

# GTA Assignment 2

- This assignment aims to gain practical experience with Neo4j. It will be graded for 15 marks.
- Each student will be provided with a set of 10 questions on the date of the assignment – 6<sup>th</sup> November.
- The questions will be related to either the Twitter or StackOverflow datasets.
- A student will be allotted a set pertaining to either one of the datasets.
- Only 1 submission should be made per student.
- Answers to these questions will be CQL queries using neo4j commands and various graph algorithms.
- Each submission requires a student to prepare 1 document.  
**ENSURE YOU SUBMIT YOUR DOCUMENT IN .docx FORMAT ONLY.**  
**THE DOCUMENT NAME SHOULD BE YOUR SRN**  
**Ex: PES2UG22CS270.docx**  
**Failure to follow this convention, will result in your assignment not getting evaluated.**
- You will have to modify the template allotted to you.

Question 1: <Question Statement>

Enter answer query as text:

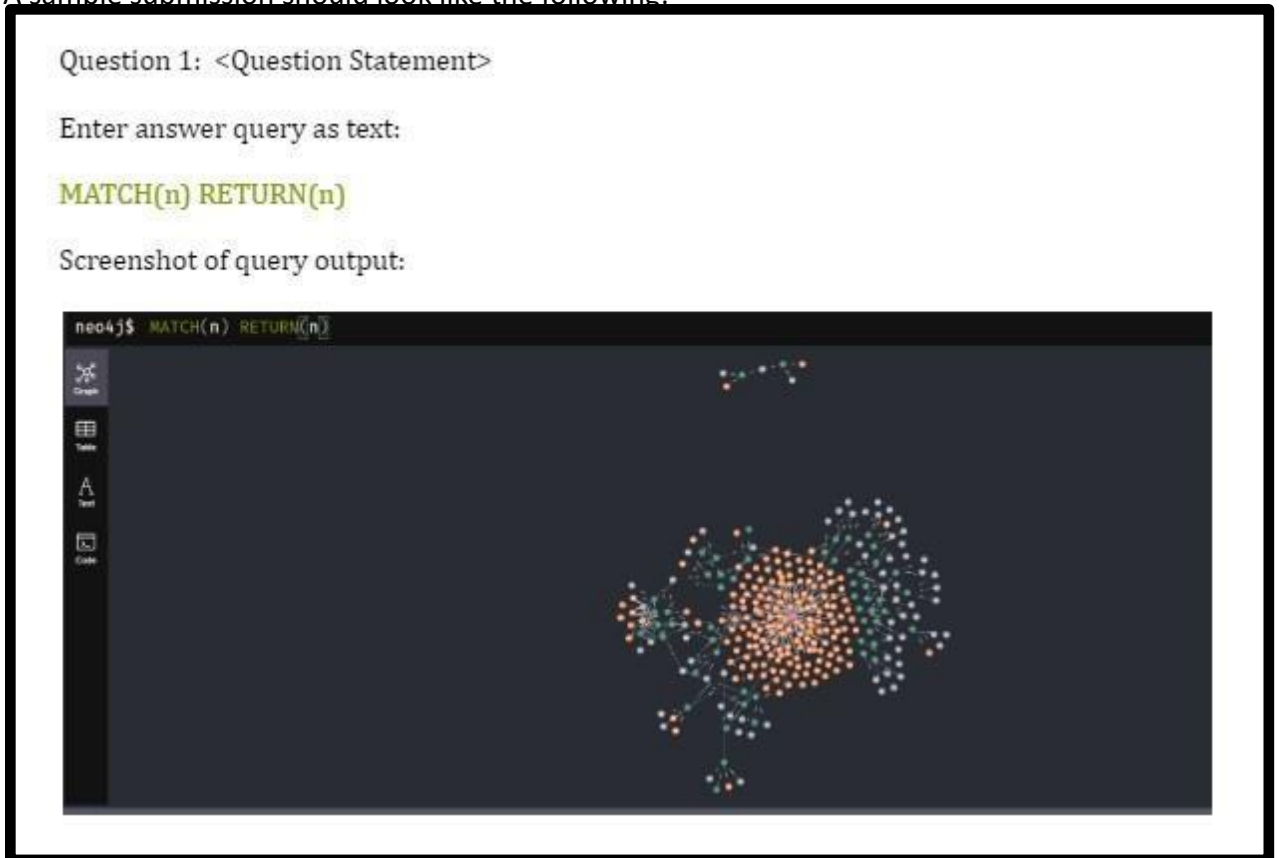
Screenshot of query output:

Each question would be structured as shown above, in the question document provided to you.

**Ensure you paste your code IN WORDS below the statement, “Enter answer query as text” and the screenshot below “Screenshot of query output.” DO NOT DELETE ANYTHING THAT WAS ALREADY PRESENT IN THE DOCUMENT, ELSE YOUR SUBMISSION WONT BE EVALUATED, BY THE SCRIPT.**

**Ensure you do not include comments in the code you paste onto the document.**

A sample submission should look like the following:



