WEB PROGRAMMING

ASSIGNMENT – 8

-B Venkatesh
(23BCE1012)

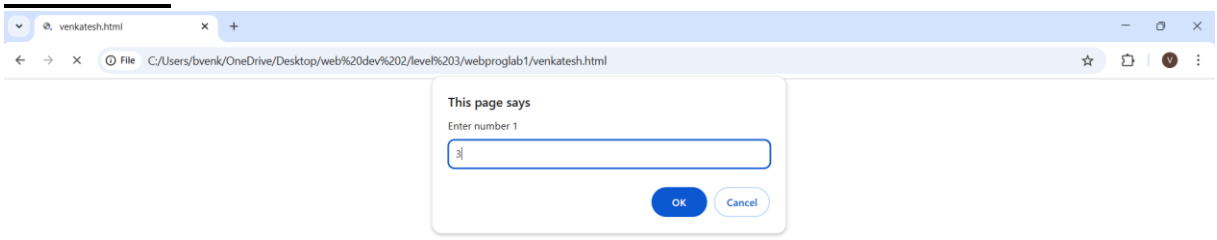
1. Create a basic calculator that takes two numbers from the user and performs basic mathematical operations (addition, subtraction, multiplication, division and mod) using prompt and alert.

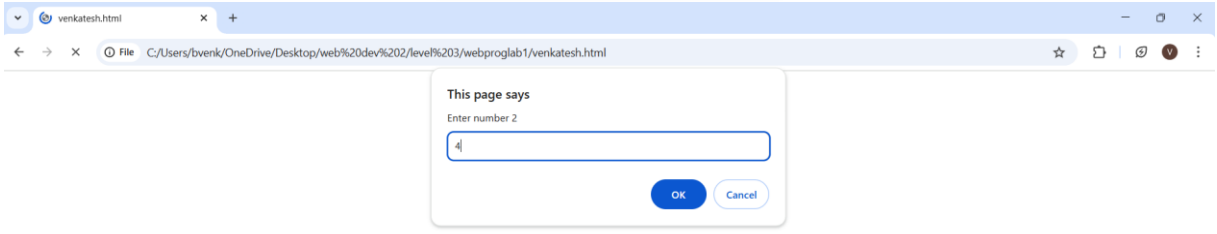
CODE

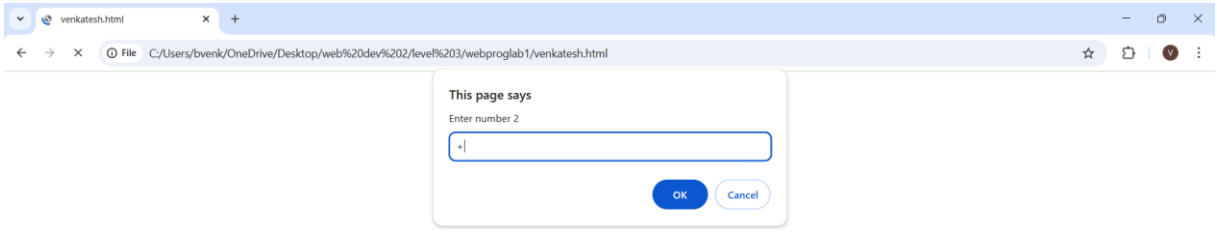
```
<html>
  <script>
      var x = parseFloat(prompt("Enter number 1"));
      var y = parseFloat(prompt("Enter number 2"));
      var z = prompt("Enter the operator (+,-,/,*,%)");
      switch(z)
      {
        case '+':
          alert(x+y);
          break;
        case '-':
          alert(x-y);
          break;
        case '/':
```

```
            alert(x/y);
            break;
        case '*':
            alert(x*y);
            break;
        case '%':
            alert(x%y);
            break;
    }
  </script>
</html>
```

OUTPUT








venkatesh.html
File
C:/Users/bvenk/OneDrive/Desktop/web%20dev%202/level%203/webproglab1/venkatesh.html
This page says
7
OK

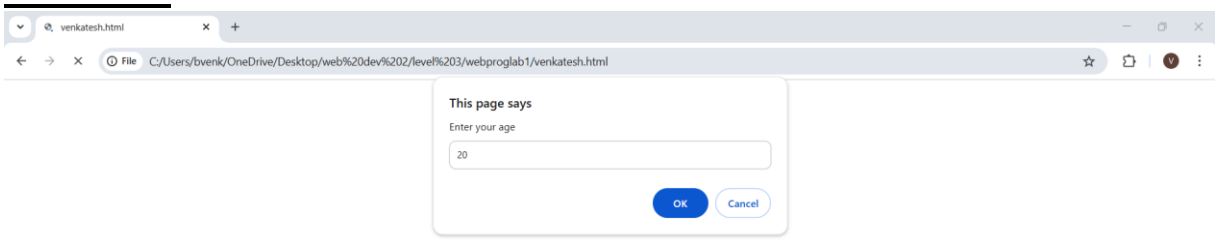
2. Write a JavaScript program to use prompt() to ask for the user's age and alert() to confirm whether the user is eligible to drive.

