```
hive> create database dsbda;
0K
Time taken: 2.201 seconds
hive> use dsbda;
0K
Time taken: 0.019 seconds
hive> create external table empdata( ename string, esal int)
   > row format delimited fields terminated by "," stored as textfile location
    > "/home/hduser/Desktop/empdata";
0K
Time taken: 0.148 seconds
hive> show tables;
0K
empdata
Time taken: 0.066 seconds, Fetched: 1 row(s)
hive> load data local inpath '/home/hduser/empdb.txt' into table empdata;
Loading data to table dsbda.empdata
0K
Time taken: 0.793 seconds
hive> select * from
   > empdata;
0K
sachin
       5000
yuvraj
       3000
virat
        1000
rahul
        4000
saurav
       3500
scott
        2500
        1500
smith
mathew 2400
       4500
Laxman
ricky
        1300
        2000
ram
Time taken: 0.528 seconds, Fetched: 11 row(s)
hive> alter table empdata change esal esal string;
Time taken: 0.054 seconds
hive> describe empdata;
0K
ename
                        string
esal
                        string
Time taken: 0.037 seconds, Fetched: 2 row(s)
hive> drop table empdata;
hive> create table empinfo(empno int, empgrade string) row format delimited fields
terminated by ',' stored as textfile;
0K
Time taken: 0.045 seconds
hive> load data local inpath '/home/hduser/empinfo.txt' into table empinfo;
Loading data to table dsbda.empinfo
0K
Time taken: 0.141 seconds
hive> select * from empinfo;
0K
1
        Α
2
        В
3
        В
4
        Α
5
        В
6
        В
7
        D
8
        Ε
q
        C
10
        C
11
Time taken: 0.053 seconds, Fetched: 11 row(s)
```

```
hive> create table empdbnew(eno int, ename string, esal int) row format delimited fields
terminated by ',' stored as textfile;
0K
Time taken: 0.035 seconds
hive> load data local inpath '/home/hduser/empdbnew.txt' into table empdbnew;
Loading data to table dsbda.empdbnew
0K
Time taken: 0.105 seconds
hive> select * from empdbnew;
0K
        sachin 5000
1
2
        yuvraj
                3000
3
        virat
                1000
4
        rahul
                4000
5
        saurav
                3500
6
                2500
        scott
7
        smith
                1500
        mathew 2400
8
9
        Laxman
               4500
10
                1300
        ricky
                2000
11
        ram
Time taken: 0.066 seconds, Fetched: 11 row(s)
hive> describe empinfo;
0K
empno
                        int
emparade
                        string
Time taken: 0.032 seconds, Fetched: 2 row(s)
hive> describe empdbnew;
0K
eno
                        int
ename
                        string
esal
                        int
Time taken: 0.026 seconds, Fetched: 3 row(s)
hive> select eno,ename,esal,empno,empgrade from empdbnew join empinfo
    > on eno=empno;
WARNING: Hive-on-MR is deprecated in Hive 2 and may not be available in the future
versions. Consider using a different execution engine (i.e. spark, tez) or using Hive 1.X
Query ID = hduser 20230510143339 a70043e2-d5d3-4794-be06-88357b16159c
Total jobs = 1
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/home/hduser/apache-hive-2.3.9-bin/lib/log4j-slf4j-
impl-2.6.2.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/usr/local/hadoop/share/hadoop/common/lib/slf4j-
log4j12-1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple bindings for an explanation.
SLF4J: Actual binding is of type [org.apache.logging.slf4j.Log4jLoggerFactory]
2023-05-10 14:33:43
                        Starting to launch local task to process map join;
                                                                                 maximum
memory = 477626368
2023-05-10 14:33:43
                        Dump the side-table for tag: 1 with group count: 11 into file:
file:/tmp/hduser/d0c4ca8b-413b-4d29-bbb5-40bb55494a55/
hive 2023-05-10 14-33-39 907 5005826098719851142-1/-local-10004/HashTable-Stage-3/MapJoin-
mapfile01--.hashtable
2023-05-10 14:33:43
                        Uploaded 1 File to: file:/tmp/hduser/d0c4ca8b-413b-4d29-
bbb5-40bb55494a55/hive 2023-05-10 14-33-39 907 5005826098719851142-1/-local-10004/
HashTable-Stage-3/MapJoin-mapfile01--.hashTable (491 bytes)
2023-05-10 14:33:43
                        End of local task; Time Taken: 0.542 sec.
