

# NeoDatis & neo4j

**NeoDatis**: An object oriented database

neo4j: a Powerful Graph Database

#### **Presented By**

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#### **TOPICS COVERED**

- NeoDatis Nixan Parmar
  - What is NeoDatis?
  - Features NeoDatis
  - Benefits NeoDatis
  - Steps To Use NeoDatis In Your Project & Simple Example
- Neo4j –Tejasv Modi
  - What is Graph Database?, Why To Use It?
  - What is neo4j?
  - Overview of Ecosystem & Features of neo4j.
  - Products of neo4j.
  - Organizations Which use neo4j.
- Practical Demo –Smit Joshi
  - ☐ How to Create, Update , Delete Nodes & Relationships



#### **NeoDatis**

- NeoDatis ODB is an object-oriented database for Java, .NET, Groovy, Scala, and Google Android.
- ➤ It is a native and transparent persistence layer that allows you to store and retrieve objects without any mapping or conversion.
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#### **Features of NeoDatis ODB**

- Native and transparent persistence.
- Simple and easy to use
- Simple and easy to use
- Simple and easy to use
- > Scalable
- Open source





#### **Benefits of using NeoDatis ODB**

- Increased productivity.
- > Improved performance.
- Reduced complexity.
- Increased scalability.
- > Reduced costs.





#### **Steps to use NeoDatis in your Project**

Import the NeoDatis ODB library.

Create a database instance.
NeoDatis.open()

Store objects in the database.
ODB.store()

Retrieve objects from the database. ODB.query()

Close the database instance.
ODB.close()



#### **Example store and retrieve a simple object : NeoDatis**

```
// Import the NeoDatis ODB library.

import org.neodatis.odb.ODB;

odb.store(person);

// Retrieve the object from the database.

// Create a database instance.

ODB odb = ODBFactory.open("mydatabase.odb");

// Create an object to store.

Person person = new Person("John Doe");

// Close the database instance.

odb.close();
```

# 



#### WHAT IS A GRAPH DATABASE?

A graph database is a type of database that stores data as nodes and relationships

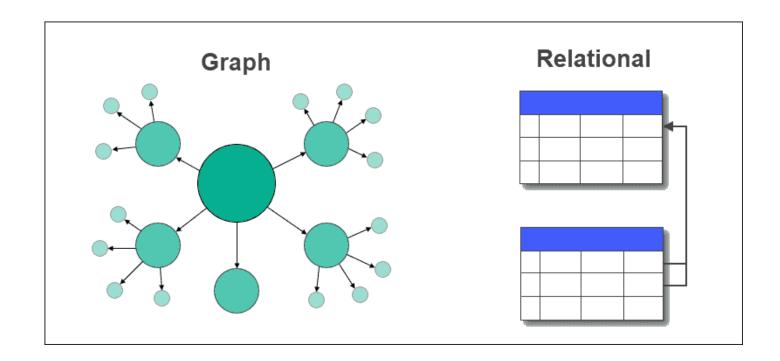
The nodes represent entities, such as people, products, or events

The relationships represent the connections between entities, such as friendships, purchases, or events



# WHY USE A GRAPH DATABASE?

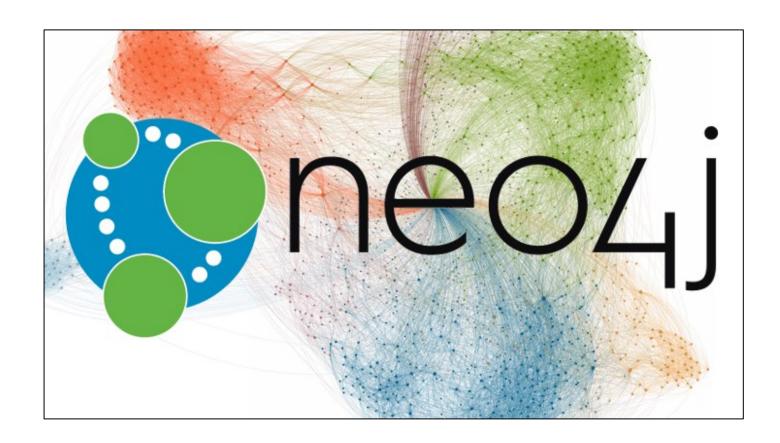
- Graph databases are wellsuited for storing and querying data with complex relationships
- They are also efficient for tasks such as pathfinding, social network analysis, and fraud detection





