Hands-on Lab: Create Tables and Load Data in Datasette

Estimated time needed: 20 minutes

In this lab, you will learn how to create tables and load data in Datasette.

Objectives

After completing this lab, you will be able to:

- Create and load data into a table from a CSV file
- Create and load data into a table from a SQL script file

Prerequisites

In this lab, you will use Datasette, an open-source multi-tool for exploring and publishing data.

Datasets

PETSHOP and BookShop are the two data sets you will use in this lab.

- PETSHOP:

ID	ANIMAL
1	Cat
2	Dog
3	Parrot
4	Hamster
5	Goldfish

- BookShop:

BOOK_ID	TITLE	AUTHOR_N/
B101	Introduction to Algorithms	Thomas H. C
B201	Structure and Interpretation of Computer Pro...	Harold Abels
B301	Deep Learning	Ian Goodfell
B401	Algorithms Unlocked	Thomas H. C
B501	Machine Learning: A Probabilistic Perspective	Kevin P. Mur

Exercise 1: Load a CSV file and create a table using the Datasette tool

In this exercise, you will learn how to load a CSV file and create a table using the Datasette tool.

1. First, select **Open tool**, then click the **Navigation Pane** at the right-end corner, and then select **Add DataSets**.

2. You will then be redirected to a page where you need to enter the full URL of the CSV data set in the text box.

   ○ Right-click the link PETSHOP.csv and copy the link address. Enter the copied URL in the text box and select the **create** button.

3. The data loaded from the CSV file will create the PETSHOP table. By default, a **SELECT** query related to the table will appear on the **text area** section of the following webpage. Click **Submit Query** to view the results.

Database: PETSHOP

```
SELECT * FROM PETSHOP;
```

Tip: Autocomplete with Ctrl+Enter or Cmd+Enter

Submit query

Results

All commands ran successfully

SELECT * FROM PETSHOP

ID	ANIMAL	SALEPRICE	SALEDATE	QUANTITY
1	Cat	450.09	2018-05-29	9
2	Dog	666.66	2018-06-01	3

4. Next, modify the **SELECT** query as follows:

```
1. 1
1. select count(*) from PETSHOP
```
Copied!

Once you have completed this step, you should see all five rows of the PETSHOP table.

