Date:04.04.2022

Third Year B. Tech., Sem VI 2021-22

4CS372 : Advanced Database System Lab

Assignment Submission

PRN No: 2019BTECS00064

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Batch: T2

Assignment: 9

Title of assignment: MongoDb CassandraDb

Objective:

To install MongoDb and CassandraDb on windows platform and To develop a Python desktop Application to demonstrate the CRUD operation with above backend cloud databases

Introduction & Theory:

MongoDb:

MongoDB is an open-source document database and leading NoSQL database. MongoDB is written in C++. This tutorial will give you great understanding on MongoDB concepts needed to create and deploy a highly scalable and performance-oriented database.

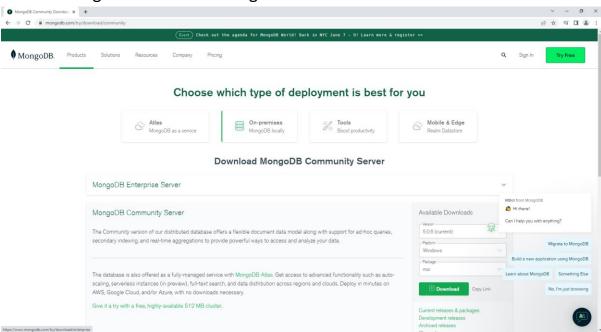
Cassandra:

Cassandra is a distributed database management system which is open source with wide column store, NoSQL database to handle large amount of data across many commodity servers which provides high availability with no single point of failure. It is written in Java and developed by Apache Software Foundation.

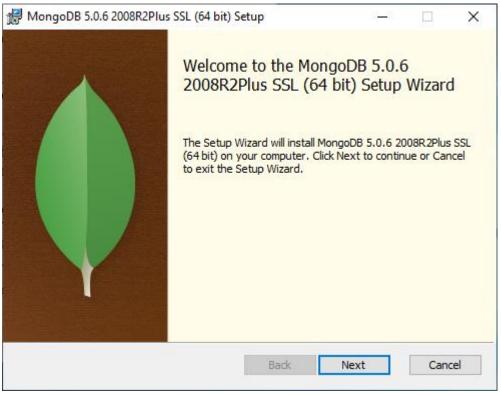
Procedure / Experiment:

