

## Assignment 3

### Task1: Execute WordMean program using the jar file present in VM

The file used – Assignment1. Txt

Here is a screenshot of the content saved in the file for which the wordmean is to be found-

```
Input  Devices  Help
[acadgild@localhost ~]$ cat Assignment1.txt
Assigment one of Big data Analytics
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$
```

The command used: **"Hadoop jar /home/acadgild/install/Hadoop/Hadoop-2.6.5/share/Hadoop/mapreduce/Hadoop-mapreduce-examples-2.6.5.jar word mean /Assignment1.txt / newoutput"**

Here is the output obtained for finding wordmean-

```
total megabyte-milliseconds taken by all reduce tasks=0436306
Map-Reduce Framework
  Map input records=1
  Map output records=12
  Map output bytes=174
  Map output materialized bytes=39
  Input split bytes=102
  Combine input records=12
  Combine output records=2
  Reduce input groups=2
  Reduce shuffle bytes=39
  Reduce input records=2
  Reduce output records=2
  Spilled Records=4
  Shuffled Maps =1
  Failed Shuffles=0
  Merged Map outputs=1
  GC time elapsed (ms)=144
  CPU time spent (ms)=1640
  Physical memory (bytes) snapshot=284733440
  Virtual memory (bytes) snapshot=4117938176
  Total committed heap usage (bytes)=170004480
Shuffle Errors
  BAD_ID=0
  CONNECTION=0
  IO_ERROR=0
  WRONG_LENGTH=0
  WRONG_MAP=0
  WRONG_REDUCE=0
File Input Format Counters
  Bytes Read=38
File Output Format Counters
  Bytes Written=18
The mean is: 5.333333333333333
```

## Task2: Execute WordMedian program using the jar file present in VM

Command used: "Hadoop jar /home/acadgild/install/Hadoop/Hadoop-2.6.5/share/Hadoop/mapreduce/Hadoop-mapreduce-examples-2.6.5.jar word median /Assignment1.txt / output1"

Here is a screenshot of the content saved in the file for which the wordmedian is to be found-

```
Total megabyte-milliseconds taken by all map tasks=4784128
Total megabyte-milliseconds taken by all reduce tasks=5399552
Map-Reduce Framework
  Map input records=1
  Map output records=6
  Map output bytes=48
  Map output materialized bytes=56
  Input split bytes=102
  Combine input records=6
  Combine output records=5
  Reduce input groups=5
  Reduce shuffle bytes=56
  Reduce input records=5
  Reduce output records=5
  Spilled Records=10
  Shuffled Maps =1
  Failed Shuffles=0
  Merged Map outputs=1
  GC time elapsed (ms)=143
  CPU time spent (ms)=1400
  Physical memory (bytes) snapshot=295661568
  Virtual memory (bytes) snapshot=4118228992
  Total committed heap usage (bytes)=170004480
Shuffle Errors
  BAD_ID=0
  CONNECTION=0
  IO_ERROR=0
  WRONG_LENGTH=0
  WRONG_MAP=0
  WRONG_REDUCE=0
File Input Format Counters
  Bytes Read=38
File Output Format Counters
  Bytes Written=21
The median is: 3
```

## Task3: Execute WordStandardDeviation program using the jar file present in VM

Command used: "Hadoop jar /home/acadgild/install/Hadoop/Hadoop-2.6.5/share/Hadoop/mapreduce/Hadoop-mapreduce-examples-2.6.5.jar word standard deviation /Assignment1.txt / output2"

Here is a screenshot of the content saved in the file for which the wordmedian is to be found-

```
Map-Reduce Framework
  Map input records=1
  Map output records=18
  Map output bytes=264
  Map output materialized bytes=56
  Input split bytes=102
  Combine input records=18
  Combine output records=3
  Reduce input groups=3
  Reduce shuffle bytes=56
  Reduce input records=3
  Reduce output records=3
  Spilled Records=6
  Shuffled Maps =1
  Failed Shuffles=0
  Merged Map outputs=1
  GC time elapsed (ms)=133
  CPU time spent (ms)=1340
  Physical memory (bytes) snapshot=298065920
  Virtual memory (bytes) snapshot=4118216704
  Total committed heap usage (bytes)=170004480
Shuffle Errors
  BAD_ID=0
  CONNECTION=0
  IO_ERROR=0
  WRONG_LENGTH=0
  WRONG_MAP=0
  WRONG_REDUCE=0
File Input Format Counters
  Bytes Read=38
File Output Format Counters
  Bytes Written=29
The standard deviation is: 3.39934634239519
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$
```