

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



Skills
Network

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
B101	Introduction to Algorithms	Thomas H
B201	Structure and Interpretation of Computer Pro...	Harold Ab
B301	Deep Learning	Ian Goodf
B401	Algorithms Unlocked	Thomas H
B501	Machine Learning: A Probabilistic Perspective	Kevin P. M

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**.

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Add a Dataset

To add a dataset into your lab, insert the link to the full URL to the CSV dataset below.

Full URL to Dataset:

Create

Powered by [Datasette](#)

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.

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Add a Dataset

To add a dataset into your lab, insert the link to the full URL to the CSV dataset below.

Full URL to Dataset:

Create

Powered by [Datasette](#)

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.

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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:
- ```
select count(*) from PETSHOP
```

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

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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

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## Practice SQL

Database: PETSHOP

```
-- Drop the tables in case they exist

DROP TABLE IF EXISTS BookShop;
DROP TABLE IF EXISTS BookShop_AuthorDetails;

-- Create the table
```

Tip: Autocomplete with Ctrl+Enter or Cmd+Enter

Submit query

### Results

All commands ran successfully

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

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## Practice SQL

Database: PETSHOP

```
-- Drop the tables in case they exist

DROP TABLE IF EXISTS BookShop;
DROP TABLE IF EXISTS BookShop_AuthorDetails;

-- Create the table
```

Tip: Autocomplete with Ctrl+Enter or Cmd+Enter

Submit query

### Results

All commands ran successfully

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

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## 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.

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## 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 | PUBLIC/ |
|------|---------|---------|---------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|
| 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 |
| 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 |

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

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