Database: PETSHOP

```
SELECT count(* ) FROM PETSHOP;
```

Tip: Autocomplete with Ctrl+Enter or Cmd+Enter

Submit query

Results

All commands ran successfully

SELECT count(*) FROM PETSHOP

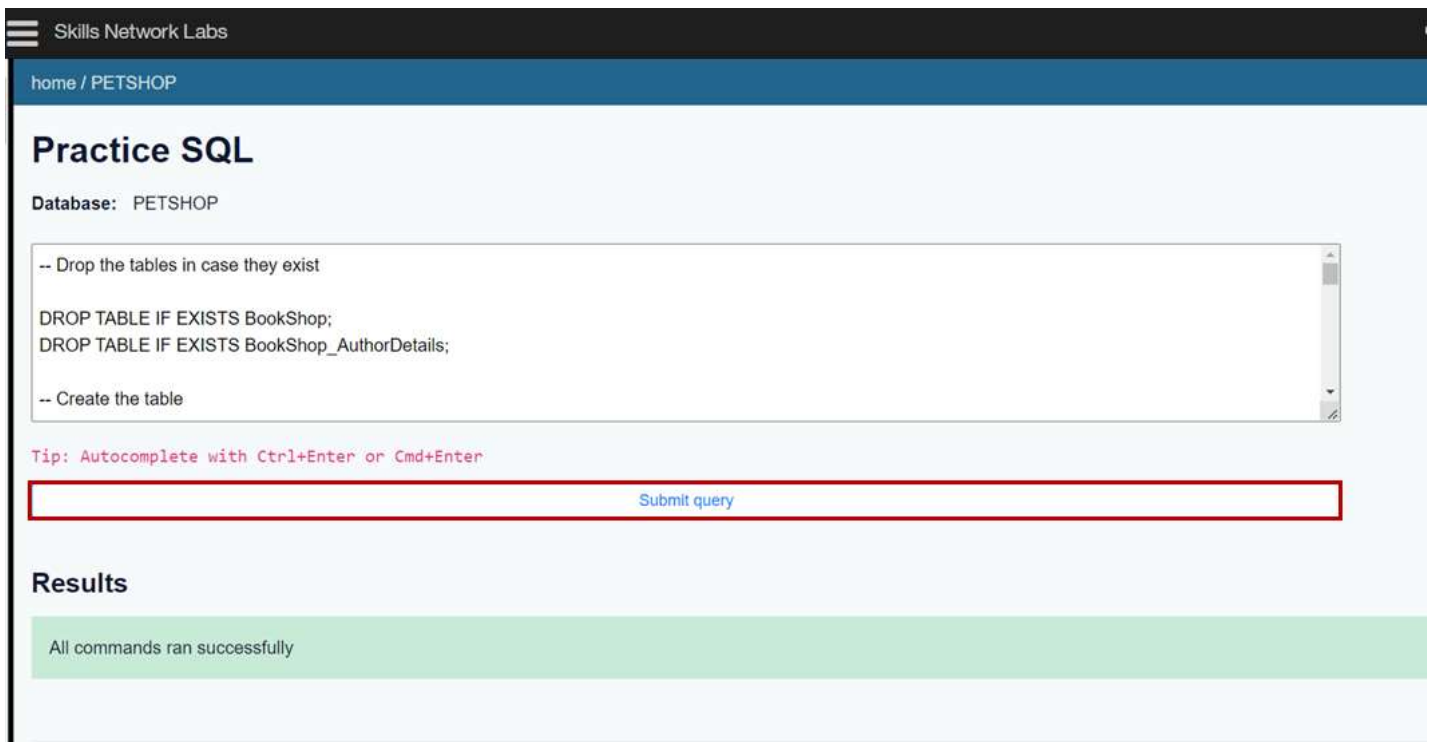| count(*) |
|-----------|
| 5 |

5. You have successfully created and loaded the **PETSHOP** table.

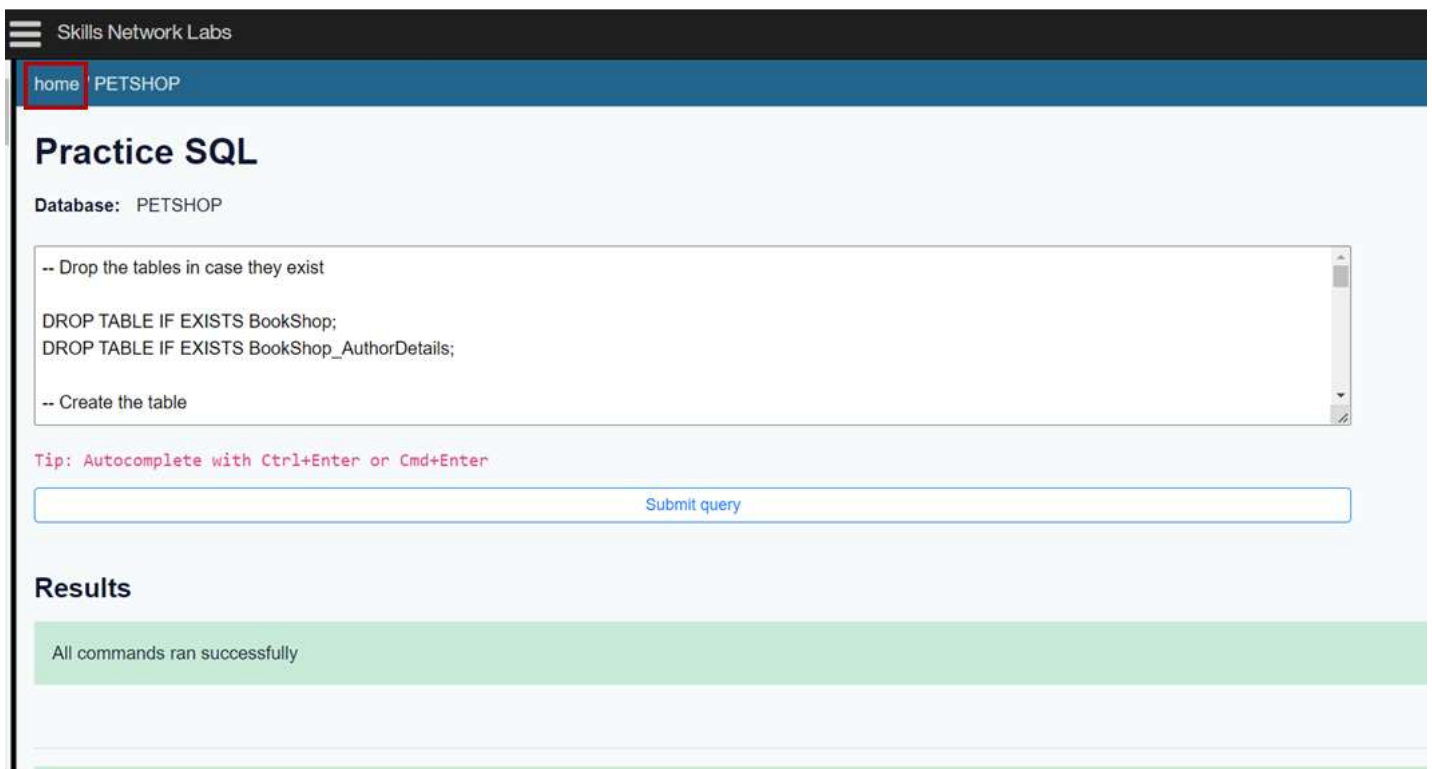# Exercise 2: Create and load data in the table using an SQL script file

In this exercise, you will learn how to create and load data into a table by running a script containing the CREATE and INSERT SQL commands.

1. Download the script file to your computer:

- BookShop-CREATE-INSERT.sql

- Copy the contents of the script file and paste it in the datasette text area

- Select Submit query

3. Next, click the **home** link at the top of the page.

4. This step will redirect you to a page displaying **Databases and Tables**.
   - Select the **BookShop** table under the **PetShop** database.

Datasette

_memory

0 tables

_internal

92 rows in 5 tables

columns, foreign_keys, tables, indexes, databases

Instructors

12 rows in 3 tables

