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**ROLL NO. 20011598-058**

**SECTION: 6-B**

**MICROSERVICE IN PYTHON**

**UPDATE STOCK.PY :**

import json

from flask import Flask, request, jsonify

from flask\_sqlalchemy import SQLAlchemy

app = Flask(\_\_name\_\_)

app.config['SQLALCHEMY\_DATABASE\_URI'] = 'sqlite:///stock.db'

db = SQLAlchemy(app)

class Order(db.Model):

    id = db.Column(db.Integer, primary\_key=True)

    name = db.Column(db.String(100), nullable=False)

    quantity = db.Column(db.Integer, nullable=False)

    price = db.Column(db.Float, nullable=False)

def create\_database():

    with app.app\_context():

        db.create\_all()

def load\_order\_data(file\_path):

    with open(file\_path, 'r') as json\_file:

        data = json.load(json\_file)

    return data

def store\_orders(orders\_data):

    with app.app\_context():

        for order\_data in orders\_data:

            name = order\_data.get('name')

            quantity = order\_data.get('quantity')

            price = order\_data.get('price')

            if name and quantity and price:

                new\_order = Order(name=name, quantity=quantity, price=price)

                db.session.add(new\_order)

        db.session.commit()

@app.route('/orders', methods=['GET', 'POST'])

def orders():

    if request.method == 'GET':

        # Implement code to fetch and return orders data from the database

        return jsonify({'message': 'Listing all orders'}), 200

    elif request.method == 'POST':

        data = request.get\_json()

        name = data.get('name')

        quantity = data.get('quantity')

        price = data.get('price')

        if not all([name, quantity, price]):

            return jsonify({'message': 'Invalid data provided'}), 400

        new\_order = Order(name=name, quantity=quantity, price=price)

        db.session.add(new\_order)

        db.session.commit()

        return jsonify({'message': 'Order created successfully'}), 201

@app.route('/update\_stock', methods=['GET', 'POST'])

def update\_stock():

    if request.method == 'GET':

        return jsonify({'message': 'Please use a POST request to update stock'}), 200

    # ... Rest of your code to handle the "POST" request

    return jsonify({'message': 'Stock updated successfully'}), 200

@app.route('/', methods=['GET'])

def home():

    return jsonify({'message': 'Welcome to the Order Management System!'}), 200

if \_\_name\_\_ == '\_\_main\_\_':

    order\_data\_file = 'update\_data.json'

    orders\_data = load\_order\_data(order\_data\_file)

    create\_database()

    store\_orders(orders\_data)

    app.run(debug=True, host='0.0.0.0')

**UPDATE\_DATA.JSON:**

[

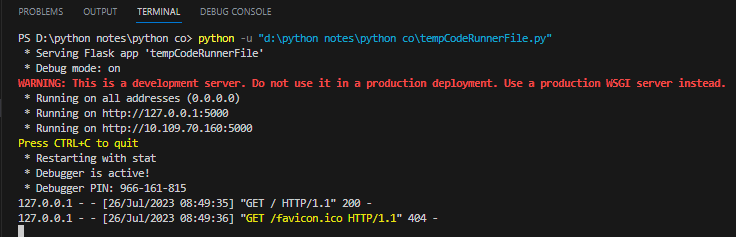
    {"name": "Product1", "quantity": 10, "price": 25.0},

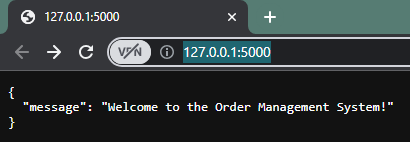
    {"name": "Product2", "quantity": 5, "price": 15.0},

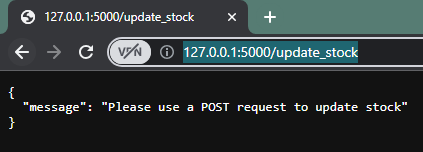
    {"name": "Product3", "quantity": 8, "price": 30.0}

