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

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -put /31165/A12/input\_weatherDataAverage.txt /31181/Input

put: `/31165/A12/input\_weatherDataAverage.txt': No such file or directory

hadoop@pict-OptiPlex-3020:~$ pwd

/home/hadoop

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -put /home/hadoop/31165/A12/input\_weatherDataAverage.txt /31181/Input

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

Found 1 items

-rw-r--r-- 3 hadoop supergroup 1770 2024-04-22 09:57 /31181/Input/input\_weatherDataAverage.txt

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

cat: `/31181/Input': Is a directory

hadoop@pict-OptiPlex-3020:~$ hdfs dfs -cat /31181/Input/input\_weatherDataAverage.txt

51.75 1006.3 71.6

54.74 1006.3 71.6

50.59 1006.3 71.6

51.67 1006.3 71.6

65.67 1006.3 71.6

55.37 1006.3 71.6

49.26 1006.3 71.6

55.44 1006.3 71.6

64.05 1006.3 71.6

68.77 1006.3 71.6

48.93 1006.3 71.6

65.37 1006.3 71.6

69.45 1006.3 71.6

52.91 1006.3 71.6

53.69 1006.3 71.6

53.3 1006.3 71.6

66.17 1006.3 71.6

53.83 1006.3 71.6

50.54 1006.3 71.6

50.27 1006.3 71.6

59.08 1006.3 71.6

53.05 1006.3 71.6

57.97 1006.3 71.6

48.23 1006.3 71.6

47.16 1003.2 53.6

69.72 1003.2 53.6

62.71 1003.2 53.6

46.34 1003.2 53.6

53.15 1003.2 53.6

64.59 1003.2 53.6

58.26 1003.2 53.6

53.27 1003.2 53.6

43.68 1003.2 53.6

65.7 1003.2 53.6

66.27 1003.2 53.6

53.05 1003.2 53.6

68.45 1003.2 53.6

49.03 1003.2 53.6

66.59 1003.2 53.6

63.12 1003.2 53.6

49.13 1003.2 53.6

62.85 1003.2 53.6

64.67 1003.2 53.6

55.73 1003.2 53.6

56.42 1003.2 53.6

53.83 1003.2 53.6

45.14 1003.2 53.6

68.18 1003.2 53.6

48.41 1008.7 62.78

55.12 1008.7 62.78

46.48 1008.7 62.78

54.99 1008.7 62.78

50.62 1008.7 62.78

55.81 1008.7 62.78

59.28 1008.7 62.78

60.55 1008.7 62.78

52.62 1008.7 62.78

62.27 1008.7 62.78

49.9 1008.7 62.78

45.12 1008.7 62.78

62.85 1008.7 62.78

50.9 1008.7 62.78

49.73 1008.7 62.78

47.28 1008.7 62.78

46.67 1008.7 62.78

49.48 1008.7 62.78

59.53 1008.7 62.78

59.49 1008.7 62.78

52.25 1008.7 62.78

57.67 1008.7 62.78

54.04 1008.7 62.78

58.76 1008.7 62.78

48.6 1020.0 51.98

50.54 1020.0 51.98

38.55 1020.0 51.98

50.14 1020.0 51.98

34.86 1020.0 51.98

35.38 1020.0 51.98

41.52 1020.0 51.98

42.28 1020.0 51.98

45.11 1020.0 51.98

51.01 1020.0 51.98

43.6 1020.0 51.98

50.12 1020.0 51.98

55.07 1020.0 51.98

43.24 1020.0 51.98

49.84 1020.0 51.98

44.42 1020.0 51.98

58.77 1020.0 51.98

35.32 1020.0 51.98

34.83 1020.0 51.98

51.72 1020.0 51.98

52.39 1020.0 51.98

57.54 1020.0 51.98

50.37 1020.0 51.98

51.75 1020.0 51.98

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/A12/build' '/home/hadoop/31165/A12/WeatherDataAverage.java'

hadoop@pict-OptiPlex-3020:~$

—-------------------------------

hadoop@pict-OptiPlex-3020:~/31165/A12$ jar -cvf weather.jar -C build/ .

