

Assignment3 YARN mean,median,standarddeviation

Input file sample.txt is present in /hadoopdata/hdfs

Using put command file is copied from local to HDFS

```
[acadgild@localhost mapreduce]$ hdfs dfs -ls /hadoopdata/hdfs/sa*
```

```
18/06/20 14:01:26 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

```
-rw-r--r--  2 acadgild supergroup      0 2018-05-19 14:02 /hadoopdata/hdfs/sagar.txt
-rw-r--r--  1 acadgild supergroup    136 2018-06-20 13:39 /hadoopdata/hdfs/sampletext.txt
```

```
[acadgild@localhost ~]$ cat sampletext.txt
```

Hi This is robot learning Hadoop

The current session is about YARN

YARN has 6 components

RM NM scheduler appmanager appmaster container

All out put files for three programmes are present in /hadoopdata folder

```
drwxr-xr-x - acadgild supergroup      0 2018-06-20 13:48 /hadoopdata/wordmean
drwxr-xr-x - acadgild supergroup      0 2018-06-20 13:49 /hadoopdata/wordmedian
drwxr-xr-x - acadgild supergroup      0 2018-06-20 13:50 /hadoopdata/wordstandarddeviation
```

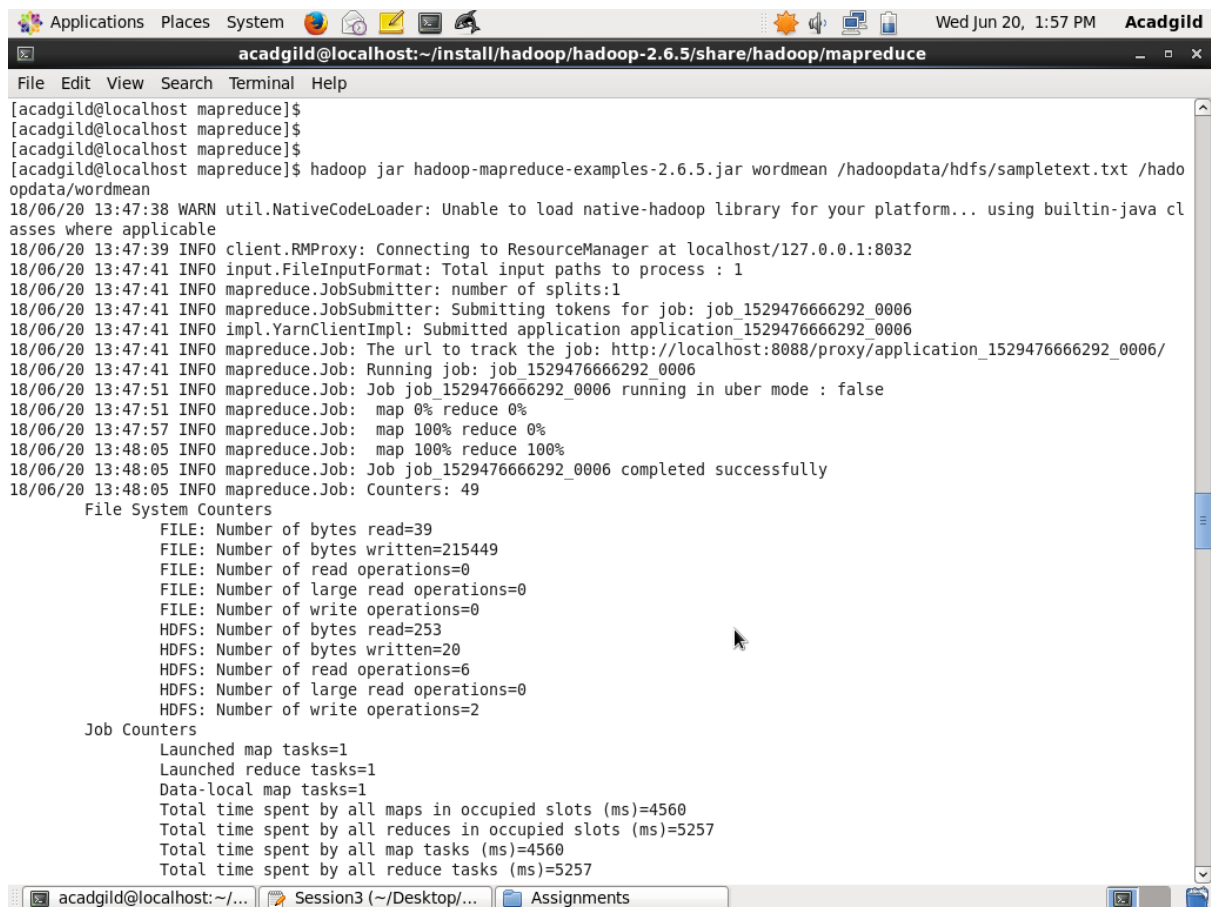
Below are the commands executed for processing the sampletext file using the jar present in folder/home/acadgild/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce

1. Wordmean
[acadgild@localhost mapreduce]\$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar wordmean /hadoopdata/hdfs/sampletext.txt /hadoopdata/wordmean
2. Wordmedian
[acadgild@localhost mapreduce]\$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar wordmedian /hadoopdata/hdfs/sampletext.txt /hadoopdata/wordmedian
3. WordStandarddeviation





