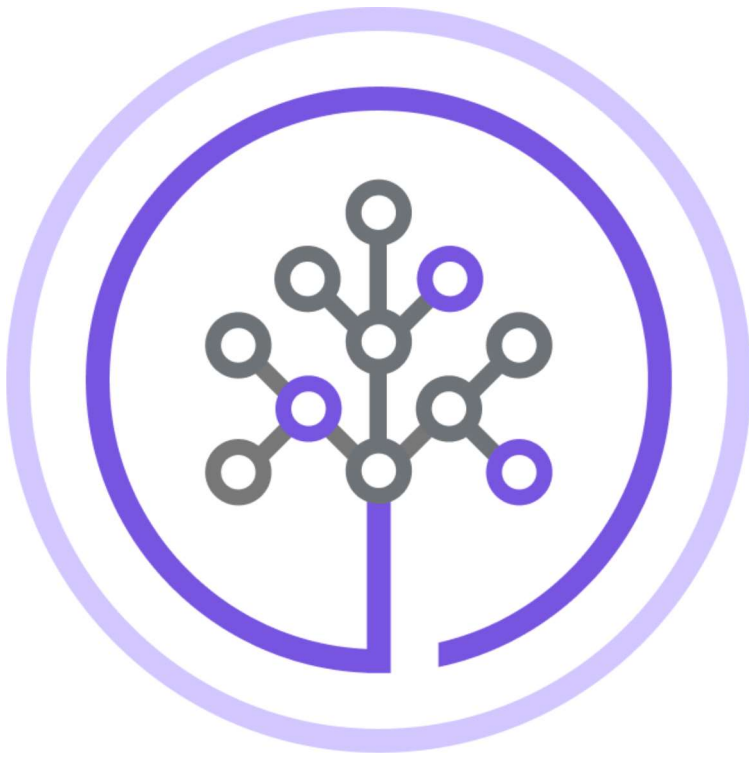


Hands-on Lab: Upload and Export using Datasette



Skills Network

Estimated time needed: 15 minutes

In this lab, you will learn how to upload and export data in a table using Datasette.

Objectives

After completing this lab, you will be able to use the Datasette:

- Upload CSV file onto a table in Datasette.
- Export data from Datasette.

Required Software

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

Database

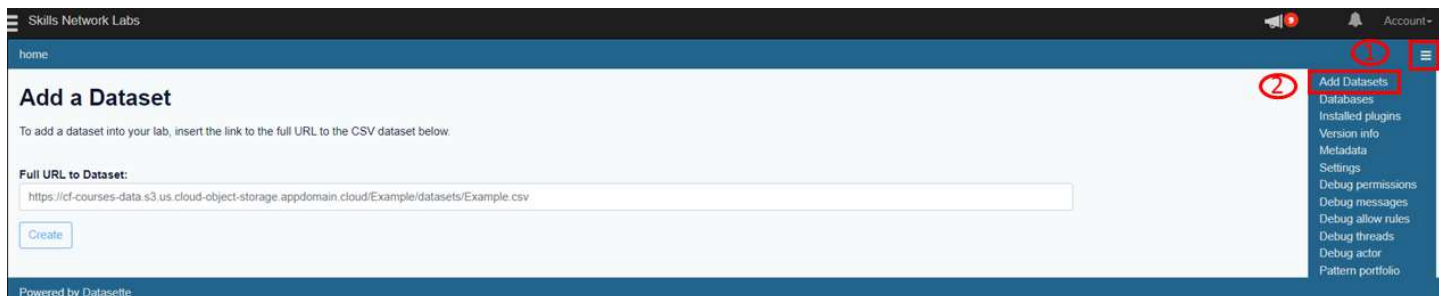
The first dataset used in this lab comes from the following source: <https://datapatform.cloud.ibm.com/exchange/public/entry/view/5562ced564e776edc5f91e13d48d8309?context=cpldaas>. This dataset is published by **IBM** and contains point data for a sample list of hospitals in the US.

Note that this is sample data for SQL demo purposes and is not necessarily current or accurate.

Exercise 1: Upload Data into a Datasette by creating a table.

In this exercise, you will go through an example of uploading a CSV file and creating a table using the Datasette tool.

1. Once the Datasette tool is launched using the open tool, click on the **Navigation Tool** and then select **Add DataSets** option at the right-end corner.



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

Right-click on the link
([Hospitals.csv](#)) and copy the link address.

Enter the copied URL in the text box and click on **Create**.

