

1. Describe the difference between asynchronous and synchronous code:
> Answer: Async functions are non-blocking, and are sent to the message queue where they wait to be evaluated once the call stack is clear.

While Sync functions are thread- blocking, run in a specific order, and are evaluated on the call stack.

2. Define NodeJS as distinct from browser based JavaScript runtimes:
> Answer: Node.js is run locally, its scope is global, and its object is also global. Node interacts with modules and require functions. The browser is also global scoped, but its object is the window. Browser interacts with documents like HTML and locations like web URL's.

3. Explain the difference between Git and GitHub:
> Answer: Git is a Version Control System that tracks and edits snapshots of your files history. GitHub is a cloud-based repo hub that stores a cloned version of a user's locally stored repository.

4. Explain when a recursive solution is appropriate to solving a problem over an iterative solution:
> Answer: If the data is unpredictable, huge, or very complex, Recursion is the tool to us, otherwise iteration is best suited for the opposite.

5. Explain why functions are "First Class Objects" in JavaScript:
> Answer: Functions are first class objects because they can assigned to variables, can be passed to an object as a method, and can even return from another function.

6. Define what IIFEs are and explain their use case:
>Answer: Immediately Invoked Function Expressions are expressions that are called upon being declared. Once declared, the function is then garbage collect and can't be used again. This is useful for clearing up namespace, and avoiding name collision.

7. Explain why a primitive type is data that is not an object and therefore cannot have methods (functions that belong to them).
>Answer Primitive data types are immutable.