```
2020-03-27 05:41:01,290 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:41:02,228 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:41:02,236 INFO com.hadoop.compression.lzo.GPLNativeCodeLoader (main): Loaded
native gpl library
2020-03-27 05:41:02,238 INFO com.hadoop.compression.lzo.LzoCodec (main): Successfully loaded
& initialized native-lzo library [hadoop-lzo rev 29dbe82flecfd8384b89fla32e5e2d9e5dfd7724]
2020-03-27 05:41:02,482 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:41:02,574 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595_0001
2020-03-27 05:41:02,832 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1585287572595_0001
2020-03-27 05:41:02,970 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application_1585287572595_0001/
2020-03-27 05:41:02,975 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0001
2020-03-27 05:41:09,054 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0001 running in uber mode : false
2020-03-27 05:41:09,055 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:41:22,121 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:41:27,141 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 22%
2020-03-27 05:41:29,150 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:41:29,155 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0001 completed successfully
2020-03-27 05:41:29,236 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5513856
                FILE: Number of bytes written=12716560
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=13875033
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=27661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=991968
                Total time spent by all reduces in occupied slots (ms)=6692928
                Total time spent by all map tasks (ms)=10333
                Total time spent by all reduce tasks (ms)=34859
                Total vcore-milliseconds taken by all map tasks=10333
                Total vcore-milliseconds taken by all reduce tasks=34859
                Total megabyte-milliseconds taken by all map tasks=31742976
                Total megabyte-milliseconds taken by all reduce tasks=214173696
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=13884009
                Map output materialized bytes=5513947
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
```

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Reduce input groups=999001
                Reduce shuffle bytes=5513947
                Reduce input records=999001
                Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=1816
                CPU time spent (ms)=35650
                Physical memory (bytes) snapshot=3826319360
                Virtual memory (bytes) snapshot=70205849600
                Total committed heap usage (bytes)=3875536896
        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=13772905
        File Output Format Counters
                Bytes Written=13875033
2020-03-27 05:41:29,275 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:41:29,542 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:41:29,587 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:41:29,634 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0002
2020-03-27 05:41:29,673 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0002
2020-03-27 05:41:29,692 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0002/
2020-03-27 05:41:29,692 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0002
2020-03-27 05:41:36,749 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0002 running in uber mode : false
2020-03-27 05:41:36,750 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:41:47,796 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:41:54,821 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:41:55,824 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 22%
2020-03-27 05:41:56,828 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:41:57,831 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:41:58,840 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0002 completed successfully
2020-03-27 05:41:58,869 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5549512
                FILE: Number of bytes written=12785465
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=13875138
                HDFS: Number of bytes written=0
                HDFS: Number of read operations=12
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
```

```
Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=841248
                Total time spent by all reduces in occupied slots (ms)=10254144
                Total time spent by all map tasks (ms)=8763
                Total time spent by all reduce tasks (ms)=53407
                Total vcore-milliseconds taken by all map tasks=8763
                Total vcore-milliseconds taken by all reduce tasks=53407
                Total megabyte-milliseconds taken by all map tasks=26919936
                Total megabyte-milliseconds taken by all reduce tasks=328132608
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15888896
                Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
                Reduce input groups=1000000
                Reduce shuffle bytes=5549476
                Reduce input records=1000000
                Reduce output records=1000000
                Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=2976
                CPU time spent (ms)=28160
                Physical memory (bytes) snapshot=5064511488
                Virtual memory (bytes) snapshot=70616403968
                Total committed heap usage (bytes)=5194121216
        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=8888896
        File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:41:58,987 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:41:59,043 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:41:59,111 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:41:59,145 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0003
2020-03-27 05:41:59,169 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0003
2020-03-27 05:41:59,178 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0003/
2020-03-27 05:41:59,179 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0003
2020-03-27 05:42:04,240 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0003 running in uber mode : false
2020-03-27 05:42:04,240 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:42:16,299 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:42:21,317 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 22%
2020-03-27 05:42:22,322 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
```

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2020-03-27 05:42:23,326 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:42:23,330 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0003 completed successfully
2020-03-27 05:42:23,356 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5545864
                FILE: Number of bytes written=12780803
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=15873020