```
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar  
wordstandarddeviation /hadoopdata/hdfs/sampletext.txt  
/hadoopdata/wordstandarddeviation
```

Screen prints of the programme.

1.Word Mean



```
Applications Places System [icons] Wed Jun 20, 1:57 PM Acadgild  
acadgild@localhost: ~/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce  
File Edit View Search Terminal Help  
[acadgild@localhost mapreduce]$  
[acadgild@localhost mapreduce]$  
[acadgild@localhost mapreduce]$  
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar wordmean /hadoopdata/hdfs/sampletext.txt /hadoopdata/wordmean  
18/06/20 13:47:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable  
18/06/20 13:47:39 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032  
18/06/20 13:47:41 INFO input.FileInputFormat: Total input paths to process : 1  
18/06/20 13:47:41 INFO mapreduce.JobSubmitter: number of splits:1  
18/06/20 13:47:41 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1529476666292_0006  
18/06/20 13:47:41 INFO impl.YarnClientImpl: Submitted application application_1529476666292_0006  
18/06/20 13:47:41 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1529476666292_0006/  
18/06/20 13:47:41 INFO mapreduce.Job: Running job: job_1529476666292_0006  
18/06/20 13:47:51 INFO mapreduce.Job: Job job_1529476666292_0006 running in uber mode : false  
18/06/20 13:47:51 INFO mapreduce.Job: map 0% reduce 0%  
18/06/20 13:47:57 INFO mapreduce.Job: map 100% reduce 0%  
18/06/20 13:48:05 INFO mapreduce.Job: map 100% reduce 100%  
18/06/20 13:48:05 INFO mapreduce.Job: Job job_1529476666292_0006 completed successfully  
18/06/20 13:48:05 INFO mapreduce.Job: Counters: 49  
File System Counters  
FILE: Number of bytes read=39  
FILE: Number of bytes written=215449  
FILE: Number of read operations=0  
FILE: Number of large read operations=0  
FILE: Number of write operations=0  
HDFS: Number of bytes read=253  
HDFS: Number of bytes written=20  
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)=4560  
Total time spent by all reduces in occupied slots (ms)=5257  
Total time spent by all map tasks (ms)=4560  
Total time spent by all reduce tasks (ms)=5257  
acadgild@localhost: ~/... Session3 (~/Desktop/... Assignments
```

Applications Places System     Wed Jun 20, 1:57 PM Acadgild

acadgild@localhost: ~/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce

File Edit View Search Terminal Help

```
Map input records=4
Map output records=44
Map output bytes=638
Map output materialized bytes=39
Input split bytes=117
Combine input records=44
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)=177
CPU time spent (ms)=1560
Physical memory (bytes) snapshot=301764608
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=136
File Output Format Counters
  Bytes Written=20

