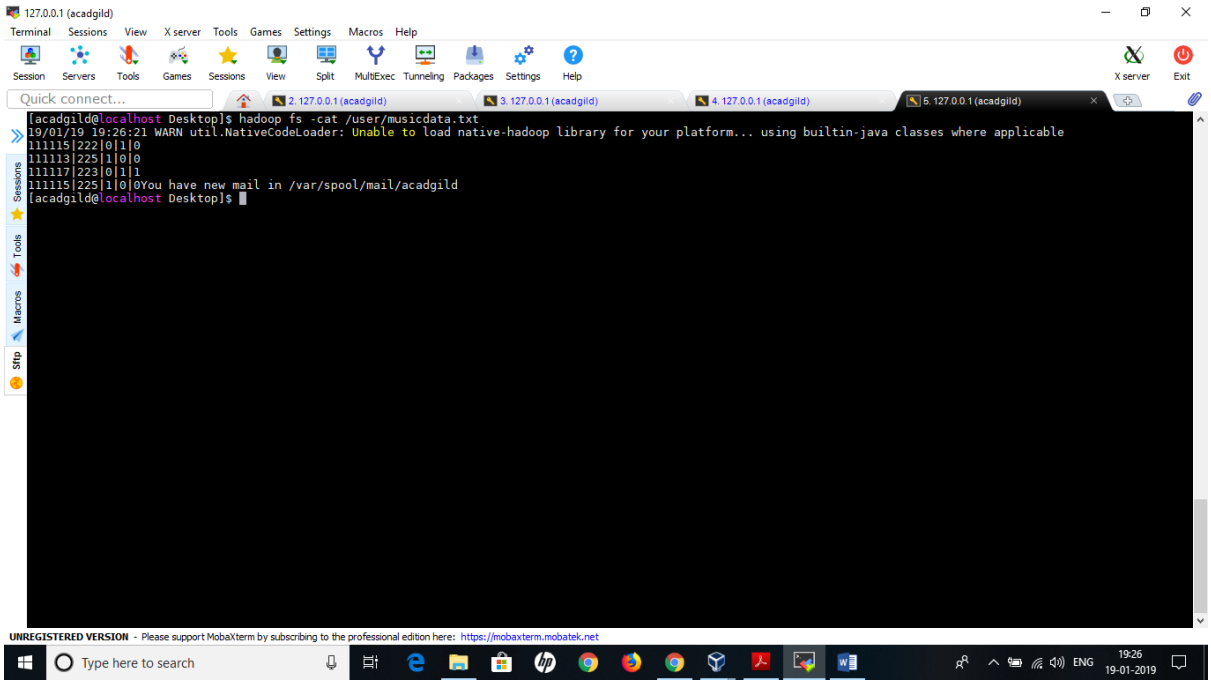
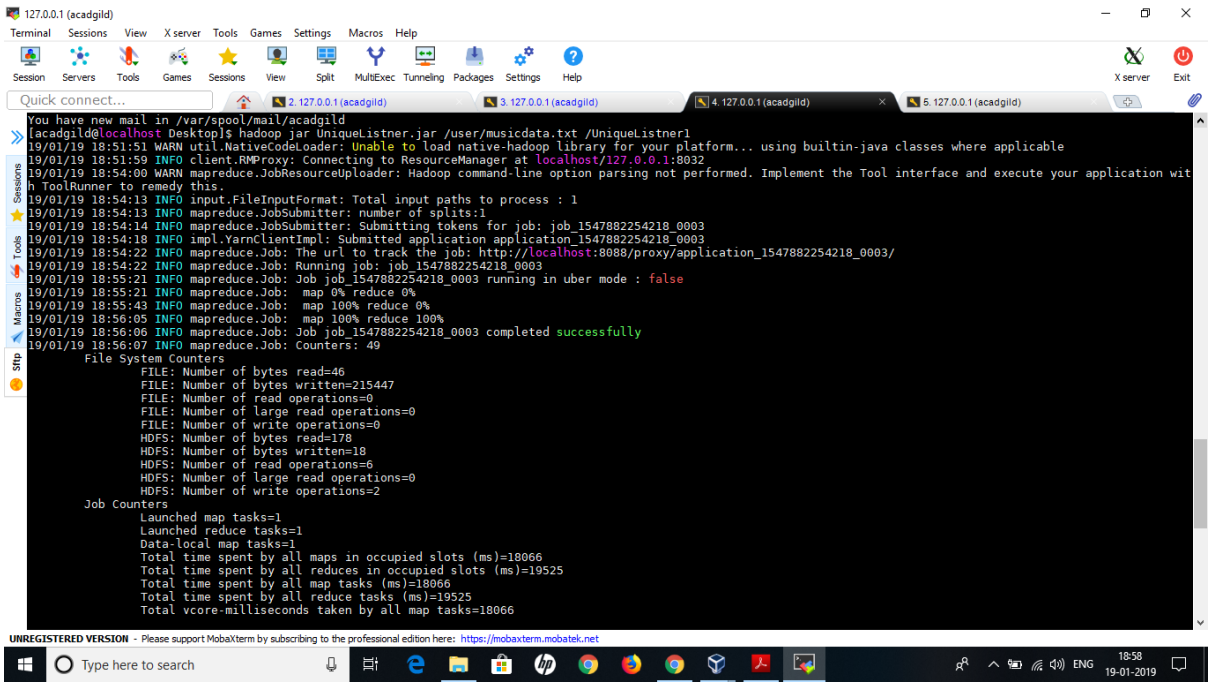
Assignment 5.1 Advance Map Reduce.

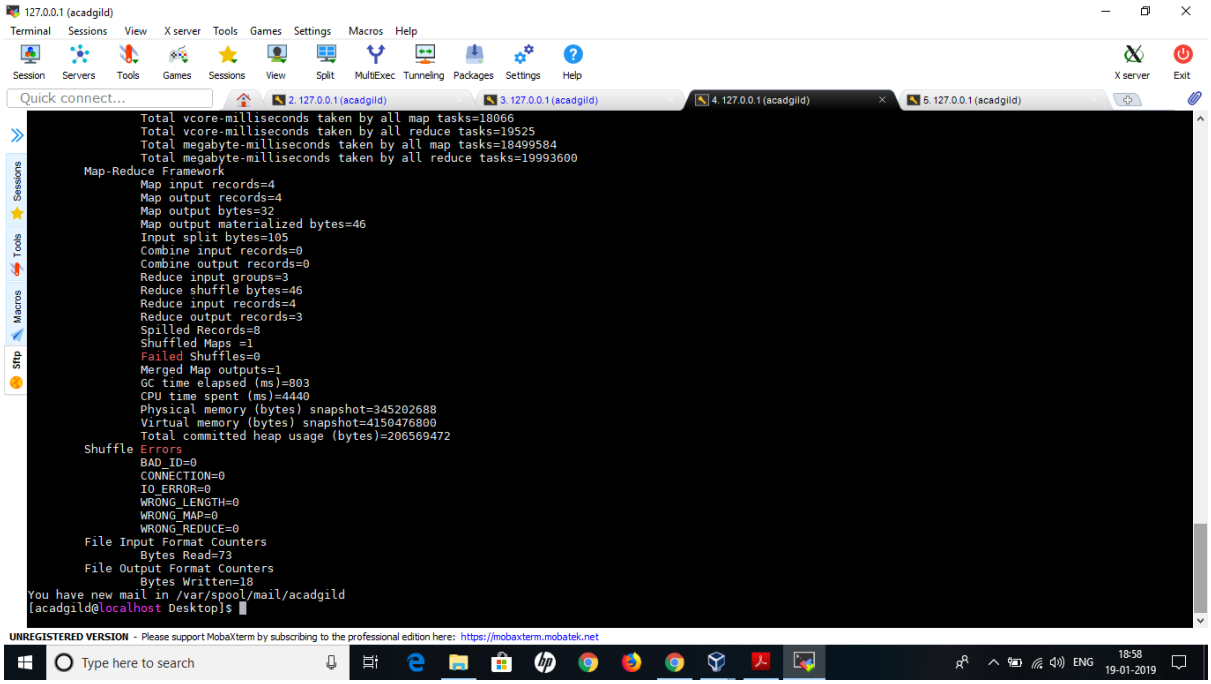
Input Data Set:

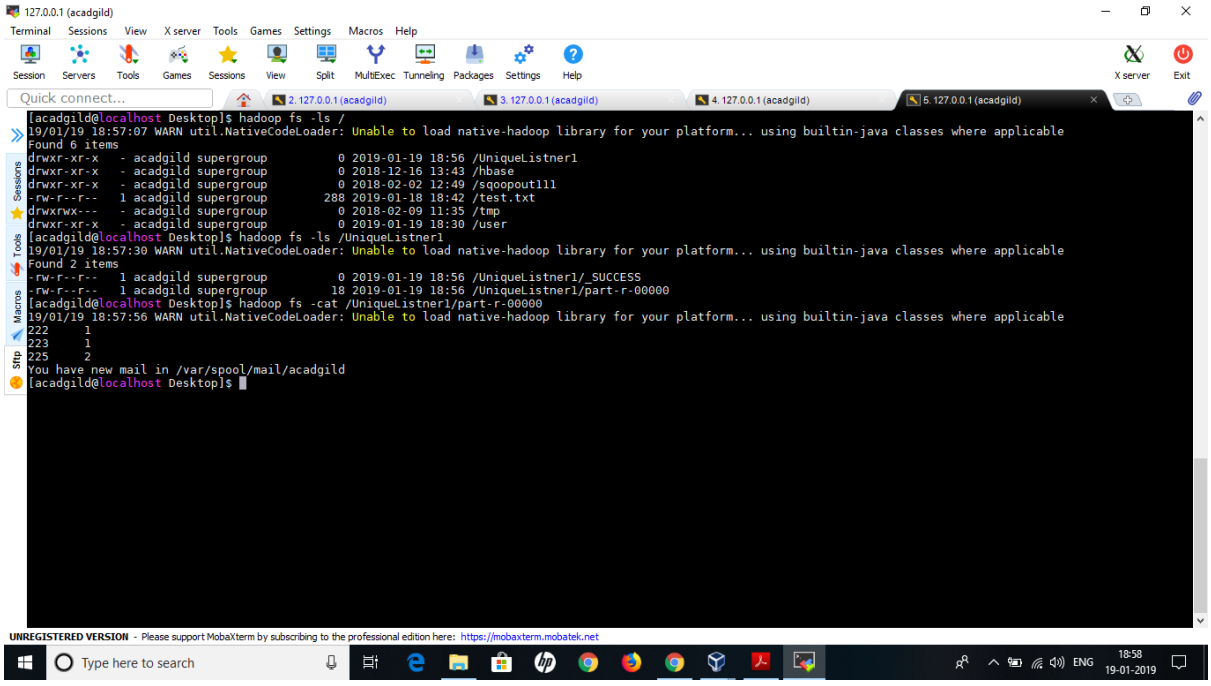


Task1: Find the number of unique listeners in the data set.

Solution:

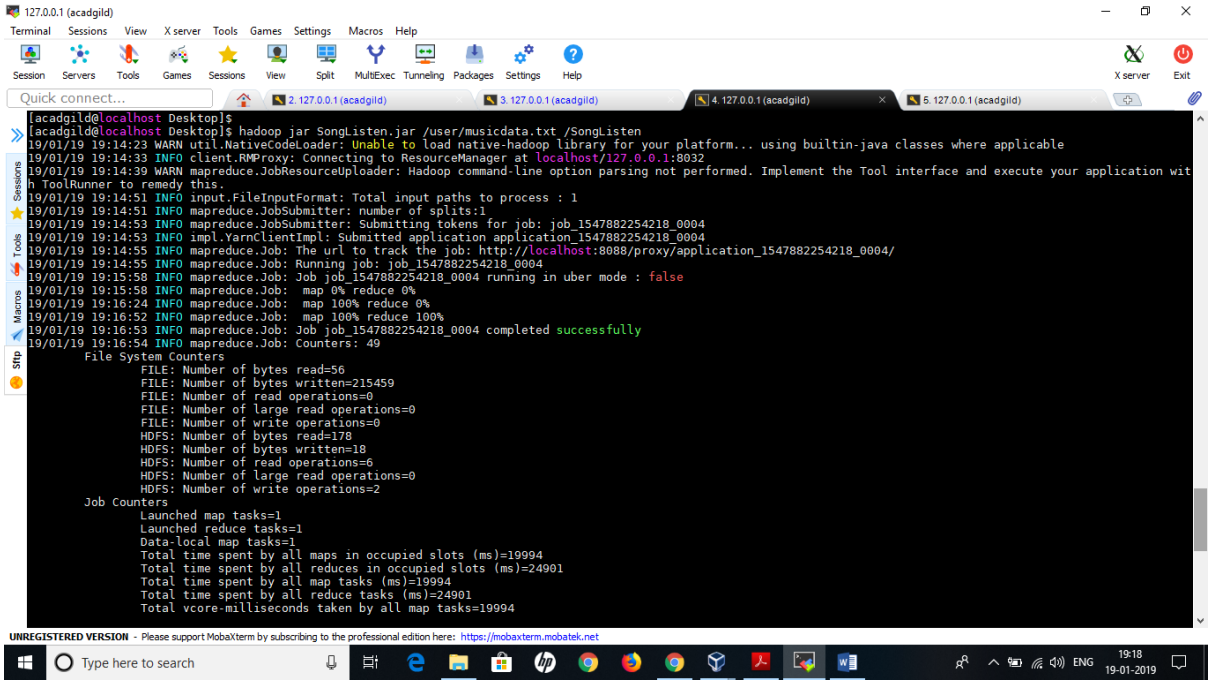






Task2: What are the number of times a song was heard fully.

Solution: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Terminal Sessions View X server Tools Games Settings Macros Help
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Quick connect...
