**Python Advance Assignment 4**

1. Explain the differences between Cassandra and typical databases.

Ans:Cassandra: Cassandra is a high-performance and highly scalable distributed NoSQL database management system. Cassandra deals with unstructured data and handles a high volume of incoming data velocity.

Typical database: **A database typically requires a comprehensive database software program known as a database management system (DBMS). A DBMS serves as an interface between the database and its end users or programs, allowing users to retrieve, update, and manage how the information is organized and optimized.**

1. What exactly is CQLSH?

Ans: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.

1. Explain the Cassandra cluster idea.

Ans:A cluster in Cassandra is one of the shells in the whole Cassandra database. Many Cassandra Clusters combine together to form the database in Cassandra. A Cluster is basically the outermost shell or storage unit in a database. The Cassandra Cluster contains many different layers of storage units.

1. Give an example to demonstrate the class notion.

Ans:A class is the basis of all data in Python, everything is an object in Python, and a class is how an object is defined. They are the foundation of object-oriented programming and represent real-world things you want to model in your programs.

1. Use an example to explain the object.

Ans:Python is an object-oriented programming language. Everything is in Python treated as an object, including variable, function, list, tuple, dictionary, set, etc. Every object belongs to its class. For example - An integer variable belongs to integer class. An object is a real-life entity.