Case Study: Financial Regulation

Domain: Banking

All financial institutions have been introduced to a new financial regulation that will consider the impact of possible future events when calculating their risk exposure.

For this change, all financial trading services will have to source data from far more data sources including both trade and risk data, which means large amounts of data that have not historically been required for accounting.

The data is of trading index listings for each trading day.

Tasks:

To adhere to the regulation a leading trading service provider has decided to create a new repository (Big Data) and a multi-facet platform that can cater to these models.

As part of the R&D team, you are required to execute a POC exercise to maintain a

master data model.

- 1.Test the spark environment by executing the spark's HdfsTest.scala example.
- 2. Try to implement the same example in pyspark and perform spark-submit.
- 3. Analyze the behavior of spark application on Spark web UI
- 4.Edit the application and add custom logs. Once executed check the Spark

logs.

- 5. Transfer the sample dataset from RDBMS to HDFS
- 6. Validate the loaded data by comparing the statistics of data both in source

and HDFS

- 7.Create a new directory EQ in HDFS and transfer the data where series is EQ
- 8.Set total trades which are less than 500 to 0 and transfer only updated

rows.

Location of HdfsTest.scala

/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/spark/examples/jars/spark-examples*.jar use_cases/HdfsTest.scala

Location of the Spark shell and the spark Submit Binary Files

```
[raghavendr48edu@ip-10-1-1-204 /]$ cd /opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/bin/ [raghavendr48edu@ip-10-1-1-204 bin]$ ls
                       impala-collect-diagnostics kafka-preferred-replica-election oozie
                                                                                                             sqoop-import-all-tables
avro-tools
                       impala-collect-minidumps impala-collect-minidumps kafka-producer-perf-test kafka-reassign-partitions impala-shell kafka-replica-verification
                                                                                                             sqoop-job
sqoop-list-databases
sqoop-list-tables
beeline
                                                                                    oozie-setup
       detect-javahome impala-shell
d impala-shell
kafka-acls
                                                                                    parquet-tools
pig
                                                                                    pyspark
                                                   kafka-run-class
cli mt
                                                                                                             sqoop-merge
cli st
                       kafka-broker-api-versions kafka-sentry
                                                                                     sentry
                                                                                                             sqoop-metastore
                                                  kafka-server-start solrctl spark-shell kafka-streams-application-reset kafka-topics sqoop
                      kafka-configs
flume-ng kafka-configs kafka-server-start kafka-hadoop kafka-console-consumer kafka-server-stop kafka-server-stop kafka-server-stop kafka-streams-application-res kafka-consumer-groups kafka-topics kafka-topics kafka-topics kafka-verifiable-consumer hase-indexer-sentry kafka-delegation-tokens kafka-verifiable-producer kafka-verifiable-producer kafka-dump-log kudu kafka-logadins load gen
                                                                                                             statestored
                                                                                                            yarn
zookeeper-client
                                                                                    sqoop-codegen zookeeper-security-migration sqoop-create-hive-table zookeeper-server zookeeper-server-cleanup sqoop-export zookeeper-server-initialize
                                                  load gen
hive
                       kafka-log-dirs
                                                                                    sqoop-help
                                                  mapred
                                                                                    sqoop-import
[raghavendr48edu@ip-10-1-1-204 bin]$ [
[raghavendr48edu@ip-10-1-1-204 opt]$ ls
anaconda3 cloudera conda mahout-0.12.2 sut sea apache-mahout-distribution-0.12.2.tar.gz cm_cdp_cdh_log4j_jndi_removal.sh dbscript mongodbusercreation.sh scala-2.11.12 zz
                                             cloudera
[raghavendr48edu@ip-10-1-1-204 opt]$ [
[raghavendr48edu@ip-10-1-1-204 cloudera]$ ls
 m cm-agent cm cdp cdh log4j jndi removal.sh csd installer log4shell-backup parcel-cache parcel-repo parcels
[raghavendr48edu@ip-10-1-1-204 cloudera]$
                                                                [raghavendr48edu@ip-10-1-1-204 parcels]$ ls
CDH CDH-6.2.1-1.cdh6.2.1.p0.1425774 CFM CFM-1.0.0.0 FLINK FLINK-1.9.0-csa1.0.0.0-cdh6.3.0
[raghavendr48edu@ip-10-1-1-204 parcels]$
[raghavendr48edu@ip-10-1-1-204 CDH-6.2.1-1.cdh6.2.1.p0.1425774]$ ls
bin etc include jars lib lib64 libexec meta share
[raghavendr48edu@ip-10-1-1-204 CDH-6.2.1-1.cdh6.2.1.p0.1425774]$ | |
hive-hcatalog impala-shell kudu pig solr zookeeper
hue kafka oozie search spark zookeeper-native
                                                                               kafka oozie search open kite parquet sentry sqoop
                                                               impala kite
flume-ng hadoop-httpfs hadoop-yarn [raghavendr48edu@ip-10-1-1-204 lib]$
[raghavendr48edu@ip-10-1-1-204 opt]$ cd /opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/spark
[raghavendr48edu@ip-10-1-1-204 spark]$ ls
                          examples hive
                                                    kubernetes LICENSE NOTICE python python.tar.gz RELEASE sbin work
bin cloudera conf
[raghavendr48edu@ip-10-1-1-204 spark]$ |
[raghavendr48edu@ip-10-1-1-204 spark]$ cd /opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/spark/examples
[raghavendr48edu@ip-10-1-1-204 examples]$ ls
[raghavendr48edu@ip-10-1-1-204 examples]$
[raghavendr48edu@ip-10-1-1-204 examples]$ cd /opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/spark/examples/jars
[raghavendr48edu@ip-10-1-1-204 jars]$ ls
                                                 -2.4.0-cdh6.2.1.jar
[raghavendr48edu@ip-10-1-1-204 jars]$
```

1. Test the spark environment by executing the spark's HdfsTest.scala

example.

HDFSTest.scala

```
package org.apache.spark.examples
import org.apache.spark.sql.SparkSession
object HdfsTest {
/** Usage: HdfsTest [file] */
  def main(args: Array[String]) {
    if (args.length < 1) {</pre>
      System.err.println("Usage: HdfsTest <file>")
      System.exit(1)
    val spark = SparkSession.builder.appName("HdfsTest") .getOrCreate()
    val file = spark.read.text(args(0)).rdd
    val mapped = file.map(s => s.length).cache()
    for (iter <- 1 to 10) {
      val start = System.currentTimeMillis()
      for (x \leftarrow mapped) \{ x + 2 \}
      val end = System.currentTimeMillis()
      println("Iteration " + iter + " took " + (end-start) + " ms")
    }
   spark.stop()
 }
}
```

From

 $<\!\!\underline{http://bigdata.cloudlabs.edureka.co:8888/hue/filebrowser/view=/user/raghavendr48edu/use_cases/HdfsTest.scala}\!\!>$

SparkSubmit

[raghavendr48edu@ip-10-1-1-204 jars]\$ spark-submit --class org.apache.spark.examples.HdfsTest --master yarn --deploy-mode cluster /opt/cloudera/parcels/CDH-6.2.11.cdh6.2.1.p0.1425774/lib/spark/examples/jars/spark-examples*.jar use_cases/HdfsTest.scala

23/05/16 15:25:12 INFO client.RMProxy: Connecting to ResourceManager at ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032

23/05/16 15:25:12 INFO yarn.Client: Requesting a new application from cluster with 3 NodeManagers

23/05/16 15:25:12 INFO conf.Configuration: resource-types.xml not found 23/05/16 15:25:12 INFO resource.ResourceUtils: Unable to find 'resource-types.xml'.

23/05/16 15:25:12 INFO yarn.Client: Verifying our application has not requested more than the maximum memory capability of the cluster (20480 MB per containe

r)

23/05/16 15:25:12 INFO yarn.Client: Will allocate AM container, with 1408 MB memory including 384 MB overhead

```
23/05/16 15:25:12 INFO yarn. Client: Setting up container launch context for
our AM
23/05/16 15:25:12 INFO yarn.Client: Setting up the launch environment for our
AM container
23/05/16 15:25:12 INFO yarn.Client: Preparing resources for our AM container
23/05/16 15:25:12 INFO yarn.Client: Uploading resource
file:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/spark/examples/jars/spark-examples 2.11
-2.4.0-cdh6.2.1.jar ->
hdfs://nameservice1/user/raghavendr48edu/.sparkStaging/application_1682019
329825_39245/spark-examples_2.11-2.4.0-cdh6.2.1.jar
23/05/16 15:25:12 INFO yarn.Client: Uploading resource file:/tmp/spark-
db27f191-6b27-4149-b73c-
5071e533f5d8/ spark conf 5370573057872246418.zip -> hdfs://n
ameservice1/user/raghavendr48edu/.sparkStaging/application_1682019329825
 39245/ spark conf .zip
23/05/16 15:25:12 INFO spark. Security Manager: Changing view acls to:
raghavendr48edu
23/05/16 15:25:12 INFO spark. Security Manager: Changing modify acls to:
raghavendr48edu
23/05/16 15:25:12 INFO spark. Security Manager: Changing view acls groups to:
23/05/16 15:25:12 INFO spark. Security Manager: Changing modify acls groups
23/05/16 15:25:12 INFO spark. Security Manager: Security Manager:
authentication disabled; ui acls disabled; users with view permissions:
Set(raghavendr48edu);
groups with view permissions: Set(); users with modify permissions:
Set(raghavendr48edu); groups with modify permissions: Set()
23/05/16 15:25:12 INFO conf. HiveConf: Found configuration file
file:/etc/hive/conf.cloudera.hive/hive-site.xml
23/05/16 15:25:13 INFO security.YARNHadoopDelegationTokenManager:
Attempting to load user's ticket cache.
23/05/16 15:25:13 INFO yarn.Client: Submitting application
application_1682019329825_39245 to ResourceManager
23/05/16 15:25:13 INFO impl. YarnClientImpl: Submitted application
application 1682019329825 39245
23/05/16 15:25:14 INFO yarn.Client: Application report for
application 1682019329825 39245 (state: ACCEPTED)
23/05/16 15:25:14 INFO yarn.Client:
      client token: N/A
      diagnostics: AM container is launched, waiting for AM container to Register
with RM
      ApplicationMaster host: N/A
      ApplicationMaster RPC port: -1
      queue: root.default
      start time: 1684250713073
      final status: UNDEFINED
      tracking URL: <a href="http://ip-10-1-1-204.ap-south-">http://ip-10-1-1-204.ap-south-</a>
1.compute.internal:6066/proxy/application_1682019329825_39245/
```

user: raghavendr48edu

23/05/16 15:25:15 INFO yarn.Client: Application report for application_1682019329825_39245 (state: ACCEPTED) 23/05/16 15:25:16 INFO yarn.Client: Application report for application_1682019329825_39245 (state: ACCEPTED) 23/05/16 15:25:17 INFO yarn.Client: Application report for application_1682019329825_39245 (state: ACCEPTED) 23/05/16 15:25:18 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:18 INFO yarn.Client:

client token: N/A diagnostics: N/A

ApplicationMaster host: ip-10-1-2-103.ap-south-1.compute.internal

ApplicationMaster RPC port: 43158

queue: root.default

start time: 1684250713073 final status: UNDEFINED

tracking URL: http://ip-10-1-1-204.ap-south-

1.compute.internal:6066/proxy/application 1682019329825 39245/

user: raghavendr48edu

23/05/16 15:25:19 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:20 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:21 INFO yarn.Client: Application report for application 1682019329825 39245 (state: RUNNING) 23/05/16 15:25:22 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:23 INFO yarn.Client: Application report for application 1682019329825 39245 (state: RUNNING) 23/05/16 15:25:24 INFO yarn.Client: Application report for application 1682019329825 39245 (state: RUNNING) 23/05/16 15:25:25 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:26 INFO yarn.Client: Application report for application 1682019329825 39245 (state: RUNNING) 23/05/16 15:25:27 INFO yarn.Client: Application report for application 1682019329825 39245 (state: RUNNING) 23/05/16 15:25:28 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:29 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:30 INFO yarn.Client: Application report for application 1682019329825 39245 (state: RUNNING) 23/05/16 15:25:31 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:32 INFO yarn.Client: Application report for application_1682019329825_39245 (state: RUNNING) 23/05/16 15:25:33 INFO yarn.Client: Application report for application 1682019329825 39245 (state: RUNNING) 23/05/16 15:25:34 INFO yarn.Client: Application report for application 1682019329825 39245 (state: RUNNING)

23/05/16 15:25:35 INFO yarn.Client: Application report for application_1682019329825_39245 (state: FINISHED)

23/05/16 15:25:35 INFO yarn.Client:

client token: N/A diagnostics: N/A

ApplicationMaster host: ip-10-1-2-103.ap-south-1.compute.internal

ApplicationMaster RPC port: 43158

queue: root.default

start time: 1684250713073 final status: SUCCEEDED

tracking URL: http://ip-10-1-1-204.ap-south-

1.compute.internal:6066/proxy/application 1682019329825 39245/

user: raghavendr48edu

23/05/16 15:25:35 INFO util.ShutdownHookManager: Shutdown hook called 23/05/16 15:25:35 INFO util.ShutdownHookManager: Deleting directory

