## Week 3

I ran the MaxTemperature script on 3 data sets. Following are the outputs and execution time:

```
. . .
                          📄 ubuntu-xenial-large-521 — vagrant@pleasechangeme: ~/hadoop-book/ch02-mr-intro/src/main/java — s
                Map input records=5000000
                Map output records=4642067
                Map output bytes=41778603
                Map output materialized bytes=51062785
                Input split bytes=904
                 Combine input records=0
                 Combine output records=0
                Reduce input groups=1
                Reduce shuffle bytes=51062785
                 Reduce input records=4642067
                 Reduce output records=1
                 Spilled Records=9284134
                 Shuffled Maps =8
                Failed Shuffles=0
                Merged Map outputs=8
                GC time elapsed (ms)=3167
                 CPU time spent (ms)=21880
                Physical memory (bytes) snapshot=1924378624
                 Virtual memory (bytes) snapshot=16911880192
                Total committed heap usage (bytes)=1391427584
        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=1030902727
        File Output Format Counters
                Bytes Written=9
real
        1m4.189s
user
        0m3.444s
        0m0.120s
vagrant@pleasechangeme:~/hadoop-book/ch02-mr-intro/src/main/java$ Hadoop fs -ls /user/$USER/output1
Hadoop: command not found
vagrant@pleasechangeme:~/hadoop-book/ch02-mr-intro/src/main/java$ hadoop fs -ls /user/$USER/output1
-ls: Unknown command
[vagrant@pleasechangeme:~/hadoop-book/ch02-mr-intro/src/main/java$ hadoop fs -ls /user/$USER/output1
Found 2 items
-rw-r--r-- 1 vagrant supergroup
-rw-r--r-- 1 vagrant supergroup
                                            0 2017-02-10 20:14 /user/vagrant/output1/_SUCCESS
                                            9 2017-02-10 20:14 /user/vagrant/output1/part-r-00000
[vagrant@pleasechangeme:~/hadoop-book/ch02-mr-intro/src/main/java$ hadoop fs -cat /user/$USER/output1/part-r-00000
vagrant@pleasechangeme:~/hadoop-book/ch02-mr-intro/src/main/java$
```

```
. . .
                         bubuntu-xenial-large-521 — vagrant@pleasechangeme: ~/hadoop-book/ch02-mr-intro/sr
                Total time spent by all map tasks (ms)=1816038
                Total time spent by all reduce tasks (ms)=318858
                Total vcore-seconds taken by all map tasks=1816038
                Total vcore-seconds taken by all reduce tasks=318858
                Total megabyte-seconds taken by all map tasks=1859622912
                Total megabyte-seconds taken by all reduce tasks=326510592
        Map-Reduce Framework
                Map input records=35000000
                Map output records=30592765
                Map output bytes=275334885
                Map output materialized bytes=336520775
                Input split bytes=6840
                Combine input records=0
                Combine output records=0
                Reduce input groups=2
                Reduce shuffle bytes=336520775
                Reduce input records=30592765
                Reduce output records=2
                Spilled Records=61185530
                Shuffled Maps =60
                Failed Shuffles=0
                Merged Map outputs=60
                GC time elapsed (ms)=28745
                CPU time spent (ms)=176790
                Physical memory (bytes) snapshot=13301149696
                Virtual memory (bytes) snapshot=114581987328
                Total committed heap usage (bytes)=9769713664
        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=7993006187
        File Output Format Counters
                Bytes Written=18
        6m40.488s
real
user
        0m4.712s
        0m0.288s
sys
[vagrant@pleasechangeme:~/hadoop-book/ch02-mr-intro/src/main/java$ hadoop fs -cat /user/$USER/output3/par
1990
1992
vagrant@pleasechangeme:~/hadoop-book/ch02-mr-intro/src/main/java$
```

## Retired Jobs

Show 20 ¢ entries Search:											
Submit Time \$	Start Time	Finish Time *	Job ID ≎	Name \$	User ≎	Queue	State \$	Maps Total	Maps Completed	Reduces Total \$	Reduces Completed
2017.02.10 21:29:11 CST	2017.02.10 21:29:19 CST	2017.02.10 21:40:12 CST	job_1486782805443_0001	Max temperature	vagrant	default	SUCCEEDED	88	88	1	1
Submit Time	Start Time	Finish Time	Job ID	Name	User	Queue	State	Maps 7	Maps Comple	Reduces To	Reduces Con