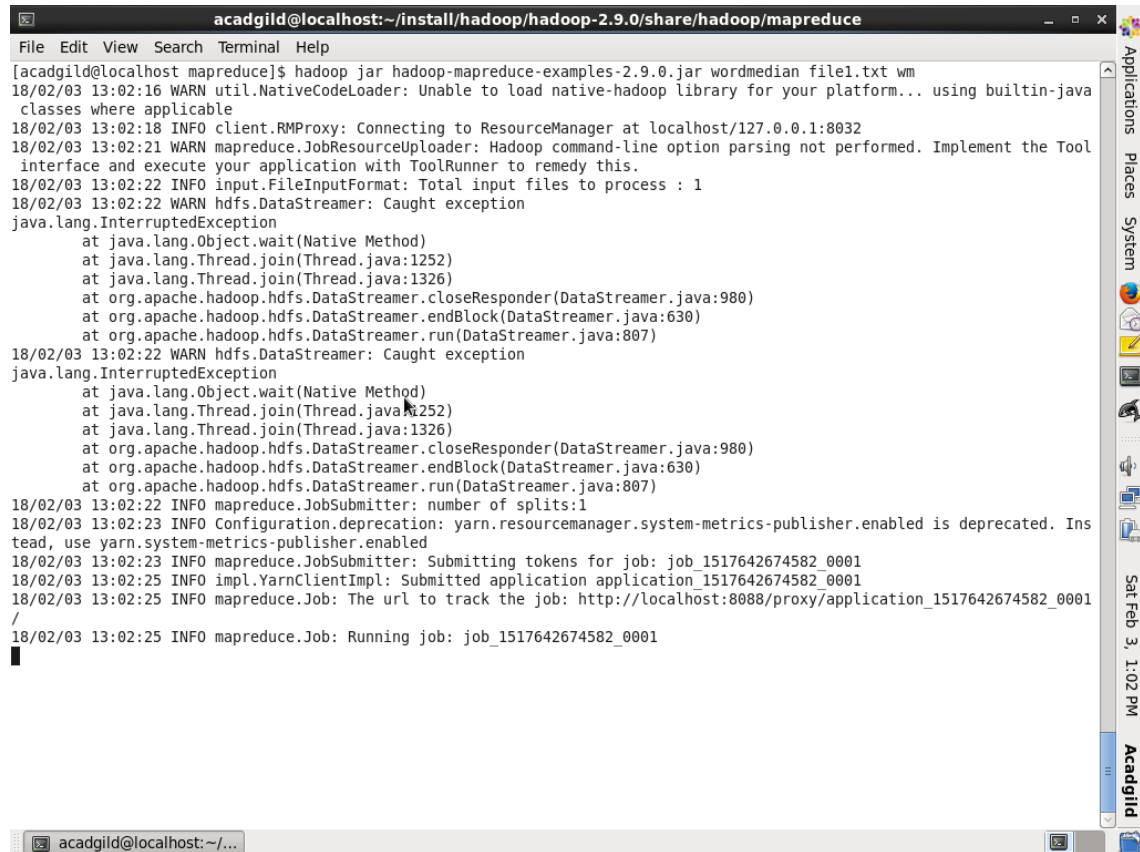


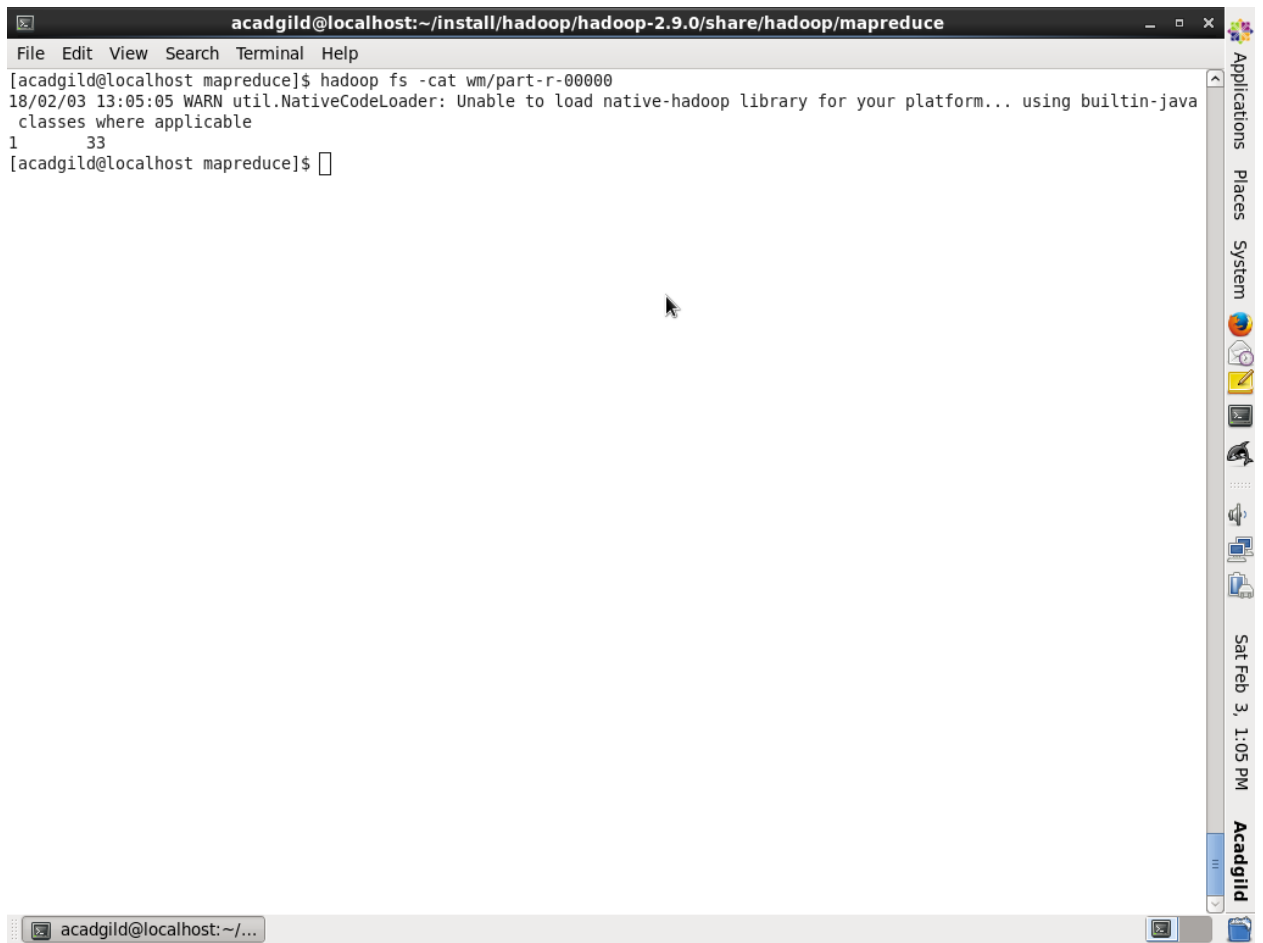
1. WordMedian

Input Command: `hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordmedian file1.txt wm`



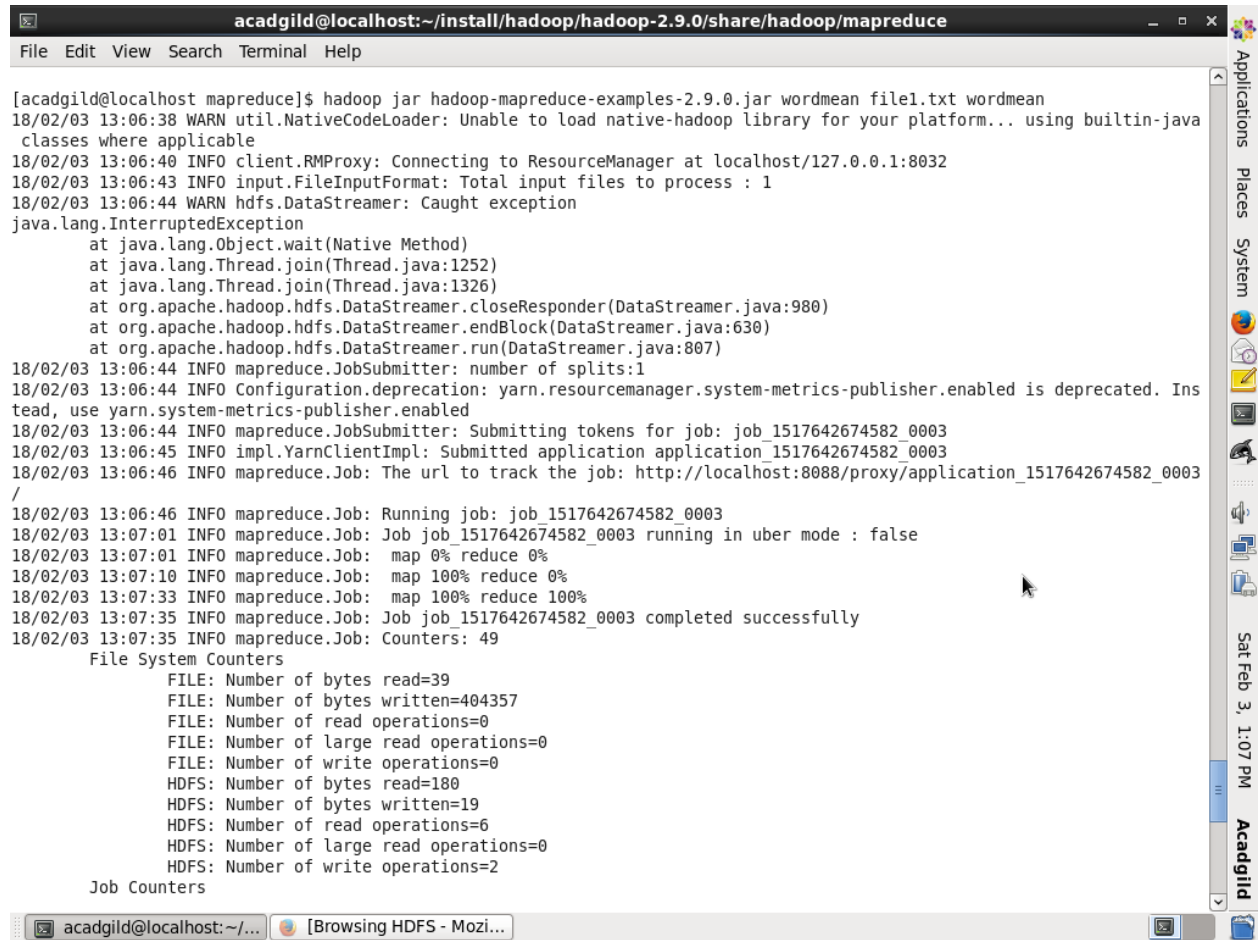
```
acadgild@localhost:~/install/hadoop/hadoop-2.9.0/share/hadoop/mapreduce
File Edit View Search Terminal Help
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordmedian file1.txt wm
18/02/03 13:02:16 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
18/02/03 13:02:18 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
18/02/03 13:02:21 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool
interface and execute your application with ToolRunner to remedy this.
