Node.js Interview Questions

1. What is Node.js, and how does it differ from traditional server-side languages like PHP or Java?

   Node.js is an open-source, server-side runtime environment for executing JavaScript. It differs from traditional server-side languages by using a non-blocking, event-driven architecture, making it highly efficient and well-suited for I/O-intensive tasks.

2. Explain the concept of non-blocking I/O in Node.js. How does it work?

   Non-blocking I/O allows Node.js to continue processing other tasks without waiting for I/O operations to complete. It works by using asynchronous functions and callbacks, allowing other code to run while waiting for I/O operations to finish.

3. What is an event loop in Node.js, and why is it essential for its non-blocking behavior?

   The event loop is a fundamental part of Node.js that manages asynchronous tasks. It continually checks the message queue for pending tasks, making Node.js non-blocking and highly efficient.

4. What is the Node Package Manager (NPM), and how is it used in Node.js development?

   NPM is the package manager for Node.js. It is used to install, manage, and share packages or modules in Node.js applications.

5. What are modules in Node.js, and how do you create and use them?

   Modules are reusable pieces of code in Node.js. You create them using `module.exports` and use them in other files with `require`.