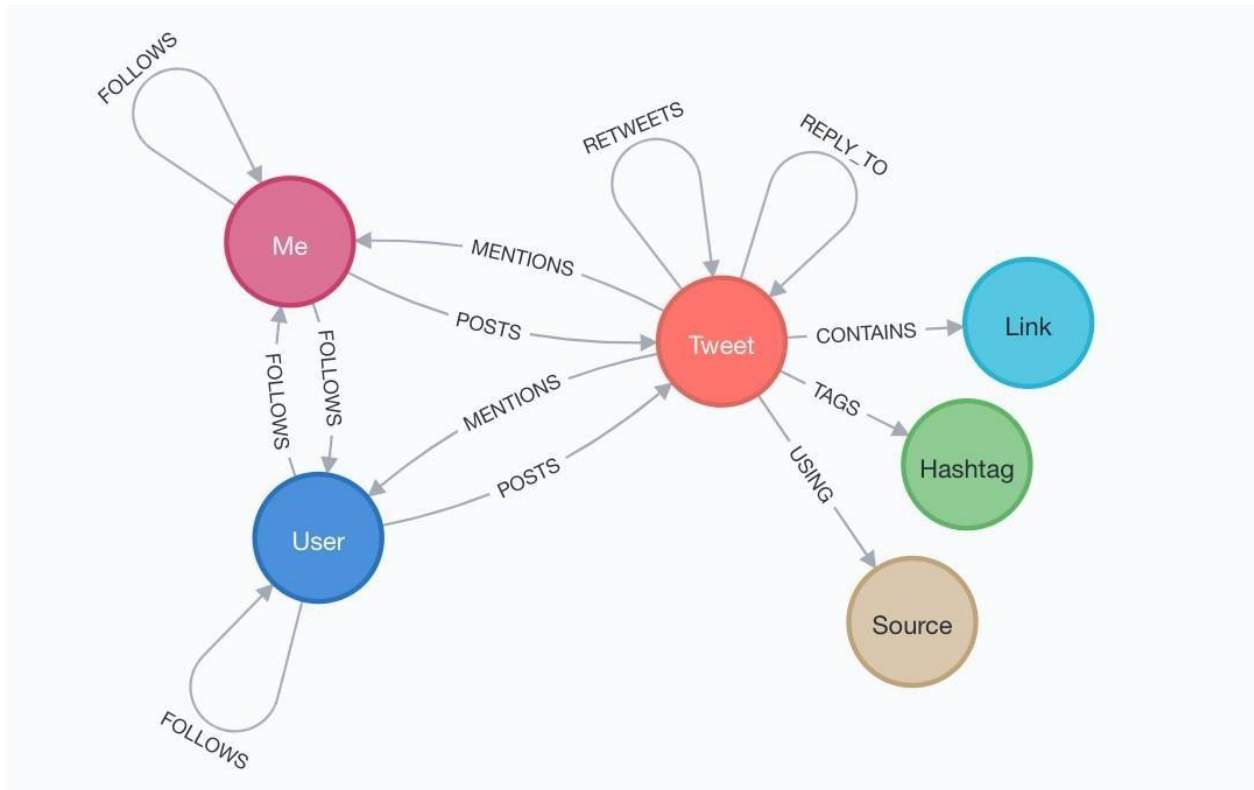
**Prerequisite** - Install Neo4j desktop and import the database assigned to you.

Install Neo4j **desktop** by following this [documentation](https://neo4j.com/docs/) (you can alternatively work on Neo4j browser as well by creating a **sandbox** or by creating a **free instance**(AuraDB) that is provided by clicking on *Get Started*, and signing up on <https://neo4j.com/developer/example-data/>)

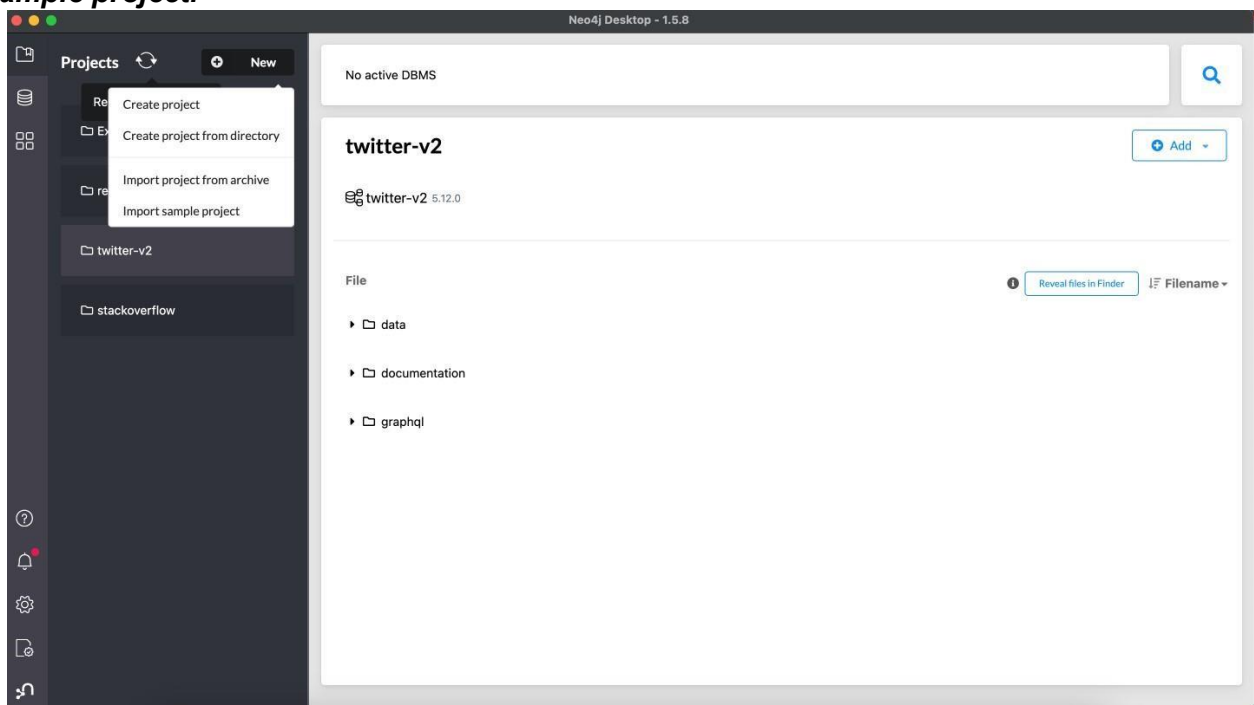
The Graph Data Science library(required for implementing graph algorithms) is not included by default in Neo4j AuraDB. Therefore, it is suggested to use desktop or sandbox versions(see plugin installation steps [here](#)).

