Commands:

1. To enter hive terminal

Command: hive Output: hive>

2. To check the databases

Command: show databases;

Output:

hive> show tables;

OK

bookinfo

Time taken: 0.079 seconds

hive> use data1;

OK

Time taken: 0.015 seconds

3. To check the tables

Command: show tables;

Output:

hive> show tables;

OK

cust_master

emp

product_master

Time taken: 0.026 seconds

4. To use a particular database

Command: use dbname;

Output:

hive> use books

>; OK

Time taken: 0.031 seconds

5. To create database

Command: create database retail;

Output:

hive> create database retail;

OK

Time taken: 0.109 seconds

hive> use retail;

OK

Time taken: 0.0070 seconds

6. To create table emp in retail database

Output:

hive> create table empy(a INT , B STRING , C DOUBLE) row format delimited fields terminated by ',' stored as textfile;

OK

Time taken: 0.119 seconds

hive> create table emp(id INT, name STRING, sal DOUBLE) row format delimited fields terminated by ',' stored as textfile;

OK

Time taken: 0.036 seconds

7. Schema information of table

Output:

hive> describe empy

>;

OK

a int

b string

c double

Time taken: 0.047 seconds

8. To create file in training folder and save as demo.txt To view contents of demo.txt file

To load data from local path

Output: hive> exit;

[training@localhost ~]\$ vi empy.txt

[training@localhost ~]\$ pwd

/home/training

[training@localhost ~]\$ cat /home/training/empy.txt

1,aaa,5000

2,bbbm,10000

3,ccc,54000

4,ddd,7890

5,ttt,6700

hive> use retail;

OK

Time taken: 1.044 seconds

hive> show tables;

OK

emp empy

Time taken: 0.121 seconds

hive> load data local inpath '/home/training/empy.txt' into table empy;

Copying data from file:/home/training/empy.txt

Copying file: file:/home/training/empy.txt

Loading data to table retail.empy

OK

Time taken: 0.222 seconds

9. To view contents of table

Command: select * from emp;

Output:

hive> select * from empy;

OK

1 aaa 5000.0

2 bbbm 10000.0

3 ccc 54000.0

4 ddd 7890.0

5 ttt 6700.0

Time taken: 0.15 seconds

10. To rename table name

Command: ALTER TABLE old_table_name RENAME TO new_table_name;

```
Output:
hive> use retail;
hive> alter table empy rename to emp_sal;
OK
Time taken: 0.388 seconds
   11. Selecting data
Command: hive> select * from emp_sal where id=1;
Output:
hive> select * from emp_sal where id=1;
OK
           5000.0
1
     aaa
Time taken: 0.10 seconds
   12. To count number of records in table
Output:
hive> select count(*) from emp_sal;
Total MapReduce 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 mapred.reduce.tasks=<number>
Starting
              Job
                                job_201907242206_0001,
                                                                Tracking
                                                                               URL
http://localhost:50030/jobdetails.jsp?jobid=job 201907242206 0001
Kill Command = /usr/lib/hadoop/bin/hadoop job -Dmapred.job.tracker=localhost:8021 -kill
job_201907242206_0001
2019-07-24\ 23:23:29,355\ Stage-1\ map = 0\%, reduce = 0%
2019-07-24 23:23:30,362 Stage-1 map = 100%, reduce = 0%
2019-07-24\ 23:23:37,422\ Stage-1\ map = 100\%, reduce = 100\%
Ended Job = job_201907242206_0001
OK
5
Time taken: 11.89 seconds
```

13. Try using aggregate commands using HQL

Output:

hive> select sum(C) from emp_sal;

```
Total MapReduce 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 mapred.reduce.tasks=<number>
Starting Job = job_201907242206_0002, Tracking URL =
http://localhost:50030/jobdetails.jsp?jobid=job_201907242206_0002
Kill Command = /usr/lib/hadoop/bin/hadoop job -Dmapred.job.tracker=localhost:8021 -kill
job_201907242206_0002
2019-07-24\ 23:24:40,754\ Stage-1\ map = 100\%, reduce = 0%
2019-07-24 23:24:47,805 Stage-1 map = 100%, reduce = 100%
Ended Job = job_201907242206_0002
OK
83590.0
Time taken: 10.303 seconds
hive> select max(p_length) from iris;
Total MapReduce 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>
```

```
set mapred.reduce.tasks=<number>
Starting Job = job_201907242206_0003, Tracking URL =
http://localhost:50030/jobdetails.jsp?jobid=job_201907242206_0003
Kill Command = /usr/lib/hadoop/bin/hadoop job -Dmapred.job.tracker=localhost:8021 -kill
job 201907242206 0003
2019-07-24\ 23:48:49,187\ Stage-1\ map = 0\%, reduce = 0%
2019-07-24\ 23:48:50,193\ Stage-1\ map = 100\%, reduce = 0%
2019-07-24 23:48:57,253 Stage-1 map = 100%, reduce = 100%
Ended Job = job_201907242206_0003
OK
6.9
Time taken: 10.526 seconds
hive> select variety,count(*) from iris group by variety;
Total MapReduce jobs = 1
Launching Job 1 out of 1
Number of reduce tasks not specified. Estimated from input data size: 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 mapred.reduce.tasks=<number>
                              job_201907242224_0003,
                                                                            URL
Starting
             Job
                                                             Tracking
http://localhost:50030/jobdetails.jsp?jobid=job_201907242224_0003
Kill Command = /usr/lib/hadoop/bin/hadoop job -Dmapred.job.tracker=localhost:8021 -kill
job_201907242224_0003
```

 $2019-07-24\ 23:45:57,330\ \text{Stage-1 map} = 0\%$, reduce = 0%

In order to set a constant number of reducers:

 $2019-07-24\ 23:45:58,337\ Stage-1\ map = 100\%,\ reduce = 0\%$

2019-07-24 23:46:05,393 Stage-1 map = 100%, reduce = 100%

Ended Job = $job_201907242224_0003$

OK

NULL 2

Setosa 49

Versicolor 50

Virginica 50

Time taken: 11.532 seconds

14. To drop table

Output:

hive> drop table emp_sal;

OK

Time taken: 5.3 seconds

15. To exit from Hive terminal

hive> exit;