

```
[cloudera@quickstart ~]$ hive
```

```
Logging initialized using configuration in jar:file:/usr/jars/hive-common-1.1.0-cdh5.4.2.jar!/hive-log4j.properties
```

```
WARNING: Hive CLI is deprecated and migration to Beeline is recommended.
```

```
hive> show databases;
```

```
OK
```

```
default
```

```
sampladb
```

```
Time taken: 0.83 seconds, Fetched: 2 row(s)
```

```
hive> create database facebook;
```

```
OK
```

```
Time taken: 1.802 seconds
```

```
hive> use facebook;
```

```
OK
```

```
Time taken: 0.133 seconds
```

```
hive> create table fb(id int, age int, day int, year int, month int, gender  
string, tenure int, friends int, friend_init int, likes int, likes_recd int, mlikes  
int, mlikes_recd int, wlikes int, wlikes_recd int)
```

```
> row format delimited fields terminated by ',' stored as textfile location  
'/user/cloudera/facebookdata/';
```

```
OK
```

```
Time taken: 0.481 seconds
```

```
hive> select * from fb limit 2;
```

```
OK
```

NULL	NULL	NULL	NULL	NULL	gender	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
	NULL	NULL											
2094382	14	19	1999	11	male	266	0	0	0	0	00	0	0
0													

```
Time taken: 0.644 seconds, Fetched: 2 row(s)
```

```
hive> select count (*) from fb;
```

```
Query ID = cloudera_20210728031919_695e1d7a-0e93-4c7d-b04e-1f2a78433dd3
```

```
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_1627449136812_0001, Tracking URL =
```

```
http://quickstart.cloudera:8088/proxy/application_1627449136812_0001/
```

```
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0001
```

```
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
```

```
2021-07-28 03:20:09,432 Stage-1 map = 0%, reduce = 0%
```

```
2021-07-28 03:20:18,215 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.01 sec
```

```
2021-07-28 03:20:28,851 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 1.97 sec
```

```
MapReduce Total cumulative CPU time: 1 seconds 970 msec
```

```
Ended Job = job_1627449136812_0001
```

```
MapReduce Jobs Launched:
```

```
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 1.97 sec HDFS Read: 5224795
```

```
HDFS Write: 6 SUCCESS
```

```
Total MapReduce CPU Time Spent: 1 seconds 970 msec
```

```
OK
```

```
99004
```

```
Time taken: 34.961 seconds, Fetched: 1 row(s)
```

```
hive> select count (*) from fb where age>25;
```

```
Query ID = cloudera_20210728032222_ddebce4d-9690-45a5-8b86-4e63870e9e46
```

```

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_1627449136812_0002, Tracking URL =
http://quickstart.cloudera:8088/proxy/application_1627449136812_0002/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0002
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-28 03:23:06,085 Stage-1 map = 0%, reduce = 0%
2021-07-28 03:23:13,766 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.55 sec
2021-07-28 03:23:23,384 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 2.75 sec
MapReduce Total cumulative CPU time: 2 seconds 750 msec
Ended Job = job_1627449136812_0002
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 2.75 sec HDFS Read: 5225613
HDFS Write: 6 SUCCESS
Total MapReduce CPU Time Spent: 2 seconds 750 msec
OK
56676
Time taken: 27.516 seconds, Fetched: 1 row(s)
hive> select avg(friends) from fb where gender='male';
Query ID = cloudera_20210728032828_3ed1f8bf-663a-439c-9d4b-f5cef09a1bae
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_1627449136812_0003, Tracking URL =
http://quickstart.cloudera:8088/proxy/application_1627449136812_0003/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0003
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-28 03:28:45,558 Stage-1 map = 0%, reduce = 0%
2021-07-28 03:28:54,011 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.69 sec
2021-07-28 03:29:02,591 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 2.78 sec
MapReduce Total cumulative CPU time: 2 seconds 780 msec
Ended Job = job_1627449136812_0003
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 2.78 sec HDFS Read: 5225976
HDFS Write: 19 SUCCESS
Total MapReduce CPU Time Spent: 2 seconds 780 msec
OK
165.03545941885477
Time taken: 26.177 seconds, Fetched: 1 row(s)