18/02/03 13:02:22 INFO input.FileInputFormat: Total input files to process : 1
18/02/03 13:02:22 WARN hdfs.DataStreamer: Caught exception
java.lang.InterruptedException
    at java.lang.Object.wait(Native Method)
    at java.lang.Thread.join(Thread.java:1252)
    at java.lang.Thread.join(Thread.java:1326)
    at org.apache.hadoop.hdfs.DataStreamer.closeResponder(DataStreamer.java:980)
    at org.apache.hadoop.hdfs.DataStreamer.endBlock(DataStreamer.java:630)
    at org.apache.hadoop.hdfs.DataStreamer.run(DataStreamer.java:807)
18/02/03 13:02:22 WARN hdfs.DataStreamer: Caught exception
java.lang.InterruptedException
    at java.lang.Object.wait(Native Method)
    at java.lang.Thread.join(Thread.java:1252)
    at java.lang.Thread.join(Thread.java:1326)
    at org.apache.hadoop.hdfs.DataStreamer.closeResponder(DataStreamer.java:980)
    at org.apache.hadoop.hdfs.DataStreamer.endBlock(DataStreamer.java:630)
    at org.apache.hadoop.hdfs.DataStreamer.run(DataStreamer.java:807)
18/02/03 13:02:22 INFO mapreduce.JobSubmitter: number of splits:1
18/02/03 13:02:23 INFO Configuration.deprecation: yarn.resourcemanager.system-metrics-publisher.enabled is deprecated. Ins
tead, use yarn.system-metrics-publisher.enabled
18/02/03 13:02:23 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1517642674582_0001
18/02/03 13:02:25 INFO impl.YarnClientImpl: Submitted application application_1517642674582_0001
18/02/03 13:02:25 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1517642674582_0001
/
18/02/03 13:02:25 INFO mapreduce.Job: Running job: job_1517642674582_0001
```

OutPut:



2. WordMean

