<http://www.tutorialspoint.com/nodejs/nodejs_first_application.htm>

A Node.js application consists of following three important parts −

* **Import required modules** − We use **require** directive to load a Node.js module.
* **Create server** − A server which will listen to client's request similar to Apache HTTP Server.
* **Read request and return response** − server created in earlier step will read HTTP request made by client which can be a browser or console and return the response.

In Node Application, any async function accepts a callback as a last parameter and the callback function accepts error as a first parameter.

As Node.js runs in a single thread mode but it uses an event-driven paradigm to handle concurrency. It also facilitates creation of child processes to leverage parallel processing on multi-core cpu based systems.

Child processes always have three streams **child.stdin**, **child.stdout**, and**child.stderr** which may be shared with the stdio streams of the parent process.

Node provides **child\_process** module which has following three major ways to create child process.

* **exec** - child\_process.exec method runs a command in a shell/console and buffers the output.
* **spawn** - child\_process.spawn launches a new process with a given command
* **fork** - The child\_process.fork method is a special case of the spawn() to create child processes.