

Assignment 7.2

```
hive> create table olympic
(athlete string,age int,country string,year string,c_date string,sports
string,gold_medal int,silver_medal int,bronze_medal int,total_medal int)
row format delimited fields terminated by '\t';
OK
Time taken: 0.557 seconds
hive>
```

```
hive> LOAD DATA LOCAL INPATH '/home/acadgild/hive/olympix_data.csv' INTO TABLE
olympic;
Loading data to table bl.olympic
Table bl.olympic stats: [numFiles=1, totalSize=518669]
OK
Time taken: 0.763 seconds
hive>
```

--Problem 1

1. Write a Hive program to find the number of medals won by each country in swimming.

```
hive> SELECT country,SUM(total_medal) FROM olympic where sports='Swimming' group
by country ;
Query ID = acadgild_20171117222222_0d6ccf4d-07d7-454c-b02d-267c3194a285
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_1505655198300_0016, Tracking URL =
http://localhost:8088/proxy/application_1505655198300_0016/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job -kill
job_1505655198300_0016
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2017-11-17 22:22:44,570 Stage-1 map = 0%, reduce = 0%
2017-11-17 22:23:05,845 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 4.42 sec
2017-11-17 22:23:21,705 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 7.39
sec
MapReduce Total cumulative CPU time: 7 seconds 390 msec
Ended Job = job_1505655198300_0016
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 7.39 sec HDFS Read: 518895
HDFS Write: 386 SUCCESS
Total MapReduce CPU Time Spent: 7 seconds 390 msec
OK
country _c1
Argentina 1
```

Australia	163	
Austria	3	
Belarus	2	
Brazil	8	
Canada	5	
China	35	
Costa Rica	2	
Croatia	1	
Denmark	1	
France	39	
Germany	32	
Great Britain	11	
Hungary	9	
Italy	16	
Japan	43	
Lithuania	1	
Netherlands	46	
Norway	2	
Poland	3	
Romania	6	
Russia	20	
Serbia	1	
Slovakia	2	
Slovenia	1	
South Africa	11	
South Korea	4	
Spain	3	
Sweden	9	
Trinidad and Tobago	1	
Tunisia	3	
Ukraine	7	
United States	267	
Zimbabwe	7	

Time taken: 61.647 seconds, Fetched: 34 row(s)

hive>

--problem 2

2. Write a Hive program to find the number of medals that India won year wise.

```
hive> SELECT year,SUM(total_medal) FROM olympic where country='India' group by
year ;
```

Query ID = acadgild_20171117223333_69f0598b-9cfd-4ded-a907-9db3b47f3b3c

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_1505655198300_0017, Tracking URL =

http://localhost:8088/proxy/application_1505655198300_0017/

```

Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job -kill
job_1505655198300_0017
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2017-11-17 22:33:44,818 Stage-1 map = 0%, reduce = 0%
2017-11-17 22:34:04,912 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 4.01 sec
2017-11-17 22:34:25,817 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 7.79
sec
MapReduce Total cumulative CPU time: 7 seconds 790 msec
Ended Job = job_1505655198300_0017
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 7.79 sec HDFS Read: 518895
HDFS Write: 28 SUCCESS
Total MapReduce CPU Time Spent: 7 seconds 790 msec
OK
year _c1

2000 1
2004 1
2008 3
2012 6
Time taken: 77.374 seconds, Fetched: 4 row(s)
hive>

```

--problem 3

3. Write a Hive Program to find the total number of medals each country won.

```

hive> SELECT country,SUM(total_medal) FROM olympic group by country;
Query ID = acadgild_20171117224747_eea4fbbf-6db9-4936-b413-28c5ea69d96c
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_1505655198300_0018, Tracking URL =
http://localhost:8088/proxy/application_1505655198300_0018/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job -kill
job_1505655198300_0018
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2017-11-17 22:47:35,138 Stage-1 map = 0%, reduce = 0%
2017-11-17 22:47:52,733 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.96 sec
2017-11-17 22:48:15,419 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 6.71
sec
MapReduce Total cumulative CPU time: 6 seconds 710 msec
Ended Job = job_1505655198300_0018
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.71 sec HDFS Read: 518895
HDFS Write: 1315 SUCCESS
Total MapReduce CPU Time Spent: 6 seconds 710 msec

```

OK

country	_c1
Afghanistan	2
Algeria	8
Argentina	141
Armenia	10
Australia	609
Austria	91
Azerbaijan	25
Bahamas	24
Bahrain	1
Barbados	1
Belarus	97
Belgium	18
Botswana	1
Brazil	221
Bulgaria	41
Cameroon	20
Canada	370
Chile	22
China	530
Chinese Taipei	20
Colombia	13
Costa Rica	2
Croatia	81
Cuba	188
Cyprus	1
Czech Republic	81
Denmark	89
Dominican Republic	5
Ecuador	1
Egypt	8
Eritrea	1
Estonia	18
Ethiopia	29
Finland	118
France	318
Gabon	1
Georgia	23
Germany	629
Great Britain	322
Greece	59
Grenada	1
Guatemala	1
Hong Kong	3
Hungary	145
Iceland	15
India	11
Indonesia	22
Iran	24
Ireland	9
Israel	4
Italy	331
Jamaica	80
Japan	282
Kazakhstan	42
Kenya	39