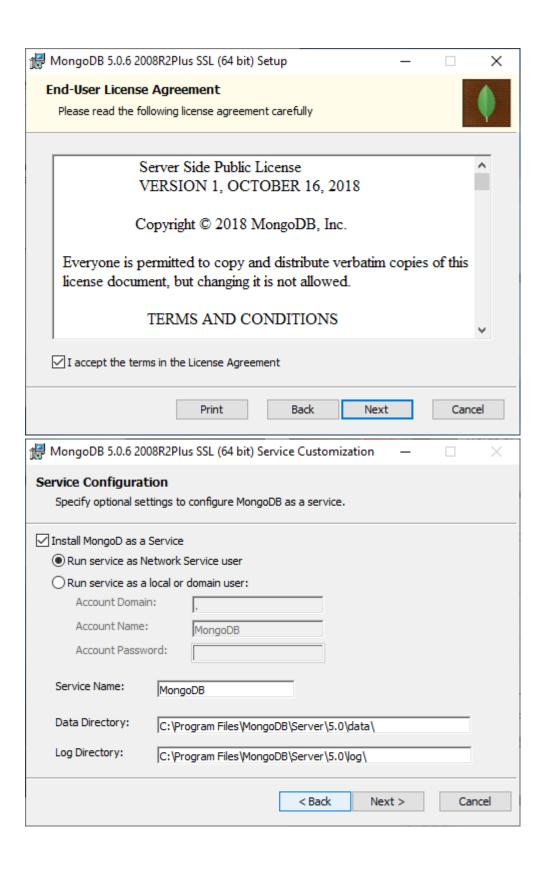
Installation of MongoDb

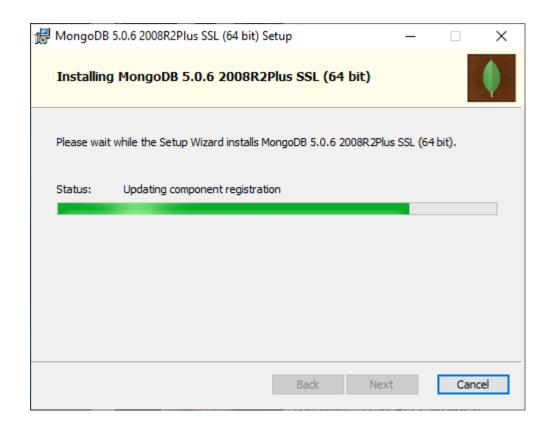
1. Downloading the exe file of MongoDb



2. Installation of MongoDb

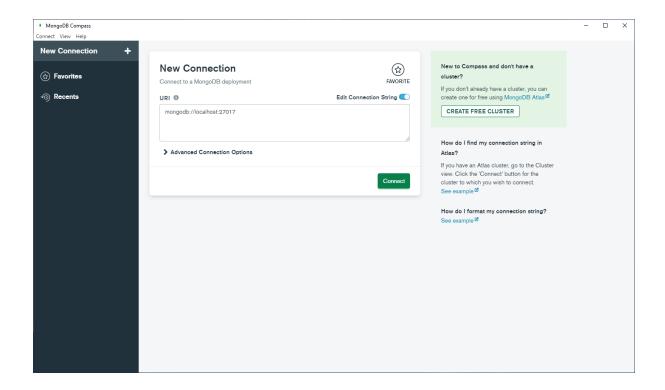




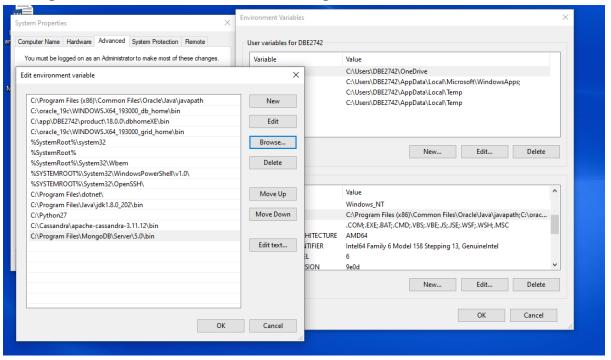




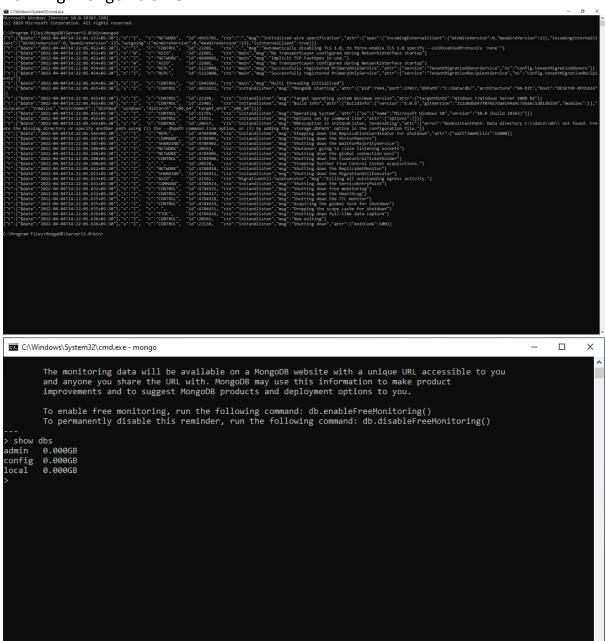
MongoDB Compass is being installed. It will launch once it is done.