The screenshot shows the 'Add a Dataset' page in the Skills Network Labs interface. The page has a dark blue header with the 'Skills Network Labs' logo and a 'home' link. Below the header, the title 'Add a Dataset' is displayed. A sub-header reads: 'To add a dataset into your lab, insert the link to the full URL to the CSV dataset below.' A text input field is labeled 'Full URL to Dataset:' and contains the URL 'https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DB0231EN-SkillsNetwork/datasets/hospitals.csv'. A red rectangle highlights this URL. Below the input field is a 'Create' button, also highlighted with a red rectangle. At the bottom of the page, it says 'Powered by Datasette'.

3. Then this will create the HOSPITALS table with the data loaded from the CSV file.

A **select** query related to the table will default appear in the text area section.

Click on the **Submit Query** button to view the results.

The screenshot shows the 'Practice SQL' page in the Skills Network Labs interface. The page has a dark blue header with the 'Skills Network Labs' logo and a 'home / hospitals' link. Below the header, the title 'Practice SQL' is displayed. A sub-header reads: 'Database: hospitals'. A text input field contains the SQL query 'SELECT * FROM hospitals;'. Below the input field is a 'Submit query' button, highlighted with a red rectangle. A tip below the input field reads: 'Tip: Autocomplete with Ctrl+Enter or Cmd+Enter'. At the bottom of the page, it says 'Powered by Datasette'.

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

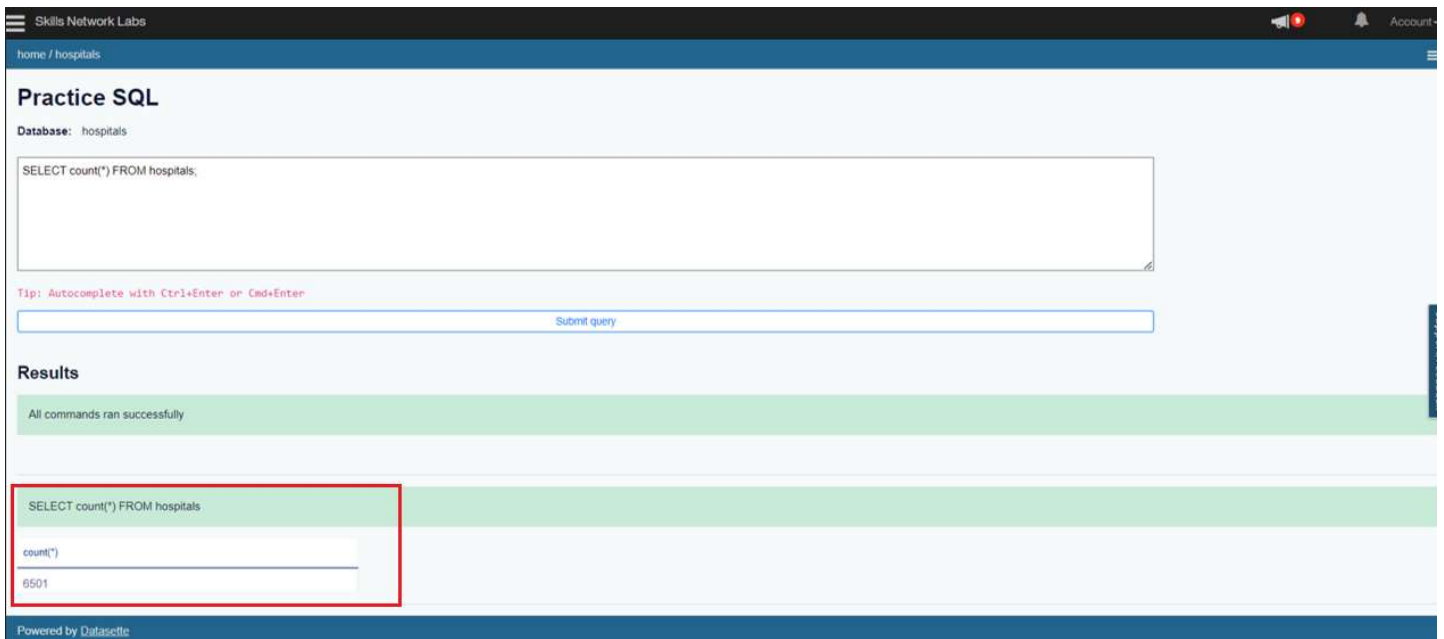
The screenshot shows the 'Practice SQL' page in the Skills Network Labs interface, displaying the results of the query. The page has a dark blue header with the 'Skills Network Labs' logo and a 'home / hospitals' link. Below the header, the title 'Practice SQL' is displayed. A sub-header reads: 'Database: hospitals'. A text input field contains the SQL query 'SELECT * FROM hospitals;'. Below the input field is a 'Submit query' button. Below the input field, a green banner reads: 'All commands ran successfully'. Below the banner, the results of the query are displayed in a table. The table has 6 columns: 'id', 'name', 'city', 'state', 'lon', and 'lat'. The table contains 2 rows of data. Below the table, it says 'Powered by Datasette'.

