**What is Node.js?**

**Node.js is a runtime environment that allows you to run JavaScript outside the browser.**

Normally:

- JavaScript runs in the **browser** (like Chrome).

- But with **Node.js**, you can run JavaScript on your **computer/server**.

So basically…

Before Node.js → JS = only frontend
After Node.js → JS = frontend + backend

Node.js helps you:

- Create servers

- Build APIs

- Connect to databases

- Handle requests and responses

It is mainly used for **backend development**.

**Real Life Example**

Think of a **restaurant**:

- Frontend = Waiter (takes order from customer)

- Backend = Kitchen (prepares food)

- Node.js = The kitchen system that processes orders

When a user clicks something on a website:

1. Request goes to server

2. Node.js handles it

3. Sends back response

**Why Node.js is popular?**

- Uses JavaScript (no need to learn new language for backend)

- Fast (uses non-blocking system)

- Good for real-time apps (chat apps, streaming, etc.)

- Huge community and packages (NPM)

# How to install Node.js

1.Go to **nodejs.org**
2.Click on **LTS version**

3. Download it
4. Open the downloaded file
5. Keep clicking **Next → Next → Install → Finish**

**Now check if it worked**
Open **Command Prompt (cmd)** and type:
node -v
If you see something like:
v20.5.0
That means Node.js is installed

**Create a server**
**Step 1**
Create a file called:
server.js

**Step 2**

```
const express = require('express');
const app = express();

app.get("/", (req, res) => {
   res.send("Hello World");
});

app.listen(5000, () => {
   console.log("Server running on http://localhost:5000");
});
```

**Step 3**
Open terminal and type:
node server.js

**Step 4**
Open browser and type:
localhost:5000
You will see:
👉 **Hello World**