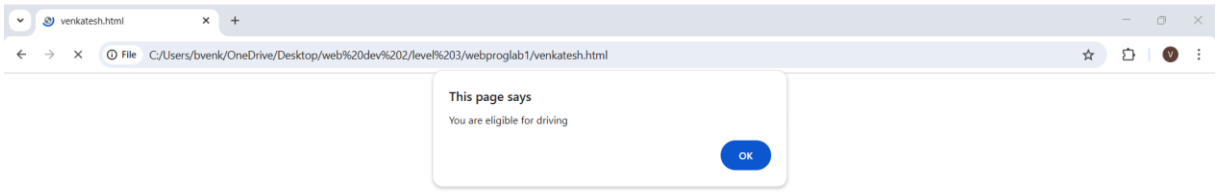
CODE

```
<html>
   <script>
      var x = prompt("Enter your age");
      if(x>=18)
   {
      alert("You are eligible for driving");
   }
   else
   {
      alert("You are not eligible for driving");
```

```
    }
    </script>
</html>
```

OUTPUT





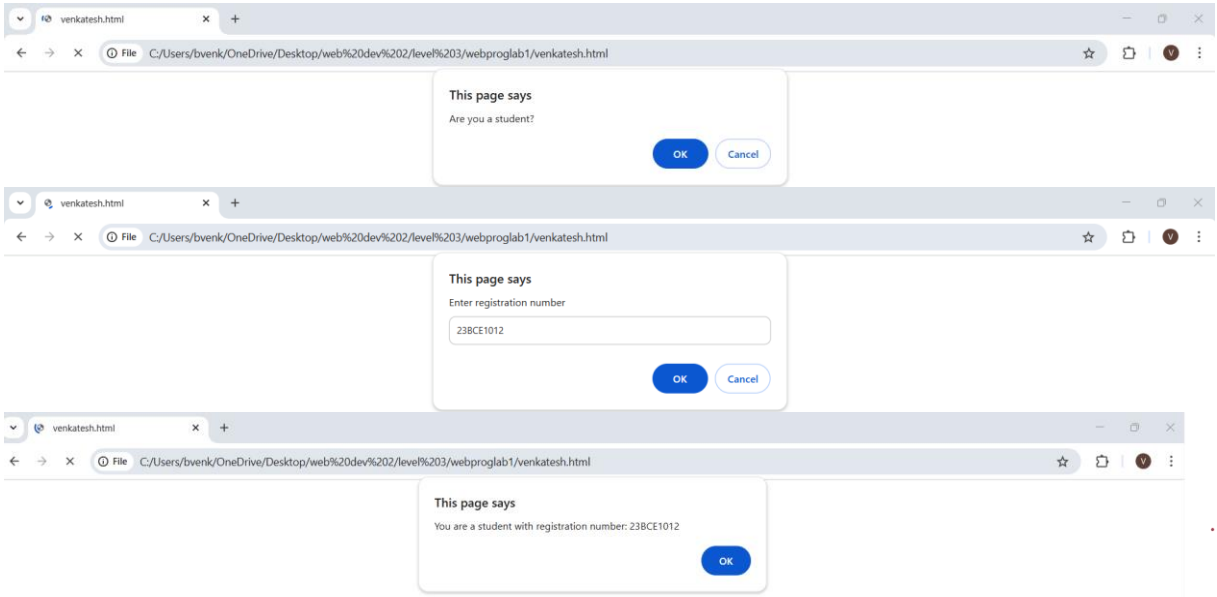
3. Write a JavaScript program to use confirm() to ask the user for confirmation whether he is a student while entering his registration number.

CODE

```
<html>
    <script>

        var y = confirm("Are you a student?");
```

```
    if(y)
  {
    var x = prompt("Enter registration number");
    alert("You are a student with registration number: "+x);
  }
  else{
    alert("You are not a student");
  }

  </script>
</html>
```

OUTPUT



4. A General Service company hired you to calculate the labour cost and total charge for the services rendered to their client based on the formula given below:

