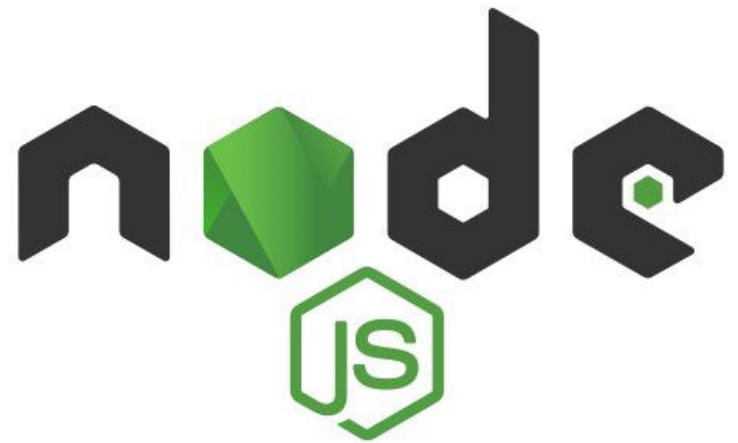# TOP 12

# Node.js Interview Questions...

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# 1. What is npm?

npm stands for Node Package Manager.
npm provides following two main
functionalities:

- Online repositories for node.js packages/
modules which are
searchable on search.nodejs.org
- Command line utility to install packages, do
version
management and dependency management of Node.js
packages.

# 2. What is Node.js?

Node.js is a web application framework built on
Google Chrome's JavaScript Engine (V8 Engine).

Node.js = Runtime Environment + JavaScript
Library

## 3. What are the two types of API functions in Node.js?

> The two types of API functions in Node.js are:
>
> - Asynchronous, non-blocking functions.
> - Synchronous, blocking functions.

## 4. What is an error-first callback?

> Error-first callbacks are used to pass errors and data.
>
> The first argument is always an error object that the programmer has to check if something went wrong.
>
> Additional arguments are used to pass data.

## 5. What is Callback Hell?

The asynchronous function requires callbacks as a return parameter. When multiple asynchronous functions are chained together then callback hell situation comes up.

## 6. What is control flow function?

It is a generic piece of code which runs in between several asynchronous function calls is known as control flow function.

## 7. What is Callback?

Callback is an asynchronous equivalent for a function. A callback function is called at the completion of a given task. Node makes heavy use of callbacks. All APIs of Node are written is such a way that they supports callbacks.

# 8. What are the key features of Node.js?

Let's look at some of the key features of Node.js.

- Asynchronous event driven IO helps concurrent request handling – All APIs of Node.js are asynchronous. This feature means that if a Node receives a request for some Input/Output operation, it will execute that operation in the background and continue with the processing of other requests.

- Single Threaded but Highly Scalable – Node.js uses a single thread model for event looping. The response from these events may or may not reach the server immediately. However, this does not block other operations. Thus making Node.js highly scalable.

- Node.js library uses JavaScript – This is another important aspect of Node.js from the developer's point of view. The majority of developers are already well-versed in JavaScript.

- No Buffering – Node.js applications never buffer any data. They simply output the data in chunks.

## 9. What are the core modules of Node.js?

- *EventEmitter*
- *Stream*
- *FS*
- *Net*
- *Global Objects*

## 10. What do you mean by Asynchronous API?

*All APIs of Node.js library are aynchronous that is non-blocking.*
*It essentially means a Node.js based server never waits for a API to return data.*
*Server moves to next API after calling it and a notification mechanism of Events of Node.js helps server to get response from the previous API call.*

# 11. What is the difference between Nodejs, AJAX, and jQuery?

*The one common trait between Node.js, AJAX, and jQuery is that all of them are the advanced implementation of JavaScript.*

*- Node.js —It is a server-side platform for developing client-server applications.*

*- AJAX (aka Asynchronous Javascript and XML) —It is a client-side scripting technique, primarily designed for rendering the contents of a page without refreshing it.*

*- jQuery —It is a famous JavaScript module which complements AJAX, DOM traversal, looping and so on. This library provides many useful functions to help in JavaScript development.*

## 12. List out the differences between AngularJS and NodeJS?

*- AngularJS is a web application development framework. It's a JavaScript and it is different from other web app frameworks written in JavaScript like jQuery.*

*- NodeJS is a runtime environment used for building server-side applications while AngularJS is a JavaScript framework mainly useful in building/developing client-side part of applications which run inside a web browser.*