hive> select avg(friends) from fb where gender='female';
Query ID = cloudera_20210728032929_df602669-37f1-4448-8825-61aa6a148a8f
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_1627449136812_0004, Tracking URL =
http://quickstart.cloudera:8088/proxy/application_1627449136812_0004/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0004
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-28 03:29:26,643 Stage-1 map = 0%, reduce = 0%
2021-07-28 03:29:35,130 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.53 sec
2021-07-28 03:29:43,566 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 2.66 sec
MapReduce Total cumulative CPU time: 2 seconds 660 msec
Ended Job = job_1627449136812_0004
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 2.66 sec HDFS Read: 5225985
HDFS Write: 19 SUCCESS
Total MapReduce CPU Time Spent: 2 seconds 660 msec
OK
241.96994087544095
Time taken: 26.9 seconds, Fetched: 1 row(s)
hive> select gender, avg(friends) from fb group by gender;
Query ID = cloudera_20210728033131_adc07df6-11ce-423d-97c6-43bf29cdc76c
Total 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 mapreduce.job.reduces=<number>
Starting Job = job_1627449136812_0005, Tracking URL =
http://quickstart.cloudera:8088/proxy/application_1627449136812_0005/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0005
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-28 03:31:55,544 Stage-1 map = 0%, reduce = 0%
2021-07-28 03:32:02,968 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.17 sec
2021-07-28 03:32:10,347 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 2.12 sec
MapReduce Total cumulative CPU time: 2 seconds 120 msec
Ended Job = job_1627449136812_0005
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 2.12 sec HDFS Read: 5225523
HDFS Write: 82 SUCCESS
Total MapReduce CPU Time Spent: 2 seconds 120 msec
OK
NA 184.41142857142856
female 241.96994087544095
gender NULL
male 165.03545941885477
Time taken: 23.724 seconds, Fetched: 4 row(s)
hive> select avg(likes_rec'd) from fb where age>=13 AND age<=25;
Query ID = cloudera_20210728035454_f5444648-6d1f-4a91-8971-350628c435e2
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_1627449136812_0006, Tracking URL =

http://quickstart.cloudera:8088/proxy/application_1627449136812_0006/

Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0006

Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1

2021-07-28 03:54:39,889 Stage-1 map = 0%, reduce = 0%

2021-07-28 03:54:52,675 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.0 sec

2021-07-28 03:55:33,410 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 3.52 sec

MapReduce Total cumulative CPU time: 3 seconds 520 msec

Ended Job = job_1627449136812_0006

MapReduce Jobs Launched:

Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 3.52 sec HDFS Read: 5226435

HDFS Write: 18 SUCCESS

Total MapReduce CPU Time Spent: 3 seconds 520 msec

OK

200.2870508186264

Time taken: 70.312 seconds, Fetched: 1 row(s)

hive> select avg(likes_recd) from fb where age<=35;

Query ID = cloudera_20210728035555_3b74d027-8897-405a-a5ca-af460f37dcb3

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_1627449136812_0007, Tracking URL =

http://quickstart.cloudera:8088/proxy/application_1627449136812_0007/

Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0007

Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1

2021-07-28 03:56:09,713 Stage-1 map = 0%, reduce = 0%

2021-07-28 03:56:18,245 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.81 sec

2021-07-28 03:56:28,940 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 3.42 sec

MapReduce Total cumulative CPU time: 3 seconds 420 msec

Ended Job = job_1627449136812_0007

MapReduce Jobs Launched:

Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 3.42 sec HDFS Read: 5226021

HDFS Write: 19 SUCCESS

Total MapReduce CPU Time Spent: 3 seconds 420 msec

OK

166.39300593773578

Time taken: 32.136 seconds, Fetched: 1 row(s)

hive> select month, count(*) from fb group by month;

Query ID = cloudera_20210728035757_c8810c4e-5efe-4590-b9d9-59a8f3d2294b

Total 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 mapreduce.job.reduces=<number>
```