/tmp/spark-db27f191-6b27-4149-b73c-5071e533f5d8

23/05/16 15:25:35 INFO util.ShutdownHookManager: Deleting directory

/tmp/spark-ef180879-1b83-4424-b017-3c4c1e0458fd

From < https://bigdata.cloudlabs.edureka.co/shell/>

3. Analyze the behavior of spark application on Spark web UI



Completed Jobs (12)					
Job Id •	Description	Submitted	Duration	Stages: Succeeded/Total	Tasks (for all stages): Succeeded/Total
11	sum at HdfsTest.scala:45 sum at HdfsTest.scala:45	2023/05/16 15:25:33	97 ms	1/1	1/1
10	take at HdfsTest.scala:44 take at HdfsTest.scala:44	2023/05/16 15:25:33	0.1 s	1/1	1/1
9	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:33	96 ms	1/1	1/1
8	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:33	65 ms	1/1	1/1
7	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:33	71 ms	1/1	1/1
6	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:33	70 ms	1/1	1/1
5	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:33	77 ms	1/1	1/1
4	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:33	76 ms	1/1	1/1
3	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:33	97 ms	1/1	1/1
2	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:33	0.1 s	1/1	1/1
1	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:32	0.2 s	1/1	1/1
)	foreach at HdfsTest.scala:40 foreach at HdfsTest.scala:40	2023/05/16 15:25:21	11 s	1/1	1/1

```
[raghavendr48edu@ip-10-1-1-204 bin]$ spark-shell
Setting default log level to "WARN".
To adjust logging level use sc.setLogLevel(newLevel). For SparkR, use
setLogLevel(newLevel).
23/05/16 15:52:39 WARN
cluster.YarnSchedulerBackend$YarnSchedulerEndpoint: Attempted to request
executors before the AM has registered!
Spark context available as 'sc' (master = yarn, app id =
application_1682019329825_39246).
Spark session available as 'spark'.
Welcome to
 /_/____/___//__
_\V__V_`/__/ '__/
/___/.__/\_,_/_/\_\ version 2.4.0-cdh6.2.1
Using Scala version 2.11.12 (Java HotSpot(TM) 64-Bit Server VM, Java
1.8.0 181)
Type in expressions to have them evaluated.
Type :help for more information.
scala > package org.apache.spark.examples
<console>:1: error: illegal start of definition
package org.apache.spark.examples
scala>
scala > import org.apache.spark.sql.SparkSession
import org.apache.spark.sql.SparkSession
scala>
scala> object HdfsTest {
   /** Usage: HdfsTest [file] */
   | def main(args: Array[String]) {
       if (args.length < 1) {
         System.err.println("Usage: HdfsTest <file>")
         System.exit(1)
       val spark = SparkSession
         .builder
         .appName("HdfsTest")
         .getOrCreate()
       val file = spark.read.text(args(0)).rdd
       val mapped = file.map(s => s.length).cache()
       for (iter <- 1 to 10) {
```

val start = System.currentTimeMillis()

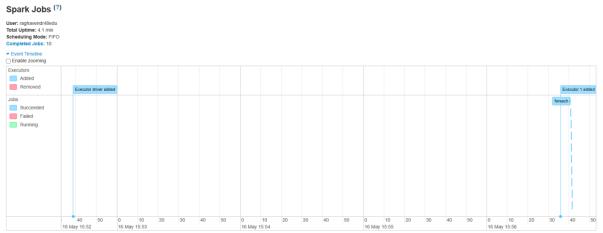
```
| for (x <- mapped) { x + 2 }
| val end = System.currentTimeMillis()
| println("Iteration " + iter + " took " + (end-start) + " ms")
| }
| spark.stop()
| }
| }
| defined object HdfsTest</pre>
```

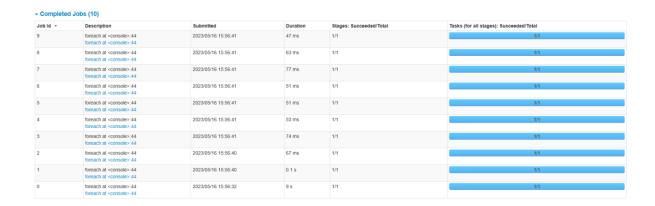
```
scala> HdfsTest.main(Array("AppleStore.csv"))
23/05/16 15:56:30 WARN sql.SparkSession$Builder: Using an existing SparkSession; some configuration may not take effect.
Iteration 1 took 8800 ms
Iteration 2 took 160 ms
Iteration 3 took 76 ms
Iteration 4 took 82 ms
Iteration 5 took 62 ms
Iteration 6 took 59 ms
Iteration 7 took 58 ms
Iteration 8 took 84 ms
Iteration 9 took 73 ms
Iteration 10 took 54 ms
```

From < https://bigdata.cloudlabs.edureka.co/shell/>

scala>

3. Analyze the behavior of spark application on Spark web UI





OR

Step 1: Create a folder named training_project mkdir training_project

Step 2: Create build.sbt in the training_project folder with the following content (using vibuild.sbt)

name := "SparkMe Project"

version := "1.0"

organization := "edureka" scalaVersion := "2.11.8" val sparkVersion = "2.1.0"

libraryDependencies += "org.apache.spark" %% "spark-core" % sparkVersion %"provided" libraryDependencies += "org.apache.spark" %% "spark-sql" % sparkVersion % "provided" resolvers += Resolver.mavenLocal

[raghavendr48edu@ip-10-1-1-204 ~]\$ cd training_project
[raghavendr48edu@ip-10-1-1-204 training project]\$ vi build.sbt

Step 3: Verify build.sbt by executing the command given below sbt compile sbt compile

The above command will create directory "project" and "target".

[raghavendr48edu@ip-10-1-1-204 training_project]\$ **sbt compile**

[info] welcome to sbt 1.5.5 (Oracle Corporation Java 1.8.0_181)

[info] loading project definition from

/home/raghavendr48edu/training_project/project

[info] loading settings for project training_project from build.sbt ...

[info] set current project to SparkMe Project (in build

file:/home/raghavendr48edu/training_project/)

[info] Executing in batch mode. For better performance use sbt's shell

[info] Updating

https://repo1.maven.org/maven2/org/scala-lang/scala-library/2.11.8/scala-library-2.11.8.pom

100.0% [########] 1.4 KiB (2.0 KiB / s)

[info] Resolved dependencies

[info] Updating

```
https://repo1.maven.org/maven2/org/apache/spark/spark-
sql_2.11/2.1.0/spark-sql_2.11-2.1.0.pom
 100.0% [#########] 9.4 KiB (56.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
core_2.11/2.1.0/spark-core_2.11-2.1.0.pom
 100.0% [#########] 20.4 KiB (49.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
parent 2.11/2.1.0/spark-parent 2.11-2.1.0.pom
 100.0% [#########] 98.2 KiB (318.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/14/apache-14.pom
 100.0% [#########] 14.3 KiB (103.2 KiB / s)
https://repo1.maven.org/maven2/net/razorvine/pyrolite/4.13/pyrolite-4.13.pom
 100.0% [########] 3.5 KiB (25.0 KiB / s)
https://repo1.maven.org/maven2/log4j/log4j/1.2.17/log4j-1.2.17.pom
 100.0% [#########] 21.2 KiB (133.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
tags 2.11/2.1.0/spark-tags 2.11-2.1.0.pom
 100.0% [#########] 1.8 KiB (13.0 KiB / s)
https://repo1.maven.org/maven2/org/json4s/json4s-
jackson 2.11/3.2.11/json4s-jackson 2.11-3.2.11.pom
 100.0% [#########] 2.3 KiB (16.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
sketch 2.11/2.1.0/spark-sketch 2.11-2.1.0.pom
 100.0% [#########] 3.0 KiB (7.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
unsafe 2.11/2.1.0/spark-unsafe 2.11-2.1.0.pom
 100.0% [######## 4.5 KiB (11.3 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/core/jersey-
client/2.22.2/jersey-client-2.22.2.pom
 100.0% [######### 7.4 KiB (18.3 KiB / s)
https://repo1.maven.org/maven2/com/twitter/chill-java/0.8.0/chill-java-
0.8.0.pom
 100.0% [######### 2.0 KiB (13.9 KiB / s)
https://repo1.maven.org/maven2/org/spark-
project/spark/unused/1.0.0/unused-1.0.0.pom
 100.0% [######### 2.3 KiB (15.4 KiB / s)
https://repo1.maven.org/maven2/com/google/code/findbugs/jsr305/1.3.9/jsr30
5-1.3.9.pom
 100.0% [######## 965B (7.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/ivy/ivy/2.4.0/ivy-2.4.0.pom
 100.0% [######### 6.1 KiB (41.4 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
hadoop/1.8.1/parquet-hadoop-1.8.1.pom
 100.0% [######### 3.4 KiB (24.4 KiB / s)
https://repo1.mayen.org/mayen2/org/apache/spark/spark-network-
shuffle 2.11/2.1.0/spark-network-shuffle 2.11-2.1.0.pom
 100.0% [######## 4.1 KiB (26.6 KiB / s)
https://repo1.maven.org/maven2/com/univocity/univocity-
parsers/2.2.1/univocity-parsers-2.2.1.pom
 100.0% [######### 8.0 KiB (14.3 KiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
graphite/3.1.2/metrics-graphite-3.1.2.pom
```

```
100.0% [######### 1.3 KiB (9.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/curator/curator-
recipes/2.4.0/curator-recipes-2.4.0.pom
 100.0% [#########] 2.4 KiB (17.4 KiB / s)
https://repo1.maven.org/maven2/com/clearspring/analytics/stream/2.7.0/strea
m-2.7.0.pom
 100.0% [######### # 1 6.5 KiB (44.2 KiB / s)
https://repo1.maven.org/maven2/com/twitter/chill 2.11/0.8.0/chill 2.11-
0.8.0.pom
 100.0% [######### 2.3 KiB (15.4 KiB / s)
https://repo1.maven.org/maven2/org/slf4j/jcl-over-slf4j/1.7.16/jcl-over-slf4j-
1.7.16.pom
 100.0% [######## 963B (7.1 KiB / s)
https://repo1.maven.org/maven2/org/slf4j/slf4j-log4j12/1.7.16/slf4j-log4j12-
1.7.16.pom
 100.0% [######## # 909B (6.2 KiB / s)
https://repo1.maven.org/maven2/oro/oro/2.0.8/oro-2.0.8.pom
 100.0% [######## 140B (1.0 KiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
jvm/3.1.2/metrics-jvm-3.1.2.pom
 100.0% [######## # 967B (7.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/xbean/xbean-asm5-
shaded/4.4/xbean-asm5-shaded-4.4.pom
 100.0% [#########] 3.3 KiB (24.8 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/module/jackson-
module-scala 2.11/2.6.5/jackson-module-scala 2.11-2.6.5.pom
 100.0% [########] 4.0 KiB (27.3 KiB / s)
https://repo1.maven.org/maven2/commons-net/commons-net/2.2/commons-
net-2.2.pom
 100.0% [######## 12.4 KiB (77.4 KiB / s)
https://repo1.maven.org/maven2/javax/servlet/javax.servlet-
api/3.1.0/javax.servlet-api-3.1.0.pom
 100.0% [######### 13.2 KiB (81.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
crypto/1.0.0/commons-crypto-1.0.0.pom
 100.0% [#########] 21.3 KiB (130.8 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/containers/jersey-
container-servlet/2.22.2/jersey-container-servlet-2.22.2.pom
 100.0% [######### 4.5 KiB (30.1 KiB / s)
https://repo1.maven.org/maven2/com/ning/compress-lzf/1.0.3/compress-lzf-
1.0.3.pom
 100.0% [######### 7.7 KiB (47.9 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/containers/jersey-
container-servlet-core/2.22.2/jersey-container-servlet-core-2.22.2.pom
 100.0% [######### 4.6 KiB (28.1 KiB / s)
https://repo1.maven.org/maven2/net/java/dev/jets3t/jets3t/0.7.1/jets3t-
0.7.1.pom
 100.0% [######## 1.5 KiB (9.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
math3/3.4.1/commons-math3-3.4.1.pom
 100.0% [#########] 26.6 KiB (145.1 KiB / s)
```

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https://repo1.maven.org/maven2/org/apache/commons/commons-
lang3/3.5/commons-lang3-3.5.pom
 100.0% [#########] 22.8 KiB (122.6 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/core/jackson-
databind/2.6.5/jackson-databind-2.6.5.pom
 100.0% [########] 5.9 KiB (43.2 KiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
json/3.1.2/metrics-json-3.1.2.pom
 100.0% [######## 1.4 KiB (9.7 KiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
core/3.1.2/metrics-core-3.1.2.pom
 100.0% [######## # 846B (5.5 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/core/jersey-
common/2.22.2/jersey-common-2.22.2.pom
 100.0% [######### 10.2 KiB (61.9 KiB / s)
https://repo1.maven.org/maven2/io/netty/netty/3.8.0.Final/netty-
3.8.0.Final.pom
 100.0% [#########] 25.6 KiB (151.4 KiB / s)
https://repo1.maven.org/maven2/org/xerial/snappy/snappy-
java/1.1.2.6/snappy-java-1.1.2.6.pom
 100.0% [#########] 3.2 KiB (21.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
column/1.8.1/parquet-column-1.8.1.pom
 100.0% [######### 4.9 KiB (32.9 KiB / s)
https://repo1.maven.org/maven2/net/sf/py4j/py4j/0.10.4/py4j-0.10.4.pom
 100.0% [#########] 2.1 KiB (15.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro-mapred/1.7.7/avro-
mapred-1.7.7.pom
 100.0% [######## | 6.6 KiB (43.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-network-
common 2.11/2.1.0/spark-network-common 2.11-2.1.0.pom
 100.0% [######### 4.9 KiB (37.3 KiB / s)
https://repo1.maven.org/maven2/org/slf4j/slf4j-api/1.7.16/slf4j-api-1.7.16.pom
 100.0% [#########] 2.7 KiB (19.8 KiB / s)
https://repo1.maven.org/maven2/io/netty/netty-all/4.0.42.Final/netty-all-
4.0.42.Final.pom
 100.0% [########] 17.2 KiB (113.8 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
catalyst_2.11/2.1.0/spark-catalyst_2.11-2.1.0.pom
 100.0% [######### 7.6 KiB (54.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
launcher_2.11/2.1.0/spark-launcher_2.11-2.1.0.pom
 100.0% [######### 6.2 KiB (45.9 KiB / s)
https://repo1.maven.org/maven2/net/jpountz/lz4/lz4/1.3.0/lz4-1.3.0.pom
 100.0% [######## 1.9 KiB (12.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
client/2.2.0/hadoop-client-2.2.0.pom
 100.0% [######### 10.8 KiB (76.1 KiB / s)
https://repo1.maven.org/maven2/org/roaringbitmap/RoaringBitmap/0.5.11/Roa
ringBitmap-0.5.11.pom
 100.0% [######## # 6.2 KiB (42.9 KiB / s)
```

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https://repo1.maven.org/maven2/org/slf4j/jul-to-slf4j/1.7.16/jul-to-slf4j-
1.7.16.pom
 100.0% [#########] 986B (6.6 KiB / s)
https://repo1.maven.org/maven2/org/qlassfish/jersey/core/jersey-
server/2.22.2/jersey-server-2.22.2.pom
 100.0% [######## 12.0 KiB (81.4 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/7/apache-7.pom
 100.0% [######### 14.1 KiB (95.2 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/containers/project/2.22.2
/project-2.22.2.pom
 100.0% [#########] 3.7 KiB (25.4 KiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
parent/3.1.2/metrics-parent-3.1.2.pom
 100.0% [######### 11.7 KiB (72.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/curator/apache-
curator/2.4.0/apache-curator-2.4.0.pom
 100.0% [#########] 20.1 KiB (119.4 KiB / s)
https://repo1.maven.org/maven2/io/netty/netty-parent/4.0.42.Final/netty-
parent-4.0.42.Final.pom
 100.0% [#########] 43.8 KiB (213.4 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/jackson-
parent/2.6.2/jackson-parent-2.6.2.pom
 100.0% [######### 7.6 KiB (51.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro-parent/1.7.7/avro-
parent-1.7.7.pom
 100.0% [#########] 18.6 KiB (114.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet/1.8.1/parquet-
 100.0% [########] 17.0 KiB (102.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/41/commons-parent-41.pom
 100.0% [######## | 63.3 KiB (342.3 KiB / s)
https://repo1.maven.org/maven2/org/slf4j/slf4j-parent/1.7.16/slf4j-parent-
1.7.16.pom
 100.0% [######## 13.2 KiB (32.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-project-
dist/2.2.0/hadoop-project-dist-2.2.0.pom
 100.0% [#########] 17.3 KiB (112.2 KiB / s)
https://repo1.maven.org/maven2/net/java/jvnet-parent/3/jvnet-parent-3.pom
 100.0% [######### 4.7 KiB (30.8 KiB / s)
https://repo1.maven.org/maven2/org/apache/xbean/xbean/4.4/xbean-4.4.pom
 100.0% [#########] 17.3 KiB (115.2 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/project/2.22.2/project-
2.22.2.pom
 100.0% [######## # 82.3 KiB (261.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/40/commons-parent-40.pom
 100.0% [########] 62.6 KiB (393.8 KiB / s)
https://repo1.maven.org/maven2/org/sonatype/oss/oss-parent/5/oss-parent-
 100.0% [########] 4.0 KiB (30.0 KiB / s)
```