added manifest

adding: WeatherDataAverage.class(in = 1705) (out= 892)(deflated 47%)

adding: WeatherDataAverage$TokenizerMapper.class(in = 2041) (out= 882)(deflated 56%)

adding: WeatherDataAverage$FloatAverageReducer.class(in = 1823) (out= 774)(deflated 57%)

hadoop@pict-OptiPlex-3020:~/31165/A12$ hadoop jar '/home/hadoop/31165/A12/weather.jar' WeatherDataAverage /31181/Input /31181/Output1

2024-04-22 10:10:15,145 INFO impl.MetricsConfig: Loaded properties from hadoop-metrics2.properties

2024-04-22 10:10:15,230 INFO impl.MetricsSystemImpl: Scheduled Metric snapshot period at 10 second(s).

2024-04-22 10:10:15,230 INFO impl.MetricsSystemImpl: JobTracker metrics system started

2024-04-22 10:10:15,364 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 10:10:15,495 INFO input.FileInputFormat: Total input files to process : 1

2024-04-22 10:10:15,514 INFO mapreduce.JobSubmitter: number of splits:1

2024-04-22 10:10:15,641 INFO mapreduce.JobSubmitter: Submitting tokens for job: job\_local1669818974\_0001

2024-04-22 10:10:15,642 INFO mapreduce.JobSubmitter: Executing with tokens: []

2024-04-22 10:10:15,762 INFO mapreduce.Job: The url to track the job: http://localhost:8080/

2024-04-22 10:10:15,767 INFO mapreduce.Job: Running job: job\_local1669818974\_0001

2024-04-22 10:10:15,769 INFO mapred.LocalJobRunner: OutputCommitter set in config null

2024-04-22 10:10:15,784 INFO output.PathOutputCommitterFactory: No output committer factory defined, defaulting to FileOutputCommitterFactory

2024-04-22 10:10:15,785 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2

2024-04-22 10:10:15,785 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup \_temporary folders under output directory:false, ignore cleanup failures: false

2024-04-22 10:10:15,786 INFO mapred.LocalJobRunner: OutputCommitter is org.apache.hadoop.mapreduce.lib.output.FileOutputCommitter

2024-04-22 10:10:15,849 INFO mapred.LocalJobRunner: Waiting for map tasks

2024-04-22 10:10:15,849 INFO mapred.LocalJobRunner: Starting task: attempt\_local1669818974\_0001\_m\_000000\_0

2024-04-22 10:10:15,873 INFO output.PathOutputCommitterFactory: No output committer factory defined, defaulting to FileOutputCommitterFactory

2024-04-22 10:10:15,874 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2

2024-04-22 10:10:15,874 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup \_temporary folders under output directory:false, ignore cleanup failures: false

2024-04-22 10:10:15,889 INFO mapred.Task: Using ResourceCalculatorProcessTree : [ ]

2024-04-22 10:10:15,893 INFO mapred.MapTask: Processing split: hdfs://127.0.0.1:9000/31181/Input/input\_weatherDataAverage.txt:0+1770

2024-04-22 10:10:15,940 INFO mapred.MapTask: (EQUATOR) 0 kvi 26214396(104857584)

2024-04-22 10:10:15,941 INFO mapred.MapTask: mapreduce.task.io.sort.mb: 100

2024-04-22 10:10:15,941 INFO mapred.MapTask: soft limit at 83886080

2024-04-22 10:10:15,941 INFO mapred.MapTask: bufstart = 0; bufvoid = 104857600

2024-04-22 10:10:15,941 INFO mapred.MapTask: kvstart = 26214396; length = 6553600

2024-04-22 10:10:15,945 INFO mapred.MapTask: Map output collector class = org.apache.hadoop.mapred.MapTask$MapOutputBuffer

2024-04-22 10:10:16,037 INFO mapred.LocalJobRunner:

2024-04-22 10:10:16,039 INFO mapred.MapTask: Starting flush of map output

2024-04-22 10:10:16,039 INFO mapred.MapTask: Spilling map output

2024-04-22 10:10:16,039 INFO mapred.MapTask: bufstart = 0; bufend = 4128; bufvoid = 104857600

2024-04-22 10:10:16,039 INFO mapred.MapTask: kvstart = 26214396(104857584); kvend = 26213248(104852992); length = 1149/6553600

2024-04-22 10:10:16,065 INFO mapred.MapTask: Finished spill 0

2024-04-22 10:10:16,076 INFO mapred.Task: Task:attempt\_local1669818974\_0001\_m\_000000\_0 is done. And is in the process of committing

2024-04-22 10:10:16,080 INFO mapred.LocalJobRunner: map

2024-04-22 10:10:16,080 INFO mapred.Task: Task 'attempt\_local1669818974\_0001\_m\_000000\_0' done.

