* Introduction:

JavaScript’s rising popularity has brought with it a lot of changes, and the face of web development today is dramatically different. The things that we can do on the web nowadays with Javascript running in the server, as well as in the browser, were hard to imagine just several years ago.

Node.js is a packaged compilation of Google’s V8 JavaScript engine, the platform abstraction layer, and a core library, which is itself primarily written in JavaScript. Beyond that, it is worth nothing that Ryan Dahl, the creator of Node.Js, was aiming to create real-time websites with push capability, “inspired by applications like Gmail”. In Node.Js, he gave developers a tool for working in the non-blocking, event-driven I/O paradigm, we finally have web applications with real-time, two way connections.

* Course Objectives:
* Understand the JavaScript and technical concepts behind Node JS
* Structure a Node application in modules
* Understand and use the Event Emitter
* Understand Buffers, Streams, and Pipes
* Build a Web Server in Node and understand how it really works
* Use npm and manage node packages
* Build a web application and API more easily using Express
* Connect to Mongo Database in Node
* Understand how the MEAN stack works

Module 1:- Introduction to Node JS(Done)

* Introduction
* What is Node JS
* Advantages of Node Js
* Traditional Web Server Model
* Node.Js Process Model

Module 2:- Setup Dev Environment(Live)

* Install in Windows
* Install in Ubuntu

Module 3:- Node JS Modules

* Functions
* Buffer
* Module
* Module Types
* Core Modules
* Local Modules
* Module.Exports

Module 4:- Node Package Manager

* What is NPM?
* Installing Packages Locally
* Adding dependency in package.json
* Installing packages globally
* Updating packages

Module 5:- Creating Web Server

* REST APIs
* Handling Http Requests
* Creating Web Server
* Sending and Receiving Requests

Module 6:- File System

* Fs.readFile
* Writing a File
* Writing a File asynchronously
* Opening a File
* Deleting a File
* Other I/O Ops

Module 7:- Events

* EventEmitter class
* Returning event emitter

Module 8:- Express JS

* Working with Express
* Configuring Routes

Module 9:- Database Connectivity

* Configuration
* Connect to Mongo DB
* Working with select command
* Updating records
* Deleting records

Module 10:- Template Engine

* Why Template Engine
* What is Jade
* What is Vash

Real Time Project:-

Give simple example