JavaScript Interview Questions

* What is programming language?
* What is front-end?
* What is back-end?
* What is HTML
* What is CSS
* What is JavaScript
* Difference between java and JavaScript?
* Is JavaScript a case-sensitive language?
* Tell us about role of HTML, CSS, and JavaScript?
* Tell us about the history of JavaScript?
* What is ECMAScript and how is it related to JavaScript?
* What are the different versions of JavaScript?
* What is Es5 and Es6?
* What are the different places where we can write JavaScript code?
* Difference between client side and server side JavaScript?
* Explain below JavaScript features?
  + High Level Language
  + Garbage Collected
  + Interpreted Language (JIT)
  + Multi Paradigm
  + Prototype based functions
  + First Class Function
  + Dynamically Type/ Dynamic
    - Is javascript a statically typed or a dynamically type language.
  + Single Threaded
  + Non-Blocking Event Loop
* What is value and variable?
* What are rules of defining a variable?
* What is data type
* What are the different types of data types?
* What is Symbol?
* What is BigInt?
* What is the difference between primitive and non-primitive data types?
* Why is the typeof NaN?
* What is the typeof null?
* What is comment and how to add a single line or multi line comment in JavaScript?
* What is Infinity?
* What is the significance of use strict?
* How JavaScript behave in non-strict mode?
* What is a statement in programming?
* How to write a single line of statement?
* How to write a multi-line statement?
* What is a code block?
* What is let, const and var?
* Difference between let, const and var?
* When to use let, const and var?
* What is ++, -- operators?
* What is typeof operator?
* What is reminder operator?
* Explain logical &&, || and ! operators
* What are the different ways of writing output in JavaScript? Explain each
  + console.log
  + document.write()
  + window.alert()
  + innerHTML
* What is a string?
* How to create a String? Explain each:
  + String Literal
  + String Object
* Difference between string Literal vs string object?
* What is string length property?
* How to convert string to array?
* What is String Template Literal?
* Difference between String Literal and String template literal?
* Difference between slice, substring and substr functions?
* What is the difference between exec and test function in JavaScript?
* What is the difference between padStart and padEnd functions?
* What is the difference between indexOf and includes?
* What is the difference between indexOf and lastIndexOf function?
* What is the difference between search and match functions?
* What is Implicit type conversion?
* What is Explicit type conversion?
* What is Coercion?
* What are different popup boxes available in core JavaScript? Explain each:
  + Alert Box
  + Confirm Box
  + Prompt Box
* What are the truthy and falsy values in JavaScript?
* Give examples of falsy values
* What is Loose equality operator
* What is Strict equality operator
* Difference between == and ===
* Difference between while and do while loop
* What is for of loop
* What is for in loop
* What is Switch
* What are cases in switch?
* What is default case?
* What are break and continue words?
* What is scoping?
* What are the different types of scopes in JavaScript? Explain each?
  + Global Scope
  + Functional scope
  + Block scope
* What is function?
* What is functional programing?
* What are generator function?
* What are the different ways of creating function in JavaScript?
* What is function declaration?
* What is currying in JavaScript?
* What is function expression?
* What is arrow function?
* What is anonymous function? Where do we use this function?
* What is the difference between function declaration and function expression?
* What is the difference between function expression and arrow function?
* What is difference between parameter and argument?
* What are the default parameters? How to add default parameters in a function?
* What is call by value and what is call by reference?
* What is High order function? Give one example.
* What is First class function? Give one example.
* What is callback function? When to use callback functions?
* What is callback hell?
* What is setTimeout? How to clear a setTimeOut?
* What is setInterval? How to clear a setInterval?
* What are the call, apply and bind functions? Give example of each.
* What is IIFE (Immediately invoked function expression)?
* What is closure? When to use closure? What are the benefits of using closure?
* What is hoisting?
* What is TDZ(Temporal Dead Zone)?
* What is DRY Principle?
* What is design pattern? Name few famous design patterns?
* What is developer tool?
* Difference between console.log and console.table?
* Difference between console.warn and console.error?
* What is Error? What are the different types of error in JavaScript?
* Explain numbers in JavaScript?
* Difference between number and BigInt?
* What is Number System?
* Explain below functions of Number class:
  + toFixed
  + toString
  + valueOf
  + parseInt
  + parseFloat
  + isNaN
* What is Date object in JavaScript? What are the different ways of creating Date object?
* How will you convert any Number or Date in a format of a difference locale/country?
* What is DOM?
* What is the need of DOM?
* What are the below functions?
  + getElementById
  + getElementsByTagName
  + getElementsByClassName
  + querySelector
  + querySelectorAll
  + write
* What is Node? What is HTMLCollection? What is Element?
* Difference between innerHTML vs textContent?
* What is an event bubbling in javascript?
