FIT5137
Installation Guide (Windows)

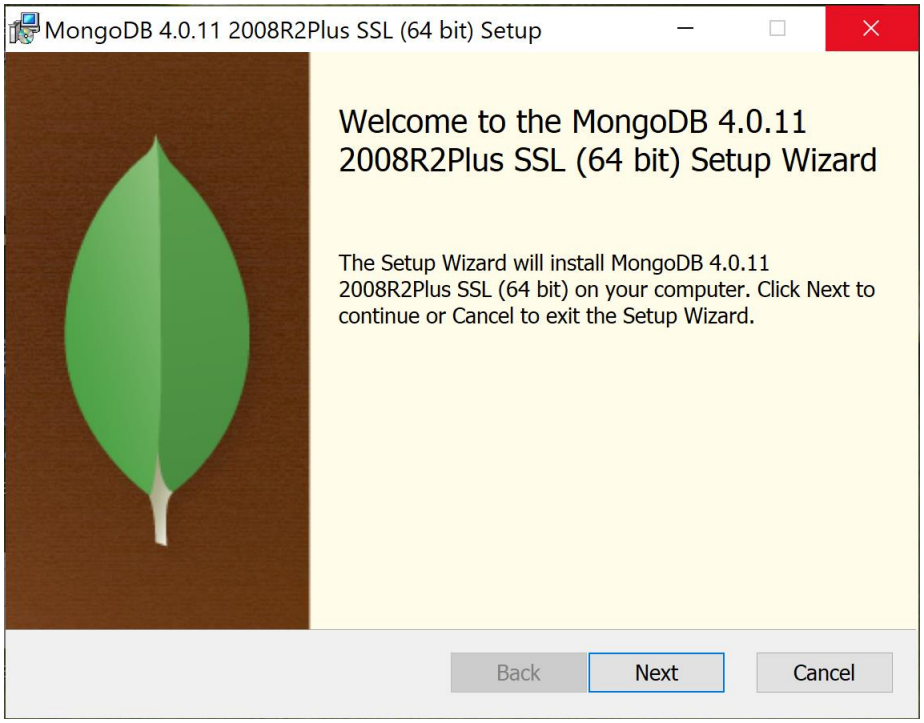
This is a guide for installing **MongoDB**, **Cassandra**, and **Neo4j** on **Windows** environment. Please ensure that you download the correct version for each software. We encourage you to install all software on your own device as the labs' devices have some issues with MongoDB and Cassandra.

Software needed throughout the semester:

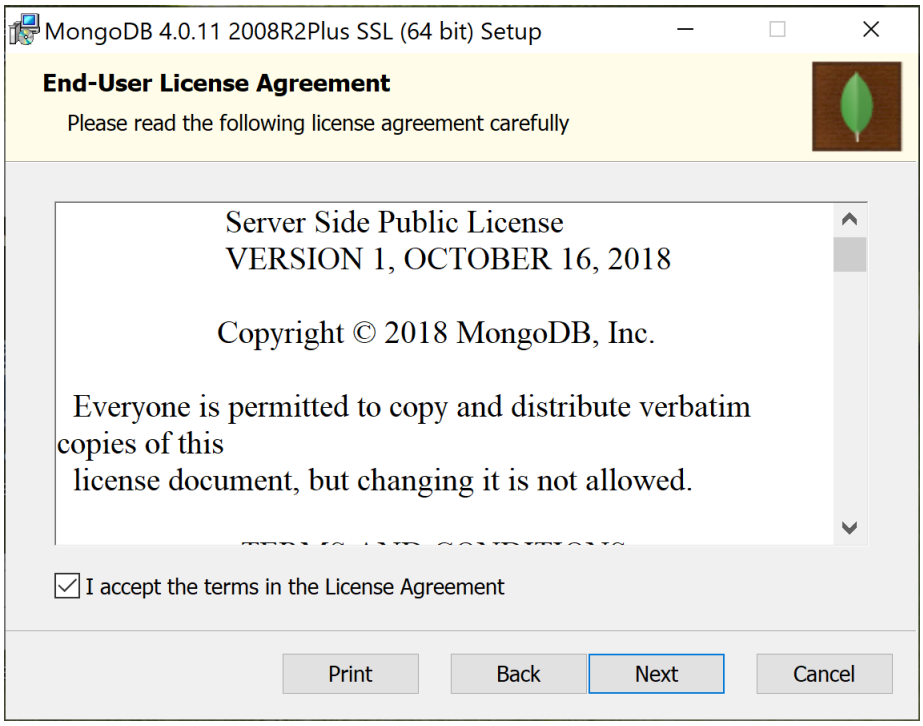
- Mongo DB Community Server 4.0.11
- Cassandra 3.11.4
- Neo4j Desktop 1.2.1

MongoDB

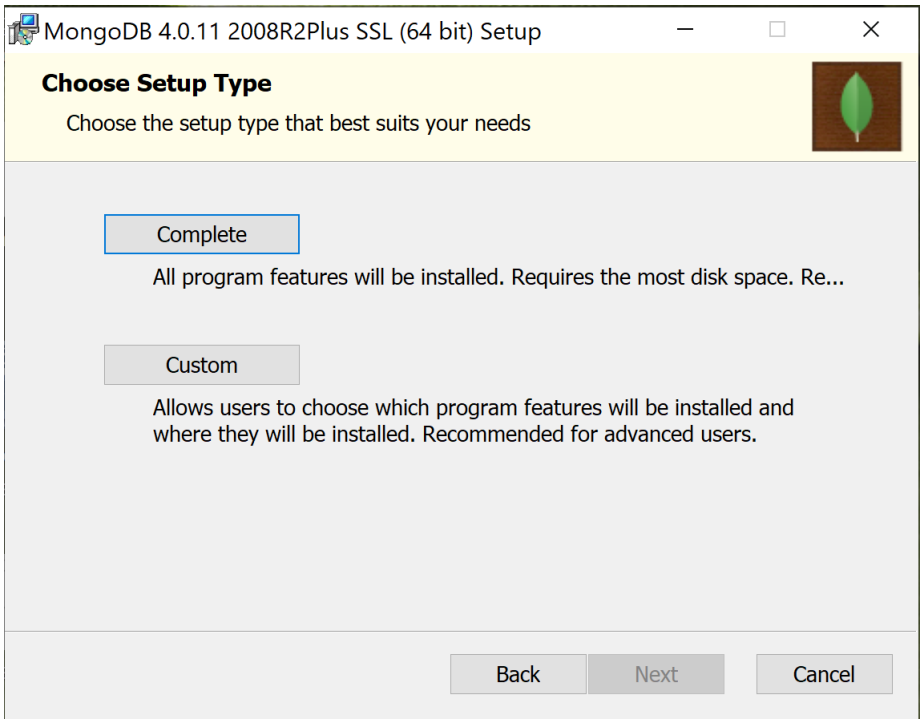
1. Download MongoDB software from: https://www.mongodb.com/download-center/community
2. In the download page, select **Server** tab, then choose the **MongoDB Community Server** edition, version **4.0.11**.
3. Click download.
4. After you have finished downloading MongoDB software, run the installer.
5. The MongoDB Setup Wizard will appear. Click Next.