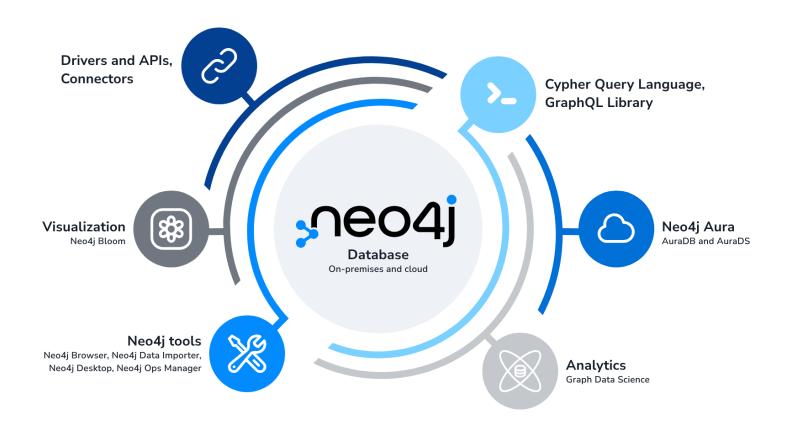
#### WHAT IS neo4j?

- Neo4j is a graph database management system developed by Neo4j, Inc.
- Neo4j is used by a wide range of organizations, including financial services, retail, telecommunications, manufacturing, government, healthcare, energy, media and entertainment, and logistics and transportation.





#### **OVERVIEW OF NEO4J ECOSYSTEM**





## neo4j PRODUCTS

Neo4j Graph Database



Neo4j Graph Data Science



neo4j auraDB





## **ORGANIZATIONS WHICH USE neo4j**







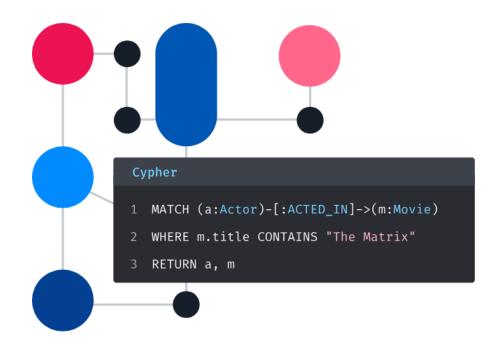






#### **NEO4J CYPHER QUERY LANGUAGE**

Cypher is a declarative graph query language that is used by developers worldwide. Created by Neo4j, Cypher provides expressive and efficient queries for property graphs.

