**Introduction to JWT (JSON Web Token) in Flask**

**JSON Web Token (JWT)** is a compact, self-contained way to securely transmit information between parties as a JSON object. It is commonly used for authentication and information exchange in web applications.

In a Flask application, JWT is typically used to handle authentication. Instead of traditional session-based authentication, JWT is stateless, meaning all authentication data is encapsulated in the token itself and not stored on the server.

pip install Flask Flask-JWT-Extended

App.py

from flask import Flask, jsonify, request

from flask\_jwt\_extended import (

    JWTManager, create\_access\_token, jwt\_required, get\_jwt\_identity

)

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

# Configure the JWT secret key

app.config["JWT\_SECRET\_KEY"] = "your-secret-key"  # Change this to a strong key

jwt = JWTManager(app)

# Mock user database

users = {

    "testuser": {"password": "testpassword"}

}

@app.route("/login", methods=["POST"])

def login():

    """

    Login endpoint to authenticate users and generate JWT.

    """

    username = request.json.get("username", None)

    password = request.json.get("password", None)

    if not username or not password:

        return jsonify({"msg": "Missing username or password"}), 400

    # Check if the user exists and the password matches

    user = users.get(username)

    if not user or user["password"] != password:

        return jsonify({"msg": "Bad username or password"}), 401

    # Create access token

    access\_token = create\_access\_token(identity=username)

    return jsonify(access\_token=access\_token)

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

@jwt\_required()

def protected():

    """

    Protected endpoint that requires a valid JWT token to access.

    """

    current\_user = get\_jwt\_identity()

    return jsonify(logged\_in\_as=current\_user), 200

if \_\_name\_\_ == "\_\_main\_\_":

    app.run(debug=True)

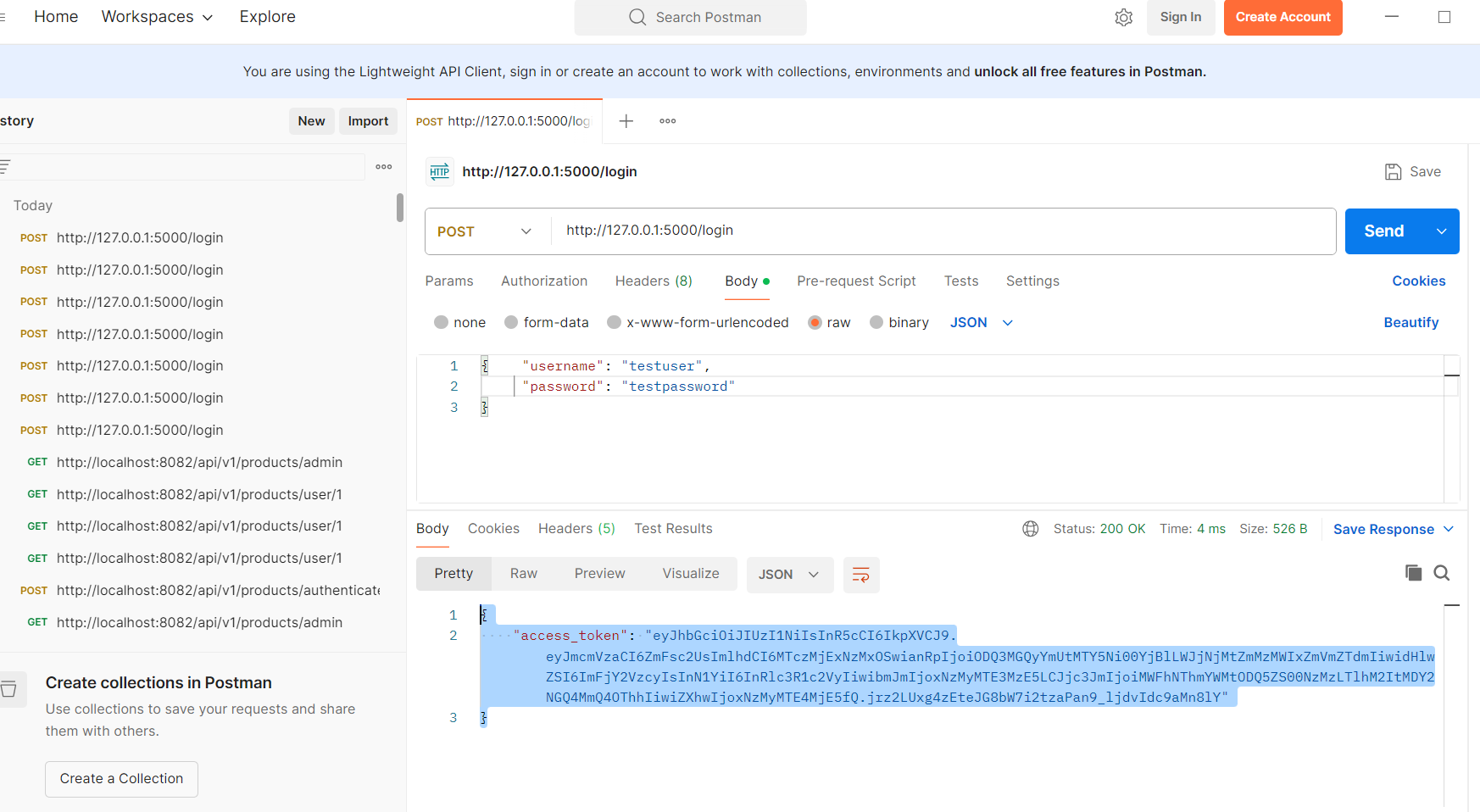
Post <http://localhost:5000/login>

{

    "username": "testuser",

     "password": "testpassword"

}



{

    "access\_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJmcmVzaCI6ZmFsc2UsImlhdCI6MTczMjExNzMxOSwianRpIjoiODQ3MGQyYmUtMTY5Ni00YjBlLWJjNjMtZmMzMWIxZmVmZTdmIiwidHlwZSI6ImFjY2VzcyIsInN1YiI6InRlc3R1c2VyIiwibmJmIjoxNzMyMTE3MzE5LCJjc3JmIjoiMWFhNThmYWMtODQ5ZS00NzMzLTlhM2ItMDY2NGQ4MmQ4OThhIiwiZXhwIjoxNzMyMTE4MjE5fQ.jrz2LUxg4zEteJG8bW7i2tzaPan9\_ljdvIdc9aMn8lY"

}

Get request : http://localhost:5000/protected

Bearer token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJmcmVzaCI6ZmFsc2UsImlhdCI6MTczMjExNzMxOSwianRpIjoiODQ3MGQyYmUtMTY5Ni00YjBlLWJjNjMtZmMzMWIxZmVmZTdmIiwidHlwZSI6ImFjY2VzcyIsInN1YiI6InRlc3R1c2VyIiwibmJmIjoxNzMyMTE3MzE5LCJjc3JmIjoiMWFhNThmYWMtODQ5ZS00NzMzLTlhM2ItMDY2NGQ4MmQ4OThhIiwiZXhwIjoxNzMyMTE4MjE5fQ.jrz2LUxg4zEteJG8bW7i2tzaPan9\_ljdvIdc9aMn8lY

