```
[acadgild@localhost ~]$ pwd
/home/acadgild
[acadgild@localhost ~]$ ls
Desktop     eclipse-jee-neon-M3-linux-gtk-x86_64.tar.gz   Pictures    workspace
Documents   hadoop                                        Public
Downloads   metastore_db                                  Templates
eclipse     Music                                         Videos
[acadgild@localhost ~]$ cd Downloads
[acadgild@localhost Downloads]$ ls
apache-hive-0.14.0-bin.tar.gz.part    wordcount.zip
hadoop-mapreduce-examples-2.9.0.jar
[acadgild@localhost Downloads]$ cp /hadoop-mapreduce-examples-2.9.0.jar /home/ac
adgild/Desktop
cp: cannot stat `/hadoop-mapreduce-examples-2.9.0.jar': No such file or director
y
[acadgild@localhost Downloads]$ cp hadoop-mapreduce-examples-2.9.0.jar /home/aca
dgild/Desktop
[acadgild@localhost Downloads]$ ls
apache-hive-0.14.0-bin.tar.gz.part    wordcount.zip
hadoop-mapreduce-examples-2.9.0.jar
[acadgild@localhost Downloads]$ cp wordcount.zip /home/acadgild/Desktop
[acadgild@localhost Downloads]$ pwd
/home/acadgild/Downloads
[acadgild@localhost Downloads]$ cd /home/acadgild/Desktop
[acadgild@localhost Desktop]$ ls
gnome-terminal.desktop              new file
hadoop-mapreduce-examples-2.9.0.jar  wordcount.zip
[acadgild@localhost Desktop]$ clear
```

```
[acadgild@localhost Desktop]$ cat file1.txt
cat: file1.txt: No such file or directory
[acadgild@localhost Desktop]$ cat > file1.txt
A B C
C A B
B B A
B C A
A C C
^C
```

```
[acadgild@localhost Desktop]$ start-all.sh
This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh
18/03/13 14:53:11 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Starting namenodes on [localhost]
localhost: starting namenode, logging to /usr/local/hadoop-2.6.0/logs/hadoop-aca
dgild-namenode-localhost.localdomain.out
localhost: starting datanode, logging to /usr/local/hadoop-2.6.0/logs/hadoop-aca
dgild-datanode-localhost.localdomain.out
Starting secondary namenodes [0.0.0.0]
0.0.0.0: starting secondarynamenode, logging to /usr/local/hadoop-2.6.0/logs/had
oop-acadgild-secondarynamenode-localhost.localdomain.out
18/03/13 14:53:30 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
starting yarn daemons
starting resourcemanager, logging to /usr/local/hadoop-2.6.0/logs/yarn-acadgild-
resourcemanager-localhost.localdomain.out
localhost: starting nodemanager, logging to /usr/local/hadoop-2.6.0/logs/yarn-ac
adgild-nodemanager-localhost.localdomain.out
[acadgild@localhost Desktop]$ clear
```

```
[acadgild@localhost Desktop]$ ls
file1.txt                    hadoop-mapreduce-examples-2.9.0.jar  wordcount.zip
gnome-terminal.desktop  new file
[acadgild@localhost Desktop]$ hadoop fs -put file1.txt
18/03/13 14:53:56 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
[acadgild@localhost Desktop]$ hadoop fs put file.txt
put: Unknown command
Did you mean -put?  This command begins with a dash.
[acadgild@localhost Desktop]$ hadoop fs -ls
18/03/13 14:54:33 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Found 3 items
-rw-r--r--   1 acadgild supergroup         31 2018-03-13 14:53 file1.txt
drwxr-xr-x   - acadgild supergroup          0 2015-11-17 02:03 oozie-acad
drwxr-xr-x   - acadgild supergroup          0 2015-11-17 02:00 share

[acadgild@localhost Desktop]$ ls
file1.txt                    hadoop-mapreduce-examples-2.9.0.jar  wordcount.zip
gnome-terminal.desktop  new file
[acadgild@localhost Desktop]$ hadoop fs -put file1.txt
18/03/13 14:54:57 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
put: `file1.txt': File exists
[acadgild@localhost Desktop]$ hadoop fs -cat file1.txt
18/03/13 14:55:16 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
A B C
C A B
B B A
B C A
A C C
```

Word Median

```
[acadgild@localhost Desktop]$ hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordmedian file1.txt wmedian
18/03/13 15:10:41 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
18/03/13 15:10:41 INFO client.RMProxy: Connecting to ResourceManager at /0.0.0.0:8032
18/03/13 15:10:42 WARN mapreduce.JobSubmitter: Hadoop command-line option parsing not performed. Implement the Tool interface
 and execute your application with ToolRunner to remedy this.