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3. 127.0.0.1 (acadgild)
4. 127.0.0.1 (acadgild)
5. 127.0.0.1 (acadgild)
[acadgild@localhost Desktop]$
[acadgild@localhost Desktop]$ hadoop jar SongListen.jar /user/musicdata.txt /SongListen
19/01/19 19:14:23 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
19/01/19 19:14:33 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
19/01/19 19:14:39 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool interface and execute your application wit
h ToolRunner to remedy this.
19/01/19 19:14:51 INFO input.FileInputFormat: Total input paths to process : 1
19/01/19 19:14:51 INFO mapreduce.JobSubmitter: number of splits:1
19/01/19 19:14:53 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1547882254218_0004
19/01/19 19:14:53 INFO impl.YarnClientImpl: Submitted application application_1547882254218_0004
19/01/19 19:14:55 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1547882254218_0004/
19/01/19 19:14:55 INFO mapreduce.Job: Running job: job_1547882254218_0004
19/01/19 19:15:58 INFO mapreduce.Job: Job job_1547882254218_0004 running in uber mode : false
19/01/19 19:15:58 INFO mapreduce.Job: map 0% reduce 0%
19/01/19 19:16:24 INFO mapreduce.Job: map 100% reduce 0%
19/01/19 19:16:52 INFO mapreduce.Job: map 100% reduce 100%
19/01/19 19:16:53 INFO mapreduce.Job: Job job_1547882254218_0004 completed successfully
19/01/19 19:16:54 INFO mapreduce.Job: Counters: 49
File System Counters
FILE: Number of bytes read=56
FILE: Number of bytes written=215459
FILE: Number of read operations=0
FILE: Number of large read operations=0
FILE: Number of write operations=0
HDFS: Number of bytes read=178