BookShop, BookShop_AuthorDetails, Instructor

PETSHOP

10 rows in 2 tables

PETSHOP, BookShop

Powered by Datasette

5. You will be able to view the **columns** and **data** of the **Bookshop** table.

BookShop

5 rows

- column -   =

[Apply]

↖ View and edit SQL

This data as json, CSV (advanced)

Suggested facets: AUTHOR_NAME, AUTHOR_BIO, AUTHOR_ID, PUBLICATION_DATE (date)

Show charting options

Link	rowid ▼	BOOK_ID	TITLE	AUTHOR_NAME	AUTHOR_BIO	AUTHOR_ID	PUBLICATION
1	1	B101	Introduction to Algorithms	Thomas H. Cormen	Thomas H. Cormen is the co-author of Introduction to Algorithms, along with Charles Leiserson, Ron Rivest, and Cliff Stein. He is a Full Professor of computer science at Dartmouth College and currently Chair of the Dartmouth College Writing Program.	123	2001-09-01
2	2	B201	Structure and Interpretation of Computer Programs	Harold Abelson	Harold Abelson, Ph.D., is Class of 1922 Professor of Computer Science and Engineering in the Department of Electrical Engineering and Computer Science at MIT and a fellow of the IEEE.	456	1996-07-25

Congratulations! You have completed this lab and are ready for the next topic.