The mean is: 5.181818181818182
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
```

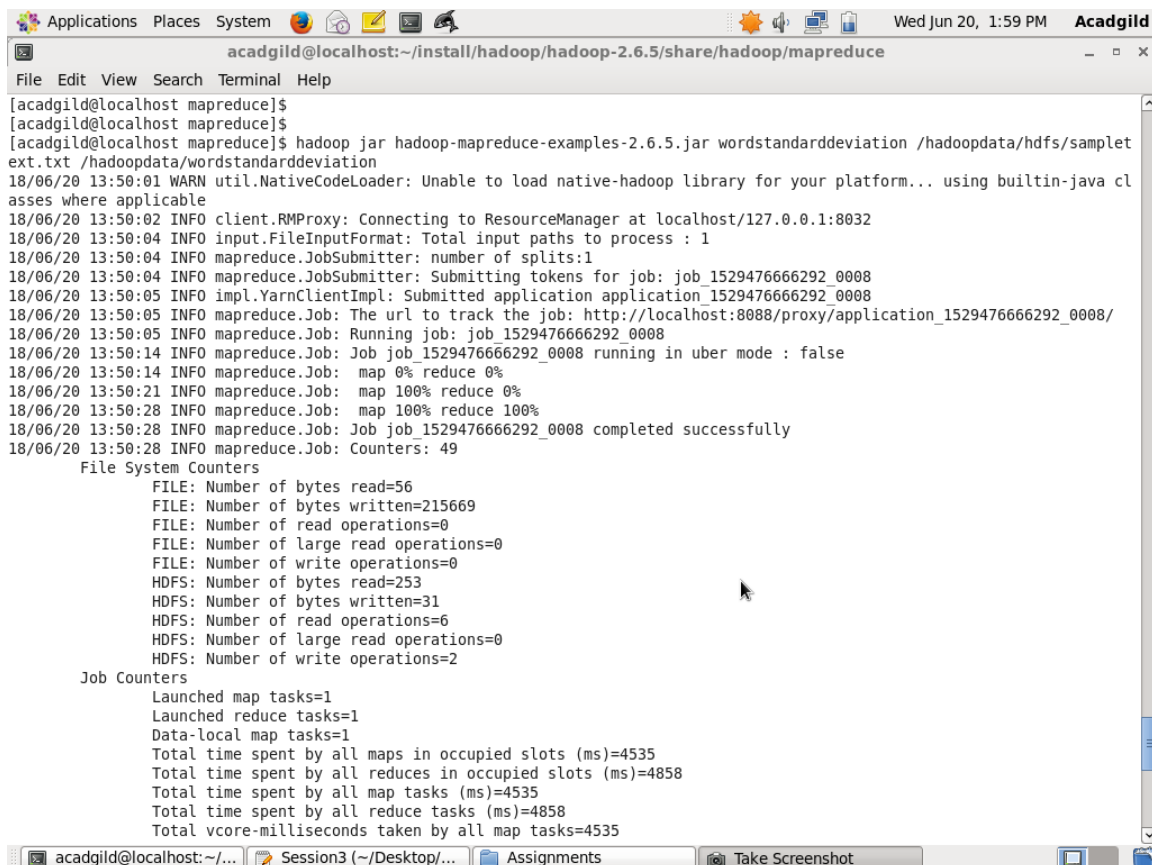
acadgild@localhost: ~/... Session3 (~/Desktop/... Assignments Take Screenshot

2. WordMedian

```
Applications Places System acadgild@localhost:~/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce
File Edit View Search Terminal Help
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar wordmedian /hadoopdata/hdfs/sampletext.txt /ha
dooopdata/wordmedian
18/06/20 13:48:35 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
18/06/20 13:48:36 INFO client.RMPProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
18/06/20 13:48:37 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool in
terface and execute your application with ToolRunner to remedy this.
18/06/20 13:48:38 INFO input.FileInputFormat: Total input paths to process : 1
18/06/20 13:48:38 INFO mapreduce.JobSubmitter: number of splits:1
18/06/20 13:48:38 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1529476666292_0007
18/06/20 13:48:38 INFO impl.YarnClientImpl: Submitted application application_1529476666292_0007
18/06/20 13:48:38 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1529476666292_0007/
18/06/20 13:48:38 INFO mapreduce.Job: Running job: job_1529476666292_0007
18/06/20 13:48:48 INFO mapreduce.Job: Job job_1529476666292_0007 running in uber mode : false
18/06/20 13:48:48 INFO mapreduce.Job: map 0% reduce 0%
18/06/20 13:48:54 INFO mapreduce.Job: map 100% reduce 0%
18/06/20 13:49:01 INFO mapreduce.Job: map 100% reduce 100%
18/06/20 13:49:02 INFO mapreduce.Job: Job job_1529476666292_0007 completed successfully
18/06/20 13:49:02 INFO mapreduce.Job: Counters: 49
File System Counters
  FILE: Number of bytes read=106
  FILE: Number of bytes written=215323
  FILE: Number of read operations=0
  FILE: Number of large read operations=0
  FILE: Number of write operations=0
  HDFS: Number of bytes read=253
  HDFS: Number of bytes written=41
  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)=4404
  Total time spent by all reduces in occupied slots (ms)=5150
```

