**Assignment 1: Environment Setup**

**Set up Node.js and npm on your machine.**

**Create a simple "Hello World" Node.js application.**

Below are step-by-step instructions to set up Node.js and npm on your machine and create a simple "Hello World" Node.js application.

Step 1: Install Node.js and npm

Download and Install Node.js:

Visit the official Node.js website: Node.js Download.

Download the recommended version for your operating system.

Follow the installation instructions provided on the website.

Verify Installation:

Open a terminal or command prompt.

Run the following commands to check if Node.js and npm are installed:

node -v

npm -v

These commands should print the installed versions of Node.js and npm.

Step 2: Create a "Hello World" Node.js Application

Create a Project Directory:

Choose or create a directory where you want to create your Node.js project.

Navigate to the Project Directory:

Open a terminal or command prompt.

Use the cd command to navigate to your project directory:

cd path/to/your/project

Create a Package.json File:

Run the following command to create a package.json file. This file will contain metadata about your project and its dependencies.

npm init -y

This command uses default values for most prompts. You can modify the package.json file later if needed.

Create the Main Application File:

Create a file named app.js (or any other name you prefer) in your project directory.

Edit app.js:

Open app.js in a text editor and add the following code:

console.log("Hello, World!");

Step 3: Run the "Hello World" Application

Run the Application:

In the terminal, run the following command to execute the app.js file:

node app.js

You should see the output "Hello, World!" in the terminal.

Congratulations! You have successfully set up Node.js, npm, and created a simple "Hello World" Node.js application. You can now continue building more complex applications using Node.js and its vast ecosystem of packages.