hadoop@pict-OptiPlex-3020:~$ pwd

/home/hadoop

hadoop@pict-OptiPlex-3020:~$ start-dfs.sh

Starting namenodes on [localhost]

Starting datanodes

Starting secondary namenodes [pict-OptiPlex-3020]

hadoop@pict-OptiPlex-3020:~$ start-yarn.sh

Starting resourcemanager

Starting nodemanagers

hadoop@pict-OptiPlex-3020:~$ jps

5618 NodeManager

5986 Jps

4981 DataNode

5468 ResourceManager

4829 NameNode

5198 SecondaryNameNode

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -mkdir /31181

mkdir: Cannot create directory /31181. Name node is in safe mode.

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -mkdir /m3

mkdir: Cannot create directory /m3. Name node is in safe mode.

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -ls /31201

Found 2 items

drwxr-xr-x - hadoop supergroup 0 2024-04-16 11:34 /31201/input

drwxr-xr-x - hadoop supergroup 0 2024-04-16 11:34 /31201/output

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -ls /31275

Found 1 items

drwxr-xr-x - hadoop supergroup 0 2024-04-16 10:25 /31275/input

hadoop@pict-OptiPlex-3020:~$ hadoop dfsadmin -safemode leave

WARNING: Use of this script to execute dfsadmin is deprecated.

WARNING: Attempting to execute replacement "hdfs dfsadmin" instead.

Safe mode is OFF

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -mkdir /31181

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -ls /31181

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -put /home/hadoop/31165/temp.txt /31181

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -ls /31181

Found 1 items

-rw-r--r-- 3 hadoop supergroup 62 2024-04-22 09:33 /31181/temp.txt

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -cat /31181/temp.txt

India is my country. All Indians are my brothers and sisters.

hadoop@pict-OptiPlex-3020:~$ yarn jar /home/hadoop/hadoop-3.3.5/share/hadoop/mapreduce/hadoop-

JAR does not exist or is not a normal file: /home/hadoop/hadoop-3.3.5/share/hadoop/mapreduce/hadoop-

hadoop@pict-OptiPlex-3020:~$ yarn jar /home/hadoop/hadoop-3.3.5/share/hadoop/mapreduce/hadoop- mapreduce-examples-3.3.5.jar wordcount /31181/temp.txt /31181\_output

JAR does not exist or is not a normal file: /home/hadoop/hadoop-3.3.5/share/hadoop/mapreduce/hadoop-

hadoop@pict-OptiPlex-3020:~$ export HADOOP\_CLASSPATH=$(hadoop classpath)

hadoop@pict-OptiPlex-3020:~$ echo $HADOOP\_CLASSPATH

/home/hadoop/hadoop-3.3.5/etc/hadoop:/home/hadoop/hadoop-3.3.5/share/hadoop/common/lib/\*:/home/hadoop/hadoop-3.3.5/share/hadoop/common/\*:/home/hadoop/hadoop-3.3.5/share/hadoop/hdfs:/home/hadoop/hadoop-3.3.5/share/hadoop/hdfs/lib/\*:/home/hadoop/hadoop-3.3.5/share/hadoop/hdfs/\*:/home/hadoop/hadoop-3.3.5/share/hadoop/mapreduce/\*:/home/hadoop/hadoop-3.3.5/share/hadoop/yarn:/home/hadoop/hadoop-3.3.5/share/hadoop/yarn/lib/\*:/home/hadoop/hadoop-3.3.5/share/hadoop/yarn/\*

hadoop@pict-OptiPlex-3020:~$ javac -classpath ${HADOOP\_CLASSPATH} -d '/home/hadoop/31165/build' '/home/hadoop/31165/WordCount.java'

hadoop@pict-OptiPlex-3020:~$

—----------------------------

hadoop@pict-OptiPlex-3020:~/31165$ jar -cvf wc.jar -C build/ .

added manifest

adding: WordCount.class(in = 1511) (out= 825)(deflated 45%)

adding: WordCount$IntSumReducer.class(in = 1755) (out= 749)(deflated 57%)

adding: WordCount$TokenizerMapper.class(in = 1752) (out= 764)(deflated 56%)

hadoop@pict-OptiPlex-3020:~/31165$ hadoop jar '/home/hadoop/31165/wc.jar' WordCount /31181 /31181/Output

2024-04-22 09:46:57,221 INFO impl.MetricsConfig: Loaded properties from hadoop-metrics2.properties

2024-04-22 09:46:57,297 INFO impl.MetricsSystemImpl: Scheduled Metric snapshot period at 10 second(s).