Rate per hour : Rs.45/-

Labour cost : Rate per hour * hours work

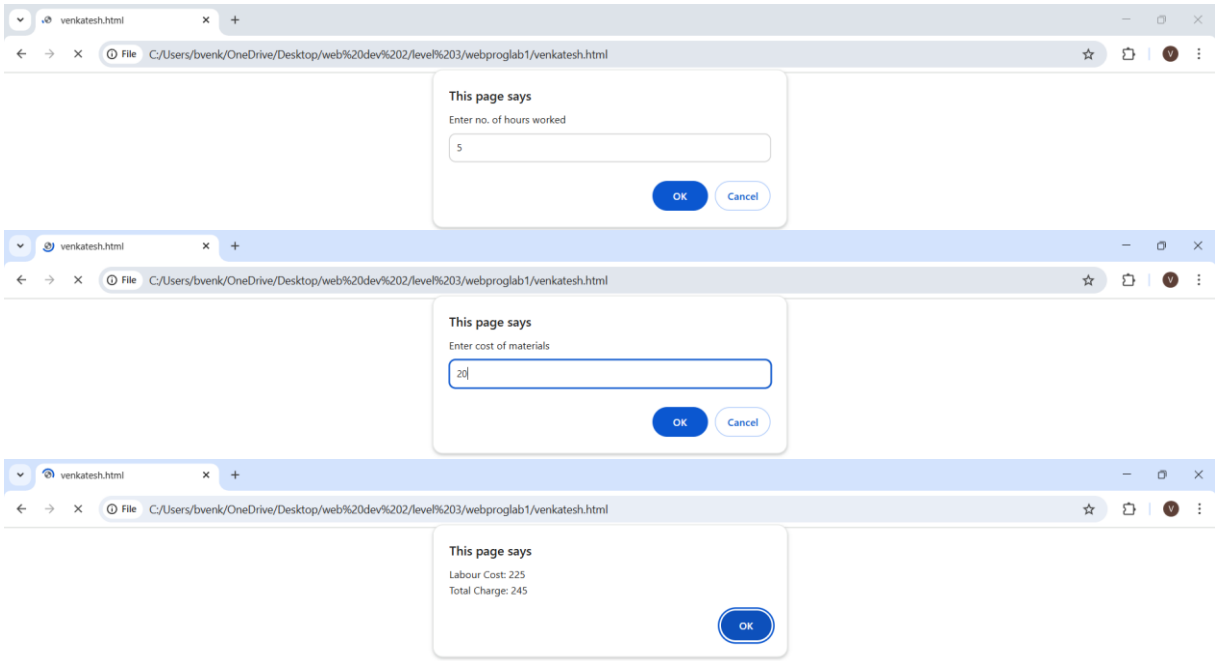
Total Charge : Labour cost + Cost of Materials.

Write a JavaScript program (Internal) using suitable pop-up boxes to read the necessary inputs and display the output.

CODE

```
<html>
   <script>
        var h = parseInt(prompt("Enter no. of hours worked"));
        var c = parseInt(prompt("Enter cost of materials"));
        alert("Labour Cost: "+h*45+"\nTotal Charge: "+((h*45)+c));
   </script>
</html>
```

OUTPUT



5. Write a JavaScript program to accept reg.no and name.

Display your registration number as shown below by applying inline style using document.write.

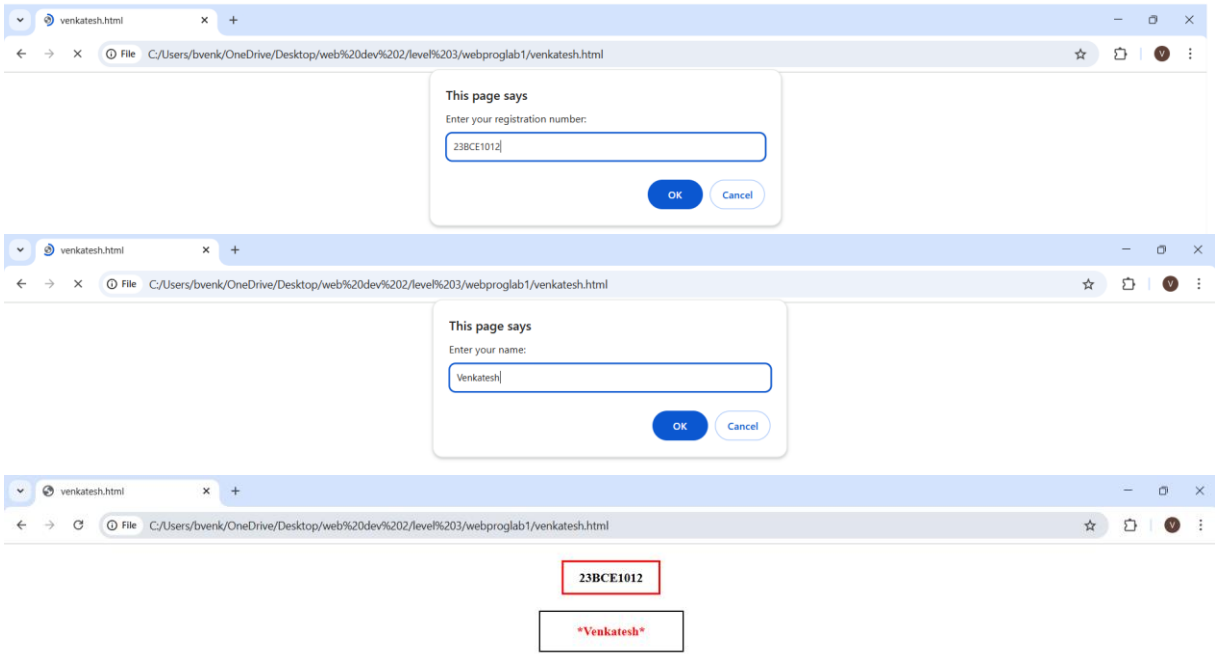
Display your name as shown below by applying inline style using innerHTML.

