E-Commerce Admin Dashboard API

This is a FastAPI-powered backend for an e-commerce admin dashboard. The API allows e-commerce managers to view and manage sales data, inventory, and products, as well as track revenue over different periods.

Features

- **Sales Status**: Retrieve, filter, and analyze sales data. Compare revenue across different periods.
- **Inventory Management**: View and update current inventory levels, and track stock changes.
- **Product Registration**: Register new products in the system.
- **Revenue Analysis**: Get insights on revenue over daily, weekly, monthly, or annual periods.

Requirements

- Python 3.8+
- MySQL (or any compatible relational database)

Setup Instructions

1. Clone the Repository

Clone this repository to your local machine:

```
git clone .git
```

2. Create a Virtual Environment

Create and activate a virtual environment to manage dependencies:

```
# For Windows
python -m venv venv
venv\Scripts\activate
```

3. Install Dependencies

Install the required Python dependencies:

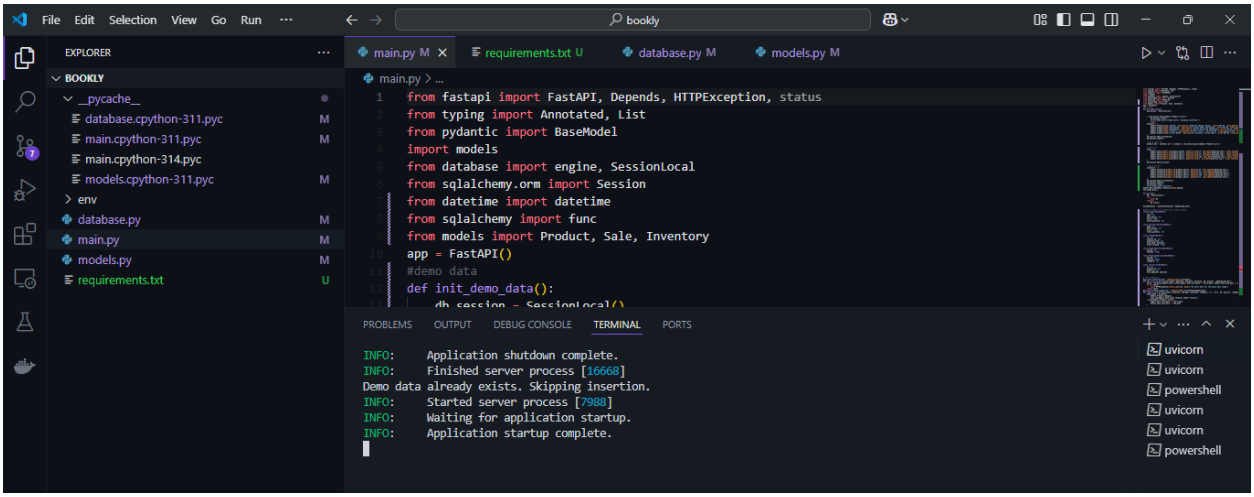
```
pip install -r requirements.txt
```

4. Start the API

Run the FastAPI application:

```
uvicorn main:app --reload
```

The API will be accessible at http://localhost:8000.



5. Access the API Documentation

Once the application is running, you can access the automatically generated documentation for the API:

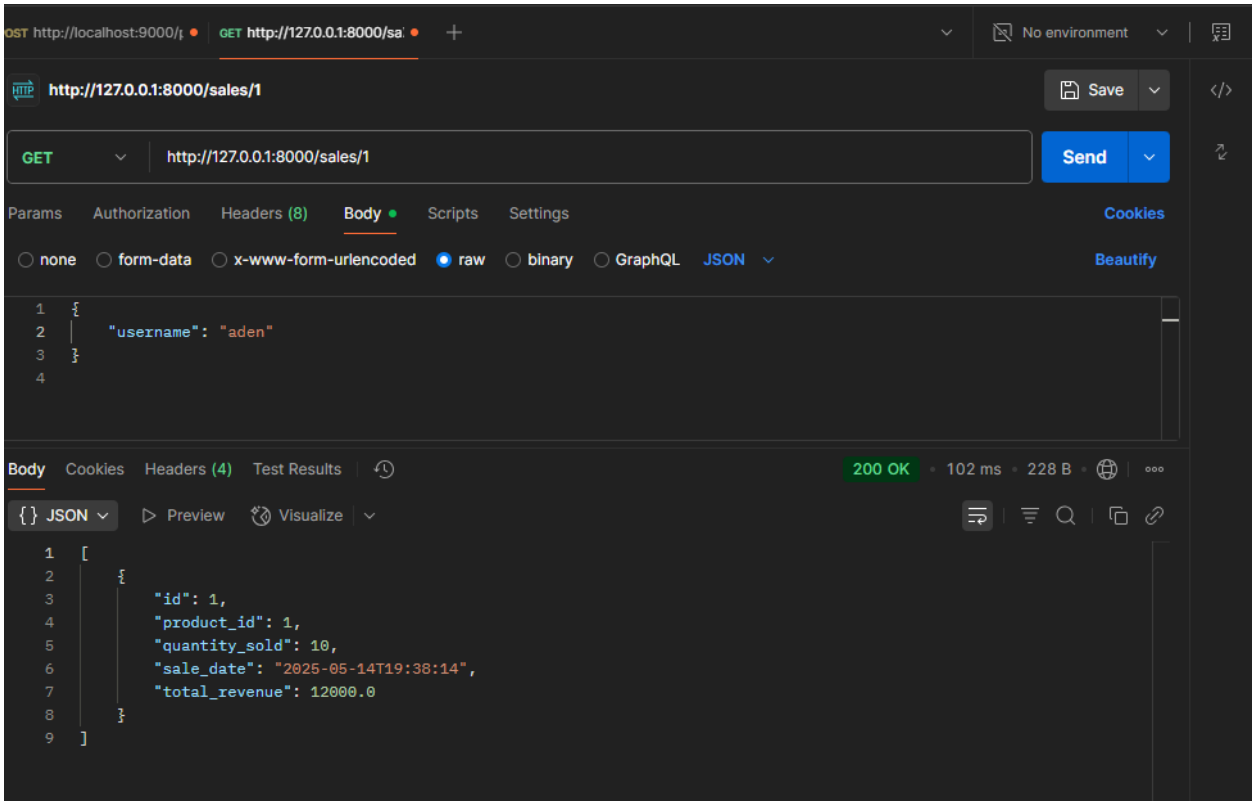
- Swagger UI: `http://localhost:8000/docs`
- ReDoc UI: `http://localhost:8000/redoc`