```
Applications Places System acadgild@localhost:~/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce
File Edit View Search Terminal Help
Total time spent by all reduce tasks (ms)=5150
Total vcore-milliseconds taken by all map tasks=4404
Total vcore-milliseconds taken by all reduce tasks=5150
Total megabyte-milliseconds taken by all map tasks=4509696
Total megabyte-milliseconds taken by all reduce tasks=5273600
Map-Reduce Framework
  Map input records=4
  Map output records=22
  Map output bytes=176
  Map output materialized bytes=106
  Input split bytes=117
  Combine input records=22
  Combine output records=10
  Reduce input groups=10
  Reduce shuffle bytes=106
  Reduce input records=10
  Reduce output records=10
  Spilled Records=20
  Shuffled Maps =1
  Failed Shuffles=0
  Merged Map outputs=1
  GC time elapsed (ms)=164
  CPU time spent (ms)=1380
  Physical memory (bytes) snapshot=297529344
  Virtual memory (bytes) snapshot=4118224896
  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=136
File Output Format Counters
  Bytes Written=41
The median is: 4
[acadgild@localhost mapreduce]$
```

3. wordStandarddeviation

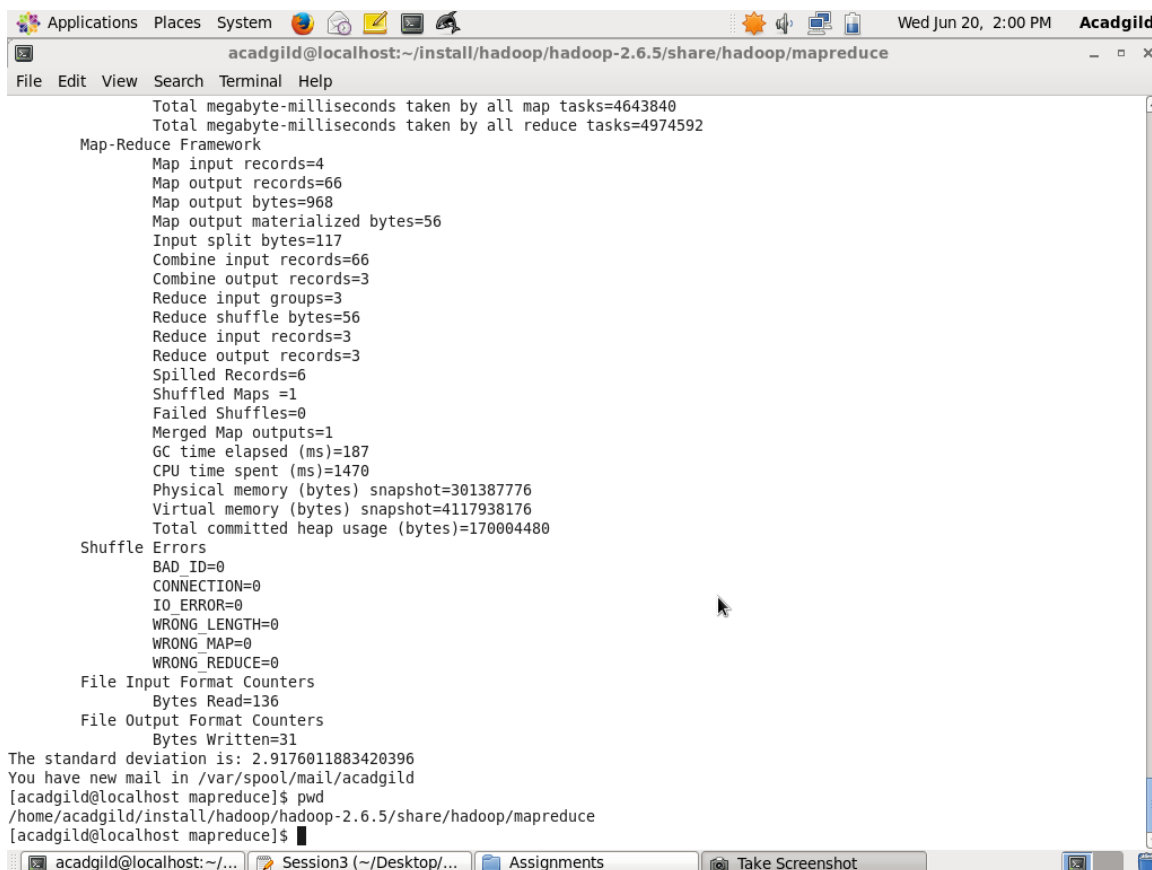


Applications Places System Wed Jun 20, 1:59 PM Acadgild

acadgild@localhost: ~/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce

```
File Edit View Search Terminal Help
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar wordstandarddeviation /hadoopdata/hdfs/samplelet
ext.txt /hadoopdata/wordstandarddeviation
18/06/20 13:50:01 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
18/06/20 13:50:02 INFO client.RMPProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
18/06/20 13:50:04 INFO input.FileInputFormat: Total input paths to process : 1
18/06/20 13:50:04 INFO mapreduce.JobSubmitter: number of splits:1
18/06/20 13:50:04 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1529476666292_0008
18/06/20 13:50:05 INFO impl.YarnClientImpl: Submitted application application_1529476666292_0008
18/06/20 13:50:05 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1529476666292_0008/
18/06/20 13:50:05 INFO mapreduce.Job: Running job: job_1529476666292_0008
18/06/20 13:50:14 INFO mapreduce.Job: Job job_1529476666292_0008 running in uber mode : false
18/06/20 13:50:14 INFO mapreduce.Job: map 0% reduce 0%
18/06/20 13:50:21 INFO mapreduce.Job: map 100% reduce 0%
18/06/20 13:50:28 INFO mapreduce.Job: map 100% reduce 100%
18/06/20 13:50:28 INFO mapreduce.Job: Job job_1529476666292_0008 completed successfully
18/06/20 13:50:28 INFO mapreduce.Job: Counters: 49
  File System Counters
    FILE: Number of bytes read=56
    FILE: Number of bytes written=215669
    FILE: Number of read operations=0
    FILE: Number of large read operations=0
    FILE: Number of write operations=0
    HDFS: Number of bytes read=253
    HDFS: Number of bytes written=31
    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)=4535
    Total time spent by all reduces in occupied slots (ms)=4858
    Total time spent by all map tasks (ms)=4535
    Total time spent by all reduce tasks (ms)=4858
    Total vcore-milliseconds taken by all map tasks=4535
```

acacgild@localhost: ~/... Session3 (~/Desktop/... Assignments Take Screenshot



Applications Places System Wed Jun 20, 2:00 PM Acadgild

acacgild@localhost: ~/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce

```
File Edit View Search Terminal Help
Total megabyte-milliseconds taken by all map tasks=4643840
Total megabyte-milliseconds taken by all reduce tasks=4974592
Map-Reduce Framework
  Map input records=4
  Map output records=66
  Map output bytes=968
  Map output materialized bytes=56
  Input split bytes=117
  Combine input records=66
  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)=187
  CPU time spent (ms)=1470
  Physical memory (bytes) snapshot=301387776
  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=136
File Output Format Counters
  Bytes Written=31
The standard deviation is: 2.9176011883420396
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost mapreduce]$ pwd
/home/acadgild/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce
[acadgild@localhost mapreduce]$
```

acacgild@localhost: ~/... Session3 (~/Desktop/... Assignments Take Screenshot

Copied from terminal with the output files

WordMean