CODE

```
<html>
   <body>

<script>

   let regNo = prompt("Enter your registration number:");

   let name = prompt("Enter your name:");
```

```
    document.write(`<div style="border: 3px solid red; padding: 10px; text-align: center; width: 100px; margin: 20px auto; font-weight: bold;">${regNo}</div>`);

    document.body.innerHTML += `<div style="border: 2px solid black; padding: 15px; text-align: center; width: 150px; margin: 20px auto; color: red; font-weight: bold; ">*${name}*</div>`;

</script>


</body>

</html>
```

OUTPUT



6. A circus has an entry ticket booth. Visitors come to the booth, and order tickets for adults and children. The booth attendant collects the entry fee, and prints out the tickets. Write a JavaScript program (External) to display the total amount in a given text box on clicking ‘Total’ button.

CODE

HTML

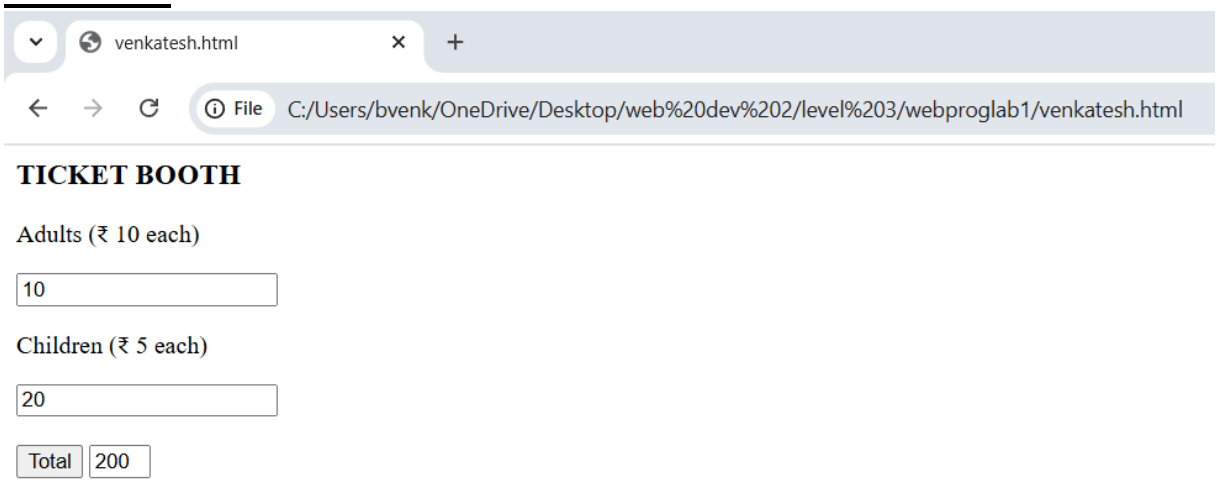
```
<html>
   <script src="external.js" type="text/javascript">
   </script>
   <style>
      .box
      {
         display:inline-block;
      }
   </style>
   <body>
      <h3>TICKET BOOTH</h3>
      <p>Adults (&#8377 10 each)</p>
      <input type="text" id="adults" class="box"></body>
      <p>Children (&#8377 5 each)</p>
```

```
        <input type="text" id="children"
class="box"></html><br><br>
        <button onclick="compute()">Total</button>
        <input type="text" id="res" style="width:40px"></input>
    </body>
</html>
```

JS

```
function compute()
{
    document.getElementById("res").value =
(10*parseInt(document.getElementById("adults").value)) +
(5*parseInt(document.getElementById("children").value));
}
```

OUTPUT



WEB PROGRAMMING

ASSIGNMENT – 9

-B Venkatesh
(23BCE1012)

1)The following are the daily temperature recordings of NEWYORK city (In Fahrenheit)
55,62,68,74,59,45,41,58,60,67,65,78,82,88,91,92,90,93,87,80,78,79,72,68,61,59,55,65 Your JavaScript program should count and print the number of HOT days (High Temperature: 85 or higher), the number of PLEASANT days (High temperature: 60-84) and the number of COLD days (High temperature<60) in the city. It should also display the category of each temperature in an HTML Table.