* What is an event capturing in javascript?
* Difference between event bubbling and capturing?
* Difference between innherHTML and attribute?
* How to change the style of an html element using DOM?
* What is event?
* What is role the event.preventDefult()?
* What are the different types of mouse/keyboard events?
* What is eventListener?
* How to remove a eventListener?
* How to create a DOM element dynamically?
* What are the below BOM objects? Explain each:
  + Window
  + History
  + Navigator
  + Screen
  + Location
  + Timing
  + Cookies
  + LocalStorage
* What is JavaScript engine? What are the famous JavaScript engine names?
* What is Call Stack?
* What is Execution Context?
* How call stack and execution context are interrelated?
* What is Heap memory?
* What is Stack memory?
* What is the difference between heap and stack memory?
* What is Compiler?
* What is interpreter?
* What is the difference between compiler and interpreter?
* What is JIT?
* What is event loop?
* What is inside the execution context?
  + Types of execution context?
    - Global
    - Functional
* What is variable environment?
* What is scope chain?
* What is this keyword? Where to use it? What this keyword denotes?
* What is creation and code phase?
* What will happen if we use this keyword inside a function in strict mode?
* What is the difference between primitive and object?
* What is normal copy?
* What is shallow copy? How to perform shallow copy of an object?
* What is deep copy? How to perform deep copy of an object?
* Where objects are stored? Is object primitive type or non-primitive?
* What is Destructuring ?
* How to reverse values using destructuring?
* How to return two values from function ?
* How destructuring works in array and object?
* How to do destructuring of nested array?
* How to set default values in destructuring?
* What is destructuring object ?
* How we can use destructuring with object?
* How to destructuring remaining value to a single variable?
* How to give alias name to a property name?
* How we can set default values in destructurnig object?
* What is nested object destructuring?
* How to destructruing object when passing into a function?
* What is spread operator?
* How to do shallow copy using spread operator?
* How to join multiple arrays using spread operator?
* How to convert a String to array using spread operator?
* How to pass arguments in function using spread operator?
* What is rest parameter?
* Difference between spread and rest operator?
* How to pass variable arguments in function using rest operator?
* What is short circuiting?
* Difference between || and ??
* What is nullish coalescing operator?
* What is optional chaining? What are the benefits of using optional chaining?
* What is an Array?
* What are the properties of an Array?
* Difference between Array Literal and Array Object?
* What is the significance of index in Array?
* Does sort function work for all types of elements?
* When to pass a sorting function sort function?
* Difference between push and unshift, pop and shift?
* Difference between slice, splice?
* Difference between forEach, for of loop?
* Difference between map, filter and reduce function?
* Difference between some and every?
* Difference between flat and flatMap?
* What is an Object?
* Difference between object literal and new object?
* Difference between dot and bracket annotation?
* Explain Object.keys, Object.values and Object.Entries function?
* What is Set?
* What is weakSet in JavaScript?
* How to print set values using for of loop?
* How to create set to Array?
* What is Map?
* What is weakMap in JavaScript?
* What is chaining in Map?
* How the map will behave if we use an Array as key?
* Convert
  + Map to Array
  + Array to Map
  + Object to Map
* How to iterate map using foreach and for of loop?
* What is OOPs?
* What are the 6 priniciples of OOPs?
* Explain below topics and give one real life example of each topic:
  + Class
  + Object
  + Encapsulation
  + Abstraction
  + Inheritance
  + Polymorphism
* How to inheritance works in JavaScript?
* What is prototypal inheritance?
* What are the different ways of doing prototypal inheritance? Explain below topics;
  + Constructor function
  + ES6 classes
  + Object.create
* What is prototypal chain?
* What is setters and getters in ES6 classes?
* What will happen if we give same name of property of an object and setter and getter?
* What is static function in ES6 classes?
* How to implement inheritance in Constructor functions, ES6 classes and Object.create?
* How to implement encapsulation? How to make fields protected?
* How to make fields and functions private?
* What is chaining methods? How can we implement the same in ES6 classes?
* What is Synchronous and Asynchronous?
* What is AJAX?
* What is API? Explain below topics?
  + SOAP API
  + Rest API
    - Request
    - Response
    - Request Body
    - Query Param
    - Path Variable
    - URL
    - URI
    - Data : JSON/XML/Text
* What is server client architecture?
* What is Promise and fetch?
* How to consume promises?
* How handle rejected promises?
* How to create a Promise?
* What is async/await?
* How to return values from Async function?
* How to run promises in Parallel?
* How to do error handling? Explain try catch and finally?
* Explain some of the promise combinators?
  + Race
  + allSettled
  + any
* What is module in JavaScript?
* How to import and export modules?
* What is Polyfilling?
* What is Transpiling?
* Difference between polyfilling and transpiling?