```
bigdata@bigdata-VirtualBox:~/Desktop/INFO312/Assignment 1$
$HADOOP HOME/bin/hadoop fs -cat weather.txt
Queensland, GoldCoast, 25
Victoria, Melbourne, 125
Victoria, Geelong, 90
Victoria, Wodonga, 10
NSW, Lismore, 900
Queensland, Brisbane, 50
South Australia, Adelaide, 300
Western Australia, Perth, 200
Western Australia, Albany, 200
Western Australia, Broome, 10
California, Los Angeles, 225
Illinois, Chicago, 150
Texas, Houston, 130
Arizona, Phoenix, 890
Pennsylvania, Philadelphia, 750
Texas, San Antonio, 220
California, San Diego, 350
Texas, Dallas, 110
California, San Jose, 550
Texas, Austin, 600
bigdata@bigdata-VirtualBox:~/Desktop/INFO312/Assignment 1$ javac -
classpath ${HADOOP CLASSPATH} solution2.java
bigdata@bigdata-VirtualBox:~/Desktop/INFO312/Assignment 1$ jar cf
solution2.jar solution2*.class
bigdata@bigdata-VirtualBox:~/Desktop/INFO312/Assignment 1$
$HADOOP HOME/bin/hadoop fs -rm -r /user/out
22/04/16 17:05:48 INFO fs.TrashPolicyDefault: Namenode trash
configuration: Deletion interval = 0 minutes, Emptier interval = 0
minutes.
Deleted /user/out
bigdata@bigdata-VirtualBox:~/Desktop/INFO312/Assignment 1$
$HADOOP HOME/bin/hadoop jar solution2.jar solution2 weather.txt /user/out
22/04/16 17:06:08 INFO client.RMProxy: Connecting to ResourceManager at
bigdata-VirtualBox/10.0.2.15:8032
22/04/16 17:06:09 WARN mapreduce. JobResource Uploader: Hadoop command-line
option parsing not performed. Implement the Tool interface and execute
your application with ToolRunner to remedy this.
22/04/16 17:06:09 INFO input.FileInputFormat: Total input paths to
process: 1
22/04/16 17:06:09 INFO mapreduce. JobSubmitter: number of splits:1
22/04/16 17:06:09 INFO mapreduce. JobSubmitter: Submitting tokens for job:
job 1650071344200 0017
22/04/16 17:06:10 INFO impl.YarnClientImpl: Submitted application
application 1650071344200 0017
22/04/16 17:06:10 INFO mapreduce. Job: The url to track the job:
http://bigdata-VirtualBox:8088/proxy/application 1650071344200 0017/
22/04/16 17:06:10 INFO mapreduce. Job: Running job: job 1650071344200 0017
22/04/16 17:06:18 INFO mapreduce.Job: Job job 1650071344200 0017 running
in uber mode : false
22/04/16 17:06:18 INFO mapreduce.Job: map 0% reduce 0%
22/04/16 17:06:24 INFO mapreduce.Job: map 100% reduce 0%
22/04/16 17:06:31 INFO mapreduce.Job: map 100% reduce 100%
22/04/16 17:06:32 INFO mapreduce.Job: Job job 1650071344200 0017
completed successfully
22/04/16 17:06:32 INFO mapreduce. Job: Counters: 49
      File System Counters
```

```
FILE: Number of bytes read=336
           FILE: Number of bytes written=237893
           FILE: Number of read operations=0
           FILE: Number of large read operations=0
           FILE: Number of write operations=0
           HDFS: Number of bytes read=572
           HDFS: Number of bytes written=222
           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)=3972
           Total time spent by all reduces in occupied slots (ms)=4280
           Total time spent by all map tasks (ms) = 3972
           Total time spent by all reduce tasks (ms) = 4280
           Total vcore-milliseconds taken by all map tasks=3972
           Total vcore-milliseconds taken by all reduce tasks=4280
           Total megabyte-milliseconds taken by all map tasks=4067328
           Total megabyte-milliseconds taken by all reduce tasks=4382720
     Map-Reduce Framework
           Map input records=20
           Map output records=20
           Map output bytes=290
           Map output materialized bytes=336
           Input split bytes=111
           Combine input records=0
           Combine output records=0
           Reduce input groups=10
           Reduce shuffle bytes=336
           Reduce input records=20
           Reduce output records=10
           Spilled Records=40
           Shuffled Maps =1
           Failed Shuffles=0
           Merged Map outputs=1
           GC time elapsed (ms) = 185
           CPU time spent (ms) = 2540
           Physical memory (bytes) snapshot=443518976
           Virtual memory (bytes) snapshot=3851235328
           Total committed heap usage (bytes) = 339738624
      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=461
     File Output Format Counters
           Bytes Written=222
bigdata@bigdata-VirtualBox:~/Desktop/INFO312/Assignment 1$
$HADOOP HOME/bin/hadoop fs -cat /user/out/part-r-00000
Arizona
                       890 890 890
California
                       1125 550 225
```

Illinois	150	150	150
NSW	900	900	900
Pennsylvania	750	750	750
Queensland	75	50	25
South Australia	300	300	300
Texas	1060	600	110
Victoria	225	125	10
Western Australia	410	200	10