PYTHON ASSIGNMENT 4

1.
The main difference between Cassandra and RDBMS is that Cassandra deals with unstructured data that uses a wide-column store and NoSQL for database management. It is designed to handle massive data across many commodity servers. Although working for enormous data, it provides high availability and no point failure.

2.
cqlsh is a command-line interface for interacting with Cassandra using CQL (the Cassandra Query Language). It is shipped with every Cassandra package, and can be found in the bin/ directory alongside the cassandra executable

3.
The design goal of Cassandra is to handle big data workloads across multiple nodes without any single point of failure. Cassandra has peer-to-peer distributed system across its nodes, and data is distributed among all the nodes in a cluster. All the nodes in a cluster play the same role.
4.
UML is popular for its diagrammatic notations. We all know that UML is for visualizing, specifying, constructing and documenting the components of software and non-software systems. Hence, visualization is the most important part which needs to be understood and remembered.

UML notations are the most important elements in modeling. Efficient and appropriate use of notations is very important for making a complete and meaningful model. The model is useless, unless its purpose is depicted properly.

Hence, learning notations should be emphasized from the very beginning. Different notations are available for things and relationships. UML diagrams are made using the notations of things and relationships. Extensibility is another important feature which makes UML more powerful and flexible.

5.
An object is an entity having a specific identity, specific characteristics and specific behavior. Taking a car as an example of an object, it has characteristics like colour, model, version, registration number, etc. It has behaviours like start the engine, stop the engine, accelerate the car, apply the brakes, etc.