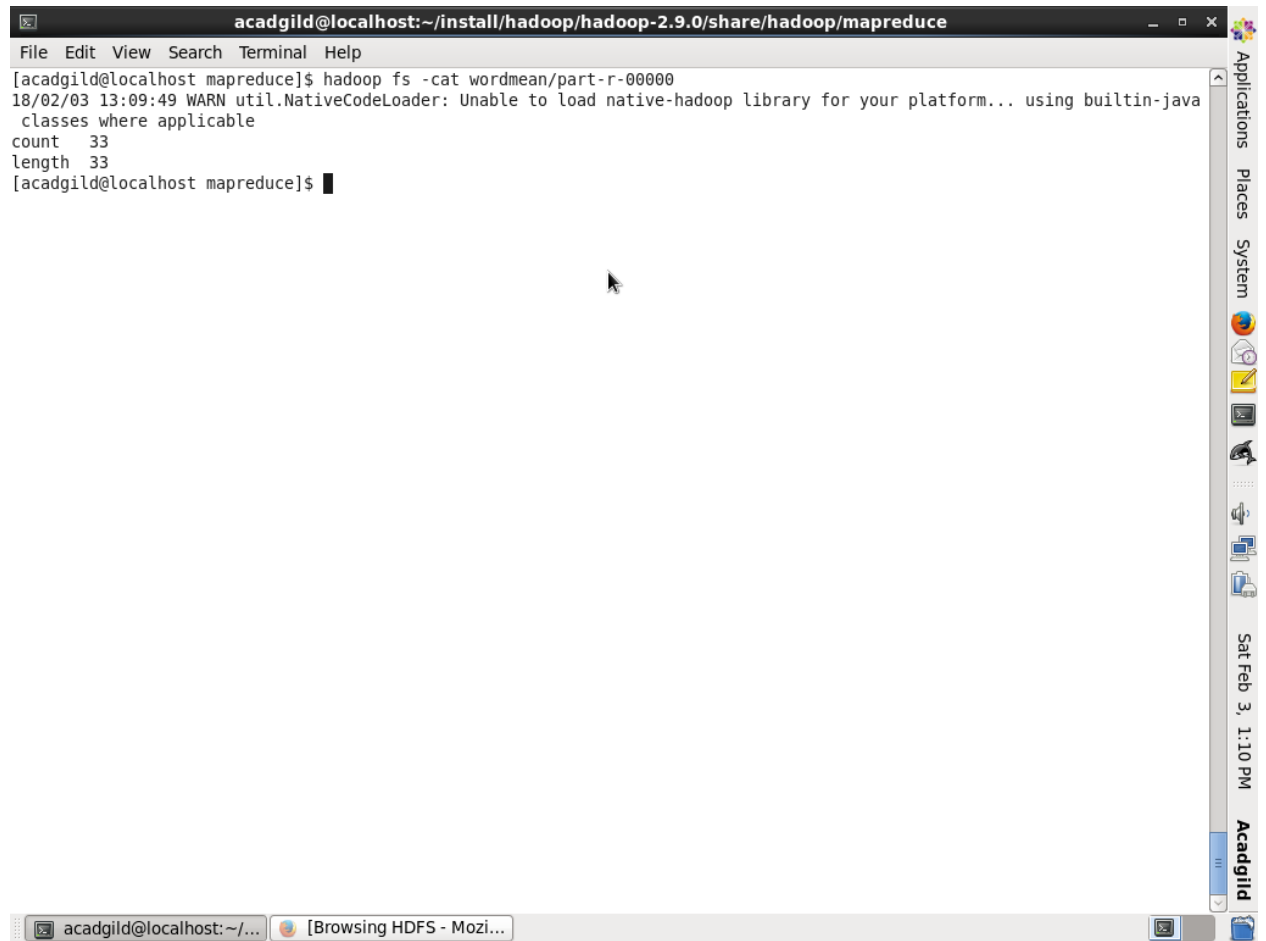
Input command: `hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordmean file1.txt wordmean`



```
acadgild@localhost:~/install/hadoop/hadoop-2.9.0/share/hadoop/mapreduce
File Edit View Search Terminal Help

[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordmean file1.txt wordmean
18/02/03 13:06:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
18/02/03 13:06:40 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
18/02/03 13:06:43 INFO input.FileInputFormat: Total input files to process : 1
18/02/03 13:06:44 WARN hdfs.DataStreamer: Caught exception
java.lang.InterruptedException
    at java.lang.Object.wait(Native Method)
    at java.lang.Thread.join(Thread.java:1252)
    at java.lang.Thread.join(Thread.java:1326)
    at org.apache.hadoop.hdfs.DataStreamer.closeResponder(DataStreamer.java:980)
    at org.apache.hadoop.hdfs.DataStreamer.endBlock(DataStreamer.java:630)
    at org.apache.hadoop.hdfs.DataStreamer.run(DataStreamer.java:807)
18/02/03 13:06:44 INFO mapreduce.JobSubmitter: number of splits:1
18/02/03 13:06:44 INFO Configuration.deprecation: yarn.resourcemanager.system-metrics-publisher.enabled is deprecated. Ins
tead, use yarn.system-metrics-publisher.enabled
18/02/03 13:06:44 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1517642674582_0003
18/02/03 13:06:45 INFO impl.YarnClientImpl: Submitted application application_1517642674582_0003
18/02/03 13:06:46 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1517642674582_0003
/
18/02/03 13:06:46 INFO mapreduce.Job: Running job: job_1517642674582_0003