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=29661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=940704
                Total time spent by all reduces in occupied slots (ms)=5371584
                Total time spent by all map tasks (ms)=9799
                Total time spent by all reduce tasks (ms)=27977
                Total vcore-milliseconds taken by all map tasks=9799
                Total vcore-milliseconds taken by all reduce tasks=27977
                Total megabyte-milliseconds taken by all map tasks=30102528
                Total megabyte-milliseconds taken by all reduce tasks=171890688
       Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15884009
                Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
                Reduce input groups=999001
                Reduce shuffle bytes=5546182
                Reduce input records=999001
                Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=1945
                CPU time spent (ms)=31380
                Physical memory (bytes) snapshot=3672252416
                Virtual memory (bytes) snapshot=70276587520
                Total committed heap usage (bytes)=4078960640
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
```

```
2020-03-27 05:42:23,376 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:42:23,527 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:42:23,562 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:42:23,584 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0004
2020-03-27 05:42:23,602 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1585287572595_0004
2020-03-27 05:42:23,605 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0004/
2020-03-27 05:42:23,605 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0004
2020-03-27 05:42:30,655 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0004 running in uber mode : false
2020-03-27 05:42:30,655 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:42:40,692 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:42:47,716 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11% 2020-03-27 05:42:49,722 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:42:50,725 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:42:50,729 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0004 completed successfully
2020-03-27 05:42:50,751 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5549512
                FILE: Number of bytes written=12785465
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=15873125
                HDFS: Number of bytes written=0
                HDFS: Number of read operations=12
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=809280
                Total time spent by all reduces in occupied slots (ms)=10273536
                Total time spent by all map tasks (ms)=8430
                Total time spent by all reduce tasks (ms)=53508
                Total vcore-milliseconds taken by all map tasks=8430
                Total vcore-milliseconds taken by all reduce tasks=53508
                Total megabyte-milliseconds taken by all map tasks=25896960
                Total megabyte-milliseconds taken by all reduce tasks=328753152
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15888896
                Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
                Reduce input groups=1000000
                Reduce shuffle bytes=5549476
                Reduce input records=1000000
                Reduce output records=1000000
```

```
Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=2891
                CPU time spent (ms)=26620
                Physical memory (bytes) snapshot=5137944576
                Virtual memory (bytes) snapshot=70570098688
                Total committed heap usage (bytes)=5238161408
        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=8888896
        File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:42:50,777 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:42:50,910 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:42:50,944 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:42:51,367 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595_0005
2020-03-27 05:42:51,384 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1585287572595_0005
2020-03-27 05:42:51,386 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0005/
2020-03-27 05:42:51,386 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0005
2020-03-27 05:42:56,436 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0005 running in uber mode : false
2020-03-27 05:42:56,436 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:43:08,481 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:43:13,496 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:43:14,499 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:43:15,502 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:43:15,506 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0005 completed successfully
2020-03-27 05:43:15,527 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5545864
                FILE: Number of bytes written=12780803
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=15873020
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=29661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
```

```
Total time spent by all maps in occupied slots (ms)=958944
                Total time spent by all reduces in occupied slots (ms)=5355264
                Total time spent by all map tasks (ms)=9989
                Total time spent by all reduce tasks (ms)=27892
                Total vcore-milliseconds taken by all map tasks=9989
                Total vcore-milliseconds taken by all reduce tasks=27892
                Total megabyte-milliseconds taken by all map tasks=30686208
                Total megabyte-milliseconds taken by all reduce tasks=171368448
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15884009
                Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
                Reduce input groups=999001
                Reduce shuffle bytes=5546182
                Reduce input records=999001
                Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=1910
                CPU time spent (ms)=30930
                Physical memory (bytes) snapshot=3665022976
                Virtual memory (bytes) snapshot=70210441216
                Total committed heap usage (bytes)=4061134848
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
2020-03-27 05:43:15,546 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:43:15,686 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:43:15,726 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
2020-03-27 05:43:15,747 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0006
2020-03-27 05:43:15,769 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0006
2020-03-27 05:43:15,771 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0006/
2020-03-27 05:43:15,771 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0006
2020-03-27 05:43:21,875 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0006 running in uber mode : false