Kuwait	2
Kyrgyzstan	3
Latvia	17
Lithuania	30
Macedonia	1
Malaysia	3
Mauritius	1
Mexico	38
Moldova	5
Mongolia	10
Montenegro	14
Morocco	11
Mozambique	1
Netherlands	318
New Zealand	52
Nigeria	39
North Korea	21
Norway	192
Panama	1
Paraguay	17
Poland	80
Portugal	9
Puerto Rico	2
Qatar	3
Romania	123
Russia	768
Saudi Arabia	6
Serbia	31
Serbia and Montenegro	38
Singapore	7
Slovakia	35
Slovenia	25
South Africa	25
South Korea	308
Spain	205
Sri Lanka	1
Sudan	1
Sweden	181
Switzerland	93
Syria	1
Tajikistan	3
Thailand	18
Togo	1
Trinidad and Tobago	19
Tunisia	4
Turkey	28
Uganda	1
Ukraine	143
United Arab Emirates	1
United States	1312
Uruguay	1
Uzbekistan	19
Venezuela	4
Vietnam	2
Zimbabwe	7

Time taken: 71.84 seconds, Fetched: 110 row(s)
hive>

--problem 4

4. Write a Hive program to find the number of gold medals each country won.

```
hive> SELECT country,SUM(gold_medal) FROM olympic group by country;
Query ID = acadgild_20171117225252_d8a6504d-52bf-4f66-af78-2c0901a46455
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_1505655198300_0019, Tracking URL =
http://localhost:8088/proxy/application_1505655198300_0019/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job -kill
job_1505655198300_0019
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2017-11-17 22:53:22,053 Stage-1 map = 0%, reduce = 0%
2017-11-17 22:53:39,633 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 3.26 sec
2017-11-17 22:53:58,356 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 6.6
sec
MapReduce Total cumulative CPU time: 6 seconds 600 msec
Ended Job = job_1505655198300_0019
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.6 sec HDFS Read: 518895
HDFS Write: 1276 SUCCESS
Total MapReduce CPU Time Spent: 6 seconds 600 msec
OK
country      _c1
Afghanistan   0
Algeria       2
Argentina     49
Armenia       0
Australia     163
Austria       36
Azerbaijan    6
Bahamas       11
Bahrain       0
Barbados      0
Belarus       17
Belgium       2
Botswana      0
Brazil        46
Bulgaria      8
Cameroon      20
Canada        168
Chile         3
China         234
Chinese Taipei 2
Colombia      2
```

Costa Rica	0	
Croatia	35	
Cuba	57	
Cyprus	0	
Czech Republic	14	
Denmark	46	
Dominican Republic	3	
Ecuador	0	
Egypt	1	
Eritrea	0	
Estonia	6	
Ethiopia	13	
Finland	11	
France	108	
Gabon	0	
Georgia	6	
Germany	223	
Great Britain	124	
Greece	12	
Grenada	1	
Guatemala	0	
Hong Kong	0	
Hungary	77	
Iceland	0	
India	1	
Indonesia	5	
Iran	10	
Ireland	1	
Israel	1	
Italy	86	
Jamaica	24	
Japan	57	
Kazakhstan	13	
Kenya	11	
Kuwait	0	
Kyrgyzstan	0	
Latvia	3	
Lithuania	5	
Macedonia	0	
Malaysia	0	
Mauritius	0	
Mexico	19	
Moldova	0	
Mongolia	2	
Montenegro	0	
Morocco	2	
Mozambique	1	
Netherlands	101	
New Zealand	18	
Nigeria	6	
North Korea	6	
Norway	97	
Panama	1	
Paraguay	0	
Poland	20	
Portugal	1	
Puerto Rico	0	

Qatar	0
Romania	57
Russia	234
Saudi Arabia	0
Serbia	1
Serbia and Montenegro	11
Singapore	0
Slovakia	10
Slovenia	5
South Africa	10
South Korea	110
Spain	19
Sri Lanka	0
Sudan	0
Sweden	57
Switzerland	21
Syria	0
Tajikistan	0
Thailand	6
Togo	0
Trinidad and Tobago	1
Tunisia	2
Turkey	9
Uganda	1
Ukraine	31
United Arab Emirates	1
United States	552
Uruguay	0
Uzbekistan	5
Venezuela	1
Vietnam	0
Zimbabwe	2

Time taken: 76.665 seconds, Fetched: 110 row(s)
hive>