EXP NO: 7	Practice importing and exporting data from various databases.
DATE:	

AIM: -

BACKGROUND THEORY: -

PROCEDURE: -

- Switch to superuser mode using sudo su.
- Import Data from MySQL to Hive
    - Check Sqoop Installation
    - Check MySQL Schema and Table Structure
        - Log in to MySQL to check the schema and the structure of the table you want to import
        - Describe the table to check its structure
    - Import MySQL Data into Hive using Sqoop
    - Verify the Hive Table
    - Describe the Hive table
- Export Data from Hive to MySQL
    - Check Hive Table Structure
    - Export Hive Data to MySQL with the use of sqoop commands
    - Check the Exported Data in MySQL

CODING: -

- sudo su
- # Part 1: Import Data from MySQL to Hive
    - # Check Sqoop Installation
    - sqoop version
    - # Check MySQL Schema and Table Structure
    - mysql -u your_user -p
    - DESCRIBE your_database.your_table;
    - # Import MySQL Data into Hive using Sqoop
    - sqoop import \
    - --connect jdbc:mysql://your-mysql-server-ip:3306/your_database \
    - --username your_user \
    - --password your_password \
    - --table your_table \
    - --hive-import \
    - --hive-table your_hive_database.your_hive_table \
    - --m 1

    - # Verify the Hive Table
    - hive
    - DESCRIBE your_hive_database.your_hive_table;
    - SELECT * FROM your_hive_database.your_hive_table LIMIT 10;
- # Part 2: Export Data from Hive to MySQL
    - # Check Hive Table Structure
    - DESCRIBE your_hive_database.your_hive_table;
    - # Export Hive Data to MySQL
    - sqoop export \
    - --connect jdbc:mysql://your-mysql-server-ip:3306/your_database \
    - --username your_user \
    - --password your_password \
    - --table your_table \
    - --export-dir /user/hive/warehouse/your_hive_table \
    - --m 1
    - # Check the Exported Data in MySQL
    - SELECT * FROM your_database.your_table LIMIT 10;

OUTPUT: -

```
mysql> use demo_database;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> DESCRIBE demo_table;
+-------+-------------+------+-----+---------+----------------+
| Field | Type        | Null | Key | Default | Extra          |
+-------+-------------+------+-----+---------+----------------+
| id    | int         | NO   | PRI | NULL    | auto_increment |
| name  | varchar(100) | NO   |     | NULL    |                |
| age   | int         | NO   |     | NULL    |                |
+-------+-------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)
```

```
Database changed
mysql> DESCRIBE demo_table;
+-------+-------------+------+-----+---------+----------------+
| Field | Type        | Null | Key | Default | Extra          |
+-------+-------------+------+-----+---------+----------------+
| id    | int         | NO   | PRI | NULL    | auto_increment |
| name  | varchar(100) | NO   |     | NULL    |                |
| age   | int         | NO   |     | NULL    |                |
+-------+-------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql> SELECT * FROM demo_table
    -> ^C
mysql> SELECT * FROM demo_table;
+----+---------+-----+
| id | name    | age |
+----+---------+-----+
|  1 | Alice   |  30 |
|  2 | Bob     |  25 |
|  3 | Charlie |  35 |
+----+---------+-----+
3 rows in set (0.00 sec)
```