```
//Assignment 3


// Executing wordmedian mapreduce program



[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-
2.6.5.jar wordmedian  /hadoopdata/hdfs/test1.txt  /hadoopdata/out     //
command to execute wormedian code.

18/06/07 22:53:40 WARN util.NativeCodeLoader: Unable to load native-
hadoop library for your platform... using builtin-java classes where
applicable
18/06/07 22:53:41 INFO client.RMProxy: Connecting to ResourceManager at
localhost/127.0.0.1:8032
18/06/07 22:53:43 WARN mapreduce.JobResourceUploader: Hadoop command-line
option parsing not performed. Implement the Tool interface and execute
your application with ToolRunner to remedy this.
18/06/07 22:53:43 INFO input.FileInputFormat: Total input paths to
process : 1
18/06/07 22:53:43 INFO mapreduce.JobSubmitter: number of splits:1
18/06/07 22:53:43 INFO mapreduce.JobSubmitter: Submitting tokens for job:
job_1528385216097_0003
18/06/07 22:53:44 INFO impl.YarnClientImpl: Submitted application
application_1528385216097_0003
18/06/07 22:53:44 INFO mapreduce.Job: The url to track the job:
http://localhost:8088/proxy/application_1528385216097_0003/
18/06/07 22:53:44 INFO mapreduce.Job: Running job: job_1528385216097_0003
18/06/07 22:53:55 INFO mapreduce.Job: Job job_1528385216097_0003 running
in uber mode : false
18/06/07 22:53:55 INFO mapreduce.Job:  map 0% reduce 0%
18/06/07 22:54:03 INFO mapreduce.Job:  map 100% reduce 0%
18/06/07 22:54:18 INFO mapreduce.Job:  map 100% reduce 100%
18/06/07 22:54:19 INFO mapreduce.Job: Job job_1528385216097_0003
completed successfully
18/06/07 22:54:19 INFO mapreduce.Job: Counters: 49
        File System Counters
                FILE: Number of bytes read=86
                FILE: Number of bytes written=215259
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=208
                HDFS: Number of bytes written=32
                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)=5509
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             Total time spent by all reduces in occupied slots (ms)=11188
             Total time spent by all map tasks (ms)=5509
             Total time spent by all reduce tasks (ms)=11188
             Total vcore-milliseconds taken by all map tasks=5509
             Total vcore-milliseconds taken by all reduce tasks=11188
             Total megabyte-milliseconds taken by all map tasks=5641216
             Total megabyte-milliseconds taken by all reduce
tasks=11456512
       Map-Reduce Framework
             Map input records=4
             Map output records=19
             Map output bytes=152
             Map output materialized bytes=86
             Input split bytes=112
             Combine input records=19
             Combine output records=8
             Reduce input groups=8
             Reduce shuffle bytes=86
             Reduce input records=8
             Reduce output records=8
             Spilled Records=16
             Shuffled Maps =1
             Failed Shuffles=0
             Merged Map outputs=1
             GC time elapsed (ms)=156
             CPU time spent (ms)=1630
             Physical memory (bytes) snapshot=293113856
             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=96
       File Output Format Counters
             Bytes Written=32
The median is: 4
You have new mail in /var/spool/mail/acadgild

// output for  wordmedian mapreduce program

[acadgild@localhost mapreduce]$ hdfs dfs -ls /hadoopdata/out
18/06/07 22:57:13 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 2018-06-07 22:54
/hadoopdata/out/_SUCCESS
-rw-r--r--   1 acadgild supergroup         32 2018-06-07 22:54
/hadoopdata/out/part-r-00000
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[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/out/part-r-
00000
18/06/07 22:57:48 WARN util.NativeCodeLoader: Unable to load native-
hadoop library for your platform... using builtin-java classes where
applicable
1       1
2       6
3       1
4       4
5       1
6       4
7       1
8       1
You have new mail in /var/spool/mail/acadgild




// Executing wordmean mapreduce program

[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-
2.6.5.jar wordmean /hadoopdata/hdfs/test1.txt  /hadoopdata/mean-out
18/06/07 23:00:14 WARN util.NativeCodeLoader: Unable to load native-
hadoop library for your platform... using builtin-java classes where
applicable
18/06/07 23:00:15 INFO client.RMProxy: Connecting to ResourceManager at
localhost/127.0.0.1:8032
18/06/07 23:00:16 INFO input.FileInputFormat: Total input paths to
process : 1
18/06/07 23:00:17 INFO mapreduce.JobSubmitter: number of splits:1
18/06/07 23:00:17 INFO mapreduce.JobSubmitter: Submitting tokens for job:
job_1528385216097_0004
18/06/07 23:00:17 INFO impl.YarnClientImpl: Submitted application
application_1528385216097_0004
18/06/07 23:00:17 INFO mapreduce.Job: The url to track the job:
http://localhost:8088/proxy/application_1528385216097_0004/
18/06/07 23:00:17 INFO mapreduce.Job: Running job: job_1528385216097_0004
18/06/07 23:00:27 INFO mapreduce.Job: Job job_1528385216097_0004 running
in uber mode : false
18/06/07 23:00:27 INFO mapreduce.Job:  map 0% reduce 0%
18/06/07 23:00:34 INFO mapreduce.Job:  map 100% reduce 0%
18/06/07 23:00:55 INFO mapreduce.Job:  map 100% reduce 100%
18/06/07 23:00:57 INFO mapreduce.Job: Job job_1528385216097_0004
completed successfully
18/06/07 23:00:57 INFO mapreduce.Job: Counters: 49
        File System Counters
                FILE: Number of bytes read=39
                FILE: Number of bytes written=215439
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=208
                HDFS: Number of bytes written=19
                HDFS: Number of read operations=6
```

