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Practical No: 3

Date Of Performance: 31/07/2025

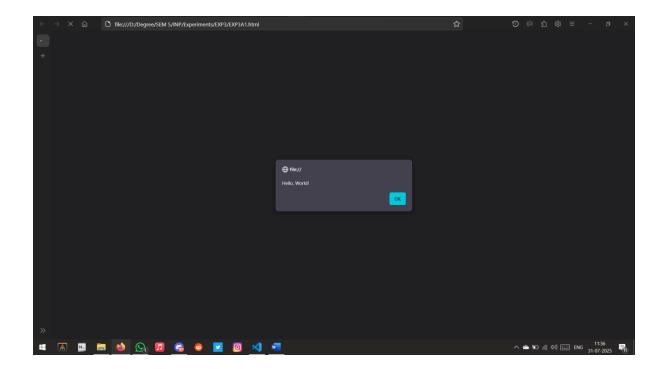
Aim: Implementation of Frontend Web Application

Development Bootstrap.

Q) Implement hello world example in java script. Run on browser and console using node

CODE (Browser):

OUTPUT:



CODE (Console):

```
console.log("Hello, World! (from Node)");
```

OUTPUT:

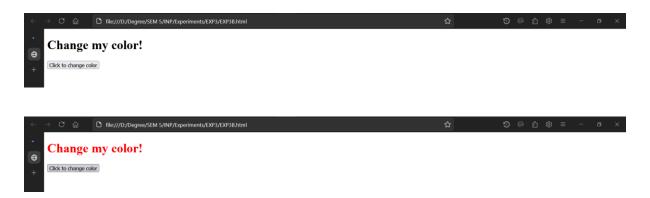
```
Abdurrahman Qureshi@DESKTOP-H2RV5MQ MINGW64 /d/Degree/SEM 5/INP/Experiments/EXP3 (master) $ node EXP3A2.js
Hello, World! (from Node)
```

Q) Implement DOM manipulation for change in color of text to red

CODE:

```
<!DOCTYPE html>
                                                            <button
                                                    onclick="changeColor()">Click to change
<html>
                                                    color</button>
    <head>
                                                            <script>
        <title>Change to Red</title>
                                                                const changeColor = () => {
    </head>
                                                                    const heading =
    <body>
                                                    document.getElementById("text");
        <h1 id="text">Change my color!</h1>
                                                                    heading.style.color =
                                                    "red";
```

OUTPUT:



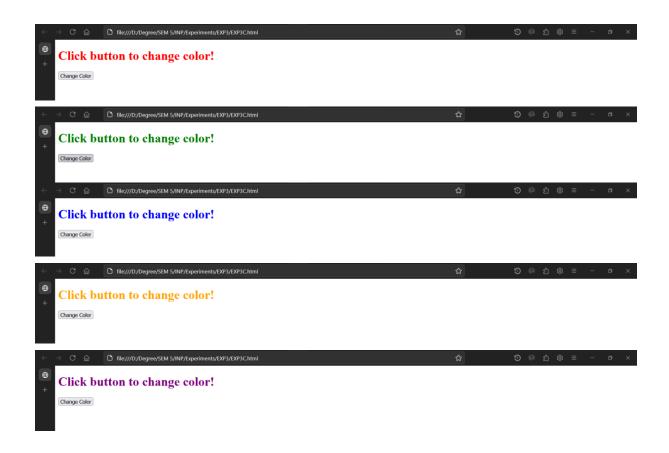
Q) Implement above using charge in different colors by clicking button using Java script

CODE:

```
<!DOCTYPE html>
                                                                let index = 0;
<html>
    <head>
                                                                function changeColor() {
        <title>Color Changer</title>
                                                                    const text =
                                                    document.getElementById("text");
    </head>
                                                                    text.style.color =
    <body>
                                                    colors[index];
        <h1 id="text">Click button to
                                                                    index = (index + 1) %
change color!</h1>
                                                    colors.length;
        <button
                                                                }
onclick="changeColor()">Change
Color</button>
                                                            </script>
                                                        </body>
                                                    </html>
        <script>
            const colors = ["red", "green",
"blue", "orange", "purple"];
```

OUTPUT:





Q) Implement arithmetic operations using Java script both on browser and console

CODE (Browser):

```
<!DOCTYPE html>
                                                                    const n1 =
                                                   parseFloat(document.getElementById("num1").
<html>
                                                   value);
    <head>
                                                                    const n2 =
        <title>Arithmetic</title>
                                                   parseFloat(document.getElementById("num2").
                                                   value);
    </head>
                                                                    const result = `
    <body>
                                                           Sum: \{n1 + n2\} < br >
        <h2>Arithmetic Operations</h2>
                                                           Difference: ${n1 - n2} <br>
        <input id="num1" type="number"</pre>
placeholder="Enter number 1" />
                                                           Product: ${n1 * n2} <br>
        <input id="num2" type="number"</pre>
                                                           Quotient: ${n1 / n2}
placeholder="Enter number 2" />
                                                                   document.getElementById("re
onclick="calculate()">Calculate</button>
                                                   sult").innerHTML = result;
        }
        <script>
                                                           </script>
            function calculate() {
                                                       </body>
                                                   </html>
```

OUTPUT:



CODE (Console):

```
function calculate() {
   const n1 = 12;
   const n2 = 4;
   const result = `
        Sum: ${n1 + n2} <br>
        Difference: ${n1 - n2} <br>
        Product: ${n1 * n2} <br>
        Quotient: ${n1 / n2}
        ;
        console.log(result);
}

calculate();
```

OUTPUT:

```
Abdurrahman Qureshi@DESKTOP-H2RV5MQ MINGW64 /d/Degree/SEM 5/INP/Experiments/EXP3 (master)

• $ node EXP3D2.js

Sum: 16 <br>
Difference: 8 <br>
Product: 48 <br>
Quotient: 3
```