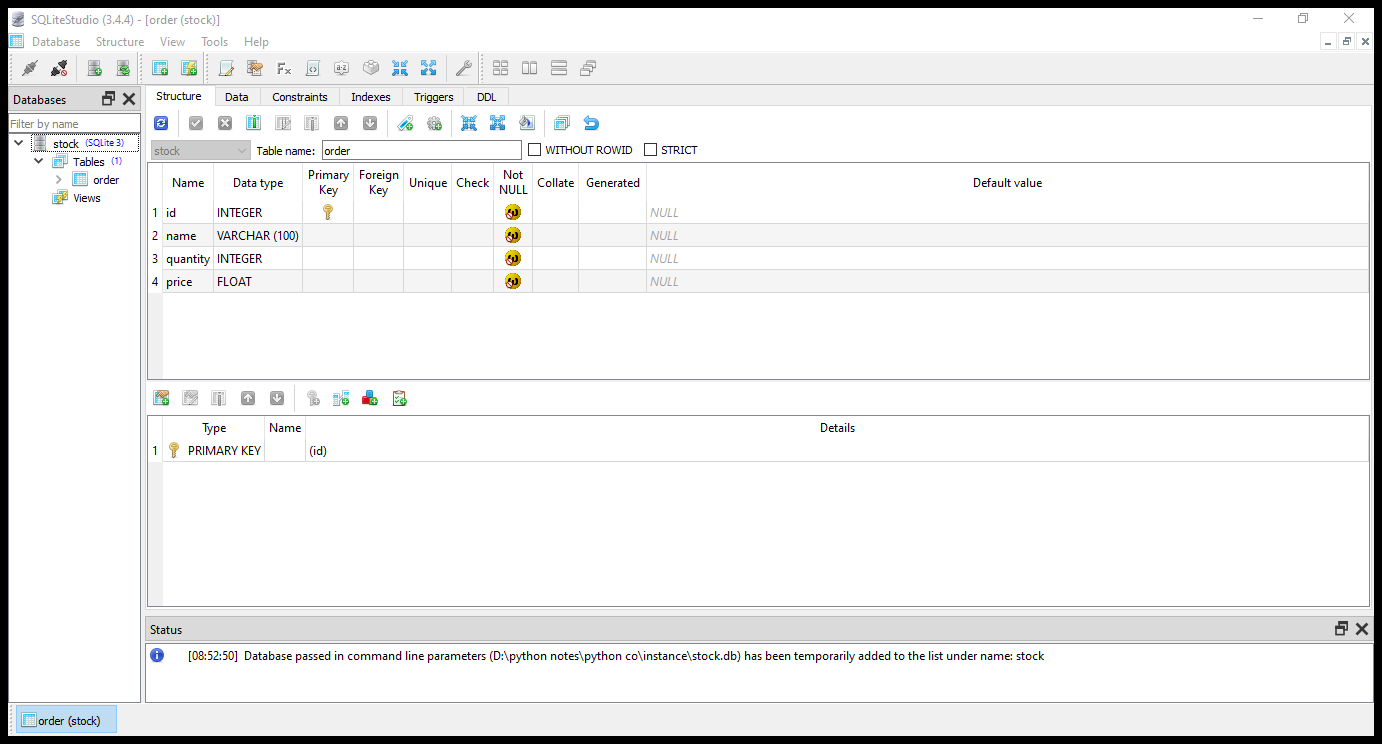
]

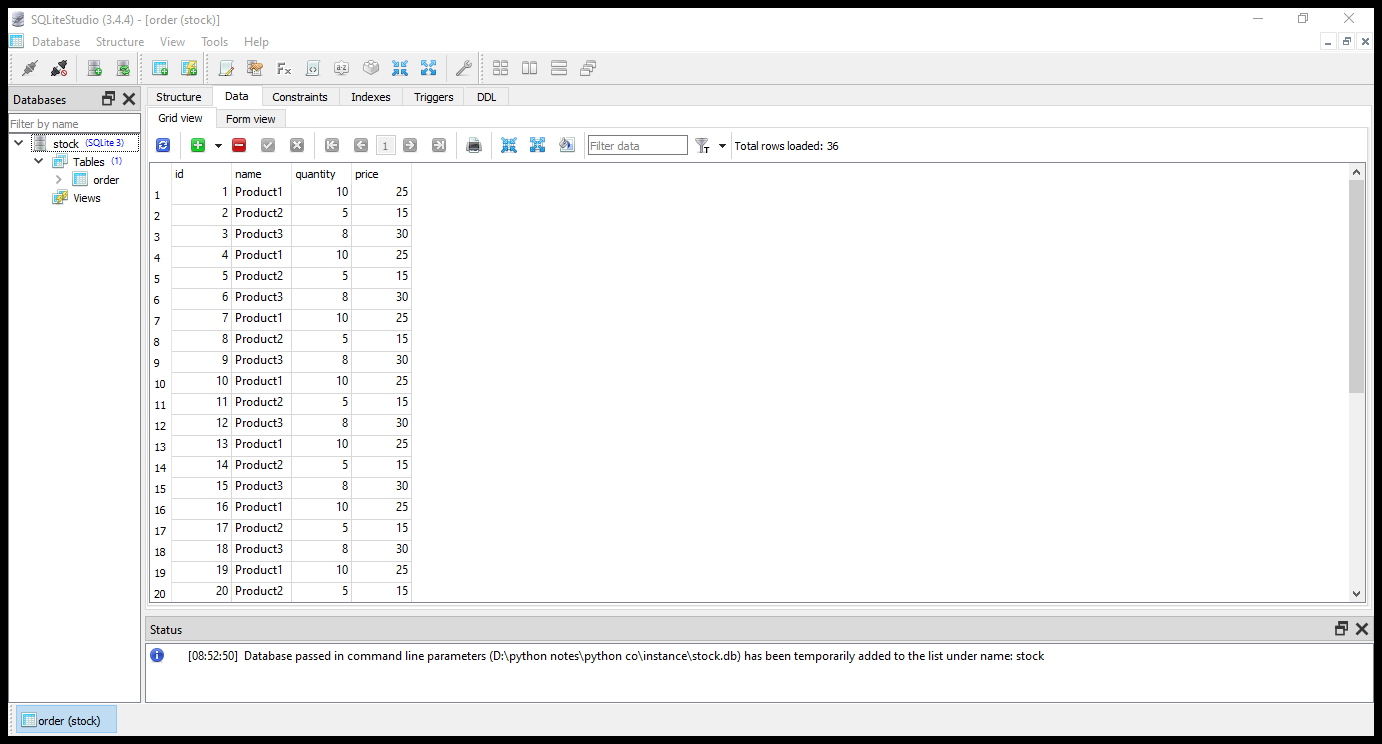
**OUTPUT**

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