Exp.No: 5

Install Hive and Create Tables in Hive and write queries to access the data in the table

AIM:

To install Hive, design and test various schema models to optimize data storage and retrieval using Hive.

PROCEDURE:

Step 1: Start Hive Open a terminal and start Hive by running:

hive

```
vboxuser@ubuntu-22:-$ hive
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
Hive Session ID = a99dc067-b38b-47ec-9b4c-b51dfdb62c67
Logging initialized using configuration in jar:file:/home/vboxuser/apache-hive-3.1.3-bin/lib/hive-common-3.1.3.jar!/hive-log4j2.prop
erties Async: true
Hive-on-MR is deprecated in Hive 2 and may not be available in the future versions. Consider using a different execution engine (i.e., spark, tez) or using Hive 1.X releases.
Hive Session ID = 05c20837-4dd2-4127-9d26-cc13e11ecaeb
hive>
```

Step 2: Create a Database: Create a new database in Hive:

hive> CREATE DATABASE courses;

```
hive> CREATE DATABASE courses;
OK
Time taken: 6.451 seconds
hive>
```

Step 3: Use the Database: Switch to the newly created database:

hive> USE courses;

```
hive> USE courses;
OK
Time taken: 0.212 seconds
hive>
```

Step 4: Create a Table: Create a simple table in your database:

hive> CREATE TABLE course_table(course_id INT, course_name STRING);

```
hive> CREATE TABLE course_table(course_id INT, course_name STRING);
OK
Time taken: 7.942 seconds
hive>
```

Step 5: Load Sample Data: You can insert sample data into the table:

hive> INSERT INTO course_table VALUES (1, 'Cloud Computing'), (2, 'Data Analytics'), (3, 'Deep Learning Concepts');

Step 6: Query Your Data: Use SQL-like queries to retrieve data from your table: hive> CREATE VIEW mycourse AS SELECT course_id, course_name FROM course_table;

```
hive> CREATE VIEW mycourse AS SELECT course_id, course_name FROM course_table;
OK
Time taken: 6.303 seconds
hive>
```

Step 7: View the data: To see the data in the view, you would need to query the view

hive> SELECT * FROM mycourse;

```
hive> SELECT * FROM mycourse;

OK

1 Cloud Computing

2 Data Analytics

3 Deep Learning Concepts

Time taken: 2.082 seconds, Fetched: 3 row(s)

hive>
```

Step 8: Describe a Table: You can describe the structure of a table using the DESCRIBE command:

hive> DESCRIBE course_table;

```
hive> DESCRIBE course_table;

OK

course_id int

course_name string

Time taken: 1.145 seconds, Fetched: 2 row(s)

hive>
```

Step 9: Alter a Table: You can alter the table structure by adding a new column: hive> ALTER TABLE course_table ADD COLUMNS (students_enrolled INT);

```
hive> ALTER TABLE course_table ADD COLUMNS(students_enrolled INT);
OK
Time taken: 2.443 seconds
hive>
```

Step 10: Quit Hive: To exit the Hive CLI, simply type: hive> quit;

```
hive> quit;
vboxuser@ubuntu-22:~$
```

RESULT:

Thus, the usage of various commands in Hive has been successfully completed.