id	name	city	state	lon	lat
1	Southern Hills Medical Center	BERRY HILL	TN	-86.721939	36.077843
2	Sycamore Shoals	ELIZABETHTON	TN	-82.247635	36.346218

6. Modify your select query as below to get the total number of records in the table.

```
1. 1  
1. SELECT count(*) FROM hospitals;
```

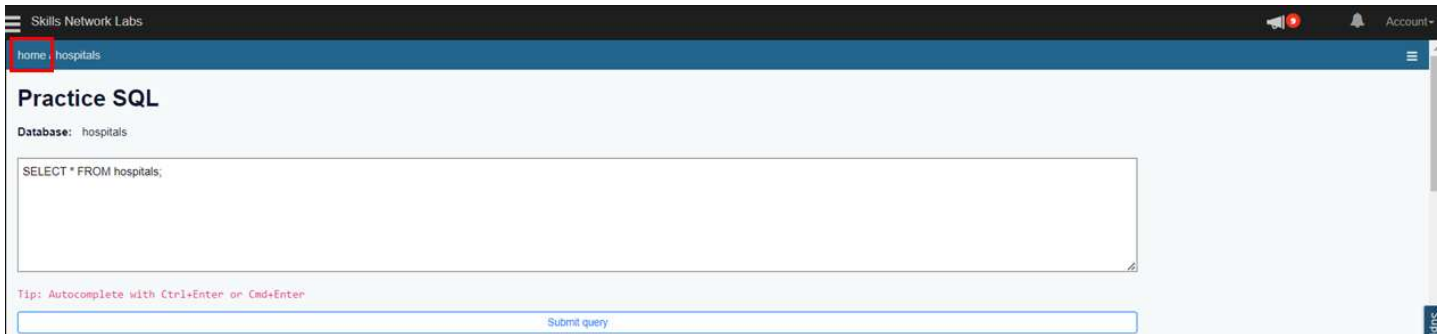
Copied!



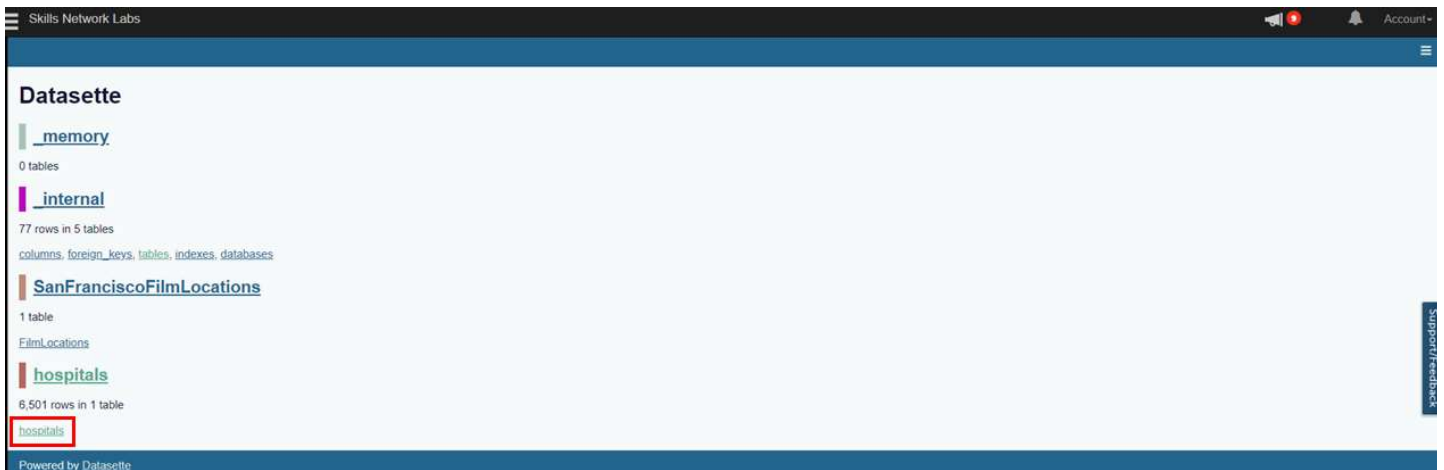
Exercise 2: Export a Table from Datasette.

