

Create database

Create database lpu;

Use database

Use lpu;

Create table

Create table students (id INT, name STRING);

Show table

Show tables;

Describe students:

Add data into table

Insert into students values (1, "abc");

Select * from students;

create table customer(id INT, fname STRING, lname STRING, city STRING)

> ROW FORMAT DELIMITED

> FIELDS TERMINATED BY ','

> STORED AS TEXTFILE;

LOAD DATA LOCAL INPATH 'C:/Users/ASUS/Desktop/HADOOPFILES/hive.txt' into table customer;

Select * from customer;

alter table customer rename to employees;

alter table employees add columns (salary int);

truncate table employees;

select * from employees;

drop table employees;

CREATE TABLE student_data (

id INT,

name STRING,

department STRING,

marks INT)

ROW FORMAT DELIMITED

FIELDS TERMINATED BY ','

STORED AS TEXTFILE;

LOAD DATA LOCAL INPATH "C:\Users\ASUS\Downloads\stu_data.txt" into table student_data;

-- Sample insert

INSERT INTO TABLE student_data VALUES

```
(1, 'Anya', 'CS', 88),  
(2, 'Brian', 'Math', 76),  
(3, 'Cara', 'CS', 92),  
(4, 'Daniel', 'Physics', 65),  
(5, 'Eva', 'Math', 81);
```

CE students with marks > 90

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SELECT * FROM student_data  
WHERE department = 'CE' AND marks > 90;
```

Students not in Math department

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SELECT * FROM student_data  
WHERE department != 'Math';
```

Students whose names start with 'A'

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SELECT * FROM student_data  
WHERE name LIKE 'A%';
```

Students in CS or Physics department

```
SELECT * FROM student_data  
WHERE department IN ('CS', 'Physics');
```

Students with marks between 70 and 90

```
SELECT * FROM student_data  
WHERE marks BETWEEN 70 AND 90;
```

COMPLEX DATA STRUCTURES:

ARRAY

```
CREATE TABLE student_marks (  
name STRING,  
marks ARRAY<INT>  
);  
INSERT INTO student_marks VALUES ('John', array(85, 90, 78));  
SELECT name, marks[0] FROM student_marks;
```

(Retrieves the first element in the array)

```
CREATE TABLE temperature (  
sno INT, place STRING,  
temp ARRAY<INT>  
)
```

```
ROW FORMAT DELIMITED  
FIELDS TERMINATED BY ','
```

COLLECTION ITEMS TERMINATED BY ':';

Textfile

1,Delhi,40:45:30

1,Kashmir,32:25:20

1,Punjab,45:48:40

LOAD DATA LOCAL INPATH "C:\Users\ASUS\Downloads\array.txt" into table temperature;

SELECT * from temperature;

SELECT sno, place, temp[0] AS first_reading FROM temperature;

MAP

CREATE TABLE employee_details (

name STRING,

address MAP<STRING, STRING>

);

INSERT INTO employee_details VALUES ('Alice', map('age', '30', 'city', 'NY'));

SELECT name, address['city'] FROM employee_details;

(Retrieves the value associated with the key 'city')

STRUCT

CREATE TABLE employee_info (

id INT,

personal_info STRUCT<name:STRING, age:INT>

);

INSERT INTO employee_info VALUES (1, named_struct('name','Bob','age',28));

SELECT personal_info.name, personal_info.age FROM employee_info;