

1. You are developing a web application that allows users to perform calculations. Implement

a JavaScript function that takes two numbers as input from the user and performs the following operations: Calculate the sum of the two numbers. Check if the first number is divisible by the second number. Calculate the square root of the second number. Display the results on the web page.

Marks Split-up:

- Part 1 (1 mark): Write the JavaScript function signature and specify the input parameters and return type.
- Part 2 (1 mark): Calculate the sum of the two numbers and assign the result to a variable.
- Part 3 (1 mark): Implement a conditional statement to check if the first number is divisible by the second number.
- Part 4 (1 mark): Calculate the square root of the second number using a built-in JavaScript function.
- Part 5 (1 mark): Display the results on the web page using JavaScript.

Source Code:

HTML Source Code:

```
<!DOCTYPE html>
<html>
<head>
<title>Calculation Results</title>
</head>
<body>
<h1>Perform Calculations</h1>
<label for="number1">Number 1:</label>
<input type="number" id="number1">
<br>
<label for="number2">Number 2:</label>
<input type="number" id="number2">
<br>
<button onclick="performCalculations()">Perform
Calculations</button>

<div id="result"></div>
<script src="js/cal.js"></script>
</body>
```

</html>

Js Source Code:

```
function performCalculations() {  
  // Part 1: JavaScript function signature with input parameters and return  
  type  
  var number1 =  
    parseFloat(document.getElementById("number1").value);  
  var number2 =  
    parseFloat(document.getElementById("number2").value);  
  // Part 2: Calculate the sum of the two numbers and assign the result to a  
  variable  
  var sum = number1 + number2;  
  // Part 3: Implement a conditional statement to check if the first number  
  is divisible by  
  the second number  
  var isDivisible = number1 % number2 === 0;  
  
  // Part 4: Calculate the square root of the second number using a built-in  
  JavaScript  
  function  
  var squareRoot = Math.sqrt(number2);  
  // Part 5: Display the results on the web page  
  document.getElementById("result").innerHTML = "Sum: " + sum +
```

```
"<br>First number divisible by the second number: " + (isDivisible ?  
"Yes" : "No")  
+  
"<br>Square root of the second number: " + squareRoot;  
}
```

OUTPUT:

Output:

Perform Calculations

Number 1:

Number 2:

Sum: 6

First number divisible by the second number: Yes

Square root of the second number: 1.4142135623730951