hbase(main):001:0> create 'flight', 'finfo', 'fsch' 0 row(s) in 1.0600 seconds

=> Hbase::Table - flight hbase(main):002:0> list TABLE employee flight 2 row(s) in 0.1130 seconds

=> ["employee", "flight"] hbase(main):003:0> put 'flight','1','finfo:source','Pune' 0 row(s) in 0.3450 seconds

hbase(main):004:0> put 'flight','1','finfo:destination','Mumbai' 0 row(s) in 0.0170 seconds

hbase(main):005:0> put 'flight','1','fsch:depar','10.00a.m' 0 row(s) in 0.0270 seconds

hbase(main):006:0> put 'flight','1','fsch:arrival','11.00a.m' 0 row(s) in 0.0260 seconds

hbase(main):008:0> put 'flight','2','finfo:source','Pune' 0 row(s) in 0.0170 seconds

hbase(main):009:0> put 'flight','2','finfo:destination','Kolkata' 0 row(s) in 0.0170 seconds

hbase(main):013:0> put 'flightdb','2','fsh:depar','1:00 am' 0 row(s) in 0.0080 seconds

hbase(main):014:0> put 'flightdb','3','fin:source','Kolkata' 0 row(s) in 0.0120 seconds

hbase(main):015:0> put 'flightdb','3','fin:destination','Goa' 0 row(s) in 0.0190 seconds

hbase(main):016:0> put 'flightdb','3','fsh:arrival','10:00 pm' 0 row(s) in 0.0100 seconds

hbase(main):017:0> put 'flightdb','3','fsh:depar','8:00 pm' 0 row(s) in 0.0090 seconds hbase(main):018:0> put 'flightdb','4','fin:source','Mumbai' 0 row(s) in 0.0310 seconds

hbase(main):019:0> put 'flightdb','4','fin:destination','Chennai' 0 row(s) in 0.0080 seconds

hbase(main):020:0> put 'flightdb','4','fsh:arrival','7:00 pm'

0 row(s) in 0.0080 seconds

hbase(main):021:0> put 'flightdb','4','fsh:depar','6:00 pm' 0 row(s) in 0.0420 seconds

hbase(main):022:0> put 'flightdb','5','fin:source','Mysore' 0 row(s) in 0.0080 seconds

hbase(main):023:0> put 'flightdb','5','fin:destination','ooty' 0 row(s) in 0.0060 seconds hbase(main):024:0> put 'flightdb','5','fsh:arrival','1:00 pm' 0 row(s) in 0.0090 seconds

hbase(main):025:0> put 'flightdb','5','fsh:depar','12:30 pm' 0 row(s) in 0.0120 seconds

hbase(main):026:0> put 'flightdb','6','fin:source','Chennai' 0 row(s) in 0.0110 seconds

hbase(main):027:0> put 'flightdb','6','fin:destination','Gujrat' 0 row(s) in 0.0070 seconds hbase(main):006:0> put 'flightdb','6','fsh:arrival','1.00 pm' 0 row(s) in 0.0080 seconds

hbase(main):007:0> put 'flightdb','6','fsh:depar','12.30 pm' 0 row(s) in 0.0090 seconds

hbase(main):008:0> put 'flightdb','7','fin:source','3.30 pm' 0 row(s) in 0.0100 seconds

hbase(main):009:0> put 'flightdb','7','fin:source','Punjab' 0 row(s) in 0.0300 seconds

hbase(main):010:0> put 'flightdb','7','fin:destination','Rajasthan' 0 row(s) in 0.0090 seconds hbase(main):011:0> put 'flightdb','7','fsh:arrival','9.00 pm' 0 row(s) in 0.0170 seconds

hbase(main):012:0> put 'flightdb','7','fsh:depar','7:00 pm' 0 row(s) in 0.0080 seconds

hbase(main):013:0> put 'flightdb','8','fin:source','Haryana' 0 row(s) in 0.0190 seconds

hbase(main):014:0> put 'flightdb','8','fin:destination','Chandigarh' 0 row(s) in 0.0070 seconds

hbase(main):015:0> put 'flightdb','8','fsh:depar','10:00 pm' 0 row(s) in 0.0090 seconds