CODE

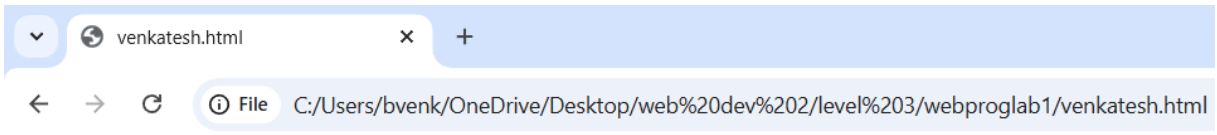
```
<html>
  <head>
    <style>
      table ,th,td{
        border: 1px solid black;

      }
    </style>
```

</head>

```
<script>
    const x =
[55,62,68,74,59,45,41,58,60,67,65,78,82,88,91,92,90,93,87,8
0,78,79,72,68,61,59,55,65];
    let hot=0,cold=0,len = 0,pl = 0;
    len = x.length;
    let tab = "<table cellspacing = 0><tr><th>Temperature
</th><th>Category</th></tr>"
    for(let i=0;i<len;i++){
        let cat = '';
        if(x[i]<60){
            cat = 'Cold'
            cold++;
        }
        else if(x[i]<=84){
            cat = 'Pleasant'
            pl++;
        }
        else{
            cat = 'Hot'
            hot++;
        }
```

```
        tab += "<tr><td>" + x[i] + "</td><td>"+ cat +
"</td></tr>";
      }
      tab += "</table><br>"
      document.write(tab);
      document.write("Number of cold days is: " + cold +
"<br>");
      document.write("Number of pleasant days is: " + pl +
"<br>" );
      document.write("Number of hot days is: " + hot);
   </script>
</html>
```

OUTPUT



Temperature	Category
55	Cold
62	Pleasant
68	Pleasant
74	Pleasant
59	Cold
45	Cold
41	Cold
58	Cold
60	Pleasant
67	Pleasant
65	Pleasant
78	Pleasant
82	Pleasant
88	Hot
91	Hot
92	Hot
90	Hot
93	Hot
87	Hot
80	Pleasant
78	Pleasant
79	Pleasant
72	Pleasant
68	Pleasant
61	Pleasant
59	Cold
55	Cold
65	Pleasant

Number of cold days: 7
Number of pleasant days: 15
Number of hot days: 6

2)A small airline has just purchased a computer for its newly automated reservations system. Write a JavaScript program to assign seats on each flight (capacity: 10 seats). Your program should display the following:

- If the person types 1, assign a seat in the first-class section (seats 1–5).
- If the person types 2, assign a seat in the economy section (seats 6–10).
- When the first-class section is full, your program should ask the person if it is acceptable to be placed in the economy section (and vice versa)

Allot the seats based on the above choices. Print a boarding pass indicating the person's name, seat number and class

Use one-dimensional array to represent the seating chart of the plane. Initialize all the elements of the array to 0 to indicate that all the seats are empty. As each seat is assigned, set the corresponding elements of the array to 1 to indicate that the seat is no longer available.

CODE

```
<!DOCTYPE html>

<html>

<head>
```

```
    <title>Seat Booking</title>
</head>
<body>
    <script>
        const seats = [0, 0, 0, 0, 0, 0, 0, 0, 0, 0];
        const names = [];
        const num = [];
        const clas = [];

        function hello() {
            var name = prompt("Enter your name");
            names.push(name);
            var x = prompt("First class(1) or economy class(2):");
            var flag = { value: 0 };

            if (x == 1) {
                checkFirstClass(flag);
```

```
            if (flag.value == 0) {

                var b = confirm("Seats full, would you like to book
in economy class?");

                if (b) {

                    checkEconomyClass(flag);

                    if (flag.value == 1) {

                        x = 0;

                        clas.push(x);

                        alert("Booking successful");

                        var t = confirm("Would you like to book
another seat?");

                        if (t) {

                            hello();

                        } else {

                            printBookingDetails();

                        }

                    }

                }
```

```
            } else {
                clas.push(x);
                alert("Booking successful");
                var t = confirm("Would you like to book another
seat?");
                if (t) {
                    hello();
                } else {
                    printBookingDetails();
                }
            }
        } else {
            checkEconomyClass(flag);
            if (flag.value == 0) {
                var y = confirm("Seats are full, would you like to
book in first class?");
                if (y) {
                    checkFirstClass(flag);
```

```
                if (flag.value == 1) {
                    x = 1;
                    clas.push(x);
                    alert("Booking successful");
                    var p = confirm("Would you like to book
another seat?");
                    if (p) {
                        hello();
                    } else {
                        printBookingDetails();
                    }
                }
            }
        } else {
            clas.push(x);
            alert("Booking successful");
            var t = confirm("Would you like to book another
seat?");
```