18/03/13 15:10:43 INFO input.FileInputFormat: Total input paths to process : 1
18/03/13 15:10:43 INFO mapreduce.JobSubmitter: number of splits:1
18/03/13 15:10:43 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1520933014970_0002
18/03/13 15:10:43 INFO impl.YarnClientImpl: Submitted application application_1520933014970_0002
18/03/13 15:10:43 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1520933014970_0002/
18/03/13 15:10:43 INFO mapreduce.Job: Running job: job_1520933014970_0002
18/03/13 15:10:51 INFO mapreduce.Job: Job job_1520933014970_0002 running in uber mode : false
18/03/13 15:10:51 INFO mapreduce.Job:  map 0% reduce 0%
18/03/13 15:10:58 INFO mapreduce.Job:  map 100% reduce 0%
18/03/13 15:11:05 INFO mapreduce.Job:  map 100% reduce 100%
18/03/13 15:11:05 INFO mapreduce.Job: Job job_1520933014970_0002 completed successfully
18/03/13 15:11:05 INFO mapreduce.Job: Counters: 49
```

```
        File System Counters
                FILE: Number of bytes read=16
                FILE: Number of bytes written=211897
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=141
                HDFS: Number of bytes written=5
                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)=3888
                Total time spent by all reduces in occupied slots (ms)=3962
                Total time spent by all map tasks (ms)=3888
                Total time spent by all reduce tasks (ms)=3962
                Total vcore-seconds taken by all map tasks=3888
                Total vcore-seconds taken by all reduce tasks=3962
                Total megabyte-seconds taken by all map tasks=3981312
                Total megabyte-seconds taken by all reduce tasks=4057088
```

```
        Map-Reduce Framework
                Map input records=5
                Map output records=15
                Map output bytes=120
                Map output materialized bytes=16
                Input split bytes=110
                Combine input records=15
                Combine output records=1
                Reduce input groups=1
                Reduce shuffle bytes=16
                Reduce input records=1
                Reduce output records=1
                Spilled Records=2
                Shuffled Maps =1
                Failed Shuffles=0
                Merged Map outputs=1
                GC time elapsed (ms)=125
                CPU time spent (ms)=1060
                Physical memory (bytes) snapshot=294162432
                Virtual memory (bytes) snapshot=4113768448
                Total committed heap usage (bytes)=165810176

        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=31
        File Output Format Counters
                Bytes Written=5
The median is: 1
```

```
[acadgild@localhost Desktop]$ hadoop fs -ls wmedian
18/03/13 15:14:28 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Found 2 items
-rw-r--r--   1 acadgild supergroup          0 2018-03-13 15:11 wmedian/_SUCCESS
-rw-r--r--   1 acadgild supergroup          5 2018-03-13 15:11 wmedian/part-r-00
000
```

```
[acadgild@localhost Desktop]$ hadoop fs -cat wmedian/part-r-00000
18/03/13 15:15:27 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
1       15
[acadgild@localhost Desktop]$ █
```

Wordmean

```
[acadgild@localhost Desktop]$ hadoop jar hadoop-mapreduce-examples-2.9.0.jar wor
dmean file1.txt wmean
18/03/13 15:16:46 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
18/03/13 15:16:47 INFO client.RMProxy: Connecting to ResourceManager at /0.0.0.0
:8032
18/03/13 15:16:48 INFO input.FileInputFormat: Total input paths to process : 1
18/03/13 15:16:48 INFO mapreduce.JobSubmitter: number of splits:1
18/03/13 15:16:48 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_15
20933014970_0003
18/03/13 15:16:49 INFO impl.YarnClientImpl: Submitted application application_15
20933014970_0003
18/03/13 15:16:49 INFO mapreduce.Job: The url to track the job: http://localhost
:8088/proxy/application_1520933014970_0003/
18/03/13 15:16:49 INFO mapreduce.Job: Running job: job_1520933014970_0003
18/03/13 15:16:57 INFO mapreduce.Job: Job job_1520933014970_0003 running in uber
 mode : false
18/03/13 15:16:57 INFO mapreduce.Job:  map 0% reduce 0%
18/03/13 15:17:03 INFO mapreduce.Job:  map 100% reduce 0%
18/03/13 15:17:10 INFO mapreduce.Job:  map 100% reduce 100%
18/03/13 15:17:10 INFO mapreduce.Job: Job job_1520933014970_0003 completed succe
ssfully
```

```
[acadgild@localhost Desktop]$ hadoop fs -ls wmean
18/03/13 15:23:00 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Found 2 items
-rw-r--r--   1 acadgild supergroup          0 2018-03-13 15:17 wmean/_SUCCESS
-rw-r--r--   1 acadgild supergroup         19 2018-03-13 15:17 wmean/part-r-0000
0
```

```
[acadgild@localhost Desktop]$ hadoop fs -cat wmean/part-r-00000
18/03/13 15:23:45 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
count   15
length  15
```

```
18/03/13 15:17:10 INFO mapreduce.Job: Counters: 49