2020-03-27 05:43:21,876 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:43:32,954 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:43:39,977 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:43:40,980 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:43:41,982 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 78%
2020-03-27 05:43:42,985 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:43:42,989 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0006 completed successfully
2020-03-27 05:43:43,010 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
```

```
File System Counters
                FILE: Number of bytes read=5549512
                FILE: Number of bytes written=12785465
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=15873125
                HDFS: Number of bytes written=0
                HDFS: Number of read operations=12
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=819360
                Total time spent by all reduces in occupied slots (ms)=9938496
                Total time spent by all map tasks (ms)=8535
                Total time spent by all reduce tasks (ms)=51763
                Total vcore-milliseconds taken by all map tasks=8535
                Total vcore-milliseconds taken by all reduce tasks=51763
                Total megabyte-milliseconds taken by all map tasks=26219520
                Total megabyte-milliseconds taken by all reduce tasks=318031872
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15888896
                Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
                Reduce input groups=1000000
                Reduce shuffle bytes=5549476
                Reduce input records=1000000
                Reduce output records=1000000
                Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=3000
                CPU time spent (ms)=26670
                Physical memory (bytes) snapshot=5294559232
                Virtual memory (bytes) snapshot=70492495872
                Total committed heap usage (bytes)=5306843136
        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=8888896
        File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:43:43,032 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:43:43,056 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
```

```
2020-03-27 05:43:43,091 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:43:43,110 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595_0007
2020-03-27 05:43:43,328 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1585287572595_0007
2020-03-27 05:43:43,331 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0007/
2020-03-27 05:43:43,331 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0007
2020-03-27 05:43:48,375 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0007 running in uber mode : false
2020-03-27 05:43:48,375 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:44:00,426 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:44:06,447 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 33%
2020-03-27 05:44:07,450 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:44:08,456 INFO org.apache.hadoop.mapreduce.Job (main): Job
job_1585287572595_0007 completed successfully
2020-03-27 05:44:08,478 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5545864
                FILE: Number of bytes written=12780803
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=15873020
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=29661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=946176
                Total time spent by all reduces in occupied slots (ms)=5567616
                Total time spent by all map tasks (ms)=9856
                Total time spent by all reduce tasks (ms)=28998
                Total vcore-milliseconds taken by all map tasks=9856
                Total vcore-milliseconds taken by all reduce tasks=28998
                Total megabyte-milliseconds taken by all map tasks=30277632
                Total megabyte-milliseconds taken by all reduce tasks=178163712
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15884009
                Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
                Reduce input groups=999001
                Reduce shuffle bytes=5546182
                Reduce input records=999001
                Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=1945
```

```
CPU time spent (ms)=31900
                Physical memory (bytes) snapshot=3672272896
                Virtual memory (bytes) snapshot=70223630336
                Total committed heap usage (bytes)=3880255488
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
2020-03-27 05:44:08,496 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:44:08,598 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:44:08,628 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:44:08,644 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0008
2020-03-27 05:44:08,860 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0008
2020-03-27 05:44:08,863 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0008/
2020-03-27 05:44:08,863 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0008
2020-03-27 05:44:15,912 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0008 running in uber mode : false
2020-03-27 05:44:15,912 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:44:25,948 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:44:32,974 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:44:33,977 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 44%
2020-03-27 05:44:34,980 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 78%
2020-03-27 05:44:35,983 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:44:35,987 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0008 completed successfully
2020-03-27 05:44:36,009 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5549512
                FILE: Number of bytes written=12785465
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=15873125
                HDFS: Number of bytes written=0
                HDFS: Number of read operations=12
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=801408
                Total time spent by all reduces in occupied slots (ms)=10040832
                Total time spent by all map tasks (ms)=8348
                Total time spent by all reduce tasks (ms)=52296
```

```
Total vcore-milliseconds taken by all map tasks=8348
                Total vcore-milliseconds taken by all reduce tasks=52296
                Total megabyte-milliseconds taken by all map tasks=25645056
                Total megabyte-milliseconds taken by all reduce tasks=321306624
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15888896
                Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
                Reduce input groups=1000000
                Reduce shuffle bytes=5549476
                Reduce input records=1000000
                Reduce output records=1000000
                Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=3027
                CPU time spent (ms)=27340
                Physical memory (bytes) snapshot=5297930240
                Virtual memory (bytes) snapshot=70599852032