2024-04-22 09:46:57,298 INFO impl.MetricsSystemImpl: JobTracker metrics system started

2024-04-22 09:46:57,394 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool interface and execute your application with ToolRunner to remedy this.

2024-04-22 09:46:57,517 INFO input.FileInputFormat: Total input files to process : 1

2024-04-22 09:46:57,545 INFO mapreduce.JobSubmitter: number of splits:1

2024-04-22 09:46:57,670 INFO mapreduce.JobSubmitter: Submitting tokens for job: job\_local1126753776\_0001

2024-04-22 09:46:57,670 INFO mapreduce.JobSubmitter: Executing with tokens: []

2024-04-22 09:46:57,786 INFO mapreduce.Job: The url to track the job: http://localhost:8080/

2024-04-22 09:46:57,789 INFO mapreduce.Job: Running job: job\_local1126753776\_0001

2024-04-22 09:46:57,790 INFO mapred.LocalJobRunner: OutputCommitter set in config null

2024-04-22 09:46:57,800 INFO output.PathOutputCommitterFactory: No output committer factory defined, defaulting to FileOutputCommitterFactory

2024-04-22 09:46:57,801 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2

2024-04-22 09:46:57,802 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup \_temporary folders under output directory:false, ignore cleanup failures: false

2024-04-22 09:46:57,803 INFO mapred.LocalJobRunner: OutputCommitter is org.apache.hadoop.mapreduce.lib.output.FileOutputCommitter

2024-04-22 09:46:57,880 INFO mapred.LocalJobRunner: Waiting for map tasks

2024-04-22 09:46:57,880 INFO mapred.LocalJobRunner: Starting task: attempt\_local1126753776\_0001\_m\_000000\_0

2024-04-22 09:46:57,897 INFO output.PathOutputCommitterFactory: No output committer factory defined, defaulting to FileOutputCommitterFactory

2024-04-22 09:46:57,898 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2

2024-04-22 09:46:57,898 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup \_temporary folders under output directory:false, ignore cleanup failures: false

2024-04-22 09:46:57,910 INFO mapred.Task: Using ResourceCalculatorProcessTree : [ ]

2024-04-22 09:46:57,915 INFO mapred.MapTask: Processing split: hdfs://127.0.0.1:9000/31181/temp.txt:0+62

2024-04-22 09:46:57,956 INFO mapred.MapTask: (EQUATOR) 0 kvi 26214396(104857584)

2024-04-22 09:46:57,956 INFO mapred.MapTask: mapreduce.task.io.sort.mb: 100

2024-04-22 09:46:57,956 INFO mapred.MapTask: soft limit at 83886080

2024-04-22 09:46:57,956 INFO mapred.MapTask: bufstart = 0; bufvoid = 104857600

2024-04-22 09:46:57,956 INFO mapred.MapTask: kvstart = 26214396; length = 6553600

2024-04-22 09:46:57,960 INFO mapred.MapTask: Map output collector class = org.apache.hadoop.mapred.MapTask$MapOutputBuffer

2024-04-22 09:46:58,039 INFO mapred.LocalJobRunner:

2024-04-22 09:46:58,041 INFO mapred.MapTask: Starting flush of map output

2024-04-22 09:46:58,041 INFO mapred.MapTask: Spilling map output

2024-04-22 09:46:58,041 INFO mapred.MapTask: bufstart = 0; bufend = 106; bufvoid = 104857600

2024-04-22 09:46:58,041 INFO mapred.MapTask: kvstart = 26214396(104857584); kvend = 26214356(104857424); length = 41/6553600

2024-04-22 09:46:58,082 INFO mapred.MapTask: Finished spill 0

2024-04-22 09:46:58,091 INFO mapred.Task: Task:attempt\_local1126753776\_0001\_m\_000000\_0 is done. And is in the process of committing

2024-04-22 09:46:58,095 INFO mapred.LocalJobRunner: map

2024-04-22 09:46:58,095 INFO mapred.Task: Task 'attempt\_local1126753776\_0001\_m\_000000\_0' done.

