Experiment No.5
Create HIVE Database and Descriptive analytics-basic statistics.
Date of Performance:
Date of Submission:

Aim: Create HIVE Database and Descriptive analytics-basic statistics.

Theory:

Hive is a database technology that can define databases and tables to analyze structured data. The theme for structured data analysis is to store the data in a tabular manner, and pass queries to analyze it. This chapter explains how to create Hive database. Hive contains a default database named default.

Create Database Statement

Create Database is a statement used to create a database in Hive. A database in Hive is a namespace or a collection of tables. The syntax for this statement is as follows:

CREATE DATABASE|SCHEMA [IF NOT EXISTS] <database name>

Here, IF NOT EXISTS is an optional clause, which notifies the user that a database with the same name already exists. We can use SCHEMA in place of DATABASE in this command. The following query is executed to create a database named userdb:

hive> CREATE DATABASE [IF NOT EXISTS] userdb;

hive> CREATE SCHEMA userdb;

The following query is used to verify a databases list:

hive> SHOW DATABASES;

default

userdb

Program:

The JDBC program to create a database is given below.

import java.sql.SQLException;

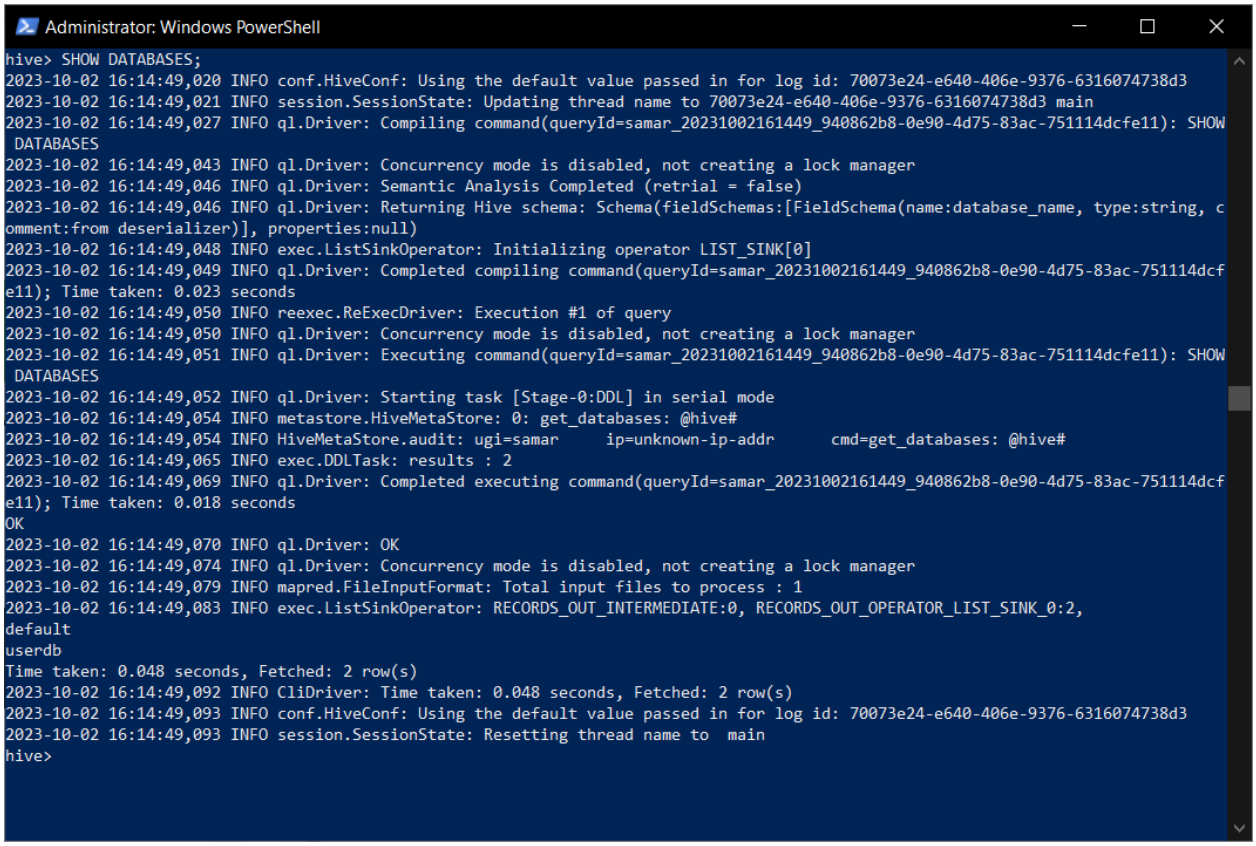
import java.sql.Connection;

import java.sql.ResultSet;

```
import java.sql.Statement;
import java.sql.DriverManager;

public class HiveCreateDb {
  private static String driverName = "org.apache.hadoop.hive.jdbc.HiveDriver";

  public static void main(String[] args) throws SQLException {
    // Register driver and create driver instance

    Class.forName(driverName);
    // get connection

    Connection con = DriverManager.getConnection("jdbc:hive://localhost:10000/default",
"", "");
    Statement stmt = con.createStatement();

    stmt.executeQuery("CREATE DATABASE userdb");
    System.out.println("Database userdb created successfully.");

    con.close();
  }
}
```

Output:

Database userdb created successfully.



CONCLUSION:

The experiment involved creating a HIVE database and applying basic statistics for descriptive analytics. We organized data efficiently and prepared it meticulously, addressing missing values and outliers. Basic statistical measures like mean, median, standard deviation, and data visualization techniques aided in summarizing and visualizing data trends. Insights were gleaned, providing valuable information for decision-making and guiding further analysis. While basic statistics offer initial insights, more advanced analytics may be needed. Continuous data quality monitoring is crucial. This experiment underscores the significance of proper data management and analysis for informed decision-making, with applications spanning various industries.