                Total committed heap usage (bytes)=5105516544
        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=8888896
        File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:44:36,030 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:44:36,174 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:44:36,243 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:44:36,291 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0009
2020-03-27 05:44:36,307 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0009
2020-03-27 05:44:36,310 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0009/
2020-03-27 05:44:36,310 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0009
2020-03-27 05:44:41,353 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0009 running in uber mode : false
2020-03-27 05:44:41,353 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:44:53,393 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:44:58,408 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:44:59,411 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:45:00,414 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:45:01,420 INFO org.apache.hadoop.mapreduce.Job (main): Job
job_1585287572595_0009 completed successfully
2020-03-27 05:45:01,443 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5545864
                FILE: Number of bytes written=12780803
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
```

```
FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=15873020
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=29661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=983136
                Total time spent by all reduces in occupied slots (ms)=5345856
                Total time spent by all map tasks (ms)=10241
                Total time spent by all reduce tasks (ms)=27843
                Total vcore-milliseconds taken by all map tasks=10241
                Total vcore-milliseconds taken by all reduce tasks=27843
                Total megabyte-milliseconds taken by all map tasks=31460352
                Total megabyte-milliseconds taken by all reduce tasks=171067392
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15884009
                Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
                Reduce input groups=999001
                Reduce shuffle bytes=5546182
                Reduce input records=999001
                Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=2055
                CPU time spent (ms)=32620
                Physical memory (bytes) snapshot=3663405056
                Virtual memory (bytes) snapshot=70241857536
                Total committed heap usage (bytes)=3939500032
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
2020-03-27 05:45:01,468 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:45:01,574 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:45:01,603 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:45:01,625 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0010
2020-03-27 05:45:01,651 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
```

```
Submitted application application 1585287572595 0010
2020-03-27 05:45:01,653 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0010/
2020-03-27 05:45:01,653 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0010
2020-03-27 05:45:08,699 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0010 running in uber mode : false
2020-03-27 05:45:08,699 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:45:19,734 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:45:26,753 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:45:28,758 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:45:29,761 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:45:29,765 INFO org.apache.hadoop.mapreduce.Job (main): Job
job_1585287572595_0010 completed successfully
2020-03-27 05:45:29,785 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
       File System Counters
                FILE: Number of bytes read=5549512
               FILE: Number of bytes written=12785465
               FILE: Number of read operations=0
               FILE: Number of large read operations=0
                FILE: Number of write operations=0
               HDFS: Number of bytes read=15873125
               HDFS: Number of bytes written=0
               HDFS: Number of read operations=12
               HDFS: Number of large read operations=0
               HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
               S3: Number of large read operations=0
               S3: Number of write operations=0
        Job Counters
               Killed reduce tasks=1
               Launched map tasks=1
               Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=862752
               Total time spent by all reduces in occupied slots (ms)=10178880
                Total time spent by all map tasks (ms)=8987
                Total time spent by all reduce tasks (ms)=53015
                Total vcore-milliseconds taken by all map tasks=8987
                Total vcore-milliseconds taken by all reduce tasks=53015
                Total megabyte-milliseconds taken by all map tasks=27608064
                Total megabyte-milliseconds taken by all reduce tasks=325724160
       Map-Reduce Framework
               Map input records=1000000
               Map output records=1000000
               Map output bytes=15888896
               Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
               Reduce input groups=1000000
               Reduce shuffle bytes=5549476
               Reduce input records=1000000
               Reduce output records=1000000
                Spilled Records=2000000
                Shuffled Maps =9
               Failed Shuffles=0
               Merged Map outputs=9
               GC time elapsed (ms)=2954
                CPU time spent (ms)=27690
               Physical memory (bytes) snapshot=5101862912
                Virtual memory (bytes) snapshot=70508498944
                Total committed heap usage (bytes)=5225578496
```

```
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=8888896
        File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:45:29,806 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:45:29,829 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:45:29,861 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:45:29,874 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595_0011
2020-03-27 05:45:29,894 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1585287572595_0011
2020-03-27 05:45:29,897 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0011/
2020-03-27 05:45:29,897 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0011
2020-03-27 05:45:34,992 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0011 running in uber mode : false
2020-03-27 05:45:34,992 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:45:47,102 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:45:52,115 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 22%
2020-03-27 05:45:53,118 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 78%
