

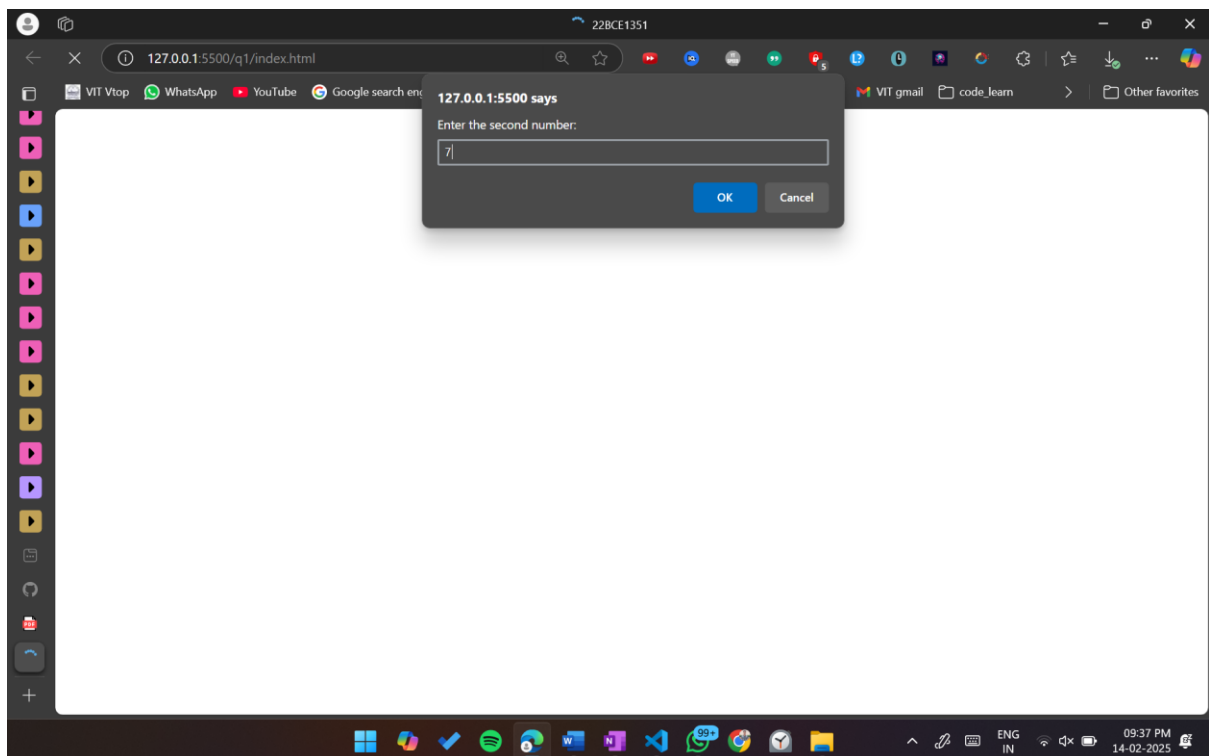
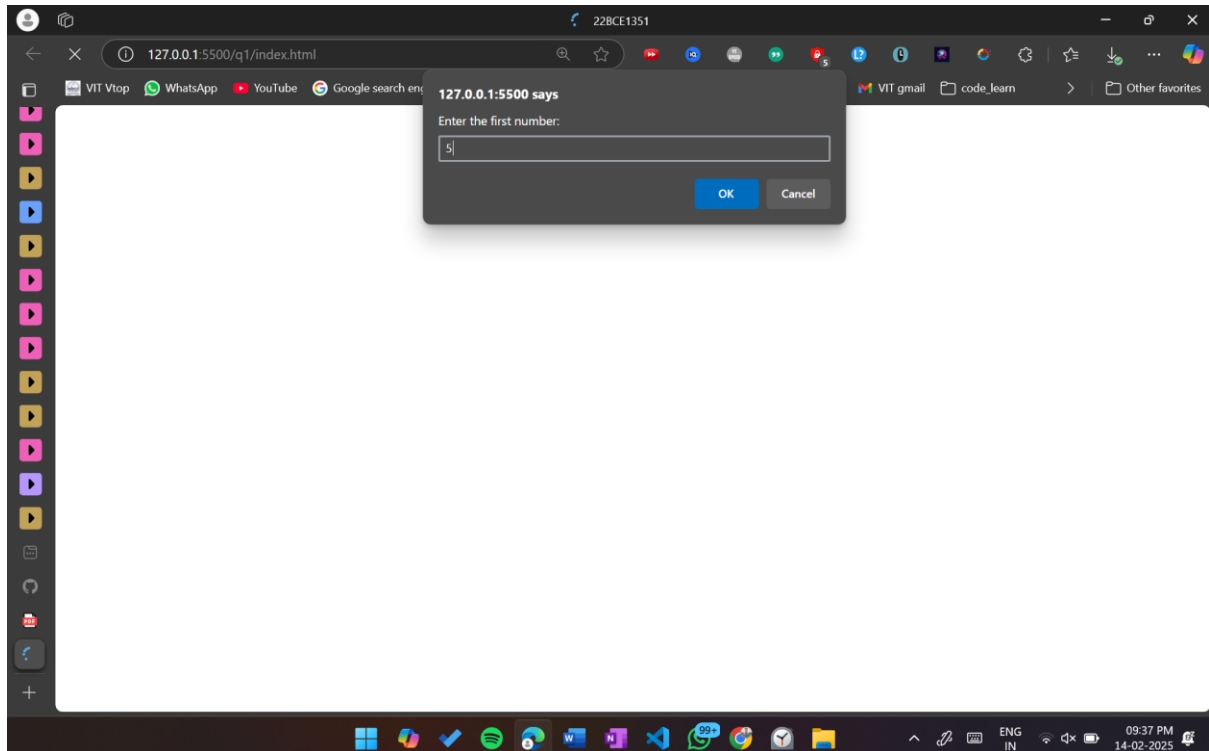
# Web Lab Exercise 8