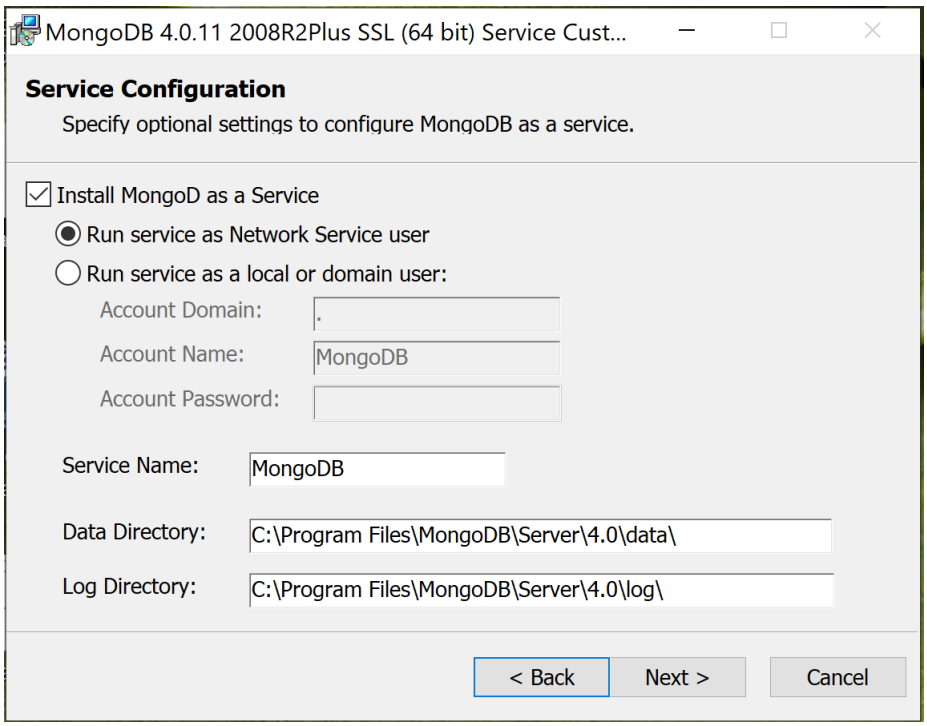
6. Accept the terms in the License Agreement, then click Next.



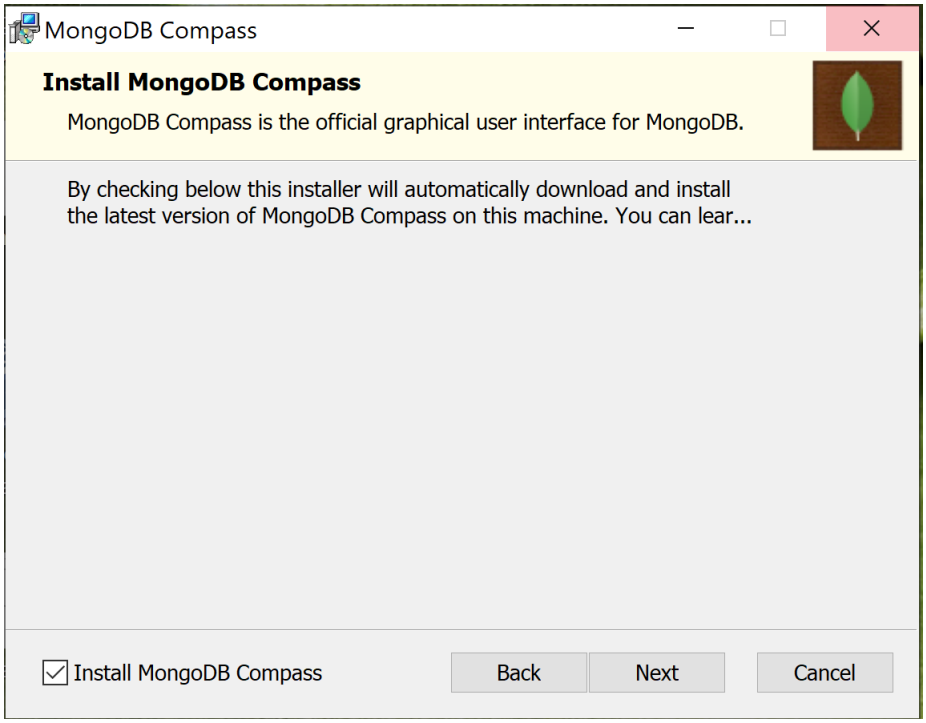
7. Choose **Complete** setup.



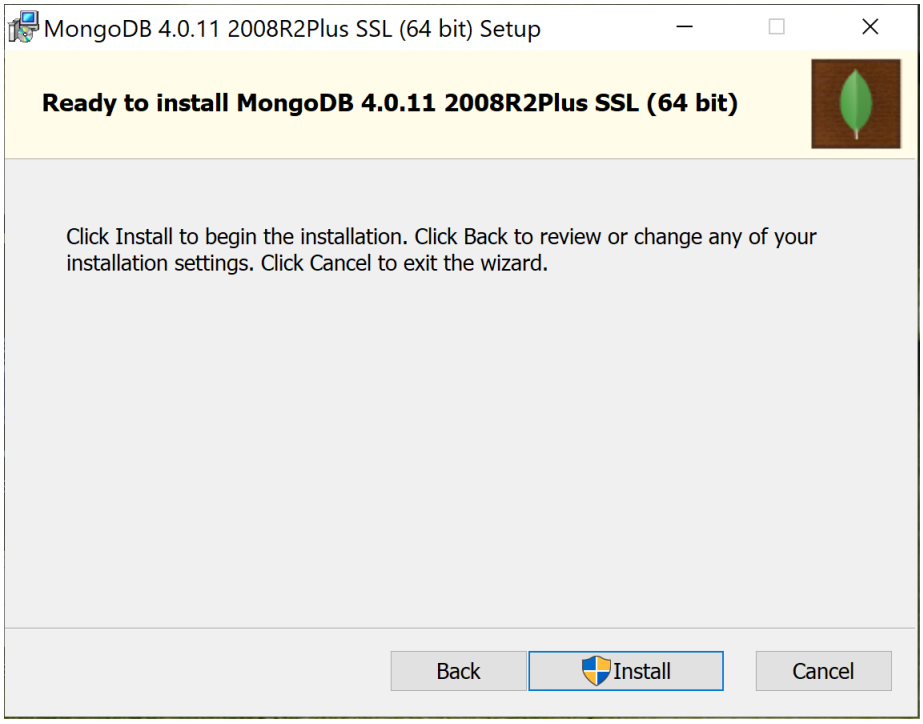
8. Select the directory for MongoDB, then click Next.



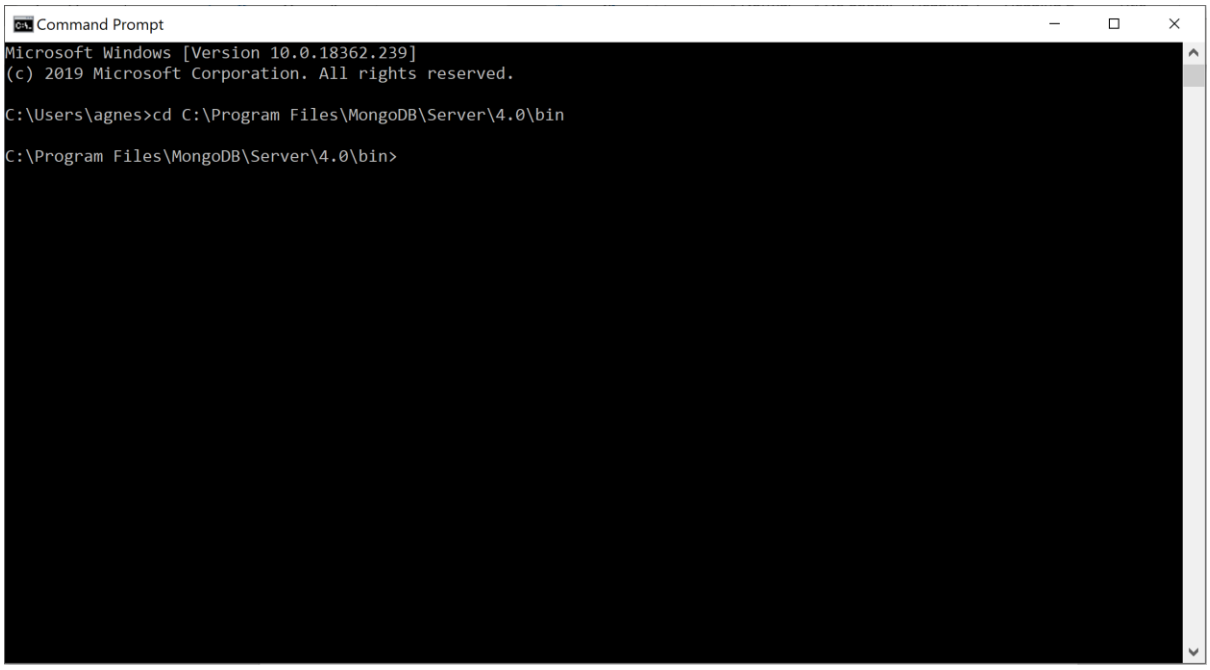
9. Tick the “Install MongoDB Compass” box, then click Next.