HDFS: Number of bytes written=18
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)=19994
Total time spent by all reduces in occupied slots (ms)=24901
Total time spent by all map tasks (ms)=19994
Total time spent by all reduce tasks (ms)=24901
Total vcore-milliseconds taken by all map tasks=19994
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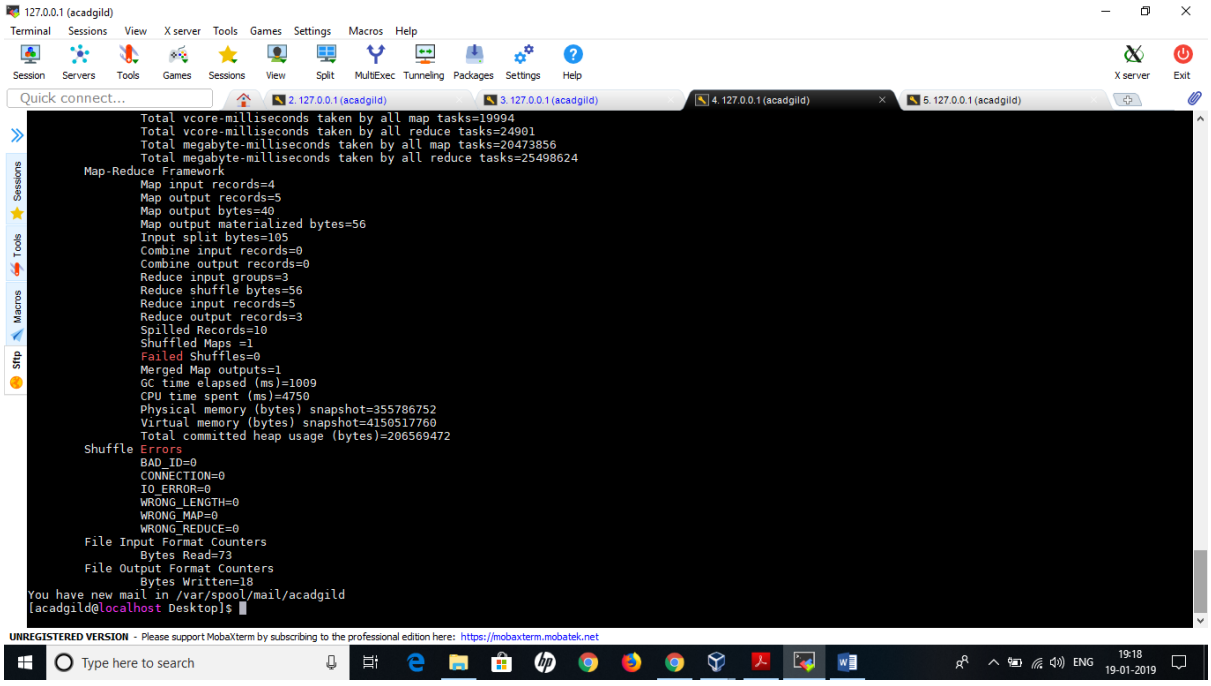
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3. 127.0.0.1 (acadgild)
4. 127.0.0.1 (acadgild)
5. 127.0.0.1 (acadgild)
Total vcore-milliseconds taken by all map tasks=19994
