1. Create database

**Create database lpu;**

1. Use database

**Use lpu;**

1. Create table

**Create table students (id INT, name STRING);**

1. Show table

**Show tables;**

1. **Describe students:**
2. Add data into table

**Insert into students values (1, “abc”);**

1. **Select \* from students;**
2. create table customer(id INT, fname STRING, lname STRING, city STRING)

> ROW FORMAT DELIMITED

> FIELDS TERMINATED BY ','

> STORED AS TEXTFILE;

1. LOAD DATA LOCAL INPATH 'C:/Users/ASUS/Desktop/HADOOPFILES/hive.txt' into table customer;
2. Select \* from customer;
3. alter table customer rename to employees;
4. alter table employees add columns (salary int);
5. truncate table employees;
6. select \* from employees;
7. drop table employees;

|  |  |  |  |
| --- | --- | --- | --- |
| **id** | **name** | **department** | **marks** |
| 1 | Anya | CS | 88 |
| 2 | Brian | Math | 76 |
| 3 | Cara | CS | 92 |
| 4 | Daniel | Physics | 65 |
| 5 | Eva | Math | 81 |

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);

1. **CE students with marks > 90**

**SELECT \* FROM student\_data**

**WHERE department = 'CE' AND marks > 90;**

1. **Students not in Math department**

**SELECT \* FROM student\_data**

**WHERE department != 'Math';**

1. **Students whose names start with 'A'**

**SELECT \* FROM student\_data**

**WHERE name LIKE 'A%';**

1. **Students in CS or Physics department**

**SELECT \* FROM student\_data**

**WHERE department IN ('CS', 'Physics');**

1. **Students with marks between 70 and 90**

**SELECT \* FROM student\_data**

**WHERE marks BETWEEN 70 AND 90;**

**# COMPLEX DATA STRUCTURES:**

* **ARRAY**

1. **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)**

1. **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;**