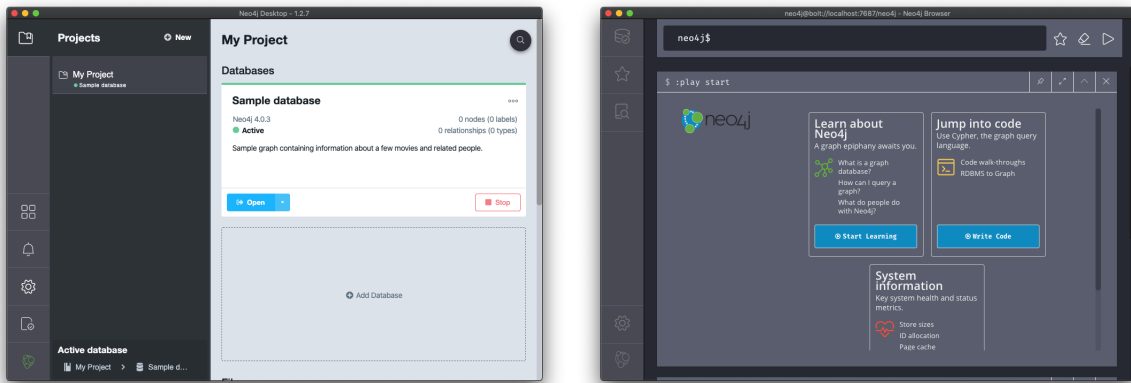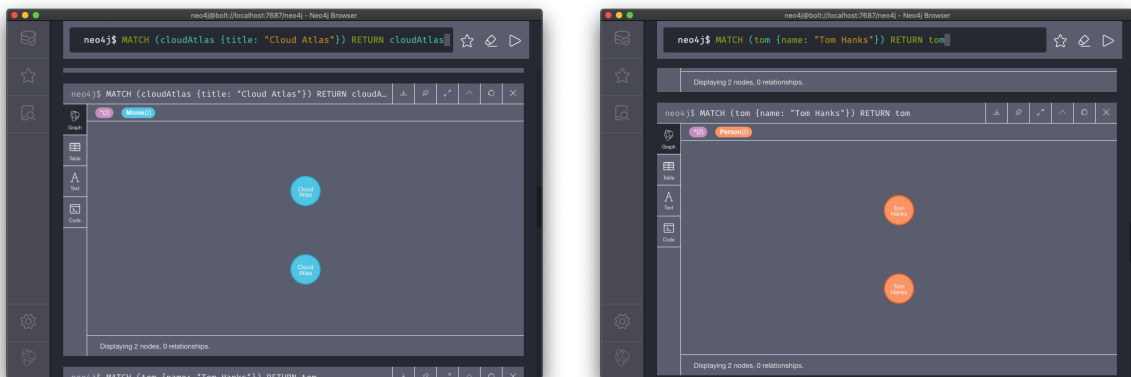**MSDE 631: Lab 7—Neo4J**
Etana Disasa

1. Installation and Getting to know the New4J Desktop
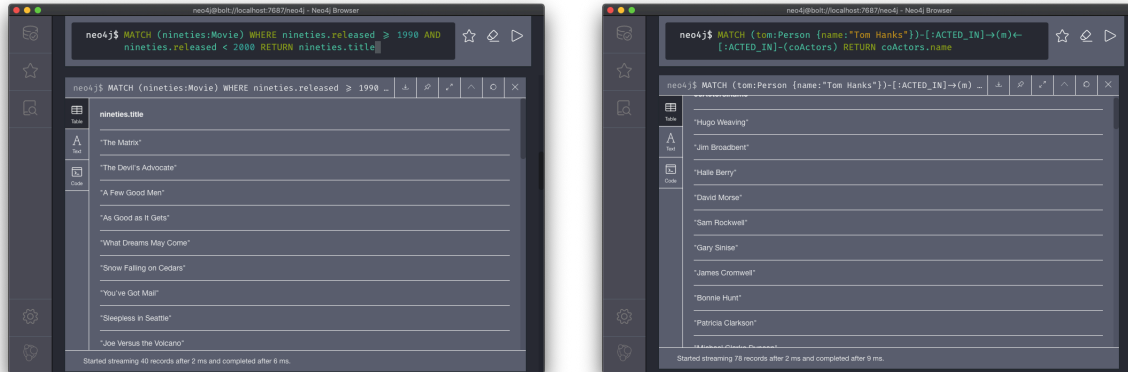

2. Exploring the Neo4J Graph Database

3. More exercise using nodes, relationships and matching in the Movie Graph Database

4. Extra Credit Work

Idea

I was part of a small band of 8 friends including me. However, we also had parnters we collaborated with. We write, perform and produce music. Therefore, I decided to do a graph database to show the connection each bandmember and partner had with the music we wrote and performed.

