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hadoop@bmscscse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop fs -mkdir /rsg
hadoop@bmscscse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop fs -copyFromLocal /home/hadoop/Desktop/sample.txt /rsg/sample.txt
hadoop@bmscscse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop jar /home/hadoop/Desktop/wordcount.jar WCDriver /rsg/sample.txt /result
2025-05-06 15:05:01,260 INFO impl.MetricsConfig: Loaded properties from hadoop-metrics2.properties
2025-05-06 15:05:01,299 INFO impl.MetricsSystemImpl: Scheduled Metric snapshot period at 10 second(s).
2025-05-06 15:05:01,299 INFO impl.MetricsSystemImpl: JobTracker metrics system started
2025-05-06 15:05:01,305 WARN impl.MetricsSystemImpl: JobTracker metrics system already initialized!
2025-05-06 15:05:01,365 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool interface and execute your application with ToolRunner to remedy this.
2025-05-06 15:05:01,414 INFO mapred.FileInputFormat: Total input files to process : 1
2025-05-06 15:05:01,445 INFO mapreduce.JobSubmitter: number of splits:1
2025-05-06 15:05:01,511 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_local90897529_0001
2025-05-06 15:05:01,511 INFO mapreduce.JobSubmitter: Executing with tokens: []
2025-05-06 15:05:01,565 INFO mapreduce.Job: The url to track the job: http://localhost:8080/
2025-05-06 15:05:01,566 INFO mapreduce.Job: Running job: job_local90897529_0001
2025-05-06 15:05:01,566 INFO mapred.LocalJobRunner: OutputCommitter set in config null
2025-05-06 15:05:01,567 INFO mapred.LocalJobRunner: OutputCommitter is org.apache.hadoop.mapred.FileOutputCommitter
2025-05-06 15:05:01,569 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2

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hadoop@bmscece-HP-Elite-Tower-800-G9-Desktop-PC: ~
2025-05-06 15:05:01,299 INFO impl.MetricsSystemImpl: Scheduled Metric snapshot period at 10 second(s).
2025-05-06 15:05:01,299 INFO impl.MetricsSystemImpl: JobTracker metrics system started
2025-05-06 15:05:01,305 WARN impl.MetricsSystemImpl: JobTracker metrics system already initialized!
2025-05-06 15:05:01,365 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool interface
and execute your application with ToolRunner to remedy this.
2025-05-06 15:05:01,414 INFO mapred.FileInputFormat: Total input files to process : 1
2025-05-06 15:05:01,511 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_local90897529_0001
2025-05-06 15:05:01,511 INFO mapreduce.JobSubmitter: Executing with tokens: []
2025-05-06 15:05:01,565 INFO mapreduce.Job: The url to track the job: http://localhost:8080/
2025-05-06 15:05:01,566 INFO mapreduce.Job: Running job: job_local90897529_0001
2025-05-06 15:05:01,566 INFO mapred.LocalJobRunner: OutputCommitter set in config null
2025-05-06 15:05:01,567 INFO mapred.LocalJobRunner: OutputCommitter is org.apache.hadoop.mapred.FileOutputCommitter
2025-05-06 15:05:01,569 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2
2025-05-06 15:05:01,569 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup _temporary folders under output directory:false
, ignore cleanup failures: false
2025-05-06 15:05:01,606 INFO mapred.LocalJobRunner: Waiting for map tasks
2025-05-06 15:05:01,607 INFO mapred.LocalJobRunner: Starting task: attempt_local90897529_0001_m_000000_0
2025-05-06 15:05:01,618 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2
2025-05-06 15:05:01,618 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup _temporary folders under output directory:false
, ignore cleanup failures: false
2025-05-06 15:05:01,624 INFO mapred.Task: Using ResourceCalculatorProcessTree : [ ]
2025-05-06 15:05:01,631 INFO mapred.MapTask: Processing split: hdfs://localhost:9000/rsg/sample.txt:0+89
2025-05-06 15:05:01,640 INFO mapred.MapTask: numReduceTasks: 1
2025-05-06 15:05:01,671 INFO mapred.MapTask: (EQUATOR) 0 kvt 26214396(104857584)
2025-05-06 15:05:01,671 INFO mapred.MapTask: mapreduce.task.io.sort.mb: 100
2025-05-06 15:05:01,671 INFO mapred.MapTask: soft limit at 83886080
2025-05-06 15:05:01,671 INFO mapred.MapTask: bufstart = 0; bufvoid = 104857600
2025-05-06 15:05:01,671 INFO mapred.MapTask: kvstart = 26214396; length = 6553600
2025-05-06 15:05:01,673 INFO mapred.MapTask: Map output collector class = org.apache.hadoop.mapred.MapTask$MapOutputBuffer
2025-05-06 15:05:01,742 INFO mapred.LocalJobRunner:
2025-05-06 15:05:01,742 INFO mapred.MapTask: Starting flush of map output
2025-05-06 15:05:01,742 INFO mapred.MapTask: Spilling map output
2025-05-06 15:05:01,742 INFO mapred.MapTask: bufstart = 0; bufend = 169; bufvoid = 104857600
2025-05-06 15:05:01,742 INFO mapred.MapTask: kvstart = 26214396(104857584); kvend = 26214320(104857280); length = 77/6553600
2025-05-06 15:05:01,745 INFO mapred.MapTask: Finished spill 0
2025-05-06 15:05:01,751 INFO mapred.Task: Task:attempt_local90897529_0001_m_000000_0 is done. And is in the process of committing
2025-05-06 15:05:01,753 INFO mapred.LocalJobRunner: hdfs://localhost:9000/rsg/sample.txt:0+89
2025-05-06 15:05:01,753 INFO mapred.Task: Task :attempt_local90897529_0001_m_000000_0' done.