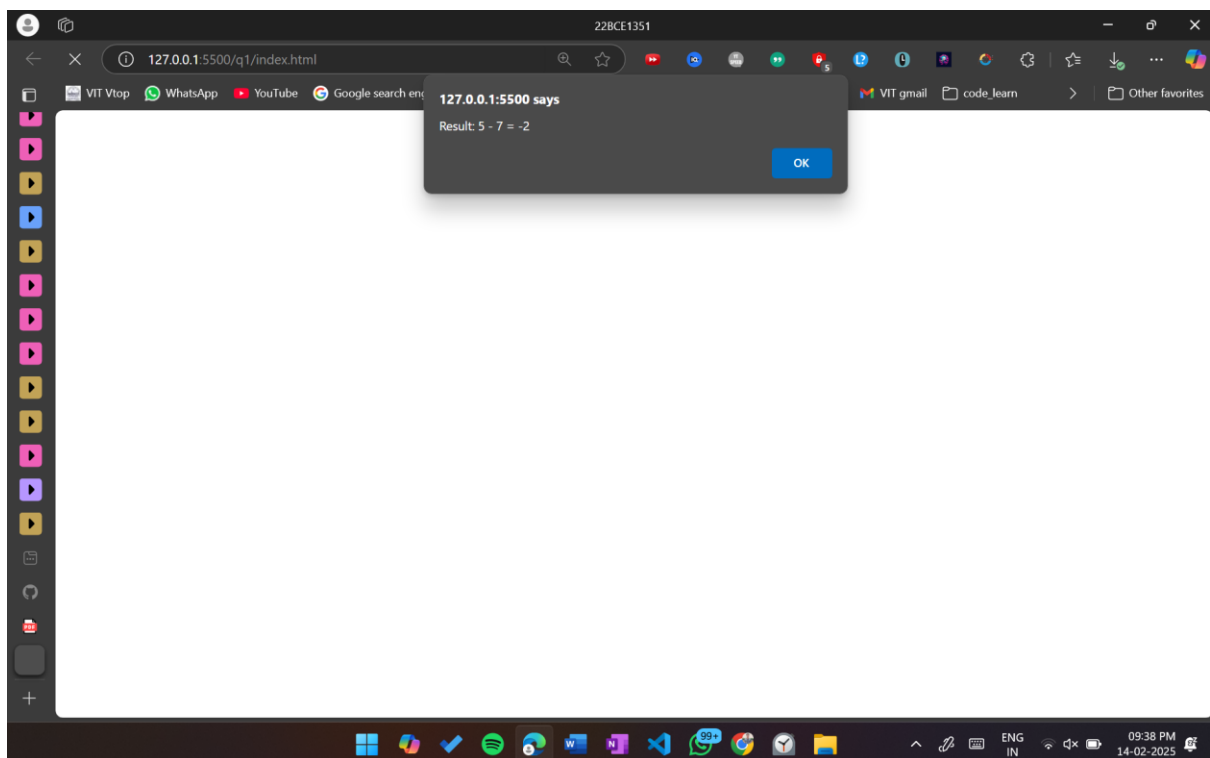
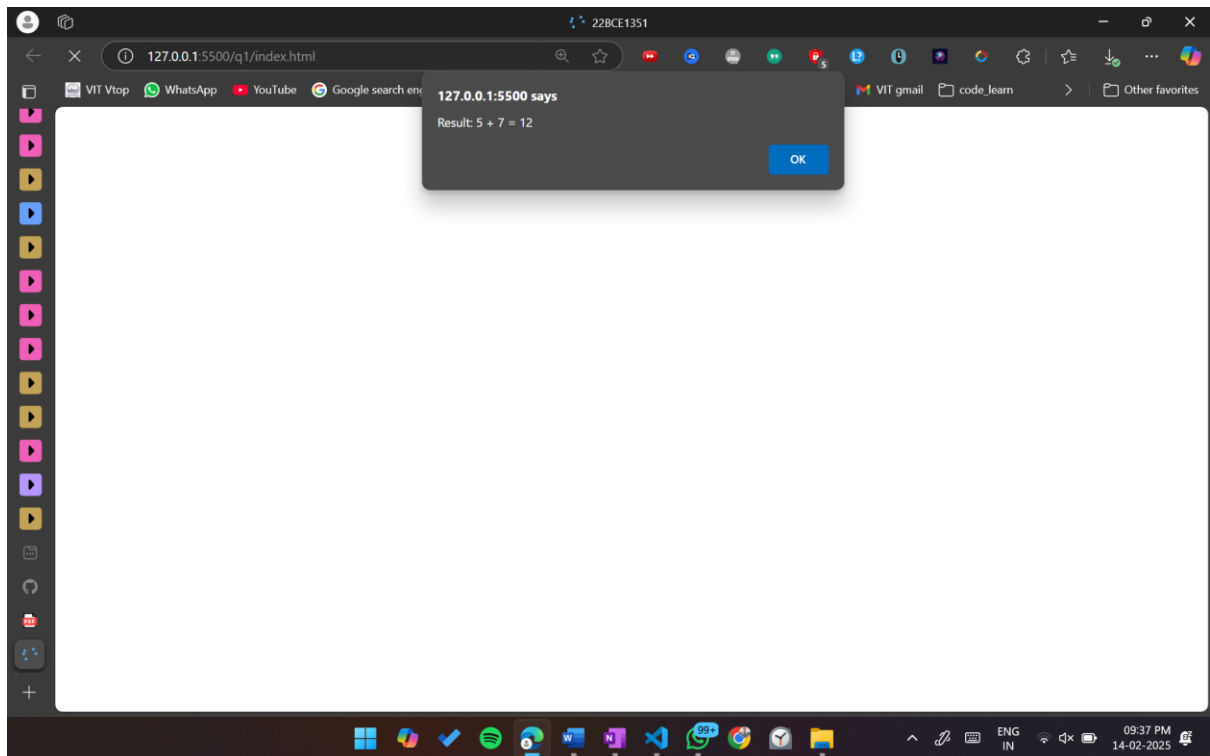


