What is NodeJS

⤷ prerequisite to learn

•→ Only system

•→ Your Timing + Dedication }

⇒ I will teach you Basics of Javascript as well.

•→ "Just start and see the Magical Result"

What is Node JS

✓ •> Intially, JS was used in frontend only, to enhance UI and
and interaction on website. (i·e Button, dynamic colour, popup)

•> But Nodejs is,

open source ✓
server side ✓
Javascript ✓
Runtime Enviroment ⟶ that allow to Run (JS) code in the server

•> Node Js allow developer to use same language in frontend and
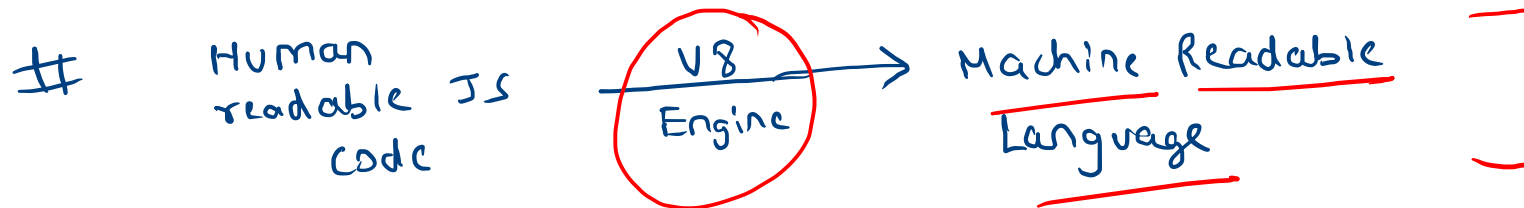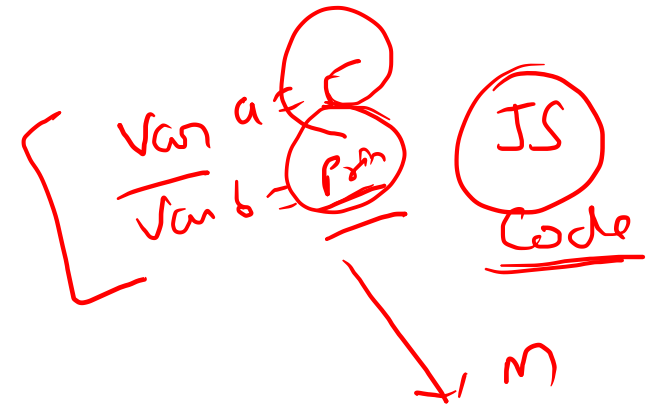Backend

i·e client side ⎤
✓ server side ⎦

•> Node's is built on top of
" Chrome V8 Javascript Engine "
  └→ which is Known for high performance and Efficient Execution
           of Js Code.