2025-05-06 15:05:01,750 INFO mapred.Task: Final counters for attempt_local90897529_0001_m_000000_0: Counters: 23
File System Counters
FILE: Number of bytes read=4273
FILE: Number of bytes written=639534
FILE: Number of read operations=0

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hadoop@bmscece-HP-Elite-Tower-800-G9-Desktop-PC: ~
BAD_ID=0
CONNECTION=0
IO_ERROR=0
WRONG_LENGTH=0
WRONG_MAP=0
WRONG_REDUCE=0
File Output Format Counters
Bytes Written=69
2025-05-06 15:05:01,897 INFO mapred.LocalJobRunner: Finishing task: attempt_local90897529_0001_r_000000_0
2025-05-06 15:05:01,897 INFO mapred.LocalJobRunner: reduce task executor complete.
2025-05-06 15:05:02,569 INFO mapreduce.Job: Job job_local90897529_0001 running in uber mode : false
2025-05-06 15:05:02,572 INFO mapreduce.Job: map 100% reduce 100%
2025-05-06 15:05:02,574 INFO mapreduce.Job: Job job_local90897529_0001 completed successfully
2025-05-06 15:05:02,584 INFO mapreduce.Job: Counters: 36
File System Counters
FILE: Number of bytes read=9008
FILE: Number of bytes written=1279283
FILE: Number of read operations=0
FILE: Number of large read operations=0
FILE: Number of write operations=0
HDFS: Number of bytes read=178
HDFS: Number of bytes written=69
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=5
Map output records=20
Map output bytes=169
Map output materialized bytes=215
Input split bytes=88
Combine input records=0
Combine output records=0
Reduce input groups=10
Reduce shuffle bytes=215
Reduce input records=20
Reduce output records=10
Spilled Records=40
Shuffled Maps =1
Failed Shuffles=0
Merged Map outputs=1
GC time elapsed (ms)=0
Total committed heap usage (bytes)=1052770304

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hadoop@bmscscse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
FILE: Number of write operations=0  
HDFS: Number of bytes read=89  
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=5  
  Map output records=20  
  Map output bytes=169  
  Map output materialized bytes=215  
  Input split bytes=88  
  Combine input records=0  
  Spilled Records=20  
  Failed Shuffles=0  
  Merged Map outputs=0  
  GC time elapsed (ms)=0  
  Total committed heap usage (bytes)=526385152  
File Input Format Counters  
  Bytes Read=89  
025-05-06 15:05:01,756 INFO mapred.LocalJobRunner: Finishing task: attempt_local90897529_0001_m_000000_0  
025-05-06 15:05:01,757 INFO mapred.LocalJobRunner: map task executor complete.  
025-05-06 15:05:01,758 INFO mapred.LocalJobRunner: Waiting for reduce tasks  
025-05-06 15:05:01,758 INFO mapred.LocalJobRunner: Starting task: attempt_local90897529_0001_r_000000_0  
025-05-06 15:05:01,762 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2  
025-05-06 15:05:01,762 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup _temporary folders under output directory:false  
  ignore cleanup failures: false  
025-05-06 15:05:01,762 INFO mapred.Task: Using ResourceCalculatorProcessTree : [ ]  
025-05-06 15:05:01,763 INFO mapred.ReduceTask: Using ShuffleConsumerPlugin: org.apache.hadoop.mapreduce.task.reduce.Shuffle@636a90e9  
025-05-06 15:05:01,764 WARN Impl.MetricsSystemImpl: JobTracker metrics system already initialized!  