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https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/34/commons-parent-34.pom
 100.0% [#########] 54.6 KiB (199.4 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/17/commons-parent-17.pom
 100.0% [#########] 30.5 KiB (180.2 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/oss-parent/24/oss-parent-
 100.0% [########] 19.0 KiB (129.1 KiB / s)
https://repo1.maven.org/maven2/net/java/jvnet-parent/4/jvnet-parent-4.pom
 100.0% [######### 7.6 KiB (52.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/18/apache-18.pom
 100.0% [#########] 15.3 KiB (105.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/geronimo/genesis/genesis-java5-
flava/2.1/genesis-java5-flava-2.1.pom
 100.0% [######### 5.4 KiB (36.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
project/2.2.0/hadoop-project-2.2.0.pom
 100.0% [########] 36.3 KiB (219.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro-toplevel/1.7.7/avro-
toplevel-1.7.7.pom
 100.0% [######## 9.4 KiB (23.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/17/apache-17.pom
 100.0% [########] 15.7 KiB (111.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/16/apache-16.pom
 100.0% [#########] 15.0 KiB (105.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/13/apache-13.pom
 100.0% [######### 13.6 KiB (94.8 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/10/apache-10.pom
 100.0% [######## 14.5 KiB (98.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
main/2.2.0/hadoop-main-2.2.0.pom
 100.0% [#########] 16.2 KiB (113.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/geronimo/genesis/genesis-
default-flava/2.1/genesis-default-flava-2.1.pom
 100.0% [########] 15.7 KiB (96.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/geronimo/genesis/genesis/2.1/ge
nesis-2.1.pom
 100.0% [######## 13.9 KiB (84.4 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/hk2-bom/2.4.0-b34/hk2-
bom-2.4.0-b34.pom
 100.0% [#########] 20.4 KiB (121.5 KiB / s)
https://repo1.maven.org/maven2/net/java/jvnet-parent/5/jvnet-parent-5.pom
 100.0% [######### 8.7 KiB (59.3 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/core/jackson-
annotations/2.6.5/jackson-annotations-2.6.5.pom
 100.0% [#########] 1.2 KiB (9.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
<u>client-jobclient/2.2.0/hadoop-mapreduce-client-job</u>client-2.2.0.pom
 100.0% [######## # 5.3 KiB (40.2 KiB / s)
https://repo1.maven.org/maven2/org/json4s/json4s-core 2.11/3.2.11/json4s-
core 2.11-3.2.11.pom
```

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100.0% [######### 2.5 KiB (18.7 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/hk2-locator/2.4.0-b34/hk2-
locator-2.4.0-b34.pom
 100.0% [######### 5.4 KiB (35.5 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/media/jersey-media-
jaxb/2.22.2/jersey-media-jaxb-2.22.2.pom
 100.0% [######### # 1 7.0 KiB (45.6 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/module/jackson-
module-paranamer/2.6.5/jackson-module-paranamer-2.6.5.pom
 100.0% [######### 4.4 KiB (31.4 KiB / s)
https://repo1.maven.org/maven2/org/antlr/antlr4-runtime/4.5.3/antlr4-
runtime-4.5.3.pom
 100.0% [#########] 2.3 KiB (16.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
annotations/2.2.0/hadoop-annotations-2.2.0.pom
 100.0% [#########] 2.3 KiB (16.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/zookeeper/zookeeper/3.4.5/zooke
<u>eper-3.4.5.pom</u>
 100.0% [######### 2.9 KiB (20.4 KiB / s)
https://repo1.maven.org/maven2/javax/ws/rs/javax.ws.rs-
api/2.0.1/iavax.ws.rs-api-2.0.1.pom
 100.0% [#########] 20.9 KiB (120.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/curator/curator-
framework/2.4.0/curator-framework-2.4.0.pom
 100.0% [#########] 2.2 KiB (5.5 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/hk2-api/2.4.0-b34/hk2-api-
2.4.0-b34.pom
 100.0% [######### 4.5 KiB (33.0 KiB / s)
https://repo1.maven.org/maven2/org/scalatest/scalatest 2.11/2.2.6/scalatest
2.11-2.2.6.pom
 100.0% [######### 5.5 KiB (40.7 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/core/jackson-
core/2.6.5/jackson-core-2.6.5.pom
 100.0% [######### 4.8 KiB (31.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
client-app/2.2.0/hadoop-mapreduce-client-app-2.2.0.pom
 100.0% [######### 4.2 KiB (28.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-format/2.3.0-
incubating/parquet-format-2.3.0-incubating.pom
 100.0% [######## # 6.8 KiB (49.5 KiB / s)
https://repo1.maven.org/maven2/commons-httpclient/commons-
httpclient/3.1/commons-httpclient-3.1.pom
 100.0% [######### 7.6 KiB (51.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro-ipc/1.7.7/avro-ipc-
1.7.7.pom
 100.0% [######### 5.0 KiB (36.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
common/2.2.0/hadoop-common-2.2.0.pom
 100.0% [#########] 26.2 KiB (181.0 KiB / s)
https://repo1.maven.org/maven2/org/codehaus/jackson/jackson-mapper-
asl/1.9.13/jackson-mapper-asl-1.9.13.pom
 100.0% [######### 1.5 KiB (10.4 KiB / s)
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https://repo1.maven.org/maven2/org/glassfish/hk2/external/javax.inject/2.4.0-
b34/iavax.inject-2.4.0-b34.pom
 100.0% [######### # 6.3 KiB (46.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
common/1.8.1/parquet-common-1.8.1.pom
 100.0% [########] 2.8 KiB (19.6 KiB / s)
https://repo1.mayen.org/mayen2/org/apache/hadoop/hadoop-mapreduce-
client-core/2.2.0/hadoop-mapreduce-client-core-2.2.0.pom
 100.0% [#########] 3.0 KiB (22.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-
api/2.2.0/hadoop-yarn-api-2.2.0.pom
 100.0% [#########] 2.9 KiB (22.0 KiB / s)
https://repo1.maven.org/maven2/com/google/guava/guava/14.0.1/guava-
14.0.1.pom
 100.0% [######### 5.3 KiB (36.5 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/osgi-resource-
locator/1.0.1/osgi-resource-locator-1.0.1.pom
 100.0% [######## # 6.0 KiB (41.4 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/bundles/repackaged/jers
ey-quava/2.22.2/jersey-quava-2.22.2.pom
 100.0% [######## 13.0 KiB (87.3 KiB / s)
https://repo1.maven.org/maven2/org/codehaus/jackson/jackson-core-
asl/1.9.13/jackson-core-asl-1.9.13.pom
 100.0% [######## 1.2 KiB (9.3 KiB / s)
https://repo1.maven.org/maven2/javax/annotation/javax.annotation-
api/1.2/javax.annotation-api-1.2.pom
 100.0% [######### 13.1 KiB (95.7 KiB / s)
https://repo1.maven.org/maven2/javax/validation/validation-
api/1.1.0.Final/validation-api-1.1.0.Final.pom
 100.0% [######### 7.7 KiB (53.7 KiB / s)
https://repo1.maven.org/maven2/org/codehaus/janino/commons-
compiler/3.0.0/commons-compiler-3.0.0.pom
 100.0% [######## # 666B (4.4 KiB / s)
https://repo1.maven.org/maven2/org/codehaus/janino/janino/3.0.0/janino-
3.0.0.pom
 100.0% [#########] 925B (6.5 KiB / s)
https://repo1.maven.org/maven2/org/scala-lang/scala-reflect/2.11.8/scala-
reflect-2.11.8.pom
 100.0% [######### 1.5 KiB (10.5 KiB / s)
https://repo1.maven.org/maven2/commons-codec/commons-
codec/1.10/commons-codec-1.10.pom
 100.0% [######## 11.3 KiB (55.0 KiB / s)
https://repo1.maven.org/maven2/com/esotericsoftware/kryo-
shaded/3.0.3/kryo-shaded-3.0.3.pom
 100.0% [#########] 3.1 KiB (22.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
hdfs/2.2.0/hadoop-hdfs-2.2.0.pom
 100.0% [########] 23.5 KiB (162.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
jackson/1.8.1/parquet-jackson-1.8.1.pom
 100.0% [########] 3.5 KiB (24.0 KiB / s)
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https://repo1.maven.org/maven2/org/fusesource/leveldbjni/leveldbjni-
all/1.8/leveldbjni-all-1.8.pom
 100.0% [#########] 7.1 KiB (49.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
encoding/1.8.1/parquet-encoding-1.8.1.pom
 100.0% [########] 3.0 KiB (20.9 KiB / s)
https://repo1.maven.org/maven2/org/antlr/antlr4-master/4.5.3/antlr4-master-
4.5.3.pom
 100.0% [#########] 3.6 KiB (25.5 KiB / s)
https://repo1.maven.org/maven2/org/codehaus/janino/janino-
parent/3.0.0/janino-parent-3.0.0.pom
 100.0% [######### 8.2 KiB (58.2 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/bundles/repackaged/proj
ect/2.22.2/project-2.22.2.pom
 100.0% [#########] 2.7 KiB (19.3 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/media/project/2.22.2/pro
ject-2.22.2.pom
 100.0% [#########] 2.9 KiB (20.8 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/35/commons-parent-35.pom
 100.0% [#########] 56.4 KiB (311.7 KiB / s)
https://repo1.maven.org/maven2/com/esotericsoftware/kryo-parent/3.0.3/kryo-
parent-3.0.3.pom
 100.0% [######## 4.9 KiB (37.6 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/jackson-
parent/2.6.1/jackson-parent-2.6.1.pom
 100.0% [########] 7.6 KiB (50.4 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
yarn/2.2.0/hadoop-yarn-2.2.0.pom
 100.0% [######## 6.4 KiB (42.4 KiB / s)
https://repo1.maven.org/maven2/org/fusesource/leveldbjni/leveldbjni-
project/1.8/leveldbjni-project-1.8.pom
 100.0% [#########] 9.4 KiB (62.9 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/hk2-parent/2.4.0-b34/hk2-
parent-2.4.0-b34.pom
 100.0% [#########] 46.7 KiB (270.0 KiB / s)
https://repo1.maven.org/maven2/com/google/guava/guava-
parent/14.0.1/quava-parent-14.0.1.pom
 100.0% [#########] 2.5 KiB (17.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
client/2.2.0/hadoop-mapreduce-client-2.2.0.pom
 100.0% [######### 6.2 KiB (15.5 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/external/2.4.0-
b34/external-2.4.0-b34.pom
 100.0% [#########] 2.9 KiB (21.3 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/pom/8/pom-8.pom
 100.0% [######## 10.3 KiB (65.2 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/bundles/project/2.22.2/p
roject-2.22.2.pom
 100.0% [#########] 3.0 KiB (22.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/15/apache-15.pom
 100.0% [######### 114.9 KiB (97.2 KiB / s)
```

