

## 1. Math Expressions:

- Create a JavaScript function that takes two numbers as input from the user.
- Use mathematical operators to perform addition, subtraction, multiplication, and division on the input numbers.
- Display the results for each operation on the web page.

## 2. Comparison Expressions:

- Create another function that prompts the user to enter their age and compares it to a predefined legal drinking age (e.g., 21).
- Use comparison operators to determine if the user is of legal drinking age and display an appropriate message.

## 3. Logical Expressions:

- Add a third function that checks whether the user is of legal drinking age and whether they have a valid ID (true/false).
- Use logical operators to determine whether the user can legally drink and display the result.

## 4. Conditional Statements:

- Extend the logical expressions by using if, else if, and else statements to provide more specific messages based on the user's age and ID status.

## 5. String Concatenation:

- Create a function that prompts the user to enter their first name and last name.
- Use string concatenation to combine the names and display a personalized greeting.

### Math Expressions

```
function performMathOperations() {
    let num1 = parseFloat(prompt("Enter the first number:"));
    let num2 = parseFloat(prompt("Enter the second number:"));

    let addition = num1 + num2;
    let subtraction = num1 - num2;
    let multiplication = num1 * num2;
    let division = num1 / num2;

    document.getElementById("mathResults").textContent = "Addition: " +
    addition + ", Subtraction: " + subtraction + ", Multiplication: " +
    multiplication + ", Division: " + division;
```

### Comparison Expressions

```
function checkDrinkingAge() {
    let userAge = parseInt(prompt("Enter your age:"));
    let legalDrinkingAge = 21;

    if (userAge >= legalDrinkingAge) {
        document.getElementById("ageMessage").textContent = "You are of legal
drinking age.";
    } else {
        document.getElementById("ageMessage").textContent = "You are not of
```

```
legal drinking age.";  
    }  
}
```

### Logical Expressions and Conditional Statements

```
function checkLegalDrinkingAge() {  
    let userAge = parseInt(prompt("Enter your age:"));  
    let hasValidID = confirm("Do you have a valid ID?");  
  
    if (userAge >= 21 && hasValidID) {  
        document.getElementById("legalDrinkingMessage").textContent = "You  
are legally allowed to drink with a valid ID.";  
    } else if (userAge >= 21) {  
        document.getElementById("legalDrinkingMessage").textContent = "You  
are legally allowed to drink.";  
    } else {  
        document.getElementById("legalDrinkingMessage").textContent = "You  
are not legally allowed to drink.";  
    }  
}
```

### String Concatenation

```
function combineNames() {  
    let firstName = prompt("Enter your first name:");  
    let lastName = prompt("Enter your last name:");  
  
    let fullName = firstName + " " + lastName;  
    document.getElementById("greetingMessage").textContent = "Hello, " +  
fullName + "!";  
}
```

prompt() returns a dialog box for the user to input values, if left empty will return null. When each button is clicked for the tasks, the onclick() returns the appropriate function. Below each button, there is a <p> calling the id for that task which can be used in document.getElementById("The id goes here"). It is just a bunch of defining variables and then doing some simple operation or check on it