hbase(main):016:0> put 'flightdb','8','fsh:depar','9:00 pm' 0 row(s) in 0.0250 seconds

```
hbase(main):017:0> put 'flightdb','9','fin:source','MP'
0 \text{ row(s)} in 0.0100 \text{ seconds}
hbase(main):018:0> put 'flightdb','9','fin:destination','UP'
0 \text{ row(s)} in 0.0130 \text{ seconds}
hbase(main):019:0> put 'flightdb','8','fsh:arrival','10:00 pm'
0 \text{ row(s)} in 0.0360 \text{ seconds}
hbase(main):020:0> put 'flightdb','9','fsh:arrival','10:00 am'
0 \text{ row(s)} in 0.0180 \text{ seconds}
hbase(main):021:0> put 'flightdb','9','fsh:depar','9:00 am'
0 row(s) in 0.0090 seconds
hbase(main):022:0> put 'flightdb','10','fin:source','Patna'
0 \text{ row(s)} in 0.0080 \text{ seconds}
hbase(main):023:0> put 'flightdb','10','fin:destination','Ranchi'
0 row(s) in 0.0060 seconds
hbase(main):024:0> put 'flightdb','10','fsh:arrival','11:00 am'
0 \text{ row(s)} in 0.0080 \text{ seconds}
hbase(main):025:0> put 'flightdb','10','fsh:depar','10:00 am'
0 \text{ row(s)} in 0.0070 \text{ seconds}
hbase(main):099:0> exit
[cloudera@quickstart ~]$ hive
Logging initialized using configuration in file:/etc/hive/conf.dist/hive-log4j.properties
WARNING: Hive CLI is deprecated and migration to Beeline is recommended.
hive> beeline -u jdbc:hive2://localhost:10000
  > CREATE EXTERNAL TABLE flight_hive (
       rowkey STRING,
       source STRING,
       destination STRING,
       arrival STRING,
  >
       departure STRING
  >)
  > STORED BY 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
  > WITH SERDEPROPERTIES (
       "hbase.columns.mapping" = ":key,fin:source,fin:destination,fsh:arrival,fsh:departure"
  >
  >)
  > TBLPROPERTIES ('hbase.table.name'='flightdb');
OK
Time taken: 4.52 seconds
hive> SHOW TABLES;
OK
emplovee
flight hive
Time taken: 0.563 seconds, Fetched: 2 row(s)
```

```
hive> DESC flight_hive;
OK
rowkey
                    string
                                 from deserializer
source
                    string
                                 from deserializer
destination
                    string
                                 from deserializer
             string
                           from deserializer
arrival
departure
                    string
                                 from deserializer
Time taken: 0.391 seconds, Fetched: 5 row(s)
hive> SELECT
      AVG(UNIX_TIMESTAMP(arrival, 'hh:mm a')) AS avg_arrival_seconds,
      AVG(UNIX_TIMESTAMP(departure, 'hh:mm a')) AS avg_departure_seconds
  > FROM flight_hive;
Query ID = cloudera_20250326000808_e5b290a3-48fa-4b7d-a1e9-910555f7153b
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
 set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
 set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
 set mapreduce.job.reduces=<number>
Starting Job = job 1742968947688 0001, Tracking URL =
http://quickstart.cloudera:8088/proxy/application 1742968947688 0001/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1742968947688_0001
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2025-03-26\ 00:09:23,718\ Stage-1\ map = 0\%, reduce = 0%
2025-03-26 00:09:39,678 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.91 sec
2025-03-26 00:09:55,986 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 3.24 sec
MapReduce Total cumulative CPU time: 3 seconds 240 msec
Ended Job = job 1742968947688 0001
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 3.24 sec HDFS Read: 15722 HDFS Write:
11 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 240 msec
OK
78300.0
             NULL
Time taken: 58.334 seconds, Fetched: 1 row(s)
hive> SELECT
      FROM_UNIXTIME(AVG(UNIX_TIMESTAMP(arrival, 'hh:mm a')), 'hh:mm a') AS
avg_arrival_time,
      FROM_UNIXTIME(AVG(UNIX_TIMESTAMP(departure, 'hh:mm a')), 'hh:mm a') AS
avg_departure_time
  > FROM flight hive;
hive> SELECT arrival, departure FROM flight_hive LIMIT 10;
OK
11:00 am
             NULL
11:00 am
             NULL
2:00 am
             NULL
10:00 pm
             NULL
7:00 pm
             NULL
```

1:00 pm

**NULL** 

 1.00 pm
 NULL

 9.00 pm
 NULL

 10:00 pm
 NULL

 10:00 am
 NULL

Time taken: 2.553 seconds, Fetched: 10 row(s)

hive> SELECT

- > FROM\_UNIXTIME(AVG(UNIX\_TIMESTAMP(arrival, 'hh:mm a')), 'hh:mm a') AS avg\_arrival\_time,
- > FROM\_UNIXTIME(AVG(UNIX\_TIMESTAMP(departure, 'hh:mm a')), 'hh:mm a') AS avg\_departure\_time
  - > FROM flight\_hive
  - > WHERE arrival IS NOT NULL AND departure IS NOT NULL;

**SELECT** 

FROM\_UNIXTIME(AVG(UNIX\_TIMESTAMP(arrival, 'hh:mm a')), 'hh:mm a') AS avg\_arrival\_time,

 $FROM\_UNIXTIME(AVG(UNIX\_TIMESTAMP(departure, 'hh:mm \ a')), \ 'hh:mm \ a') \ AS \ avg\_departure\_time$ 

FROM flight\_hive;

avg\_arrival\_time avg\_departure\_time 3:06 pm 2.05 p