Endpoints

1. Sales Status Endpoints

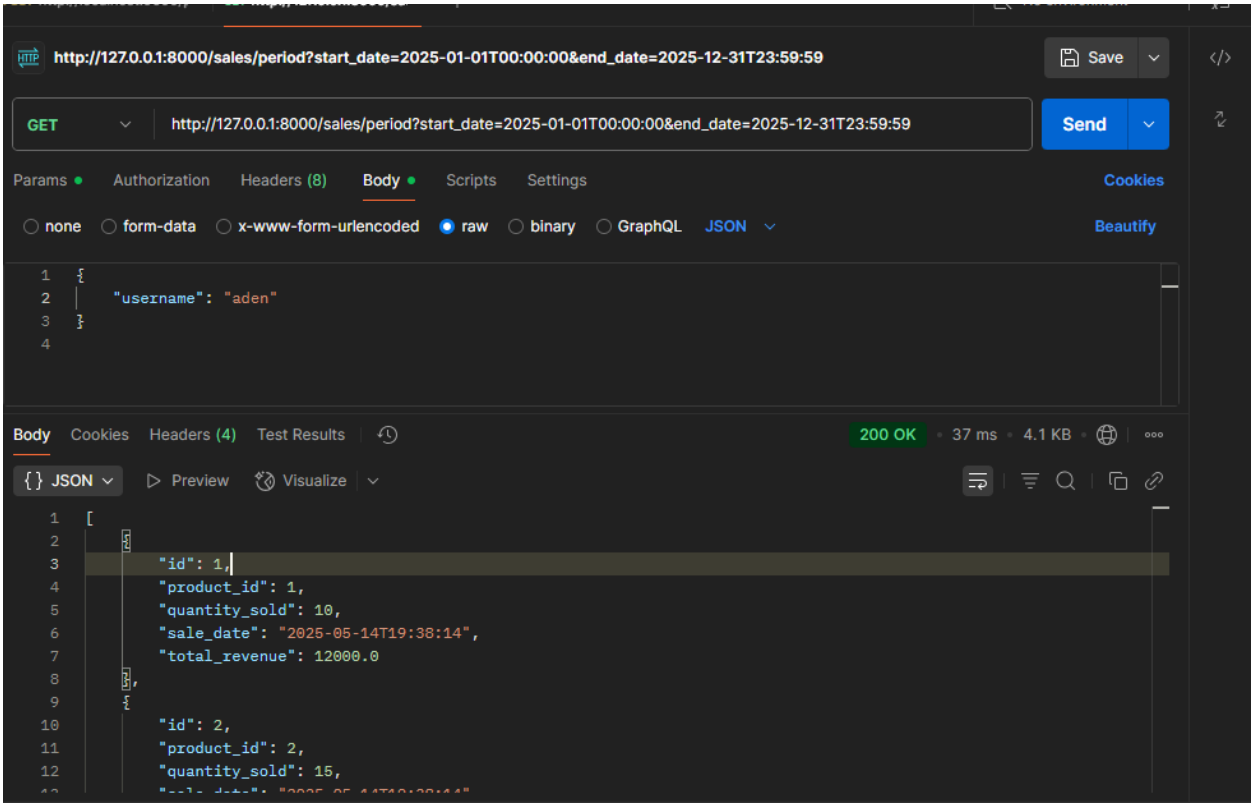
Get Sales by Product ID

- **Method:** `GET`
- **Endpoint:** `/sales/{product_id}`
- **Example:** `/sales/1`



