```
bigdata@bigdata-VirtualBox:~/A1$ $HADOOP HOME/bin/hadoop fs -cat
/user/bigdata/SpeedCamera.txt
UPS234 17-JAN-2019 190
PKR856 12-DEC-2018 120
PKR856 12-FEB-2018 80
PKR856 01-JAN-2019 60
ALUK234 21-OCT-2020 200
ALUK234 22-OCT-2020 60
UPS234 17-JAN-2019 190
PKR856 12-DEC-2018 120
PKR856 12-FEB-2018 80
PKR856 01-JAN-2019 60
ALUK234 21-OCT-2020 200
ALUK234 22-OCT-2020 60
UPS234 17-JAN-2019 190
PKR856 12-DEC-2018 120
PKR856 12-FEB-2018 80
PKR856 01-JAN-2019 60
ALUK234 21-OCT-2020 200
ALUK234 22-OCT-2020 60
UPS234 17-JAN-2019 190
PKR856 12-DEC-2018 120
PKR856 12-FEB-2018 80
PKR856 01-JAN-2019 60
ALUK234 21-OCT-2020 200
ALUK234 22-OCT-2020 60
bigdata@bigdata-VirtualBox:~/A1$ export
HADOOP CLASSPATH=$($HADOOP HOME/bin/hadoop classpath)
bigdata@bigdata-VirtualBox:~/A1$ javac -classpath ${HADOOP CLASSPATH}
solution2.java
bigdata@bigdata-VirtualBox:~/A1$ jar cf solution2.jar solution2*.class
bigdata@bigdata-VirtualBox:~/A1$ $HADOOP HOME/bin/hadoop jar
solution2.jar solution2 SpeedCamera.txt out
21/10/13 00:41:02 INFO client.RMProxy: Connecting to ResourceManager at
bigdata-VirtualBox/10.0.2.15:8032
21/10/13 00:41:03 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 00:41:03 INFO input.FileInputFormat: Total input paths to
process: 1
21/10/13 00:41:03 INFO mapreduce. JobSubmitter: number of splits:1
21/10/13 00:41:03 INFO mapreduce. JobSubmitter: Submitting tokens for job:
job 1633997001299 0005
21/10/13 00:41:04 INFO impl.YarnClientImpl: Submitted application
application 1633997001299 0005
21/10/13 00:41:04 INFO mapreduce.Job: The url to track the job:
http://bigdata-VirtualBox:8088/proxy/application 1633997001299 0005/
21/10/13 00:41:04 INFO mapreduce. Job: Running job: job 1633997001299 0005
21/10/13 00:41:11 INFO mapreduce.Job: Job job 1633997001299 0005 running
in uber mode : false
21/10/13 00:41:11 INFO mapreduce.Job: map 0% reduce 0%
21/10/13 00:41:16 INFO mapreduce.Job: map 100% reduce 0%
21/10/13 00:41:22 INFO mapreduce.Job: map 100% reduce 100%
21/10/13 00:41:23 INFO mapreduce.Job: Job job_1633997001299_0005
completed successfully
21/10/13 00:41:23 INFO mapreduce. Job: Counters: 49
     File System Counters
```

```
FILE: Number of bytes read=46
           FILE: Number of bytes written=237657
           FILE: Number of read operations=0
           FILE: Number of large read operations=0
           FILE: Number of write operations=0
           HDFS: Number of bytes read=664
           HDFS: Number of bytes written=34
           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)=2830
           Total time spent by all reduces in occupied slots (ms) = 3287
           Total time spent by all map tasks (ms) = 2830
           Total time spent by all reduce tasks (ms)=3287
           Total vcore-milliseconds taken by all map tasks=2830
           Total vcore-milliseconds taken by all reduce tasks=3287
           Total megabyte-milliseconds taken by all map tasks=2897920
           Total megabyte-milliseconds taken by all reduce tasks=3365888
     Map-Reduce Framework
           Map input records=25
           Map output records=16
           Map output bytes=180
           Map output materialized bytes=46
           Input split bytes=115
           Combine input records=16
           Combine output records=3
           Reduce input groups=3
           Reduce shuffle bytes=46
           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) = 154
           CPU time spent (ms) = 1370
           Physical memory (bytes) snapshot=447000576
           Virtual memory (bytes) snapshot=3823681536
           Total committed heap usage (bytes) = 329777152
      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=549
     File Output Format Counters
           Bytes Written=34
bigdata@bigdata-VirtualBox:~/A1$ $HADOOP HOME/bin/hadoop fs -cat
/user/bigdata/out/part-r-00000
ALUK234 200
PKR856
           100
```

UPS234 190
bigdata@bigdata-VirtualBox:~/A1\$