```
bigdata@bigdata-VirtualBox:~/Desktop$ javac -cp $HADOOP_CLASSPATH
solution3.java
bigdata@bigdata-VirtualBox:~/Desktop$ jar cvf solution3.jar
solution3*.classadded manifest
adding: solution3.class(in = 1470) (out= 800)(deflated 45%)
adding: solution3$IntMinMaxSumAvgReducer.class(in = 2010) (out=
897)(deflated 55%)
adding: solution3$TokenizerMapper.class(in = 1836) (out= 799)(deflated
56%)
bigdata@bigdata-VirtualBox:~/Desktop$ $HADOOP_HOME/bin/hadoop jar
/home/bigdata/Desktop/solution3.jar solution3 task3.txt task3output
21/10/15 01:38:37 INFO client.RMProxy: Connecting to ResourceManager at
bigdata-VirtualBox/10.0.2.15:8032
21/10/15 01:38:38 WARN mapreduce.JobResourceUploader: Hadoop command-line
option parsing not performed. Implement the Tool interface and execute
your application with ToolRunner to remedy this.
21/10/15 01:38:38 INFO input.FileInputFormat: Total input paths to
process : 1
21/10/15 01:38:38 INFO mapreduce.JobSubmitter: number of splits:1
21/10/15 01:38:38 INFO mapreduce.JobSubmitter: Submitting tokens for job:
job_1633958939443_0044
21/10/15 01:38:38 INFO impl.YarnClientImpl: Submitted application
application_1633958939443_0044
21/10/15 01:38:38 INFO mapreduce.Job: The url to track the job:
http://bigdata-VirtualBox:8088/proxy/application_1633958939443_0044/
21/10/15 01:38:38 INFO mapreduce.Job: Running job: job_1633958939443_0044
21/10/15 01:38:42 INFO mapreduce.Job: Job job_1633958939443_0044 running
in uber mode : false
21/10/15 01:38:42 INFO mapreduce.Job:  map 0% reduce 0%
21/10/15 01:38:46 INFO mapreduce.Job:  map 100% reduce 0%
21/10/15 01:38:50 INFO mapreduce.Job:  map 100% reduce 100%
21/10/15 01:38:50 INFO mapreduce.Job: Job job_1633958939443_0044
completed successfully
21/10/15 01:38:50 INFO mapreduce.Job: Counters: 49
        File System Counters
                FILE: Number of bytes read=245
                FILE: Number of bytes written=237745
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=278
                HDFS: Number of bytes written=170
                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)=1305
                Total time spent by all reduces in occupied slots (ms)=1405
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                Total time spent by all map tasks (ms)=1305
                Total time spent by all reduce tasks (ms)=1405
                Total vcore-milliseconds taken by all map tasks=1305
                Total vcore-milliseconds taken by all reduce tasks=1405
                Total megabyte-milliseconds taken by all map tasks=1336320
                Total megabyte-milliseconds taken by all reduce tasks=1438720
        Map-Reduce Framework
                Map input records=20
                Map output records=20
                Map output bytes=199
                Map output materialized bytes=245
                Input split bytes=109
                Combine input records=0
                Combine output records=0
                Reduce input groups=5
                Reduce shuffle bytes=245
                Reduce input records=20
                Reduce output records=20
                Spilled Records=40
                Shuffled Maps =1
                Failed Shuffles=0
                Merged Map outputs=1
                GC time elapsed (ms)=61
                CPU time spent (ms)=740
                Physical memory (bytes) snapshot=442908672
                Virtual memory (bytes) snapshot=3821383680
                Total committed heap usage (bytes)=323485696
        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=169
        File Output Format Counters
                Bytes Written=170
bigdata@bigdata-VirtualBox:~/Desktop$ $HADOOP_HOME/bin/hadoop fs -cat
task3output/part-r-00000
bolt  54
bolt  1
bolt  105
bolt  26
drill 40
drill 1
drill 57
drill 14
nail  5
nail  5
nail  5
nail  5
screw 89
screw 2
```

```
screw 274
screw 39
washer      56
washer      3
washer      80
washer      20
bigdata@bigdata-VirtualBox:~/Desktop$
```