Arithmetic Operators

1. Write a set of JavaScript expressions to calculate and log to the terminal the:
    a. sum of two numbers
    b. product of 3 numbers
    c. quotient of 2 numbers
    d. difference between 2 numbers
    e. remainder when one number is divided by another.
2. Write a JavaScript program that calculates the result of raising a base number to an exponent. For example, calculate 2 to the power of 5 using the exponentiation operator and display the result.

Assignment Operators

1. Create a JavaScript program that initializes a variable **result** to 10. Use the addition *assignment operator* to add 7 to **result**, and then display the updated value of **result** with console.log()
2. Create a JavaScript program that initializes a variable **counter** to 100. Use the *subtraction assignment* operator to subtract 25 from **counter**, and then display the updated value of **counter.**
3. Create a JavaScript program that initializes a variable **product** to 8. Use the *multiplication assignment* operator to multiply **product** by 4, and then display the updated value of **product.**
4. Create a JavaScript program that initializes a variable **value** to 50. Use the division assignment operator to divide **value** by 5, and then display the updated value of **value.**
5. Create a JavaScript program that initializes a variable **remainder** to 23. Use the *modulus assignment* operator to find the remainder when **remainder** is divided by 6, and then display the updated value of remainder."
6. Create a JavaScript program that initializes a variable **exponent** to 2. Use the *exponentiation assignment* operator to raise **exponent** to the power of 4, and then display the updated value of **exponent."**
7.

Comparison and Logical Operators (You are expected to do this part on a paper or book, and present it to your instructor)

A = 20, B = 79, C = 12, D = 90, E = -5, F = 6, G = '6', H = 'hello', I = 'heLLO', J = 'hello'

Resolve the following to either true or false:

1. (A > F) || (A > E) = ?
2. true || false = ?
3. true && false = ?
4. true && true = ?
5. !(H == J) || (E >= D)
6. (A <= B) && (C > B) || !(G === F) || (I === J)
7. (A < G) || (H === I) || (E < F)
8. !(C <= D) && (C >= D) || (J !== I)

Unary Operator:

1. Create a variable **coun**t and initialize it with a value of 5. Use the unary increment operator to increase its value by 1. Log the result to the terminal.
2. Create a variable **x** and initialize it with a value of 10. Use the unary decrement operator to decrease its value by 2. Log the result to the terminal.

Ternary Operator:

1. Write a JavaScript program with two variables storing numbers, and use the ternary operator to log the larger of the two numbers. Test the program with different number pairs.
2. Create a JS variable called isEven that stores an integer, Use the ternary operator to log a message indicating whether the number is even or odd.