

1. Create database

```
CREATE DATABASE BankDB;  
USE BankDB;
```

2. Create tables

```
CREATE TABLE Customer (  
    customer_id BIGINT,  
    name STRING,  
    email STRING  
)  
ROW FORMAT DELIMITED  
FIELDS TERMINATED BY ','  
STORED AS TEXTFILE;
```

3. Tables (Partitioned by)

```
CREATE TABLE Account (  
    account_id BIGINT,  
    customer_id BIGINT,  
    balance DECIMAL(12,2)  
)  
PARTITIONED BY (branch_id INT)  
ROW FORMAT DELIMITED  
FIELDS TERMINATED BY ','  
STORED AS TEXTFILE;
```

4.

```
CREATE TABLE Transaction (  
    transaction_id BIGINT,  
    account_id BIGINT,  
    amount DECIMAL(12,2)  
)  
PARTITIONED BY (branch_id INT)  
ROW FORMAT DELIMITED  
FIELDS TERMINATED BY ','  
STORED AS TEXTFILE;
```

5. Creating temporary tables

```
CREATE TABLE Customer_tmp (  
    customer_id BIGINT,  
    name STRING,  
    email STRING  
)  
ROW FORMAT DELIMITED  
FIELDS TERMINATED BY ','  
STORED AS TEXTFILE;
```

6. Inserting into temp folder

```
LOAD DATA LOCAL INPATH '/tmp/Customer.csv' INTO TABLE Customer_tmp;
```

7. From temp to main table

```
INSERT INTO TABLE Customer SELECT * FROM Customer_tmp;
```

8. For partitioned tables (Account, Transaction), specify the partition column:

```
-- For Account
```

```
INSERT INTO TABLE Account PARTITION (branch_id)
```

```
SELECT account_id, customer_id, balance, branch_id FROM Account_tmp;
```

```
-- For Transaction
```

```
INSERT INTO TABLE Transaction PARTITION (branch_id)
```

```
SELECT transaction_id, account_id, amount, branch_id FROM Transaction_tmp;
```

9. Drop table items

```
DROP TABLE Customer_tmp;
```

```
DROP TABLE Account_tmp;
```

```
DROP TABLE Transaction_tmp;
```

10. Adding a partition

```
ALTER TABLE Account ADD PARTITION (branch_id=6);
```

```
ALTER TABLE Transaction ADD PARTITION (branch_id=6);
```

11. Drop a partition

```
ALTER TABLE Account DROP PARTITION (branch_id=3);
```

```
ALTER TABLE Transaction DROP PARTITION (branch_id=3);
```

12. Counting the number of transaction in each partition

```
SELECT branch_id, COUNT(*) AS transaction_count
```

```
FROM Transaction
```

```
GROUP BY branch_id;
```

13. If the csv file in local machine then do this for copying in docker

```
docker cp Customer.csv hive-server:/tmp/
```

```
docker cp Account.csv hive-server:/tmp/
```

```
docker cp Transaction.csv hive-server:/tmp/
```

#####

In case of using hdfs

Create folder in HDFS

```
hdfs dfs -mkdir /user/hasib
```

Upload CSV from container local FS to HDFS

```
hdfs dfs -put /tmp/customer.csv /user/hasib/
```

Verify file in HDFS

```
hdfs dfs -ls /user/hasib/
```

Then in hive

USE BankDB;

```
LOAD DATA INPATH '/user/hasib/customer.csv' INTO TABLE Customer;
```