18/02/03 13:07:01 INFO mapreduce.Job: Job job_1517642674582_0003 running in uber mode : false
18/02/03 13:07:01 INFO mapreduce.Job:  map 0% reduce 0%
18/02/03 13:07:10 INFO mapreduce.Job:  map 100% reduce 0%
18/02/03 13:07:33 INFO mapreduce.Job:  map 100% reduce 100%
18/02/03 13:07:35 INFO mapreduce.Job: Job job_1517642674582_0003 completed successfully
18/02/03 13:07:35 INFO mapreduce.Job: Counters: 49
    File System Counters
        FILE: Number of bytes read=39
        FILE: Number of bytes written=404357
        FILE: Number of read operations=0
        FILE: Number of large read operations=0
        FILE: Number of write operations=0
        HDFS: Number of bytes read=180
        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
```

Output:



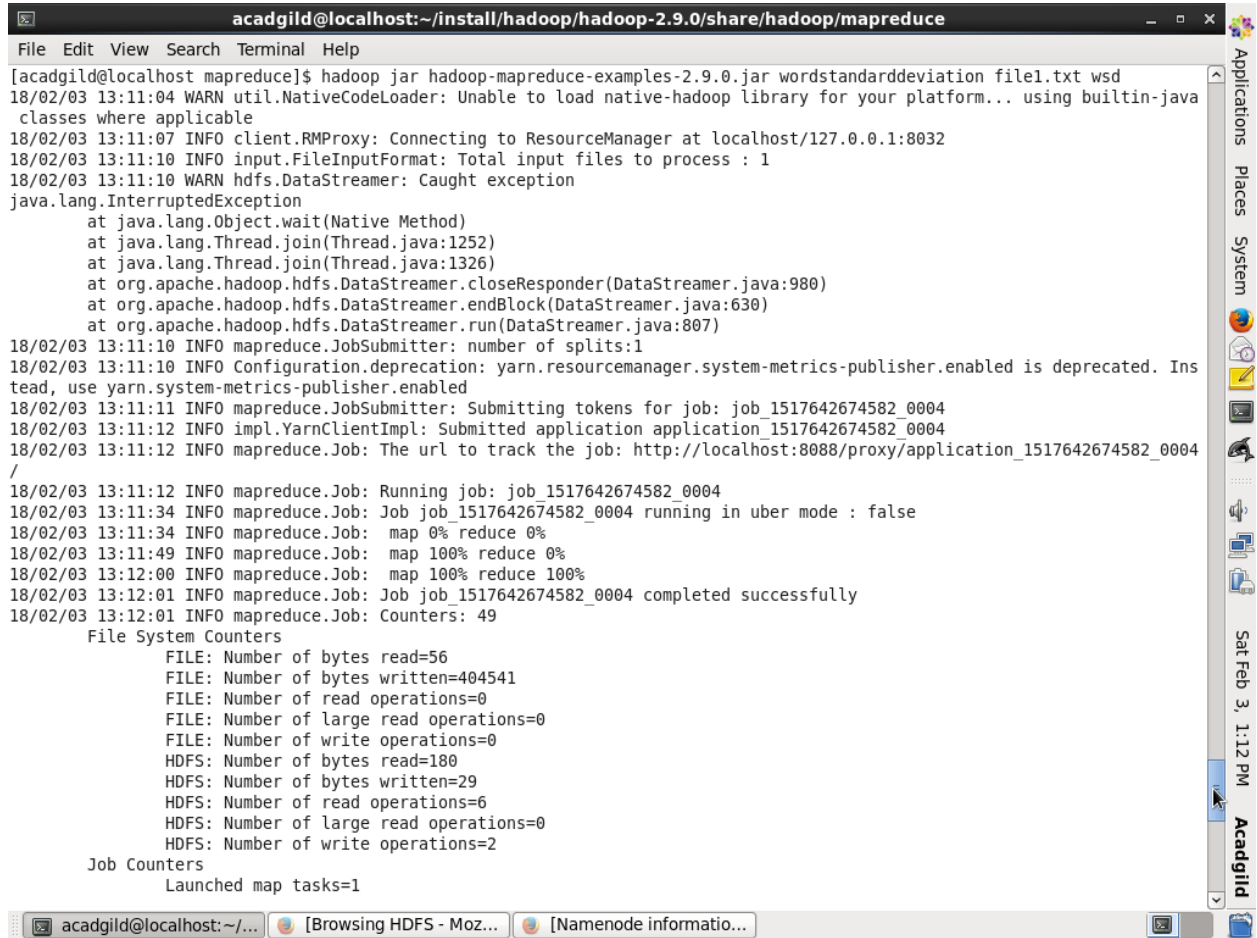
The screenshot shows a terminal window titled "acadgild@localhost: ~/install/hadoop/hadoop-2.9.0/share/hadoop/mapreduce". The terminal has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The command executed is "hadoop fs -cat wordmean/part-r-00000". The output is as follows:

```
[acadgild@localhost mapreduce]$ hadoop fs -cat wordmean/part-r-00000
18/02/03 13:09:49 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
count 33
length 33
[acadgild@localhost mapreduce]$
```

The terminal window is part of a desktop environment. On the right side, there is a vertical dock with icons for "Applications", "Places", "System", and a clock showing "Sat Feb 3, 1:10 PM". The user's name "Acadgild" is visible at the bottom right. At the bottom of the screen, there is a taskbar with two open windows: "acadgild@localhost: ~/..." and "[Browsing HDFS - Mozi...".