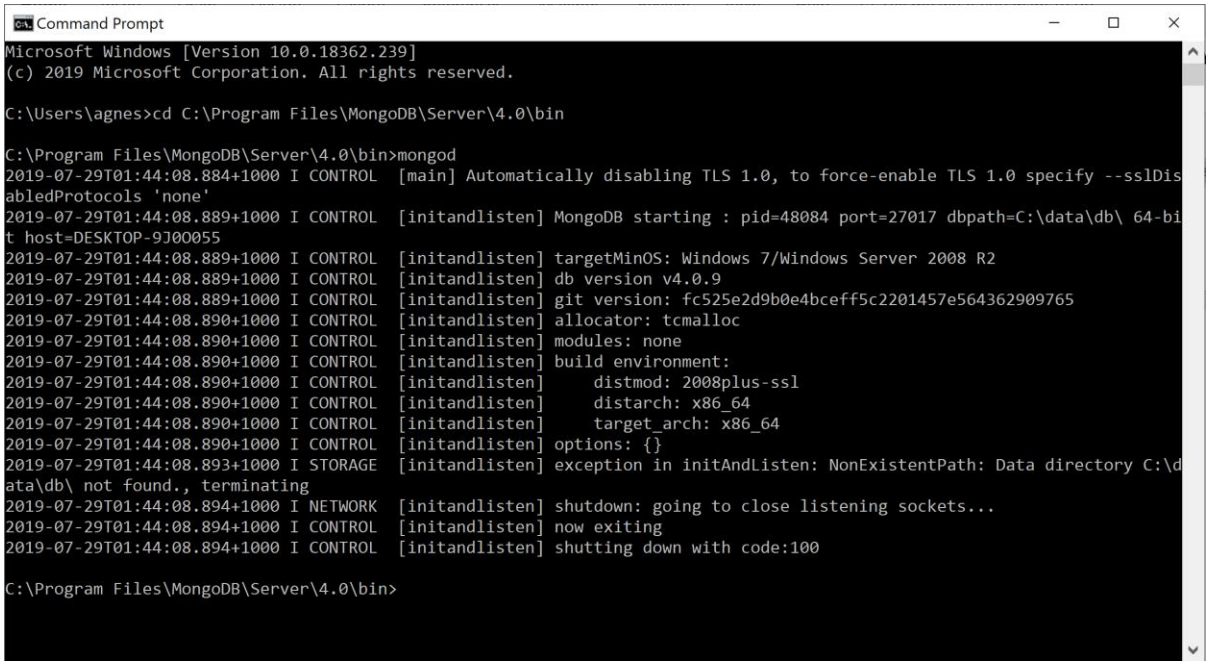
10. Click Install.



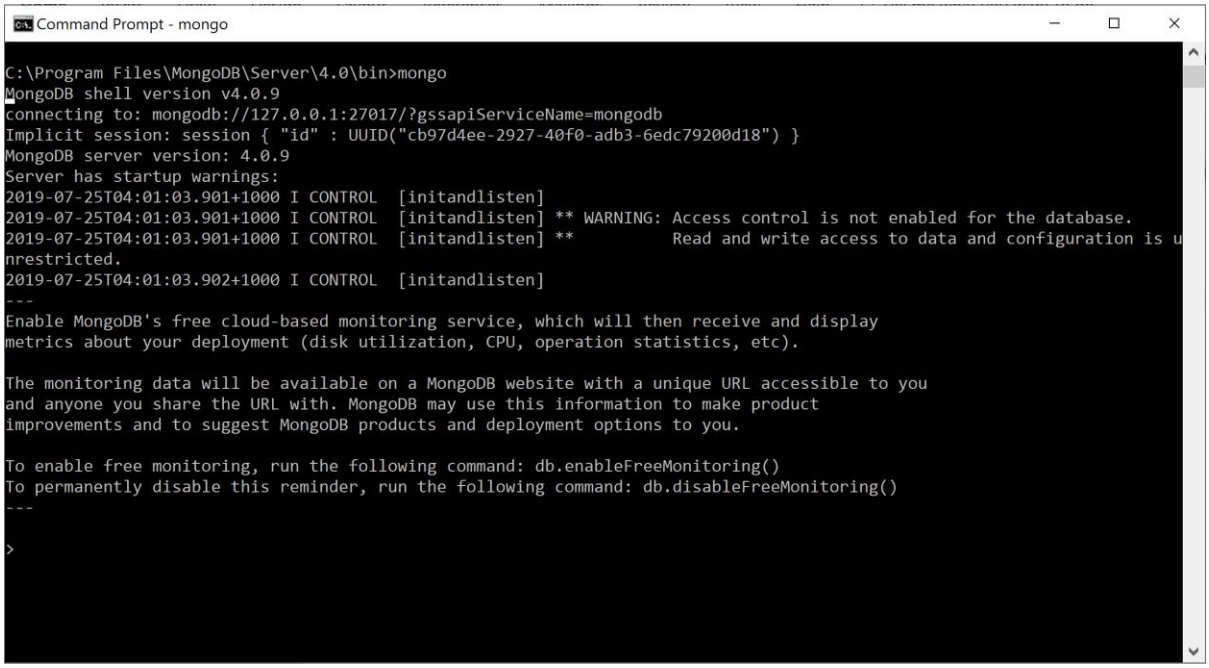
11. After you have installed MongoDB, open **Command Prompt** (**Run → cmd**).
12. Then type "**cd C:\Program Files\MongoDB\Server\4.0\bin**" (the directory path might be different if you did not install MongoDB in C: drive. Make sure you have the correct MongoDB directory before moving to the next step).