JS

Var a =
Var b =   P   JS
                Code
                 M

•> V8 Engine

  └→ open source
     Javascript Engine

     developed by Google → to use in the Google chrome
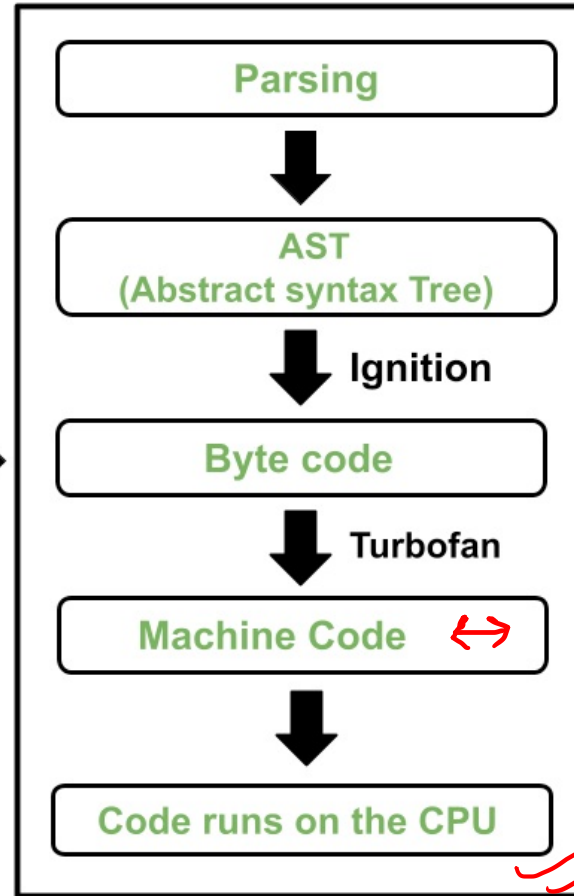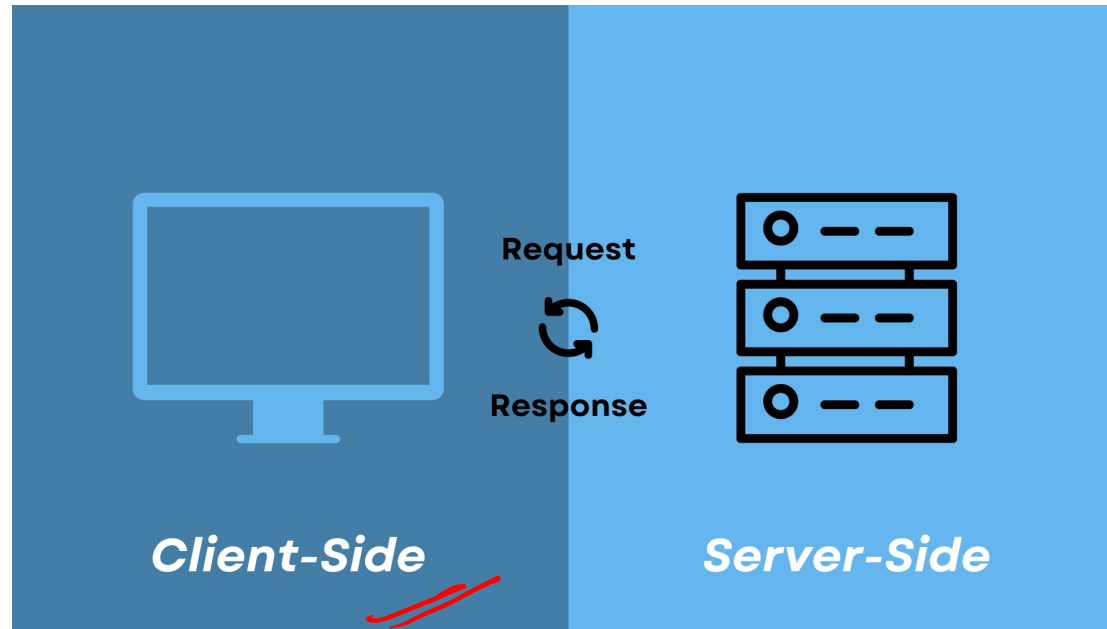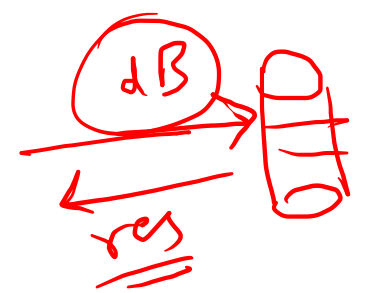   web browser.

Human
    readable JS   → V8 →   Machine Readable
    code   Engine   Language

Node.js environment

JS Source code

Chrome V8 engine

Parsing

**AST
(Abstract syntax Tree)**

Ignition

Byte code

Turbofan

Machine Code

Code runs on the CPU

•→ understand **Client side** & **server side** .

JS → Modern JS → JS ← JAVA

dB → res

Request

Response

Client-Side   **Server-Side**

Frontend   req → Backend
                  ← res

FlipKart
Shirt

Buy now

Count--
₹/2   ₹9

Frontend

shirt $\longrightarrow$

10.

$\longleftarrow$

Levis
Denm

Backend

DB.
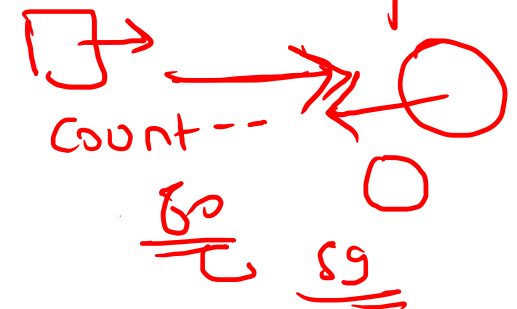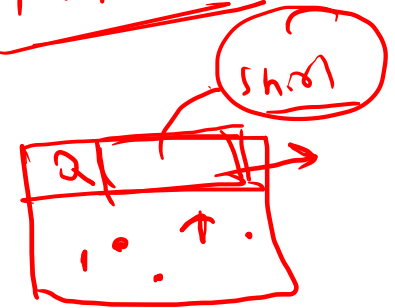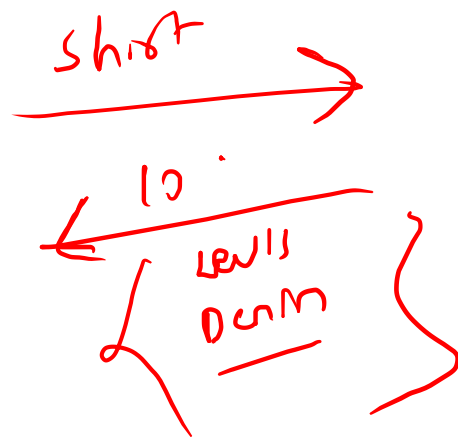
Layman Example to understand Node'js & V8 Engine

