4. Write a Node JS program to read form data from query string and generate response using NodeJS

const http = require('http');

const url = require('url');

// Create an HTTP server

const server = http.createServer((req, res) => {

    // Parse the URL and extract query parameters

    const query = url.parse(req.url, true).query;

    const name = query.name || 'Guest';

    const age = query.age || 'Unknown';

    const email = query.email || 'Not Provided';

    // Set response header

    res.writeHead(200, { 'Content-Type': 'text/html' });

    // Generate response with submitted data

    res.write('<h1>Form Data Received</h1>');

    res.write('<p>Here is the data you submitted:</p>');

    res.write(`<ul>

        <li><strong>Name:</strong> ${name}</li>

        <li><strong>Age:</strong> ${age}</li>

        <li><strong>Email:</strong> ${email}</li>

    </ul>`);

    res.end();

});

// Start the server on port 3000

server.listen(3000, () => {

    console.log('Server is running on http://localhost:3000');

});

**How It Works:**

1. The server listens on **port 3000**.
2. It extracts the **query string parameters** from the request URL.
3. It dynamically generates an HTML response displaying the received form data.
4. If no query parameters are found, it displays a message.

5.Create a food delivery website where users can order food from a particular restaurant

Set Up Your Project

Install Node.js and npm (Node Package Manager).

Create a new project directory and initialize it with npm init.

Install necessary dependencies:

npm install express body-parser mongoose

express: For handling HTTP requests and responses.

body-parser: For parsing incoming request bodies.

mongoose: For interacting with MongoDB.

**Server.js:**

const express = require('express');

const bodyParser = require('body-parser');

const path = require('path');

const app = express();

app.use(bodyParser.urlencoded({ extended: true }));

// Serve static files (ensures order.html is accessible)

app.use(express.static(\_\_dirname));

// Route to serve the order form

app.get('/', (req, res) => {

res.sendFile(path.join(\_\_dirname, 'order.html'));

});

// Route to handle form submission

app.post('/order', (req, res) => {

const { item, quantity } = req.body;

if (!item || !quantity || isNaN(quantity) || quantity <= 0) {

return res.status(400).send('Invalid input. Please enter a valid item and quantity.');

}

res.send(`Order placed: ${quantity} x ${item}`);

});

// Start the server

const PORT = 3000;

app.listen(PORT, () => {

console.log(`Server is running on http://localhost:${PORT}`);

});

**Order.html:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Food Order</title>

</head>

<body>

<h2>Place Your Order</h2>

<form action="/order" method="POST">

<label for="item">Item:</label>

<input type="text" id="item" name="item" required><br><br>

<label for="quantity">Quantity:</label>

<input type="number" id="quantity" name="quantity" min="1" required><br><br>

<button type="submit">Place Order</button>

</form>

</body>

</html>

**Save** the order.html and server.js files in the same directory

npm install express body-parser

node server.js