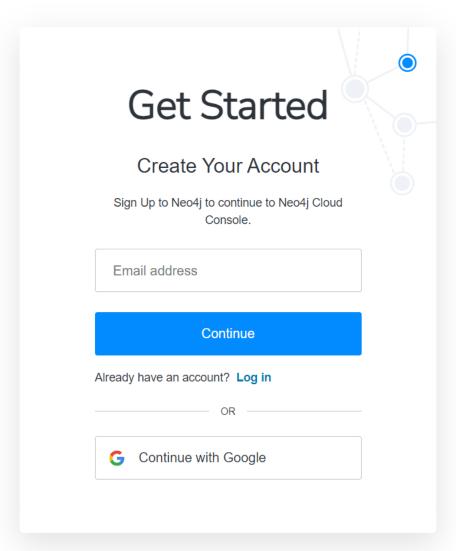






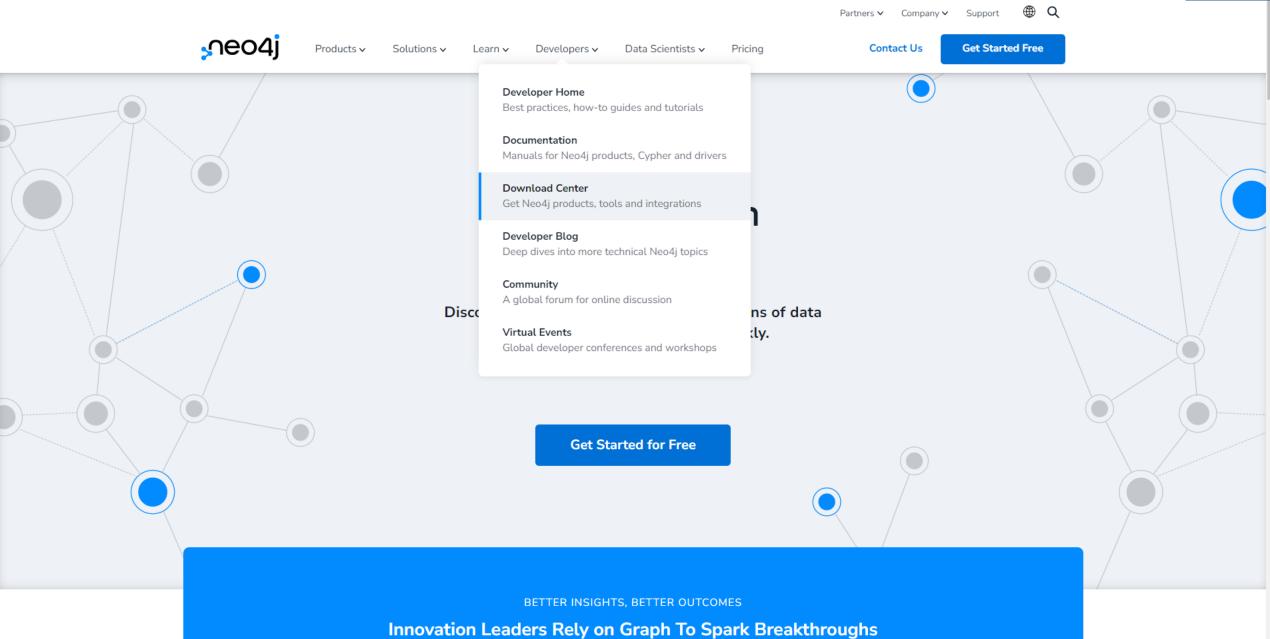
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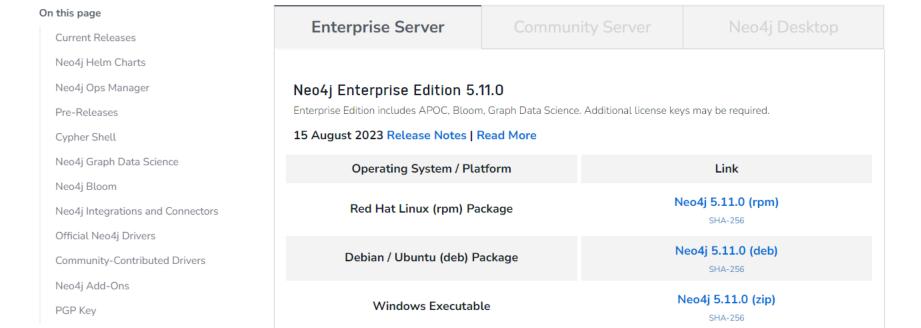
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Neo4j Graph Data Science