The screenshot shows the Neo4j Developer website. The main content area is titled "Guide: Example Datasets". A yellow warning box states: "Important - page not maintained. This page is no longer being maintained and its content may be out of date. For the latest guidance, please visit the Getting Started Manual." The page is categorized as "Intermediate". The sidebar on the left lists navigation links under "For Beginners" and "For Developers". The right sidebar contains links to "Neo4j AuraDB", "Neo4j Sandbox", and "Neo4j Desktop", along with other resources like "GitHub Repositories" and "Neo4j Dataset Demo server".

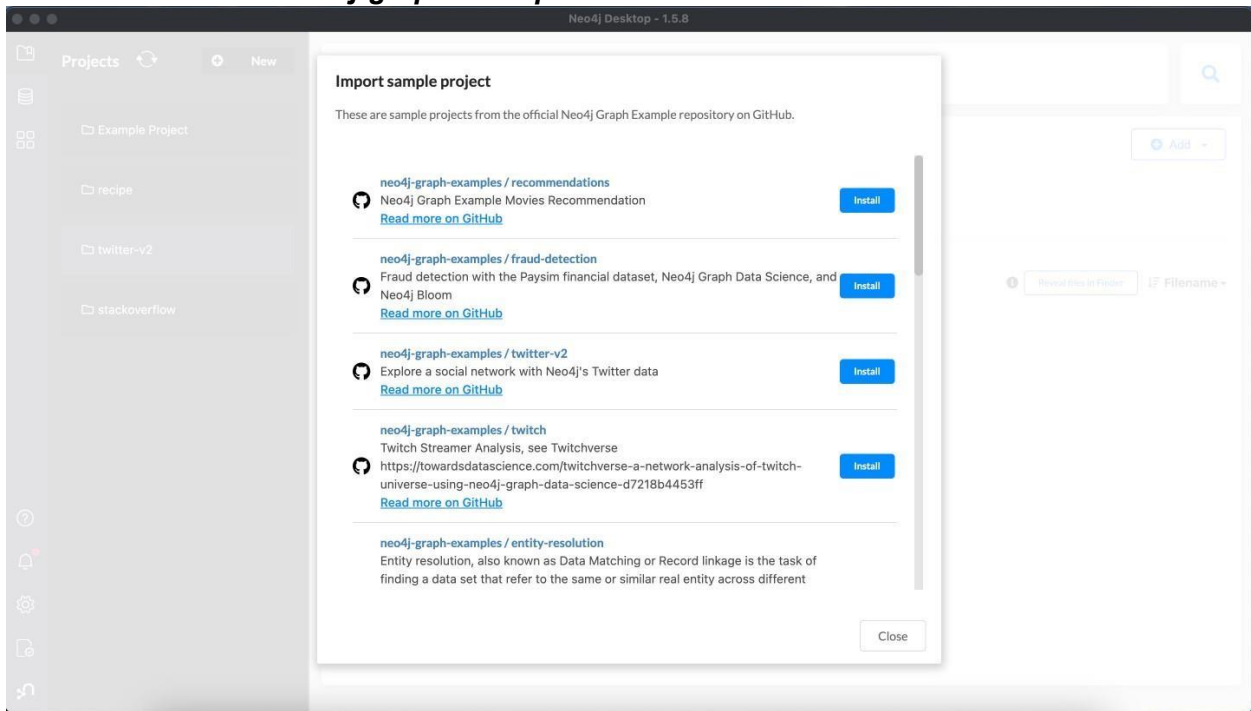
# Twitter Dataset



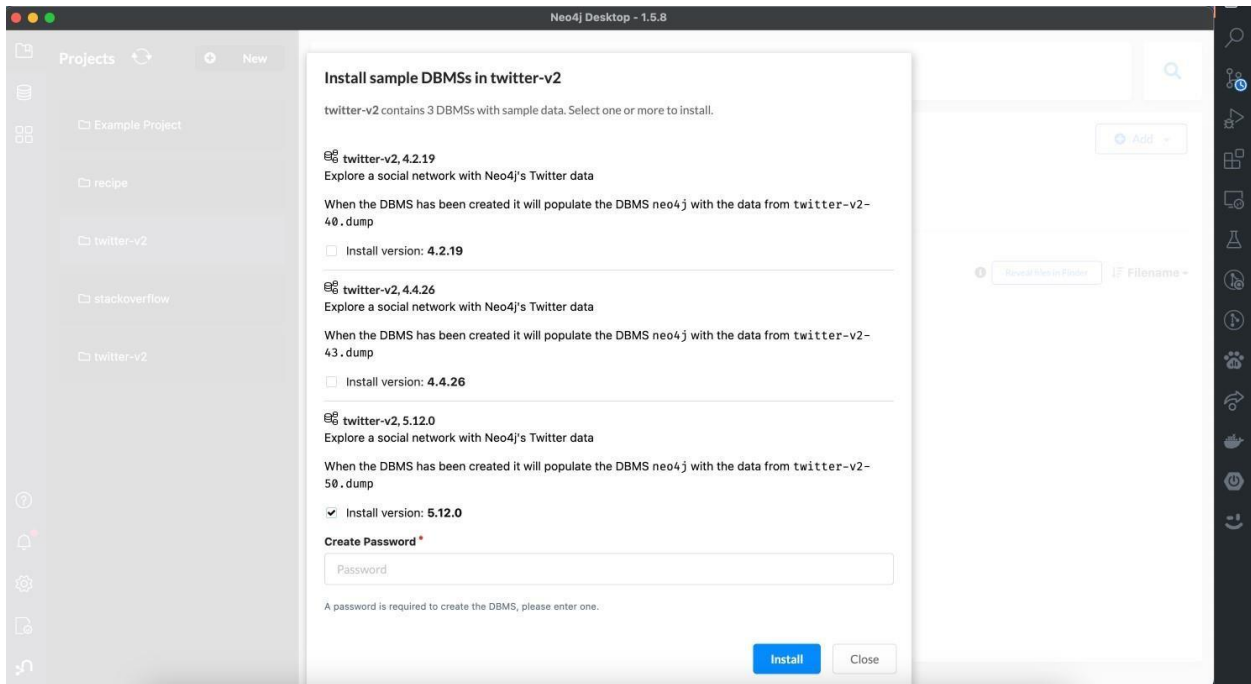
To import a new sample twitter project, launch neo4j desktop, click on **New**, followed by **Import sample project**.

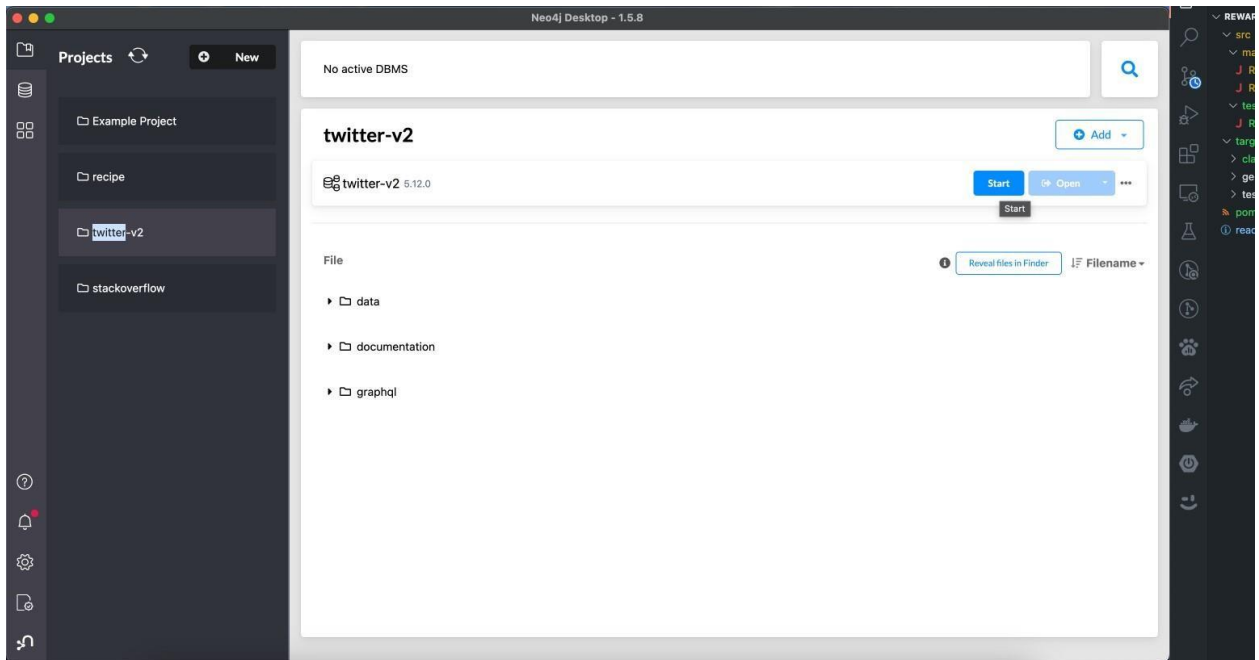


Click on **Install** next to **neo4j-graph-examples/twitter-v2**.

