

---WORD MEDIAN PROGRAM EXECUTION -----

SOLUTION AND STEPS:

1)Created an input file for the wordmean program in path /hadoopdata/hdfs/in with file name wordmean.txt

```
[acadgild@localhost ~]$ hadoop fs -mkdir /hadoopdata/hdfs/in
```

```
[acadgild@localhost ~]$ hadoop fs -put wordmean.txt /hadoopdata/hdfs/in
```

```
[acadgild@localhost ~]$ hadoop fs -cat /hadoopdata/hdfs/in/wordmean.txt
```

good morning everyone welcome to the acadgild session specially to the toughest part which is yarn.

2)Ran the word mean program using the mentioned hadoop-mapreduce-examples-2.7.2.jar in path /home/acadgild/hadoop-2.7.2/share/hadoop/mapreduce using following command.

```
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.7.2.jar wordmedian /hadoopdata/hdfs/in/wordmean.txt /hadoopdata/hdfs/out/filewordmedian
```

Java HotSpot(TM) Client VM warning: You have loaded library /home/acadgild/hadoop-2.7.2/lib/native/libhadoop.so.1.0.0 which might have disabled stack guard. The VM will try to fix the stack guard now.

It's highly recommended that you fix the library with 'execstack -c <libfile>', or link it with '-z noexecstack'.

18/05/13 21:10:49 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

18/05/13 21:10:51 INFO client.RMProxy: Connecting to ResourceManager at /0.0.0.0:8032

18/05/13 21:10:53 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool interface and execute your application with ToolRunner to remedy this.

18/05/13 21:10:54 INFO input.FileInputFormat: Total input paths to process : 1

18/05/13 21:10:55 INFO mapreduce.JobSubmitter: number of splits:1

18/05/13 21:10:55 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1526194450906_0003

18/05/13 21:10:56 INFO impl.YarnClientImpl: Submitted application application_1526194450906_0003

18/05/13 21:10:56 INFO mapreduce.Job: The url to track the job:
http://localhost:8088/proxy/application_1526194450906_0003/

18/05/13 21:10:56 INFO mapreduce.Job: Running job: job_1526194450906_0003

18/05/13 21:11:25 INFO mapreduce.Job: Job job_1526194450906_0003 running in uber mode : false

18/05/13 21:11:25 INFO mapreduce.Job: map 0% reduce 0%

18/05/13 21:11:37 INFO mapreduce.Job: map 100% reduce 0%

18/05/13 21:11:49 INFO mapreduce.Job: map 100% reduce 100%

18/05/13 21:11:52 INFO mapreduce.Job: Job job_1526194450906_0003 completed successfully

18/05/13 21:11:52 INFO mapreduce.Job: Counters: 49

File System Counters

FILE: Number of bytes read=76

FILE: Number of bytes written=235219

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=219

HDFS: Number of bytes written=28

HDFS: Number of read operations=6

HDFS: Number of large read operations=0

HDFS: Number of write operations=2

Job Counters

Launched map tasks=1

Launched reduce tasks=1

Data-local map tasks=1

Total time spent by all maps in occupied slots (ms)=9123

Total time spent by all reduces in occupied slots (ms)=10274

Total time spent by all map tasks (ms)=9123

Total time spent by all reduce tasks (ms)=10274

Total vcore-milliseconds taken by all map tasks=9123

Total vcore-milliseconds taken by all reduce tasks=10274

Total megabyte-milliseconds taken by all map tasks=9341952

Total megabyte-milliseconds taken by all reduce tasks=10520576

Map-Reduce Framework

Map input records=1

Map output records=16

Map output bytes=128

Map output materialized bytes=76

Input split bytes=118

Combine input records=16

Combine output records=7

Reduce input groups=7

Reduce shuffle bytes=76

Reduce input records=7

Reduce output records=7

Spilled Records=14

Shuffled Maps =1

Failed Shuffles=0

Merged Map outputs=1

GC time elapsed (ms)=491

CPU time spent (ms)=2350

Physical memory (bytes) snapshot=229789696

Virtual memory (bytes) snapshot=635781120

Total committed heap usage (bytes)=137498624

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=101

File Output Format Counters

Bytes Written=28

The median is: 5

OUTPUT:

```
[acadgild@localhost ~]$ hadoop fs -ls /hadoopdata/hdfs/out/filewordmedian
```

Found 2 items

```
-rw-r--r--  1 acadgild supergroup    0 2018-05-13 21:11  
/hadoopdata/hdfs/out/filewordmedian/_SUCCESS
```

```
-rw-r--r--  1 acadgild supergroup   28 2018-05-13 21:11 /hadoopdata/hdfs/out/filewordmedian/part-  
r-00000
```

```
[acadgild@localhost ~]$ hadoop fs -cat /hadoopdata/hdfs/out/filewordmedian/part-r-00000
```

2 3

3 2

4 2

5 2

7 3

8 3

9 1

[acadgild@localhost ~]\$