C:\hadoop_new\share\hadoop\mapreduce>hadoop jarhadoop-mapreduce-examples-3.1.0.jar

An example program must be given as the first argument. Valid program names are:

aggregatewordcount: An Aggregate based map/reduce program that counts thewords in the input files.

aggregatewordhist: An Aggregate based map/reduce program that computes the histogram of the words in the input files.

bbp: A map/reduce program that uses Bailey-Borwein-Plouffe to compute exactdigits of Pi. dbcount: An example job that count the pageview counts from a database. distbbp: A map/reduce program that uses a BBP-type formula to compute exact bits of Pi.

grep: A map/reduce program that counts the matches of a regex in the input.join: A job that effects a join over sorted, equally partitioned datasets multifilewc: A job that counts words from several files.

pentomino: A map/reduce tile laying program to find solutions to pentominoproblems.

pi: A map/reduce program that estimates Pi using a quasi-Monte Carlo method.

randomtextwriter: A map/reduce program that writes 10GB of random textual data per node.

randomwriter: A map/reduce program that writes 10GB of random data pernode.

secondarysort: An example defining a secondary sort to the reduce.

sort: A map/reduce program that sorts the data written by the random writer.sudoku: A sudoku solver.

teragen: Generate data for the terasortterasort: Run the

terasort

teravalidate: Checking results of terasort

wordcount: A map/reduce program that counts the words in the input files. wordmean: A map/reduce program that counts the average length of the words in the input files.

wordmedian: A map/reduce program that counts the median length of the wordsin the input files.

wordstandarddeviation: A map/reduce program that counts the standarddeviation of the length of the words in the input files.

 $\label{lem:c:hadoop_new} $$ C:\hadoop_new\hadoop\mapreduce>hdfs dfs -mkdir /input C:\hadoop_new\hadoop\mapreduce>hdfs dfs -put E:\Desktop\input.txt \end{tabular}$

C:\hadoop_new\share\hadoop\mapreduce>hdfs dfs -ls \inputFound 1 items

-rw-r--r-- 1 Admin supergroup

45 2021-04-26 14:46 /input/input.txt

C:\hadoop_new\share\hadoop\mapreduce>hdfs dfs -cat \input\input.txtdeer bear river car car river deer car bear

C:\hadoop_new\share\hadoop\mapreduce>hadoop jar

hadoop-mapreduce-examples-3.1.0.jar wordcount \input \firstExampleOutput2021-04-26 16:04:57,079 INFO client.RMProxy: Connecting to ResourceManager at /0.0.0.0:8032 2021-04-26 16:04:59,541 INFO mapreduce.JobResourceUploader: DisablingErasure Coding for path:

/tmp/hadoop-yarn/staging/Admin/.staging/job_1619433198405_0001 2021-04-26 16:05:02,640 INFO input.FileInputFormat: Total input files to process: 1

2021-04-26 16:05:04,138 INFO mapreduce.JobSubmitter: number of splits:1 2021-04-26 16:05:04,450 INFO Configuration.deprecation: yarn.resourcemanager.system-metrics-publisher.enabled is deprecated. Instead,use yarn.system-metrics-publisher.enabled 2021-04-26 16:05:05,111 INFO mapreduce.JobSubmitter: Submitting tokens forjob: job_1619433198405_0001

2021-04-26 16:05:05,114 INFO mapreduce.JobSubmitter: Executing with tokens:[] 2021-04-26 16:05:05,609 INFO conf.Configuration: resource-types.xml not found2021-04-26 16:05:05,614 INFO resource.ResourceUtils: Unable to find 'resource-types.xml'.

2021-04-26 16:05:06,486 INFO impl. YarnClientImpl: Submitted application application_1619433198405_0001

2021-04-26 16:05:06,666 INFO mapreduce. Job: The url to track the job:

http://DESKTOP-CK14PFH:8088/proxy/application_1619433198405_0001/2021-04-26

16:05:06,668 INFO mapreduce.Job: Running job: job_1619433198405_0001

2021-04-26 16:05:39,704 INFO mapreduce.Job: Job job_1619433198405_0001

running in uber mode: false

2021-04-26 16:05:39,806 INFO mapreduce. Job: map 0% reduce 0%

2021-04-26 16:06:04,188 INFO mapreduce. Job: map 100% reduce 0%

2021-04-26 16:06:41,797 INFO mapreduce.Job: map 100% reduce 100%

2021-04-26 16:06:46,907 INFO mapreduce.Job: Job job_1619433198405_0001

completed successfully

2021-04-26 16:06:47,311 INFO mapreduce. Job: Counters: 53File System

Counters

FILE: Number of bytes read=50

FILE: Number of bytes written=427745 FILE:

Number of read operations=0 FILE: Number of

large read operations=0FILE: Number of write

operations=0 HDFS: Number of bytes read=147

HDFS: Number of bytes written=28 HDFS:

Number of read operations=8

HDFS: Number of large read operations=0HDFS:

Number of write operations=2

Job Counters

Launched map tasks=1

Launched reduce tasks=1Data-

local map tasks=1

Total time spent by all maps in occupied slots (ms)=19887 Total time spent

by all reduces in occupied slots (ms)=34624Total time spent by all map

tasks (ms)=19887

Total time spent by all reduce tasks (ms)=34624

Total vcore-milliseconds taken by all map tasks=19887 Total vcore-

milliseconds taken by all reduce tasks=34624

Total megabyte-milliseconds taken by all map tasks=20364288 Total megabyte-milliseconds taken by all reduce tasks=35454976

```
Map-Reduce Framework Map
     input records=3 Map
     output records=9Map
     output bytes=80
     Map output materialized bytes=50Input split
     bytes=102
     Combine input records=9
     Combine output records=4
     Reduce input groups=4 Reduce
     shuffle bytes=50 Reduce input
     records=4 Reduce output
     records=4 Spilled Records=8
     Shuffled Maps =1
     Failed Shuffles=0 Merged
     Map outputs=1
     GC time elapsed (ms)=192CPU time
     spent (ms)=3855
     Physical memory (bytes) snapshot=454619136 Virtual
     memory (bytes) snapshot=598560768 Total committed
     heap usage (bytes)=245891072Peak Map Physical memory
     (bytes)=269107200Peak Map Virtual memory
     (bytes)=346247168
     Peak Reduce Physical memory (bytes)=185511936Peak
     Reduce Virtual memory (bytes)=252313600
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=45
File Output Format Counters
     Bytes Written=28
```

 $C:\hadoop_new\share\hadoop\mapreduce>hdfs\ dfs\ -ls\ \label{linear} InputFound\ 1\ items$

-rw-r--r-- 1 Admin supergroup 45 2021-04-26 14:46 /input/input.txt

C:\hadoop_new\share\hadoop\mapreduce>hdfs dfs -ls \firstExampleOutputFound 2 items

-rw-r--r-- 1 Admin supergroup 0 2021-04-26 16:06

/firstExampleOutput/_SUCCESS

-rw-r--r-- 1 Admin supergroup 28 2021-04-26 16:06

/firstExampleOutput/part-r-00000

C:\hadoop_new\share\hadoop\mapreduce>hdfs dfs -cat

bear 2

car 3

deer 2

river 2