2024-04-22 10:10:16,085 INFO mapred.Task: Final Counters for attempt\_local1669818974\_0001\_m\_000000\_0: Counters: 23

File System Counters

FILE: Number of bytes read=3560

FILE: Number of bytes written=648842

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=1770

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=96

Map output records=288

Map output bytes=4128

Map output materialized bytes=4710

Input split bytes=127

Combine input records=0

Spilled Records=288

Failed Shuffles=0

Merged Map outputs=0

GC time elapsed (ms)=8

Total committed heap usage (bytes)=287309824

File Input Format Counters

Bytes Read=1770

2024-04-22 10:10:16,085 INFO mapred.LocalJobRunner: Finishing task: attempt\_local1669818974\_0001\_m\_000000\_0

2024-04-22 10:10:16,086 INFO mapred.LocalJobRunner: map task executor complete.

2024-04-22 10:10:16,088 INFO mapred.LocalJobRunner: Waiting for reduce tasks

2024-04-22 10:10:16,088 INFO mapred.LocalJobRunner: Starting task: attempt\_local1669818974\_0001\_r\_000000\_0

2024-04-22 10:10:16,096 INFO output.PathOutputCommitterFactory: No output committer factory defined, defaulting to FileOutputCommitterFactory

2024-04-22 10:10:16,096 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2

2024-04-22 10:10:16,096 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup \_temporary folders under output directory:false, ignore cleanup failures: false

2024-04-22 10:10:16,097 INFO mapred.Task: Using ResourceCalculatorProcessTree : [ ]

2024-04-22 10:10:16,102 INFO mapred.ReduceTask: Using ShuffleConsumerPlugin: org.apache.hadoop.mapreduce.task.reduce.Shuffle@2eda240e

2024-04-22 10:10:16,103 WARN impl.MetricsSystemImpl: JobTracker metrics system already initialized!

2024-04-22 10:10:16,119 INFO reduce.MergeManagerImpl: MergerManager: memoryLimit=1443050240, maxSingleShuffleLimit=360762560, mergeThreshold=952413184, ioSortFactor=10, memToMemMergeOutputsThreshold=10

2024-04-22 10:10:16,121 INFO reduce.EventFetcher: attempt\_local1669818974\_0001\_r\_000000\_0 Thread started: EventFetcher for fetching Map Completion Events

2024-04-22 10:10:16,151 INFO reduce.LocalFetcher: localfetcher#1 about to shuffle output of map attempt\_local1669818974\_0001\_m\_000000\_0 decomp: 4706 len: 4710 to MEMORY

2024-04-22 10:10:16,154 INFO reduce.InMemoryMapOutput: Read 4706 bytes from map-output for attempt\_local1669818974\_0001\_m\_000000\_0

2024-04-22 10:10:16,156 INFO reduce.MergeManagerImpl: closeInMemoryFile -> map-output of size: 4706, inMemoryMapOutputs.size() -> 1, commitMemory -> 0, usedMemory ->4706

2024-04-22 10:10:16,157 INFO reduce.EventFetcher: EventFetcher is interrupted.. Returning

2024-04-22 10:10:16,158 INFO mapred.LocalJobRunner: 1 / 1 copied.