Neo4j Bloom

Neo4j Integrations and Connectors

Official Neo4j Drivers

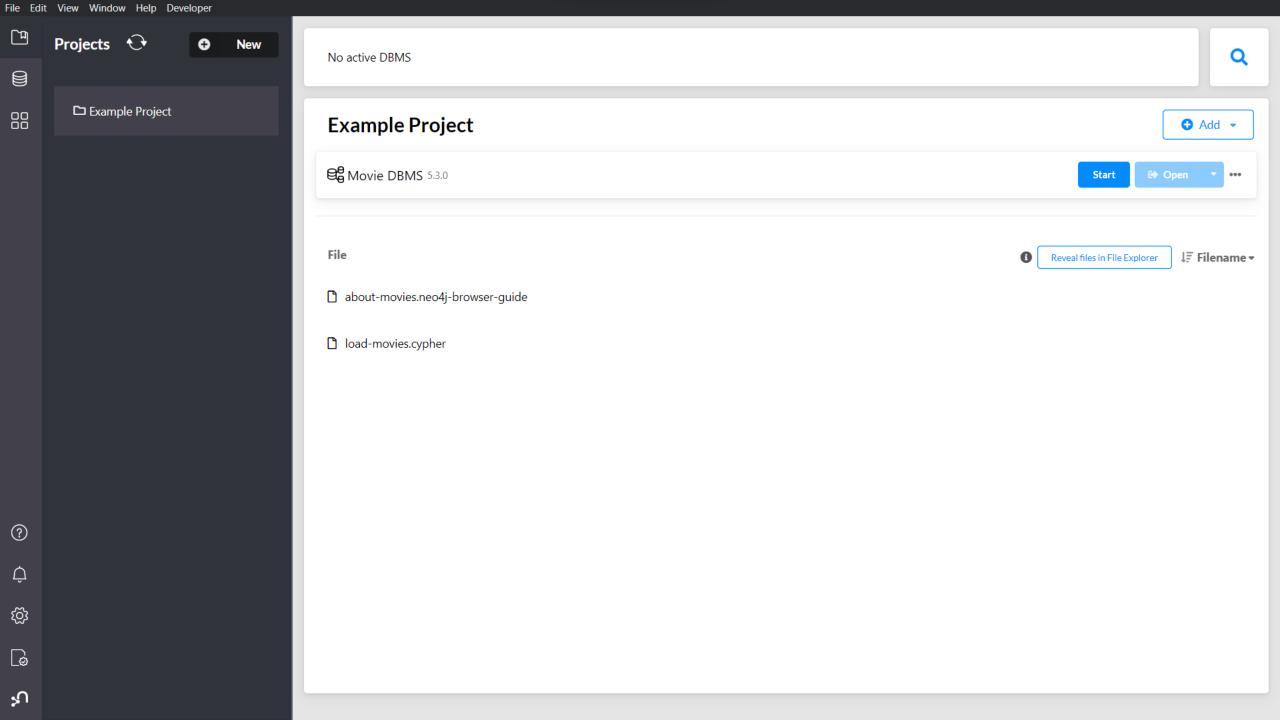
Community-Contributed Drivers

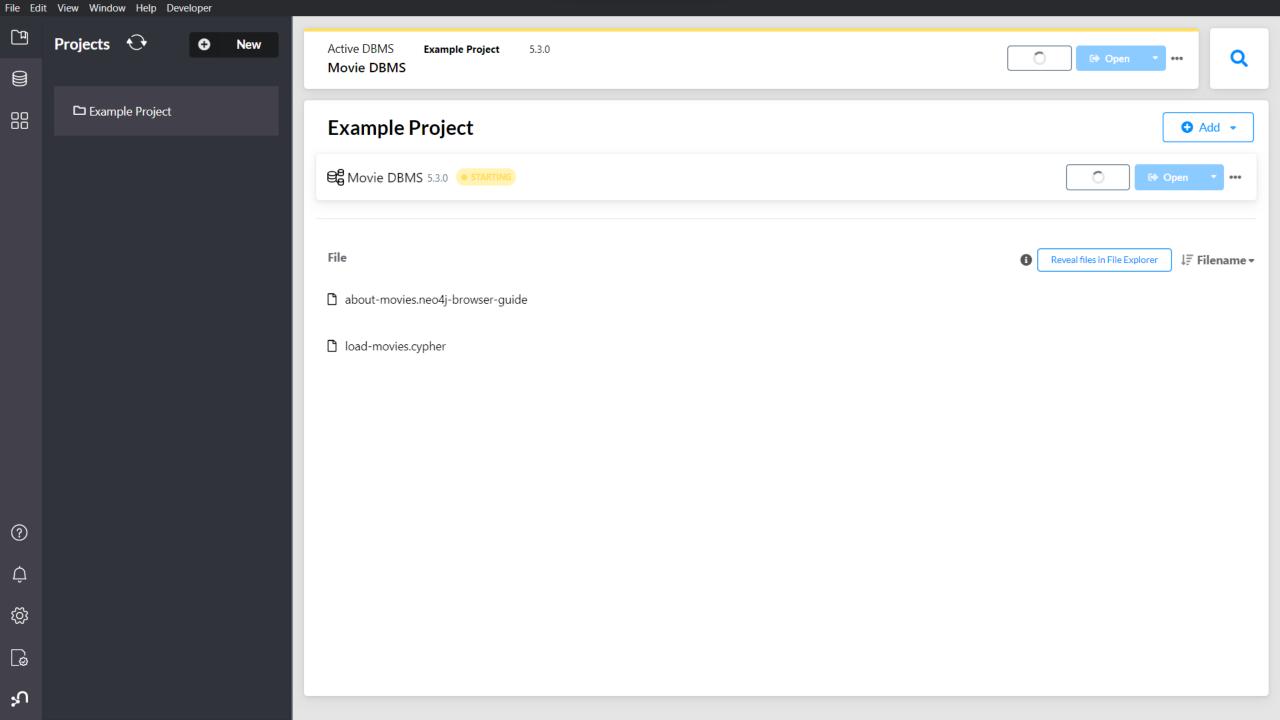
Neo4j Add-Ons

