

=====Short Answer=====

1. What is hoisting
  - hoisting is the javascript's default behavior of moving declaration on top of the current scope.
2. What are different type of scopes
  - function scope, block scope(for,if), global scope (on window).
3. Difference between var,let and const
  - var does not have a scope (can be re-assign), let variables are limited to the scope of a block statement.Const are block-coped (value cannot be change through reassignment.
4. What is execution context and call stack
  - call stack follow the format of LIFO (last in first out), stack stores all the execution contexts created during code execution.Whenever a function is invoked the execution context will be added on top of the stack
  - execution context defined as the environment in which the JS code is executed.
5. What is scope chain and lexical scoping
  - JS default machenism of looking for a variable when the variable is used. First it will look inside of the current scope, if JS engine cannot find it, it will look for the variable in the outerscope and will continue to run until it reaches the global scope or found the variable.
6. Lexical Scoping
  - a variable define outside of a function can be accessible inside another function define after the variable declaration. But the opposite does not apply.
7. What does 'this' refer to
  - In a method this refers to the outer object.
  - In a function this refers to the global object.
8. What is the difference between this in function before ES5 with arrow function.
  - don't bind their own scope but bind to the parent. always references to the owner of the function it is in.

9. What is the difference between call, apply and bind.

- call() and apply() execute at the time of binding while bind() execute at the time when we execute return function.
- call() has any number of arguments one by one as parameter, apply() has Array[] as parameter, bind() has array and any number of arguments.

10. Can you name some ES6 new features:

- Class, spread and rest Operator, blockscope, Arrow Function.

11. What is spread Operator and rest operator

- spread copy all content from one object to another, usually use in the argument context.
- rest usually use in the parameter context, for example when you create a function and does not know how many parameter that function will take. In this situation you can use rest.

12. Object Oriented Programming Language

- programming practices that based on the concept of objects
- Class, Object, OOP: Abstraction, Encapsulation, Inheritance, Polymorphism.

13. What is prototype-based OOP

- object are linked to a prototype object. Also a style of object-oriented programming in which behaviour reuse (known as inheritance) is performed via process of reusing existing objects that serve as prototypes.

14. What is prototype chain

- JavaScript objects have a link to a prototype object. When trying to access a property of an object, the property will not only be sought on the object but on the prototype of the object, the prototype of the prototype, and so on until either a property with a matching name is found or the end of the prototype chain is reached.

15. How to implement inheritance in JavaScript

- Simply use extends, and super() in ES6.

16. What is Closure?

- In other words, a closure gives you access to an outer function's scope from an inner function. In JavaScript,

closures are created every time a function is created, at function creation time.