```
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar wordmean  
/hadoopdata/hdfs/sampletext.txt /hadoopdata/wordmean
```

18/06/20 13:47:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform...
using builtin-java classes where applicable

18/06/20 13:47:39 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032

18/06/20 13:47:41 INFO input.FileInputFormat: Total input paths to process : 1

18/06/20 13:47:41 INFO mapreduce.JobSubmitter: number of splits:1

18/06/20 13:47:41 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1529476666292_0006

18/06/20 13:47:41 INFO impl.YarnClientImpl: Submitted application application_1529476666292_0006

18/06/20 13:47:41 INFO mapreduce.Job: The url to track the job:
http://localhost:8088/proxy/application_1529476666292_0006/

18/06/20 13:47:41 INFO mapreduce.Job: Running job: job_1529476666292_0006

18/06/20 13:47:51 INFO mapreduce.Job: Job job_1529476666292_0006 running in uber mode : false

18/06/20 13:47:51 INFO mapreduce.Job: map 0% reduce 0%

18/06/20 13:47:57 INFO mapreduce.Job: map 100% reduce 0%

18/06/20 13:48:05 INFO mapreduce.Job: map 100% reduce 100%

18/06/20 13:48:05 INFO mapreduce.Job: Job job_1529476666292_0006 completed successfully

18/06/20 13:48:05 INFO mapreduce.Job: Counters: 49

File System Counters

FILE: Number of bytes read=39

FILE: Number of bytes written=215449

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=253

HDFS: Number of bytes written=20

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)=4560
Total time spent by all reduces in occupied slots (ms)=5257
Total time spent by all map tasks (ms)=4560
Total time spent by all reduce tasks (ms)=5257
Total vcore-milliseconds taken by all map tasks=4560
Total vcore-milliseconds taken by all reduce tasks=5257
Total megabyte-milliseconds taken by all map tasks=4669440
Total megabyte-milliseconds taken by all reduce tasks=5383168

Map-Reduce Framework

Map input records=4
Map output records=44
Map output bytes=638
Map output materialized bytes=39
Input split bytes=117
Combine input records=44
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)=177
CPU time spent (ms)=1560
Physical memory (bytes) snapshot=301764608
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=136

File Output Format Counters

Bytes Written=20

The mean is: 5.1818181818182

[acadgild@localhost mapreduce]\$ hdfs dfs -ls /hadoopdata/wordmean

18/06/20 14:03:40 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 2 items

-rw-r--r-- 1 acadgild supergroup 0 2018-06-20 13:48 /hadoopdata/wordmean/_SUCCESS

-rw-r--r-- 1 acadgild supergroup 20 2018-06-20 13:48 /hadoopdata/wordmean/part-r-00000

[acadgild@localhost mapreduce]\$ hdfs dfs -cat /hadoopdata/wordmean/part-r-00000

18/06/20 14:04:32 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

count 22

length 114

WORDMEDIAN

[acadgild@localhost mapreduce]\$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar wordmedian /hadoopdata/hdfs/sampletext.txt /hadoopdata/wordmedian

18/06/20 13:48:35 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

18/06/20 13:48:36 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032

18/06/20 13:48:37 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool interface and execute your application with ToolRunner to remedy this.

18/06/20 13:48:38 INFO input.FileInputFormat: Total input paths to process : 1

18/06/20 13:48:38 INFO mapreduce.JobSubmitter: number of splits:1

18/06/20 13:48:38 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1529476666292_0007

18/06/20 13:48:38 INFO impl.YarnClientImpl: Submitted application application_1529476666292_0007

18/06/20 13:48:38 INFO mapreduce.Job: The url to track the job:
http://localhost:8088/proxy/application_1529476666292_0007/

18/06/20 13:48:38 INFO mapreduce.Job: Running job: job_1529476666292_0007

18/06/20 13:48:48 INFO mapreduce.Job: Job job_1529476666292_0007 running in uber mode : false

18/06/20 13:48:48 INFO mapreduce.Job: map 0% reduce 0%

18/06/20 13:48:54 INFO mapreduce.Job: map 100% reduce 0%

18/06/20 13:49:01 INFO mapreduce.Job: map 100% reduce 100%

18/06/20 13:49:02 INFO mapreduce.Job: Job job_1529476666292_0007 completed successfully

18/06/20 13:49:02 INFO mapreduce.Job: Counters: 49

File System Counters

FILE: Number of bytes read=106

FILE: Number of bytes written=215323

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=253

HDFS: Number of bytes written=41

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)=4404

Total time spent by all reduces in occupied slots (ms)=5150

Total time spent by all map tasks (ms)=4404

Total time spent by all reduce tasks (ms)=5150

Total vcore-milliseconds taken by all map tasks=4404

Total vcore-milliseconds taken by all reduce tasks=5150

Total megabyte-milliseconds taken by all map tasks=4509696

Total megabyte-milliseconds taken by all reduce tasks=5273600

Map-Reduce Framework

Map input records=4

Map output records=22

Map output bytes=176
Map output materialized bytes=106
Input split bytes=117
Combine input records=22
Combine output records=10
Reduce input groups=10
Reduce shuffle bytes=106
Reduce input records=10
Reduce output records=10
Spilled Records=20
Shuffled Maps =1
Failed Shuffles=0
Merged Map outputs=1
GC time elapsed (ms)=164
CPU time spent (ms)=1380
Physical memory (bytes) snapshot=297529344
Virtual memory (bytes) snapshot=4118224896
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=136

File Output Format Counters

Bytes Written=41

The median is: 4