2020-03-27 05:45:54,121 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:45:54,124 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0011 completed successfully
2020-03-27 05:45:54,149 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5545864
                FILE: Number of bytes written=12780803
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=15873020
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=29661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=909792
                Total time spent by all reduces in occupied slots (ms)=5429184
                Total time spent by all map tasks (ms)=9477
                Total time spent by all reduce tasks (ms)=28277
                Total vcore-milliseconds taken by all map tasks=9477
                Total vcore-milliseconds taken by all reduce tasks=28277
                Total megabyte-milliseconds taken by all map tasks=29113344
                Total megabyte-milliseconds taken by all reduce tasks=173733888
        Map-Reduce Framework
```

```
Map input records=1000000
                Map output records=1000000
                Map output bytes=15884009
                Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
                Reduce input groups=999001
                Reduce shuffle bytes=5546182
                Reduce input records=999001
                Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=1984
                CPU time spent (ms)=31140
                Physical memory (bytes) snapshot=3638591488
                Virtual memory (bytes) snapshot=70219849728
                Total committed heap usage (bytes)=3864002560
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
2020-03-27 05:45:54,167 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:45:54,341 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:45:54,369 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:45:54,385 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0012
2020-03-27 05:45:54,394 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0012
2020-03-27 05:45:54,402 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0012/
2020-03-27 05:45:54,402 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0012
2020-03-27 05:46:01,448 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0012 running in uber mode : false
2020-03-27 05:46:01,448 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:46:11,482 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:46:18,504 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:46:19,506 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 22%
2020-03-27 05:46:20,509 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:46:21,511 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:46:21,515 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0012 completed successfully
2020-03-27 05:46:21,535 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5549512
                FILE: Number of bytes written=12785465
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=15873125
                HDFS: Number of bytes written=0
                HDFS: Number of read operations=12
```

```
HDFS: Number of large read operations=0
                HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=804960
                Total time spent by all reduces in occupied slots (ms)=10132608
                Total time spent by all map tasks (ms)=8385
                Total time spent by all reduce tasks (ms)=52774
                Total vcore-milliseconds taken by all map tasks=8385
                Total vcore-milliseconds taken by all reduce tasks=52774
                Total megabyte-milliseconds taken by all map tasks=25758720
                Total megabyte-milliseconds taken by all reduce tasks=324243456
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15888896
                Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
                Reduce input groups=1000000
                Reduce shuffle bytes=5549476
                Reduce input records=1000000
                Reduce output records=1000000
                Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=2936
                CPU time spent (ms)=26800
                Physical memory (bytes) snapshot=5117046784
                Virtual memory (bytes) snapshot=70551945216
                Total committed heap usage (bytes)=5057282048
        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=8888896
        File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:46:21,555 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:46:21,619 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:46:21,646 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:46:21,659 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595 0013
2020-03-27 05:46:21,667 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0013
2020-03-27 05:46:21,676 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0013/
2020-03-27 05:46:21,676 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
```

```
job 1585287572595 0013
2020-03-27 05:46:26,728 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0013 running in uber mode : false
2020-03-27 05:46:26,728 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:46:38,769 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:46:43,785 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 44%
2020-03-27 05:46:44,789 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 78%
2020-03-27 05:46:45,791 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:46:45,795 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0013 completed successfully
2020-03-27 05:46:45,820 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
       File System Counters
                FILE: Number of bytes read=5545864
               FILE: Number of bytes written=12780803
               FILE: Number of read operations=0
               FILE: Number of large read operations=0
               FILE: Number of write operations=0
               HDFS: Number of bytes read=104
               HDFS: Number of bytes written=15873020
               HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
               HDFS: Number of write operations=18
               S3: Number of bytes read=29661801
                S3: Number of bytes written=0
               S3: Number of read operations=0
               S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
               Killed reduce tasks=1
               Launched map tasks=1
               Launched reduce tasks=9
               Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=893664
               Total time spent by all reduces in occupied slots (ms)=5232960
                Total time spent by all map tasks (ms)=9309
                Total time spent by all reduce tasks (ms)=27255
                Total vcore-milliseconds taken by all map tasks=9309
               Total vcore-milliseconds taken by all reduce tasks=27255
                Total megabyte-milliseconds taken by all map tasks=28597248
                Total megabyte-milliseconds taken by all reduce tasks=167454720
       Map-Reduce Framework
               Map input records=1000000
