snowflake®

Vulnerability Assessment Walk-through example

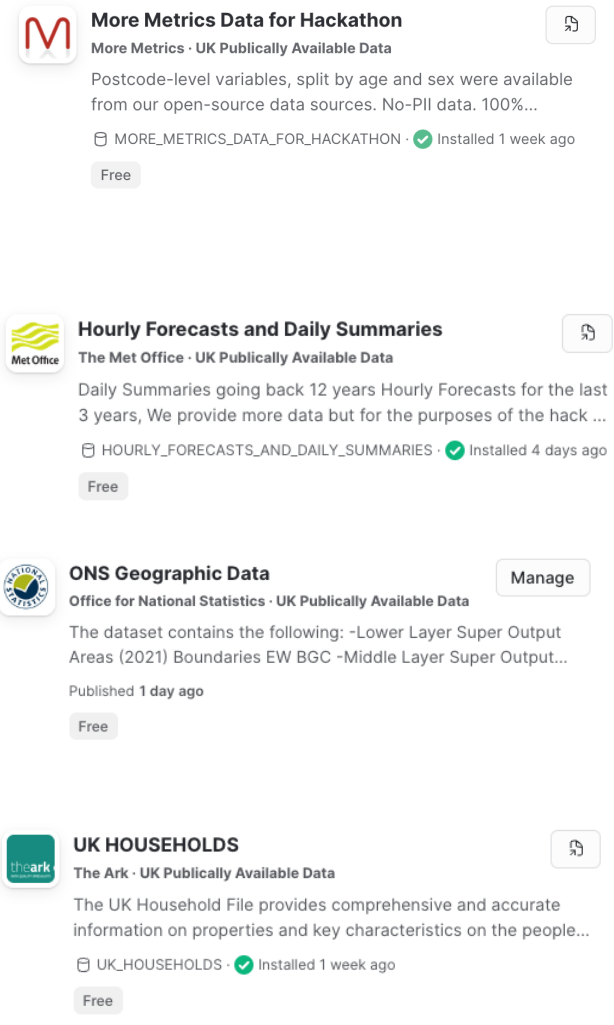
This is an example of what you could do for analyzing geographic data in the UK to provide vulnerability insights combined with fuel consumption and weather data.

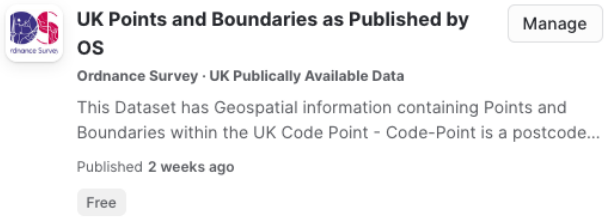
SIGN UP FOR A 30 DAY FREE TRIAL OF HEX

- Hex is a best of breed notebook tool.
- Go to www.tex.tech and get started for Free

INITIAL SETUP

In snowsight, navigate to the private exchange and get the following:



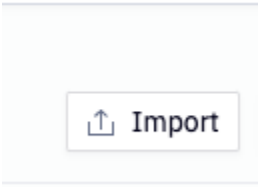


In snowsight, import the sql file which is called **Initial_Setup.sql**.

This will create views of data inside a new snowflake database. The views are located in a Private Exchange.

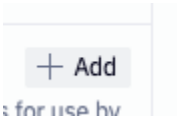
LOAD THE NOTEBOOK YAML FILE INTO HEX

In the workspace home page press Import



Upload the Yaml file provided. There will be a warning that the project connection cannot be imported. We will need to set this up.

