

```
# Open HBase shell
```

```
>> hbase shell
```

```
# A) CREATE HBASE TABLE
```

```
create 'flight_info', 'details', 'schedule', 'delay'
```

```
# B) ADD A ROW TO THE TABLE
```

```
put 'flight_info', 'FL002', 'details:name', 'airindia'
```

```
put 'flight_info', 'FL002', 'details:depart', 'delhi'
```

```
put 'flight_info', 'FL002', 'details:arrive', 'kolkata'
```

```
put 'flight_info', 'FL002', 'schedule:dtime', '11:00pm'
```

```
put 'flight_info', 'FL002', 'schedule:atime', '1:00am'
```

```
put 'flight_info', 'FL002', 'delay:depart', '25'
```

```
# VIEW ALL ROWS IN THE TABLE
```

```
scan 'flight_info'
```

```
# VIEW COLUMN FAMILIES (TABLE DESCRIPTION)
```

```
describe 'flight_info'
```

```
# ALTER TABLE (ADD A FAMILY)
```

```
alter 'flight_info', NAME => 'status'
```

```
# ALTER TABLE (DELETE A FAMILY)
```

```
alter 'flight_info', {NAME => 'status', METHOD => 'delete'}
```

```
# DROP A TABLE (FIRST DISABLE IT)
```

```
disable 'flight_info'
```

```
drop 'flight_info'
```

```
-- Open Hive shell
```

```
>> hive
```

```
-- C) CREATE HIVE EXTERNAL TABLE FOR HBASE TABLE
```

```
CREATE EXTERNAL TABLE hive_flight (
```

```
  flight_id STRING,
```

```
  name STRING,
```

```
  depart STRING,
```

```
  arrive STRING,
```

```
  dtime STRING,
```

```
  atime STRING,
```

```
  delay INT
```

```
)
```

```
STORED BY 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
WITH SERDEPROPERTIES (
  "hbase.columns.mapping" =
  ":key,details:name,details:depart,details:arrive,schedule:dtime,schedule:atime,delay:depart"
)
TBLPROPERTIES (
  "hbase.table.name" = "flight_info"
);
```

```
-- VIEW TABLE DATA
```

```
SELECT * FROM hive_flight;
```

```
-- VIEW TABLE COLUMNS
```

```
DESCRIBE hive_flight;
```

```
-- D) TOTAL DELAY
```

```
SELECT SUM(delay) AS total_delay FROM hive_flight;
```

```
-- E) AVERAGE DELAY
```

```
SELECT AVG(delay) AS avg_delay FROM hive_flight;
```

```
-- F) NOTE: INDEXING NOT SUPPORTED ON HBASE-BACKED HIVE TABLES
```

```
-- Instead, use WHERE clause with row key for efficient access
```

```
SELECT * FROM hive_flight WHERE flight_id = 'FL002';
```