13. Type **mongod** to start MongoDB.

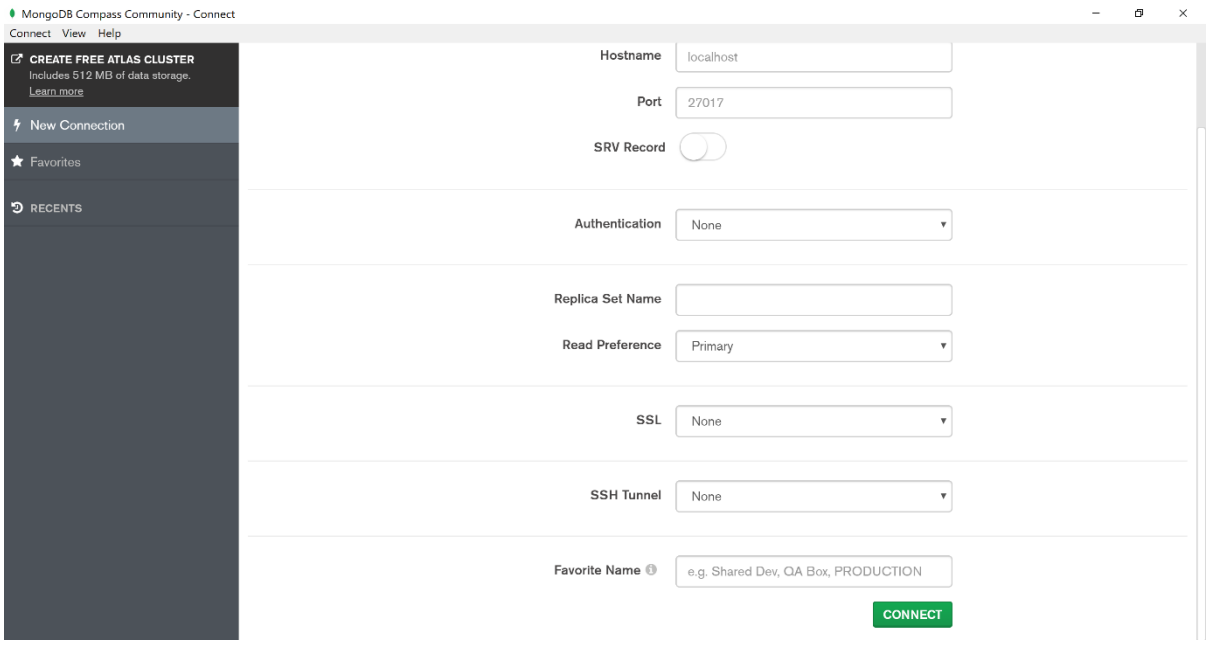


14. Type **mongo**.

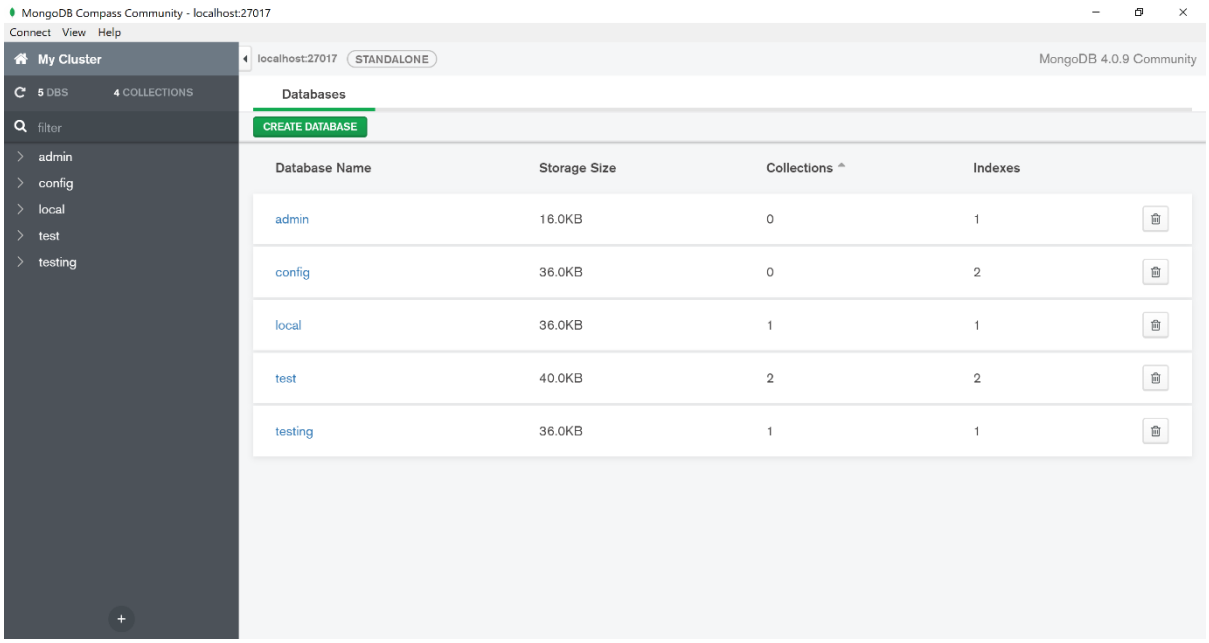


15. Type "**use test**" to create a new test database.

16. You can also check the databases through MongoDB Compass. MongoDB Compass provides a more user-friendly interface of MongoDB.
17. Open MongoDB Compass, then click **CONNECT** button.



18. The list of databases will be shown in MongoDB Compass, similar to the figure below.



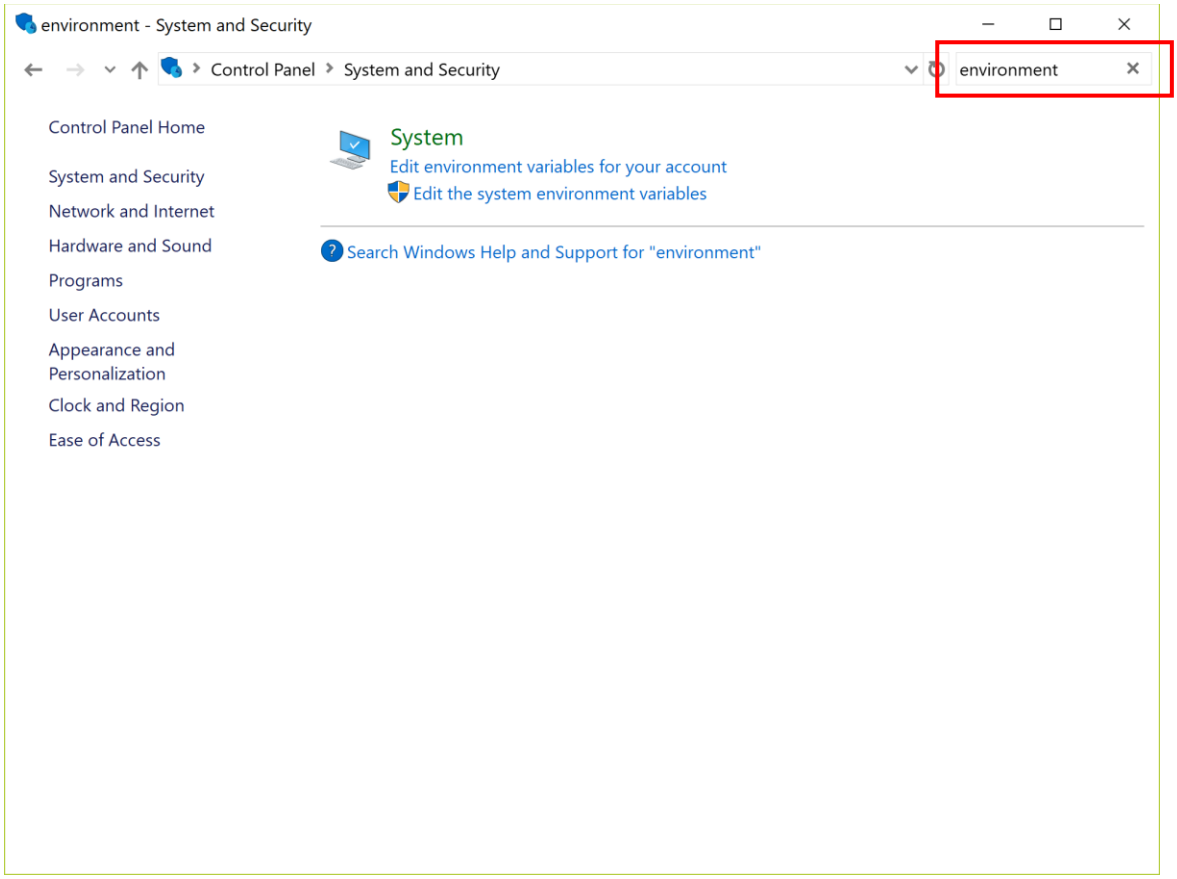
For more information on MongoDB installation:
https://docs.mongodb.com/manual/tutorial/install-mongodb-on-windows/?_ga=2.96383071.23984071.1563719283-1264152635.1558090265