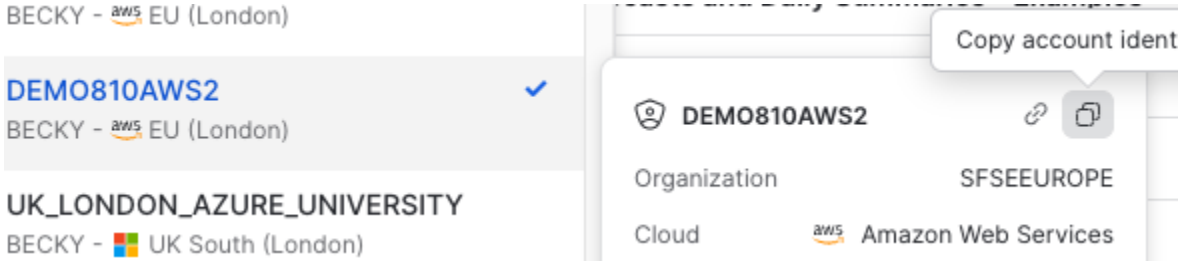
In data connections press add



Add a data connection and select Snowflake

In connection name, call it **Vulnerability Assessment Datasets**

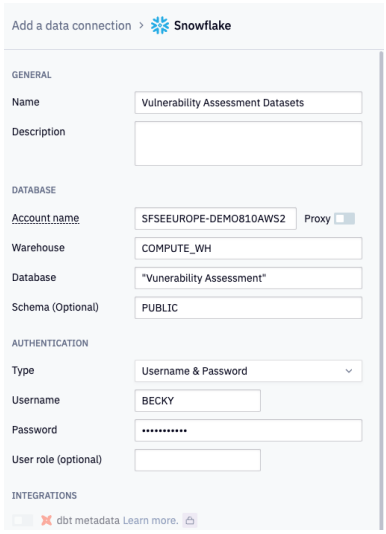
In Snowsight, grab the account identifier by pressing the copy icon



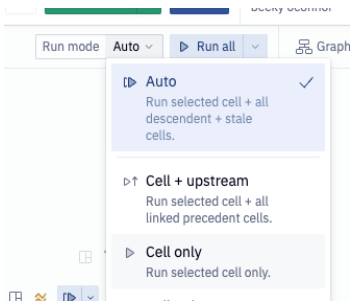
Paste it in the Account Name field in Hex.

IMPORTANT - replace the '.' with a hyphen '-'

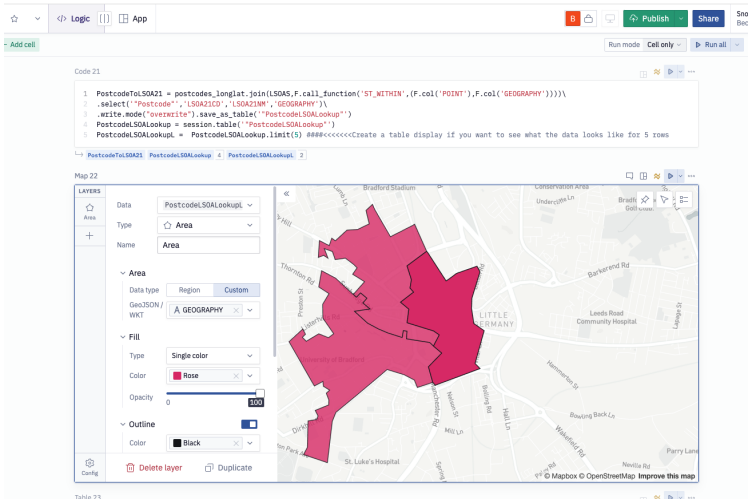
Populate the rest of the details and Create Connection.



Next step - for learning purposes its best to load one step at a time - in hex, change the ‘Run Mode’ to Cell Only.



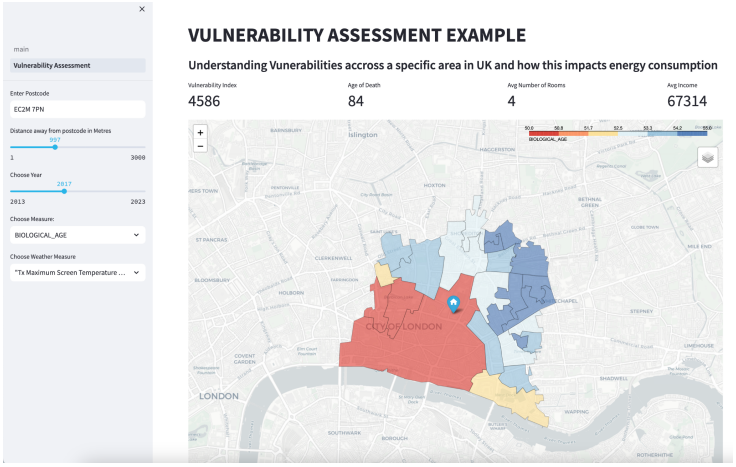
Now continue to follow the instructions in the hex notebook.



STREAMLIT APP

You will need to install Streamlit on your laptop - you can do this by following the instructions here:

https://docs.streamlit.io/library/get-started/installation



Copy the entire streamlit folder into a directory - TIP - I use VSCode as it allows me to easily leverage github and has the terminal, the working file as well as all associated directories in one place.

Populate the zcreds to your own credentials. You will need to rename it to creds.json. You may also need to change the path of the creds file within the vulnerability_asssessment.py file.

TIP: For the app to work without changes, you will need to go through the hex workbook first as some of the tables have been derived from the running the workbook cell.

Install all the dependent libraries - you will see at the top of the Vulnerability_Assessment.py file, I have imported various libraries that will need to be installed. TIP - I tend to create an anaconda environment for this.

When done, - test using streamlit run main.py from the route directory

This will then pop up a new browser window containing the app.

You may use the code /extract some of it to use with your own ideas and/or use alternative datasets from the other providers.

GOOD LUCK!