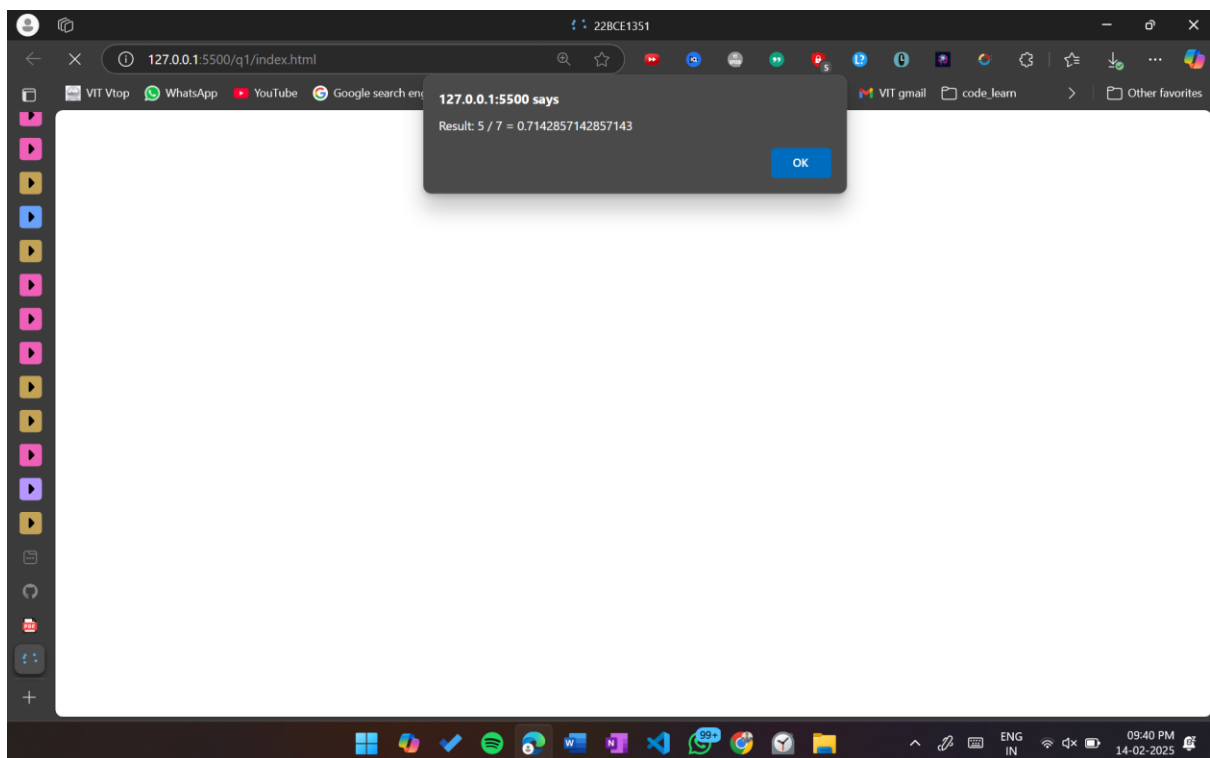
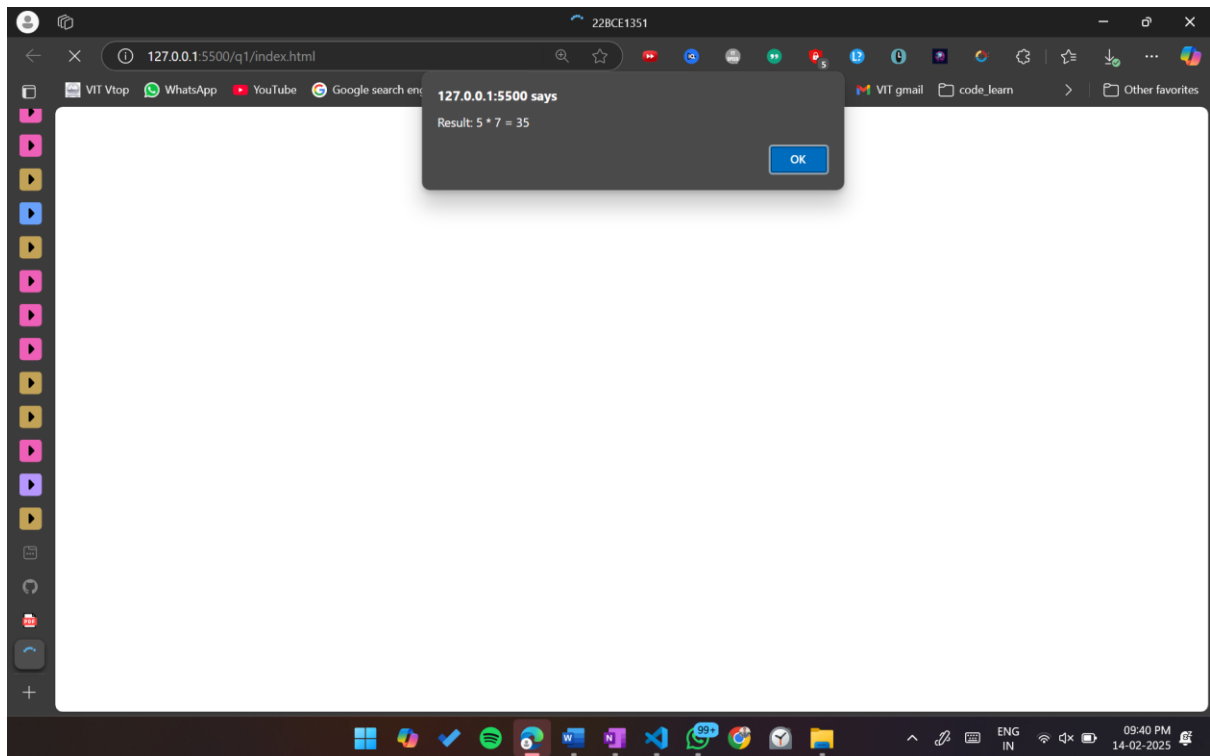
Name	Satyaprakash Swain
Reg. no	22BCE1351
Professor	Jenila Livingston M
Subject	Web Programming
Slot	L15+L16+L19+L20
Venue	AB3 – 202