In Exercise 1, you have learned how to upload data from a file into a Datasette database. Now, in this exercise, you will export a table from the database into a CSV file.

1. First, click the **home** link at the top of the page in the tool.



2. Click on the **hospitals** table link as highlighted below:



3. Right-click on the **CSV** and copy the **link address**.

Skills Network Labs

home / hospitals

hospitals

6,501 rows

- column -

Apply

View and edit SQL

This data as **JSON** (advanced)

Show charting options

Link rowid id

1 1

2 2

3 3

4 4

5 5

6 6

7 7

8 8

Open link in new tab

Open link in new window

Open link in incognito window

Save link as

Copy link address

Get image descriptions from Google

Inspect

city	state	lon	lat
BERRY HILL	TN	-86.721939	36.077843
ELIZABETHTON	TN	-82.247635	36.346218
GREENEVILLE	TN	-82.845711	36.151772
DOWNTOWN MEMPHIS	TN	-90.037033	35.142872
MARTIN	TN	-88.868393	36.335064
BELLE MEADE	TN	-86.809723	36.153667
COLLEGE DALE	TN	-85.134125	35.056461
FORT WORTH	TX	-97.343361	32.729851

4. Paste the URL in a new tab and press ENTER. Now this will display all the data present in the table.

https://dataset-2-labs-prod-misc-tools-us-east-0.labs.cognitiveclass.ai/user/nivedithap/hospitals/hospitals.csv?_size=max

rowid,id,name,city,state,lon,lat

1,1,Southern Hills Medical Center,BERRY HILL,TN,-86.721939,36.077843

2,2,Sycamore Shoals Hospital,ELIZABETHTON,TN,-82.247635,36.346218

3,3,Tokona Hospital,GREENEVILLE,TN,-82.845711,36.151772

4,4,University of Tennessee Child Development Center,DOWNTOWN MEMPHIS,TN,-90.037033,35.142872