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            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)=4616
            Total time spent by all reduces in occupied slots (ms)=17985
            Total time spent by all map tasks (ms)=4616
            Total time spent by all reduce tasks (ms)=17985
            Total vcore-milliseconds taken by all map tasks=4616
            Total vcore-milliseconds taken by all reduce tasks=17985
            Total megabyte-milliseconds taken by all map tasks=4726784
            Total megabyte-milliseconds taken by all reduce
tasks=18416640
      Map-Reduce Framework
            Map input records=4
            Map output records=38
            Map output bytes=551
            Map output materialized bytes=39
            Input split bytes=112
            Combine input records=38
            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)=141
            CPU time spent (ms)=1600
            Physical memory (bytes) snapshot=294711296
            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=96
      File Output Format Counters
            Bytes Written=19
The mean is: 4.0
You have new mail in /var/spool/mail/acadgild

// output for  wordmean  mapreduce program

[acadgild@localhost mapreduce]$ hdfs dfs -ls /hadoopdata/mean-out
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18/06/07 23:01:26 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 2018-06-07 23:00
/hadoopdata/mean-out/_SUCCESS
-rw-r--r--   1 acadgild supergroup         19 2018-06-07 23:00
/hadoopdata/mean-out/part-r-00000
[acadgild@localhost mapreduce]$ hdfs dfs -cat /hadoopdata/mean-out/part-
r-00000
18/06/07 23:02:13 WARN util.NativeCodeLoader: Unable to load native-
hadoop library for your platform... using builtin-java classes where
applicable
count 19
length      76
You have new mail in /var/spool/mail/acadgild


// Executing wordstandarddeviation  mapreduce program


[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-
2.6.5.jar wordstandarddeviation  /hadoopdata/hdfs/test1.txt
/hadoopdata/deviation-out
18/06/07 23:03:40 WARN util.NativeCodeLoader: Unable to load native-
hadoop library for your platform... using builtin-java classes where
applicable
18/06/07 23:03:41 INFO client.RMProxy: Connecting to ResourceManager at
localhost/127.0.0.1:8032
18/06/07 23:03:43 INFO input.FileInputFormat: Total input paths to
process : 1
18/06/07 23:03:43 INFO mapreduce.JobSubmitter: number of splits:1
18/06/07 23:03:43 INFO mapreduce.JobSubmitter: Submitting tokens for job:
job_1528385216097_0005
18/06/07 23:03:44 INFO impl.YarnClientImpl: Submitted application
application_1528385216097_0005
18/06/07 23:03:44 INFO mapreduce.Job: The url to track the job:
http://localhost:8088/proxy/application_1528385216097_0005/
18/06/07 23:03:44 INFO mapreduce.Job: Running job: job_1528385216097_0005
18/06/07 23:03:53 INFO mapreduce.Job: Job job_1528385216097_0005 running
in uber mode : false
18/06/07 23:03:53 INFO mapreduce.Job:  map 0% reduce 0%
18/06/07 23:04:00 INFO mapreduce.Job:  map 100% reduce 0%
18/06/07 23:04:11 INFO mapreduce.Job:  map 100% reduce 100%
18/06/07 23:04:15 INFO mapreduce.Job: Job job_1528385216097_0005
completed successfully
18/06/07 23:04:15 INFO mapreduce.Job: Counters: 49
      File System Counters
            FILE: Number of bytes read=56
            FILE: Number of bytes written=215643
            FILE: Number of read operations=0
            FILE: Number of large read operations=0
            FILE: Number of write operations=0
            HDFS: Number of bytes read=208
```

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                HDFS: Number of bytes written=30
                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)=4722
                Total time spent by all reduces in occupied slots (ms)=6622
                Total time spent by all map tasks (ms)=4722
                Total time spent by all reduce tasks (ms)=6622
                Total vcore-milliseconds taken by all map tasks=4722
                Total vcore-milliseconds taken by all reduce tasks=6622
                Total megabyte-milliseconds taken by all map tasks=4835328
                Total megabyte-milliseconds taken by all reduce tasks=6780928
        Map-Reduce Framework
                Map input records=4
                Map output records=57
                Map output bytes=836
                Map output materialized bytes=56
                Input split bytes=112
                Combine input records=57
                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)=132
                CPU time spent (ms)=1570
                Physical memory (bytes) snapshot=287899648
                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=96
        File Output Format Counters
                Bytes Written=30
The standard deviation is: 2.0
You have new mail in /var/spool/mail/acadgild


// output for wordstandarddeviation program
```

```
[acadgild@localhost ~]$ hdfs dfs -cat /hadoopdata/deviation-out/part-r-
00000
18/06/07 23:15:00 WARN util.NativeCodeLoader: Unable to load native-
hadoop library for your platform... using builtin-java classes where
applicable
count 19
length      76
square      380
[acadgild@localhost ~]$

[acadgild@localhost mapreduce]$
```