```
[acadgild@localhost mapreduce]$ hdfs dfs -ls /hadoopdata/wordmedian
```

18/06/20 14:05:09 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 2 items

```
-rw-r--r-- 1 acadgild supergroup      0 2018-06-20 13:49 /hadoopdata/wordmedian/_SUCCESS
-rw-r--r-- 1 acadgild supergroup    41 2018-06-20 13:49 /hadoopdata/wordmedian/part-r-00000
```

```
[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/wordmedian/part-r-00000
```

```
18/06/20 14:05:20 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

1	1
2	5
3	2
4	3
5	2
6	1
7	2
8	1
9	3
10	2

WORDSTANDARDDEVIATION

```
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.6.5.jar wordstandarddeviation /hadoopdata/hdfs/sampletext.txt /hadoopdata/wordstandarddeviation
```

```
18/06/20 13:50:01 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

```
18/06/20 13:50:02 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
```

```
18/06/20 13:50:04 INFO input.FileInputFormat: Total input paths to process : 1
```

```
18/06/20 13:50:04 INFO mapreduce.JobSubmitter: number of splits:1
```

```
18/06/20 13:50:04 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1529476666292_0008
```

```
18/06/20 13:50:05 INFO impl.YarnClientImpl: Submitted application application_1529476666292_0008
```

```
18/06/20 13:50:05 INFO mapreduce.Job: The url to track the job:
http://localhost:8088/proxy/application_1529476666292_0008/
```

```
18/06/20 13:50:05 INFO mapreduce.Job: Running job: job_1529476666292_0008
```

```
18/06/20 13:50:14 INFO mapreduce.Job: Job job_1529476666292_0008 running in uber mode : false
```

```
18/06/20 13:50:14 INFO mapreduce.Job: map 0% reduce 0%
```

```
18/06/20 13:50:21 INFO mapreduce.Job: map 100% reduce 0%
```

```
18/06/20 13:50:28 INFO mapreduce.Job: map 100% reduce 100%
```

```
18/06/20 13:50:28 INFO mapreduce.Job: Job job_1529476666292_0008 completed successfully
```

```
18/06/20 13:50:28 INFO mapreduce.Job: Counters: 49
```

File System Counters

FILE: Number of bytes read=56
FILE: Number of bytes written=215669
FILE: Number of read operations=0
FILE: Number of large read operations=0
FILE: Number of write operations=0
HDFS: Number of bytes read=253
HDFS: Number of bytes written=31
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)=4535
Total time spent by all reduces in occupied slots (ms)=4858
Total time spent by all map tasks (ms)=4535
Total time spent by all reduce tasks (ms)=4858
Total vcore-milliseconds taken by all map tasks=4535
Total vcore-milliseconds taken by all reduce tasks=4858
Total megabyte-milliseconds taken by all map tasks=4643840
Total megabyte-milliseconds taken by all reduce tasks=4974592

Map-Reduce Framework

Map input records=4
Map output records=66
Map output bytes=968
Map output materialized bytes=56
Input split bytes=117
Combine input records=66
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)=187
CPU time spent (ms)=1470
Physical memory (bytes) snapshot=301387776
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=136

File Output Format Counters

Bytes Written=31

The standard deviation is: 2.9176011883420396

You have new mail in /var/spool/mail/acadgild

[acadgild@localhost mapreduce]\$ pwd

/home/acadgild/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce

[acadgild@localhost mapreduce]\$ hdfs dfs -ls /hadoopdata/wordstandarddeviation

18/06/20 14:05:53 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 2 items

**-rw-r--r-- 1 acadgild supergroup 0 2018-06-20 13:50
/hadoopdata/wordstandarddeviation/_SUCCESS**

-rw-r--r-- 1 acadgild supergroup 31 2018-06-20 13:50 /hadoopdata/wordstandarddeviation/part-r-00000

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/wordstandarddeviation/part-r-00000
```

```
18/06/20 14:06:54 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