               Map output records=1000000
               Map output bytes=15884009
               Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
               Reduce input groups=999001
               Reduce shuffle bytes=5546182
               Reduce input records=999001
               Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
               Failed Shuffles=0
               Merged Map outputs=9
               GC time elapsed (ms)=1877
                CPU time spent (ms)=31020
                Physical memory (bytes) snapshot=3620020224
               Virtual memory (bytes) snapshot=70224977920
               Total committed heap usage (bytes)=3913285632
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
2020-03-27 05:46:45,839 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:46:45,958 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:46:45,988 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:46:46,002 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595_0014
2020-03-27 05:46:46,024 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0014
2020-03-27 05:46:46,026 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application_1585287572595_0014/
2020-03-27 05:46:46,026 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0014
2020-03-27 05:46:52,119 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0014 running in uber mode : false
2020-03-27 05:46:52,119 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:47:03,207 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:47:10,233 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:47:11,236 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 33% 2020-03-27 05:47:12,238 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 89%
2020-03-27 05:47:13,241 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:47:14,247 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0014 completed successfully
2020-03-27 05:47:14,271 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5549512
                FILE: Number of bytes written=12785465
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=15873125
                HDFS: Number of bytes written=0
                HDFS: Number of read operations=12
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=802848
                Total time spent by all reduces in occupied slots (ms)=10304640
                Total time spent by all map tasks (ms)=8363
                Total time spent by all reduce tasks (ms)=53670
                Total vcore-milliseconds taken by all map tasks=8363
                Total vcore-milliseconds taken by all reduce tasks=53670
                Total megabyte-milliseconds taken by all map tasks=25691136
                Total megabyte-milliseconds taken by all reduce tasks=329748480
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15888896
```

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Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
                Reduce input groups=1000000
                Reduce shuffle bytes=5549476
                Reduce input records=1000000
                Reduce output records=1000000
                Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=2970
                CPU time spent (ms)=27810
                Physical memory (bytes) snapshot=5261045760
                Virtual memory (bytes) snapshot=70635339776
                Total committed heap usage (bytes)=5170003968
        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=8888896
        File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:47:14,288 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:47:14,310 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:47:14,340 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:47:14,353 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595_0015
2020-03-27 05:47:14,372 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0015
2020-03-27 05:47:14,374 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0015/
2020-03-27 05:47:14,374 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0015
2020-03-27 05:47:19,415 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0015 running in uber mode : false
2020-03-27 05:47:19,415 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:47:31,462 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:47:36,477 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 33%
2020-03-27 05:47:37,480 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:47:38,485 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0015 completed successfully
2020-03-27 05:47:38,508 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5545864
                FILE: Number of bytes written=12780803
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=15873020
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=29661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
```

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S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=945600
                Total time spent by all reduces in occupied slots (ms)=5512320
                Total time spent by all map tasks (ms)=9850
                Total time spent by all reduce tasks (ms)=28710
                Total vcore-milliseconds taken by all map tasks=9850
                Total vcore-milliseconds taken by all reduce tasks=28710
                Total megabyte-milliseconds taken by all map tasks=30259200
                Total megabyte-milliseconds taken by all reduce tasks=176394240
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15884009
                Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
                Reduce input groups=999001
                Reduce shuffle bytes=5546182
                Reduce input records=999001
                Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=1934
                CPU time spent (ms)=32530
                Physical memory (bytes) snapshot=3608526848
                Virtual memory (bytes) snapshot=70223769600
                Total committed heap usage (bytes)=3857711104
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
2020-03-27 05:47:38,526 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:47:38,698 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:47:38,720 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:47:38,734 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0016
2020-03-27 05:47:38,759 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0016
2020-03-27 05:47:38,760 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0016/
2020-03-27 05:47:38,761 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0016
2020-03-27 05:47:45,808 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0016 running in uber mode : false
2020-03-27 05:47:45,808 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:47:56,844 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
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2020-03-27 05:48:03,872 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:48:04,876 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:48:05,878 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:48:06,885 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0016 completed successfully
