Hive Assignment 6.2

Solution 1 :

select dates, temperature from temperature_data where zipcode > '300000' and zipcode < '399999';

```
hive> select dates, temperature from temperature_data where zipcode > '300000' and zipcode < '399999';
OK
10-03-1990      15
10-01-1991      22
12-02-1990      9
10-03-1991      16
10-01-1990      23
12-02-1991      10
10-03-1993      16
10-01-1994      23
12-02-1991      10
10-03-1991      16
10-01-1990      23
12-02-1991      10
Time taken: 0.27 seconds, Fetched: 12 row(s)
hive>
```

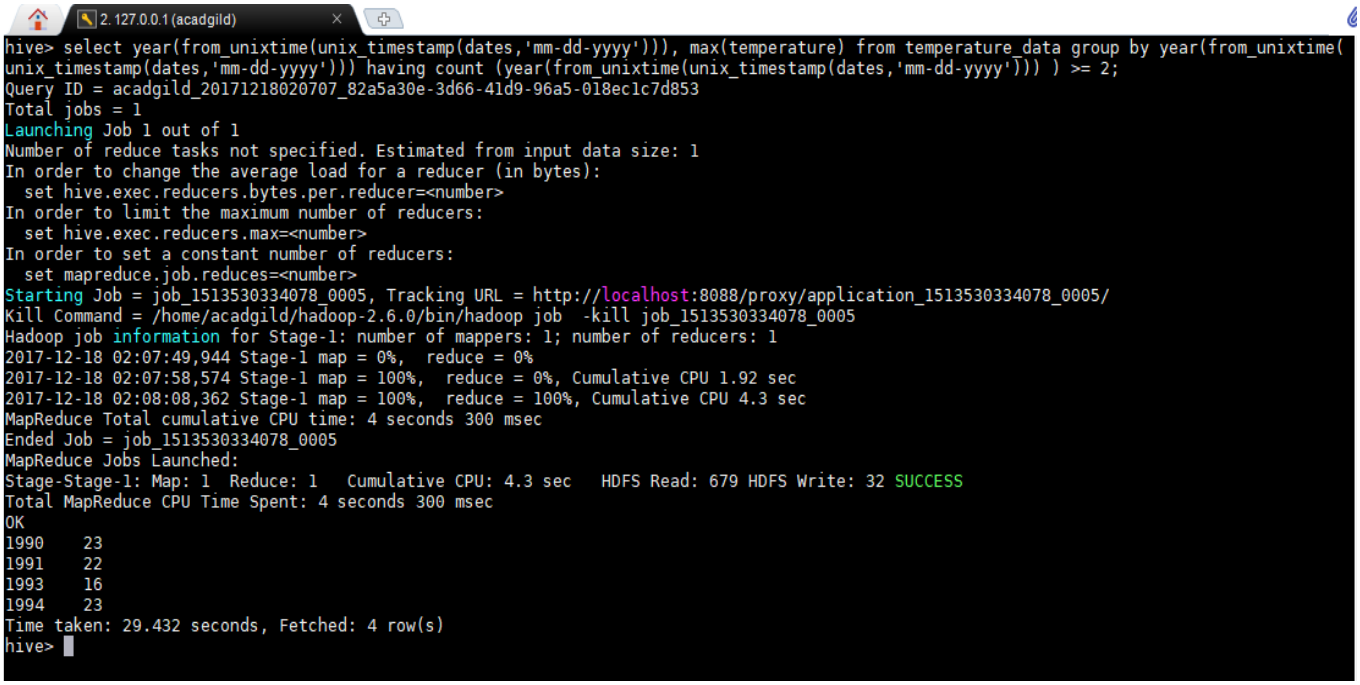
2) Solution 2:

select year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy'))),max(temperature) from temperature_data group by year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy')));

```
2. 127.0.0.1 (acadgild)
    > select year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy'))),max(temperature) from temperature_data group by year(from_unixtime(u
nix_timestamp(dates,'mm-dd-yyyy')));
Query ID = acadgild_20171218015959_d19c959c-5c4e-4c6d-9d01-fd08fefebf30
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_1513530334078_0003, Tracking URL = http://localhost:8088/proxy/application_1513530334078_0003/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job  -kill job_1513530334078_0003
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2017-12-18 01:59:34,971 Stage-1 map = 0%,  reduce = 0%
2017-12-18 01:59:43,950 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.9 sec
2017-12-18 01:59:53,793 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.32 sec
MapReduce Total cumulative CPU time: 3 seconds 320 msec
Ended Job = job_1513530334078_0003
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.32 sec   HDFS Read: 679 HDFS Write: 32 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 320 msec
OK
1990    23
1991    22
1993    16
1994    23
Time taken: 32.204 seconds, Fetched: 4 row(s)
```