Cassandra

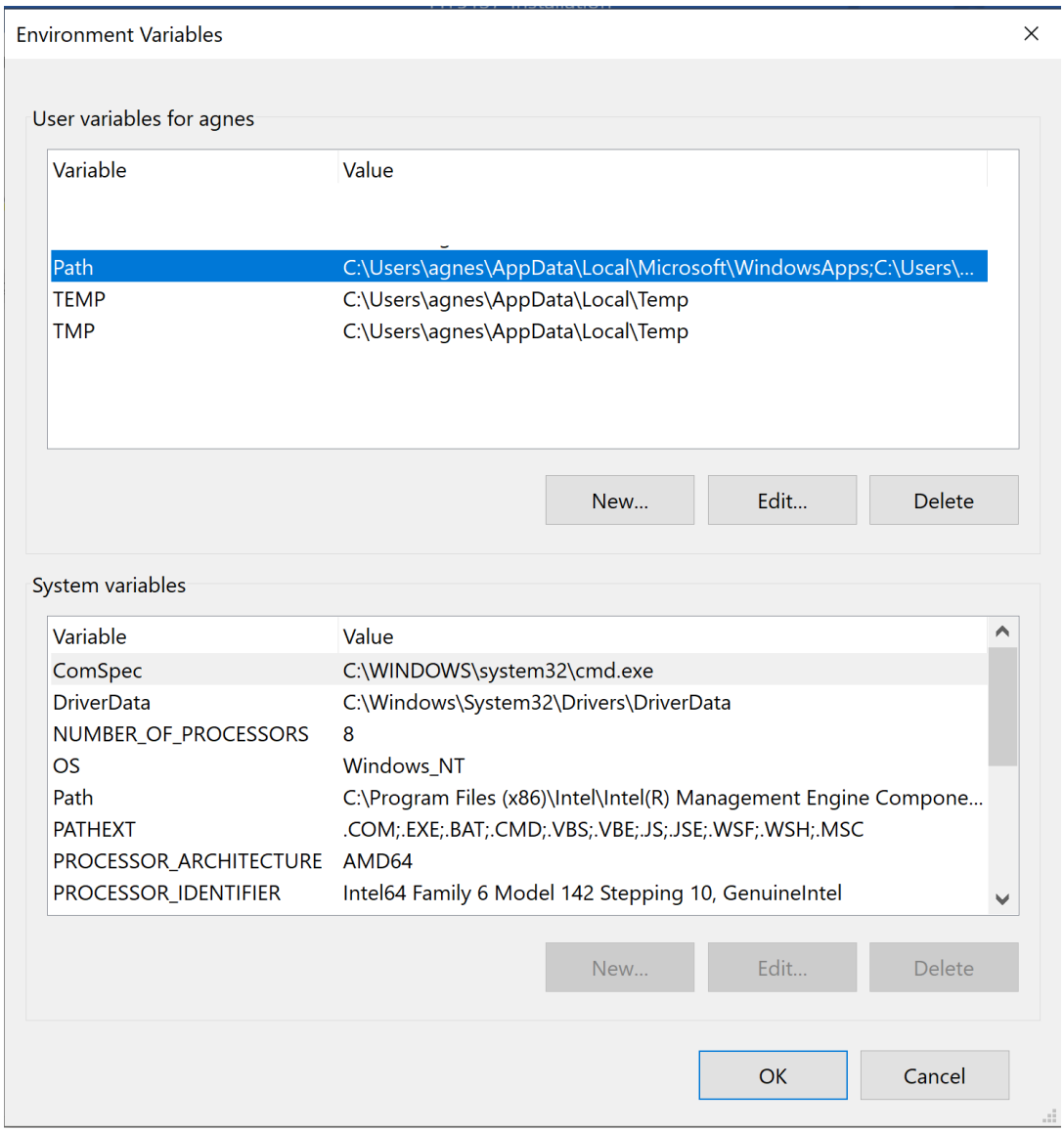
Warning: Before installing Cassandra, you must ensure that you have Python 2.7.0 installed in your machine. Do not use other version of Python since Cassandra would not work on other versions.

Set Python Path:

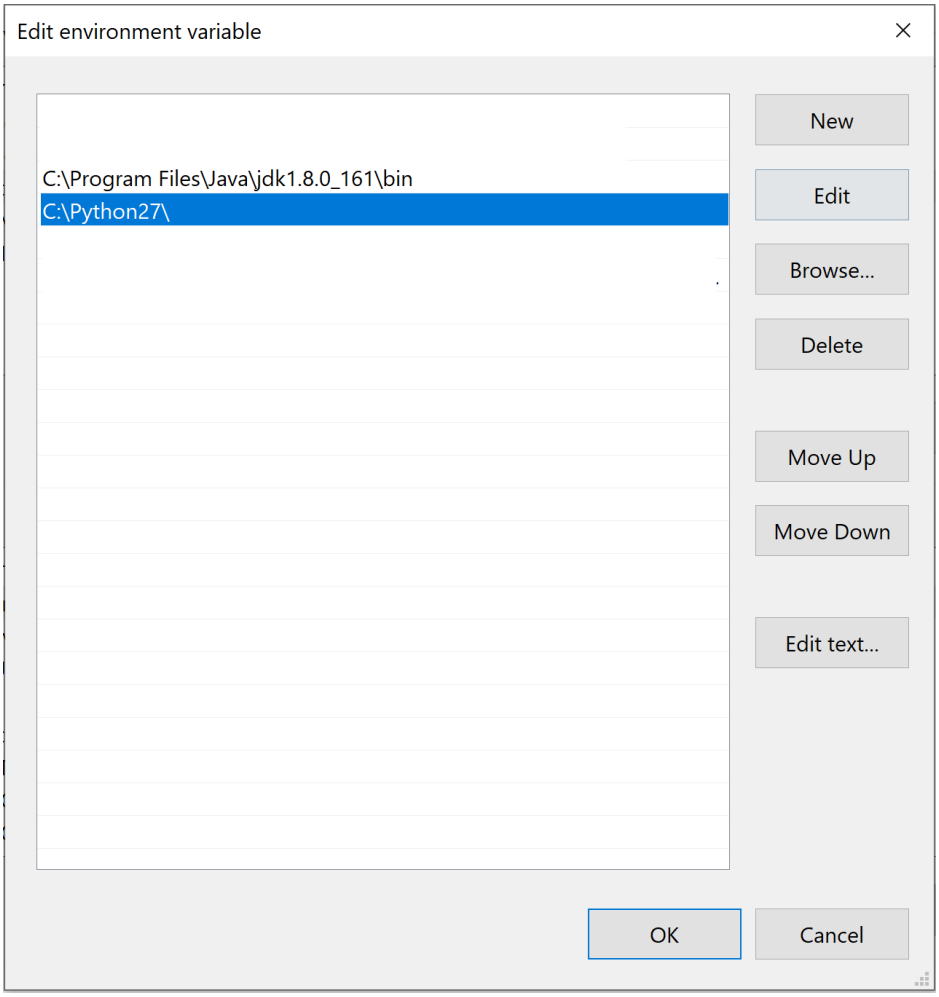
1. Download **Python 2.7.0** from: https://www.python.org/downloads/release/python-270/
2. Install Python. Make sure that you install **version 2.7.0** as the other versions will not work for Cassandra.
3. After you have successfully installed Python, go to **Control Panel → System and Security**.
4. In the search bar, type **environment**.



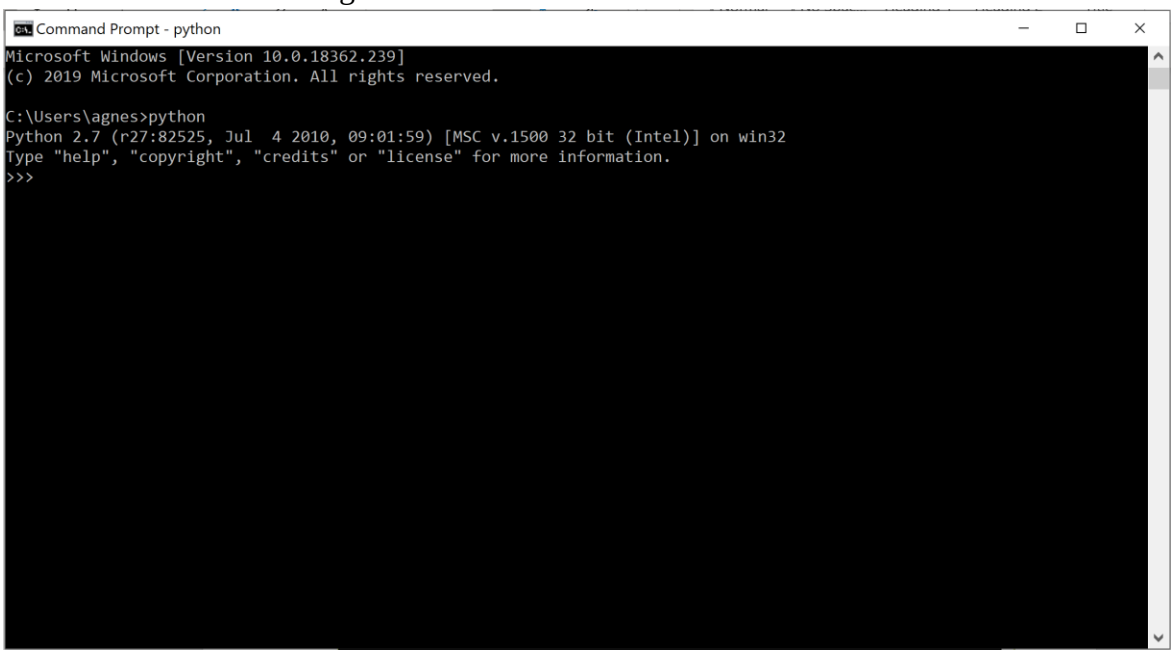
5. Select “Edit environment variables for your account”.
6. In the “User variables for [username]”, select **Path**, then click **Edit**.