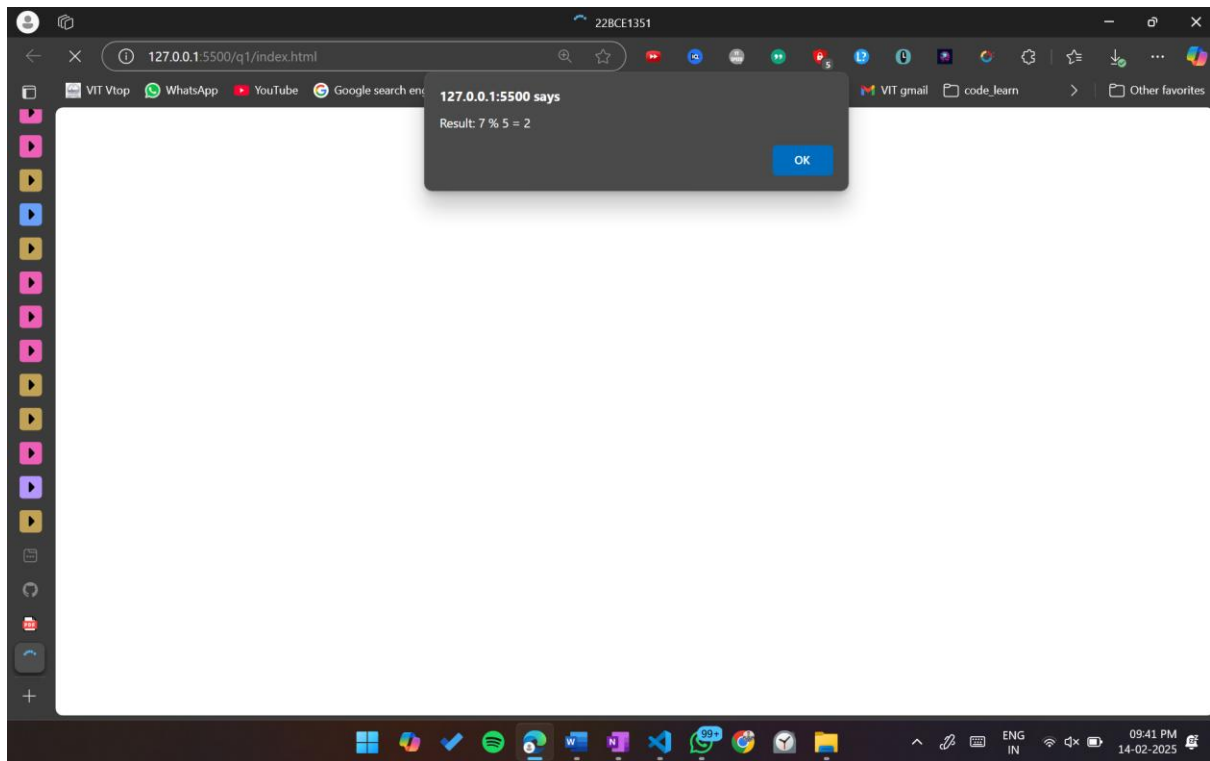
## JavaScript Basics

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.









```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>22BCE1351</title>
</head>

<body>
  <script>
    function calculator(){
      let num1 = parseFloat(prompt("Enter the first number:"));
      let num2 = parseFloat(prompt("Enter the second number:"));

      let operation = prompt("Choose an operation: +, -, *, /, %");

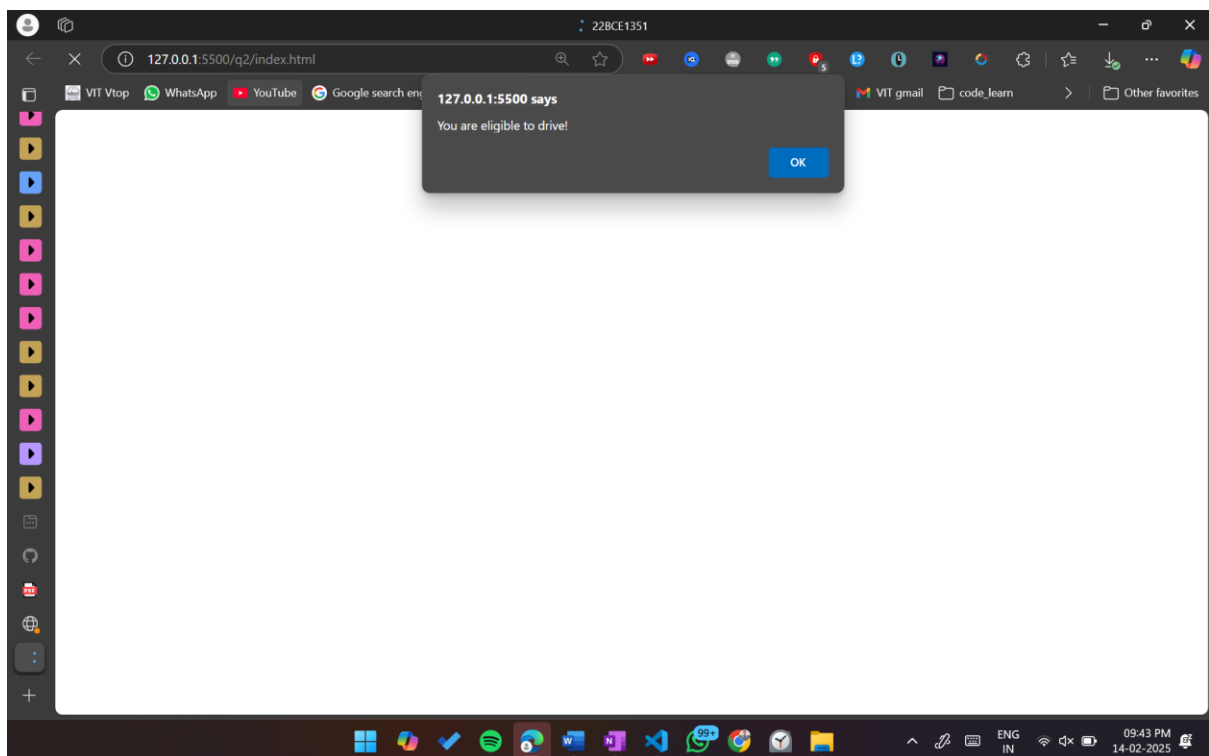
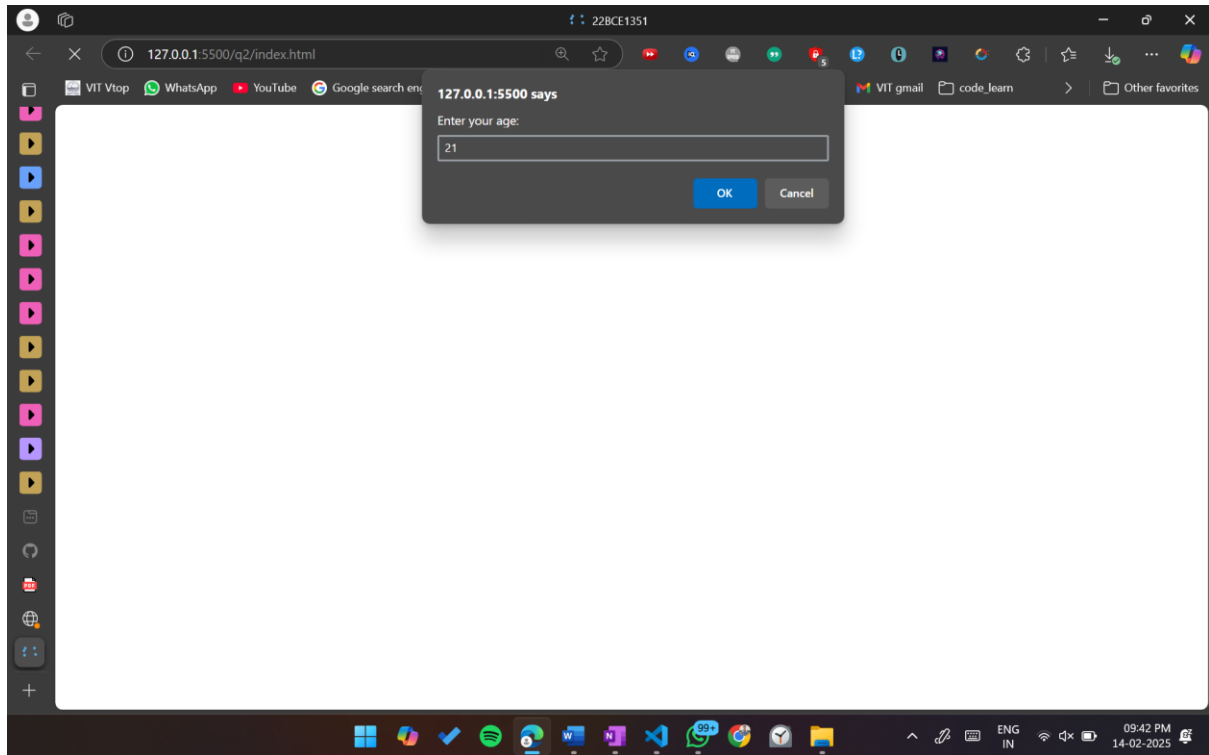
      let result;
      switch (operation) {
        case "+":
          result = num1 + num2;
          break;
        case "-":
          result = num1 - num2;
          break;
```

```
        case "*":
            result = num1 * num2;
            break;
        case "/":
            if (num2 !== 0) {
                result = num1 / num2;
            } else {
                alert("Error: Division by zero is not allowed!");
                return;
            }
            break;
        case "%":
            result = num1 % num2;
            break;
        default:
            alert("Invalid operation! Please enter +, -, *, /, or
%.");
            return;
    }

    alert(`Result: ${num1} ${operation} ${num2} = ${result}`);
}

calculator();
</script>
</body>
</html>
```