Starting Job = job_1627449136812_0008, Tracking URL =

http://quickstart.cloudera:8088/proxy/application_1627449136812_0008/

Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0008

Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
 2021-07-28 03:57:58,958 Stage-1 map = 0%, reduce = 0%
 2021-07-28 03:58:08,692 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.55 sec
 2021-07-28 03:58:21,404 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 2.68 sec
 MapReduce Total cumulative CPU time: 2 seconds 680 msec
 Ended Job = job_1627449136812_0008
 MapReduce Jobs Launched:
 Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 2.68 sec HDFS Read: 5225098
 HDFS Write: 93 SUCCESS
 Total MapReduce CPU Time Spent: 2 seconds 680 msec
 OK
 NULL 1
 1 11772
 2 7632
 3 8110
 4 7810
 5 8271
 6 7607
 7 8021
 8 8266
 9 7939
 10 8476
 11 7205
 12 7894
 Time taken: 32.158 seconds, Fetched: 13 row(s)
 hive> select avg(mlikes) from fb where age>=13 AND age<=25;
 Query ID = cloudera_20210728040606_6533bf66-aacf-44cb-bde9-d63f5539372a
 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_1627449136812_0009, Tracking URL =
 http://quickstart.cloudera:8088/proxy/application_1627449136812_0009/
 Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0009
 Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
 2021-07-28 04:07:02,327 Stage-1 map = 0%, reduce = 0%
 2021-07-28 04:07:12,209 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.82 sec
 2021-07-28 04:07:23,749 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 3.12 sec
 MapReduce Total cumulative CPU time: 3 seconds 120 msec
 Ended Job = job_1627449136812_0009
 MapReduce Jobs Launched:
 Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 3.12 sec HDFS Read: 5226435
 HDFS Write: 19 SUCCESS
 Total MapReduce CPU Time Spent: 3 seconds 120 msec
 OK
 123.98981737425284
 Time taken: 32.577 seconds, Fetched: 1 row(s)
 hive> select avg(mlikes),avg(wlikes) from fb where age>=13 AND age<=25;
 Query ID = cloudera_20210728040707_2a0ddf14-f864-468b-bdd2-3463b0257bc3
 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_1627449136812_0010, Tracking URL =
http://quickstart.cloudera:8088/proxy/application_1627449136812_0010/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0010
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-28 04:08:01,832 Stage-1 map = 0%, reduce = 0%
2021-07-28 04:08:11,484 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.91 sec
2021-07-28 04:08:18,840 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 3.01 sec
MapReduce Total cumulative CPU time: 3 seconds 10 msec
Ended Job = job_1627449136812_0010
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 3.01 sec HDFS Read: 5227057
HDFS Write: 37 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 10 msec
OK
123.98981737425284 55.50010631511801
Time taken: 26.98 seconds, Fetched: 1 row(s)
hive> select avg(mlikes),avg(wlikes) from fb where age>35;
Query ID = cloudera_20210728040808_0ebf4e44-b35c-41ab-830b-484dff72d00d
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_1627449136812_0011, Tracking URL =
http://quickstart.cloudera:8088/proxy/application_1627449136812_0011/
Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job_1627449136812_0011
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-28 04:08:42,008 Stage-1 map = 0%, reduce = 0%
2021-07-28 04:08:50,391 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 1.66 sec
2021-07-28 04:08:59,958 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 2.81 sec
MapReduce Total cumulative CPU time: 2 seconds 810 msec
Ended Job = job_1627449136812_0011
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 2.81 sec HDFS Read: 5226614
HDFS Write: 37 SUCCESS
Total MapReduce CPU Time Spent: 2 seconds 810 msec
OK
94.65523043352525 57.562504929410835
Time taken: 27.591 seconds, Fetched: 1 row(s)
hive>

```