3. Setting the Environment Variables of MongoDb

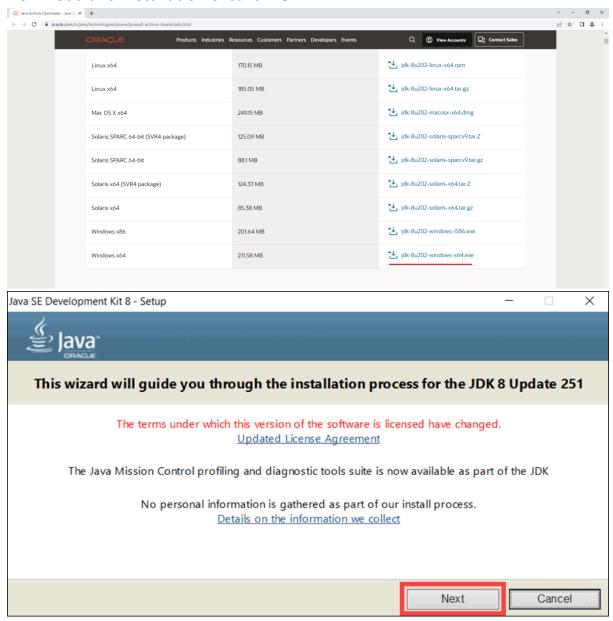


4. Running MongoDb on CMD

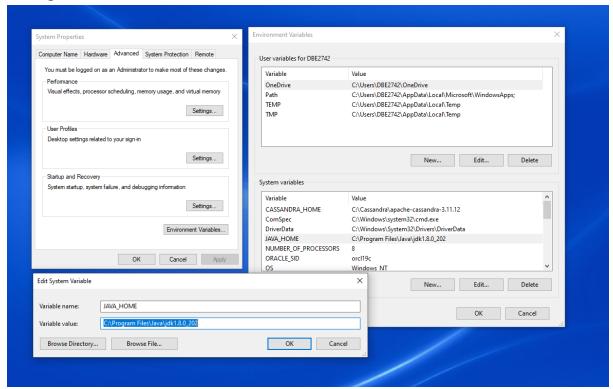


Installation of CassandraDb:

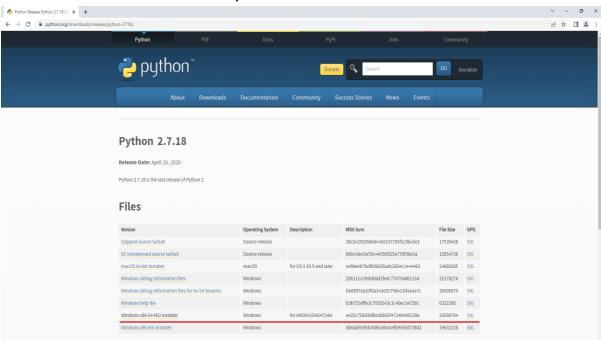
1. Download and Installation of Java – 8

