

# SQL Murder Mystery

Link: <https://mystery.knightlab.com/>

There's been a Murder in SQL City! The SQL Murder Mystery is designed to be both a self-directed lesson to learn SQL concepts and commands and a fun game for experienced SQL users to solve an intriguing crime.

A crime has taken place and the detective needs your help. The detective gave you the crime scene report, but you somehow lost it. You vaguely remember that the crime was a murder that occurred sometime on Jan.15, 2018, and that it took place in SQL City.

Start by retrieving the corresponding crime scene report from the police department's database.

Following are a few pointers to help you solve this case, these pointers are provided to give you a headstart on approaching this problem statement. It is not recommended to follow this as it is.

## Setting Up the Connection:

**Task:** Establish a connection to the police department's database in Python. Ensure that you can access the necessary tables for the investigation. We have provided you the database file you need to connect that in Python. (Hint: `import sqlite3` )

## 1. Retrieve Crime Scene Report:

**Task:** Run a query to retrieve the crime scene report for the murder that occurred on Jan.15, 2018, in SQL City. Gather all available details from the report.

## 2. Witness Personal Details:

**Task:** Check the personal details of witnesses involved in the case. Retrieve their names, addresses, and any other relevant information.

## 3. View Witness Interviews:

**Task:** Access the recorded interviews of witnesses conducted after the murder. Gather insights into their statements and potential clues.

## 4. Check Gym Database:

**Task:** Investigate the gym database using details obtained from the crime scene report and witness interviews. Look for any gym-related information that might be relevant.

## **5. Check Car Details:**

**Task:** Examine the car details associated with the crime scene. Retrieve information about the vehicles present during the incident.

## **6. Personal Details:**

**Task:** Identify and collect personal details mentioned in the previous query. This includes names, addresses, and any additional details.

## **7. Membership Status at the Gym:**

**Task:** Determine who is identified in the previous query as a member of the gym. Utilize the gym database to confirm their membership status.

## **8. Analyze and Draw Conclusions:**

**Task:** Analyze the collected data, including crime scene reports, witness interviews, gym records, and car details. Draw conclusions or hypotheses based on the information available.

## **9. Document Findings:**

**Task:** Document your findings and any insights gained from the SQL investigation. Summarize the key details that lead you to your conclusions.

## **10. Prepare a Report:**

**Task:** Prepare a detailed report for the detective, summarizing the events, suspects, and your conclusions. Present the evidence and rationale behind your findings.

## **11. Reflect on the Investigation:**

**Task:** Reflect on the investigative process. What challenges did you encounter, and how did you overcome them? Share your reflections on the case-solving experience.

This approach turns the investigative process into actionable tasks, encouraging you to explore the database, extract relevant information, and piece together the clues to solve the SQL Murder Mystery. Good Luck Detective.

MySQL Workbench Installation Guide:

<https://prepinstaprim.com/admin/how-to-install-mysql-workbench/>

SQLite3 Installation: <https://www.sqlite.org/download.html>

If you want to solve this project with Python then take reference from this Kaggle notebook.

<https://www.kaggle.com/code/rishikeshkonapure/eda-text-analysis-amazon-fine-food-reviews>

## Web Scrapping

Website: <http://books.toscrape.com/>

Dataset after web scrapping:

|   | title                                 | rating | price  | link  |
|---|---------------------------------------|--------|--------|---|
| 0 | A Light in the Attic                  | Three  | £51.77 | <a href="http://books.toscrape.com/a-light-in-the-attic...">http://books.toscrape.com/a-light-in-the-attic...</a> |
| 1 | Tipping the Velvet                    | One    | £53.74 | <a href="http://books.toscrape.com/tipping-the-velvet_9...">http://books.toscrape.com/tipping-the-velvet_9...</a> |
| 2 | Soumission                            | One    | £50.10 | <a href="http://books.toscrape.com/soumission_998/index...">http://books.toscrape.com/soumission_998/index...</a> |
| 3 | Sharp Objects                         | Four   | £47.82 | <a href="http://books.toscrape.com/sharp-objects_997/in...">http://books.toscrape.com/sharp-objects_997/in...</a> |
| 4 | Sapiens: A Brief History of Humankind | Five   | £54.23 | <a href="http://books.toscrape.com/sapiens-a-brief-hist...">http://books.toscrape.com/sapiens-a-brief-hist...</a> |