

## SQL Lab 2: SQLite RAG

### Objectives:

- Store documents and embeddings in SQLite
- Compute cosine similarity with NumPy
- Build a simple RAG pipeline

### Setup:

- Set OPENAI\_API\_KEY in a .env file
- Install deps: openai, python-dotenv, numpy

### Steps:

- 1) Create documents table (content, embedding)
- 2) Embed each document and store as JSON
- 3) For a query, embed + compute similarity
- 4) Retrieve top-k docs and answer with LLM

### Key SQL:

- CREATE TABLE, INSERT, SELECT
- LIKE queries for baseline keyword search