```
count  22
```

```
length 114
```

```
square 778
```

```
You have new mail in /var/spool/mail/acadgild
```

```
[acadgild@localhost mapreduce]$
```

INPUT and OUTFILE screen prints

```
Applications Places System acadgild@localhost:~/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce
File Edit View Search Terminal Help
drwxr-xr-x - acadgild supergroup 0 2018-06-20 13:48 /hadoopdata/wordmean
drwxr-xr-x - acadgild supergroup 0 2018-06-20 13:49 /hadoopdata/wordmedian
drwxr-xr-x - acadgild supergroup 0 2018-06-20 13:50 /hadoopdata/wordstandarddeviation
[acadgild@localhost mapreduce]$ [acadgild@localhost mapreduce]$ hdfs dfs -ls /hadoopdata/hdfs/sa*
bash: [acadgild@localhost: command not found
[acadgild@localhost mapreduce]$ 18/06/20 14:01:26 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your p
latfom... using builtin-java classes where applicable
bash: 18/06/20: No such file or directory
[acadgild@localhost mapreduce]$ -rw-r--r-- 2 acadgild supergroup 0 2018-05-19 14:02 /hadoopdata/hdfs/sagar.txt
bash: -rw-r--r--: command not found
[acadgild@localhost mapreduce]$ -rw-r--r-- 1 acadgild supergroup 136 2018-06-20 13:39 /hadoopdata/hdfs/sampletext.tx
t
bash: -rw-r--r--: command not found
[acadgild@localhost mapreduce]$ [acadgild@localhost mapreduce]$
bash: [acadgild@localhost: command not found
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$
[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/word*
18/06/20 14:03:24 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
cat: '/hadoopdata/wordmean': Is a directory
cat: '/hadoopdata/wordmedian': Is a directory
cat: '/hadoopdata/wordstandarddeviation': Is a directory
[acadgild@localhost mapreduce]$ hdfs dfs -ls /hadoopdata/wordmean
18/06/20 14:03:40 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup 0 2018-06-20 13:48 /hadoopdata/wordmean/_SUCCESS
-rw-r--r-- 1 acadgild supergroup 20 2018-06-20 13:48 /hadoopdata/wordmean/part-r-00000
[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/wordmean/part-r-00000
18/06/20 14:04:32 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
count 22
length 114
acadgild@localhost:~/... Session3 (~/Desktop/... Assignments
Applications Places System acadgild@localhost:~/install/hadoop/hadoop-2.6.5/share/hadoop/mapreduce
File Edit View Search Terminal Help
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost mapreduce]$ hdfs dfs -ls /hadoopdata/wordmedian
18/06/20 14:05:09 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup 0 2018-06-20 13:49 /hadoopdata/wordmedian/_SUCCESS
-rw-r--r-- 1 acadgild supergroup 41 2018-06-20 13:49 /hadoopdata/wordmedian/part-r-00000
[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/wordmedian/part-r-00000
18/06/20 14:05:20 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
1 1
2 5
3 2
4 3
5 2
6 1
7 2
8 1
9 3
10 2
[acadgild@localhost mapreduce]$ hdfs dfs -ls /hadoopdata/wordstandarddeviation
18/06/20 14:05:53 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup 0 2018-06-20 13:50 /hadoopdata/wordstandarddeviation/_SUCCESS
-rw-r--r-- 1 acadgild supergroup 31 2018-06-20 13:50 /hadoopdata/wordstandarddeviation/part-r-00000
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/wordstandarddeviation/part-r-00000
18/06/20 14:06:28 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
cat: '/hadoopdata/wordstandarddeviation/part-r-00000': No such file or directory
[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/wordstandarddeviation/part-r-00000
18/06/20 14:06:54 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
count 22
length 114
square 778
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost mapreduce]$
```