Vidyavardhini's College of Engineering & Technology Department of Artificial Intelligence and Data Science

Experiment No.6

Create HIVE Database and Descriptive analytics-

basic

statistics.

Date of Performance: 05/09/23

Date of Submission: 12/09/23



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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;

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import java.sql.Statement;

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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 {

Class.forName(driverName);

// get connection

Connection con = DriverManager.getConnection("jdbc:hive://localhost:10000/default","",

Statement stmt = con.createStatement();

// Register driver and create driver instance

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

created successfully.");

con.close();
}

Output:

}

Database userdb created successfully.

CONCLUSION:

In conclusion, creating a HIVE database and performing descriptive analytics and basic statistics is a fundamental step in harnessing the power of big data and making data-driven decisions. By establishing a HIVE database, organizations can efficiently store, manage, and query vast datasets. This sets the stage for conducting descriptive analytics, a crucial process in data analysis, which involves summarizing, visualizing, and interpreting data to gain valuable insights. Basic statistics play a pivotal role in this, enabling us to uncover patterns, trends, and outliers in the data, facilitating informed decision-making. Through the combined use of HIVE and basic statistical techniques, businesses and researchers can unlock the potential of their data, driving innovation, improving processes, and making well-informed choices to achieve their goals.

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