# Assignment Questions

## 1. Nested If

Write a JavaScript program that:  
1. Asks the user for their age.  
2. Uses nested if-else to check:  
 - If they are 18 or older, check further:  
 - If they have a driving license, show 'You can drive.'  
 - Otherwise, show 'You need a license to drive.'  
 - If they are younger than 18, show 'You are too young to drive.'

## 2. Mathematical Operations (Nested If-Else)

Write a JavaScript program that:  
1. Asks the user to enter two numbers using prompt().  
2. Asks the user to enter a mathematical operator (+, -, \*, /).  
3. Uses nested if-else statements to perform the corresponding mathematical operation:  
 - If the operator is '+', add the numbers.  
 - If the operator is '-', subtract the numbers.  
 - If the operator is '\*', multiply the numbers.  
 - If the operator is '/', check further:  
 - If the second number is 0, display 'Error: Division by zero is not allowed.'

(Input: num1 = 20, num2 = 0, operator = /

Output: 'Error: Division by zero is not allowed.')  
 - Otherwise, perform the division and show the result.

**Bonus**  
4. If the user enters an invalid operator, display 'Invalid operator! Please enter +, -, \*, or /.'

## 3. Array Declaration & Access

Write a JavaScript program that:  
1. Declares an array with five different colors.  
2. Asks the user for an index number (0-4).  
3. Displays the color present at that index.

**4)Array Operations (Push & Pop)**

1) Create an array with the values [1, 2, 3, 4].

-Use push() to add the number 5 at the end of the array.

-Use pop() to remove the last element.

-Print the array after each step.

2) Start with an empty array [].

-Use push() to add the numbers 10, 20, and 30 to the array one by one.

-Then use pop() to remove the last element from the array.

-Print the array after each push() and pop().

3) Write a JavaScript program that:

-. Creates an empty array called cart.

- Asks the user if they want to add or remove an item using prompt().

- If they enter "add", ask for an item name and add it using push().

- If they enter 'remove', remove the last item using pop().

-Display the updated cart using console.log(cart).