7. A pop-up window will show up. If you do not have Python directory there, click **New**, then write the directory where you store Python program.



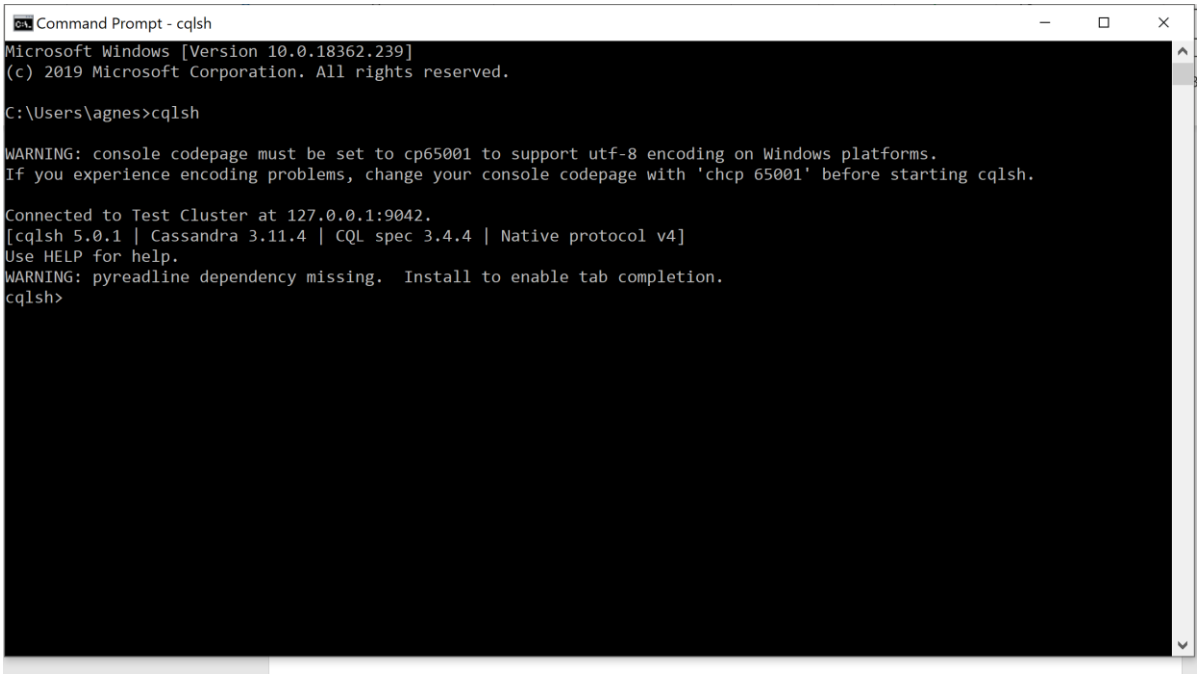
8. Go to **Command Prompt**, then type **Python**.
9. If Python has been installed correctly in your system, the Command Prompt screen should look like the Figure below.



10. Type **exit()** to exit Python.

Cassandra setup:

1. Download Cassandra from: http://cassandra.apache.org/download/
2. Choose version **3.11.4**.
3. Ensure that Python 2.7.0 has been installed in your system. [See the Set Python Path section if you do not have Python 2.7.0 in your system]
4. Extract the downloaded Cassandra file (preferably using 7zip).
5. After it is extracted, go to **apache-cassandra-3.11.4\bin**.
6. Copy the directory.
7. Go to Command Prompt, then go to Cassandra directory by typing "**cd [directory]**".
8. Type **Cassandra**.
9. The Command Prompt will load Cassandra. Wait until it stops loading.
10. Open another Command Prompt with the same Cassandra directory, then type **cqlsh**. The figure below indicates that you have successfully load Cassandra.



Note:

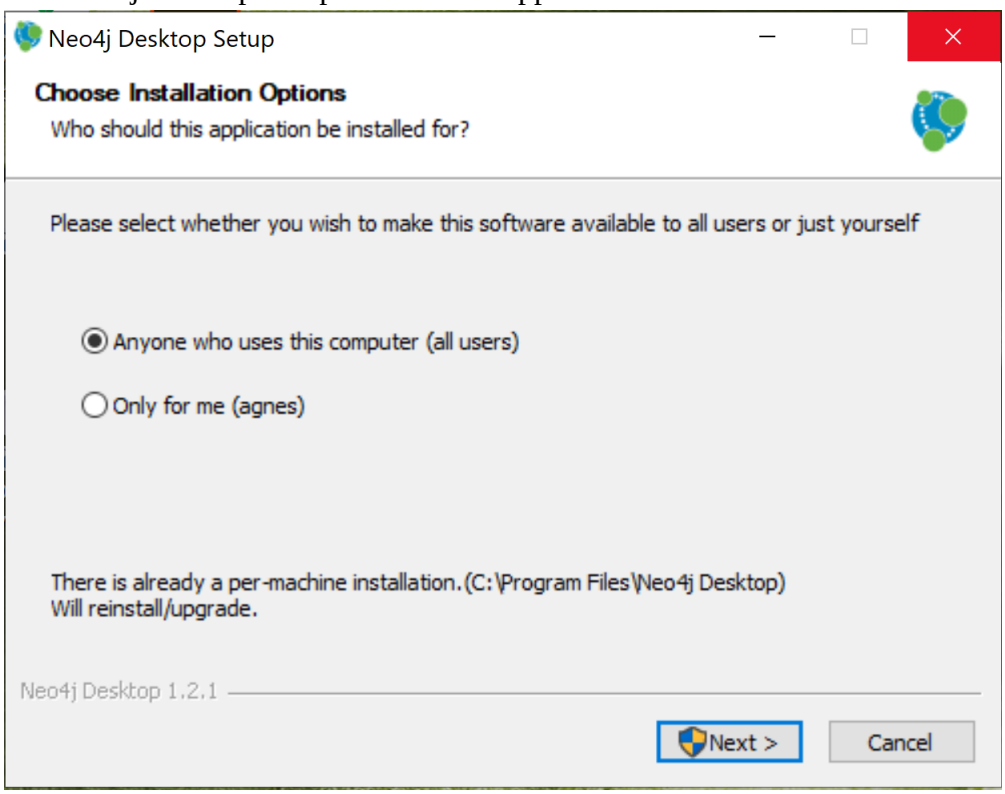
If you encounter this problem: `"Unrecognized VM option 'UseParNewGC' Error: Could not create the Java Virtual Machine."`, then it means that your JDK is not supported for Cassandra. Make sure you have JDK 8 installed in your computer. Otherwise use the link below to install one:

https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html

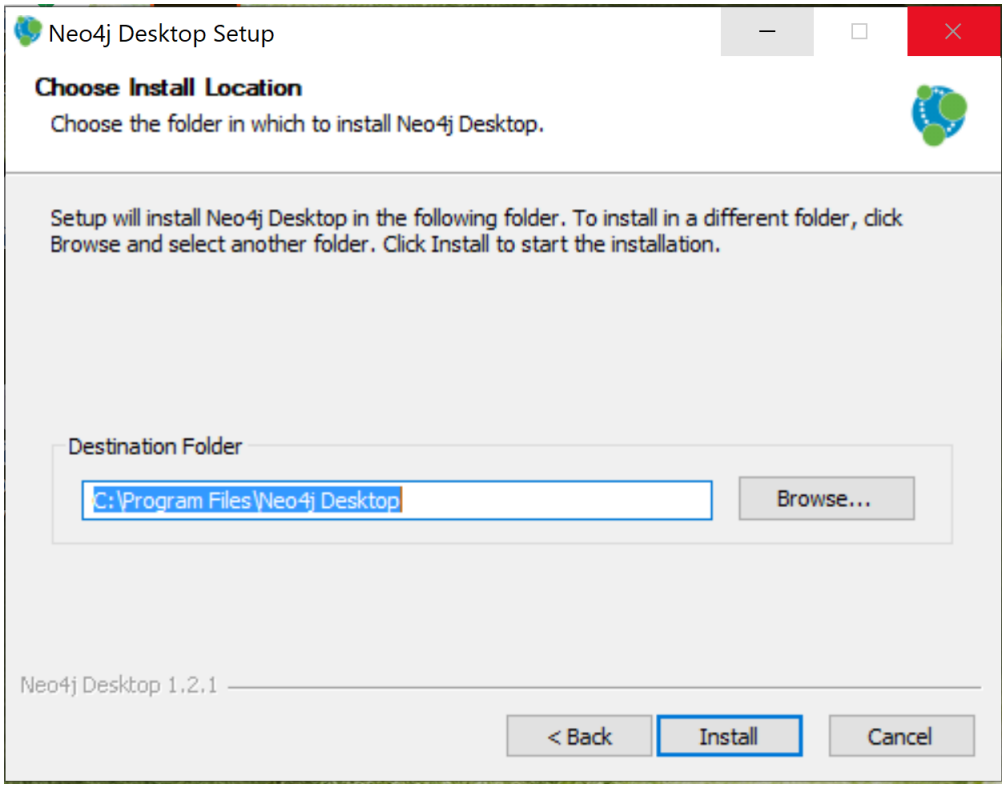
You should also update your environmental variable to JDK 8.

Neo4j

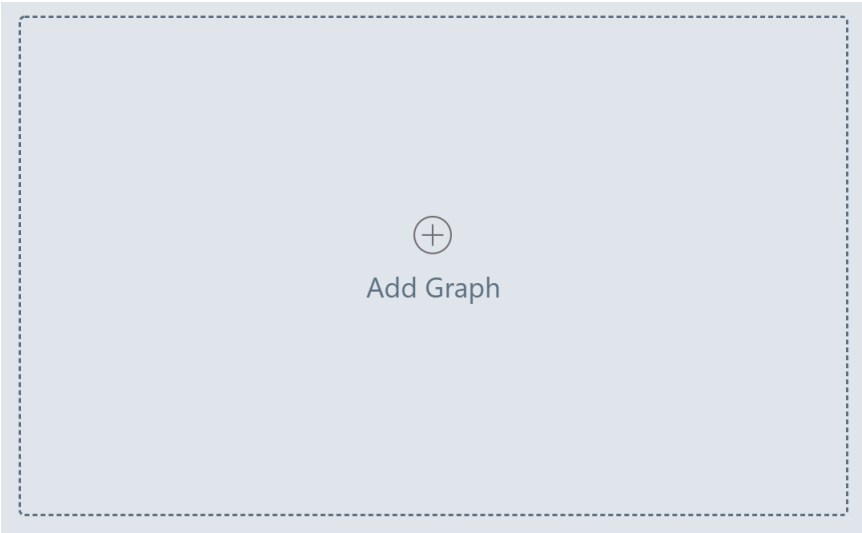
1. Download Neo4j from: https://neo4j.com/download-center/#desktop
2. Choose Neo4j Desktop version **1.2.1**. You may need to register to Neo4j before downloading the software.
3. Click download.
4. After you have finished downloading Neo4j, run the installer.
5. The Neo4j Desktop Setup Wizard will appear. Click Next.