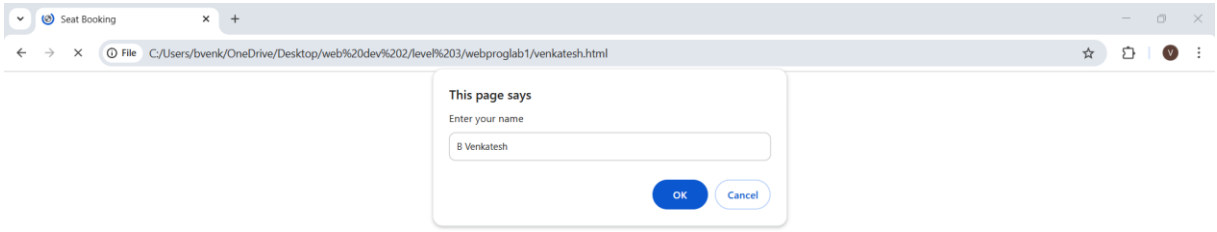
```
            if (t) {
                hello();
            } else {
                printBookingDetails();
            }
        }
    }
}

function checkFirstClass(flag) {
    let seatNo = 0;
    for (let i = 0; i < seats.length / 2; i++) {
        if (seats[i] == 0) {
            seats[i] = 1;
            seatNo = i + 1;
            num.push(seatNo);
            flag.value = 1;
```

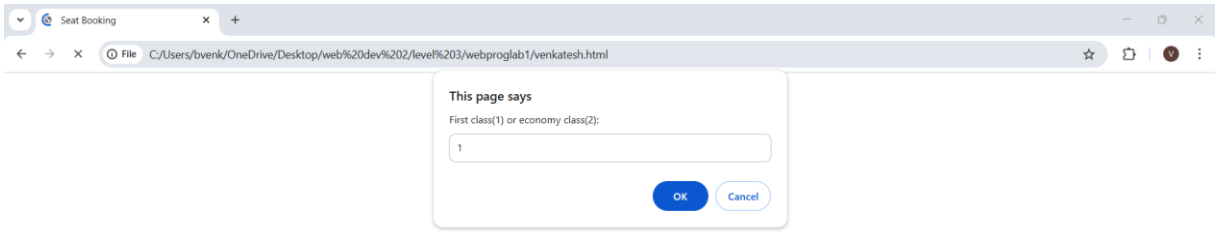
```
            break;
        }
    }
}

function checkEconomyClass(flag) {
    let seatNo = 0;
    for (let i = seats.length / 2; i < seats.length; i++) {
        if (seats[i] == 0) {
            seats[i] = 1;
            seatNo = i + 1;
            num.push(seatNo);
            flag.value = 1;
            break;
        }
    }
}
```

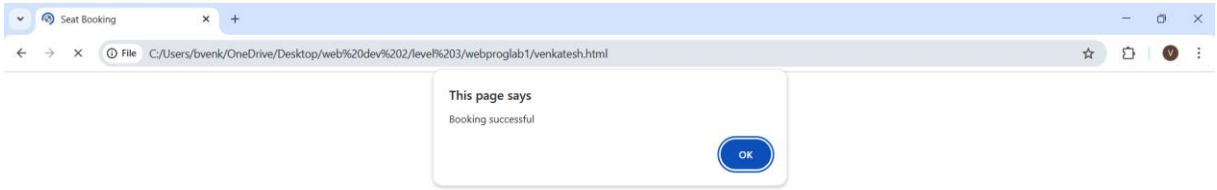
```
    function printBookingDetails() {
        for (let i = 0; i < names.length; i++) {
            document.write("Name: " + names[i] + "<br>");
            document.write("Seat Number: " + num[i] + "<br>");
            document.write("Class: ");
            if (clas[i] == 1) {
                document.write("First-Class <br>");
            } else {
                document.write("Economy-Class <br>");
            }
            document.write("<br>");
        }
    }

    hello();
</script>
```