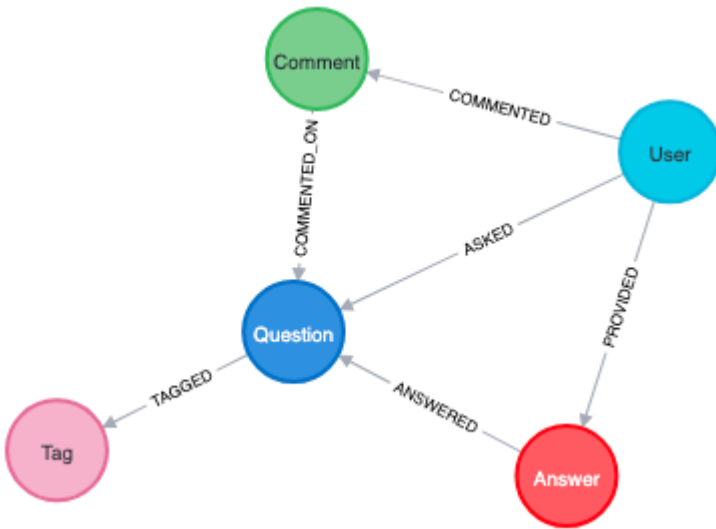


Install the latest version - 5.12.0

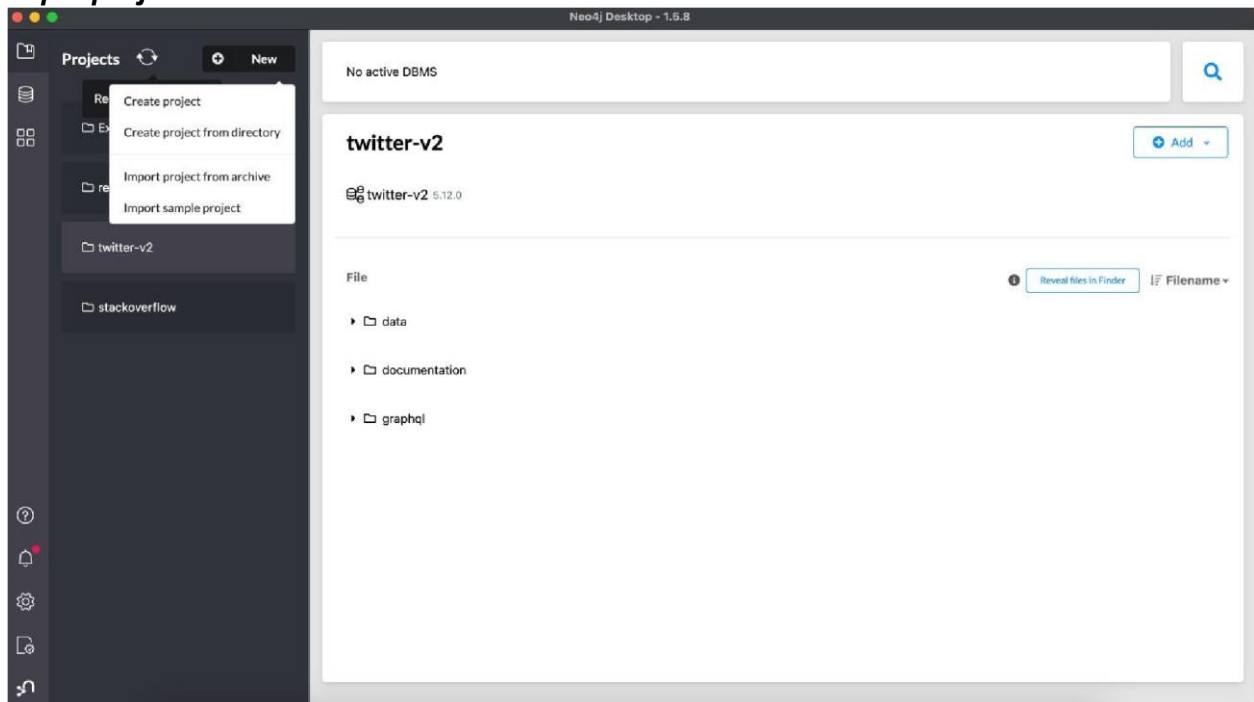




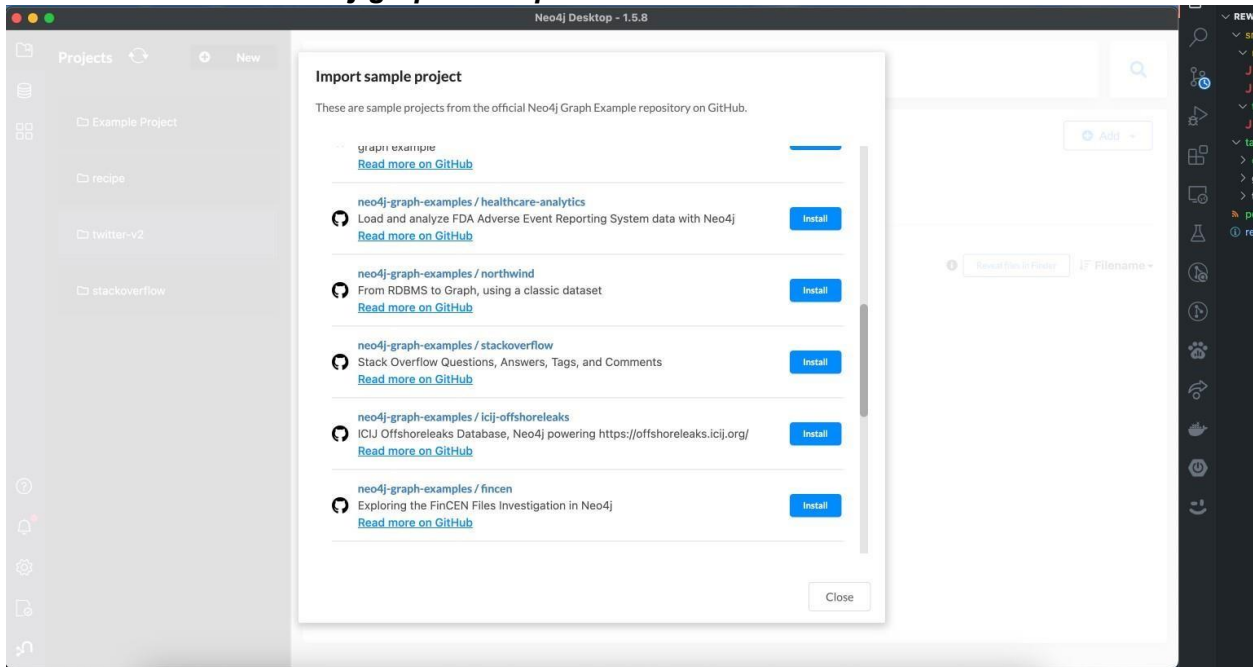
# Stack Overflow Dataset



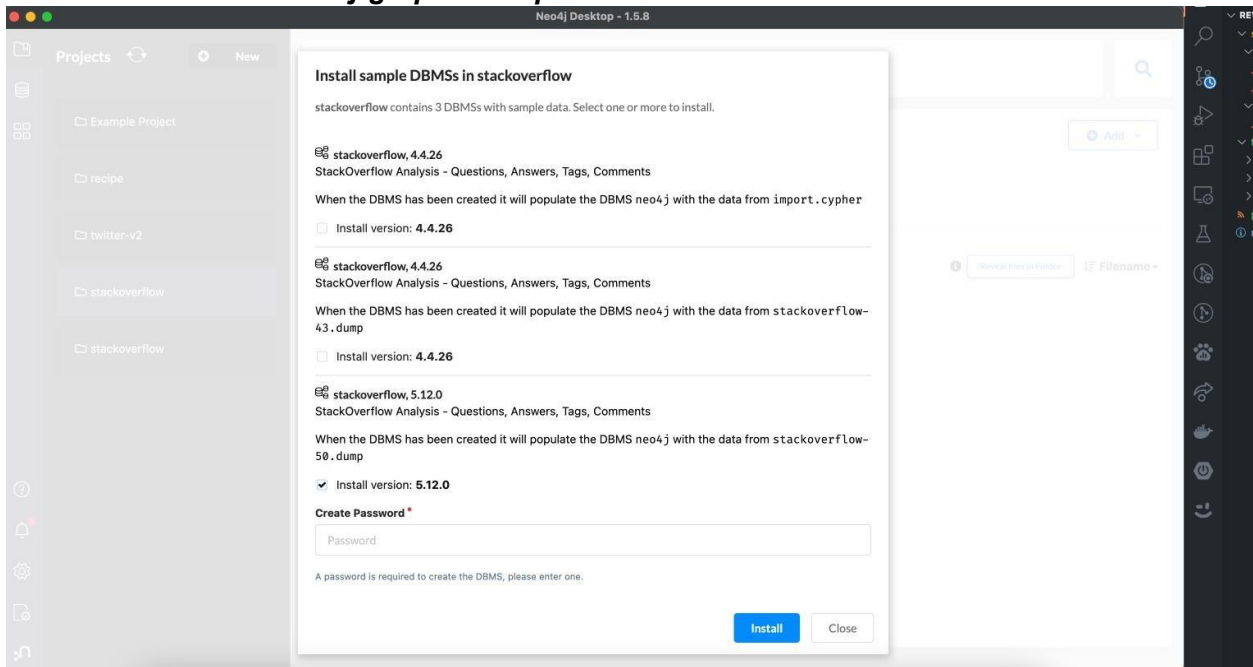
To import a new sample stackoverflow project, launch neo4j desktop, click on **New**, followed by **Import sample project**.



Click on **Install** next to *neo4j-graph-examples/stackoverflow*.