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https://repo1.maven.org/maven2/org/codehaus/codehaus-parent/4/codehaus-
parent-4.pom
 100.0% [######### 4.7 KiB (31.0 KiB / s)
https://repo1.maven.org/maven2/org/fusesource/fusesource-
pom/1.9/fusesource-pom-1.9.pom
 100.0% [######## 14.4 KiB (95.0 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/oss-parent/23/oss-parent-
 100.0% [#########] 18.8 KiB (108.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/curator/curator-
client/2.4.0/curator-client-2.4.0.pom
 100.0% [#########] 2.2 KiB (15.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
<u>client-common/2.2.0/hadoop-mapreduce-client-common-2.2.0.pom</u>
 100.0% [######### 3.2 KiB (22.0 KiB / s)
https://repo1.maven.org/maven2/org/javassist/javassist/3.18.1-GA/javassist-
3.18.1-GA.pom
 100.0% [#########] 9.3 KiB (64.1 KiB / s)
https://repo1.maven.org/maven2/org/scala-lang/modules/scala-
xml 2.11/1.0.2/scala-xml 2.11-1.0.2.pom
 100.0% [#########] 2.5 KiB (17.0 KiB / s)
https://repo1.maven.org/maven2/xmlenc/xmlenc/0.52/xmlenc-0.52.pom
 100.0% [######## 623B (4.2 KiB / s)
https://repo1.maven.org/maven2/com/google/protobuf/protobuf-
java/2.5.0/protobuf-java-2.5.0.pom
 100.0% [######### 8.2 KiB (60.6 KiB / s)
https://repo1.maven.org/maven2/commons-lang/commons-lang/2.5/commons-
lang-2.5.pom
 100.0% [########] 16.7 KiB (123.0 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-
common/2.2.0/hadoop-yarn-common-2.2.0.pom
 100.0% [######### 4.9 KiB (36.7 KiB / s)
https://repo1.maven.org/maven2/org/mortbay/jetty/jetty-util/6.1.26/jetty-util-
6.1.26.pom
 100.0% [#########] 3.8 KiB (26.5 KiB / s)
https://repo1.maven.org/maven2/commons-net/commons-net/3.1/commons-
net-3.1.pom
 100.0% [#########] 18.0 KiB (104.0 KiB / s)
https://repo1.maven.org/maven2/com/thoughtworks/paranamer/paranamer/2.6
/paranamer-2.6.pom
 100.0% [######### 4.7 KiB (32.2 KiB / s)
https://repo1.maven.org/maven2/commons-cli/commons-cli/1.2/commons-cli-
1.2.pom
 100.0% [######### 7.8 KiB (54.1 KiB / s)
https://repo1.maven.org/maven2/org/json4s/json4s-ast 2.11/3.2.11/json4s-
ast 2.11-3.2.11.pom
 100.0% [#########] 2.0 KiB (4.9 KiB / s)
https://repo1.maven.org/maven2/org/objenesis/objenesis/2.1/objenesis-
2.1.pom
 100.0% [#########] 2.5 KiB (17.4 KiB / s)
https://repo1.maven.org/maven2/commons-configuration/commons-
configuration/1.6/commons-configuration-1.6.pom
```

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100.0% [######### 13.0 KiB (87.9 KiB / s)
https://repo1.maven.org/maven2/commons-io/commons-io/2.1/commons-io-
2.1.pom
 100.0% [#########] 10.4 KiB (66.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
compress/1.4.1/commons-compress-1.4.1.pom
 100.0% [######### 1 10.5 KiB (79.0 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/external/aopalliance-
repackaged/2.4.0-b34/aopalliance-repackaged-2.4.0-b34.pom
 100.0% [######### 6.6 KiB (49.3 KiB / s)
https://repo1.maven.org/maven2/org/scala-lang/scalap/2.11.8/scalap-
2.11.8.pom
 100.0% [######### 1.4 KiB (10.5 KiB / s)
https://repo1.maven.org/maven2/com/esotericsoftware/minlog/1.3.0/minlog-
1.3.0.pom
 100.0% [#########] 3.2 KiB (22.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro/1.7.7/avro-1.7.7.pom
 100.0% [######### 5.5 KiB (38.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
client-shuffle/2.2.0/hadoop-mapreduce-client-shuffle-2.2.0.pom
 100.0% [#########] 1.6 KiB (11.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
math/2.1/commons-math-2.1.pom
 100.0% [######## 10.1 KiB (69.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
auth/2.2.0/hadoop-auth-2.2.0.pom
 100.0% [########] 6.9 KiB (48.0 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/hk2-utils/2.4.0-b34/hk2-
utils-2.4.0-b34.pom
 100.0% [########] 5.0 KiB (28.1 KiB / s)
https://repo1.maven.org/maven2/com/google/google/1/google-1.pom
 100.0% [######### 1.5 KiB (11.5 KiB / s)
https://repo1.maven.org/maven2/com/thoughtworks/paranamer/paranamer-
parent/2.6/paranamer-parent-2.6.pom
 100.0% [######## 11.0 KiB (72.4 KiB / s)
https://repo1.maven.org/maven2/org/mortbay/jetty/project/6.1.26/project-
6.1.26.pom
 100.0% [#########] 9.0 KiB (59.1 KiB / s)
https://repo1.maven.org/maven2/org/objenesis/objenesis-parent/2.1/objenesis-
parent-2.1.pom
 100.0% [#########] 16.3 KiB (107.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/24/commons-parent-24.pom
 100.0% [######### 46.2 KiB (169.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/23/commons-parent-23.pom
 100.0% [#########] 43.4 KiB (256.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/22/commons-parent-22.pom
 100.0% [#########] 40.9 KiB (248.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/14/commons-parent-14.pom
```

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100.0% [#########] 30.7 KiB (189.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/12/commons-parent-12.pom
 100.0% [#########] 26.3 KiB (175.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/11/commons-parent-11.pom
 100.0% [#########] 24.1 KiB (156.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/9/apache-9.pom
 100.0% [#########] 14.8 KiB (105.7 KiB / s)
https://repo1.maven.org/maven2/org/mortbay/jetty/jetty-parent/10/jetty-
parent-10.pom
 100.0% [#########] 3.2 KiB (22.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/apache/4/apache-4.pom
 100.0% [######### 4.4 KiB (31.8 KiB / s)
https://repo1.maven.org/maven2/org/eclipse/jetty/jetty-parent/14/jetty-parent-
14.pom
 100.0% [#########] 16.1 KiB (111.8 KiB / s)
https://repo1.maven.org/maven2/javax/inject/javax.inject/1/javax.inject-1.pom
 100.0% [######## # 612B (4.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-server-
common/2.2.0/hadoop-yarn-server-common-2.2.0.pom
 100.0% [#########] 3.5 KiB (26.3 KiB / s)
https://repo1.maven.org/maven2/org/tukaani/xz/1.0/xz-1.0.pom
 100.0% [######## 1.9 KiB (14.2 KiB / s)
https://repo1.maven.org/maven2/commons-beanutils/commons-beanutils-
core/1.8.0/commons-beanutils-core-1.8.0.pom
 100.0% [######### 1.6 KiB (10.6 KiB / s)
https://repo1.maven.org/maven2/commons-digester/commons-
digester/1.8/commons-digester-1.8.pom
 100.0% [######### 6.8 KiB (45.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-
client/2.2.0/hadoop-yarn-client-2.2.0.pom
 100.0% [######## 1.9 KiB (13.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-server-
nodemanager/2.2.0/hadoop-yarn-server-nodemanager-2.2.0.pom
 100.0% [######### 7.2 KiB (51.1 KiB / s)
https://repo1.maven.org/maven2/org/scala-lang/scala-compiler/2.11.8/scala-
compiler-2.11.8.pom
 100.0% [#########] 2.3 KiB (16.3 KiB / s)
https://repo1.maven.org/maven2/commons-collections/commons-
collections/3.2.1/commons-collections-3.2.1.pom
 100.0% [######## 12.2 KiB (31.2 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
parent/9/commons-parent-9.pom
 100.0% [#########] 21.4 KiB (137.3 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-
server/2.2.0/hadoop-yarn-server-2.2.0.pom
 100.0% [######## 1.8 KiB (11.4 KiB / s)
https://repo1.maven.org/maven2/com/google/inject/guice/3.0/guice-3.0.pom
 100.0% [######### 7.1 KiB (48.0 KiB / s)
https://repo1.maven.org/maven2/commons-beanutils/commons-
beanutils/1.7.0/commons-beanutils-1.7.0.pom
```

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100.0% [#########] 357B (2.4 KiB / s)
https://repo1.maven.org/maven2/org/scala-lang/modules/scala-parser-
combinators 2.11/1.0.4/scala-parser-combinators 2.11-1.0.4.pom
 100.0% [#########] 2.1 KiB (14.2 KiB / s)
https://repo1.maven.org/maven2/org/scala-lang/modules/scala-
xml 2.11/1.0.4/scala-xml 2.11-1.0.4.pom
 100.0% [######### 1 2.5 KiB (16.6 KiB / s)
https://repo1.maven.org/maven2/com/google/inject/guice-parent/3.0/guice-
parent-3.0.pom
 100.0% [######## 12.7 KiB (82.8 KiB / s)
https://repo1.maven.org/maven2/com/google/google/5/google-5.pom
 100.0% [#########] 2.4 KiB (16.7 KiB / s)
https://repo1.maven.org/maven2/aopalliance/aopalliance/1.0/aopalliance-
1.0.pom
 100.0% [#########] 363B (2.5 KiB / s)
https://repo1.maven.org/maven2/jline/jline/0.9.94/jline-0.9.94.pom
 100.0% [######### 6.2 KiB (43.1 KiB / s)
[info] Resolved dependencies
[info] Updating
[info] Resolved dependencies
[info] Fetching artifacts of
https://repo1.maven.org/maven2/org/glassfish/hk2/external/aopalliance-
repackaged/2.4.0-b34/aopalliance-repackaged-2.4.0-b34.jar
 100.0% [########] 14.4 KiB (98.8 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
auth/2.2.0/hadoop-auth-2.2.0.jar
 100.0% [#########] 48.6 KiB (292.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
sketch 2.11/2.1.0/spark-sketch 2.11-2.1.0.jar
 100.0% [########] 28.8 KiB (173.8 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
hadoop/1.8.1/parquet-hadoop-1.8.1.jar
 100.0% [#########] 213.0 KiB (696.0 KiB / s)
https://repo1.maven.org/maven2/javax/servlet/javax.servlet-
api/3.1.0/javax.servlet-api-3.1.0.jar
 100.0% [########] 93.6 KiB (525.6 KiB / s)
https://repo1.maven.org/maven2/com/ning/compress-lzf/1.0.3/compress-lzf-
1.0.3.jar
 100.0% [########] 78.0 KiB (428.4 KiB / s)
https://repo1.maven.org/maven2/commons-digester/commons-
digester/1.8/commons-digester-1.8.jar
 100.0% [######## 140.2 KiB (345.4 KiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
graphite/3.1.2/metrics-graphite-3.1.2.jar
 100.0% [########] 20.4 KiB (137.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
tags_2.11/2.1.0/spark-tags_2.11-2.1.0.jar
 100.0% [#########] 16.7 KiB (119.3 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/containers/jersey-
container-servlet/2.22.2/jersey-container-servlet-2.22.2.jar
 100.0% [#########] 17.7 KiB (130.9 KiB / s)
```

