

Basic JavaScript Exercises

Basic Arithmetic Exercises

In the following exercises declare all your variables with `const` unless you are told otherwise

- 1. Adding Two Numbers** Create two variables: `num1` with a value of 8 and `num2` with a value of 15. Write a JavaScript statement to add these two numbers and use `console.log` to print the sum.
- 2. Subtracting Numbers** Create two variables: `a` with a value of 30 and `b` with a value of 12. Subtract `b` from `a` and use `console.log` to print the result.
- 3. Multiplying Numbers** Create two variables: `x` with a value of 7 and `y` with a value of 3. Write a JavaScript statement to multiply `x` and `y`, and use `console.log` to print the product.
- 4. Dividing and Finding the Remainder** Create two variables: `dividend` with a value of 20 and `divisor` with a value of 4. Divide `dividend` by `divisor` and print the quotient. Then, find the remainder when `dividend` is divided by `divisor` and print it using `console.log`.
- 5. Average of Three Numbers** Create three variables: `number1` with a value of 15, `number2` with a value of 25, and `number3` with a value of 10. Calculate the average of these three numbers and use `console.log` to print the average.
- 6. Modulo Operator Basics:**
 - Explain what the modulo operator (`%`) does in JavaScript. Provide a simple code example where you calculate the remainder of dividing a variable `x` by 3 and display the result.
- 7. Even or Odd Detector:**
 - Write a JavaScript program that takes a number as input and uses the modulo operator to determine if it's even or odd. Display a

message indicating the result.

8. Divisibility Check:

- Create a program that checks if a given number is divisible by both 5 and 7. Use the modulo operator for this task and provide a message based on the outcome.

9. Counting by Steps:

- write a program that counts from 1 to 20, but only displays the numbers that are divisible by 4 using the modulo operator.

10. Logical AND Operator:

- Create a JavaScript program that checks if a number is both greater than 10 and less than 20. Use logical AND (&&) operator for this task. Print a message indicating whether the number satisfies the condition.

11. Logical OR Operator:

- Write a JavaScript program that checks if a number is either less than -5 or greater than 10. Use the logical OR (||) operator for this task. Print a message indicating whether the number satisfies the condition.

12. Logical NOT Operator:

- Develop a JavaScript program that takes a boolean value (true or false) and uses the logical NOT (!) operator to print the opposite boolean value.

13. Combining Logical Operators:

- Create a JavaScript program that checks if a number is greater than 5 and less than 10, or if it is greater than 20 and less than 30. Use a combination of logical AND (&&) and logical OR (||) operators for this task. Print a message indicating whether the number satisfies any of the conditions.