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.



```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>22BCE1351</title>
</head>

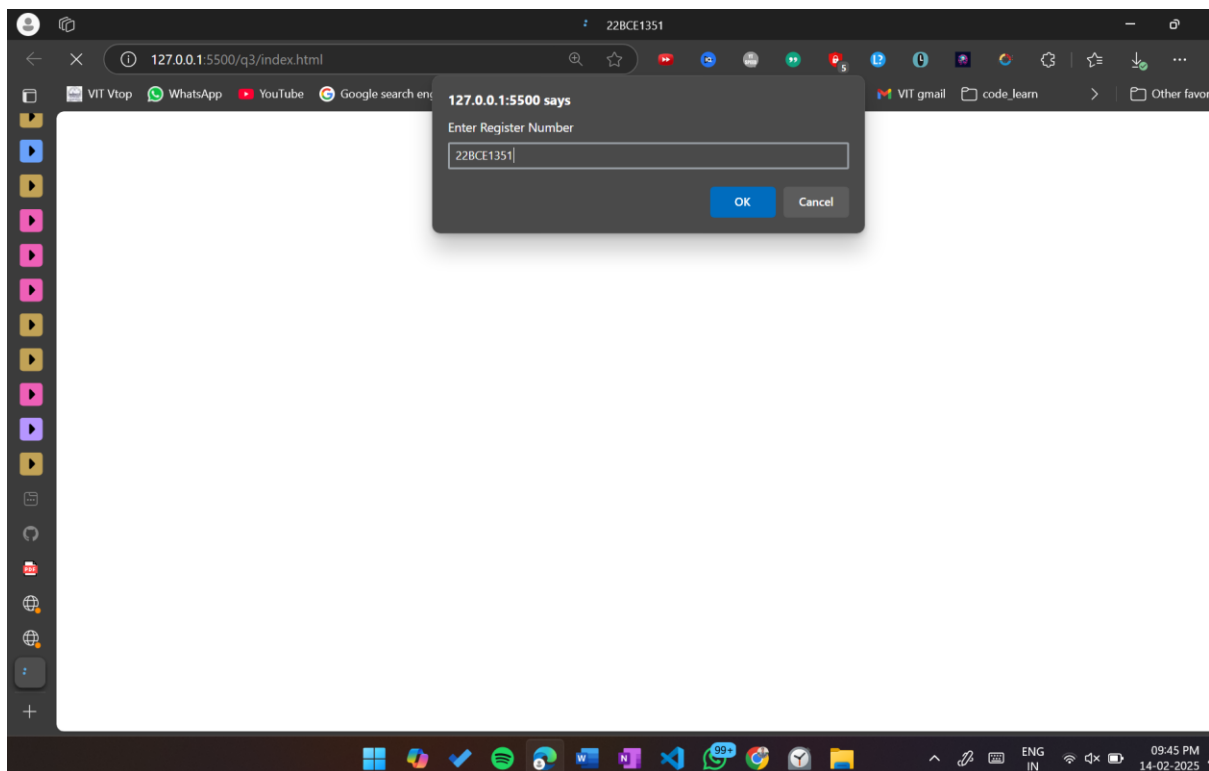
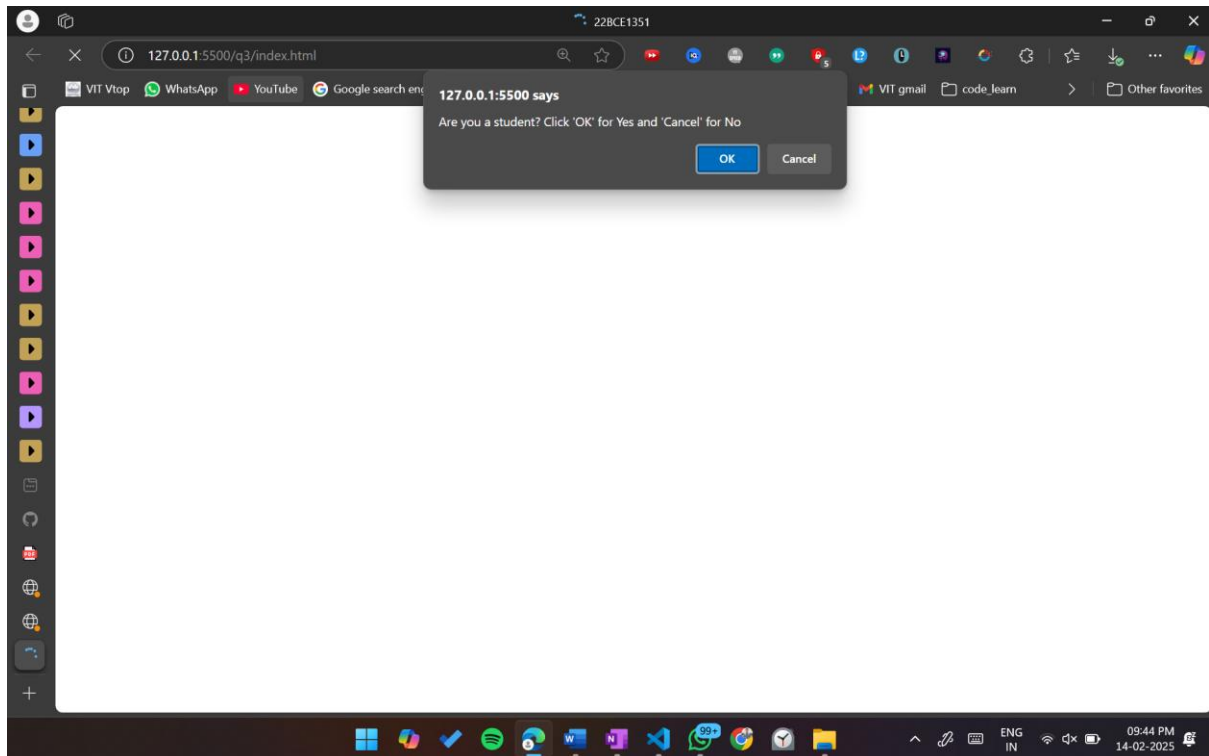
<body>
  <script>
    function checkEligibility() {
      let age = parseInt(prompt("Enter your age:"));

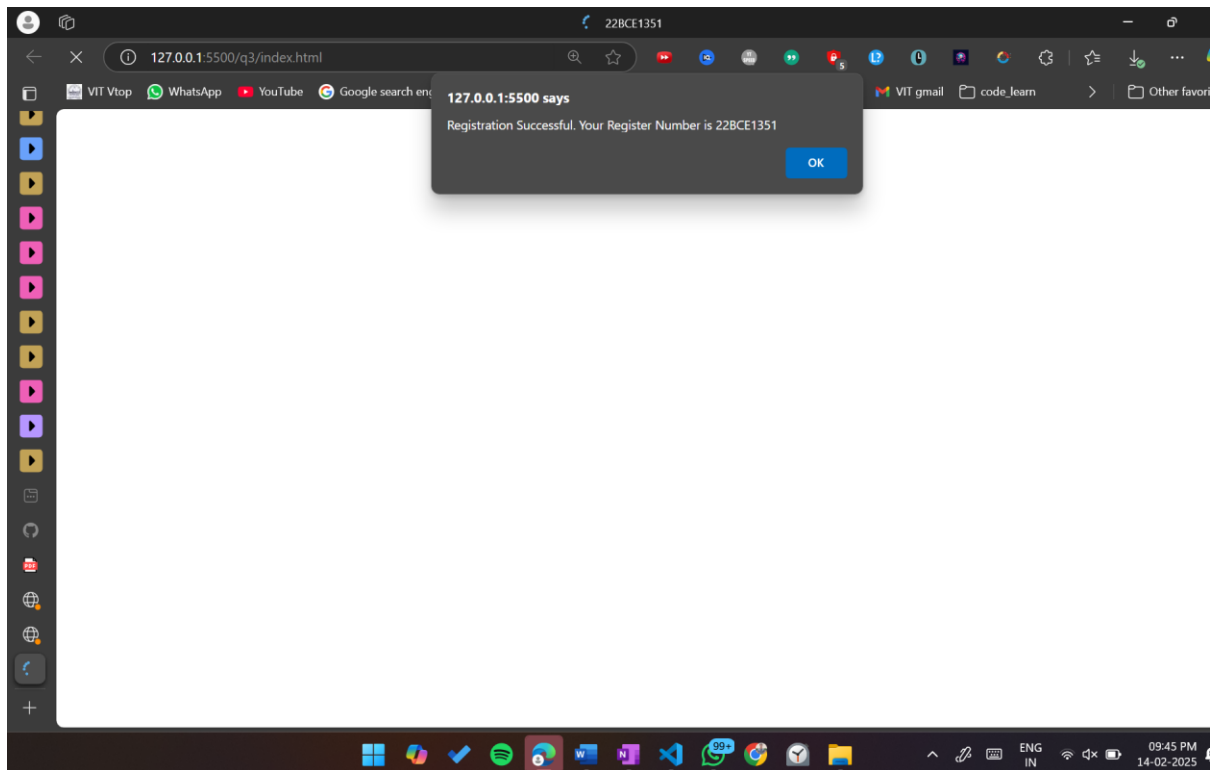
      if (age <= 0) {
        alert("Please enter a valid age!");
      } else if (age >= 18) {
        alert("You are eligible to drive!");
      } else {
        alert("Sorry, you are not eligible to drive yet.");
      }
    }

    checkEligibility();
  </script>
</body>
</html>
```



