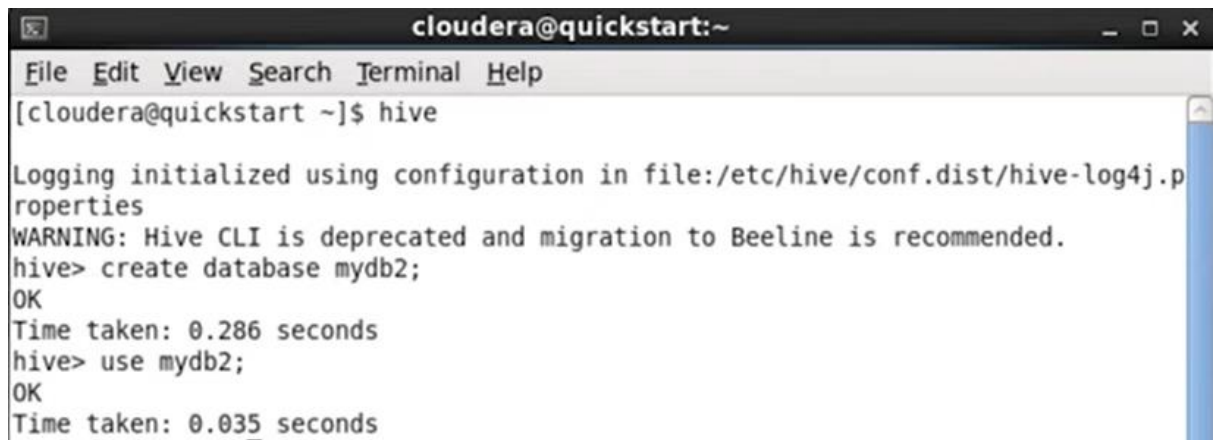


Assignment No 3

1. Creating Database



```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ hive  
  
Logging initialized using configuration in file:/etc/hive/conf.dist/hive-log4j.p  
roperties  
WARNING: Hive CLI is deprecated and migration to Beeline is recommended.  
hive> create database mydb2;  
OK  
Time taken: 0.286 seconds  
hive> use mydb2;  
OK  
Time taken: 0.035 seconds
```

2. Creating Table

```
hive> create table flight(fno int,year int, dest varchar(10), delay float);  
OK  
Time taken: 0.217 seconds  
hive> █
```

3. Alter Table

```
hive> alter table flight rename to air_flight;  
OK  
Time taken: 0.368 seconds  
hive> █
```

```
hive> alter table air_flight add columns(source varchar(10));  
OK  
Time taken: 0.179 seconds  
hive> █
```

4. Drop Table

```
hive> drop table flight;  
OK  
Time taken: 0.015 seconds  
hive> █
```

5. Creating an external Hive table

```
hive> create table flight(fno int, year int, dest varchar(10), delay float)
> row format delimited
> fields terminated by ','
> lines terminated by '\n'
> stored as textfile;
OK
Time taken: 0.072 seconds
hive> █
```

6. Inserting records

```
hive> insert into flight values(123,2009,"mumbai",30.6);
Query ID = cloudera_20240212220707_24d53363-61a2-4bf2-8ec1-23ac57128f3e
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1707371758511_0001, Tracking URL = http://quickstart.cloudera:8088/proxy/application_1707371758511_0001/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1707371758511_0001
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 0
2024-02-12 22:07:28.715 Stage-1 map = 0%, reduce = 0%
C
MapReduce Total cumulative CPU time: 1 seconds 30 msec
Ended Job = job_1707371758511_0001
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to: hdfs://quickstart.cloudera:8020/user/hive/warehouse/mydb2.db/flight/.hive-staging_hive_2024-02-12_22-07-17_828_8462008546613947698-1/-ext-10000
Loading data to table mydb2.flight
Table mydb2.flight stats: [numFiles=1, numRows=1, totalSize=21, rawDataSize=20]
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Cumulative CPU: 1.03 sec HDFS Read: 4157 HDFS Write: 89 SUCCESS
Total MapReduce CPU Time Spent: 1 seconds 30 msec
OK
Time taken: 18.769 seconds
hive> █
```

```
hive> select * from flight;
OK
123      2009      mumbai  30.6
124      2008      pune    50.6
Time taken: 0.076 seconds, Fetched: 2 row(s)
hive> █
```

7. Load table with data

```
hive> load data local inpath "f.txt"
> overwrite into table flight;
Loading data to table mydb2.flight
Table mydb2.flight stats: [numFiles=1, numRows=0, totalSize=112, rawDataSize=0]
OK
Time taken: 0.259 seconds
hive> █
```

```
hive> select * from flight;
OK
923      2009      navi mumba      60.0
156      2009      kolhapur      78.0
112      2009      punr      0.0
322      2008      nagpur      90.0
132      2008      aurngabad      67.0
Time taken: 0.043 seconds, Fetched: 5 row(s)
hive> █
```

8. Joining Tables

```
hive> create table nflight(fno int, year int, source varchar(10))
> row format delimited
> fields terminated by ','
> lines terminated by '\n'
> stored as textfile;
OK
Time taken: 0.053 seconds
hive> █
```

```
hive> insert into nflight values(923,2009,"pune");
Query ID = cloudera_20240212222020_961c74f5-1a27-4a8e-bf71-44adc8602789
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1707371758511_0003, Tracking URL = http://quickstart.cloudera
:8088/proxy/application_1707371758511_0003/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1707371758511_0003
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 0
2024-02-12 22:20:24,828 Stage-1 map = 0%, reduce = 0%
2024-02-12 22:20:30,243 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.01 se
c
█
```

```

MapReduce Total cumulative CPU time: 1 seconds 10 msec
Ended Job = job_1707371758511_0003
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to: hdfs://quickstart.cloudera:8020/user/hive/warehouse/mydb2.db/nflight/.hive-staging_hive_2024-02-12_22-20-17_980_7655139385168538320-1/-ext-10000
Loading data to table mydb2.nflight
Table mydb2.nflight stats: [numFiles=1, numRows=1, totalSize=14, rawDataSize=13]
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1   Cumulative CPU: 1.01 sec   HDFS Read: 3894 HDFS Write: 83 SUCCESS
Total MapReduce CPU Time Spent: 1 seconds 10 msec
OK
Time taken: 14.517 seconds
hive>

```

```

hive> select a.fno, a.year, a.dest, a.delay, b.source
      > from flight a join nflight b
      > on(a.fno=b.fno);
Query ID = cloudera_20240212222323_fdf12060-eef6-4b51-b17d-18a693772a26
Total jobs = 1
Execution log at: /tmp/cloudera/cloudera_20240212222323_fdf12060-eef6-4b51-b17d-18a693772a26.log
Total MapReduce CPU Time Spent: 1 seconds 60 msec
OK
923      2009      navi mumba      60.0      pune
Time taken: 19.787 seconds, Fetched: 1 row(s)
hive>

```

9. Creating index on Flight information Table

```

hive> create index flight_index on table flight(fno)
      > as 'org.apache.hadoop.hive.ql.index.compact.CompactIndexHandler'
      > WITH DEFERRED REBUILD;
OK
Time taken: 0.39 seconds
hive>

```

```

hive> show tables;
OK
air_flight
flight
mydb2_flight_flight_index
nflight
values_tmp_table_1
values_tmp_table_2
values_tmp_table_4
Time taken: 0.059 seconds, Fetched: 7 row(s)
hive>

```