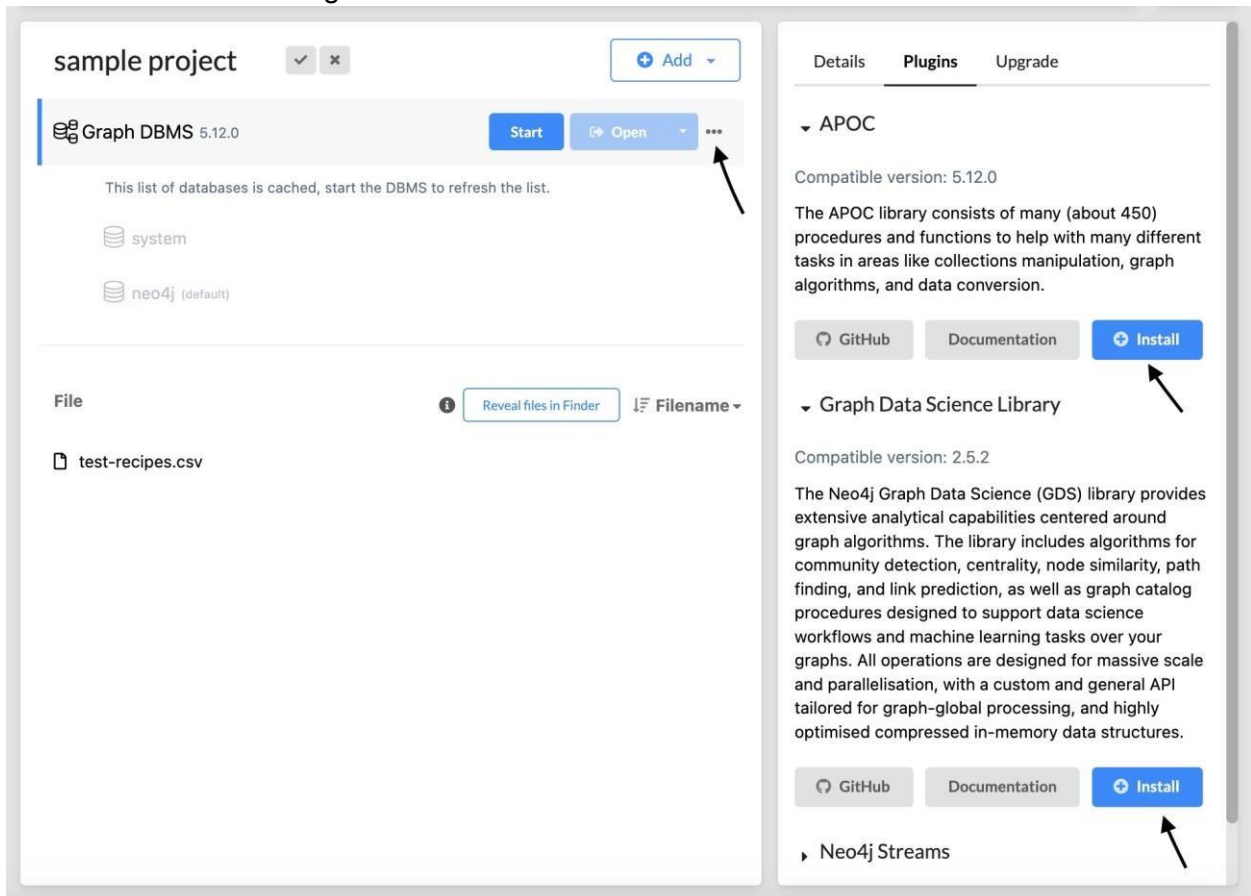
Click on **Install** next to *neo4j-graph-examples/stackoverflow*.





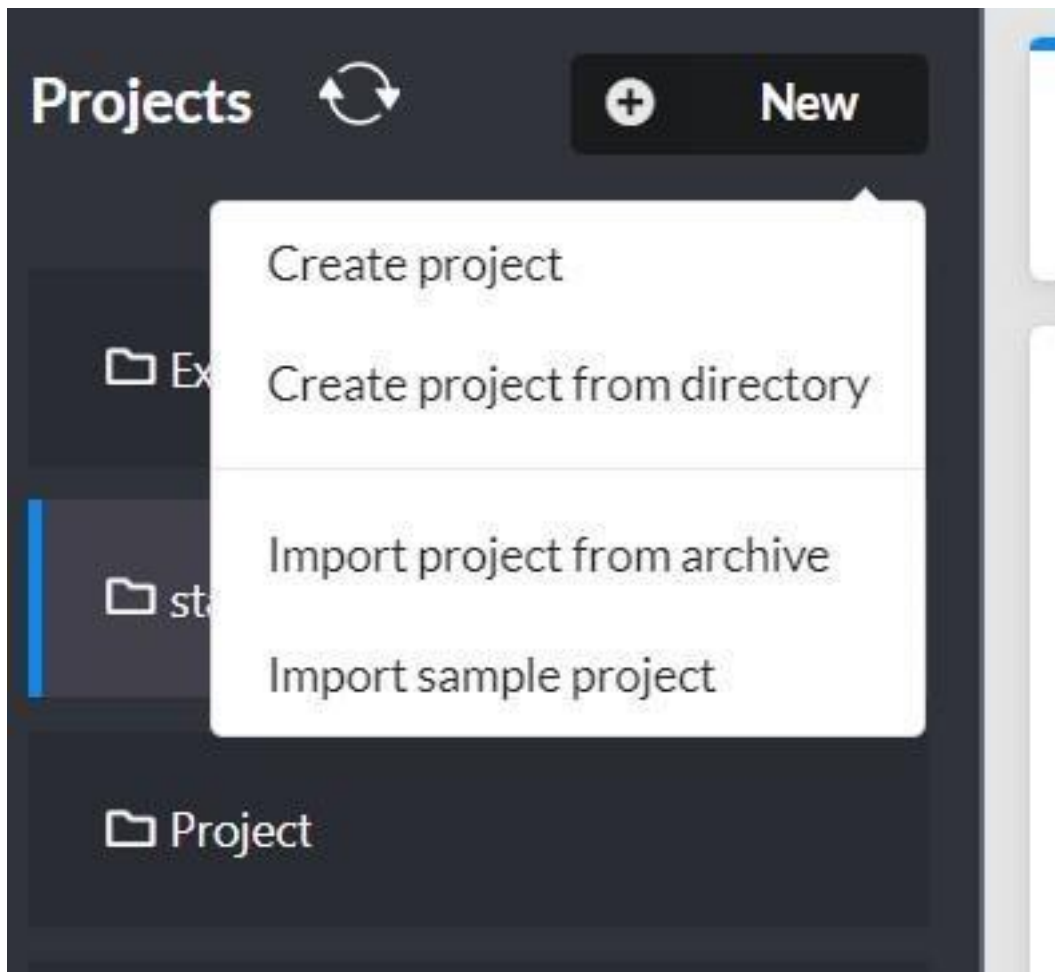
# Plugins

To make use of procedure calls in commands, install APOC and GDS library plugins by opening the three dot menu and clicking ***Install***.