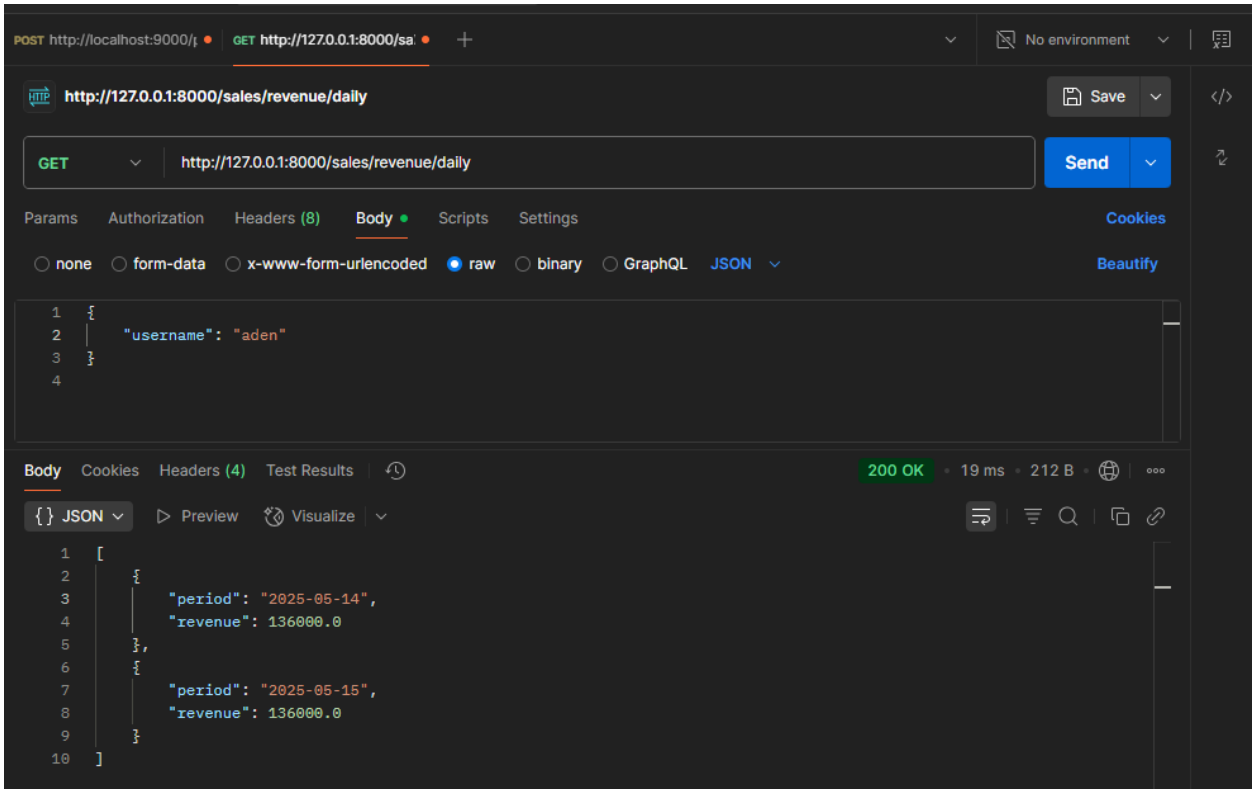
Get Sales by Date Range

- **Method:** `GET`
- **Endpoint:** `/sales/period`
- **Query Parameters:**
    - `start_date`: (e.g. `2025-01-01T00:00:00`)
    - `end_date`: (e.g. `2025-12-31T23:59:59`)



