EXPERIMENT-8

OBJECTIVE:

Design database schemas and implement minimum 10 queries using Hive/HBase/Cassandra column-based databases.

ALGORITHM:

Step 1:Install Cassandra
Step 2 : Define the Keyspace and Table
    2.1 Start by creating a keyspace to contain your tables
    2.2 Create a table to store student information
Step 3 : Insert Sample Data
Step 4 : Perform Queries

DESCRIPTION:

Cassandra is a distributed, open-source NoSQL database management system known for its ability to handle massive volumes of data across multiple nodes and data centers while ensuring high availability and scalability. Originally developed by Facebook and later open-sourced, Cassandra uses a peer-to-peer architecture to eliminate single points of failure and offers features like data replication, tunable consistency, and a flexible data model. Its use of a wide-column store makes it suitable for various data types, and its query language (CQL) resembles SQL, simplifying adoption for developers. Cassandra is commonly employed in industries requiring robust, fault-tolerant, and scalable data solutions, such as finance, healthcare, and e-commerce, thanks to its proven track record in managing large and distributed datasets.

RESULT:

Successfully executed and familiarized queries using Cassandra