Assignment 3.4

5. Problem Statement

 Get a list of employees who receive a salary less than 100, compared

to their immediate employee with higher salary in the same unit

 List of all employees who draw higher salary than the average salary

of that department

hive> select \* from employee\_details ;

OK

101 Amitabh 20000 1

102 Shahrukh 10000 2

103 Akshay 11000 3

104 Anubhav 5000 4

105 Pawan 2500 5

106 Aamir 25000 1

107 Salman 17500 2

108 Ranbir 14000 3

109 Katrina 1000 4

110 Priyanka 2000 5

111 Tushar 500 1

112 Ajay 5000 2

113 Jubeen 1000 1

114 Madhuri 2000 2

Time taken: 0.122 seconds, Fetched: 14 row(s)

hive> describe employee\_details ;

OK

emp\_name string

unit string

sal int

location string

Time taken: 0.103 seconds, Fetched: 4 row(s)

** Get a list of employees who receive a salary less than 100, compared**

**to their immediate employee with higher salary in the same unit**

hive> select \* from employee\_details order by exp desc;

Query ID = cloudera\_20180614101616\_403cc094-b75a-4588-bd4d-7b53941d824a

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\_1528593600567\_0024, Tracking URL = http://quickstart.cloudera:8088/proxy/application\_1528593600567\_0024/

Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job\_1528593600567\_0024

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

2018-06-14 10:17:05,579 Stage-1 map = 0%, reduce = 0%

2018-06-14 10:17:29,316 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.63 sec

2018-06-14 10:17:45,140 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 5.28 sec

MapReduce Total cumulative CPU time: 5 seconds 280 msec

Ended Job = job\_1528593600567\_0024

MapReduce Jobs Launched:

Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 5.28 sec HDFS Read: 7698 HDFS Write: 261 SUCCESS

Total MapReduce CPU Time Spent: 5 seconds 280 msec

OK

106 Aamir 25000 1

101 Amitabh 20000 1

107 Salman 17500 2

108 Ranbir 14000 3

103 Akshay 11000 3

102 Shahrukh 10000 2

112 Ajay 5000 2

104 Anubhav 5000 4

105 Pawan 2500 5

110 Priyanka 2000 5

114 Madhuri 2000 2

109 Katrina 1000 4

113 Jubeen 1000 1

111 Tushar 500 1

Time taken: 87.898 seconds, Fetched: 14 row(s)

** List of all employees who draw higher salary than the average salary**

**of that department**

hive> select avg(exp) from employee\_details ;

Query ID = cloudera\_20180614103131\_73be7210-61fd-43f2-ba54-bf7c54b26757

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\_1528593600567\_0026, Tracking URL = http://quickstart.cloudera:8088/proxy/application\_1528593600567\_0026/

Kill Command = /usr/lib/hadoop/bin/hadoop job -kill job\_1528593600567\_0026

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

2018-06-14 10:31:32,423 Stage-1 map = 0%, reduce = 0%

2018-06-14 10:32:04,753 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 3.8 sec

2018-06-14 10:32:23,590 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 8.17 sec

MapReduce Total cumulative CPU time: 8 seconds 170 msec

Ended Job = job\_1528593600567\_0026

MapReduce Jobs Launched:

Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 8.17 sec HDFS Read: 8358 HDFS Write: 17 SUCCESS

Total MapReduce CPU Time Spent: 8 seconds 170 msec

OK

**8321.42857142857**

Time taken: 71.238 seconds, Fetched: 1 row(s)

AVG Salary : **8321.42857142857**

hive> select \* from employee\_details where exp > 8321.42 ;

OK

101 Amitabh 20000 1

102 Shahrukh 10000 2

103 Akshay 11000 3

106 Aamir 25000 1

107 Salman 17500 2

108 Ranbir 14000 3