Execution completed successfully
MapredLocal task succeeded
Launching Job 1 out of 1
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job 1683703824975_0001, Tracking URL = http://dpl12:8088/proxy/
application_1683703824975_0001/
Kill Command = /usr/local/hadoop/bin/hadoop job -kill job_1683703824975_0001
Hadoop job information for Stage-3: number of mappers: 1; number of reducers: 0
2023-05-10 14:33:48,986 Stage-3 map = 0%, reduce = 0%
```

```
2023-05-10 14:33:53,083 Stage-3 map = 100%, reduce = 0%, Cumulative CPU 1.42 sec
MapReduce Total cumulative CPU time: 1 seconds 420 msec
Ended Job = job 1683703824975 0001
MapReduce Jobs Launched:
Stage-Stage-3: Map: 1
                      Cumulative CPU: 1.42 sec HDFS Read: 6584 HDFS Write: 413 SUCCESS
Total MapReduce CPU Time Spent: 1 seconds 420 msec
0K
1
        sachin
                5000
                                Α
2
        yuvraj
                3000
                        2
                                В
3
                1000
                        3
                                В
        virat
4
        rahul
                4000
                        4
                                Α
5
        saurav
                3500
                        5
                                В
6
        scott
                2500
                        6
                                В
7
                1500
                        7
                                D
        smith
8
        mathew
               2400
                        8
                                Ε
9
                4500
        Laxman
                                C
                        10
10
        ricky
                1300
                                C
11
                2000
                        11
                                D
        ram
Time taken: 14.218 seconds, Fetched: 11 row(s)
hive> create table flight(id int, Source string, Dest string, at string, dt string, delay
   > row format delimited fields terminated by "," stored as textfile location
    > "/home/hduser/Desktop/flight";
0K
Time taken: 0.037 seconds
hive> load data local inpath '/home/hduser/flight.txt' into table flight;
Loading data to table dsbda.flight
Time taken: 0.516 seconds
hive> select * from flight;
1
        Pune
                Mumbai 10:25am 11:25am 5
                Kolkata 7:00am 7:30am 2
2
        Pune
        Mumbai
3
               Pune
                        12:30pm 12:45pm 1
        Mumbai Delhi
                        2:00pm 2:45pm 10
Time taken: 0.049 seconds, Fetched: 4 row(s)
hive> create index flight_index
   > on table flight(delay)
    > AS 'org.apache.hadoop.hive.ql.index.compact.CompactIndexHandler'
    > WITH DEFERRED REBUILD;
0K
Time taken: 0.322 seconds
hive> show index on flight;
flight_index
                                                delay
                        flight
dsbda flight flight index
                                compact
Time taken: 0.11 seconds, Fetched: 1 row(s)
hive> select avg(delay) from flight;
WARNING: Hive-on-MR is deprecated in Hive 2 and may not be available in the future
versions. Consider using a different execution engine (i.e. spark, tez) or using Hive 1.X
releases.
Query ID = hduser_20230510143920_33d5e238-7e3b-4dbc-8cf3-de775ce9e09b
Total iobs = 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_1683703824975_0002, Tracking URL = http://dpl12:8088/proxy/
application_1683703824975_0002/
Kill Command = /usr/local/hadoop/bin/hadoop job -kill job_1683703824975_0002
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2023-05-10 14:39:24,311 Stage-1 map = 0%, reduce = 0%
```

2023-05-10 14:39:28,396 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 0.94 sec 2023-05-10 14:39:31,446 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 1.95 sec

MapReduce Total cumulative CPU time: 1 seconds 950 msec

Ended Job =  $job_1683703824975_0002$ 

MapReduce Jobs Launched:

Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 1.95 sec HDFS Read: 8682 HDFS Write: 103 SUCCESS

Total MapReduce CPU Time Spent: 1 seconds 950 msec

0K 4.5

Time taken: 11.777 seconds, Fetched: 1 row(s)