A. The band members and partners were identified as *Person*
Mire, Etana, Ellu, Andy, Eske, Kibrish, Sammy, Robi and Dawit.
B. The songs that we wrote and performed were identified as *Song*
Kefbel, Idayen and MinAynet
C. The relationship each person had with the song were
Performed_In or *Wrote*

Code

Below is the code I wrote to create

```
CREATE (Kefbel:Song {title:'Kef Kef Bel', released:2015, tagline:'This song is
about worship God for who He is'})
CREATE (Etana:Person {name:'Etana Disasa', born:1984})
CREATE (Ellu:Person {name:'Kibretsebaot Girma', born: 1986})
CREATE (Andy:Person {name:'Andenet Gezahegn', born:1979})
CREATE (Mire:Person {name:'MihretAb Berassa', born:1984})
CREATE (Eske:Person {name:'Eskindir Gidebo', born:1990})
CREATE (Robi:Person {name:'Robera Mekonnen', born:1990})
CREATE (Kibrish:Person {name:'KibreAb Mitiku', born:1989})
CREATE (Sammy:Person {name:'Samuel Shimelis', born:1991})

CREATE
(Etana)-[:PERFORMED_IN {roles:['Lead Singer']}]->(Kefbel),
(Ellu)-[:PERFORMED_IN {roles:['BG Singer2']}]->(Kefbel),
(Andy)-[:PERFORMED_IN {roles:['BG Singer2']}]->(Kefbel),
(Mire)-[:PERFORMED_IN {roles:['Lead Guitar']}]->(Kefbel),
(Eske)-[:PERFORMED_IN {roles:['Drum']}]->(Kefbel),
(Kibrish)-[:PERFORMED_IN {roles:['Keyboard1']}]->(Kefbel),
(Robi)-[:PERFORMED_IN {roles:['Base']}]->(Kefbel),
(Sammy)-[:PERFORMED_IN {roles:['Keyboard2']}]->(Kefbel),
(Etana)-[:WROTE]->(kefbel),
(Mire)-[:WROTE]->(Kefbel)
```

```
CREATE (Idayen:Song {title:'Idayen Keflotal', released:2009, tagline:'He paid the
price'})

CREATE (Dawit:Person {name:'Dawit Getachew', born:1986})

CREATE
(Andy)-[:PERFORMED_IN {roles:['Lead Singer']}]->(Idayen),
(Dawit)-[:PERFORMED_IN {roles:['Music']}]->(Idayen),
(Dawit)-[:WROTE]->(Idayen)

CREATE (MinAynet:Song {title:'Min Aynet Fikir New', released:2015, tagline:'What
kind of love is this?'})

CREATE
(Mire)-[:PERFORMED_IN {roles:['Lead Singer']}]->(MinAynet),
(Ellu)-[:PERFORMED_IN {roles:['BG Singer2']}]->(MinAynet),
(Andy)-[:PERFORMED_IN {roles:['BG Singer2']}]->(MinAynet),
(Etana)-[:PERFORMED_IN {roles:['BG Singer3']}]->(MinAynet),
(Mire)-[:PERFORMED_IN {roles:['Lead Guitar']}]->(MinAynet),
(Eske)-[:PERFORMED_IN {roles:['Drum']}]->(MinAynet),
(Kibrish)-[:PERFORMED_IN {roles:['Keyboard1']}]->(MinAynet),
(Robi)-[:PERFORMED_IN {roles:['Base']}]->(MinAynet),
(Sammy)-[:PERFORMED_IN {roles:['Keyboard2']}]->(MinAynet),
(Etana)-[:WROTE]->(MinAynet),
(Mire)-[:WROTE]->(MinAynet)
```
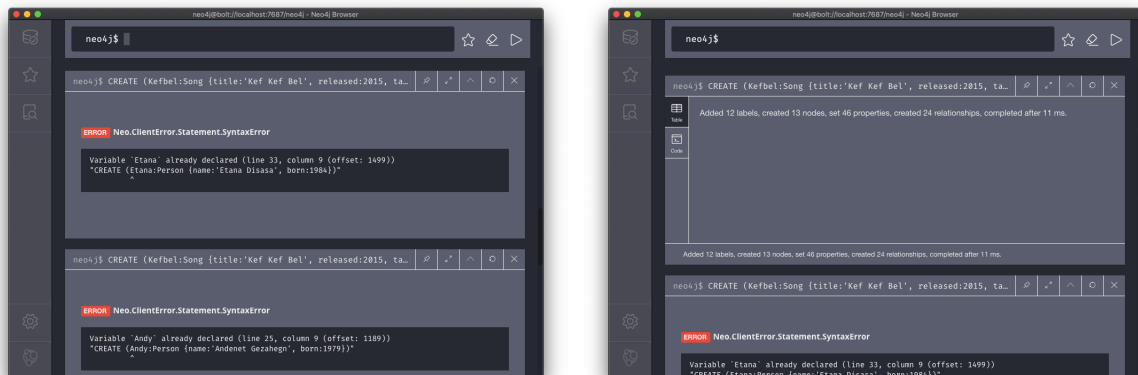
Snapshot (including some error messages ☺)