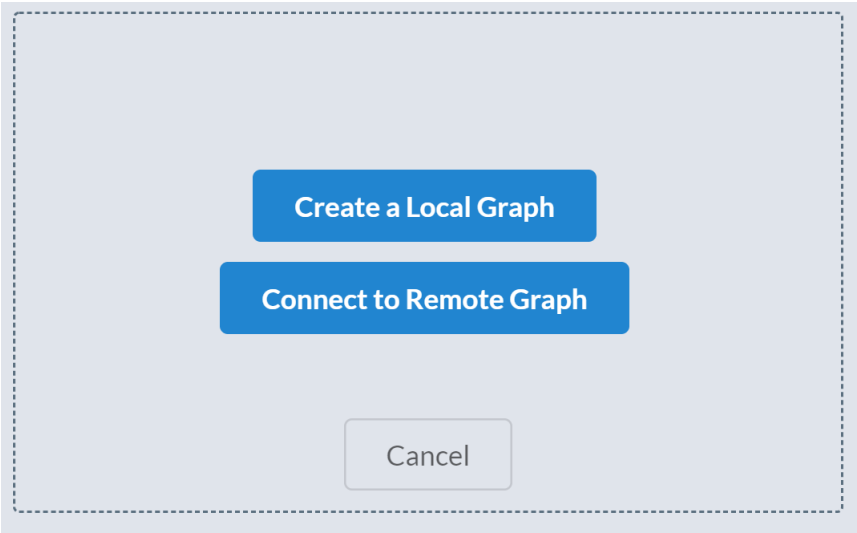


6. Click Install.

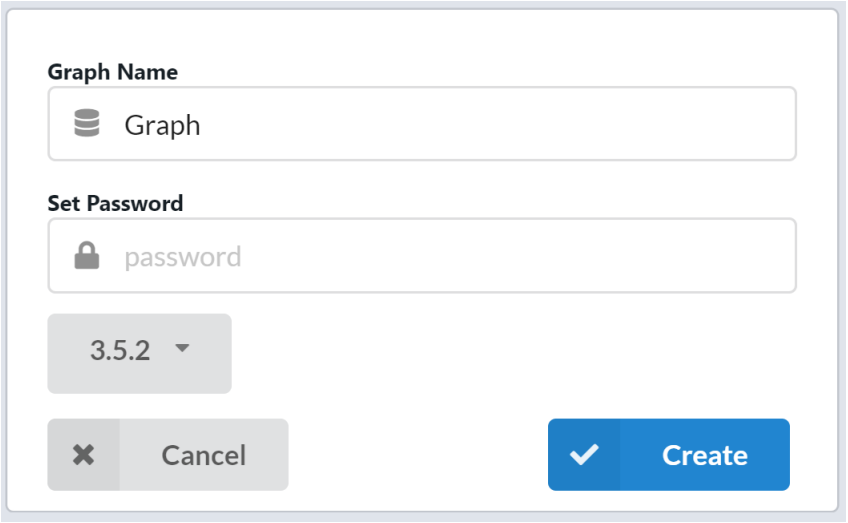


7. Once it is installed, run Neo4j.
8. Click on **Add Graph → Create a Local Graph**.

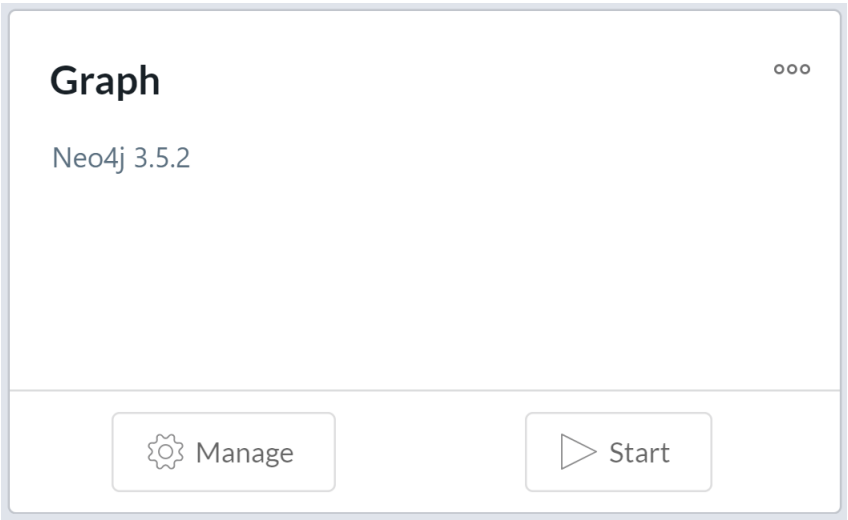




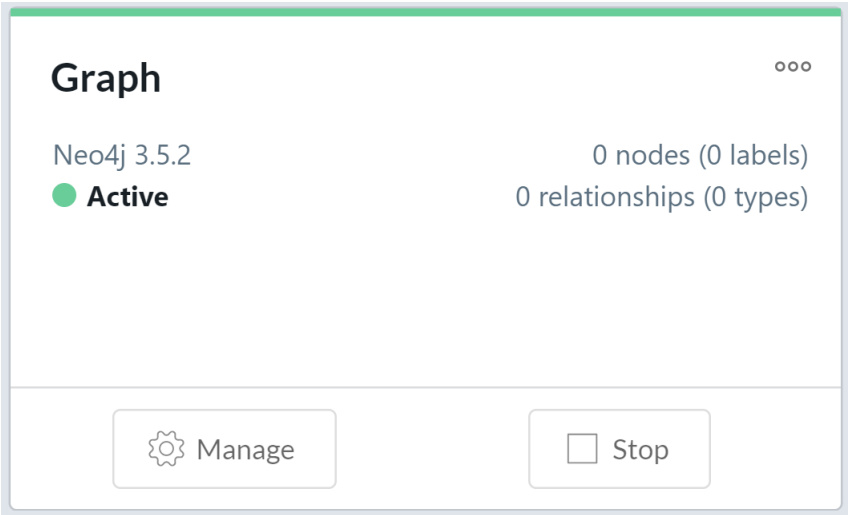
9. Fill in the **Graph name** and **Password**, the select **Create**.



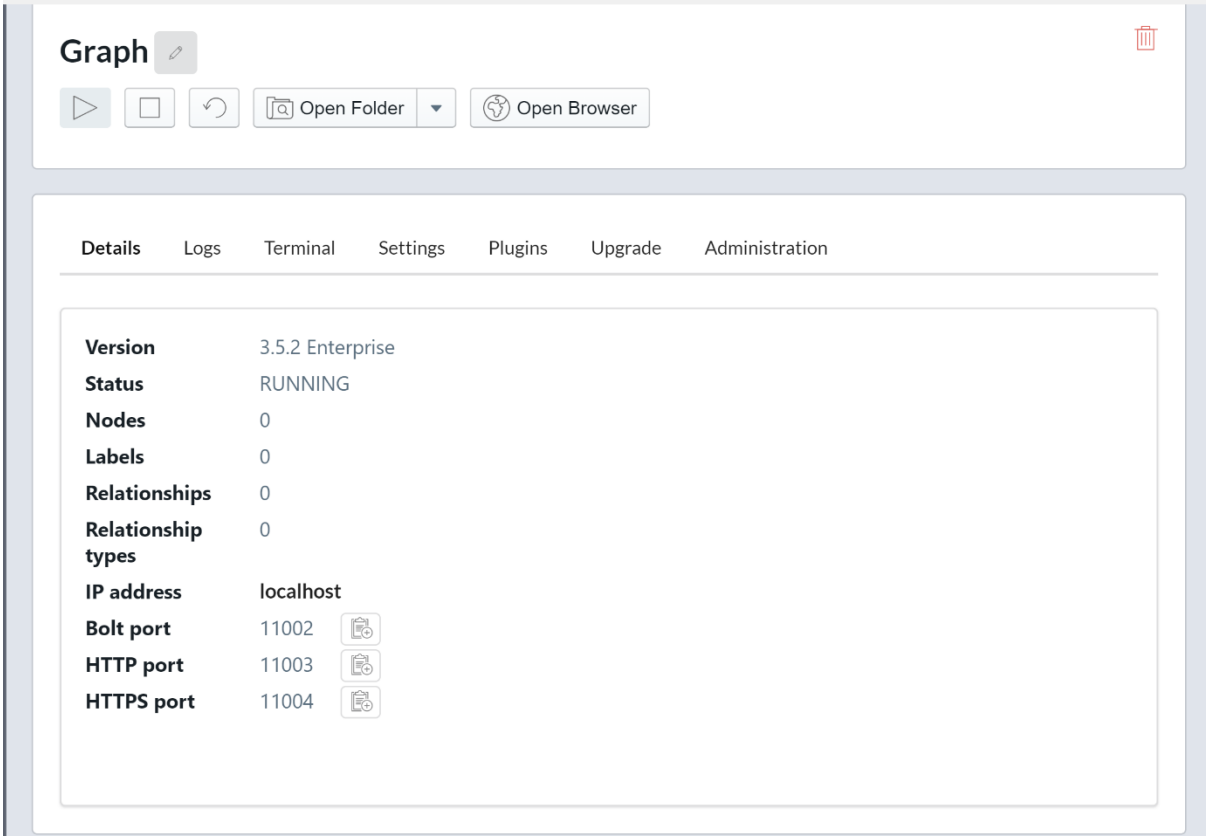
10. After your graph has been created, click **Start**.



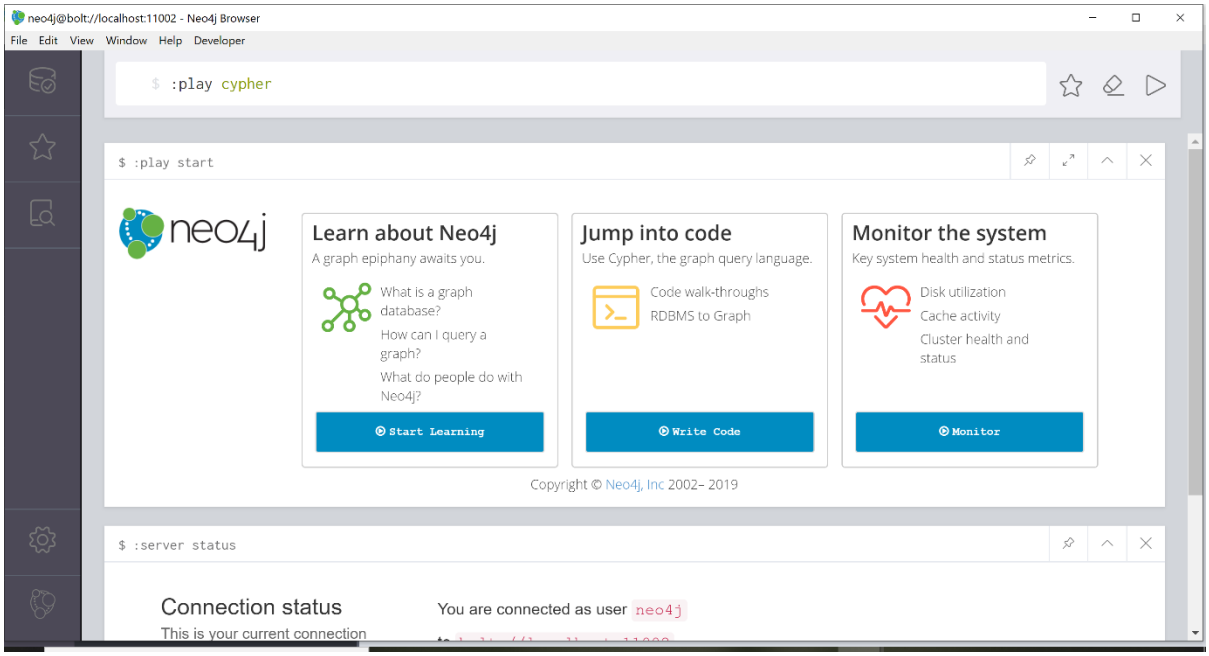
11. Once the graph is Active, select **Manage**.



12. Select **Open Browser**.



13. The browser will pop up. Type "**:play cypher**", the click the play button.


neo4j@bolt://localhost:11002 - Neo4j Browser
File Edit View Window Help Developer
$:play cypher
$:play start
neo4j
Learn about Neo4j
A graph epiphany awaits you.
What is a graph database?
How can I query a graph?
What do people do with Neo4j?
Start Learning
Jump into code
Use Cypher, the graph query language.
Code walk-throughs
RDBMS to Graph
Write Code
Monitor the system
Key system health and status metrics.
Disk utilization
Cache activity
Cluster health and status
Monitor
Copyright © Neo4j, Inc 2002- 2019
$:server status
Connection status
This is your current connection
You are connected as user neo4j