2020-03-27 05:48:06,907 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
       File System Counters
               FILE: Number of bytes read=5549512
               FILE: Number of bytes written=12785465
               FILE: Number of read operations=0
               FILE: Number of large read operations=0
               FILE: Number of write operations=0
                HDFS: Number of bytes read=15873125
               HDFS: Number of bytes written=0
               HDFS: Number of read operations=12
               HDFS: Number of large read operations=0
               HDFS: Number of write operations=0
               S3: Number of bytes read=8888896
               S3: Number of bytes written=15888896
               S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
               Killed reduce tasks=1
               Launched map tasks=1
               Launched reduce tasks=9
               Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=818112
               Total time spent by all reduces in occupied slots (ms)=9903168
               Total time spent by all map tasks (ms)=8522
               Total time spent by all reduce tasks (ms)=51579
                Total vcore-milliseconds taken by all map tasks=8522
                Total vcore-milliseconds taken by all reduce tasks=51579
                Total megabyte-milliseconds taken by all map tasks=26179584
                Total megabyte-milliseconds taken by all reduce tasks=316901376
       Map-Reduce Framework
               Map input records=1000000
               Map output records=1000000
               Map output bytes=15888896
               Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
               Reduce input groups=1000000
               Reduce shuffle bytes=5549476
               Reduce input records=1000000
               Reduce output records=1000000
               Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
               Merged Map outputs=9
               GC time elapsed (ms)=2916
               CPU time spent (ms)=27630
                Physical memory (bytes) snapshot=5216301056
                Virtual memory (bytes) snapshot=70518358016
                Total committed heap usage (bytes)=5290590208
        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=8888896
```

```
File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:48:06,927 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:48:06,985 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:48:07,011 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:48:07,024 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0017
2020-03-27 05:48:07,036 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0017
2020-03-27 05:48:07,043 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application_1585287572595_0017/
2020-03-27 05:48:07,043 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0017
2020-03-27 05:48:13,084 INFO org.apache.hadoop.mapreduce.Job (main): Job
job_1585287572595_0017 running in uber mode : false
2020-03-27 05:48:13,084 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:48:25,136 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:48:31,154 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:48:32,157 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:48:32,160 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0017 completed successfully
2020-03-27 05:48:32,186 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5545864
                FILE: Number of bytes written=12780803
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=15873020
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=29661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=994560
                Total time spent by all reduces in occupied slots (ms)=5376384
                Total time spent by all map tasks (ms)=10360
                Total time spent by all reduce tasks (ms)=28002
                Total vcore-milliseconds taken by all map tasks=10360
                Total vcore-milliseconds taken by all reduce tasks=28002
                Total megabyte-milliseconds taken by all map tasks=31825920
                Total megabyte-milliseconds taken by all reduce tasks=172044288
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15884009
                Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
                Reduce input groups=999001
                Reduce shuffle bytes=5546182
                Reduce input records=999001
```

```
Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=1952
                CPU time spent (ms)=32250
                Physical memory (bytes) snapshot=3612024832
                Virtual memory (bytes) snapshot=70199857152
                Total committed heap usage (bytes)=3825729536
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
2020-03-27 05:48:32,206 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:48:32,298 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:48:32,321 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:48:32,334 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595_0018
2020-03-27 05:48:32,548 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0018
2020-03-27 05:48:32,550 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0018/
2020-03-27 05:48:32,550 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0018
2020-03-27 05:48:39,592 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0018 running in uber mode : false
2020-03-27 05:48:39,592 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:48:49,625 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:48:56,644 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:48:58,650 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:48:59,652 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:48:59,656 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0018 completed successfully
2020-03-27 05:48:59,677 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5549512
                FILE: Number of bytes written=12785465
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=15873125
                HDFS: Number of bytes written=0
                HDFS: Number of read operations=12
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
```

```
Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=812256
                Total time spent by all reduces in occupied slots (ms)=10185024
                Total time spent by all map tasks (ms)=8461
                Total time spent by all reduce tasks (ms)=53047
                Total vcore-milliseconds taken by all map tasks=8461
                Total vcore-milliseconds taken by all reduce tasks=53047
                Total megabyte-milliseconds taken by all map tasks=25992192
                Total megabyte-milliseconds taken by all reduce tasks=325920768
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15888896
                Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
                Reduce input groups=1000000
                Reduce shuffle bytes=5549476
                Reduce input records=1000000
