## 1. What number's bigger?

- Write a function named greaterNum that:
  - o takes 2 arguments, both numbers.
  - o returns whichever number is the greater (higher) number.
- Call that function 2 times with different number pairs, and log the output to make sure it works (e.g. "The greater number of 5 and 10 is 10.").

### 2. The World Translator

- Write a function named helloWorld that:
  - o takes 1 argument, a language code (e.g. "es", "de", "en")
- o returns "Hello, World" for the given language, for atleast 3 languages. It should default to returning English.
- Call that function for each of the supported languages and log the result to make sure it works

### 3. The Grade Assigner

- Write a function named assignGrade that:
  - o takes 1 argument, a number score.
  - o returns a grade for the score, either "A", "B", "C", "D", or "F".
- Call that function for a few different scores and log the result to make sure it works

### 4. The Pluralizer

- Write a function named pluralize that:
  - o takes 2 arguments, a noun and a number.
  - o returns the number and pluralized form, like "5 cats" or "1 dog".
- Call that function for a few different scores and log the result to make sure it works.
- Bonus: Make it handle a few collective nouns like "sheep" and "geese".

## 5. Write a JS code to print numbers from 1 to 10

Function `printNumbers()` prints numbers from 1 to 10 using for loop.

### 6. Write a JS code to print a 2D array

Function `printArray()` prints all the elements of a 2D array using nested for loops.

### 7. Write a JS code to print Even numbers in given array

Function `printEven()` prints all the even numbers of a 2D array using for loops and '%' operator.

### 8. Write a JS code to delete all occurrence of element in given array

Function `deleteElement()` deletes all the occurrence of element from the given array.

## 9. Write a JS code to demonstrate Async loop

For loop consisting of setTimeout() function to print loop variable 5 times in asynchronous way.

## 10. Write a JS code to find the power of a number using for loop

Function numPower() to returns power of number for provided exponential value using for loop.

## 11. Write a JS code to print a pattern using for loop

Function printPattern() is used to print a pattern for a given range using nested for loop.

## 12. Write a JS code to find the no of digits in a number

Function digitCount() to returns the number of digits in a given number using while loop.

### 13. Write a JS code to calculate the sum of digits in a number

Function digitSum() to returns sum of all digits in a given number using while loop. Learn more about JavaScript built-in Math methods from

### 14. Write a JS code to find the largest number in an array

Program to find the largest number in the given 1D array.

### 15. Write a JS code to find the number of zeros in 2D Matrix

Program to find count number for zeros in 2d matrix using nested for loops and increment operation.

### 16. Write a JS code to find product of two arrays

Function findProd() to generate a new array which is the product of two arrays of the same size using for loop.

## 17. Write a JS code to print the Fibonacci series for a given value of N

The function fibonacci() prints the Fibonacci series for the given range N using While loop.

# 18. Write a JS code to find N value in the Fibonacci series for a given number

The function Findfibonacci() prints the index of number in the Fibonacci series if present or "element not present" if the number is not part of the Fibonacci series.

#### 19. Write a JS code to count all letters in a word

Program to find the count of all letters in a word using double for loops.

### 20. Write a JS code to find duplicate values in a given array

Function findDup() to returns all the elements that are repeated more than once in a given array.

### 21. Write a JS code for binary search algorithm

Program to find the index of a search element in an array using the binary search algorithm.

### 22. Check if a number is odd or even in JavaScript

Function `isEvenOrOdd()` checks if input number is even or odd by using "%" operator in JavaScript.

- 1. Print "Number is even" if the number is divisible by 2.
- 2. Else print "Number is odd" if the number returns a remainder when divided by 2.

## 23. Check if input variable is a number or not

Function `isNumber()` checks if input variable is a number by using isNaN() in-built JavaScript function.

- 1. Print "Variable is not a number" if isNaN() returns true.
- 2. Else print "Variable is a valid number" if isNaN() returns false.

## 24. Find the largest of two number

Function `findLargest()` finds the largest between two number by using ">" and "=" operator in JavaScript.

1. Print num1 is the largest if num1>num2.

- 2. Print num2 is the largest if num1<num2.
- 3. Else print num1 and num2 are equal when num1==num2.

### 25. Find the largest of three number

Function `findLargest()` finds the largest of three number by using ">" and "&&" operator in JavaScript.

- 1. Print num1 is the largest if num1>num2 and num1>num3.
- 2. Print num2 is the largest if num2<num3.
- 3. Else print num3.

### 26. Check if a triangle is equilateral, scalene, or isosceles

Function `findTriangleType()` finds the type of the triangle for given side values by using "==" and "&&" operator in JavaScript.

- 1. Print "Equilateral triangle." if values for all side1, side2 and side3 are equal.
- 2. Print "Isosceles triangle." if values for side1 is equal to side2 or side2 is equal to side3
- 3. Else "Scalene triangle." since values of all sides are unequal.

## 27. Find the a number is present in given range

Function `checkInRange()` finds if the given number is within the provided start and end range using >=, <= and && operators in JavaScript.

- 1. Print "Between the range" if num is between start and end values
- 2. Else Print "Outside the range" since num is outside start and end values.

### 28. Perform arithmetic operations on two numbers

Function 'evalNumbers()' prints the result after evaluating arithmetic operations between two numbers of addition, multiplication, division, and modulus in JavaScript.

- 1. Print result of num1+num2 if operation is "add"
- 2. Print result of num1-num2 if operation is "subtract"
- 3. Print result of num1\*num2 if operation is "multiply"
- 4. Print result of num1/num2 if operation is "divide"
- 5. Print result of num1%num2 if operation is "modulus"
- 6. Else print "Invalid operation"

### 29. Find check if a year is leap year or not

Function `checkLeapYear()` find if the given year is a leap year or not by using %, !=, && and || operators in JavaScript.

- 1. If year is divisble by 4 and not divisble by 100 then print "leap year".
- 2. Or if year is divisible by 400 then print "leap year".
- 3. Else print "not a leap year".

## 30. Find the grade for input marks

Function `findGrade()` to find the grade of the student based on the input marks.

- 1. Print "S grade" if marks is between 90 and 100.
- 2. Print "A grade" if marks is between 80 and 90.
- 3. Print "B grade" if marks is between 70 and 80.
- 4. Print "C grade" if marks is between 60 and 70.
- 5. Print "D grade" if marks is between 50 and 60.

- 6. Print "E grade" if marks is between 40 and 50.
- 7. Print "Student has failed" if marks is between 0 and 40.
- 8. Else print "Invalid marks".

# 31. Find number of days in a given month

Function `findDaysInMonth()` finds the number of days in a given month of a year.

- 1. If month is outside the range of 1 and 12 print "Invalid month".
- 2. If month is equal to 2 ie, February print "29 days" if leap year else print "28 days".
- 3. Else if month is equal to 4, 6, 9 or 11 print "30 days".
- 4. Else print "31 days".

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