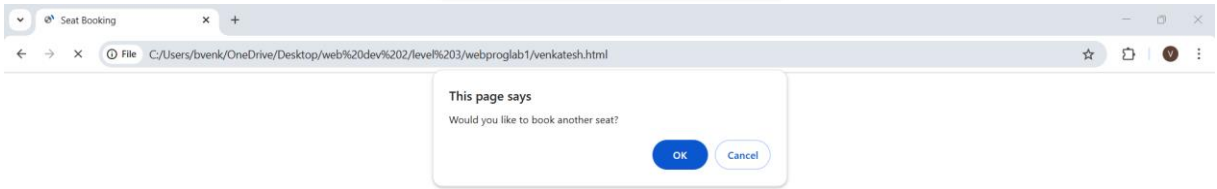
```
</body>

</html>
```

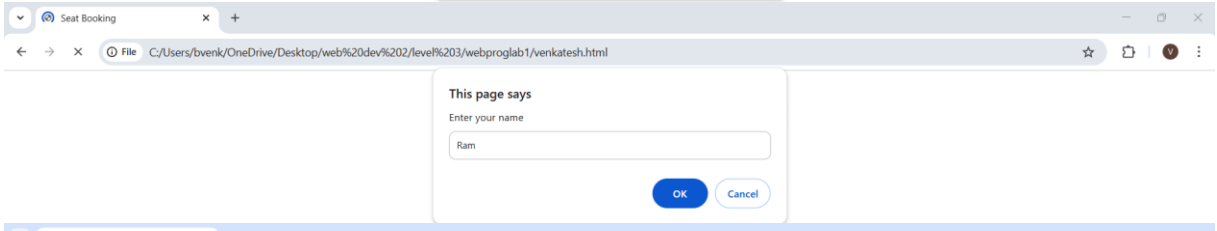
OUTPUT

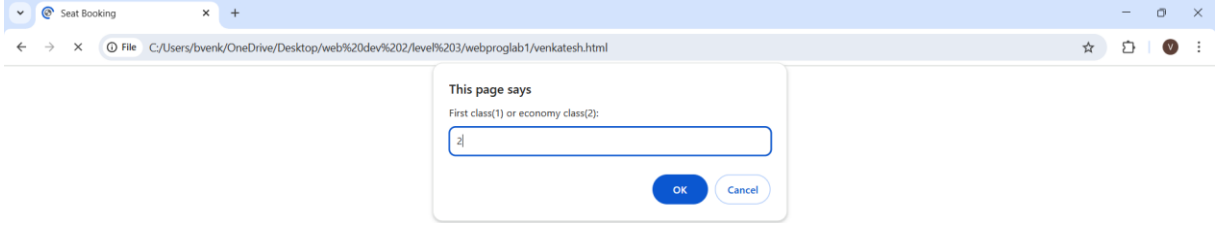




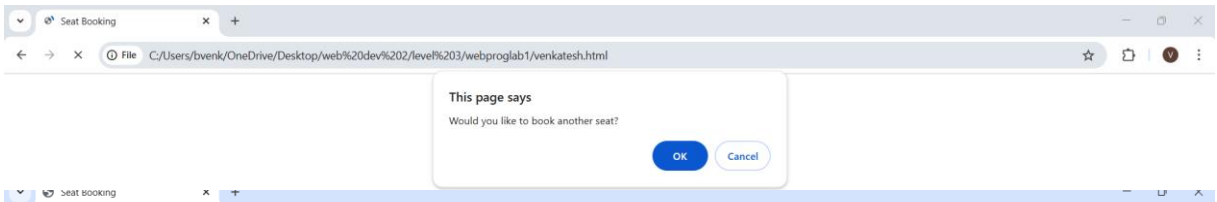


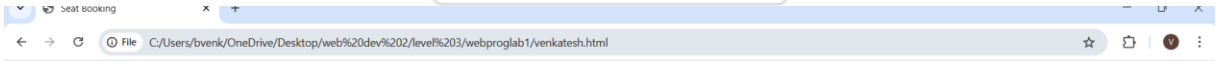






-Venkatesh B (23BCE1012)





Name: B Venkatesh
Seat Number: 1
Class: First-Class

Name: Ram
Seat Number: 6
Class: Economy-Class

3)Use Javascript to develop the web page as given in Fig.1 to calculate the Body Mass Index (BMI) and display the adult's status through appropriate popup boxes. For example, the

BMI rate of the men is 21, and then prints the status through a popup box as "Ideal Range" by triggering the event on a "Calculate" button.

CODE

HTML

```
<!DOCTYPE html>
<html lang="en">
   <head>
      <style>
         table{
            border:1px solid black;
```

```
            padding:1px;
            width:100px;
        }
        th,td{
            border:1px solid black;
            padding:1px;
        }

    </style>
</head>
<script src="EX9(3)JS.js" type="text/javascript"></script>
<body>
    <table>
        <tr>
            <th colspan="2">BMI Calculator
                <select id="genderI">
                    <option value="male">Male</option>
                    <option value="female">Female</option>
                </select>
            </th>
        </tr>
        <tr>
```

```
            <th colspan="2">Enter your Weight:<br>
                (pounds):<input type="text" id="poundsI">
            </th>
        </tr>
        <tr>
            <th colspan="2">Enter your Height:<br>
                (feet):<input type="text" id="feetI"><br><br>
                (inches):<input type="text" id="inchesI">
            </th>
        </tr>
        <tr>
            <td><div class=c><button
onclick="bmi()">Compute</button></div>
            </td>
        </tr>
        <tr>
            <th style="word-wrap:normal;width:30px">YOUR
BMI</th>
            <td><input type="text" id="res"></td>
        </tr>
    </table>
  </body>
```

```
</html>
```

