: "Good Night!"

```html
<html>
 <head>
    <script type="text/javascript">
        var d = new Date();
        var hour = d.getHours();

        if (hour >= 6 && hour < 12) {
            document.write("<i>Good Morning!</i>");
        }
        else if (hour >= 12 && hour < 17) {
            document.write("<i>Good Afternoon!</i>");
        }
        else if (hour >= 17 && hour < 21) {
            document.write("<i>Good Evening!</i>");
        }
        else {
            document.write("<i>Good Night!</i>");
        }
    </script>
 </head>
 <body>
 </body>
</html>
```

012) Write a JavaScript program using a switch statement to display a message based on the user's favorite color. The output should be displayed in bold font.

```html
<html>
 <head>
    <script type="text/javascript">
        var favoriteColor = "green";

        switch(favoriteColor.toLowerCase()) {
            case "red":
                document.write("<b>You like red.</b>");
                break;
            case "blue":
                document.write("<b>You like blue.</b>");
                break;
            case "green":
                document.write("<b>You like green.</b>");
                break;
            case "yellow":
                document.write("<b>You like yellow.</b>");
                break;
            default:
                document.write("<b>You like another color.</b>");
        }
    </script>
 </head>
 <body>
 </body>
</html>
```

013) Create a JavaScript program to pop up an alert box when loading your page.

```html
<html>
 <head>
    <script type="text/javascript">
    function alertbox()
    {
        alert("Hello COSC 31103/ BECS 31233!!!");
    }
    </script>
 </head>
 <body onload="alertbox()">
 </body>
</html>
```

- You can use any name for the function name, but the same name should be used in the onload attribute.

014) Create a JavaScript program to pop up a confirm box when the user clicks on a button.

```html
<html>
 <head>
    <script type="text/javascript">
    function confirmation()
    {
        var answer = confirm("Leave the website?");

        if (answer)
        {
            alert("Bye bye!");
            window.location = "http://www.google.com/";
        }
        else {
            alert("Thanks for sticking around!");
        }
    }
    </script>
 </head>
 <body>
    <form>
    <input type="button" onclick="confirmation()" value="Leave">
    </form>
 </body>
</html>
```

015) Create a JavaScript program to pop up a prompt box when the user clicks on a button.

```html
<html>
 <head>
    <script type="text/javascript">
    function show_prompt()
    {
        var name = prompt("Please enter your name","");

        if (name!=null && name!="")
        {
        document.write("Hello " + name + "! How are you today?");
        }
    }
    </script>
 </head>
 <body>
    <input type="button" onclick="show_prompt()" value="Show prompt box">
 </body>
</html>
```

Submit your answers as a zipped folder with the word document including source code along with screenshots of your outputs and html and js files on or before **09ᵗʰ June 2025** to ekel.