**Question 7**

1. Write a JavaScript code that has two text boxes and 4 buttons of +-\*. /. It should do the calculation as per the button pressed. Also, it should raise an alert if the user enters other than numbers in both textboxes and leave them empty.

Sol**: Html code for this question**

<!DOCTYPE html>

<html>

<head>

  <title>Calculator</title>

</head>

<body>

  <input type="text" id="num1" placeholder="Enter number 1">

  <input type="text" id="num2" placeholder="Enter number 2">

  <button onclick="add()">+</button>

  <button onclick="subtract()">-</button>

  <button onclick="multiply()">\*</button>

  <button onclick="divide()">/</button>

    <p>Ans:</p>

  <p id="ans"></p>

  <script src="jsfileq7.js"></script>

</body>

</html>

**Here’s JavaScript code**

function add() {

    let num1 = document.getElementById('num1').value;

    let num2 = document.getElementById('num2').value;

    if (num1 === '' || num2 === '' || isNaN(num1) || isNaN(num2)) {

      alert('Please enter valid numbers in both text boxes');

      return;

    }

    var sum = parseFloat(num1) + parseFloat(num2);

    document.getElementById('ans').innerText = sum;

  }

  function subtract() {

    let num1 = document.getElementById('num1').value;

    let num2 = document.getElementById('num2').value;

    if (num1 === '' || num2 === '' || isNaN(num1) || isNaN(num2)) {

      alert('Please enter valid numbers in both text boxes');

      return;

    }

    var sub = parseFloat(num1) - parseFloat(num2);

    document.getElementById('ans').innerText = sub;

  }

  function multiply(){

    let num1 = document.getElementById('num1').value;

    let num2 = document.getElementById('num2').value;

    if(num1 === '' || num2 === '' || isNaN(num1) || isNaN(num2)){

        alert('please enter valid numbers in both text boxes');

        return;

    }

    var mul = parseFloat(num1) \* parseFloat(num2);

    document.getElementById('ans').innerHTML = mul;

  }

  function divide(){

    let num1 = document.getElementById('num1').value;

    let num2 = document.getElementById('num2').value;

    if(num1 === '' || num2 === '' || isNaN(num1) || isNaN(num2)){

        alert('please enter valid numbers in both text boxes');

        return;

    }

    if(parseFloat(num2) === 0){

        alert('Cannot divided by zero');

        return;

    }

    var div = parseFloat(num1) / parseFloat(num2);

    document.getElementById('ans').innerText = div;

  }

1. Demonstrate the use of various bootstrap button classes

Sol:

Bootstrap button classes like primary, danger, warning, success, info, light, dark, etc., come with predefined styles, including appropriate color schemes that conform to web readability and accessibility standards. Here's why we might choose to use these classes:

Primary: Typically used for the main call to action on the page. This button has a strong visual weight.

Secondary: Used for secondary actions or options, usually used alongside the primary button.

Success: Indicates a successful completion of a task or operation. Generally used for positive acknowledgments, like form submission success messages.

Info: Used to provide additional information or context.

Warning: Serves as an alert for the user, indicating that caution might be required, or there may be a potential issue that needs attention.

Danger: Used to flag an incorrect action or to warn the user before they take a potentially harmful step, like deleting an account.

Light/Dark: Based on the design theme of the application, these can be used where a less conspicuous button is needed.

Link: Makes a button look like a hyperlink, while maintaining button behavior.

Each of these classes is connected to a specific user-interface need and aligns with a universally accepted color implication. Different classes help to easily differentiate between the types of action a user can take and understand the outcome of the action once it's been taken.

It's important to use these classes correctly and consistently to ensure a seamless and user-friendly experience.

**Here’s implements of buttons:**

<button type="button" class="btn">Basic</button>  
<button type="button" class="btn btn-default">Default</button>  
<button type="button" class="btn btn-primary">Primary</button>  
<button type="button" class="btn btn-success">Success</button>  
<button type="button" class="btn btn-info">Info</button>  
<button type="button" class="btn btn-warning">Warning</button>  
<button type="button" class="btn btn-danger">Danger</button>  
<button type="button" class="btn btn-link">Link</button>