Matching
Below, I tried to see if there was any other person who did a song that my friend Mire
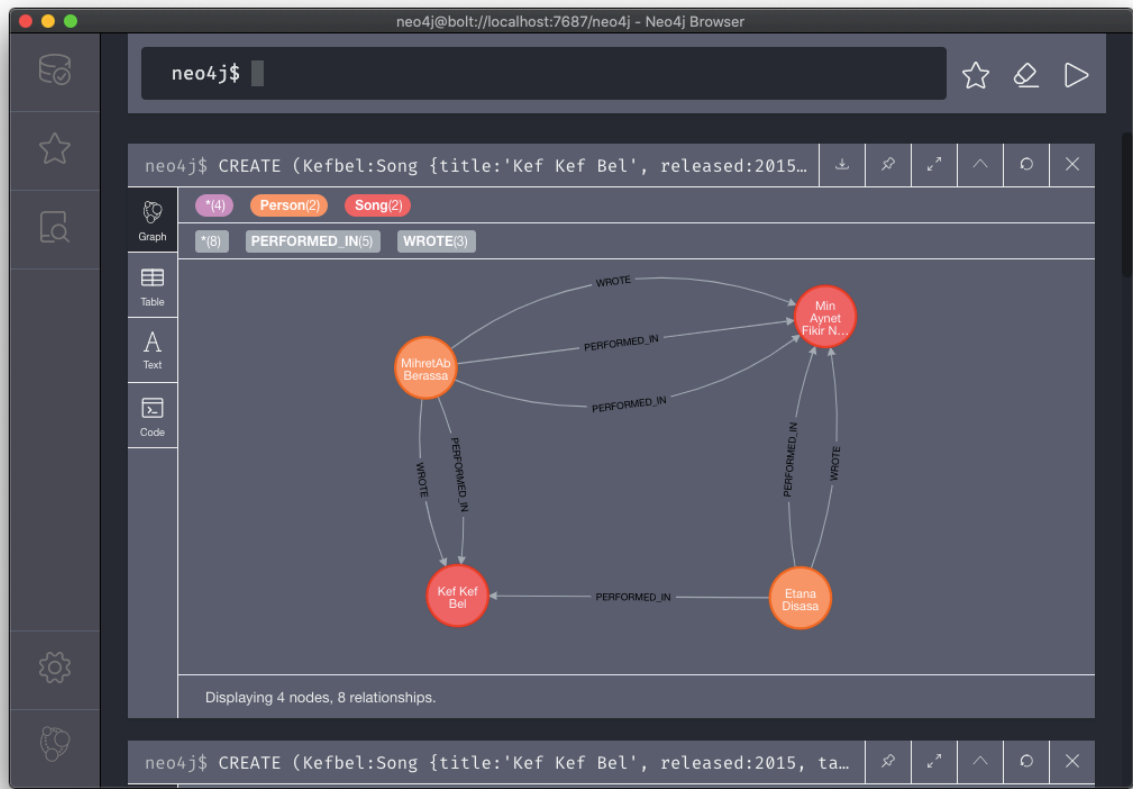wrote and performed at the same time.

```
WITH Mire as a
MATCH (a)-[:PERFORMED_IN]->(m)<-[:WROTE]-(d) RETURN a,m,d LIMIT 10;
```

and the result shows that Mire (MihretAb Berassa) had Etana (myself) have written
"Min Aynet Fikir New" and "Kef Kef Bel" and performed in both songs at the same
time. Therefore, the graph data shows the relationship that MihretAb and I (Etana) have
in regards to our involvement in writing and performing in these two songs.

More Snapshot

End of Assignment