5,5,Volunteer General Hospital,MARTIN,TN,-88.868393,36.335064

6,6,West Side Hospital,BELLE MEADE,TN,-86.809723,36.153667

7,7,William L Bork Memorial Hospital,COLLEGE DALE,TN,-85.134125,35.056461

8,8,All Saints Hospital,FORT WORTH,TX,-97.343361,32.729851

9,9,Beaumont Army Hospital,CENTRAL EL PASO,TX,-106.453598,31.822046

10,10,Burns Hospital,CUERO,TX,-97.285271,29.099424

11,11,Club of Christ Hospital,JEFFERSON,TX,-94.34742,32.440712

12,12,Danforth Memorial Hospital,TEXAS CITY,TX,-94.901306,29.392733

13,13,Eldridge Memorial Hospital,FIRST COLONY,TX,-95.617439,29.628016

14,14,Good Shepherd Hospital,LONGVIEW,TX,-94.730774,32.50098

15,15,Hamilton Hospital,OLNEY,TX,-98.763405,33.369278

16,16,Holy Cross Hospital,AUSTIN,TX,-97.713066,30.281878

17,17,Keightley Hospital,FRESNO,TX,-95.43911,29.606903

18,18,Lockwood Hospital,HOUSTON,TX,-95.317993,29.806057

19,19,Medical Hospital,TYLER,TX,-95.290787,32.338207

20,20,Newton Memorial Hospital,CAMERON,TX,-96.980827,30.854908

21,21,Oak Hills Haven,BALCONES HEIGHTS,TX,-98.574471,29.501621

22,22,Parkview General Hospital,BAYSIDE,TX,-97.393044,27.728918

23,23,Porter Hospital,DOWNTOWN LUBBOCK,TX,-101.867386,33.577305

24,24,Robstown Riverside Hospital,NORTH SAN PEDRO,TX,-97.635277,27.855021

25,25,Saint Edwards Hospital,CAMERON,TX,-96.977203,30.858799

26,26,Saint Jude Hospital,BRENNHAM,TX,-96.399414,30.179655

27,27,Santa Rosa Infirmary,ALAMO HEIGHTS,TX,-98.498627,29.426903

28,28,Southton Sanitorium,BULVERDE,TX,-98.421677,29.312176

29,29,State Tuberculosis Hospital,HARLINGEN,TX,-97.706375,26.159523

30,30,Texas Elks Hospital,PALMISTO,TX,-97.582497,29.595232

31,31,Valley Baptist Hospital,HARLINGEN,TX,-97.67083,26.175074

32,32,Wilson Hospital,BAYSIDE,TX,-97.386658,27.749197

33,33,Ashley Valley Medical Center,MAESER,UT,-109.530975,40.458023

34,34,Charter Canyon Hospital,LINDON,UT,-111.664085,40.310515

35,35,Duchenne County Hospital,BALLARD,UT,-109.996262,40.304127

36,36,Holy Cross Hospital,SALT LAKE CITY,UT,-111.861053,40.768005

37,37,Logan Regional Hospital,HYDE PARK,UT,-111.822166,41.756042

38,38,Orem Community Hospital,LINDON,UT,-111.705482,40.305515

39,39,Saint Benedicts Hospital,CLEARFIELD,UT,-111.970215,41.163273

40,40,Shriners Hospital,SALT LAKE CITY,UT,-111.851334,40.777725

41,41,Utah Valley Regional Medical Center,OREM,UT,-111.665474,40.247173

42,42,Alexandria Hospital,ALEXANDRIA,MD,-77.106094,38.822334

5. To save the file, right-click and select SAVE-AS.

https://dataset-2-labs-prod-misc-tools-us-east-0.labs.cognitiveclass.ai/user/nivedithap/hospitals/hospitals.csv?_size=max

rowid,id,name,city,state,lon,lat

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32,32,Wilson Hospital,BAYSIDE,TX,-97.386658,27.749197

Back Alt+Left Arrow

Forward Alt+Right Arrow

Reload Ctrl+R

Save as... Ctrl+S

Print... Ctrl+P

Cast...

