Answer any ONE of the following assignments:

Assignment 1: AI-Assisted Text Classification API

Problem Statement

Build a backend service that classifies input text into categories like Complaint, Query, Feedback, or Other using an AI model.

Requirements

- REST API with single POST endpoint.

- Takes a text string.

- Sends it to an AI model for classification.

- Returns category and confidence (use your own mapping if AI does not return confidence).

Tech Expectations

- .NET, Java, Node.js or PHP.

- Basic controllers, routing, service structure.

- Error handling (minimal).

Deliverables

- Source code in GitHub.

- README with API example, environment setup, and how AI was used.

- Optionally Postman collection.

Assignment 2: AI-Powered Email Template Generator Service

Problem Statement

Design a backend microservice that generates customer-friendly email templates based on a few input fields.

Requirements

- POST API: { purpose, recipient_name, tone }

- AI should generate a short email template.

- Provide response time logs for AI calls (simple timestamp diff is fine).

- Keep structure modular.

Tech Expectations

- Any one backend framework (ASP.NET Core, Spring Boot, Express.js, Laravel).

- Clean separation of controller and service logic.

- Environment variable handling for API keys.

Deliverables

- GitHub link.

- README with instructions and sample API response.

Brief explanation of how AI prompts were designed.