Total vcore-milliseconds taken by all reduce tasks=24901
Total megabyte-milliseconds taken by all map tasks=20473856
Total megabyte-milliseconds taken by all reduce tasks=25498624
Map-Reduce Framework
Map input records=4
Map output records=5
Map output bytes=40
Map output materialized bytes=56
Input split bytes=105
Combine input records=0
Combine output records=0
Reduce input groups=3
Reduce shuffle bytes=56
Reduce input records=5
Reduce output records=3
Spilled Records=10
Shuffled Maps =1
Failed Shuffles=0
Merged Map outputs=1
GC time elapsed (ms)=1009
CPU time spent (ms)=4750
Physical memory (bytes) snapshot=355786752
Virtual memory (bytes) snapshot=4150517760
Total committed heap usage (bytes)=206569472
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=73
File Output Format Counters
Bytes Written=18
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost Desktop]$
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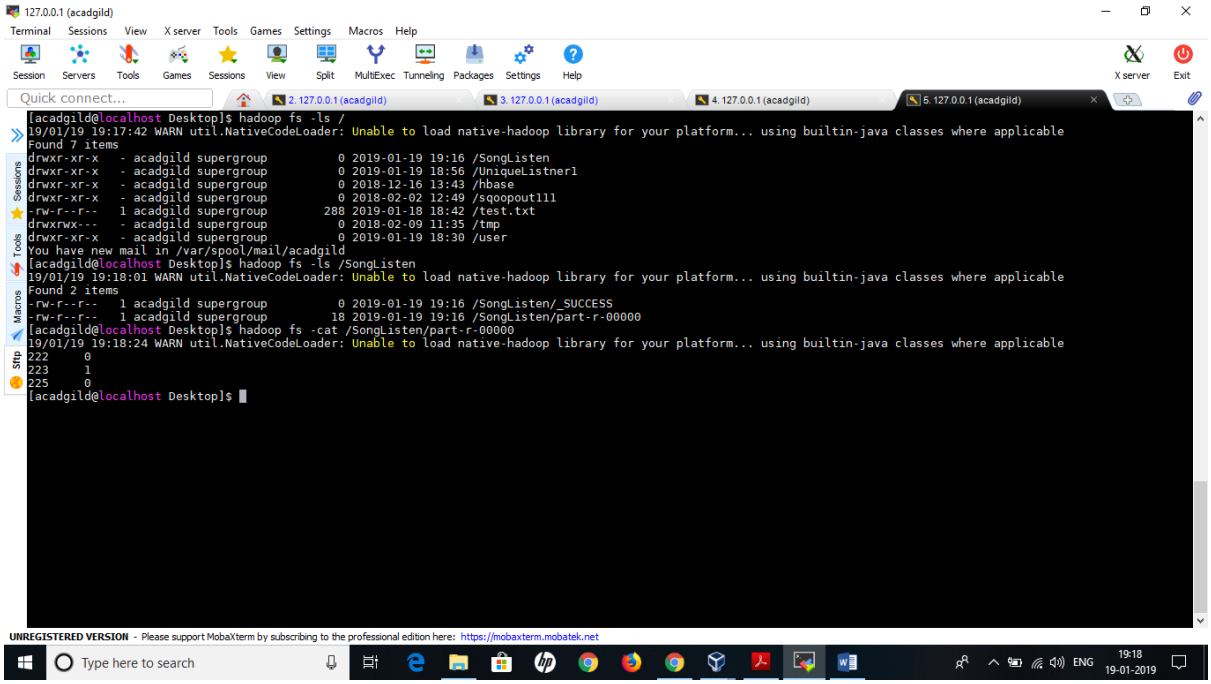
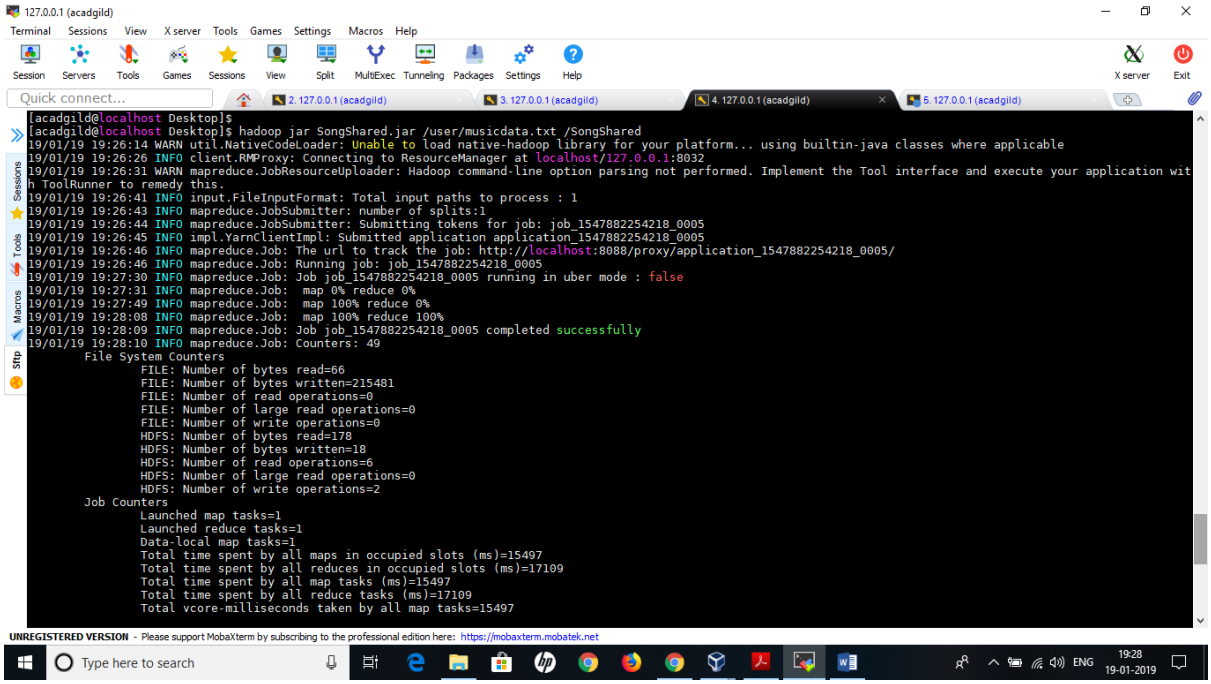
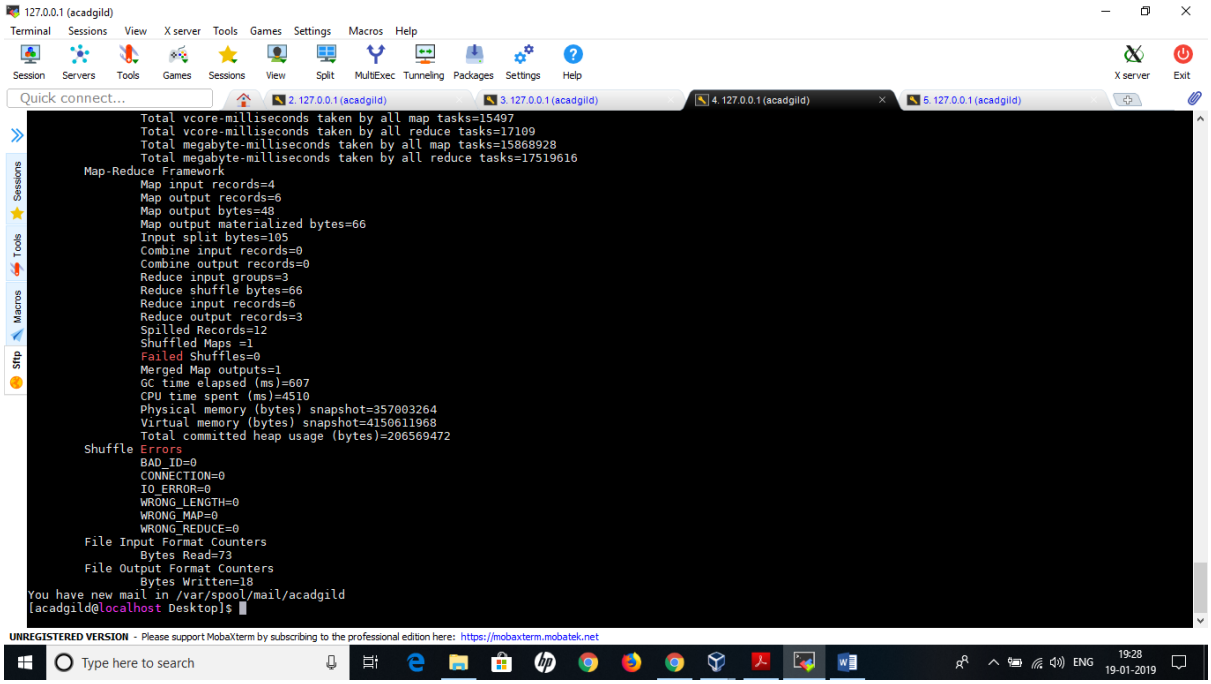


Task3: What are the number of times a song was shared.

