Assignment 7-2

Creating table and loading data into the table:-

hive> create table if not exists athlete_details
(athlete_name string, age int, country string, year int, closing_date string, sport string, gold_medals int, silver_medals int, bronze_medals int, total_medals int)
row format delimited fields terminated by '\t';

hive> load data local inpath '/home/acadgild/Assignment7-2/olympix_data.csv' into table athlete_details;

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

hive> insert overwrite local directory '/home/acadgild/Assignment7_2' row format delimited fields terminated by '\t' select country, sum(gold_medals), sum(silver_medals), sum(bronze_medals), sum(total_medals) from athlete_details group by country;

```
acadgild@localhost:~
 File Edit View Search Terminal Help
hive> insert overwrite local directory '/home/acadgild/Assignment7_2' row format delimited fields terminated by '\t'
select country, sum(gold_medals), sum(silver_medals), sum(bronze_medals), sum(total_medals) from athlete details gro
up by country:
Query ID = acadgild 20180127135353 26eefbfa-6d1c-4f2e-9ecb-632708d564a8
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_1517037470958_0002, Tracking URL = http://localhost:8088/proxy/application_1517037470958_0002/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job -kill job_1517037470958_0002
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2018-01-27 13:54:34,866 Stage-1 map = 0%, reduce = 0%
2018-01-27 13:54:49,281 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.21 sec
2018-01-27 13:55:17,901 Stage-1 map = 100%, reduce = 34%, Cumulative CPU 2.8 sec
2018-01-27 13:55:20,342 Stage-1 map = 100%, reduce = 67%, Cumulative CPU 3.76 sec
2018-01-27 13:55:22,635 Stage-1 map = 100%,
                                                  reduce = 100%, Cumulative CPU 4.91 sec
MapReduce Total cumulative CPU time: 4 seconds 910 msec
Ended Job = job_1517037470958_0002
Copying data to local directory /home/acadgild/Assignment7_2
Copying data to local directory /home/acadgild/Assignment7_2
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 4.91 sec HDFS Read: 518897 HDFS Write: 2138 SUCCESS
Total MapReduce CPU Time Spent: 4 seconds 910 msec
Time taken: 96.347 seconds
hive>
```

Output file

https://drive.google.com/file/d/1-u2dlNtAnbXDf2CLZ 5CYho9MhEriREs/view?usp=sharing

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

Hive> insert overwrite local directory '/home/acadgild/Acadgild/Assignment7_2' row format delimited fields terminated by '\t' select year, country, sum(gold_medals), sum(silver_medals), sum(bronze_medals), sum(total medals) from athlete details where country = "India" group by year, country;

```
hive> insert overwrite local directory '/home/acadgild/Assignment7_2'
row format delimited fields terminated by '\t'
select year, country, sum(gold_medals), sum(silver_medals), sum(bronze_medals), sum(total_medals) from athlete_details where country = "India" group by year, country;
Query ID = acadgild_20180127135858_cae62471-7ac9-4f83-9c9f-26a0ecfee29c
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_1517037470958_0003, Tracking URL = http://localhost:8088/proxy/application_1517037470958_0003/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job -kill job 1517037470958 0003
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2018-01-27 13:58:55,573 Stage-1 map = 0%, reduce = 0%
2018-01-27 13:59:15,344 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 3.21 sec 2018-01-27 13:59:38,695 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 6.08 sec
MapReduce Total cumulative CPU time: 6 seconds 80 msec Ended Job = job_1517037470958_0003
Copying data to local directory /home/acadgild/Assignment7 2
Copying data to local directory /home/acadgild/Assignment7_2
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.08 sec HDFS Read: 518897 HDFS Write: 76 SUCCESS
Total MapReduce CPU Time Spent: 6 seconds 80 msec
Time taken: 66.884 seconds
hive>
```

Output file -

https://drive.google.com/file/d/1IgAe9-BKIDKsYq9TsJKkkOlq5FLVP0nH/view?usp=sharing

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

Hive> insert overwrite local directory '/home/acadgild/Assignment7-2' row format delimited fields terminated by '\t' select country, sum(total medals) from athlete details group by country;

```
hive> insert overwrite local directory '/home/acadgild/Assignment7 2'
row format delimited fields terminated by '\t'
select country, sum(total medals) from athlete details group by country;
Query ID = acadgild 201801\overline{2}7140202 2332c606-c1d\overline{2}-4556-9521-f84e1958a473
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 1517037470958 0004, Tracking URL = http://localhost:8088/proxy/application 1517037470958 0004/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job -kill job 1517037470958 0004
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2018-01-27 14:02:21,459 Stage-1 map = 0%, reduce = 0%
2018-01-27 14:02:36,823 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.19 sec 2018-01-27 14:02:57,533 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 4.99 sec
MapReduce Total cumulative CPU time: 4 seconds 990 msec
Ended Job = job 1517037470958 0004
Copying data to local directory /home/acadgild/Assignment7_2
Copying data to local directory /home/acadgild/Assignment7_2
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 4.99 sec HDFS Read: 518897 HDFS Write: 1315 SUCCESS
Total MapReduce CPU Time Spent: 4 seconds 990 msec
Time taken: 57.861 seconds
hive>
```

Output file -

https://drive.google.com/file/d/1ZfhDkv95slNGH3veufuXX0qujb8GXn0R/view?usp=sharing

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

Hive> insert overwrite local directory '/home/acadgild/Assignment7-2' row format delimited fields terminated by '\t' select country, sum(gold medals) from athlete details group by country;

```
hive> insert overwrite local directory '/home/acadgild/Assignment7 2'
row format delimited fields terminated by '\t'
select country, sum(gold medals) from athlete details group by country;
Query ID = acadgild_20180127140505_eeed5df4-b533-4cf7-980d-5179bcc46e88
Total iobs = 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 1517037470958 0005, Tracking URL = http://localhost:8088/proxy/application 1517037470958 0005/
Kill Command = /home/acadgild/hadoop-2.6.0/bin/hadoop job -kill job_1517037470958_0005
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2018-01-27 14:05:22,866 Stage-1 map = 0%, reduce = 0%
2018-01-27 14:05:36,480 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.25 sec
2018-01-27 14:05:50,014 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 4.68 sec
MapReduce Total cumulative CPU time: 4 seconds 680 msec
Ended Job = job 1517037470958 0005
Copying data to local directory /home/acadgild/Assignment7_2
Copying data to local directory /home/acadgild/Assignment7 2
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 4.68 sec HDFS Read: 518897 HDFS Write: 1276 SUCCESS
Total MapReduce CPU Time Spent: 4 seconds 680 msec
Time taken: 46.426 seconds
```

Output file -

https://drive.google.com/file/d/1gzm3S2LEf_IRA4QLCsLVFlePIFddCVtL/view?usp=sharing