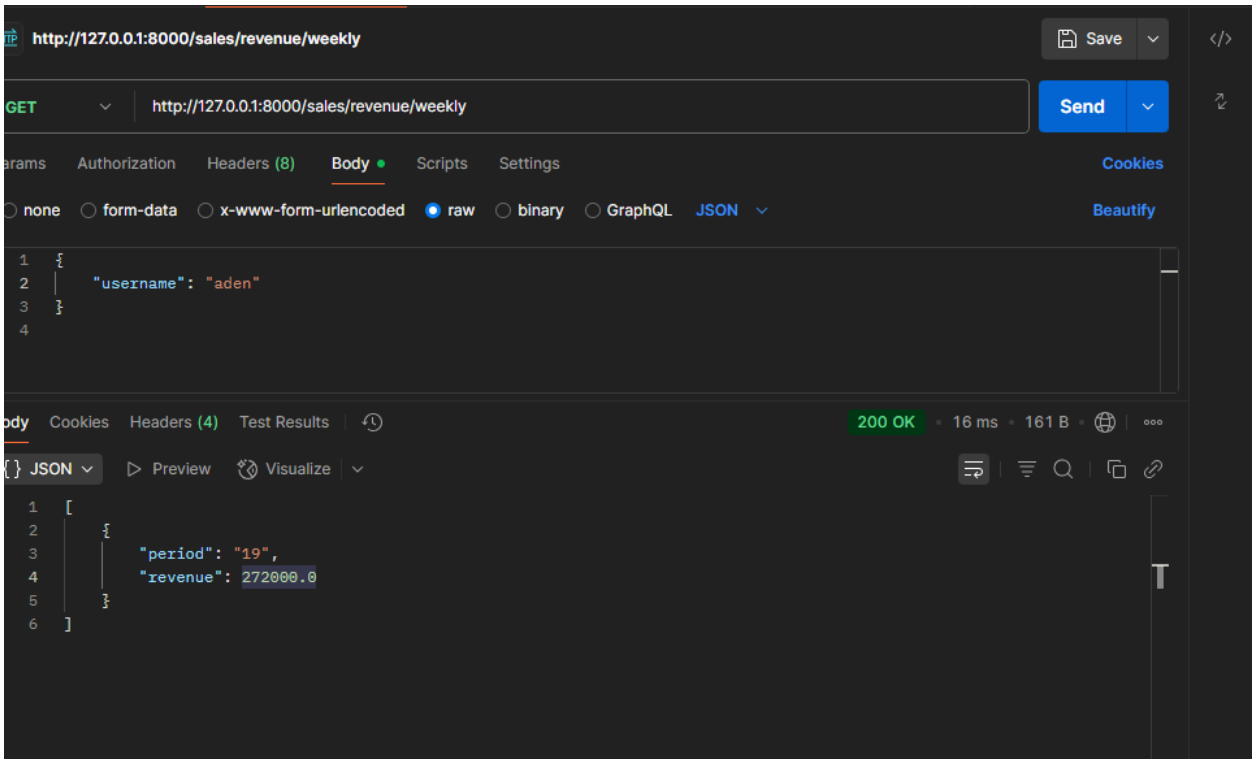
📌 Get Daily Revenue

- **Method:** `GET`
- **Endpoint:** `/sales/revenue/daily`



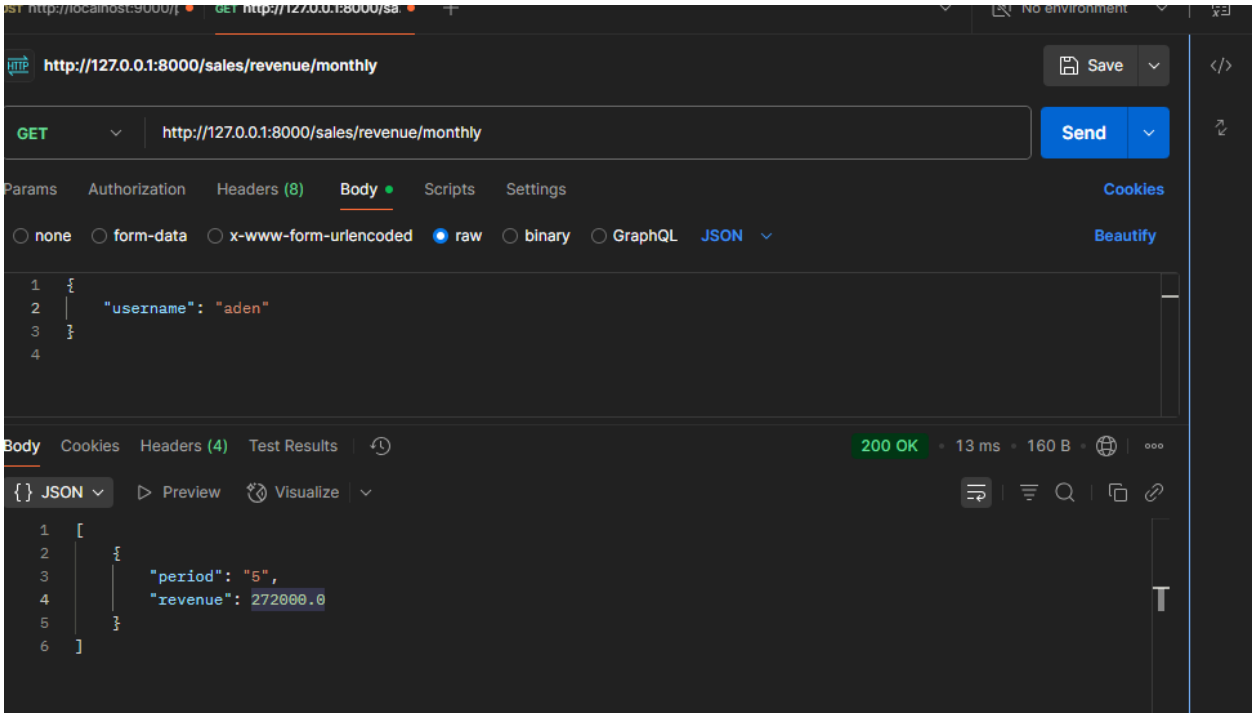
Get Weekly Revenue

- **Method:** `GET`
- **Endpoint:** `/sales/revenue/weekly`



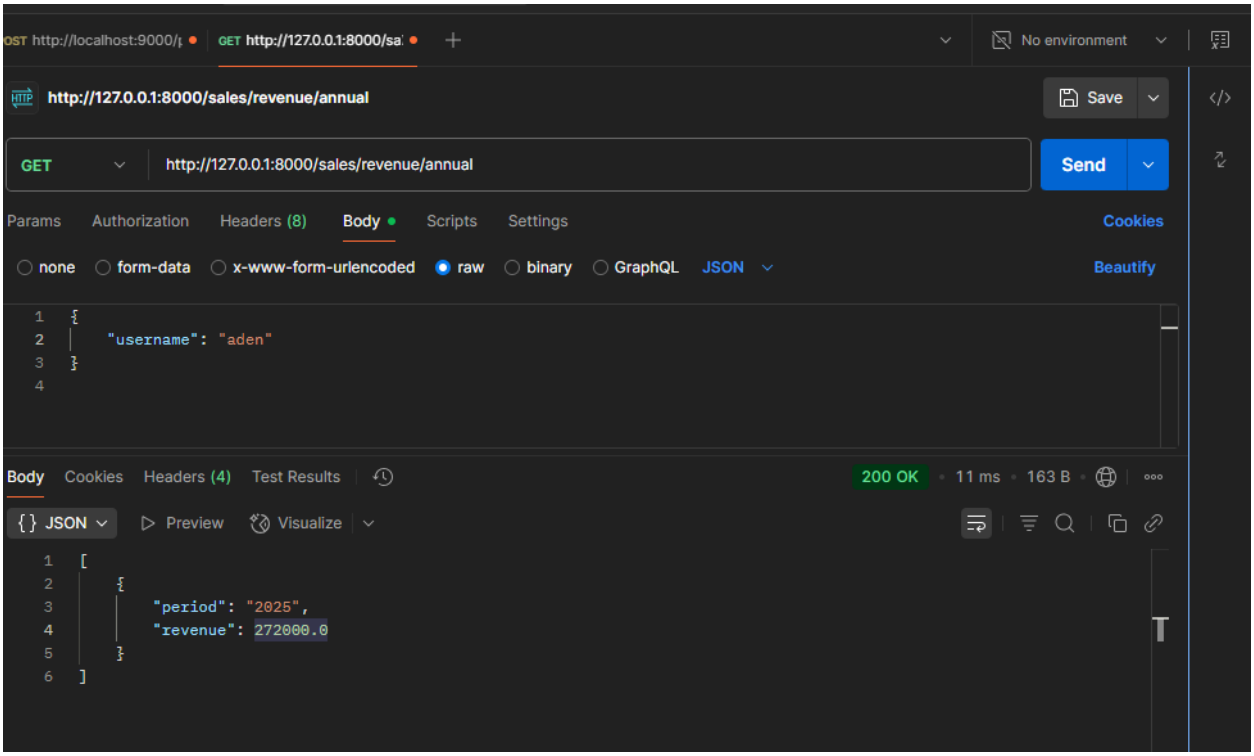
Get Monthly Revenue

- **Method:** `GET`
- **Endpoint:** `/sales/revenue/monthly`



