Assignment: Build a Simple Product API Using Express & FS

Goal:
Create a CRUD (Create - Read - Update - Delete) application using:
- Express as the Web Framework.
- fs module to store data inside a product.json file.
- Learn key concepts like middleware, routing, and file operations.
Requirements:
1. Build a complete RESTful API that supports the 4 main operations:
- Create new product (POST /api/products)
- Get all products (GET /api/products)
- Update a product (PATCH /api/products/:id)
- Delete a product (DELETE /api/products/:id)
2. Every student must use a middleware function to validate data during the Create operation.
Required fields:
- productName
- salary
- description
- category
- quantity
3. Students must include screenshots for each of the four operations to confirm proper functionality
Notes:
- Organize code using folders (routes, controllers, dev).
- product.json file should be placed inside a dev folder.

- Use async/await for clean and readable code instead of callbacks.