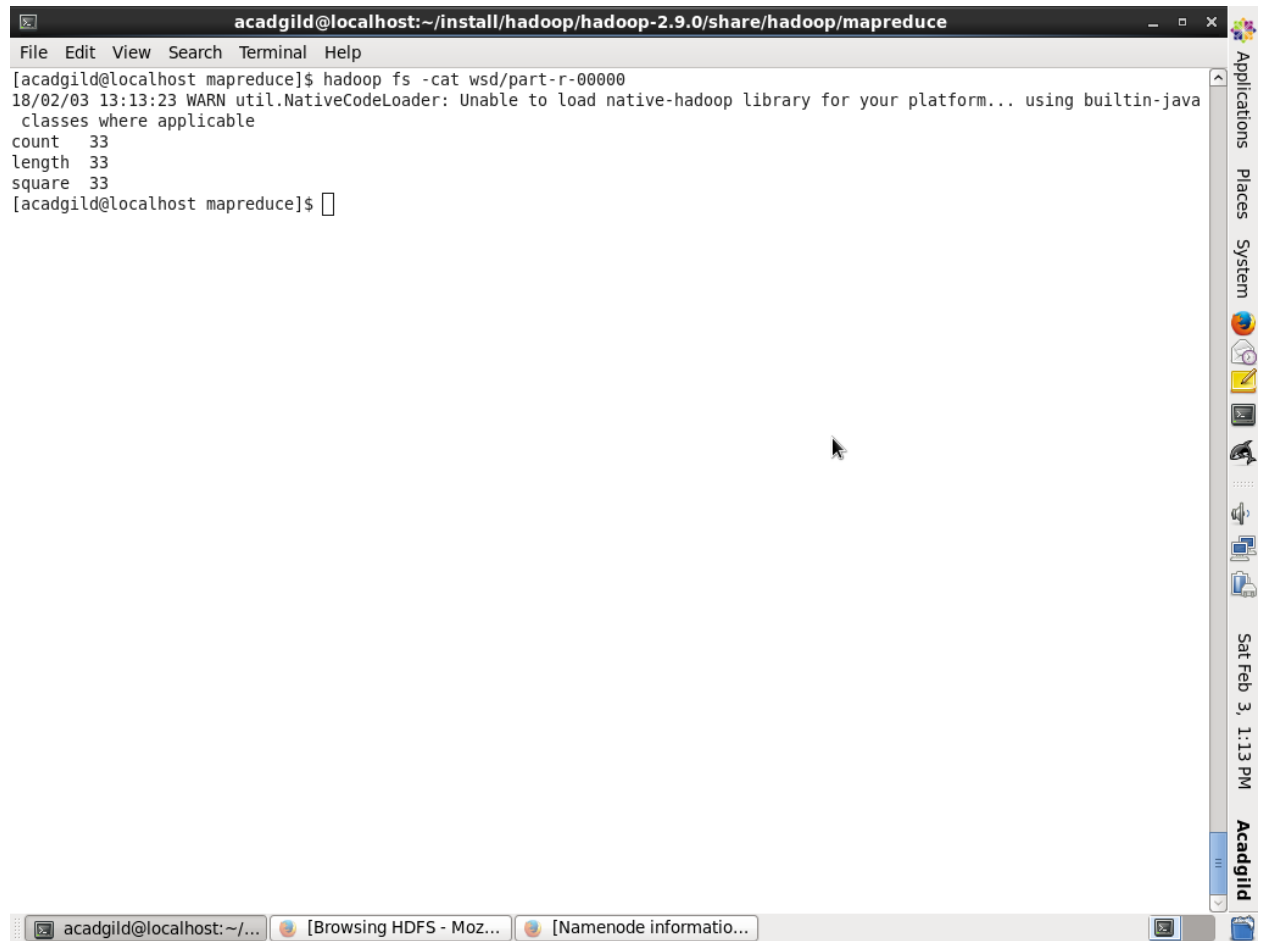
3. WordStandardDeviation:

Input command: `hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordstandarddeviation file1.txt wsd`



```
acadgild@localhost:~/install/hadoop/hadoop-2.9.0/share/hadoop/mapreduce
File Edit View Search Terminal Help
[acadgild@localhost mapreduce]$ hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordstandarddeviation file1.txt wsd
18/02/03 13:11:04 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
18/02/03 13:11:07 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
18/02/03 13:11:10 INFO input.FileInputFormat: Total input files to process : 1
18/02/03 13:11:10 WARN hdfs.DataStreamer: Caught exception
java.lang.InterruptedException
    at java.lang.Object.wait(Native Method)
    at java.lang.Thread.join(Thread.java:1252)
    at java.lang.Thread.join(Thread.java:1326)
    at org.apache.hadoop.hdfs.DataStreamer.closeResponder(DataStreamer.java:980)
    at org.apache.hadoop.hdfs.DataStreamer.endBlock(DataStreamer.java:630)
    at org.apache.hadoop.hdfs.DataStreamer.run(DataStreamer.java:807)
18/02/03 13:11:10 INFO mapreduce.JobSubmitter: number of splits:1
18/02/03 13:11:10 INFO Configuration.deprecation: yarn.resourcemanager.system-metrics-publisher.enabled is deprecated. Ins
tead, use yarn.system-metrics-publisher.enabled
18/02/03 13:11:11 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1517642674582_0004
18/02/03 13:11:12 INFO impl.YarnClientImpl: Submitted application application_1517642674582_0004
18/02/03 13:11:12 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1517642674582_0004
/
18/02/03 13:11:12 INFO mapreduce.Job: Running job: job_1517642674582_0004
18/02/03 13:11:34 INFO mapreduce.Job: Job job_1517642674582_0004 running in uber mode : false
18/02/03 13:11:34 INFO mapreduce.Job:  map 0% reduce 0%