Already serving

You
JS

Client

JS — V8 → Machine Code

Server

Server

tool
↳ (NodeJS)
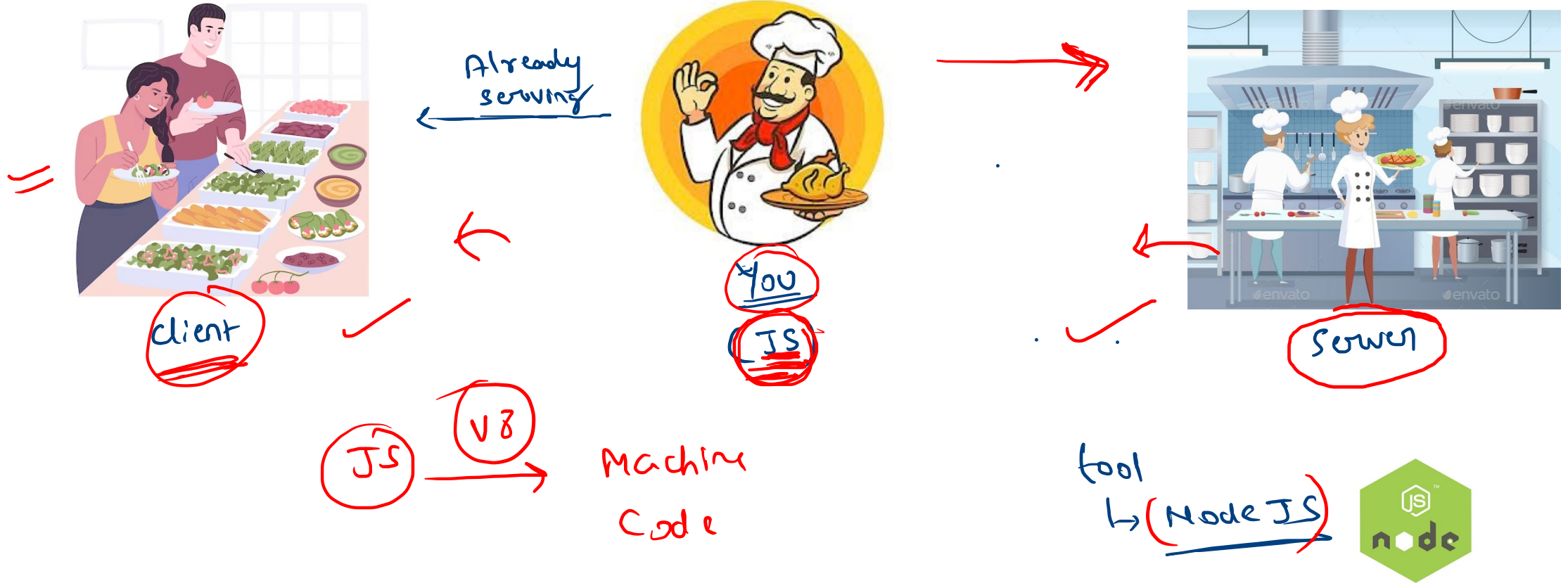
\#   Install   Node JS

NPM

Vs Code

Postman

How to Run Javascript code ?.

↳ •> I know, many of you don't know Javascript in details :

Let's
Start JS,

```
#    Var a = 5
     Var b = 6
     Var ans = a+b
     Console.log ( ans )
```

•> online compiler
•> web Browser
•> Terminal
•> Vs code

Basics of JS will be using in Node JS

  └→ Variable
       Objects
       JSON
       Console
       Array
       Random
       if
       else
       Loop
       functions
       Prompt