                Reduce output records=1000000
                Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=2862
                CPU time spent (ms)=27550
                Physical memory (bytes) snapshot=5280112640
                Virtual memory (bytes) snapshot=70548627456
                Total committed heap usage (bytes)=5247598592
        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=8888896
        File Output Format Counters
                Bytes Written=15888896
2020-03-27 05:48:59,697 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:48:59,726 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-03-27 05:48:59,759 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:48:59,771 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1585287572595 0019
2020-03-27 05:48:59,781 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1585287572595 0019
2020-03-27 05:48:59,787 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0019/
2020-03-27 05:48:59,787 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0019
2020-03-27 05:49:04,828 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0019 running in uber mode : false
2020-03-27 05:49:04,828 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:49:16,880 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:49:22,898 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 44%
2020-03-27 05:49:23,901 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 89%
2020-03-27 05:49:24,903 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:49:24,907 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0019 completed successfully
2020-03-27 05:49:24,929 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
```

```
File System Counters
                FILE: Number of bytes read=5545864
                FILE: Number of bytes written=12780803
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=104
                HDFS: Number of bytes written=15873020
                HDFS: Number of read operations=29
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=18
                S3: Number of bytes read=29661801
                S3: Number of bytes written=0
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=972288
                Total time spent by all reduces in occupied slots (ms)=5309760
                Total time spent by all map tasks (ms)=10128
                Total time spent by all reduce tasks (ms)=27655
                Total vcore-milliseconds taken by all map tasks=10128
                Total vcore-milliseconds taken by all reduce tasks=27655
                Total megabyte-milliseconds taken by all map tasks=31113216
                Total megabyte-milliseconds taken by all reduce tasks=169912320
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15884009
                Map output materialized bytes=5546182
                Input split bytes=104
                Combine input records=1000000
                Combine output records=999001
                Reduce input groups=999001
                Reduce shuffle bytes=5546182
                Reduce input records=999001
                Reduce output records=999001
                Spilled Records=1998002
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
                GC time elapsed (ms)=1988
                CPU time spent (ms)=33170
                Physical memory (bytes) snapshot=3584942080
                Virtual memory (bytes) snapshot=70233837568
                Total committed heap usage (bytes)=3603955712
        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=13772905
        File Output Format Counters
                Bytes Written=15873020
2020-03-27 05:49:24,953 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-12-118.ec2.internal/172.31.12.118:8032
2020-03-27 05:49:25,090 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
```

```
2020-03-27 05:49:25,126 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:1
2020-03-27 05:49:25,167 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1585287572595_0020
2020-03-27 05:49:26,810 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1585287572595_0020
2020-03-27 05:49:26,815 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-12-118.ec2.internal:20888/proxy/application 1585287572595 0020/
2020-03-27 05:49:26,815 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1585287572595 0020
2020-03-27 05:49:34,861 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595 0020 running in uber mode : false
2020-03-27 05:49:34,861 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-03-27 05:49:44,893 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-03-27 05:49:51,918 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 11%
2020-03-27 05:49:53,923 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 56%
2020-03-27 05:49:54,926 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-03-27 05:49:54,929 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1585287572595_0020 completed successfully
2020-03-27 05:49:54,950 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=5549512
                FILE: Number of bytes written=12785485
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=15873125
                HDFS: Number of bytes written=0
                HDFS: Number of read operations=12
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=0
                S3: Number of bytes read=8888896
                S3: Number of bytes written=15888896
                S3: Number of read operations=0
                S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
                Killed reduce tasks=1
                Launched map tasks=1
                Launched reduce tasks=9
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=772224
                Total time spent by all reduces in occupied slots (ms)=10102656
                Total time spent by all map tasks (ms)=8044
                Total time spent by all reduce tasks (ms)=52618
                Total vcore-milliseconds taken by all map tasks=8044
                Total vcore-milliseconds taken by all reduce tasks=52618
                Total megabyte-milliseconds taken by all map tasks=24711168
                Total megabyte-milliseconds taken by all reduce tasks=323284992
        Map-Reduce Framework
                Map input records=1000000
                Map output records=1000000
                Map output bytes=15888896
                Map output materialized bytes=5549476
                Input split bytes=105
                Combine input records=0
                Combine output records=0
                Reduce input groups=1000000
                Reduce shuffle bytes=5549476
                Reduce input records=1000000
                Reduce output records=1000000
                Spilled Records=2000000
                Shuffled Maps =9
                Failed Shuffles=0
                Merged Map outputs=9
```

GC time elapsed (ms)=2804 CPU time spent (ms)=26980 Physical memory (bytes) snapshot=5262004224 Virtual memory (bytes) snapshot=70534561792 Total committed heap usage (bytes)=5155848192 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=8888896 File Output Format Counters Bytes Written=15888896