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https://repo1.maven.org/maven2/com/twitter/chill 2.11/0.8.0/chill 2.11-
0.8.0.jar
 100.0% [#########] 218.3 KiB (766.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
client-core/2.2.0/hadoop-mapreduce-client-core-2.2.0.jar
 100.0% [########] 1.4 MiB (2.4 MiB / s)
https://repo1.maven.org/maven2/commons-net/commons-net/3.1/commons-
net-3.1.iar
 100.0% [########] 267.0 KiB (339.6 KiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
core/3.1.2/metrics-core-3.1.2.jar
 100.0% [########] 109.9 KiB (654.3 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/hk2-locator/2.4.0-b34/hk2-
locator-2.4.0-b34.jar
 100.0% [#########] 177.0 KiB (867.8 KiB / s)
https://repo1.maven.org/maven2/org/spark-
project/spark/unused/1.0.0/unused-1.0.0.jar
 100.0% [#########] 2.7 KiB (18.6 KiB / s)
https://repo1.maven.org/maven2/org/slf4j/slf4j-api/1.7.16/slf4j-api-1.7.16.jar
 100.0% [#########] 39.6 KiB (295.2 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/osgi-resource-
locator/1.0.1/osgi-resource-locator-1.0.1.jar
 100.0% [######## 19.8 KiB (130.9 KiB / s)
https://repo1.maven.org/maven2/javax/annotation/javax.annotation-
api/1.2/javax.annotation-api-1.2.jar
 100.0% [#########] 25.7 KiB (190.7 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
hdfs/2.2.0/hadoop-hdfs-2.2.0.jar
 100.0% [#########] 5.0 MiB (7.0 MiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
json/3.1.2/metrics-json-3.1.2.jar
 100.0% [#########] 15.5 KiB (110.4 KiB / s)
https://repo1.maven.org/maven2/commons-collections/commons-
collections/3.2.1/commons-collections-3.2.1.jar
 100.0% [######### 561.9 KiB (1.8 MiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
unsafe 2.11/2.1.0/spark-unsafe 2.11-2.1.0.jar
 100.0% [#########] 43.1 KiB (297.6 KiB / s)
https://repo1.maven.org/maven2/org/objenesis/objenesis/2.1/objenesis-2.1.jar
 100.0% [#########] 40.8 KiB (293.4 KiB / s)
https://repo1.maven.org/maven2/xmlenc/xmlenc/0.52/xmlenc-0.52.jar
 100.0% [######## 14.7 KiB (99.7 KiB / s)
https://repo1.maven.org/maven2/io/netty/netty/3.8.0.Final/netty-3.8.0.Final.jar
 100.0% [######## 1.2 MiB (5.6 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-
client/2.2.0/hadoop-yarn-client-2.2.0.jar
 100.0% [#########] 92.5 KiB (690.4 KiB / s)
https://repo1.maven.org/maven2/com/twitter/chill-java/0.8.0/chill-java-
0.8.0.jar
 100.0% [#########] 49.4 KiB (355.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/ivy/ivy/2.4.0/ivy-2.4.0.jar
 100.0% [########] 1.2 MiB (3.1 MiB / s)
```

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https://repo1.maven.org/maven2/org/glassfish/hk2/hk2-utils/2.4.0-b34/hk2-
utils-2.4.0-b34.jar
 100.0% [########] 116.2 KiB (769.4 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
crypto/1.0.0/commons-crypto-1.0.0.jar
 100.0% [########] 131.4 KiB (932.2 KiB / s)
https://repo1.mayen.org/mayen2/org/ison4s/ison4s-
jackson 2.11/3.2.11/json4s-jackson 2.11-3.2.11.jar
 100.0% [########] 39.4 KiB (264.4 KiB / s)
https://repo1.maven.org/maven2/com/thoughtworks/paranamer/paranamer/2.6
/paranamer-2.6.jar
 100.0% [#########] 32.0 KiB (240.9 KiB / s)
https://repo1.maven.org/maven2/org/mortbay/jetty/jetty-util/6.1.26/jetty-util-
6.1.26.jar
 100.0% [######### 173.0 KiB (1.0 MiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
catalyst 2.11/2.1.0/spark-catalyst 2.11-2.1.0.jar
 100.0% [######### 7.0 MiB (7.3 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-server-
nodemanager/2.2.0/hadoop-yarn-server-nodemanager-2.2.0.jar
 100.0% [######### 456.7 KiB (2.7 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
common/2.2.0/hadoop-common-2.2.0.jar
 100.0% [#########] 2.6 MiB (6.4 MiB / s)
https://repo1.maven.org/maven2/commons-cli/commons-cli/1.2/commons-cli-
1.2.jar
 100.0% [#########] 40.2 KiB (282.8 KiB / s)
https://repo1.maven.org/maven2/org/apache/curator/curator-
framework/2.4.0/curator-framework-2.4.0.jar
 100.0% [######### 175.5 KiB (1.2 MiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/hk2-api/2.4.0-b34/hk2-api-
2.4.0-b34.iar
 100.0% [######### 174.8 KiB (1.2 MiB / s)
https://repo1.maven.org/maven2/org/xerial/snappy/snappy-
java/1.1.2.6/snappy-java-1.1.2.6.jar
 100.0% [#########] 1.0 MiB (5.7 MiB / s)
https://repo1.maven.org/maven2/com/esotericsoftware/kryo-
shaded/3.0.3/kryo-shaded-3.0.3.jar
 100.0% [#########] 350.0 KiB (2.3 MiB / s)
https://repo1.maven.org/maven2/javax/inject/javax.inject/1/javax.inject-1.jar
 100.0% [######### 2.4 KiB (18.3 KiB / s)
https://repo1.maven.org/maven2/oro/oro/2.0.8/oro-2.0.8.jar
 100.0% [#########] 63.7 KiB (486.5 KiB / s)
https://repo1.maven.org/maven2/com/esotericsoftware/minlog/1.3.0/minlog-
1.3.0.iar
 100.0% [######### 5.6 KiB (37.4 KiB / s)
https://repo1.maven.org/maven2/org/scala-lang/scalap/2.11.8/scalap-
 100.0% [######### 784.0 KiB (4.6 MiB / s)
https://repo1.maven.org/maven2/commons-httpclient/commons-
httpclient/3.1/commons-httpclient-3.1.jar
 100.0% [#########] 297.9 KiB (2.0 MiB / s)
```

```
https://repo1.maven.org/maven2/com/univocity/univocity-
parsers/2.2.1/univocity-parsers-2.2.1.jar
 100.0% [#########] 317.9 KiB (2.2 MiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
column/1.8.1/parquet-column-1.8.1.jar
 100.0% [#########] 923.7 KiB (5.1 MiB / s)
https://repo1.mayen.org/mayen2/org/scala-lang/modules/scala-parser-
combinators 2.11/1.0.4/scala-parser-combinators 2.11-1.0.4.jar
 100.0% [######### 413.8 KiB (2.6 MiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
math/2.1/commons-math-2.1.jar
 100.0% [######## # 812.9 KiB (2.4 MiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-network-
common 2.11/2.1.0/spark-network-common 2.11-2.1.0.jar
 100.0% [#########] 2.2 MiB (7.9 MiB / s)
https://repo1.maven.org/maven2/org/ison4s/ison4s-ast 2.11/3.2.11/ison4s-
ast 2.11-3.2.11.jar
 100.0% [########] 80.5 KiB (490.8 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/module/jackson-
module-paranamer/2.6.5/jackson-module-paranamer-2.6.5.jar
 100.0% [#########] 40.3 KiB (281.8 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/core/jackson-
annotations/2.6.5/jackson-annotations-2.6.5.jar
 100.0% [#########] 45.9 KiB (332.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/curator/curator-
recipes/2.4.0/curator-recipes-2.4.0.jar
 100.0% [########] 235.7 KiB (1.4 MiB / s)
https://repo1.maven.org/maven2/org/codehaus/jackson/jackson-mapper-
asl/1.9.13/jackson-mapper-asl-1.9.13.jar
 100.0% [######### 762.4 KiB (4.8 MiB / s)
https://repo1.maven.org/maven2/io/dropwizard/metrics/metrics-
jvm/3.1.2/metrics-jvm-3.1.2.jar
 100.0% [########] 38.4 KiB (290.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/curator/curator-
client/2.4.0/curator-client-2.4.0.jar
 100.0% [#########] 65.7 KiB (490.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro-ipc/1.7.7/avro-ipc-
1.7.7.jar
 100.0% [######### 188.5 KiB (1.2 MiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/core/jackson-
databind/2.6.5/jackson-databind-2.6.5.jar
 100.0% [######## 1.1 MiB (5.9 MiB / s)
https://repo1.maven.org/maven2/org/fusesource/leveldbjni/leveldbjni-
all/1.8/leveldbjni-all-1.8.jar
 100.0% [#########] 1021.2 KiB (5.3 MiB / s)
https://repo1.maven.org/maven2/aopalliance/aopalliance/1.0/aopalliance-
1.0.jar
 100.0% [######### 4.4 KiB (30.3 KiB / s)
https://repo1.maven.org/maven2/com/google/code/findbugs/jsr305/1.3.9/jsr30
5-1.3.9.jar
 100.0% [########] 32.2 KiB (228.7 KiB / s)
```

```
https://repo1.maven.org/maven2/org/apache/commons/commons-
math3/3.4.1/commons-math3-3.4.1.jar
 100.0% [########] 1.9 MiB (6.8 MiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-format/2.3.0-
incubating/parquet-format-2.3.0-incubating.jar
 100.0% [#########] 378.1 KiB (2.6 MiB / s)
https://repo1.maven.org/maven2/org/glassfish/hk2/external/javax.inject/2.4.0-
b34/javax.inject-2.4.0-b34.jar
 100.0% [#########] 5.8 KiB (43.4 KiB / s)
https://repo1.maven.org/maven2/net/jpountz/lz4/lz4/1.3.0/lz4-1.3.0.jar
 100.0% [#########] 231.3 KiB (1.6 MiB / s)
https://repo1.maven.org/maven2/org/codehaus/janino/janino/3.0.0/janino-
3.0.0.iar
 100.0% [######### 718.3 KiB (4.2 MiB / s)
https://repo1.maven.org/maven2/commons-lang/commons-lang/2.5/commons-
lang-2.5.jar
 100.0% [######### 272.6 KiB (1.8 MiB / s)
https://repo1.maven.org/maven2/net/java/dev/jets3t/jets3t/0.7.1/jets3t-
0.7.1.jar
 100.0% [#########] 368.9 KiB (2.4 MiB / s)
https://repo1.maven.org/maven2/commons-beanutils/commons-
beanutils/1.7.0/commons-beanutils-1.7.0.jar
 100.0% [######## 184.2 KiB (1.3 MiB / s)
https://repo1.maven.org/maven2/org/apache/xbean/xbean-asm5-
shaded/4.4/xbean-asm5-shaded-4.4.jar
 100.0% [########] 141.3 KiB (967.6 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
encoding/1.8.1/parquet-encoding-1.8.1.jar
 100.0% [#########] 278.8 KiB (2.0 MiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/containers/jersey-
container-servlet-core/2.22.2/jersey-container-servlet-core-2.22.2.jar
 100.0% [######## # 64.7 KiB (483.0 KiB / s)
https://repo1.maven.org/maven2/org/roaringbitmap/RoaringBitmap/0.5.11/Roa
ringBitmap-0.5.11.jar
 100.0% [######## 197.2 KiB (1011.3 KiB / s)
https://repo1.maven.org/maven2/jline/jline/0.9.94/jline-0.9.94.jar
 100.0% [######### 85.3 KiB (631.7 KiB / s)
https://repo1.maven.org/maven2/org/javassist/javassist/3.18.1-GA/javassist-
3.18.1-GA.jar
 100.0% [######### 697.5 KiB (4.1 MiB / s)
https://repo1.maven.org/maven2/io/netty/netty-all/4.0.42.Final/netty-all-
4.0.42.Final.jar
 100.0% [#########] 2.2 MiB (7.8 MiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-network-
shuffle 2.11/2.1.0/spark-network-shuffle 2.11-2.1.0.jar
 100.0% [#########] 60.1 KiB (420.4 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
client-jobclient/2.2.0/hadoop-mapreduce-client-jobclient-2.2.0.jar
 100.0% [########] 34.4 KiB (233.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-
api/2.2.0/hadoop-yarn-api-2.2.0.jar
 100.0% [######## 1.1 MiB (5.4 MiB / s)
```

```
https://repo1.maven.org/maven2/com/google/protobuf/protobuf-
java/2.5.0/protobuf-java-2.5.0.jar
 100.0% [######### 521.0 KiB (3.5 MiB / s)
https://repo1.maven.org/maven2/org/slf4j/slf4j-log4j12/1.7.16/slf4j-log4j12-
1.7.16.jar
 100.0% [#########] 9.7 KiB (70.8 KiB / s)
https://repo1.maven.org/maven2/commons-io/commons-io/2.1/commons-io-
 100.0% [######### 159.3 KiB (1.2 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
client-app/2.2.0/hadoop-mapreduce-client-app-2.2.0.jar
 100.0% [######### 470.7 KiB (3.0 MiB / s)
https://repo1.maven.org/maven2/org/tukaani/xz/1.0/xz-1.0.jar
 100.0% [#########] 92.5 KiB (679.8 KiB / s)
https://repo1.maven.org/maven2/commons-configuration/commons-
configuration/1.6/commons-configuration-1.6.jar
 100.0% [#########] 291.8 KiB (2.0 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-server-
<u>common/2.2.0/hadoop-yarn-server-common-2.2.0.jar</u>
 100.0% [######## 171.4 KiB (1.2 MiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
common/1.8.1/parquet-common-1.8.1.jar
 100.0% [#########] 37.7 KiB (256.5 KiB / s)
https://repo1.maven.org/maven2/org/slf4j/jul-to-slf4j/1.7.16/jul-to-slf4j-
1.7.16.jar
 100.0% [######### 4.5 KiB (31.6 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/core/jersey-
common/2.22.2/jersey-common-2.22.2.jar
 100.0% [######## | 682.0 KiB (4.1 MiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/media/jersey-media-
jaxb/2.22.2/jersey-media-jaxb-2.22.2.jar
 100.0% [#########] 71.0 KiB (473.5 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
compress/1.4.1/commons-compress-1.4.1.jar
 100.0% [######### 235.7 KiB (1.6 MiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/core/jersey-
server/2.22.2/jersey-server-2.22.2.jar
 100.0% [#########] 929.4 KiB (5.2 MiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/core/jersey-
client/2.22.2/jersey-client-2.22.2.jar
 100.0% [######### 163.5 KiB (1.1 MiB / s)
https://repo1.maven.org/maven2/net/razorvine/pyrolite/4.13/pyrolite-4.13.jar
 100.0% [#########] 92.6 KiB (666.0 KiB / s)
https://repo1.maven.org/maven2/org/scala-lang/scala-reflect/2.11.8/scala-
reflect-2.11.8.iar
 100.0% [######### 4.4 MiB (10.0 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
client-common/2.2.0/hadoop-mapreduce-client-common-2.2.0.jar
 100.0% [######### 641.0 KiB (4.1 MiB / s)
https://repo1.maven.org/maven2/commons-codec/commons-
codec/1.10/commons-codec-1.10.jar
 100.0% [######### 277.5 KiB (1.9 MiB / s)
```

```
https://repo1.maven.org/maven2/org/scala-lang/scala-library/2.11.8/scala-
library-2.11.8.jar
 100.0% [#########] 5.5 MiB (9.9 MiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
sql_2.11/2.1.0/spark-sql_2.11-2.1.0.jar
 100.0% [#########] 6.4 MiB (9.8 MiB / s)
https://repo1.maven.org/maven2/com/google/inject/guice/3.0/guice-3.0.jar
 100.0% [######### 693.8 KiB (4.0 MiB / s)
https://repo1.maven.org/maven2/javax/validation/validation-
api/1.1.0.Final/validation-api-1.1.0.Final.jar
 100.0% [#########] 62.3 KiB (404.4 KiB / s)
https://repo1.maven.org/maven2/org/apache/commons/commons-
lang3/3.5/commons-lang3-3.5.jar
 100.0% [######### 468.6 KiB (2.8 MiB / s)
https://repo1.maven.org/maven2/org/codehaus/janino/commons-
compiler/3.0.0/commons-compiler-3.0.0.jar
 100.0% [########] 35.8 KiB (271.0 KiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/module/jackson-
module-scala 2.11/2.6.5/jackson-module-scala 2.11-2.6.5.jar
 100.0% [######### 503.5 KiB (3.1 MiB / s)
https://repo1.maven.org/maven2/org/scala-lang/modules/scala-
xml 2.11/1.0.4/scala-xml 2.11-1.0.4.jar
 100.0% [######### 632.7 KiB (3.9 MiB / s)
https://repo1.maven.org/maven2/org/antlr/antlr4-runtime/4.5.3/antlr4-
runtime-4.5.3.jar
 100.0% [#########] 295.2 KiB (1.7 MiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro-mapred/1.7.7/avro-
mapred-1.7.7-hadoop2.jar
 100.0% [######## 176.5 KiB (1.2 MiB / s)
https://repo1.maven.org/maven2/com/clearspring/analytics/stream/2.7.0/strea
m-2.7.0.jar
 100.0% [######### 170.3 KiB (1.1 MiB / s)
https://repo1.maven.org/maven2/org/json4s/json4s-core_2.11/3.2.11/json4s-
core 2.11-3.2.11.jar
 100.0% [######### 575.6 KiB (3.7 MiB / s)
https://repo1.maven.org/maven2/org/slf4j/jcl-over-slf4j/1.7.16/jcl-over-slf4j-
1.7.16.jar
 100.0% [#########] 16.0 KiB (108.4 KiB / s)
https://repo1.maven.org/maven2/org/scalatest/scalatest_2.11/2.2.6/scalatest_
2.11-2.2.6.jar
 100.0% [#########] 7.1 MiB (10.6 MiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
launcher 2.11/2.1.0/spark-launcher 2.11-2.1.0.jar
 100.0% [#########] 65.0 KiB (409.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro-ipc/1.7.7/avro-ipc-
1.7.7-tests.jar
 100.0% [######## 338.5 KiB (2.2 MiB / s)
https://repo1.maven.org/maven2/org/scala-lang/scala-compiler/2.11.8/scala-
compiler-2.11.8.jar
 100.0% [#########] 14.8 MiB (11.4 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-mapreduce-
client-shuffle/2.2.0/hadoop-mapreduce-client-shuffle-2.2.0.jar
```

```
100.0% [########] 21.0 KiB (146.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/parquet/parquet-
jackson/1.8.1/parquet-jackson-1.8.1.jar
 100.0% [######## 1023.6 KiB (5.6 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
annotations/2.2.0/hadoop-annotations-2.2.0.jar
 100.0% [######### 116.4 KiB (124.1 KiB / s)
https://repo1.maven.org/maven2/org/apache/zookeeper/zookeeper/3.4.5/zooke
eper-3.4.5.jar
 100.0% [######### 761.7 KiB (4.3 MiB / s)
https://repo1.maven.org/maven2/javax/ws/rs/javax.ws.rs-
api/2.0.1/javax.ws.rs-api-2.0.1.jar
 100.0% [########] 112.8 KiB (778.1 KiB / s)
https://repo1.maven.org/maven2/org/glassfish/jersey/bundles/repackaged/jers
ev-quava/2.22.2/iersev-quava-2.22.2.jar
 100.0% [######### 948.5 KiB (5.8 MiB / s)
https://repo1.maven.org/maven2/com/fasterxml/jackson/core/jackson-
core/2.6.5/jackson-core-2.6.5.jar
 100.0% [######### 252.8 KiB (1.8 MiB / s)
https://repo1.maven.org/maven2/org/apache/avro/avro/1.7.7/avro-1.7.7.jar
 100.0% [######### 426.1 KiB (2.9 MiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-yarn-
common/2.2.0/hadoop-yarn-common-2.2.0.jar
 100.0% [########] 1.2 MiB (7.2 MiB / s)
https://repo1.maven.org/maven2/commons-beanutils/commons-beanutils-
core/1.8.0/commons-beanutils-core-1.8.0.jar
 100.0% [#########] 201.2 KiB (1.5 MiB / s)
https://repo1.maven.org/maven2/net/sf/py4j/py4j/0.10.4/py4j-0.10.4.jar
 100.0% [######## 112.8 KiB (761.9 KiB / s)
https://repo1.maven.org/maven2/org/apache/hadoop/hadoop-
client/2.2.0/hadoop-client-2.2.0.jar
 100.0% [######### 2.5 KiB (17.5 KiB / s)
https://repo1.maven.org/maven2/org/codehaus/jackson/jackson-core-
asl/1.9.13/jackson-core-asl-1.9.13.jar
 100.0% [######### 226.8 KiB (1.5 MiB / s)
https://repo1.maven.org/maven2/jline/jline/2.12.1/jline-2.12.1.jar
 100.0% [######### 208.9 KiB (1.4 MiB / s)
https://repo1.maven.org/maven2/log4j/log4j/1.2.17/log4j-1.2.17.jar
 100.0% [######### 478.4 KiB (3.0 MiB / s)
https://repo1.maven.org/maven2/com/google/guava/guava/14.0.1/guava-
14.0.1.jar
 100.0% [#########] 2.1 MiB (7.2 MiB / s)
https://repo1.maven.org/maven2/org/apache/spark/spark-
core 2.11/2.1.0/spark-core 2.11-2.1.0.jar
 100.0% [######### 11.3 MiB (11.0 MiB / s)
[info] Fetched artifacts of
[success] Total time: 19 s, completed May 25, 2023 8:03:20 AM
```