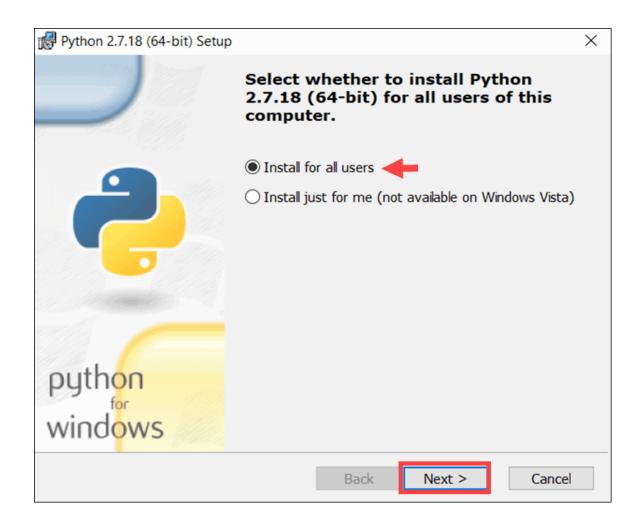


2. Configure Environment Variables for Java 8

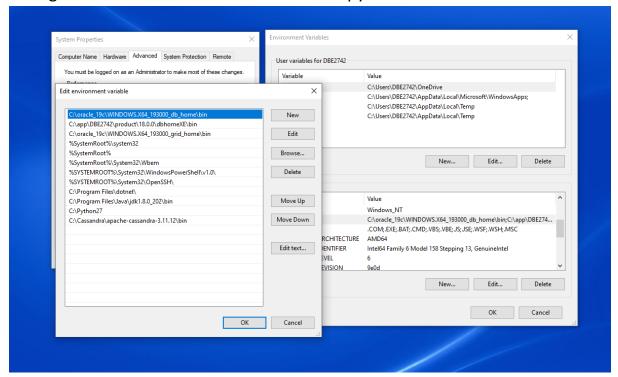


3. Download and Installation of Python 2.7

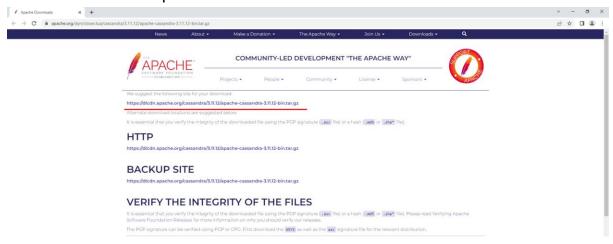




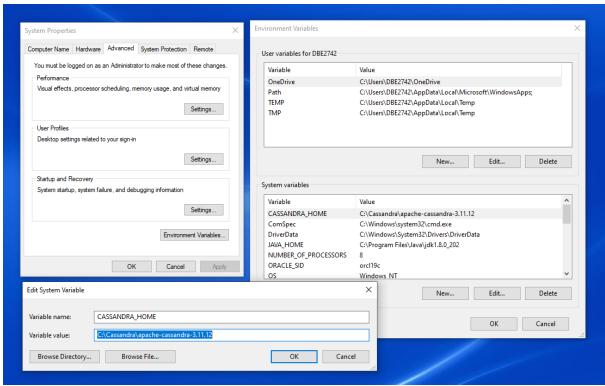
4. Configure and edit environment variable for python 2.7

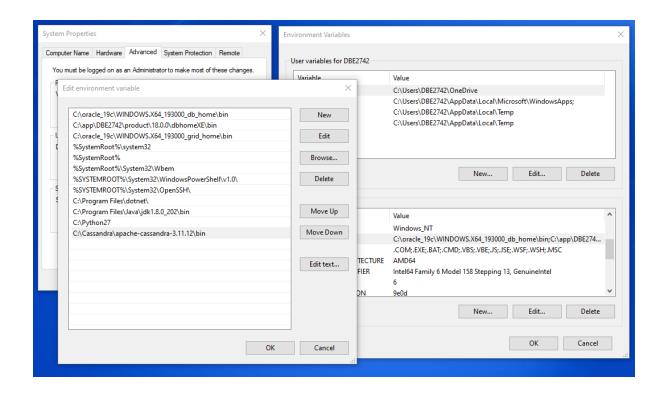


5. Download and Set Up of Cassandra

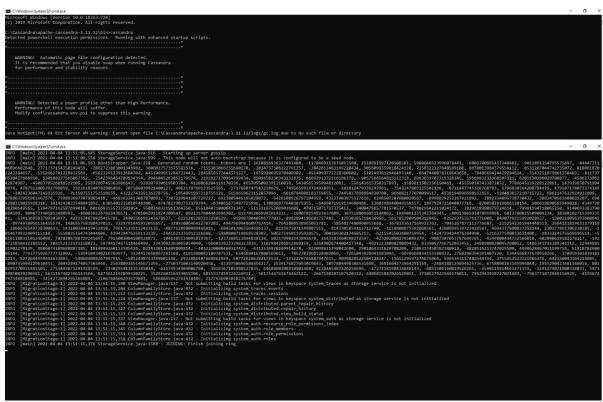


6. Configure Environment Variables for Casssandra





7. Start Cassandra from Windows CMD



8. Access Cassandra cqlsh from Windows CMD

```
Microsoft Windows [Version 10.0.18363.720]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Cassandra\apache-cassandra-3.11.12\bin>cqlsh

WARNING: console codepage must be set to cp65001 to support utf-8 encoding on Windows platforms.

If you experience encoding problems, change your console codepage with 'chcp 65001' before starting cqlsh.

Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.11.12 | CQL spec 3.4.4 | Native protocol v4]

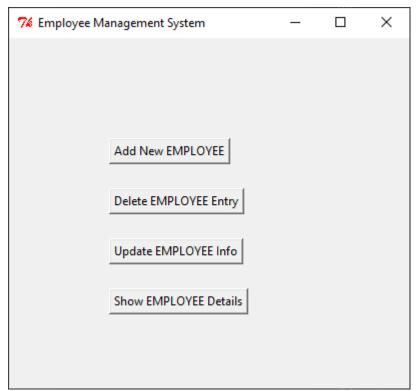
Use HELP for help.

WARNING: pyreadline dependency missing. Install to enable tab completion.

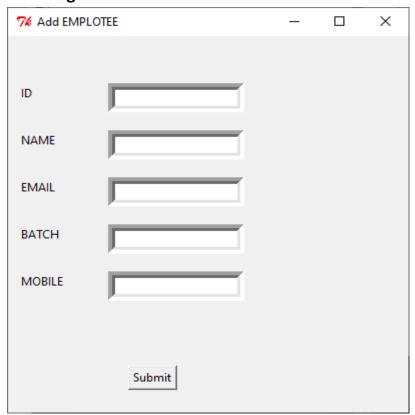
cqlsh> ■
```

