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bigdata@bigdata-VirtualBox:~/Desktop/Assignment1$ echo $HADOOP_CLASSPATH
bigdata@bigdata-VirtualBox:~/Desktop/Assignment1$ export
HADOOP_CLASSPATH=$(HADOOP_HOME/bin/hadoop classpath)
bigdata@bigdata-VirtualBox:~/Desktop/Assignment1$ javac -cp
${HADOOP_CLASSPATH} solution4.java
bigdata@bigdata-VirtualBox:~/Desktop/Assignment1$ jar cvf solution4.jar
solution4*.classadded manifest
adding: solution4$BalanceReducer.class(in = 1754) (out= 748) (deflated
57%)
adding: solution4.class(in = 1498) (out= 816) (deflated 45%)
adding: solution4$TokenizerMapper.class(in = 2264) (out= 1002) (deflated
55%)
bigdata@bigdata-VirtualBox:~/Desktop/Assignment1$ $HADOOP_HOME/bin/hadoop
fs -put solution4.jar
bigdata@bigdata-VirtualBox:~/Desktop/Assignment1$ fs -put account.txt
bigdata@bigdata-VirtualBox:~/Desktop/Assignment1$ $HADOOP_HOME/bin/hadoop
jar solution4.jar solution4 account.txt /user/output2/
21/04/22 17:26:55 INFO client.RMPProxy: Connecting to ResourceManager at
bigdata-VirtualBox/10.0.2.15:8032
21/04/22 17:26:56 WARN mapreduce.JobResourceUploader: Hadoop command-line
option parsing not performed. Implement the Tool interface and execute
your application with ToolRunner to remedy this.
21/04/22 17:26:56 INFO input.FileInputFormat: Total input paths to
process : 1
21/04/22 17:26:56 INFO mapreduce.JobSubmitter: number of splits:1
21/04/22 17:26:56 INFO mapreduce.JobSubmitter: Submitting tokens for job:
job_1619057478263_0012
21/04/22 17:26:56 INFO impl.YarnClientImpl: Submitted application
application_1619057478263_0012
21/04/22 17:26:56 INFO mapreduce.Job: The url to track the job:
http://bigdata-VirtualBox:8088/proxy/application_1619057478263_0012/
21/04/22 17:26:56 INFO mapreduce.Job: Running job: job_1619057478263_0012
21/04/22 17:27:00 INFO mapreduce.Job: Job job_1619057478263_0012 running
in uber mode : false
21/04/22 17:27:00 INFO mapreduce.Job: map 0% reduce 0%
21/04/22 17:27:04 INFO mapreduce.Job: map 100% reduce 0%
21/04/22 17:27:08 INFO mapreduce.Job: map 100% reduce 100%
21/04/22 17:27:08 INFO mapreduce.Job: Job job_1619057478263_0012
completed successfully
21/04/22 17:27:09 INFO mapreduce.Job: Counters: 49
  File System Counters
    FILE: Number of bytes read=63
    FILE: Number of bytes written=237677
    FILE: Number of read operations=0
    FILE: Number of large read operations=0
    FILE: Number of write operations=0
    HDFS: Number of bytes read=279
    HDFS: Number of bytes written=51
    HDFS: Number of read operations=6
    HDFS: Number of large read operations=0
    HDFS: Number of write operations=2
  Job Counters
    Launched map tasks=1
    Launched reduce tasks=1
    Data-local map tasks=1
```

Total time spent by all maps in occupied slots (ms)=1580
Total time spent by all reduces in occupied slots (ms)=1707
Total time spent by all map tasks (ms)=1580
Total time spent by all reduce tasks (ms)=1707
Total vcore-milliseconds taken by all map tasks=1580
Total vcore-milliseconds taken by all reduce tasks=1707
Total megabyte-milliseconds taken by all map tasks=1617920
Total megabyte-milliseconds taken by all reduce tasks=1747968

Map-Reduce Framework

Map input records=7
Map output records=5
Map output bytes=85
Map output materialized bytes=63
Input split bytes=111
Combine input records=5
Combine output records=3
Reduce input groups=3
Reduce shuffle bytes=63
Reduce input records=3
Reduce output records=3
Spilled Records=6
Shuffled Maps =1
Failed Shuffles=0
Merged Map outputs=1
GC time elapsed (ms)=86
CPU time spent (ms)=880
Physical memory (bytes) snapshot=445800448
Virtual memory (bytes) snapshot=3821760512
Total committed heap usage (bytes)=289406976

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=168

File Output Format Counters

Bytes Written=51

bigdata@bigdata-VirtualBox:~/Desktop/Assignment1\$ \$HADOOP_HOME/bin/hadoop

fs -cat /user/output2/*

1234567	2019	250
9876543	2018	150
9876543	2019	450