Step 4:

Now create source folder directory mkdir -p src/main/scala/com/edureka/training

This is where scala file will be placed.

d. Create scala file with code: vi SparkSort.scala

```
import org.apache.spark.sql.SparkSession
object HdfsTest {
 /** Usage: HdfsTest [file] */
 def main(args: Array[String]) {
  if (args.length < 1) {
   System.err.println("Usage: HdfsTest")
   System.exit(1)
  }
  val spark = SparkSession.builder.appName("CustomHdfsTest").getOrCreate()
  val file = spark.read.text(args(0)).rdd
  val mapped = file.map(s => s.length).cache()
  for (iter <- 1 to 10) {
   val start = System.currentTimeMillis()
   for (x <- mapped) {
    x + 2
   }
   val end = System.currentTimeMillis()
   println("-->Iteration " + iter + " took " + (end - start) + " ms")
  spark.stop()
}
}
```

e. Compile the scala package using the command sbt package

```
[raghavendr48edu@ip-10-1-1-204 training_project2]$ sbt package
[info] welcome to sbt 1.5.5 (Oracle Corporation Java 1.8.0_181)
[info] loading project definition from
/home/raghavendr48edu/training_project2/project
[info] loading settings for project training_project2 from build.sbt ...
[info] set current project to SparkMe Project (in build
file:/home/raghavendr48edu/training_project2/)
[info] compiling 1 Scala source to
/home/raghavendr48edu/training_project2/target/scala-2.11/classes ...
[success] Total time: 5 s, completed May 25, 2023 10:18:14 AM
[raghavendr48edu@ip-10-1-1-204 training_project2]$
```

- f. Copy the input_sort_py.txt file to HDFS from local FTP hdfs dfs -copyFromLocal /home/raghavendr48edu/input_sort_py.txt
- g. Submit the spark job with the scala code spark-submit --class com.edureka.training.m4.SparkSort --deploy-mode client target/scala-2.11/sparkme-project_2.11-1.0.jar input_sort_py.txt

[raghavendr48edu@ip-10-1-1-204 training_project3]\$ spark-submit --class HdfsTest --deploy-mode client target/scala-2.11/sparkme-project_2.11-1.0.jar input sort py.txt

23/05/25 12:27:09 INFO spark.SparkContext: Running Spark version 2.4.0-cdh6.2.1

23/05/25 12:27:09 INFO logging.DriverLogger: Added a local log appender at: /tmp/spark-149fb59c-5b64-4b50-a117-

6212d417e2c9/__driver_logs__/driver.log

23/05/25 12:27:09 INFO spark.SparkContext: Submitted application:

CustomHdfsTest

23/05/25 12:27:09 INFO spark. Security Manager: Changing view acls to: raghavendr 48edu

23/05/25 12:27:09 INFO spark. Security Manager: Changing modify acls to: raghavendr48edu

23/05/25 12:27:09 INFO spark. Security Manager: Changing view acls groups to: 23/05/25 12:27:09 INFO spark. Security Manager: Changing modify acls groups to:

23/05/25 12:27:09 INFO spark.SecurityManager: SecurityManager: authentication disabled; ui acls disabled; users with view permissions: Set(raghavendr48edu);

groups with view permissions: Set(); users with modify permissions:

Set(raghavendr48edu); groups with modify permissions: Set()

23/05/25 12:27:09 INFO util.Utils: Successfully started service 'sparkDriver' on port 40066.

23/05/25 12:27:09 INFO spark.SparkEnv: Registering MapOutputTracker

23/05/25 12:27:09 INFO spark.SparkEnv: Registering BlockManagerMaster

23/05/25 12:27:09 INFO storage.BlockManagerMasterEndpoint: Using org.apache.spark.storage.DefaultTopologyMapper for getting topology information

23/05/25 12:27:09 INFO storage.BlockManagerMasterEndpoint:

BlockManagerMasterEndpoint up

23/05/25 12:27:09 INFO storage.DiskBlockManager: Created local directory at /tmp/blockmgr-7f3f18dd-6ed8-4d58-b499-fd04eef80a15

23/05/25 12:27:09 INFO memory.MemoryStore: MemoryStore started with capacity 366.3 MB

23/05/25 12:27:09 INFO spark.SparkEnv: Registering

OutputCommitCoordinator

```
23/05/25 12:27:09 INFO spark.SparkContext: Added JAR
file:/home/raghavendr48edu/training_project3/target/scala-2.11/sparkme-
project 2.11-1.0.jar at spark://i
p-10-1-1-204.ap-south-1.compute.internal:40066/jars/sparkme-project_2.11-
1.0.jar with timestamp 1685017629956
23/05/25 12:27:10 INFO util. Utils: Using initial executors = 0, max of
spark.dynamicAllocation.initialExecutors, spark.dynamicAllocation.minExecutors
and spa
rk.executor.instances
23/05/25 12:27:10 INFO client.RMProxy: Connecting to ResourceManager at ip-
10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032
23/05/25 12:27:10 INFO yarn.Client: Requesting a new application from cluster
with 3 NodeManagers
23/05/25 12:27:10 INFO conf.Configuration: resource-types.xml not found
23/05/25 12:27:10 INFO resource.ResourceUtils: Unable to find 'resource-
types.xml'.
23/05/25 12:27:10 INFO yarn. Client: Verifying our application has not requested
more than the maximum memory capability of the cluster (20480 MB per
containe
r)
23/05/25 12:27:10 INFO yarn.Client: Will allocate AM container, with 896 MB
memory including 384 MB overhead
23/05/25 12:27:10 INFO yarn.Client: Setting up container launch context for
our AM
23/05/25 12:27:10 INFO varn.Client: Setting up the launch environment for our
AM container
23/05/25 12:27:10 INFO yarn.Client: Preparing resources for our AM container
23/05/25 12:27:11 INFO yarn.Client: Uploading resource file:/tmp/spark-
149fb59c-5b64-4b50-a117-
6212d417e2c9/ spark conf 4441404531900358458.zip -> hdfs://n
ameservice1/user/raghavendr48edu/.sparkStaging/application 1684866872278
1272/ spark conf .zip
23/05/25 12:27:11 INFO spark. Security Manager: Changing view acls to:
raghavendr48edu
23/05/25 12:27:11 INFO spark. Security Manager: Changing modify acls to:
raghavendr48edu
23/05/25 12:27:11 INFO spark. Security Manager: Changing view acls groups to:
23/05/25 12:27:11 INFO spark. Security Manager: Changing modify acls groups
to:
23/05/25 12:27:11 INFO spark. Security Manager: Security Manager:
authentication disabled; ui acls disabled; users with view permissions:
Set(raghavendr48edu);
groups with view permissions: Set(); users with modify permissions:
Set(raghavendr48edu); groups with modify permissions: Set()
23/05/25 12:27:11 INFO yarn.Client: Submitting application
application_1684866872278_1272 to ResourceManager
23/05/25 12:27:11 INFO impl. YarnClientImpl: Submitted application
application_1684866872278_1272
23/05/25 12:27:12 INFO yarn.Client: Application report for
application 1684866872278 1272 (state: ACCEPTED)
23/05/25 12:27:12 INFO yarn.Client:
     client token: N/A
```

diagnostics: AM container is launched, waiting for AM container to Register

with RM

ApplicationMaster host: N/A ApplicationMaster RPC port: -1

queue: root.default

start time: 1685017631490 final status: UNDEFINED

tracking URL: http://ip-10-1-1-204.ap-south-

1.compute.internal:6066/proxy/application 1684866872278 1272/

user: raghavendr48edu

23/05/25 12:27:13 INFO yarn.Client: Application report for application 1684866872278 1272 (state: ACCEPTED) 23/05/25 12:27:14 INFO yarn.Client: Application report for application 1684866872278 1272 (state: ACCEPTED) 23/05/25 12:27:15 INFO yarn.Client: Application report for application_1684866872278_1272 (state: ACCEPTED) 23/05/25 12:27:16 INFO yarn.Client: Application report for application_1684866872278_1272 (state: ACCEPTED) 23/05/25 12:27:17 INFO yarn.Client: Application report for application 1684866872278 1272 (state: ACCEPTED) 23/05/25 12:27:18 INFO yarn.Client: Application report for application_1684866872278_1272 (state: ACCEPTED) 23/05/25 12:27:19 INFO yarn.Client: Application report for application 1684866872278 1272 (state: ACCEPTED) 23/05/25 12:27:20 INFO yarn.Client: Application report for application 1684866872278 1272 (state: RUNNING)

23/05/25 12:27:20 INFO yarn.Client:

client token: N/A diagnostics: N/A

ApplicationMaster host: 10.1.2.40 ApplicationMaster RPC port: -1

queue: root.default

start time: 1685017631490 final status: UNDEFINED

tracking URL: http://ip-10-1-1-204.ap-south-

1.compute.internal:6066/proxy/application 1684866872278 1272/

user: raghavendr48edu

23/05/25 12:27:20 INFO cluster. Yarn Client Scheduler Backend: Application

application_1684866872278_1272 has started running.

23/05/25 12:27:20 INFO cluster.SchedulerExtensionServices: Starting Yarn extension services with app application_1684866872278_1272 and attemptId None

23/05/25 12:27:20 INFO util. Utils: Successfully started service

'org.apache.spark.network.netty.NettyBlockTransferService' on port 37637.

23/05/25 12:27:20 INFO netty.NettyBlockTransferService: Server created on ip-

10-1-1-204.ap-south-1.compute.internal:37637

23/05/25 12:27:20 INFO storage.BlockManager: Using

org.apache.spark.storage.RandomBlockReplicationPolicy for block replication policy

```
23/05/25 12:27:20 INFO cluster. YarnClientSchedulerBackend: Add WebUI Filter.
org.apache.hadoop.yarn.server.webproxy.amfilter.AmIpFilter,
Map(PROXY HOSTS -> i
p-10-1-1-204.ap-south-1.compute.internal, PROXY_URI_BASES -> http://ip-
10-1-1-204.ap-south-
1.compute.internal:6066/proxy/application_1684866872278_1272), /pr
oxy/application 1684866872278 1272
23/05/25 12:27:20 INFO storage.BlockManagerMaster: Registering
BlockManager BlockManagerId(driver, ip-10-1-1-204.ap-south-
1.compute.internal, 37637, None)
23/05/25 12:27:20 INFO storage.BlockManagerMasterEndpoint: Registering
block manager ip-10-1-1-204.ap-south-1.compute.internal:37637 with 366.3 MB
RAM, Block
ManagerId(driver, ip-10-1-1-204.ap-south-1.compute.internal, 37637, None)
23/05/25 12:27:20 INFO storage.BlockManagerMaster: Registered
BlockManager BlockManagerId(driver, ip-10-1-1-204.ap-south-
1.compute.internal, 37637, None)
23/05/25 12:27:20 INFO storage.BlockManager: external shuffle service port =
7337
23/05/25 12:27:20 INFO storage.BlockManager: Initialized BlockManager:
BlockManagerId(driver, ip-10-1-1-204.ap-south-1.compute.internal, 37637,
None)
23/05/25 12:27:20 INFO util.log: Logging initialized @12715ms
23/05/25 12:27:21 INFO scheduler. EventLoggingListener: Logging events to
hdfs://nameservice1/user/spark/applicationHistory/application 1684866872278
1272
23/05/25 12:27:21 INFO util. Utils: Using initial executors = 0, max of
spark.dynamicAllocation.initialExecutors, spark.dynamicAllocation.minExecutors
and spa
rk.executor.instances
23/05/25 12:27:21 WARN
cluster.YarnSchedulerBackend$YarnSchedulerEndpoint: Attempted to request
executors before the AM has registered!
23/05/25 12:27:21 INFO spark.SparkContext: Registered listener
com.cloudera.spark.lineage.NavigatorAppListener
23/05/25 12:27:21 INFO logging.DriverLogger$DfsAsyncWriter: Started driver
log file sync to:
/user/spark/driverLogs/application 1684866872278 1272 driver.log
23/05/25 12:27:21 INFO cluster. YarnClientSchedulerBackend:
SchedulerBackend is ready for scheduling beginning after reached
minRegisteredResourcesRatio: 0.8
23/05/25 12:27:21 INFO internal. Shared State: loading hive config file:
file:/etc/hive/conf.cloudera.hive/hive-site.xml
23/05/25 12:27:21 INFO internal. Shared State: spark.sql.warehouse.dir is not
set, but hive metastore warehouse dir is set. Setting spark sql warehouse dir to
the value of hive.metastore.warehouse.dir ('/user/hive/warehouse').
23/05/25 12:27:21 INFO internal. Shared State: Warehouse path is
'/user/hive/warehouse'.
```

StateStoreCoordinator endpoint 23/05/25 12:27:23 INFO datasources.FileSourceStrategy: Pruning directories with:

23/05/25 12:27:21 INFO state.StateStoreCoordinatorRef: Registered

```
23/05/25 12:27:23 INFO datasources. FileSourceStrategy: Post-Scan Filters:
23/05/25 12:27:23 INFO datasources. File Source Strategy: Output Data Schema:
struct<value: string>
23/05/25 12:27:23 INFO execution. File Source Scan Exec: Pushed Filters:
23/05/25 12:27:23 INFO
cluster.YarnSchedulerBackend$YarnSchedulerEndpoint: ApplicationMaster
registered as NettyRpcEndpointRef(spark-client://YarnAM)
23/05/25 12:27:24 INFO codegen.CodeGenerator: Code generated in
183.770987 ms
23/05/25 12:27:24 INFO memory.MemoryStore: Block broadcast_0 stored as
values in memory (estimated size 336.4 KB, free 366.0 MB)
23/05/25 12:27:24 INFO memory.MemoryStore: Block broadcast 0 piece0
stored as bytes in memory (estimated size 32.2 KB, free 365.9 MB)
23/05/25 12:27:24 INFO storage.BlockManagerInfo: Added broadcast 0 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 32.2 KB,
free:
366.3 MB)
23/05/25 12:27:24 INFO spark. SparkContext: Created broadcast 0 from rdd at
SparkSort.scala:23
23/05/25 12:27:24 INFO execution. File Source Scan Exec: Planning scan with bin
packing, max size: 4194304 bytes, open cost is considered as scanning 4194304
byt
es.
23/05/25 12:27:24 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:24 INFO scheduler. DAGScheduler: Got job 0 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:24 INFO scheduler.DAGScheduler: Final stage: ResultStage 0
(foreach at SparkSort.scala:33)
23/05/25 12:27:24 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:24 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:24 INFO scheduler.DAGScheduler: Submitting ResultStage 0
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:24 INFO memory.MemoryStore: Block broadcast_1 stored as
values in memory (estimated size 10.6 KB, free 365.9 MB)
23/05/25 12:27:24 INFO memory.MemoryStore: Block broadcast 1 piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
23/05/25 12:27:24 INFO storage.BlockManagerInfo: Added broadcast_1_piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.3 MB)
23/05/25 12:27:24 INFO spark.SparkContext: Created broadcast 1 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:24 INFO scheduler.DAGScheduler: Submitting 1 missing tasks
from ResultStage 0 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:24 INFO cluster. YarnScheduler: Adding task set 0.0 with 1
tasks
23/05/25 12:27:24 INFO spark.ExecutorAllocationManager: Requesting 1 new
```

executor because tasks are backlogged (new desired total will be 1)

```
23/05/25 12:27:35 INFO cluster. Yarn Scheduler Backend $Yarn Driver Endpoint:
Registered executor NettyRpcEndpointRef(spark-client://Executor)
(10.1.2.40:54824) wi
th ID 1
23/05/25 12:27:35 INFO spark. Executor Allocation Manager: New executor 1 has
registered (new total is 1)
23/05/25 12:27:35 INFO scheduler.TaskSetManager: Starting task 0.0 in stage
0.0 (TID 0, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
NO
DE_LOCAL, 8347 bytes)
23/05/25 12:27:35 INFO storage.BlockManagerMasterEndpoint: Registering
block manager ip-10-1-2-40.ap-south-1.compute.internal:33447 with 366.3 MB
RAM, BlockM
anagerId(1, ip-10-1-2-40.ap-south-1.compute.internal, 33447, None)
23/05/25 12:27:36 INFO storage.BlockManagerInfo: Added broadcast 1 piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.3 MB)
23/05/25 12:27:46 INFO storage.BlockManagerInfo: Added broadcast 0 piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 32.2 KB,
free: 3
66.3 MB)
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added rdd_4_0 in memory
on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 32.0 B, free: 366.3
23/05/25 12:27:50 INFO scheduler.TaskSetManager: Finished task 0.0 in stage
0.0 (TID 0) in 15041 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor
1)
(1/1)
23/05/25 12:27:50 INFO cluster. YarnScheduler: Removed TaskSet 0.0, whose
tasks have all completed, from pool
23/05/25 12:27:50 INFO scheduler.DAGScheduler: ResultStage 0 (foreach at
SparkSort.scala:33) finished in 25.723 s
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Job 0 finished: foreach at
SparkSort.scala:33, took 25.772812 s
-->Iteration 1 took 25786 ms
23/05/25 12:27:50 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Got job 1 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Final stage: ResultStage 1
(foreach at SparkSort.scala:33)
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Submitting ResultStage 1
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast_2 stored as
values in memory (estimated size 10.6 KB, free 365.9 MB)
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast 2 piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
```

```
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast 2 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.3 MB)
23/05/25 12:27:50 INFO spark.SparkContext: Created broadcast 2 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Submitting 1 missing tasks
from ResultStage 1 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:50 INFO cluster. YarnScheduler: Adding task set 1.0 with 1
tasks
23/05/25 12:27:50 INFO scheduler.TaskSetManager: Starting task 0.0 in stage
1.0 (TID 1, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
OCESS LOCAL, 8347 bytes)
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast_2_piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.3 MB)
23/05/25 12:27:50 INFO scheduler.TaskSetManager: Finished task 0.0 in stage
1.0 (TID 1) in 244 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1
/1)
23/05/25 12:27:50 INFO cluster. YarnScheduler: Removed TaskSet 1.0, whose
tasks have all completed, from pool
23/05/25 12:27:50 INFO scheduler.DAGScheduler: ResultStage 1 (foreach at
SparkSort.scala:33) finished in 0.276 s
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Job 1 finished: foreach at
SparkSort.scala:33, took 0.282008 s
-->Iteration 2 took 288 ms
23/05/25 12:27:50 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Got job 2 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Final stage: ResultStage 2
(foreach at SparkSort.scala:33)
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Submitting ResultStage 2
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:50 INFO memory. Memory Store: Block broadcast 3 stored as
values in memory (estimated size 10.6 KB, free 365.9 MB)
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast 3 piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast_3_piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.3 MB)
23/05/25 12:27:50 INFO spark.SparkContext: Created broadcast 3 from
```

broadcast at DAGScheduler.scala:1164

```
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Submitting 1 missing tasks
from ResultStage 2 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:50 INFO cluster. YarnScheduler: Adding task set 2.0 with 1
tasks
23/05/25 12:27:50 INFO scheduler.TaskSetManager: Starting task 0.0 in stage
2.0 (TID 2, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
PR
OCESS_LOCAL, 8347 bytes)
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast 3 piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.3 MB)
23/05/25 12:27:50 INFO scheduler. Task Set Manager: Finished task 0.0 in stage
2.0 (TID 2) in 95 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1/
1)
23/05/25 12:27:50 INFO cluster. YarnScheduler: Removed TaskSet 2.0, whose
tasks have all completed, from pool
23/05/25 12:27:50 INFO scheduler. DAGScheduler: ResultStage 2 (foreach at
SparkSort.scala:33) finished in 0.111 s
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Job 2 finished: foreach at
SparkSort.scala:33, took 0.118225 s
-->Iteration 3 took 125 ms
23/05/25 12:27:50 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Got job 3 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Final stage: ResultStage 3
(foreach at SparkSort.scala:33)
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Submitting ResultStage 3
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast 4 stored as
values in memory (estimated size 10.6 KB, free 365.9 MB)
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast_4_piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast 4 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.2 MB)
23/05/25 12:27:50 INFO spark.SparkContext: Created broadcast 4 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Submitting 1 missing tasks
from ResultStage 3 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:50 INFO cluster. Yarn Scheduler: Adding task set 3.0 with 1
```

tasks

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23/05/25 12:27:50 INFO scheduler.TaskSetManager: Starting task 0.0 in stage
3.0 (TID 3, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
PR
OCESS_LOCAL, 8347 bytes)
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast_4_piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.2 MB)
23/05/25 12:27:50 INFO scheduler. Task Set Manager: Finished task 0.0 in stage
3.0 (TID 3) in 70 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1/
1)
23/05/25 12:27:50 INFO cluster. YarnScheduler: Removed TaskSet 3.0, whose
tasks have all completed, from pool
23/05/25 12:27:50 INFO scheduler.DAGScheduler: ResultStage 3 (foreach at
SparkSort.scala:33) finished in 0.083 s
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Job 3 finished: foreach at
SparkSort.scala:33, took 0.088030 s
-->Iteration 4 took 93 ms
23/05/25 12:27:50 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Got job 4 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Final stage: ResultStage 4
(foreach at SparkSort.scala:33)
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Submitting ResultStage 4
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast_5 stored as
values in memory (estimated size 10.6 KB, free 365.9 MB)
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast_5_piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast 5 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.2 MB)
23/05/25 12:27:50 INFO spark.SparkContext: Created broadcast 5 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Submitting 1 missing tasks
from ResultStage 4 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:50 INFO cluster. YarnScheduler: Adding task set 4.0 with 1
tasks
23/05/25 12:27:50 INFO scheduler. TaskSetManager: Starting task 0.0 in stage
4.0 (TID 4, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
PR
```

OCESS_LOCAL, 8347 bytes)

```
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast 5 piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.2 MB)
23/05/25 12:27:50 INFO scheduler.TaskSetManager: Finished task 0.0 in stage
4.0 (TID 4) in 104 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1
/1)
23/05/25 12:27:50 INFO cluster. YarnScheduler: Removed TaskSet 4.0, whose
tasks have all completed, from pool
23/05/25 12:27:50 INFO scheduler. DAGScheduler: ResultStage 4 (foreach at
SparkSort.scala:33) finished in 0.115 s
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Job 4 finished: foreach at
SparkSort.scala:33, took 0.117970 s
-->Iteration 5 took 123 ms
23/05/25 12:27:50 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Got job 5 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Final stage: ResultStage 5
(foreach at SparkSort.scala:33)
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:50 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Submitting ResultStage 5
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast 6 stored as
values in memory (estimated size 10.6 KB, free 365.9 MB)
23/05/25 12:27:50 INFO memory.MemoryStore: Block broadcast_6_piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
23/05/25 12:27:50 INFO storage.BlockManagerInfo: Added broadcast 6 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.2 MB)
23/05/25 12:27:50 INFO spark.SparkContext: Created broadcast 6 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:50 INFO scheduler. DAGScheduler: Submitting 1 missing tasks
from ResultStage 5 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:50 INFO cluster. YarnScheduler: Adding task set 5.0 with 1
tasks
23/05/25 12:27:50 INFO scheduler.TaskSetManager: Starting task 0.0 in stage
5.0 (TID 5, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
PR
OCESS_LOCAL, 8347 bytes)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added broadcast_6_piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.2 MB)
```

```
23/05/25 12:27:51 INFO scheduler.TaskSetManager: Finished task 0.0 in stage
5.0 (TID 5) in 493 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1
/1)
23/05/25 12:27:51 INFO cluster. YarnScheduler: Removed TaskSet 5.0, whose
tasks have all completed, from pool
23/05/25 12:27:51 INFO scheduler.DAGScheduler: ResultStage 5 (foreach at
SparkSort.scala:33) finished in 0.506 s
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Job 5 finished: foreach at
SparkSort.scala:33, took 0.510316 s
-->Iteration 6 took 516 ms
23/05/25 12:27:51 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Got job 6 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Final stage: ResultStage 6
(foreach at SparkSort.scala:33)
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Submitting ResultStage 6
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:51 INFO memory.MemoryStore: Block broadcast_7 stored as
values in memory (estimated size 10.6 KB, free 365.8 MB)
23/05/25 12:27:51 INFO memory.MemoryStore: Block broadcast 7 piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added broadcast 7 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.2 MB)
23/05/25 12:27:51 INFO spark.SparkContext: Created broadcast 7 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Submitting 1 missing tasks
from ResultStage 6 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:51 INFO cluster. YarnScheduler: Adding task set 6.0 with 1
23/05/25 12:27:51 INFO scheduler. Task Set Manager: Starting task 0.0 in stage
6.0 (TID 6, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
OCESS_LOCAL, 8347 bytes)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added broadcast 7 piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.2 MB)
23/05/25 12:27:51 INFO scheduler.TaskSetManager: Finished task 0.0 in stage
6.0 (TID 6) in 94 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1/
1)
23/05/25 12:27:51 INFO cluster. YarnScheduler: Removed TaskSet 6.0, whose
tasks have all completed, from pool
```

```
23/05/25 12:27:51 INFO scheduler.DAGScheduler: ResultStage 6 (foreach at
SparkSort.scala:33) finished in 0.108 s
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Job 6 finished: foreach at
SparkSort.scala:33, took 0.110870 s
-->Iteration 7 took 115 ms
23/05/25 12:27:51 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Got job 7 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Final stage: ResultStage 7
(foreach at SparkSort.scala:33)
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Submitting ResultStage 7
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:51 INFO memory.MemoryStore: Block broadcast_8 stored as
values in memory (estimated size 10.6 KB, free 365.8 MB)
23/05/25 12:27:51 INFO memory.MemoryStore: Block broadcast_8_piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added broadcast 8 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.2 MB)
23/05/25 12:27:51 INFO spark.SparkContext: Created broadcast 8 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Submitting 1 missing tasks
from ResultStage 7 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:51 INFO cluster. YarnScheduler: Adding task set 7.0 with 1
tasks
23/05/25 12:27:51 INFO scheduler.TaskSetManager: Starting task 0.0 in stage
7.0 (TID 7, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
PR
OCESS LOCAL, 8347 bytes)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added broadcast 8 piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.2 MB)
23/05/25 12:27:51 INFO scheduler. Task Set Manager: Finished task 0.0 in stage
7.0 (TID 7) in 70 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1/
1)
23/05/25 12:27:51 INFO cluster. YarnScheduler: Removed TaskSet 7.0, whose
tasks have all completed, from pool
23/05/25 12:27:51 INFO scheduler. DAGScheduler: ResultStage 7 (foreach at
SparkSort.scala:33) finished in 0.081 s
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Job 7 finished: foreach at
SparkSort.scala:33, took 0.084157 s
-->Iteration 8 took 89 ms
```