18/02/03 13:11:49 INFO mapreduce.Job:  map 100% reduce 0%
18/02/03 13:12:00 INFO mapreduce.Job:  map 100% reduce 100%
18/02/03 13:12:01 INFO mapreduce.Job: Job job_1517642674582_0004 completed successfully
18/02/03 13:12:01 INFO mapreduce.Job: Counters: 49
    File System Counters
        FILE: Number of bytes read=56
        FILE: Number of bytes written=404541
        FILE: Number of read operations=0
        FILE: Number of large read operations=0
        FILE: Number of write operations=0
        HDFS: Number of bytes read=180
        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
```

Output:



The image shows a terminal window titled "acadgild@localhost: ~/install/hadoop/hadoop-2.9.0/share/hadoop/mapreduce". The terminal has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The command executed is "hadoop fs -cat wsd/part-r-00000". The output shows a warning message: "18/02/03 13:13:23 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable". This is followed by the file contents: "count 33", "length 33", and "square 33". The prompt returns to "acadgild@localhost mapreduce\$".

```
acadgild@localhost: ~/install/hadoop/hadoop-2.9.0/share/hadoop/mapreduce
File Edit View Search Terminal Help
[acadgild@localhost mapreduce]$ hadoop fs -cat wsd/part-r-00000
18/02/03 13:13:23 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
count 33
length 33
square 33
[acadgild@localhost mapreduce]$
```

The terminal window is part of a desktop environment. On the right side, there is a vertical dock with icons for Applications, Places, System, and a date/time display showing "Sat Feb 3, 1:13 PM" and the username "Acadgild". At the bottom, there is a taskbar with three open windows: "acadgild@localhost: ~/...", "[Browsing HDFS - Moz...", and "[Namenode informatio...".