**a) Creating, Dropping, and Altering Tables**

sql

-- Create table

CREATE TABLE flight\_reservation (

flight\_id STRING,

airline STRING,

source STRING,

destination STRING,

departure\_time STRING,

arrival\_time STRING,

seats\_available INT,

price DOUBLE

)

ROW FORMAT DELIMITED

FIELDS TERMINATED BY ','

STORED AS TEXTFILE;

-- Drop table

DROP TABLE flight\_reservation;

-- Alter table: Add a new column

ALTER TABLE flight\_reservation ADD COLUMNS (status STRING);

**b) Insert values / Load data**

sql

-- Insert values manually

INSERT INTO TABLE flight\_reservation VALUES

('F101', 'AirIndia', 'Delhi', 'Mumbai', '08:00', '10:30', 50, 4500.0);

-- Load data from file (e.g., flight\_data.csv)

LOAD DATA INPATH '/user/hive/warehouse/flight\_data.csv' INTO TABLE flight\_reservation;

**c) Display data from table**

sql

-- Select all records

SELECT \* FROM flight\_reservation;

-- Select specific columns

SELECT flight\_id, airline, price FROM flight\_reservation;

**d) Create index**

sql

-- Create index on destination

CREATE INDEX idx\_destination

ON TABLE flight\_reservation (destination)

AS 'COMPACT'

WITH DEFERRED REBUILD;

-- To rebuild the index (if needed)

ALTER INDEX idx\_destination ON flight\_reservation REBUILD;

**e) Join**

Assume another table: booking\_details

sql

CREATE TABLE booking\_details (

booking\_id STRING,

flight\_id STRING,

passenger\_name STRING,

booking\_date STRING

)

ROW FORMAT DELIMITED

FIELDS TERMINATED BY ','

STORED AS TEXTFILE;

-- Join flight\_reservation with booking\_details

SELECT b.booking\_id, b.passenger\_name, f.airline, f.source, f.destination

FROM booking\_details b

JOIN flight\_reservation f

ON b.flight\_id = f.flight\_id;