Send to your devices

Create QR Code for this page

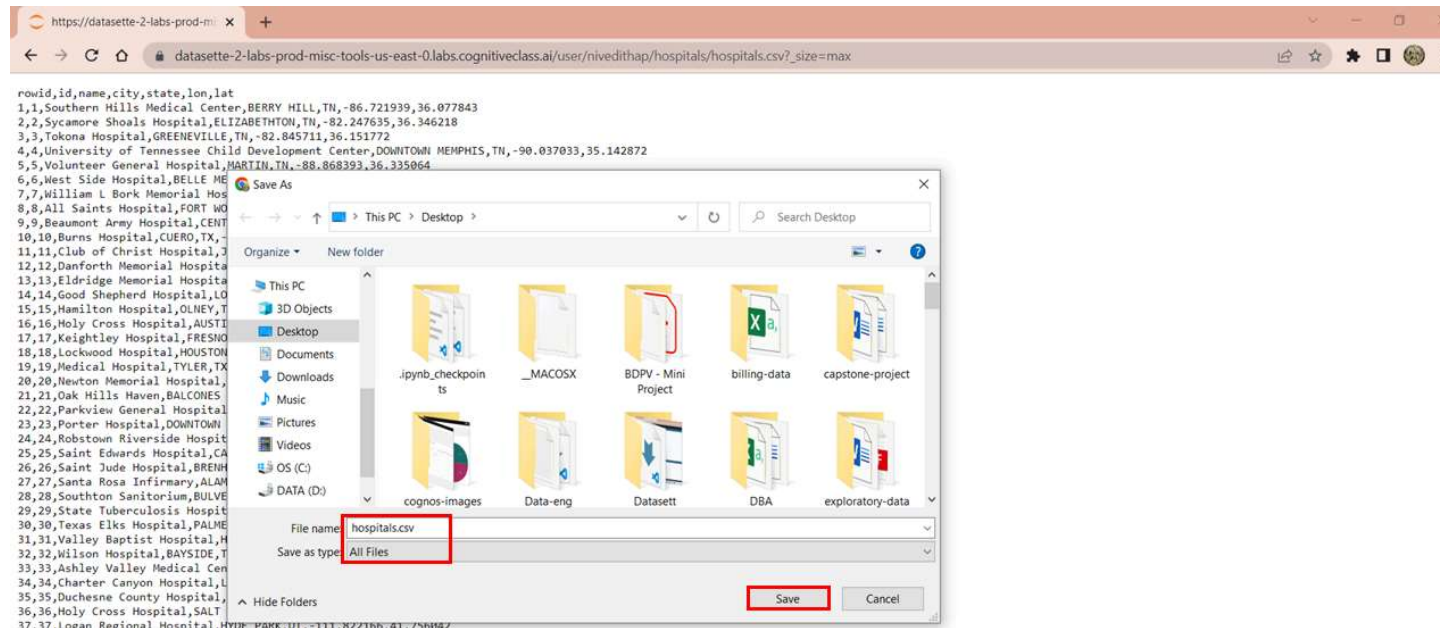
Translate to English

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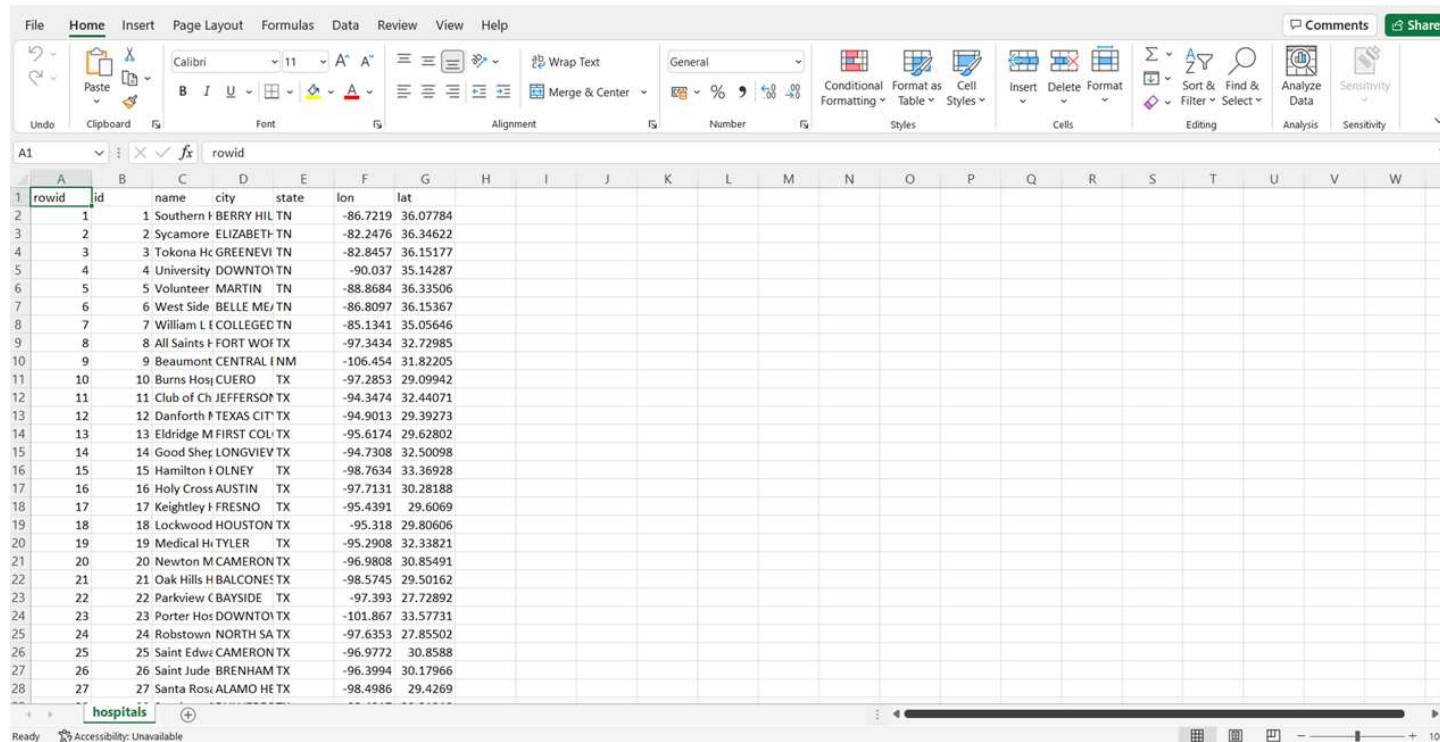
View page source Ctrl+U

Inspect

6. Enter **File-name.csv**, select **All files** from the drop-down, and click on **SAVE**.



7. Finally, your downloaded CSV file will appear as shown below:



Author(s)

- Niveditha Pandith

Changelog

Date	Version	Changed by	Change Description
2021-07-08	1.0	Sandip Saha Joy	Created initial version
2021-10-04	2.0	David Pasternak	Rewrote with updated instructions
2022-05-28	2.1	Niveditha	Converted initial version to Datasette
2023-05-08	2.2	Eric Hao	Updated Page Frames