Solution:

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3. 127.0.0.1 (acadgild)
4. 127.0.0.1 (acadgild)
5. 127.0.0.1 (acadgild)
Total vcore-milliseconds taken by all map tasks=15497
Total vcore-milliseconds taken by all reduce tasks=17109
Total megabyte-milliseconds taken by all map tasks=15868928
Total megabyte-milliseconds taken by all reduce tasks=17519616
Map-Reduce Framework
Map input records=4
Map output records=6
Map output bytes=48
Map output materialized bytes=66
Input split bytes=105
Combine input records=0
Combine output records=0
Reduce input groups=3
Reduce shuffle bytes=66
Reduce input records=6
Reduce output records=3
Spilled Records=12
Shuffled Maps =1
Failed Shuffles=0
Merged Map outputs=1
GC time elapsed (ms)=607
CPU time spent (ms)=4510
Physical memory (bytes) snapshot=357003264
Virtual memory (bytes) snapshot=4150611968
Total committed heap usage (bytes)=206569472
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=73
File Output Format Counters
Bytes Written=18
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost Desktop]$
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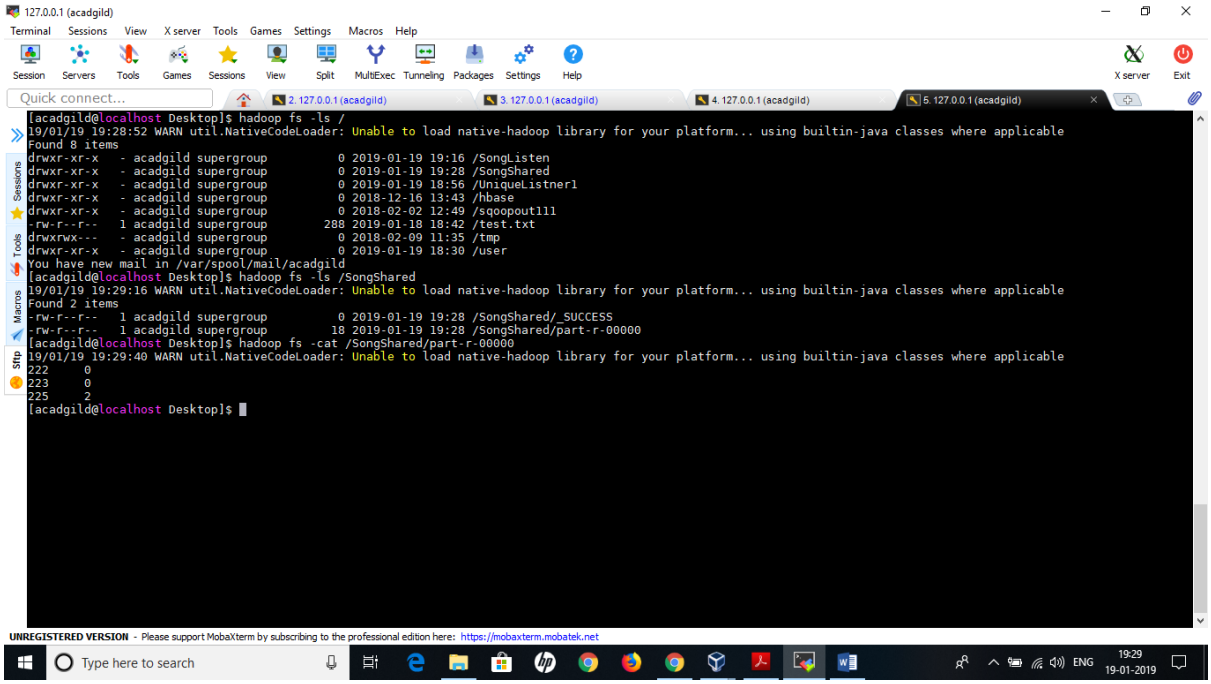
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Quick connect...
2. 127.0.0.1 (acadgild)
3. 127.0.0.1 (acadgild)
4. 127.0.0.1 (acadgild)
5. 127.0.0.1 (acadgild)
[acadgild@localhost Desktop]$ hadoop fs -ls /
19/01/19 19:28:52 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 8 items
drwxr-xr-x - acadgild supergroup 0 2019-01-19 19:16 /SongListen
drwxr-xr-x - acadgild supergroup 0 2019-01-19 19:28 /SongShared
drwxr-xr-x - acadgild supergroup 0 2019-01-19 18:56 /UniqueListner1
drwxr-xr-x - acadgild supergroup 0 2018-12-16 13:43 /hbase
drwxr-xr-x - acadgild supergroup 0 2018-02-02 12:49 /sqoopout111
-rw-r--r-- 1 acadgild supergroup 288 2019-01-18 18:42 /test.txt
drwxrwx--- - acadgild supergroup 0 2018-02-09 11:35 /tmp
drwxr-xr-x - acadgild supergroup 0 2019-01-19 18:30 /user
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost Desktop]$ hadoop fs -ls /SongShared
19/01/19 19:29:16 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 2019-01-19 19:28 /SongShared/_SUCCESS
-rw-r--r-- 1 acadgild supergroup 18 2019-01-19 19:28 /SongShared/part-r-00000
[acadgild@localhost Desktop]$ hadoop fs -cat /SongShared/part-r-00000
19/01/19 19:29:40 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
222 0
223 0
225 2
[acadgild@localhost Desktop]$
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