2024-04-22 10:10:16,159 INFO reduce.MergeManagerImpl: finalMerge called with 1 in-memory map-outputs and 0 on-disk map-outputs

2024-04-22 10:10:16,165 INFO mapred.Merger: Merging 1 sorted segments

2024-04-22 10:10:16,166 INFO mapred.Merger: Down to the last merge-pass, with 1 segments left of total size: 4695 bytes

2024-04-22 10:10:16,169 INFO reduce.MergeManagerImpl: Merged 1 segments, 4706 bytes to disk to satisfy reduce memory limit

2024-04-22 10:10:16,169 INFO reduce.MergeManagerImpl: Merging 1 files, 4710 bytes from disk

2024-04-22 10:10:16,170 INFO reduce.MergeManagerImpl: Merging 0 segments, 0 bytes from memory into reduce

2024-04-22 10:10:16,170 INFO mapred.Merger: Merging 1 sorted segments

2024-04-22 10:10:16,171 INFO mapred.Merger: Down to the last merge-pass, with 1 segments left of total size: 4695 bytes

2024-04-22 10:10:16,171 INFO mapred.LocalJobRunner: 1 / 1 copied.

2024-04-22 10:10:16,210 INFO Configuration.deprecation: mapred.skip.on is deprecated. Instead, use mapreduce.job.skiprecords

2024-04-22 10:10:16,342 INFO mapred.Task: Task:attempt\_local1669818974\_0001\_r\_000000\_0 is done. And is in the process of committing

2024-04-22 10:10:16,347 INFO mapred.LocalJobRunner: 1 / 1 copied.

2024-04-22 10:10:16,348 INFO mapred.Task: Task attempt\_local1669818974\_0001\_r\_000000\_0 is allowed to commit now

2024-04-22 10:10:16,369 INFO output.FileOutputCommitter: Saved output of task 'attempt\_local1669818974\_0001\_r\_000000\_0' to hdfs://127.0.0.1:9000/31181/Output1

2024-04-22 10:10:16,370 INFO mapred.LocalJobRunner: reduce > reduce

2024-04-22 10:10:16,370 INFO mapred.Task: Task 'attempt\_local1669818974\_0001\_r\_000000\_0' done.

2024-04-22 10:10:16,370 INFO mapred.Task: Final Counters for attempt\_local1669818974\_0001\_r\_000000\_0: Counters: 30

File System Counters

FILE: Number of bytes read=13012

FILE: Number of bytes written=653552

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=1770

HDFS: Number of bytes written=60

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=3

Reduce shuffle bytes=4710

Reduce input records=288

Reduce output records=3

Spilled Records=288

Shuffled Maps =1

Failed Shuffles=0

Merged Map outputs=1

GC time elapsed (ms)=0

Total committed heap usage (bytes)=287309824

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=60

2024-04-22 10:10:16,371 INFO mapred.LocalJobRunner: Finishing task: attempt\_local1669818974\_0001\_r\_000000\_0

2024-04-22 10:10:16,371 INFO mapred.LocalJobRunner: reduce task executor complete.

2024-04-22 10:10:16,778 INFO mapreduce.Job: Job job\_local1669818974\_0001 running in uber mode : false

2024-04-22 10:10:16,779 INFO mapreduce.Job: map 100% reduce 100%

2024-04-22 10:10:16,782 INFO mapreduce.Job: Job job\_local1669818974\_0001 completed successfully

2024-04-22 10:10:16,796 INFO mapreduce.Job: Counters: 36

File System Counters

FILE: Number of bytes read=16572

FILE: Number of bytes written=1302394

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=3540

HDFS: Number of bytes written=60

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=96

Map output records=288

Map output bytes=4128

Map output materialized bytes=4710

Input split bytes=127

Combine input records=0

Combine output records=0

Reduce input groups=3

Reduce shuffle bytes=4710

Reduce input records=288

Reduce output records=3

Spilled Records=576

Shuffled Maps =1

Failed Shuffles=0

Merged Map outputs=1

GC time elapsed (ms)=8

Total committed heap usage (bytes)=574619648

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=1770

File Output Format Counters

Bytes Written=60

hadoop@pict-OptiPlex-3020:~/31165/A12$ hdfs dfs -ls /31181/Output1

Found 2 items

-rw-r--r-- 3 hadoop supergroup 0 2024-04-22 10:10 /31181/Output1/\_SUCCESS

-rw-r--r-- 3 hadoop supergroup 60 2024-04-22 10:10 /31181/Output1/part-r-00000

hadoop@pict-OptiPlex-3020:~/31165/A12$ hdfs dfs -cat /31181/Output1/part-r-00000

DewPoint 59.99005

Temperature 53.58261

WindSpeed 1009.55023

hadoop@pict-OptiPlex-3020:~/31165/A12$