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





```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>22BCE1351</title>
</head>
<body>
  <script>
    let isStudent = confirm("Are you a student? Click 'OK' for Yes and
'Cancel' for No");

    if(isStudent){
      let regNum = prompt("Enter Register Number");
      if(regNum){
        alert("Registration Successful. Your Register Number is " +
regNum);
      }else{
        alert("Enter Valid Registration Number");
      }
    }
  </script>
</body>
</html>
```

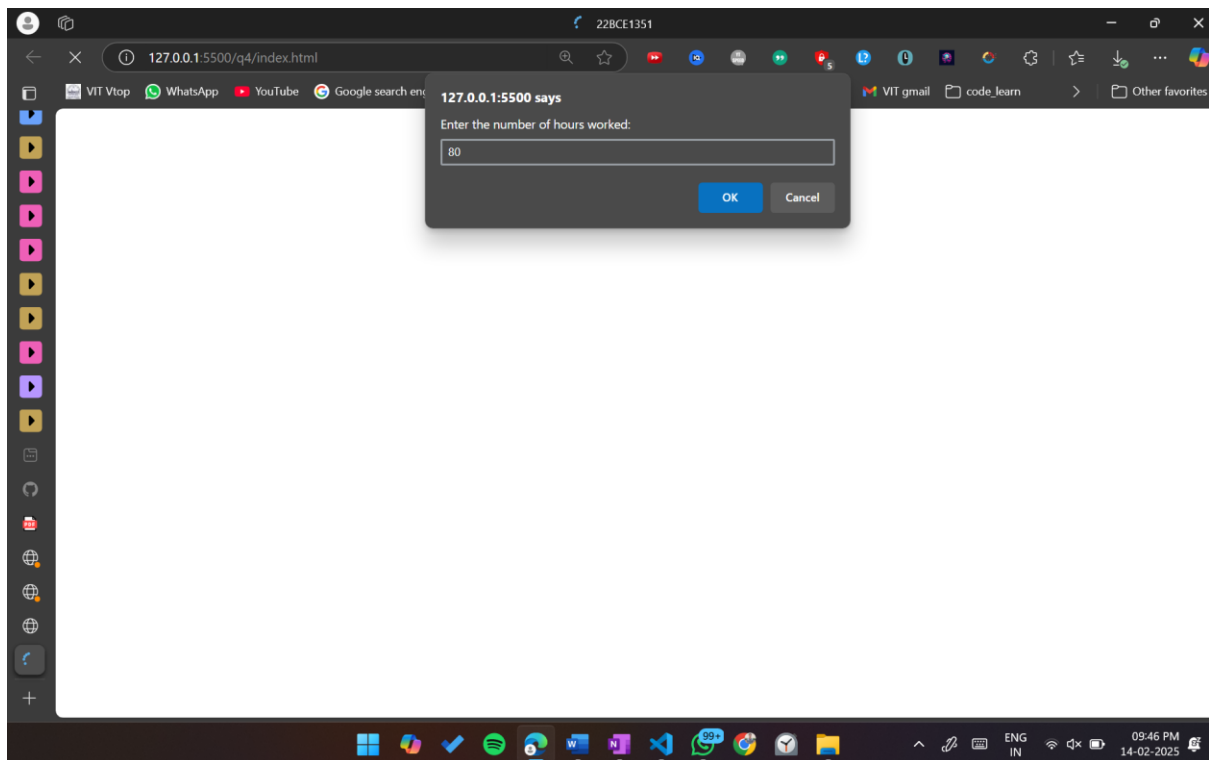
4. A General Service company hired you to calculate the labour cost and total charge for the services rendered to their client based on the formula given below:

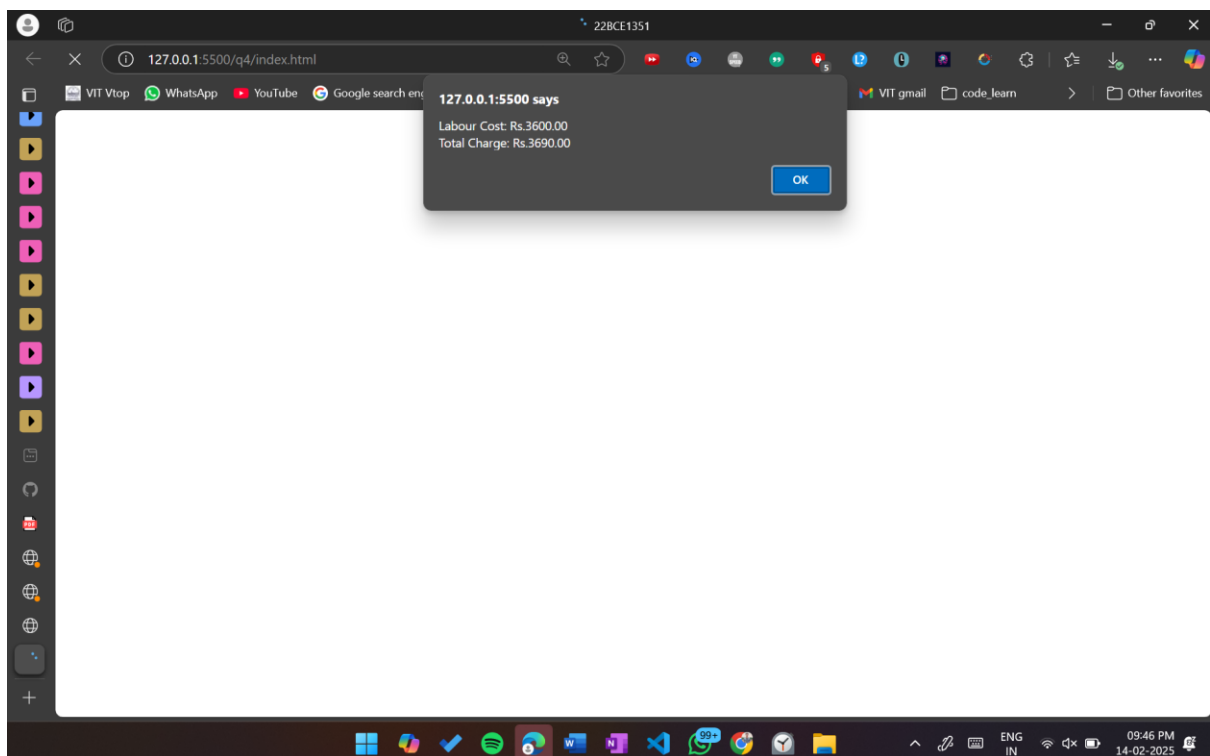
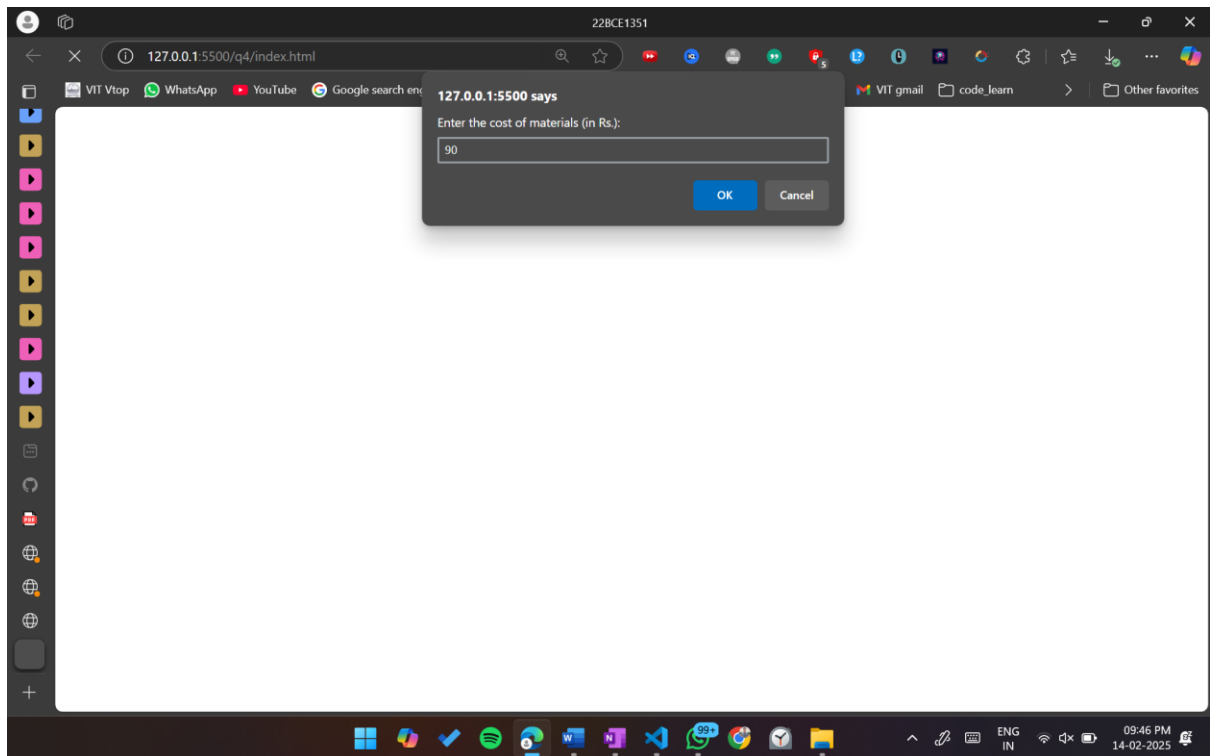
Rate per hour : Rs.45/-

