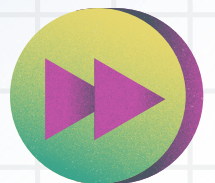
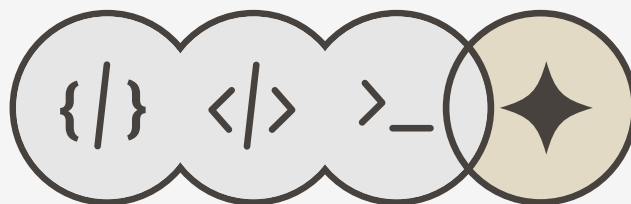




# INTERVIEW QUESTIONS

THE KEY CONCEPT TO MASTER

---





## **What is Node.js ?**

Node.js is a javascript engine used for executing JavaScript code outside the browser commonly used to built scalable backend applications.



## **What is the difference between Node.js and JavaScript ?**

JavaScript is a scripting language, while Node.js is a runtime environment that allows JavaScript to run on the server side.



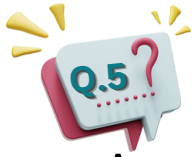
## **Is Node.js single-threaded?**

Yes, Node.js is single-threaded but uses event-driven architecture and non-blocking I/O to handle multiple requests efficiently.



## **What kind of API function is supported by Node.js?**

Node.js supports both synchronous (blocking) and asynchronous (non-blocking) API functions.



## **What is a module in Node.js?**

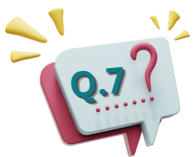
A module in Node.js is a block of code that provides specific functionality, which can be reused across different parts of an application.



## **What is npm and its advantages?**

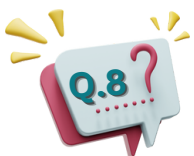
npm is the default package manager for Node.js, offering benefits like dependency management, version control, and a centralized repository.

3rd



## **What is middleware?**

Middleware functions execute between the request and response cycle, performing tasks like logging, authentication, and data processing.



## **How does Node.js handle concurrency despite being single-threaded.?**

Node.js handles concurrency through asynchronous, non-blocking operations, allowing multiple tasks to run simultaneously within a single thread.



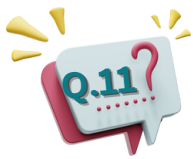
## **What is control flow in Node.js?**

Control flow refers to the order in which code statements and functions are executed, managing asynchronous operations and error handling.



## **What do you mean by event loop in Node.js?**

The event loop is a mechanism that processes asynchronous tasks in a single thread by continuously checking for and executing callback functions.



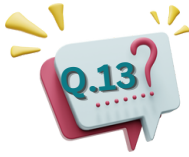
## **What are the main disadvantages of Node.js?**

Disadvantages include its single-threaded nature, preference for NoSQL databases, and rapid API changes that can cause instability.



## **What is REPL in Node.js?**

REPL stands for Read, Evaluate, Print, and Loop; it's an interactive environment for executing Node.js code and debugging.



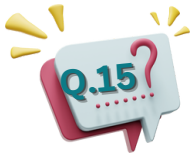
## How to import a module in Node.js?

Use the `require()` function to import external modules, storing the result in a variable for use in the application.



## What is the difference between Node.js and AJAX?

Node.js is a server-side runtime environment, while AJAX is a client-side technique for asynchronously updating parts of a web page.



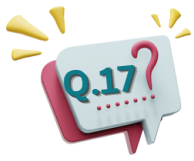
## What is package.json in Node.js?

'package.json' is a metadata file in Node.js that contains information about the project, such as dependencies, scripts, and version.



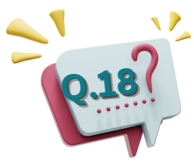
## What is the most popular Node.js framework used these days?

The most popular Node.js framework is Express.js, known for its scalability and minimalistic approach to building web applications.



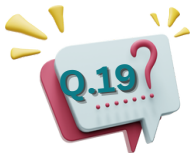
## **What are promises in Node.js?**

Promises in Node.js are objects that handle asynchronous operations, providing a cleaner alternative to callback functions.



## **What is event-driven programming in Node.js?**

Event-driven programming synchronizes multiple events using event loops and callback functions to simplify program flow.



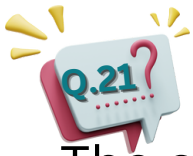
## **What is buffer in Node.js?**

A buffer is a temporary storage space for binary data, allowing Node.js to handle raw data directly.



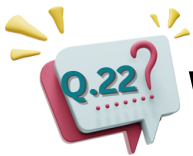
## **What are streams in Node.js?**

Streams are objects used to handle continuous data flows, allowing for efficient reading and writing of data.