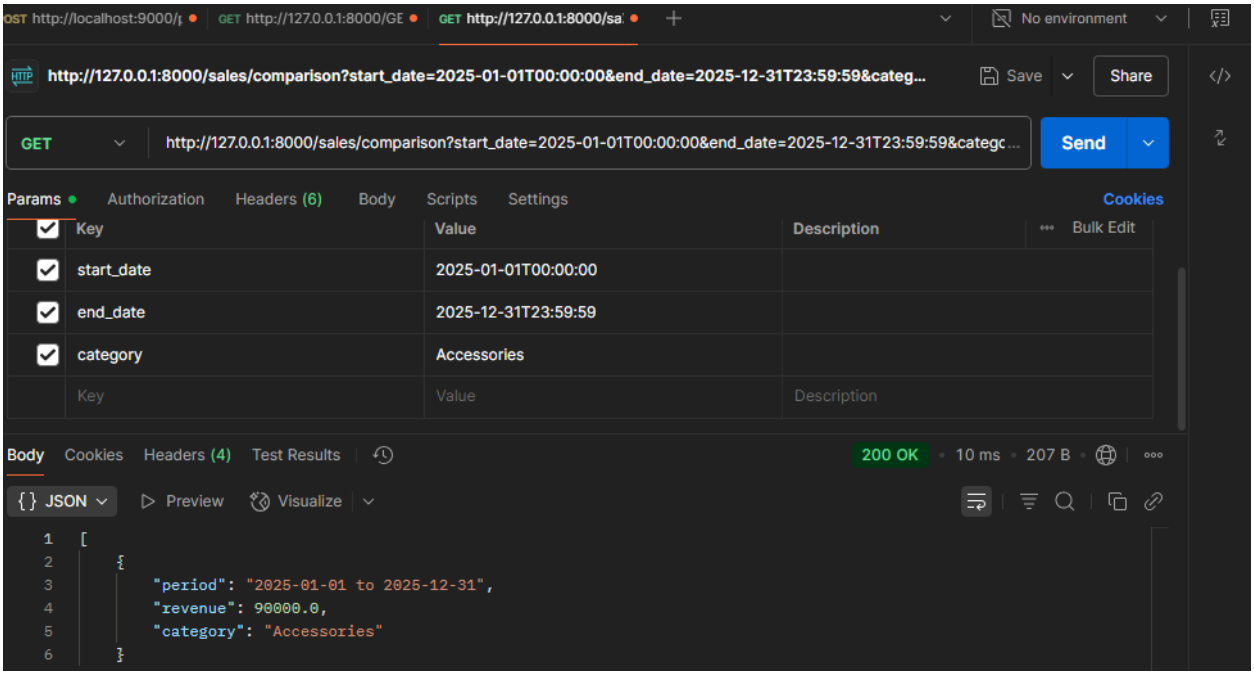
Get Annual Revenue

- **Method:** `GET`
- **Endpoint:** `/sales/revenue/annual`



Compare Revenue Method: `GET`

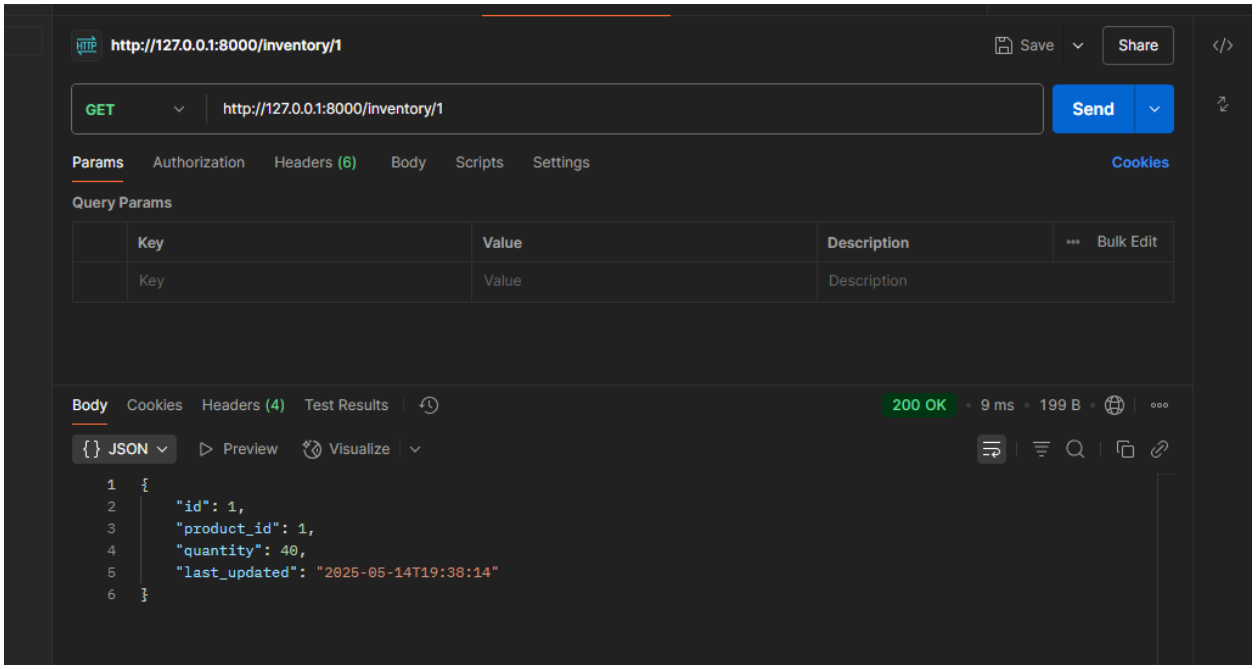
- **Endpoint:** `/sales/comparison`
- **Query Parameters:**
  - `start_date`: (e.g. `2025-01-01T00:00:00`)
  - `end_date`: (e.g. `2025-12-31T23:59:59`)
  - `category`:

- 

2. Inventory Management Endpoints

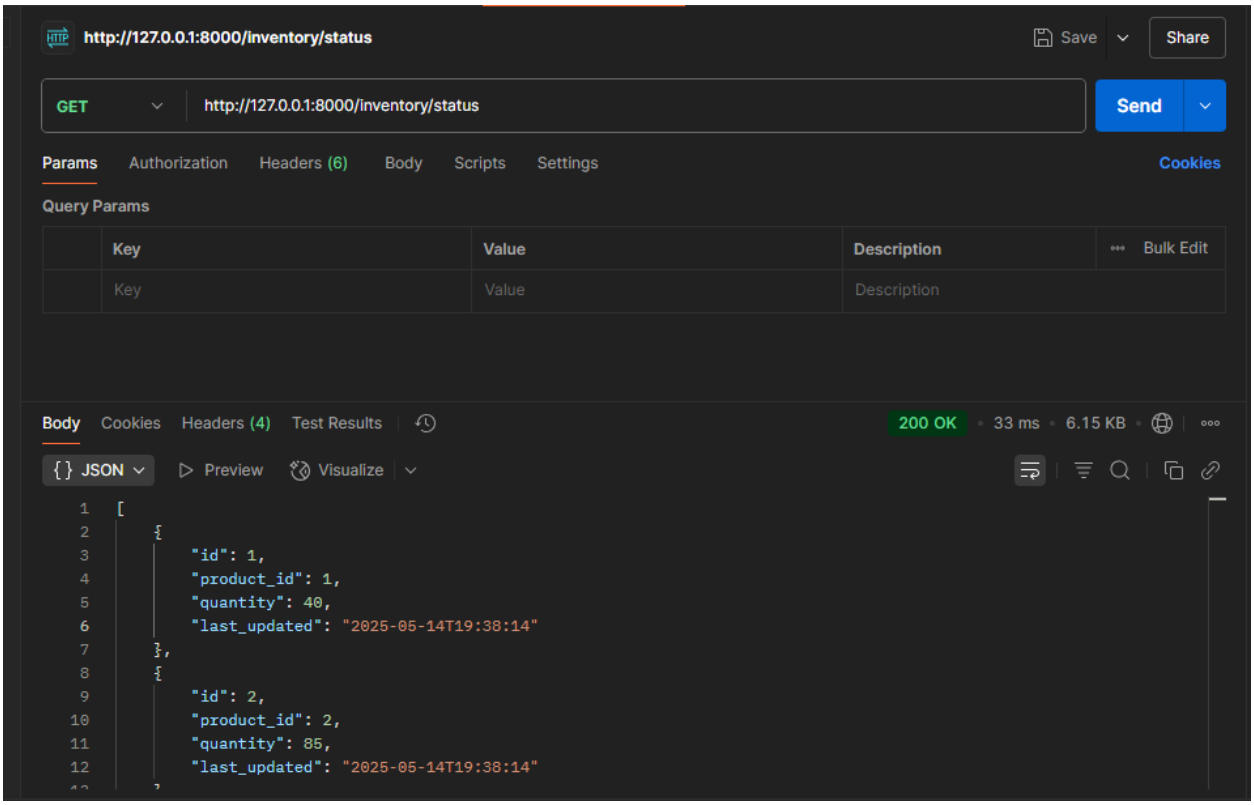
📌 Get Inventory for a Product

- **Method:** `GET`
- **Endpoint:** `/inventory/{product_id}`
- **Example:** `/inventory/1`