2024-04-22 09:46:58,100 INFO mapred.Task: Final Counters for attempt\_local1126753776\_0001\_m\_000000\_0: Counters: 24

File System Counters

FILE: Number of bytes read=3256

FILE: Number of bytes written=642432

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=62

HDFS: Number of bytes written=0

HDFS: Number of read operations=5

HDFS: Number of large read operations=0

HDFS: Number of write operations=1

HDFS: Number of bytes read erasure-coded=0

Map-Reduce Framework

Map input records=1

Map output records=11

Map output bytes=106

Map output materialized bytes=125

Input split bytes=101

Combine input records=11

Combine output records=10

Spilled Records=10

Failed Shuffles=0

Merged Map outputs=0

GC time elapsed (ms)=6

Total committed heap usage (bytes)=292552704

File Input Format Counters

Bytes Read=62

2024-04-22 09:46:58,101 INFO mapred.LocalJobRunner: Finishing task: attempt\_local1126753776\_0001\_m\_000000\_0

2024-04-22 09:46:58,102 INFO mapred.LocalJobRunner: map task executor complete.

2024-04-22 09:46:58,105 INFO mapred.LocalJobRunner: Waiting for reduce tasks

2024-04-22 09:46:58,105 INFO mapred.LocalJobRunner: Starting task: attempt\_local1126753776\_0001\_r\_000000\_0

2024-04-22 09:46:58,112 INFO output.PathOutputCommitterFactory: No output committer factory defined, defaulting to FileOutputCommitterFactory

2024-04-22 09:46:58,112 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2

2024-04-22 09:46:58,112 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup \_temporary folders under output directory:false, ignore cleanup failures: false

2024-04-22 09:46:58,113 INFO mapred.Task: Using ResourceCalculatorProcessTree : [ ]

2024-04-22 09:46:58,115 INFO mapred.ReduceTask: Using ShuffleConsumerPlugin: org.apache.hadoop.mapreduce.task.reduce.Shuffle@7449074a

2024-04-22 09:46:58,116 WARN impl.MetricsSystemImpl: JobTracker metrics system already initialized!

2024-04-22 09:46:58,129 INFO reduce.MergeManagerImpl: MergerManager: memoryLimit=1443050240, maxSingleShuffleLimit=360762560, mergeThreshold=952413184, ioSortFactor=10, memToMemMergeOutputsThreshold=10

2024-04-22 09:46:58,131 INFO reduce.EventFetcher: attempt\_local1126753776\_0001\_r\_000000\_0 Thread started: EventFetcher for fetching Map Completion Events

2024-04-22 09:46:58,154 INFO reduce.LocalFetcher: localfetcher#1 about to shuffle output of map attempt\_local1126753776\_0001\_m\_000000\_0 decomp: 121 len: 125 to MEMORY

2024-04-22 09:46:58,157 INFO reduce.InMemoryMapOutput: Read 121 bytes from map-output for attempt\_local1126753776\_0001\_m\_000000\_0

2024-04-22 09:46:58,159 INFO reduce.MergeManagerImpl: closeInMemoryFile -> map-output of size: 121, inMemoryMapOutputs.size() -> 1, commitMemory -> 0, usedMemory ->121

2024-04-22 09:46:58,161 INFO reduce.EventFetcher: EventFetcher is interrupted.. Returning

2024-04-22 09:46:58,162 INFO mapred.LocalJobRunner: 1 / 1 copied.

2024-04-22 09:46:58,163 INFO reduce.MergeManagerImpl: finalMerge called with 1 in-memory map-outputs and 0 on-disk map-outputs

2024-04-22 09:46:58,168 INFO mapred.Merger: Merging 1 sorted segments

2024-04-22 09:46:58,169 INFO mapred.Merger: Down to the last merge-pass, with 1 segments left of total size: 115 bytes

2024-04-22 09:46:58,171 INFO reduce.MergeManagerImpl: Merged 1 segments, 121 bytes to disk to satisfy reduce memory limit

2024-04-22 09:46:58,173 INFO reduce.MergeManagerImpl: Merging 1 files, 125 bytes from disk

2024-04-22 09:46:58,174 INFO reduce.MergeManagerImpl: Merging 0 segments, 0 bytes from memory into reduce

2024-04-22 09:46:58,174 INFO mapred.Merger: Merging 1 sorted segments

2024-04-22 09:46:58,176 INFO mapred.Merger: Down to the last merge-pass, with 1 segments left of total size: 115 bytes

2024-04-22 09:46:58,177 INFO mapred.LocalJobRunner: 1 / 1 copied.