025-05-06 15:05:01,771 INFO reduce.MergeManagerImpl: MergerManager: memoryLimit=5827985408, maxSingleShuffleLimit=1456996352, mergeThres  
old=3846470400, ioSortFactor=10, memToMemMergeOutputsThreshold=10  
025-05-06 15:05:01,772 INFO reduce.EventFetcher: attempt_local90897529_0001_r_000000_0 Thread started: EventFetcher for fetching Map Com  
pletion Events  
025-05-06 15:05:01,785 INFO reduce.LocalFetcher: localfetcher#1 about to shuffle output of map attempt_local90897529_0001_m_000000_0 dec  
mp: 211 len: 215 to MEMORY  
025-05-06 15:05:01,787 INFO reduce.InMemoryMapOutput: Read 211 bytes from map-output for attempt_local90897529_0001_m_000000_0  
025-05-06 15:05:01,788 INFO reduce.MergeManagerImpl: closeInMemoryFile -> map-output of size: 211, inMemoryMapOutputs.size() -> 1, commi  
Memory -> 0, usedMemory -> 211  
025-05-06 15:05:01,788 INFO reduce.EventFetcher: EventFetcher is interrupted.. Returning  
025-05-06 15:05:01,789 INFO mapred.LocalJobRunner: 1 / 1 copied.  
025-05-06 15:05:01,789 INFO reduce.MergeManagerImpl: finalMerge called with 1 in-memory map-outputs and 0 on-disk map-outputs  
025-05-06 15:05:01,792 INFO mapred.Merger: Merging 1 sorted segments
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hadoop@bmscscse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
25-05-06 15:05:01,792 INFO reduce.MergeManagerImpl: Merged 1 segments, 211 bytes to disk to satisfy reduce memory limit  
25-05-06 15:05:01,793 INFO reduce.MergeManagerImpl: Merging 1 files, 215 bytes from disk  
25-05-06 15:05:01,793 INFO reduce.MergeManagerImpl: Merging 0 segments, 0 bytes from memory into reduce  
25-05-06 15:05:01,793 INFO mapred.Merger: Merging 1 sorted segments  
25-05-06 15:05:01,793 INFO mapred.Merger: Down to the last merge-pass, with 1 segments left of total size: 205 bytes  
25-05-06 15:05:01,793 INFO mapred.LocalJobRunner: 1 / 1 copied.  
25-05-06 15:05:01,867 INFO mapred.Task: Task:attempt_local90897529_0001_r_000000_0 is done. And is in the process of committing  
25-05-06 15:05:01,869 INFO mapred.LocalJobRunner: 1 / 1 copied.  
25-05-06 15:05:01,869 INFO mapred.Task: Task attempt_local90897529_0001_r_000000_0 is allowed to commit now  
25-05-06 15:05:01,894 INFO output.FileOutputCommitter: Saved output of task 'attempt_local90897529_0001_r_000000_0' to hdfs://localhost  
000/result  
25-05-06 15:05:01,896 INFO mapred.LocalJobRunner: reduce > reduce  
25-05-06 15:05:01,896 INFO mapred.Task: Task 'attempt_local90897529_0001_r_000000_0' done.  
25-05-06 15:05:01,897 INFO mapred.Task: Final Counters for attempt_local90897529_0001_r_000000_0: Counters: 30  
File System Counters  
  FILE: Number of bytes read=4735  
  FILE: Number of bytes written=639749  
  FILE: Number of read operations=0  
  FILE: Number of large read operations=0  
  FILE: Number of write operations=0  
  HDFS: Number of bytes read=89  
  HDFS: Number of bytes written=69  
  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=215  
  Reduce input records=20  
  Reduce output records=10  
  Spilled Records=20  
  Shuffled Maps =1  
  Failed Shuffles=0  
  Merged Map outputs=1  
  GC time elapsed (ms)=0  
  Total committed heap usage (bytes)=526385152  
Shuffle Errors  
  BAD_ID=0  
  CONNECTION=0  
  IO_ERROR=0  
  WRONG_LENGTH=0
```

```
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
HDFS: Number of write operations=4  
HDFS: Number of bytes read erasure-coded=0  
Map-Reduce Framework  
  Map input records=5  
  Map output records=20  
  Map output bytes=169  
  Map output materialized bytes=215  
  Input split bytes=88  
  Combine input records=0  
  Combine output records=0  
  Reduce input groups=10  
  Reduce shuffle bytes=215  
  Reduce input records=20  
  Reduce output records=10  
  Spilled Records=40  
  Shuffled Maps =1  
  Failed Shuffles=0  
  Merged Map outputs=1  
  GC time elapsed (ms)=0  
  Total committed heap usage (bytes)=1052770304  
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=89  
File Output Format Counters  
  Bytes Written=69  
Exit Code: 0  
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop fs -cat /result/part-00000  
are      1  
brother 1  
family  1  
hl       1  
how      5  
is       4  
job      1  
sister  1  
you      1  
your     4  
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$
```