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.





```
<!DOCTYPE html>
<html lang="en">

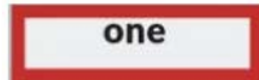
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>22BCE1351</title>
</head>

<body>
  <script>
    function calculateServiceCharge() {
      const ratePerHour = 45;
      let hoursWorked = parseFloat(prompt("Enter the number of hours
worked:"));
      let costOfMaterials = parseFloat(prompt("Enter the cost of
materials (in Rs.):"));
      if (hoursWorked < 0 || costOfMaterials < 0) {
        alert("Please enter valid numbers for hours worked and cost of
materials.");
        return;
      }
      let labourCost = ratePerHour * hoursWorked;
      let totalCharge = labourCost + costOfMaterials;
      alert(`Labour Cost: Rs.${labourCost.toFixed(2)}\nTotal Charge:
Rs.${totalCharge.toFixed(2)}`);
    }
    calculateServiceCharge();
  </script>
</body>

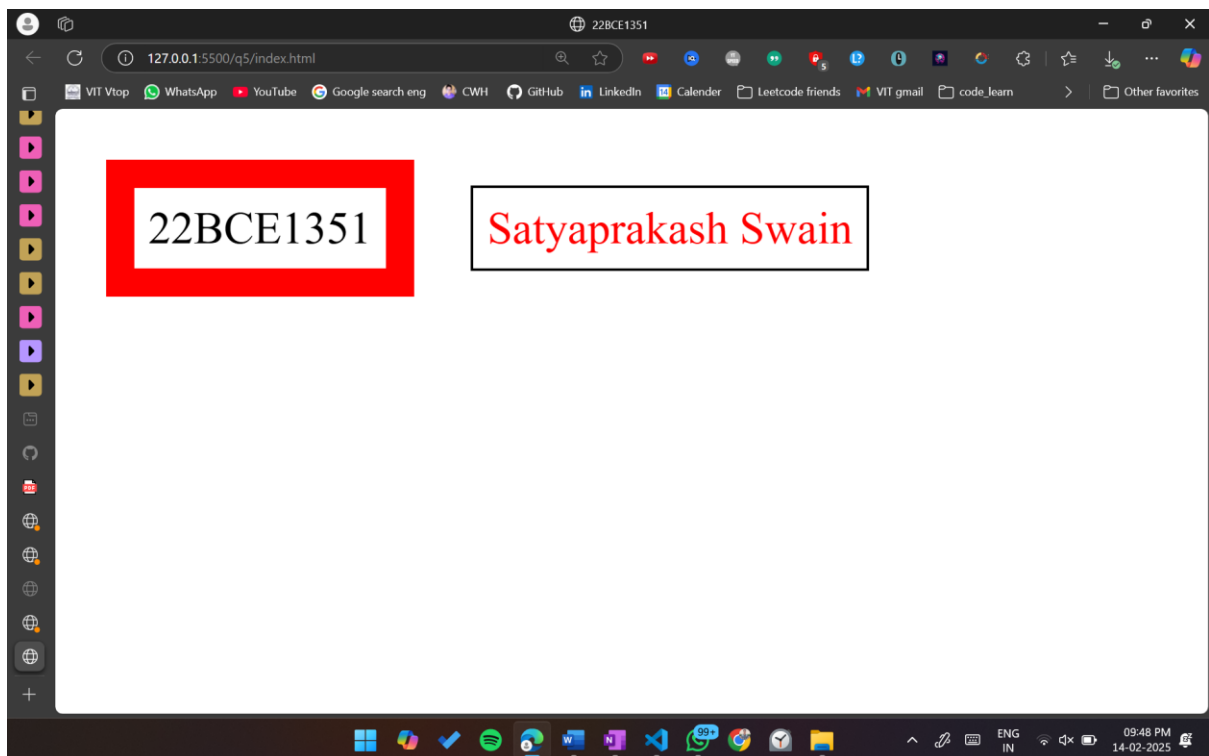
</html>
```

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.



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>22BCE1351</title>
</head>
<body>
  <script>
    function displayRegistrationNumber(regNo) {
      document.write('<span style="border: 10px solid red; display:
inline-block; padding: 5px; margin: 10px;">' + regNo + '</span>');
    }
  </script>
</body>
</html>
```

```
function displayName(name) {
    const nameElement = document.createElement('span');
    nameElement.style.border = '1px solid black';
    nameElement.style.display = 'inline-block';
    nameElement.style.padding = '5px';
    nameElement.style.margin = '10px';
    nameElement.style.color = 'red';
    nameElement.innerHTML = name;
    document.body.appendChild(nameElement);
}

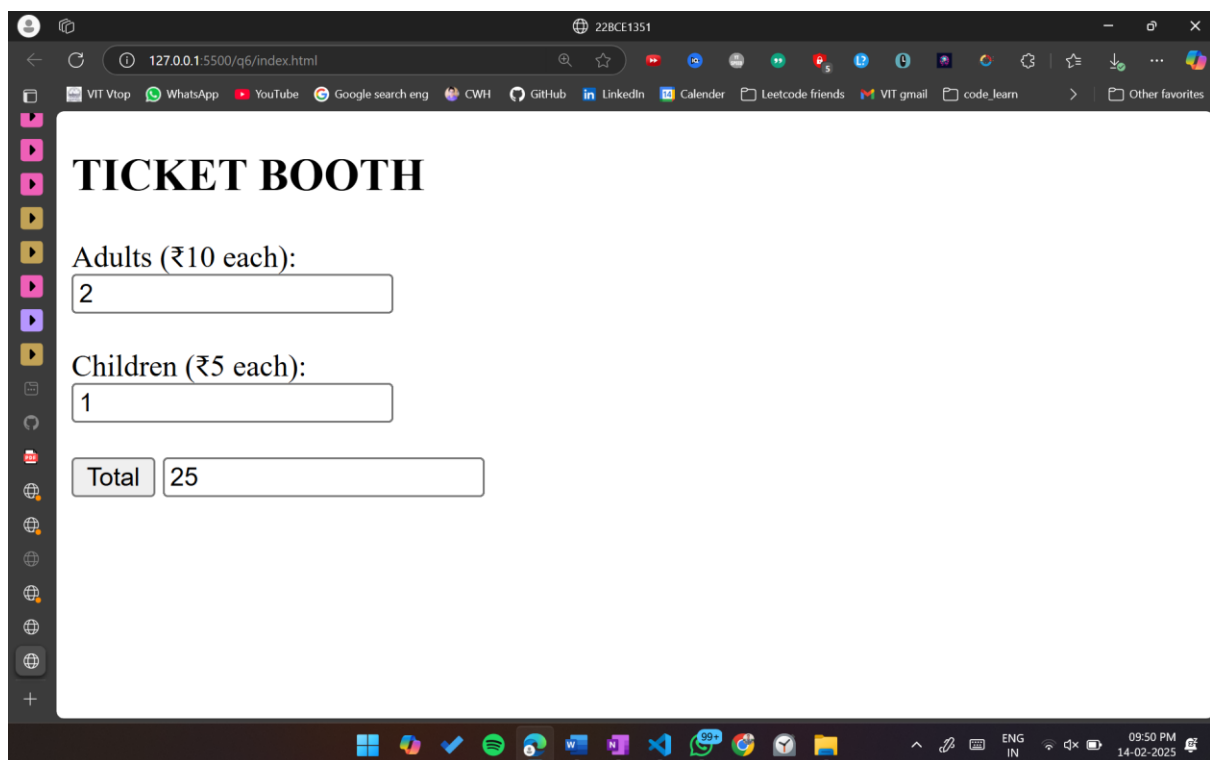
const regNo = "22BCE1351";
const name = "Satyaprakash Swain";
displayRegistrationNumber(regNo);
displayName(name);
</script>
</body>
</html>
```

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.

**TICKET BOOTH**

Adults (₹10 each)

Children (₹5 each)



Html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>22BCE1351</title>
```



```
<script src="script.js"></script>
</head>
<body>
  <h2>TICKET BOOTH</h2>
  <label for="adults">Adults (₹10 each):</label><br>
  <input type="number" name="adults" id="adults" >
  <br>
  <br>
  <label for="children">Children (₹5 each):</label><br>
  <input type="number" name="children" id="children">
  <br>
  <br>
  <button onclick="calcTotal()">Total</button>
  <input type="number" id="total">
</body>
</html>
```

Js

```
function calcTotal(){
  let adultPrice = 10;
  let childrenPrice = 5;

  let adultTickets = document.getElementById("adults").value || 0;
  let childTickets = document.getElementById("children").value || 0;

  let totalPrice = adultPrice*adultTickets + childrenPrice*childTickets;

  let totalField = document.getElementById("total");
  totalField.value = totalPrice;
}
```

Thank!  
You!