

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
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**.

The screenshot shows a web browser window with the title 'Skills Network Labs'. The address bar says 'home'. The main content area has a heading 'Add a Dataset'. Below it, a sub-instruction says 'To add a dataset into your lab, insert the link to the full URL to the CSV dataset below.' There is a text input field labeled 'Full URL to Dataset:' containing the URL 'https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/Example/datasets/Example.csv'. Below the input field is a blue 'Create' button. At the bottom of the page, there is a footer bar with the text '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.

- o Right-click the link [PETSHOP.csv](#) and copy the link address. Enter the copied URL in the text box and select the **create** button.

The screenshot shows a web browser window with the title 'Skills Network Labs'. The address bar says 'home'. The main content area has a heading 'Add a Dataset'. Below it, a sub-instruction says 'To add a dataset into your lab, insert the link to the full URL to the CSV dataset below.' There is a text input field labeled 'Full URL to Dataset:' containing the URL 'https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DB0110EN-SkillsNetwork/datasets/PET_Tables/PETSHOP.csv'. The URL in the input field is highlighted with a red box. Below the input field is a blue 'Create' button. At the bottom of the page, there is a footer bar with the text '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:

- o [BookShop-CREATE-INSERT.sql](#)

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

Skills Network Labs

home / PETSHOP

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

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

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home / PETSHOP

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

4. This step will redirect you to a page displaying **Databases and Tables**.

- o 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](#)

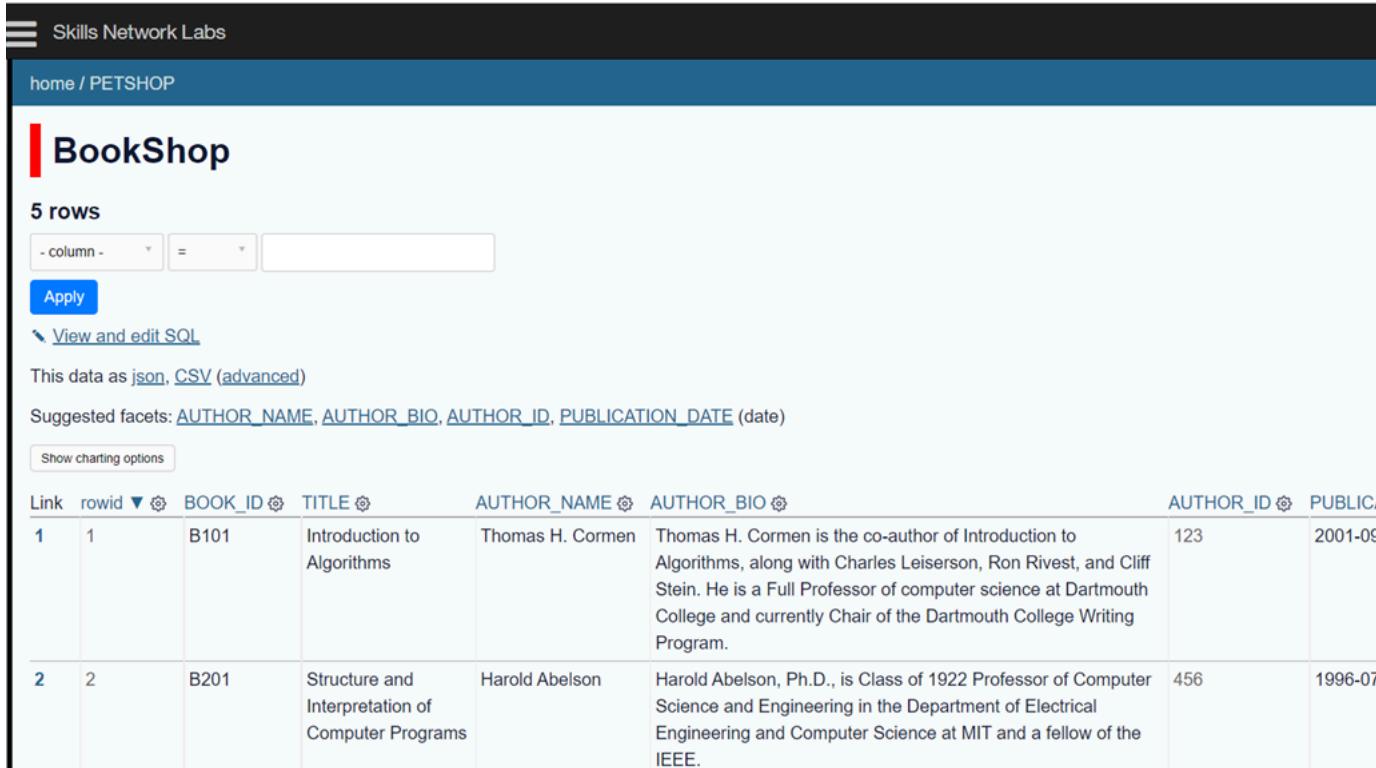
PETSHOP

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.



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home / PETSHOP

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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