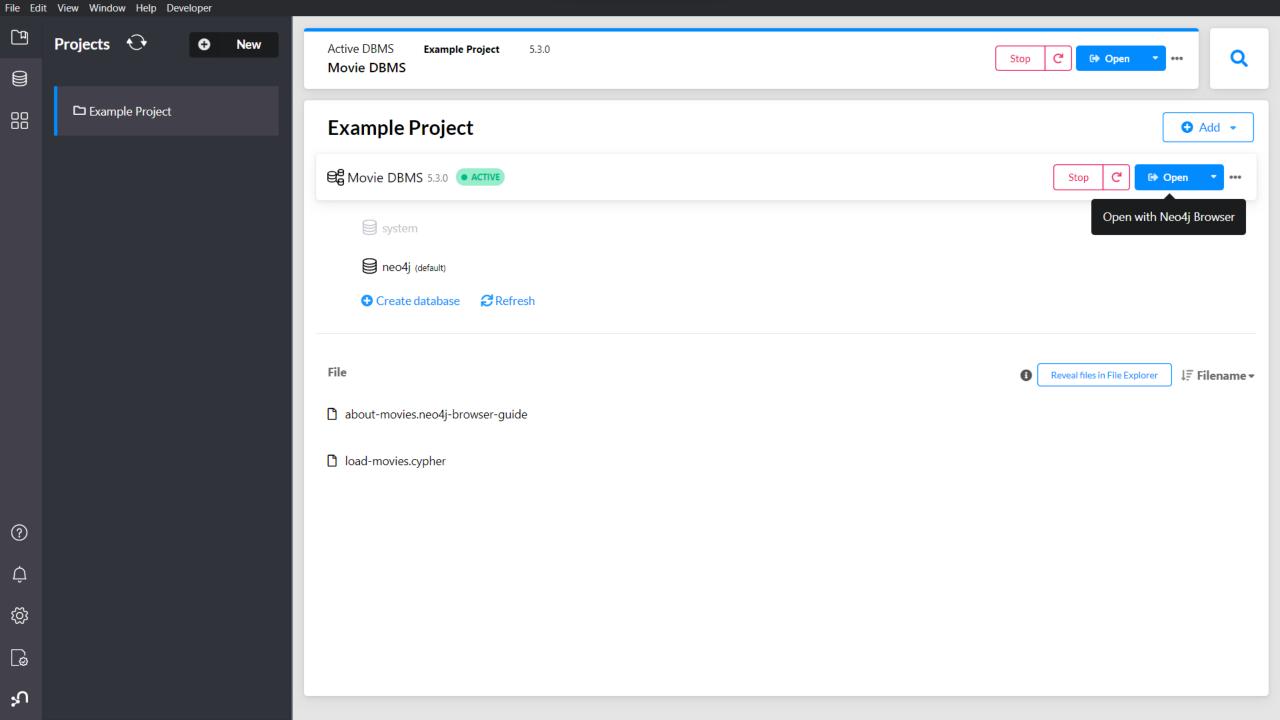
PGP Key

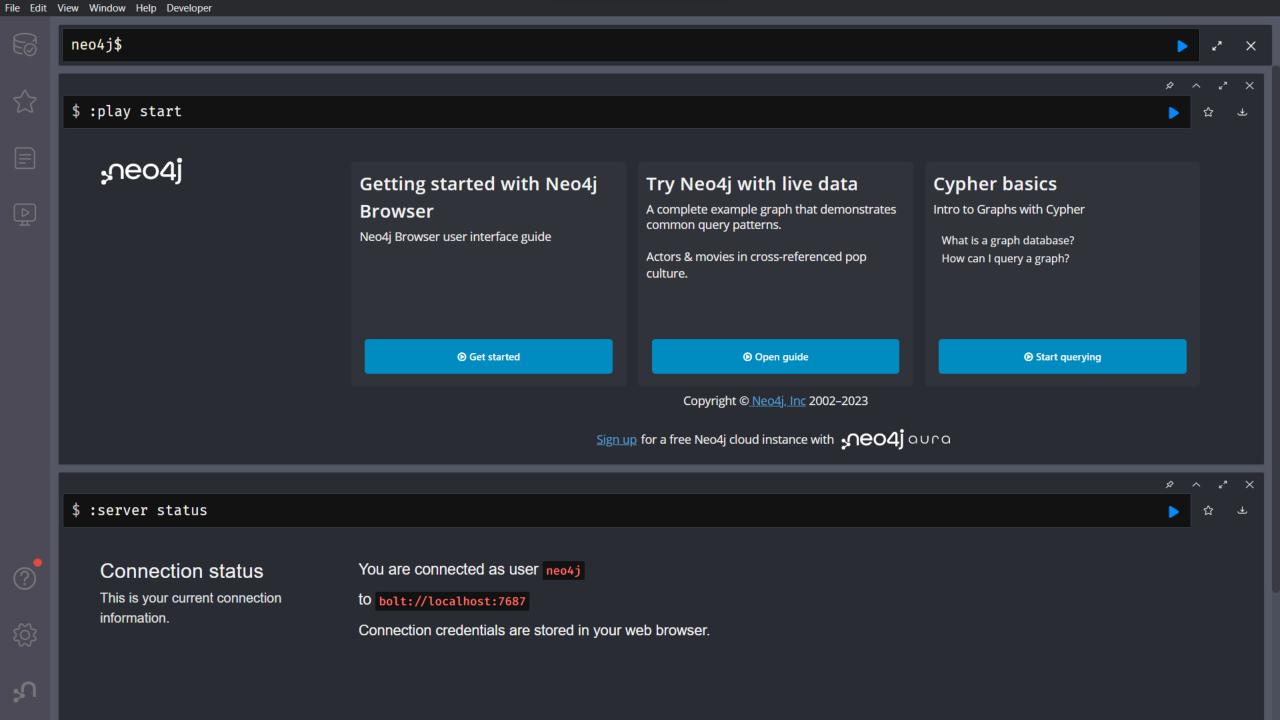
Enterprise Server	Community Server		Neo4j Desktop
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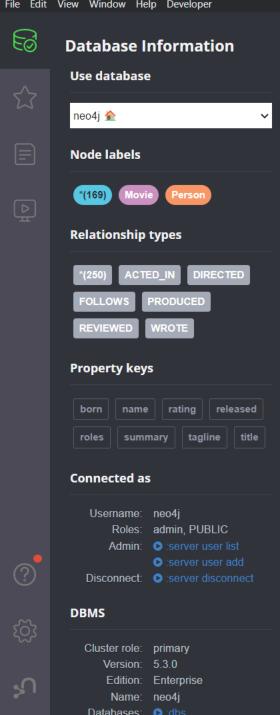