3) Solution 3 :

select year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy'))), max(temperature) from temperature_data group by year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy'))) having count (year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy')))) >= 2;



Solution : 4

create view temperature_data_vw as select year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy'))), max(temperature)

from temperature_data group by year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy')))

having count (year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy')))) >= 2;

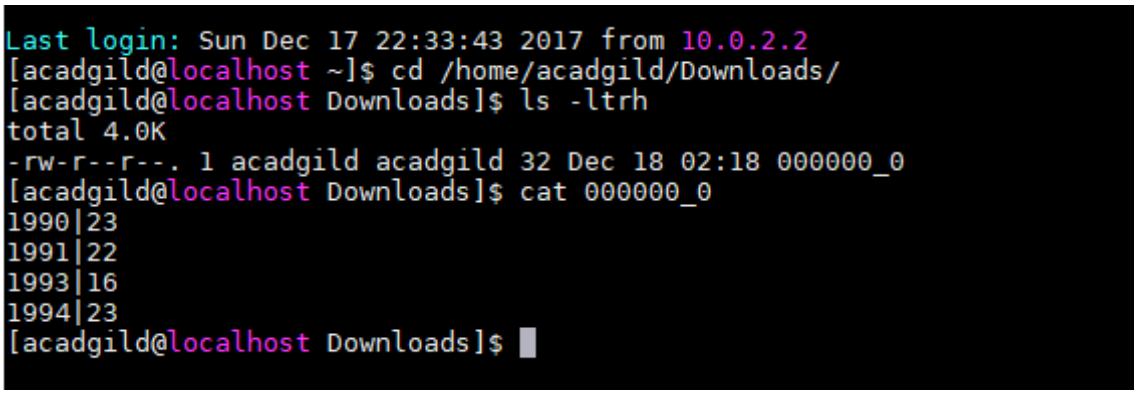
select * from temperature_data_vw;

```
hive> create view temperature_data_vw as select year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy'))), max(temperature) from temperatur
e_data group by year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy'))) having count (year(from_unixtime(unix_timestamp(dates,'mm-dd-yyyy
'))) ) >= 2;
OK
Time taken: 0.43 seconds
hive> select * from temperature_data_vw;
Query ID = acadgild_20171218021212_909409bb-3c71-485f-bc71-32101988aac7
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_1513530334078_0006, Tracking URL = http://localhost:8088/proxy/application_1513530334078_0006/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job  -kill job_1513530334078_0006
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2017-12-18 02:12:34,322 Stage-1 map = 0%,  reduce = 0%
2017-12-18 02:12:42,004 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.7 sec
2017-12-18 02:12:52,868 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 4.08 sec
MapReduce Total cumulative CPU time: 4 seconds 80 msec
Ended Job = job_1513530334078_0006
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 4.08 sec   HDFS Read: 679 HDFS Write: 32 SUCCESS
Total MapReduce CPU Time Spent: 4 seconds 80 msec
OK
1990    23
1991    22
1993    16
1994    23
Time taken: 28.734 seconds, Fetched: 4 row(s)
hive>
```

Solution : 5

insert overwrite local directory '/home/acadgild/Downloads/' row format delimited fields terminated by '|' select * from temperature_data_vw;

```
hive> insert overwrite local directory '/home/acadgild/Downloads/' row format delimited fields terminated by '|' select * from temperatur
e_data_vw;
Query ID = acadgild_20171218021717_07ae1ea7-20f0-4e1a-bbfa-f8ad5bb16cf9
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_1513530334078_0007, Tracking URL = http://localhost:8088/proxy/application_1513530334078_0007/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job  -kill job_1513530334078_0007
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2017-12-18 02:17:53,382 Stage-1 map = 0%,  reduce = 0%
2017-12-18 02:18:01,986 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.92 sec
2017-12-18 02:18:10,653 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.89 sec
MapReduce Total cumulative CPU time: 3 seconds 890 msec
Ended Job = job_1513530334078_0007
Copying data to local directory /home/acadgild/Downloads
Copying data to local directory /home/acadgild/Downloads
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.89 sec   HDFS Read: 679 HDFS Write: 32 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 890 msec
OK
Time taken: 27.833 seconds
hive>
```


Last login: Sun Dec 17 22:33:43 2017 from 10.0.2.2
[acadgild@localhost ~]$ cd /home/acadgild/Downloads/
[acadgild@localhost Downloads]$ ls -ltrh
total 4.0K
-rw-r--r--. 1 acadgild acadgild 32 Dec 18 02:18 000000_0
[acadgild@localhost Downloads]$ cat 000000_0
1990|23
1991|22
1993|16
1994|23
[acadgild@localhost Downloads]$