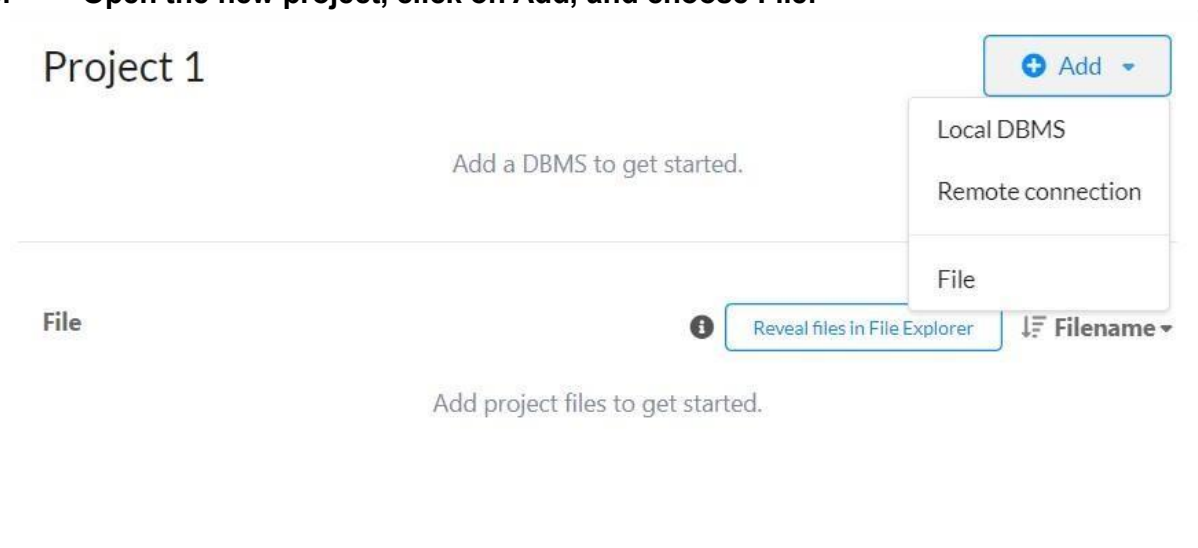


**IF YOU ARE UNABLE TO IMPORT THE TWITTER DATASET, DO THE FOLLOWING:**

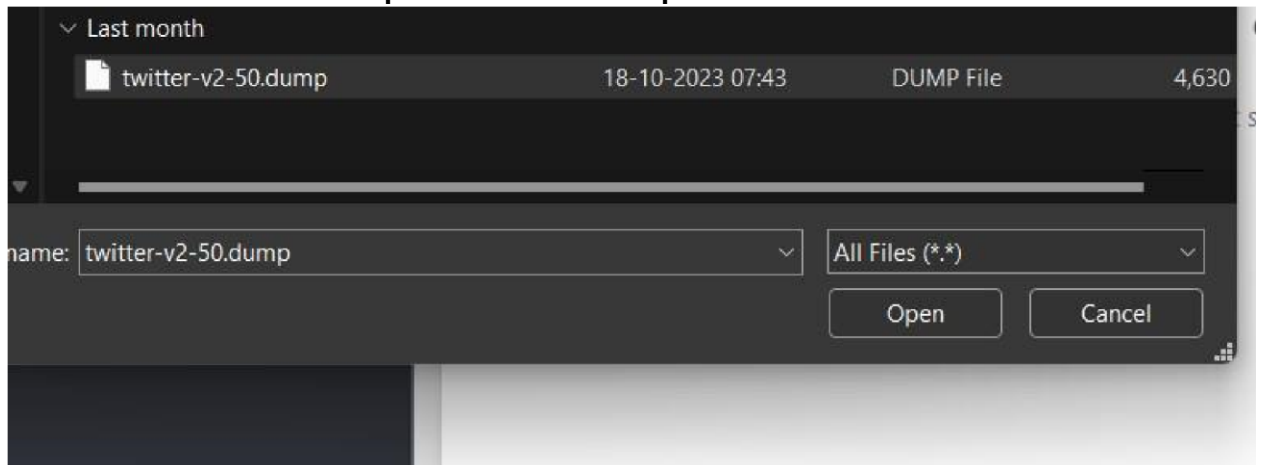
1. Download the dump file from here: [Twitter Dataset](#)
2. Click on new and click on Create Project:



3. Open the new project, click on Add, and choose File.



4. Choose the downloaded dump file and click on Open.



5. Hover over the dump file, click on the three dots on the side, and choose Create new DBMS from dump.

Project 1



Add a DBMS to get started.

File



Reveal files in File Explorer

Filename

twitter-v2-50.dump


- Create new DBMS from dump
- Import dump into existing DBMS
- Reveal in File Explorer
- Copy to other Project
- Move to other Project
- Copy url to clipboard
- Copy file path to clipboard
- Delete

6. Name your DBMS, add a password, and click on create.


Project 1

+ Add

Name

 Twitter DBMS

Password

 .....

Version

5.13.0 (latest) ▾

✕ Cancel


✓ Create

File



Reveal files in File Explorer

Filename ▾

 twitter-v2-50.dump

7. Once the DBMS is ready, click on start, and open it with Neo4j Browser.

## Set Allotment

Find the set allotment [here](#)

Find the sets [here](#)

Submission Link [here](#)