2024-04-22 09:46:58,224 INFO Configuration.deprecation: mapred.skip.on is deprecated. Instead, use mapreduce.job.skiprecords

2024-04-22 09:46:58,299 INFO mapred.Task: Task:attempt\_local1126753776\_0001\_r\_000000\_0 is done. And is in the process of committing

2024-04-22 09:46:58,301 INFO mapred.LocalJobRunner: 1 / 1 copied.

2024-04-22 09:46:58,301 INFO mapred.Task: Task attempt\_local1126753776\_0001\_r\_000000\_0 is allowed to commit now

2024-04-22 09:46:58,324 INFO output.FileOutputCommitter: Saved output of task 'attempt\_local1126753776\_0001\_r\_000000\_0' to hdfs://127.0.0.1:9000/31181/Output

2024-04-22 09:46:58,327 INFO mapred.LocalJobRunner: reduce > reduce

2024-04-22 09:46:58,327 INFO mapred.Task: Task 'attempt\_local1126753776\_0001\_r\_000000\_0' done.

2024-04-22 09:46:58,328 INFO mapred.Task: Final Counters for attempt\_local1126753776\_0001\_r\_000000\_0: Counters: 30

File System Counters

FILE: Number of bytes read=3538

FILE: Number of bytes written=642557

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=62

HDFS: Number of bytes written=79

HDFS: Number of read operations=10

HDFS: Number of large read operations=0

HDFS: Number of write operations=3

HDFS: Number of bytes read erasure-coded=0

Map-Reduce Framework

Combine input records=0

Combine output records=0

Reduce input groups=10

Reduce shuffle bytes=125

Reduce input records=10

Reduce output records=10

Spilled Records=10

Shuffled Maps =1

Failed Shuffles=0

Merged Map outputs=1

GC time elapsed (ms)=0

Total committed heap usage (bytes)=292552704

Shuffle Errors

BAD\_ID=0

CONNECTION=0

IO\_ERROR=0

WRONG\_LENGTH=0

WRONG\_MAP=0

WRONG\_REDUCE=0

File Output Format Counters

Bytes Written=79

2024-04-22 09:46:58,328 INFO mapred.LocalJobRunner: Finishing task: attempt\_local1126753776\_0001\_r\_000000\_0

2024-04-22 09:46:58,328 INFO mapred.LocalJobRunner: reduce task executor complete.

2024-04-22 09:46:58,793 INFO mapreduce.Job: Job job\_local1126753776\_0001 running in uber mode : false

2024-04-22 09:46:58,795 INFO mapreduce.Job: map 100% reduce 100%

2024-04-22 09:46:58,798 INFO mapreduce.Job: Job job\_local1126753776\_0001 completed successfully

2024-04-22 09:46:58,808 INFO mapreduce.Job: Counters: 36

File System Counters

FILE: Number of bytes read=6794

FILE: Number of bytes written=1284989

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=124

HDFS: Number of bytes written=79

HDFS: Number of read operations=15

HDFS: Number of large read operations=0

HDFS: Number of write operations=4

HDFS: Number of bytes read erasure-coded=0

Map-Reduce Framework

Map input records=1

Map output records=11

Map output bytes=106

Map output materialized bytes=125

Input split bytes=101

Combine input records=11

Combine output records=10

Reduce input groups=10

Reduce shuffle bytes=125

Reduce input records=10

Reduce output records=10

Spilled Records=20

Shuffled Maps =1

Failed Shuffles=0

Merged Map outputs=1

GC time elapsed (ms)=6

Total committed heap usage (bytes)=585105408

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=62

File Output Format Counters

Bytes Written=79

hadoop@pict-OptiPlex-3020:~/31165$ hdfs dfs -ls /31181/Output

Found 2 items

-rw-r--r-- 3 hadoop supergroup 0 2024-04-22 09:46 /31181/Output/\_SUCCESS

-rw-r--r-- 3 hadoop supergroup 79 2024-04-22 09:46 /31181/Output/part-r-00000

hadoop@pict-OptiPlex-3020:~/31165$ hdfs dfs -cat /31181/Output/part-r-00000

All 1

India 1

Indians 1

and 1

are 1

brothers 1

country. 1

is 1

my 2

sisters. 1

hadoop@pict-OptiPlex-3020:~/31165$