        File System Counters
                FILE: Number of bytes read=39
                FILE: Number of bytes written=212203
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=141
                HDFS: Number of bytes written=19
                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)=4032
                Total time spent by all reduces in occupied slots (ms)=3892
                Total time spent by all map tasks (ms)=4032
                Total time spent by all reduce tasks (ms)=3892
                Total vcore-seconds taken by all map tasks=4032
                Total vcore-seconds taken by all reduce tasks=3892
                Total megabyte-seconds taken by all map tasks=4128768
                Total megabyte-seconds taken by all reduce tasks=3985408
```

```
        Map-Reduce Framework
                Map input records=5
                Map output records=30
                Map output bytes=435
                Map output materialized bytes=39
                Input split bytes=110
                Combine input records=30
                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)=125
                CPU time spent (ms)=1050
                Physical memory (bytes) snapshot=296333312
                Virtual memory (bytes) snapshot=4113768448
                Total committed heap usage (bytes)=165810176

        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=31
        File Output Format Counters
                Bytes Written=19
The mean is: 1.0

[acadgild@localhost Desktop]$ hadoop fs -cat wmean/part-r-00000
18/03/13 15:23:45 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
count   15
length  15
```

Word Standard Deviation

```
[acadgild@localhost Desktop]$ hadoop jar hadoop-mapreduce-examples-2.9.0.jar wor
dstandarddeviation file1.txt wstd
18/03/13 15:26:05 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
18/03/13 15:26:06 INFO client.RMProxy: Connecting to ResourceManager at /0.0.0.0
:8032
18/03/13 15:26:07 INFO input.FileInputFormat: Total input paths to process : 1
18/03/13 15:26:07 INFO mapreduce.JobSubmitter: number of splits:1
18/03/13 15:26:07 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_15
20933014970_0004
18/03/13 15:26:07 INFO impl.YarnClientImpl: Submitted application application_15
20933014970_0004
18/03/13 15:26:07 INFO mapreduce.Job: The url to track the job: http://localhost
:8088/proxy/application_1520933014970_0004/
18/03/13 15:26:07 INFO mapreduce.Job: Running job: job_1520933014970_0004
18/03/13 15:26:15 INFO mapreduce.Job: Job job_1520933014970_0004 running in uber
 mode : false
18/03/13 15:26:15 INFO mapreduce.Job:  map 0% reduce 0%
18/03/13 15:26:21 INFO mapreduce.Job:  map 100% reduce 0%
18/03/13 15:26:27 INFO mapreduce.Job:  map 100% reduce 100%
18/03/13 15:26:27 INFO mapreduce.Job: Job job_1520933014970_0004 completed succe
ssfully

18/03/13 15:26:27 INFO mapreduce.Job: Counters: 49
        File System Counters
                FILE: Number of bytes read=56
                FILE: Number of bytes written=212395
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=141
                HDFS: Number of bytes written=29
                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)=3610
                Total time spent by all reduces in occupied slots (ms)=3883
                Total time spent by all map tasks (ms)=3610
                Total time spent by all reduce tasks (ms)=3883
                Total vcore-seconds taken by all map tasks=3610
                Total vcore-seconds taken by all reduce tasks=3883
                Total megabyte-seconds taken by all map tasks=3696640
                Total megabyte-seconds taken by all reduce tasks=3976192
```

```
        Map-Reduce Framework
                Map input records=5
                Map output records=45
                Map output bytes=660
                Map output materialized bytes=56
                Input split bytes=110
                Combine input records=45
                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)=137
                CPU time spent (ms)=950
                Physical memory (bytes) snapshot=295899136
                Virtual memory (bytes) snapshot=4113764352
                Total committed heap usage (bytes)=165810176

        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=31
        File Output Format Counters
                Bytes Written=29
The standard deviation is: 0.0

[acadgild@localhost Desktop]$ hadoop fs -ls wstd
18/03/13 15:31:08 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Found 2 items
-rw-r--r--   1 acadgild supergroup          0 2018-03-13 15:26 wstd/_SUCCESS
-rw-r--r--   1 acadgild supergroup         29 2018-03-13 15:26 wstd/part-r-00000
[acadgild@localhost Desktop]$ hadoop fs -cat wstd/part-r-00000
18/03/13 15:31:34 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
count   15
length  15
square  15
[acadgild@localhost Desktop]$ ▮
```