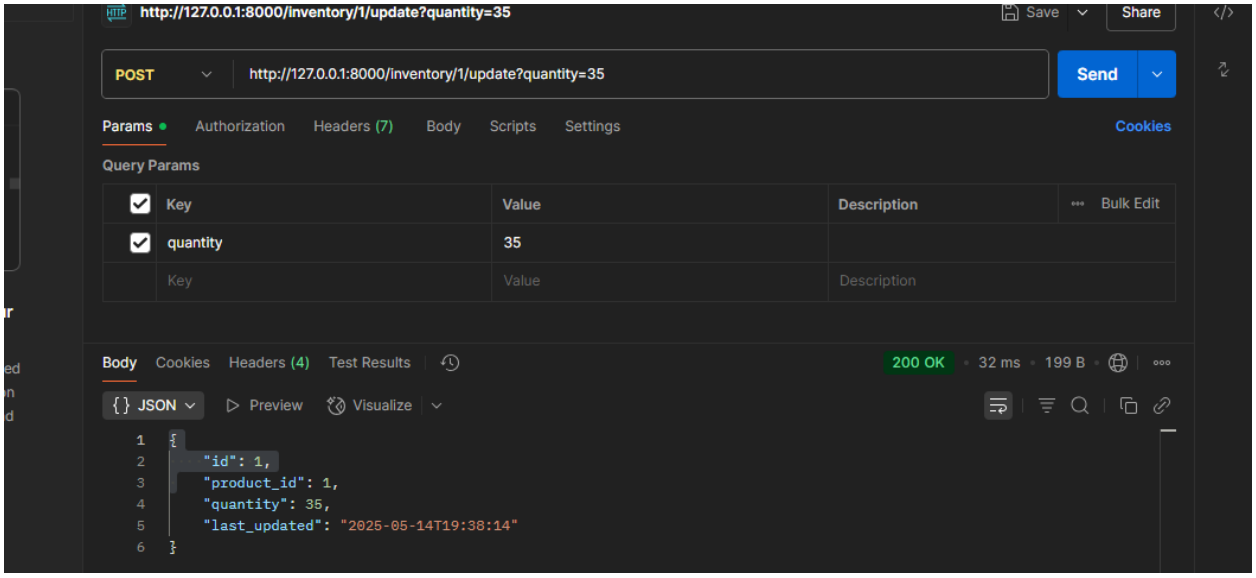
View All Inventory Status

- **Method:** `GET`
- **Endpoint:** `/inventory/status`



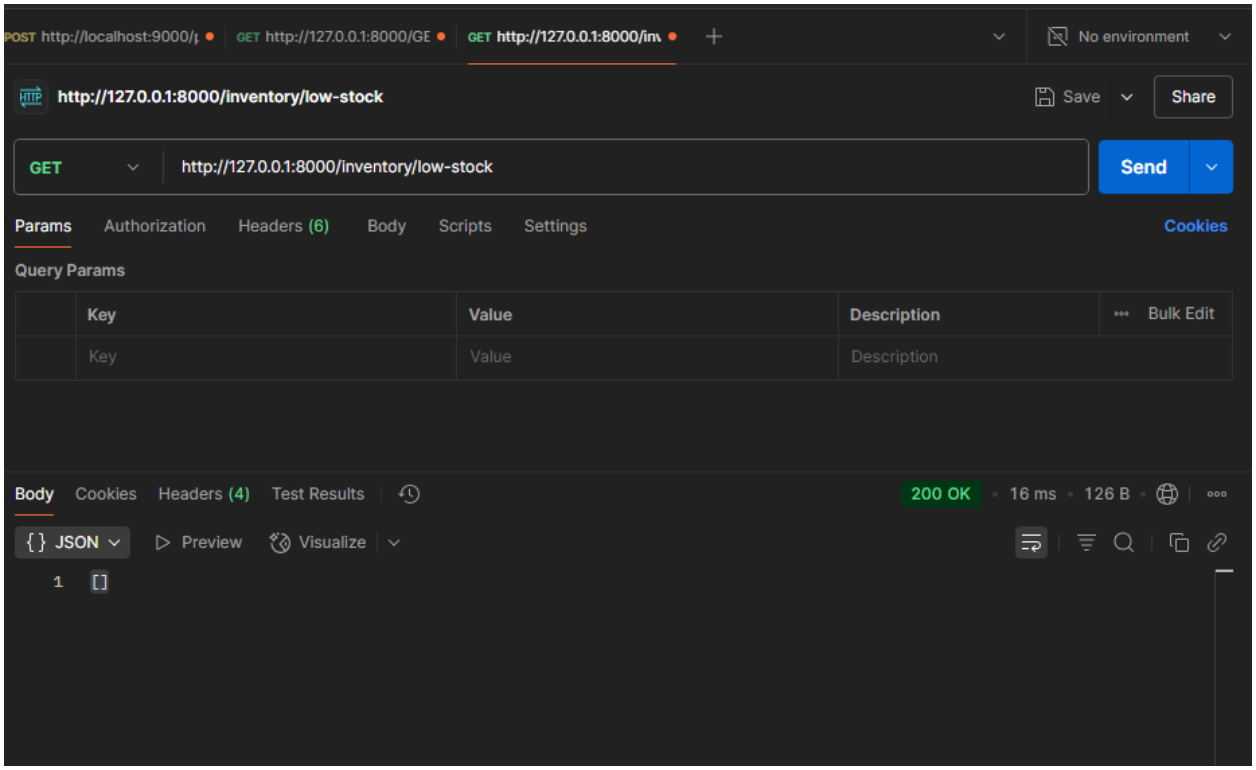
Update Inventory Quantity

- **Method:** `POST`
- **Endpoint:** `/inventory/{product_id}/update`
- **Query Parameters:**
  - `quantity`: new quantity value
- **Example**