JS

```
function bmi()
{
   var gender = document.getElementById("genderI").value;
   var pounds =
parseFloat(document.getElementById("poundsI").value);
   var feet =
parseFloat(document.getElementById("feetI").value);
   var inches =
parseFloat(document.getElementById("inchesI").value);
   var totalInches = (feet * 12) + inches;
   if (isNaN(pounds) || isNaN(feet) || isNaN(inches) ||
totalInches <= 0) {
      alert("Error: Please enter valid numeric values for weight
and height.");
      poundsI.value = "";
      feetI.value = "";
      inchesI.value = "";
      return;
   }
   else{
      var bmival = (pounds * 703)/(totalInches * totalInches);
```

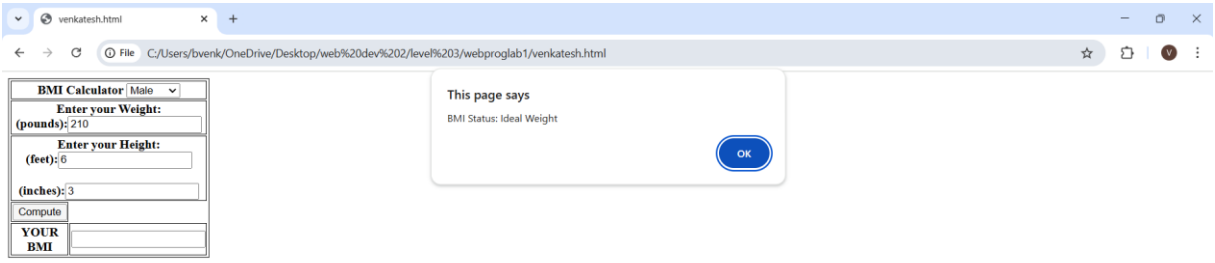
```
bmival.toFixed(2);
document.getElementById("res").value = bmival;
if (gender=="male")
   {
    if(bmival<=17.50)
    {
     alert("BMI Status : Anorexia");
    }
    else if (bmival<=20.70) {
     alert("BMI Status : Underweight");
    }
    else if (bmival<=26.40) {
     alert("BMI Status : Ideal Weight");
    }
    else if (bmival<=27.80) {
     alert("BMI Status : Marginally overweight range");
    }
    else if (bmival<=31.10) {
     alert("BMI Status : Overweight range");
    }
    else{
```

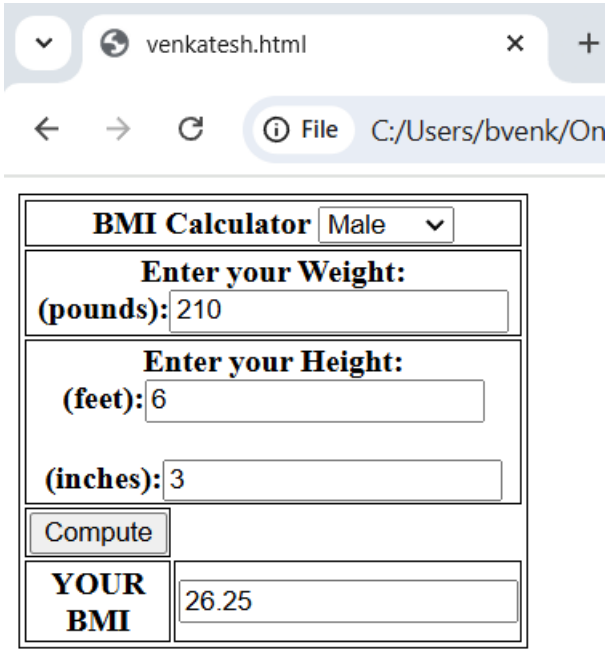
```
            alert("BMI Status : Very overweight or Obese
range");
           }

         }
       else
         {
            if(bmival<=17.50)
              {
               alert("BMI Status : Anorexia");
              }
              else if (bmival<=19.10) {
               alert("BMI Status : Underweight");
              }
              else if (bmival<=25.80) {
               alert("BMI Status : Ideal Weight");
              }
              else if (bmival<=27.30) {
               alert("BMI Status : Marginally overweight
range");

              }
              else if (bmival<=32.30) {
               alert("BMI Status : Overweight range");
```

```
            }
            else{
              alert("BMI Status : Very overweight or Obese
range");
```

```
        }
    }
  }
}
```

OUTPUT





-Venkatesh B (23BCE1012)