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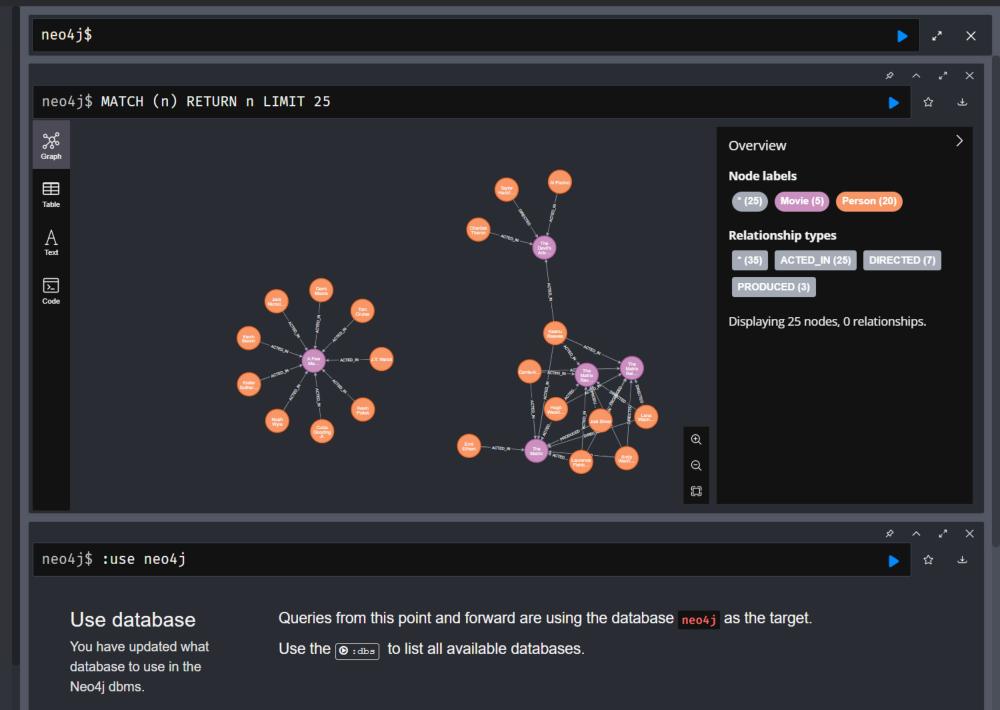














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**THANK YOU**