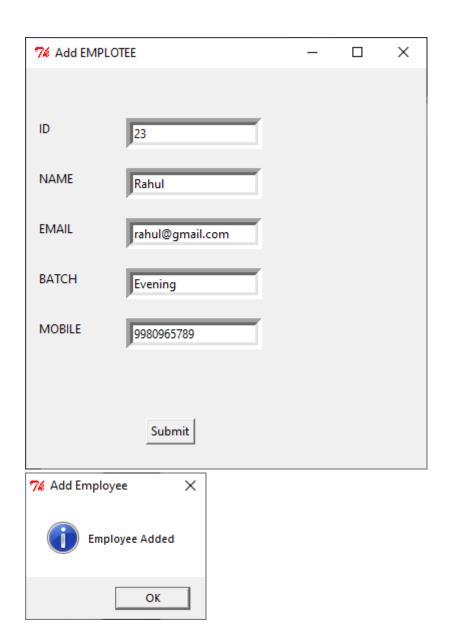
Python Application with MongoDb Database:

Dashboard

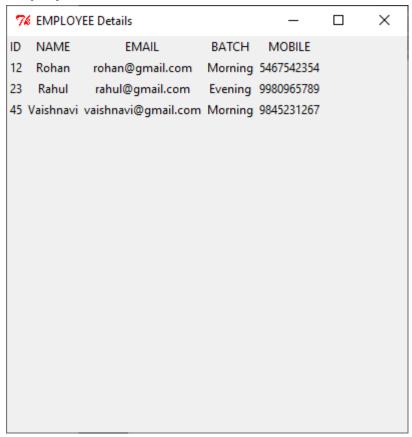


Inserting Data

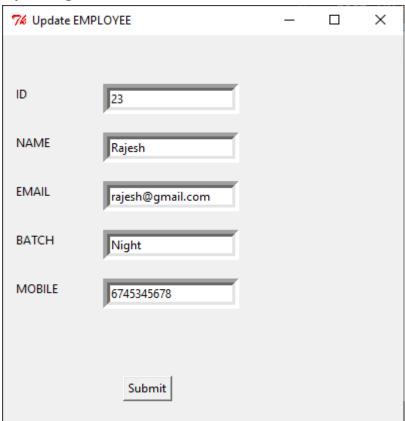


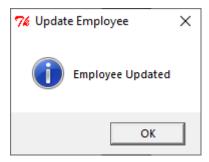


Display data

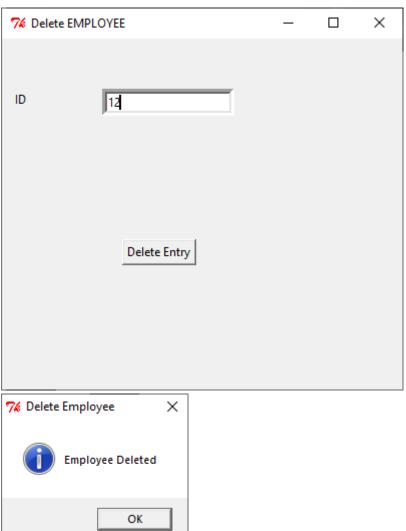


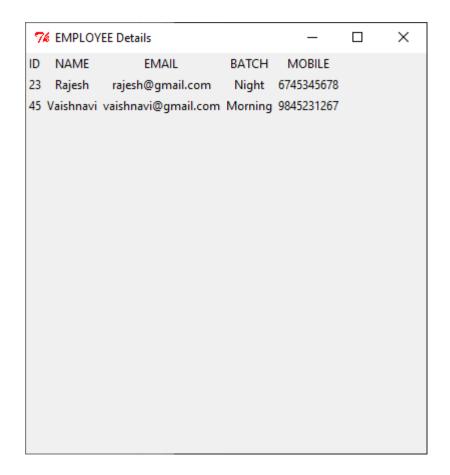
Updating data





Delete Data





Database in MongoDb Compass