Get Low Stock Alerts

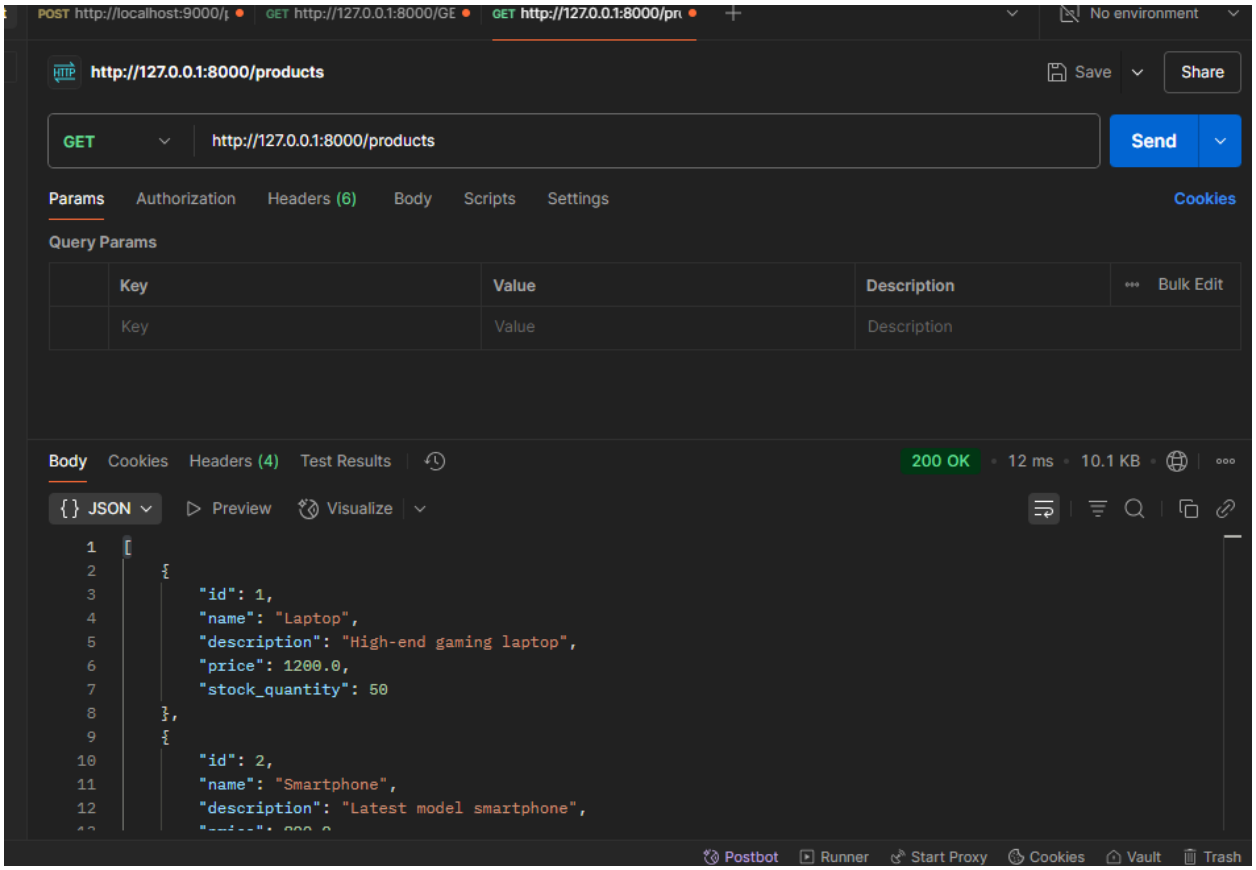
- **Method:** `GET`
- **Endpoint:** `/inventory/low-stock`



3. Product Endpoints

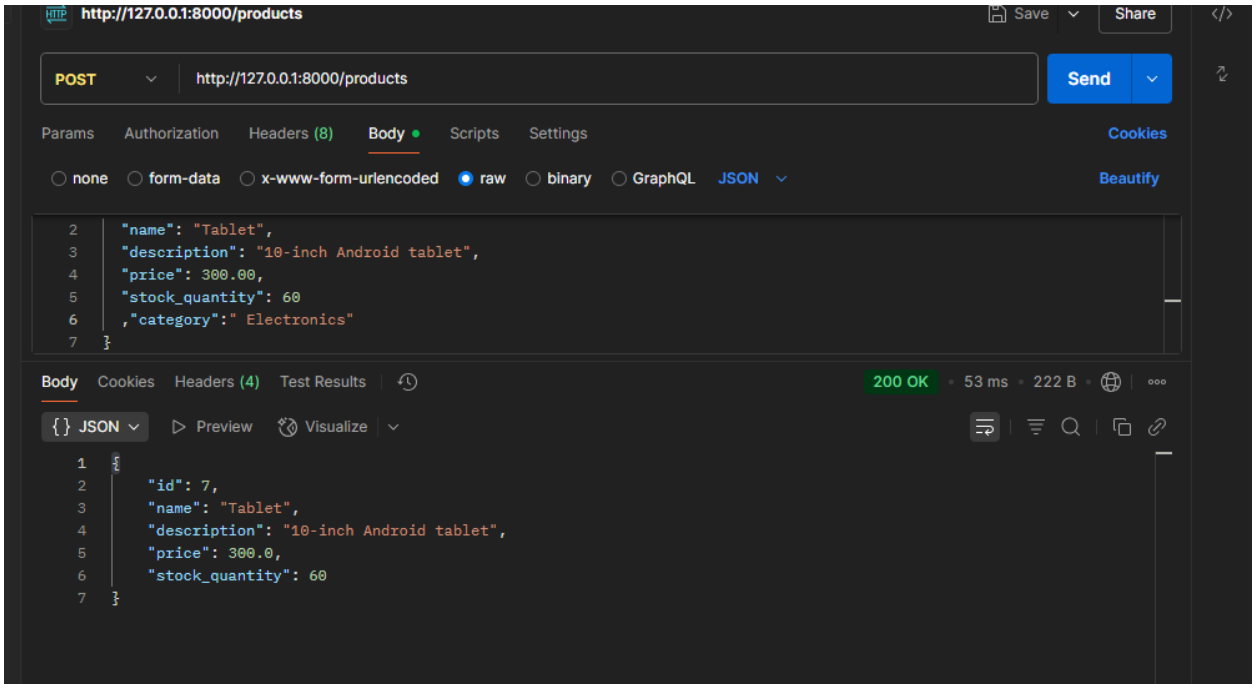
📌 Get All Products

- **Method:** `GET`
- **Endpoint:** `/products`



Register New Product

- **Method:** `POST`
- **Endpoint:** `/products`


http://127.0.0.1:8000/products
Save
Share
POST
http://127.0.0.1:8000/products
Send
Params
Authorization
Headers (8)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
2 "name": "Tablet",
3 "description": "10-inch Android tablet",
4 "price": 300.00,
5 "stock_quantity": 60
6 ,"category":" Electronics"
7 }
Body
Cookies
Headers (4)
Test Results
200 OK
53 ms
222 B
{} JSON
Preview
Visualize
1 {
2 "id": 7,
3 "name": "Tablet",
4 "description": "10-inch Android tablet",
5 "price": 300.0,
6 "stock_quantity": 60
7 }