```
bigdata@bigdata-VirtualBox:~/A1$ export
HADOOP CLASSPATH=$($HADOOP HOME/bin/hadoop classpath)
bigdata@bigdata-VirtualBox:~/A1$ javac -classpath ${HADOOP CLASSPATH}
solution3.java
bigdata@bigdata-VirtualBox:~/A1$ jar cf solution3.jar solution3*.class
bigdata@bigdata-VirtualBox:~/A1$ $HADOOP HOME/bin/hadoop jar
solution3.jar solution3 sales.txt /user/bigdata/output
21/10/13 10:18:02 INFO client.RMProxy: Connecting to ResourceManager at
bigdata-VirtualBox/10.0.2.15:8032
21/10/13 10:18:03 WARN mapreduce. JobResource Uploader: Hadoop command-line
option parsing not performed. Implement the Tool interface and execute
your application with ToolRunner to remedy this.
21/10/13 10:18:03 INFO input.FileInputFormat: Total input paths to
process: 1
21/10/13 10:18:03 INFO mapreduce. JobSubmitter: number of splits:1
21/10/13 10:18:03 INFO mapreduce. JobSubmitter: Submitting tokens for job:
job 1634070937113 0022
21/10/13 10:18:03 INFO impl.YarnClientImpl: Submitted application
application 1634070937113 0022
21/10/13 10:18:03 INFO mapreduce. Job: The url to track the job:
http://bigdata-VirtualBox:8088/proxy/application 1634070937113 0022/
21/10/13 10:18:03 INFO mapreduce. Job: Running job: job 1634070937113 0022
21/10/13 10:18:10 INFO mapreduce. Job job 1634070937113 0022 running
in uber mode : false
21/10/13 10:18:10 INFO mapreduce.Job: map 0% reduce 0%
21/10/13 10:18:15 INFO mapreduce.Job: map 100% reduce 0% 21/10/13 10:18:20 INFO mapreduce.Job: map 100% reduce 100%
21/10/13 10:18:20 INFO mapreduce. Job: Job job 1634070937113 0022
completed successfully
21/10/13 10:18:20 INFO mapreduce.Job: Counters: 49
     File System Counters
           FILE: Number of bytes read=88
           FILE: Number of bytes written=237407
           FILE: Number of read operations=0
           FILE: Number of large read operations=0
           FILE: Number of write operations=0
           HDFS: Number of bytes read=164
           HDFS: Number of bytes written=95
           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) = 2614
           Total time spent by all reduces in occupied slots (ms)=2953
           Total time spent by all map tasks (ms) = 2614
           Total time spent by all reduce tasks (ms)=2953
           Total vcore-milliseconds taken by all map tasks=2614
           Total vcore-milliseconds taken by all reduce tasks=2953
           Total megabyte-milliseconds taken by all map tasks=2676736
           Total megabyte-milliseconds taken by all reduce tasks=3023872
     Map-Reduce Framework
           Map input records=7
           Map output records=7
           Map output bytes=68
           Map output materialized bytes=88
```

```
Input split bytes=109
     Combine input records=0
     Combine output records=0
     Reduce input groups=3
     Reduce shuffle bytes=88
     Reduce input records=7
     Reduce output records=12
     Spilled Records=14
     Shuffled Maps =1
     Failed Shuffles=0
     Merged Map outputs=1
     GC time elapsed (ms)=124
     CPU time spent (ms) = 1290
     Physical memory (bytes) snapshot=447455232
     Virtual memory (bytes) snapshot=3828072448
     Total committed heap usage (bytes) = 319815680
Shuffle Errors
     BAD ID=0
     CONNECTION=0
     IO ERROR=0
     WRONG LENGTH=0
     WRONG MAP=0
     WRONG REDUCE=0
File Input Format Counters
```