# Class: TY B.etch.-IT, Semester: VI Subject: Big Data Lab

**Experiment – 5: Programming exercises on Hadoop using Hive**

**Name: Anish Sharma Roll no:I011**

**Aim:** To perform programming exercise on Hive.

**Objectives:**

To understand Program applications using tools like Hive.

To implement Hive programming model.

**Outcomes:** After study of this experiment, the student will be able to Perform hands on Hive programming models.

**Prerequisite:** Core Java, Database concepts of SQL, Hadoop File system, and any of Linux operating system flavors.

**Requirements:** PC, Internet and VMWare software, Cloudera. **DDL Commands in Hive**

1. Start Hive hive
2. Create Database

CREATE DATABASE database\_name;

1. Show Database Command in Hive

SHOW DATABASES;

1. Describe Database Command in Hive

DESCRIBE DATABASE database\_name;

1. Alter Database Command in Hive

ALTER DATABASE database\_name SET DBPROPERTIES ('property\_name'='value');

1. Use Database Command in Hive

USE database\_name;

1. Drop Database in Hive

DROP DATABASE database\_name;

(If the database contains tables, use CASCADE to drop them as well)

DROP DATABASE database\_name CASCADE;

1. Create Table Command in Hive CREATE TABLE table\_name ( id INT, name STRING,

salary FLOAT

)

ROW FORMAT DELIMITED

FIELDS TERMINATED BY ',';

1. Describe Table Command in Hive

DESCRIBE table\_name;

1. Drop Table Command in Hive

DROP TABLE table\_name;

1. Alter Table Command in Hive

(Add a new column)

ALTER TABLE table\_name ADD COLUMNS (department STRING);

1. Show Table Command in Hive

SHOW TABLES;

1. Insert Command in Hive

(For inserting values into a table)

INSERT INTO TABLE table\_name VALUES (1, 'John', 50000.0);

1. Select Command in Hive

SELECT \* FROM table\_name;

1. Update Command in Hive

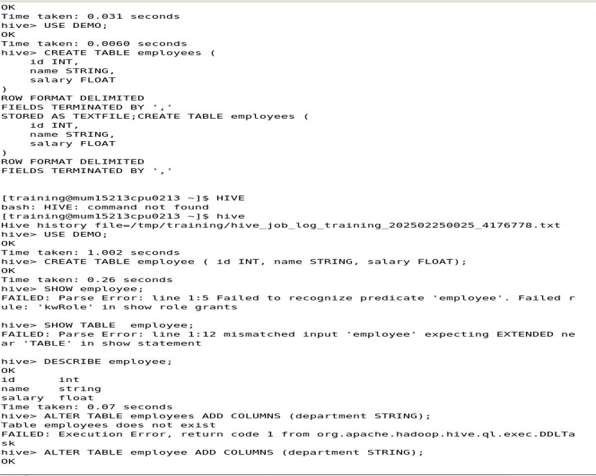
(Hive does not support UPDATE directly unless ACID properties are enabled. Instead, use

INSERT OVERWRITE to update records.)

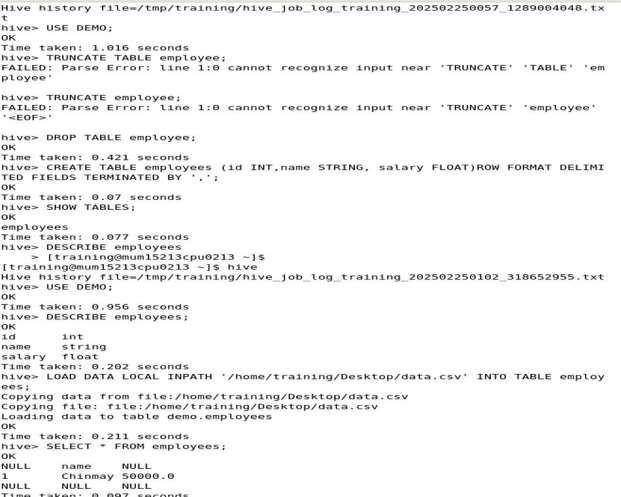
INSERT OVERWRITE TABLE table\_name SELECT \* FROM table\_name WHERE id != 1; INSERT INTO table\_name VALUES (1, 'John', 55000.0); Output:











**B. Conclusion:**

In this experiment, various Hive commands were executed to understand database management in Hive. The operations included creating and using databases, creating and modifying tables, inserting and retrieving data, and performing table alterations and deletions. Additionally, challenges related to Hive’s syntax and constraints, such as issues with INSERT INTO, UPDATE, and DROP DATABASE CASCADE, were encountered and analyzed.

**c. References:**

* 1. **Link :-**<https://www.dezyre.com/hadoop-tutorial/hive-commands>
  2. [https://examples.javacodegeeks.com/enterprise-java/apache- hadoop/apache- hadoop-hive-tutorial/](https://examples.javacodegeeks.com/enterprise-java/apache-hadoop/apache-hadoop-hive-tutorial/)
  3. <https://www.javatpoint.com/hive>
  4. <https://www.tutorialspoint.com/hive/hive_introduction.htm>
  5. Alex Holmes “Hadoop in Practice”, Manning Press, Dreamtech Press.
  6. https[://www.dezyre.com/hadoop-tutorial/hive-commands](http://www.dezyre.com/hadoop-tutorial/hive-commands)