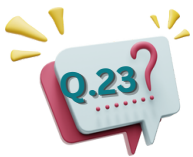
## **Explain crypto module in Node.js ?**

The crypto module provides cryptographic functionality, such as encryption, decryption, and hashing of data.



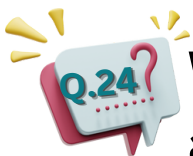
## **What is callback hell?**

Callback hell refers to the problematic situation caused by deeply nested callbacks, making code difficult to read and maintain.



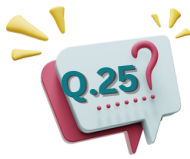
## **Explain the use of timers module in Node.js.**

The timers module allows execution of code after a specified delay or immediately in the next event loop cycle using functions like `setTimeout()` and `setImmediate()`.



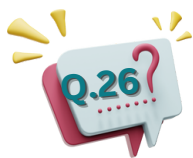
## **What is the difference between `setImmediate()` and `process.nextTick()` methods?**

`process.nextTick()` executes callbacks at the start of the next event loop, while `setImmediate()` executes them at the end of the current event loop.



## What is the difference between `setTimeout()` and `setImmediate()` method?

`setTimeout()` schedules a callback after a specified delay, whereas `setImmediate()` executes it immediately after I/O events.



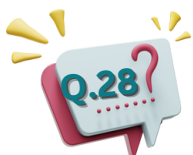
## What is the difference between `spawn()` and `fork()` method?

Node.js is a javascript engine used for executing JavaScript code outside the browser commonly used to built scalable backend applications.



## Explain the use of passport module in Node.js.

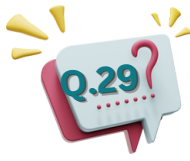
The passport module adds authentication features to applications, supporting various sign-in methods.



## What is fork in Node.js?

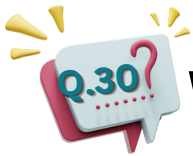
Fork is a method to create child processes that allow parallel execution of tasks in Node.js.





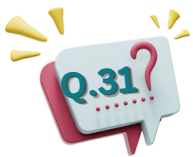
## **What are the three methods to avoid callback hell?**

To avoid callback hell, use `async/await`, promises, or generators.



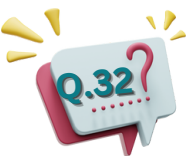
## **What is body-parser in Node.js?**

Body-parser is middleware that parses incoming request bodies in a middleware before handling it in Node.js applications.



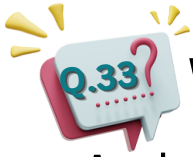
## **What is CORS in Node.js?**

CORS stands for Cross-Origin Resource Sharing, allowing restricted resources on a web page to be requested from another domain.



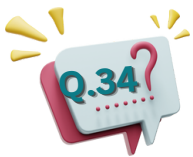
## **Explain the tls module in Node.js**

The `tls` module provides an implementation of TLS and SSL protocols to establish secure network connections.



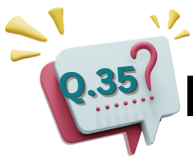
### **What is a cluster in Node.js?**

A cluster allows Node.js to utilize multiple cores of a machine by creating child processes that share the same server port.



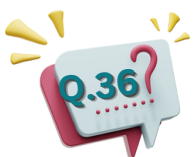
### **How to manage sessions in Node.js**

Sessions in Node.js can be managed using the express-session module, which stores session data on the server.



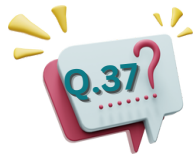
### **Explain the types of streams in Node.js.**

Types of streams include readable, writable, duplex (both), and transform (modifies data) streams.



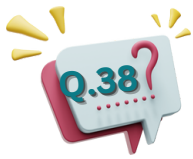
### **How can we implement authentication and authorization in Node.js?**

Use packages like Passport for authentication and JWT for managing tokens to implement security in Node.js applications.



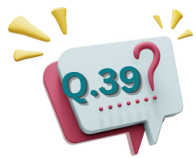
## **Explain the packages used for file uploading in Node.js.**

Multer is a popular middleware used for handling file uploads in Node.js.



## **How to handle database connection in Node.js?**

Database connections in Node.js are managed using drivers like MySQL and libraries like Mongoose for MongoDB.



## **How to read command line arguments in Node.js?**

Use the `process.argv` array to access command-line arguments passed when running a Node.js application.



## **What are child processes in Node.js?**

Child processes allow Node.js to handle multiple tasks concurrently by creating subprocesses that can run independently.



## Why **Learn Coding** ?

Quality knowledge by the best faculty

Advance knowledge in advance Era

The learning is free for everyone

We are teaching peoples more than 2Million +

**Save this File for Later** 

**Explore more**



**[Click Here to Join Us](#)**



**Ankush Kushwaha**



**Akhilesh Kushwaha**