```
23/05/25 12:27:51 INFO spark.SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Got job 8 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Final stage: ResultStage 8
(foreach at SparkSort.scala:33)
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Missing parents: List()
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Submitting ResultStage 8
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:51 INFO memory.MemoryStore: Block broadcast 9 stored as
values in memory (estimated size 10.6 KB, free 365.8 MB)
23/05/25 12:27:51 INFO memory.MemoryStore: Block broadcast 9 piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added broadcast 9 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37637 (size: 5.6 KB,
free: 3
66.2 MB)
23/05/25 12:27:51 INFO spark.SparkContext: Created broadcast 9 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Submitting 1 missing tasks
from ResultStage 8 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:51 INFO cluster. YarnScheduler: Adding task set 8.0 with 1
tasks
23/05/25 12:27:51 INFO scheduler.TaskSetManager: Starting task 0.0 in stage
8.0 (TID 8, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
PR
OCESS LOCAL, 8347 bytes)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added broadcast 9 piece0
in memory on ip-10-1-2-40.ap-south-1.compute.internal:33447 (size: 5.6 KB,
free: 36
6.2 MB)
23/05/25 12:27:51 INFO scheduler.TaskSetManager: Finished task 0.0 in stage
8.0 (TID 8) in 60 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1/
1)
23/05/25 12:27:51 INFO cluster. YarnScheduler: Removed TaskSet 8.0, whose
tasks have all completed, from pool
23/05/25 12:27:51 INFO scheduler.DAGScheduler: ResultStage 8 (foreach at
SparkSort.scala:33) finished in 0.072 s
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Job 8 finished: foreach at
SparkSort.scala:33, took 0.075601 s
-->Iteration 9 took 80 ms
23/05/25 12:27:51 INFO spark. SparkContext: Starting job: foreach at
SparkSort.scala:33
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Got job 9 (foreach at
SparkSort.scala:33) with 1 output partitions
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Final stage: ResultStage 9
(foreach at SparkSort.scala:33)
```

```
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Parents of final stage: List()
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Missing parents: List()
23/05/25 12:27:51 INFO scheduler.DAGScheduler: Submitting ResultStage 9
(MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
parents
23/05/25 12:27:51 INFO memory.MemoryStore: Block broadcast_10 stored as
values in memory (estimated size 10.6 KB, free 365.8 MB)
23/05/25 12:27:51 INFO memory. Memory Store: Block broadcast 10 piece0
stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added
broadcast 10 piece0 in memory on ip-10-1-1-204.ap-south-
1.compute.internal:37637 (size: 5.6 KB, free:
366.2 MB)
23/05/25 12:27:51 INFO spark.SparkContext: Created broadcast 10 from
broadcast at DAGScheduler.scala:1164
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Submitting 1 missing tasks
from ResultStage 9 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first
15 tas
ks are for partitions Vector(0))
23/05/25 12:27:51 INFO cluster. YarnScheduler: Adding task set 9.0 with 1
tasks
23/05/25 12:27:51 INFO scheduler. TaskSetManager: Starting task 0.0 in stage
9.0 (TID 9, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0,
PR
OCESS LOCAL, 8347 bytes)
23/05/25 12:27:51 INFO storage.BlockManagerInfo: Added
broadcast 10 piece0 in memory on ip-10-1-2-40.ap-south-
1.compute.internal:33447 (size: 5.6 KB, free: 3
66.2 MB)
23/05/25 12:27:51 INFO scheduler.TaskSetManager: Finished task 0.0 in stage
9.0 (TID 9) in 73 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1)
(1/
1)
23/05/25 12:27:51 INFO cluster. YarnScheduler: Removed TaskSet 9.0, whose
tasks have all completed, from pool
23/05/25 12:27:51 INFO scheduler.DAGScheduler: ResultStage 9 (foreach at
SparkSort.scala:33) finished in 0.085 s
23/05/25 12:27:51 INFO scheduler. DAGScheduler: Job 9 finished: foreach at
SparkSort.scala:33, took 0.088958 s
-->Iteration 10 took 94 ms
23/05/25 12:27:51 INFO cluster. YarnClientSchedulerBackend: Interrupting
monitor thread
23/05/25 12:27:51 INFO cluster. YarnClientSchedulerBackend: Shutting down all
executors
23/05/25 12:27:51 INFO cluster. Yarn Scheduler Backend $Yarn Driver Endpoint:
Asking each executor to shut down
23/05/25 12:27:51 INFO cluster. Scheduler Extension Services: Stopping
SchedulerExtensionServices
(serviceOption=None,
services=List(),
started=false)
23/05/25 12:27:51 INFO cluster. YarnClientSchedulerBackend: Stopped
```

23/05/25 12:27:51 INFO spark.MapOutputTrackerMasterEndpoint:

MapOutputTrackerMasterEndpoint stopped!

23/05/25 12:27:51 INFO memory.MemoryStore: MemoryStore cleared

23/05/25 12:27:51 INFO storage.BlockManager: BlockManager stopped

23/05/25 12:27:51 INFO storage.BlockManagerMaster: BlockManagerMaster stopped

23/05/25 12:27:51 INFO

scheduler.OutputCommitCoordinator\$OutputCommitCoordinatorEndpoint: OutputCommitCoordinator stopped!

23/05/25 12:27:51 INFO spark.SparkContext: Successfully stopped SparkContext

 $23/05/25\ 12{:}27{:}51\ INFO\ util. Shutdown Hook Manager:\ Shutdown\ hook\ called$

23/05/25 12:27:51 INFO util.ShutdownHookManager: Deleting directory

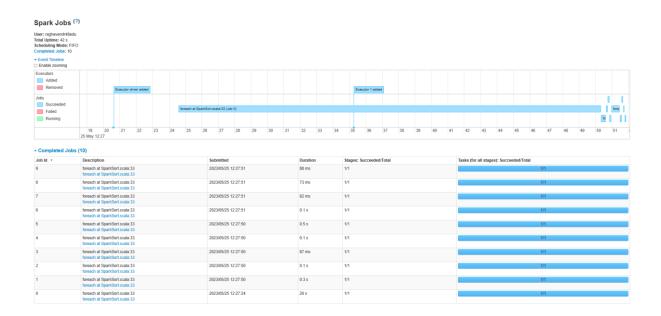
/tmp/spark-149fb59c-5b64-4b50-a117-6212d417e2c9

23/05/25 12:27:51 INFO util.ShutdownHookManager: Deleting directory

/tmp/spark-aeca6266-9a43-4039-b421-4d6e67bad587

[raghavendr48edu@ip-10-1-1-204 training_project3]\$

From < https://bigdata.cloudlabs.edureka.co/shell/>



2. Try to implement the same example in pyspark and perform sparksubmit.

/input_sort_py.txt

1 2 3 0 15 8 7 10 2 24 14 1 8 90 101 2 3 0 15 8 7 10 2 24 14 1 8 90 101 2 3 0 15 8 7 spark-submit --class org.apache.spark.examples.HdfsTest --master yarn --deploy-mode cluster /opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/spark/examples/jars/spark-examples*.jar use_cases/input_sort_py.txt

23/05/18 06:27:30 INFO client.RMProxy: Connecting to ResourceManager at ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032

23/05/18 06:27:30 INFO yarn.Client: Requesting a new application from cluster with 3 NodeManagers

23/05/18 06:27:30 INFO conf.Configuration: resource-types.xml not found 23/05/18 06:27:30 INFO resource.ResourceUtils: Unable to find 'resource-types.xml'.

23/05/18 06:27:30 INFO yarn.Client: Verifying our application has not requested more than the maximum memory capability of the cluster (20480 MB per container)

23/05/18 06:27:30 INFO yarn.Client: Will allocate AM container, with 1408 MB memory including 384 MB overhead

23/05/18 06:27:30 INFO yarn.Client: Setting up container launch context for our AM

23/05/18 06:27:30 INFO yarn.Client: Setting up the launch environment for our AM container

23/05/18 06:27:30 INFO yarn.Client: Preparing resources for our AM container 23/05/18 06:27:30 INFO yarn.Client: Uploading resource file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/lib/spark/examples/jars/spark-examples 2.11-2.4.0-cdh6.2.1.jar -> hdfs://nameservi

 $ce 1/user/rag havendr 48 edu/.spark Staging/application_1684298513961_0025/spark-examples_2.11-2.4.0-cdh 6.2.1.jar$

23/05/18 06:27:31 INFO yarn.Client: Uploading resource file:/tmp/spark-cfe28f48-65a9-4f7f-8ff8-

b6cb5fd22b8f/ spark conf 4970982468786708687.zip ->

hdfs://nameservice1/user/raghavendr48edu/.spark

Staging/application_1684298513961_0025/__spark_conf__.zip

23/05/18 06:27:31 INFO spark. Security Manager: Changing view acls to: raghavendr48edu

23/05/18 06:27:31 INFO spark. Security Manager: Changing modify acls to: raghavendr48edu

23/05/18 06:27:31 INFO spark. Security Manager: Changing view acls groups to: 23/05/18 06:27:31 INFO spark. Security Manager: Changing modify acls groups to:

23/05/18 06:27:31 INFO spark.SecurityManager: SecurityManager:

authentication disabled; ui acls disabled; users with view permissions:

Set(raghavendr48edu); groups with view permissions: Set(); u

sers with modify permissions: Set(raghavendr48edu); groups with modify permissions: Set()

23/05/18 06:27:31 INFO conf.HiveConf: Found configuration file file:/etc/hive/conf.cloudera.hive/hive-site.xml

23/05/18 06:27:31 INFO security.YARNHadoopDelegationTokenManager: Attempting to load user's ticket cache. 23/05/18 06:27:31 INFO yarn.Client: Submitting application application_1684298513961_0025 to ResourceManager 23/05/18 06:27:31 INFO impl.YarnClientImpl: Submitted application application 1684298513961 0025

23/05/18 06:27:32 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED)

23/05/18 06:27:32 INFO yarn.Client:

client token: N/A

diagnostics: AM container is launched, waiting for AM container to Register

with RM

ApplicationMaster host: N/A ApplicationMaster RPC port: -1

queue: root.default

start time: 1684391251521 final status: UNDEFINED

tracking URL: http://ip-10-1-1-204.ap-south-

1.compute.internal:6066/proxy/application 1684298513961 0025/

user: raghavendr48edu 23/05/18 06:27:33 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:34 INFO yarn.Client: Application report for application 1684298513961 0025 (state: ACCEPTED) 23/05/18 06:27:35 INFO yarn.Client: Application report for application 1684298513961 0025 (state: ACCEPTED) 23/05/18 06:27:36 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:37 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:38 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:39 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:40 INFO yarn.Client: Application report for application 1684298513961 0025 (state: ACCEPTED) 23/05/18 06:27:41 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:42 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:43 INFO yarn.Client: Application report for application 1684298513961 0025 (state: ACCEPTED) 23/05/18 06:27:44 INFO yarn.Client: Application report for application 1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:45 INFO yarn.Client: Application report for application_1684298513961_0025 (state: ACCEPTED) 23/05/18 06:27:46 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:27:46 INFO yarn.Client:

client token: N/A diagnostics: N/A

ApplicationMaster host: ip-10-1-2-40.ap-south-1.compute.internal

ApplicationMaster RPC port: 33438

queue: root.default

start time: 1684391251521 final status: UNDEFINED

tracking URL: http://ip-10-1-1-204.ap-south-

1.compute.internal:6066/proxy/application 1684298513961_0025/

user: raghavendr48edu

23/05/18 06:27:47 INFO yarn.Client: Application report for application 1684298513961_0025 (state: RUNNING) 23/05/18 06:27:48 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:27:49 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:27:50 INFO yarn.Client: Application report for application_1684298513961_0025 (state: RUNNING) 23/05/18 06:27:51 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:27:52 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:27:53 INFO yarn.Client: Application report for application_1684298513961_0025 (state: RUNNING) 23/05/18 06:27:54 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:27:55 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:27:56 INFO yarn.Client: Application report for application_1684298513961_0025 (state: RUNNING) 23/05/18 06:27:57 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:27:58 INFO yarn.Client: Application report for application_1684298513961_0025 (state: RUNNING) 23/05/18 06:27:59 INFO yarn.Client: Application report for application_1684298513961_0025 (state: RUNNING) 23/05/18 06:28:00 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:28:01 INFO yarn.Client: Application report for application_1684298513961_0025 (state: RUNNING) 23/05/18 06:28:02 INFO yarn.Client: Application report for application_1684298513961_0025 (state: RUNNING) 23/05/18 06:28:03 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:28:04 INFO yarn.Client: Application report for application 1684298513961_0025 (state: RUNNING) 23/05/18 06:28:05 INFO yarn.Client: Application report for application_1684298513961_0025 (state: RUNNING) 23/05/18 06:28:06 INFO yarn.Client: Application report for application 1684298513961 0025 (state: RUNNING) 23/05/18 06:28:07 INFO yarn.Client: Application report for application_1684298513961_0025 (state: FINISHED) 23/05/18 06:28:07 INFO yarn.Client:

client token: N/A diagnostics: N/A

ApplicationMaster host: ip-10-1-2-40.ap-south-1.compute.internal

ApplicationMaster RPC port: 33438

queue: root.default

start time: 1684391251521 final status: SUCCEEDED

tracking URL: http://ip-10-1-1-204.ap-south-

1.compute.internal:6066/proxy/application 1684298513961 0025/

user: raghavendr48edu

23/05/18 06:28:07 INFO util.ShutdownHookManager: Shutdown hook called 23/05/18 06:28:07 INFO util.ShutdownHookManager: Deleting directory

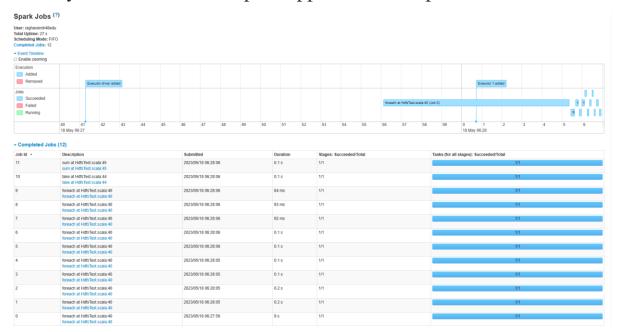
/tmp/spark-f0f0186d-24ee-4775-b22c-558a17f3b8d0

23/05/18 06:28:07 INFO util.ShutdownHookManager: Deleting directory

/tmp/spark-cfe28f48-65a9-4f7f-8ff8-b6cb5fd22b8f

From < https://bigdata.cloudlabs.edureka.co/shell/>

3. Analyze the behavior of spark application on Spark web UI



sort.py

```
from __future__ import print_function
import sys,time
from pyspark.sql import SparkSession
if __name__ == "__main__":
    if len(sys.argv) != 2:
        print("Usage: hdfstest.py <file>", file=sys.stderr)
        exit(-1)
    spark = SparkSession\
        .builder\
```

```
.appName("HdfsTest_py")\
    .getOrCreate()
file_ = spark.read.text(sys.argv[1]).rdd
mapped = file_.map(lambda s:len(s)).cache()
for i in range(10):
    start_time = time.time()
    mapped.map(lambda x: x+2)
    end_time = time.time()
    print('----> Iteration took:', end_time - start_time,'ms')
spark.stop()
```

From http://bigdata.cloudlabs.edureka.co:8888/hue/filebrowser/view=/user/raghavendr48edu/use">http://bigdata.cloudlabs.edureka.co:8888/hue/filebrowser/view=/user/raghavendr48edu/use cases/sort.py>

```
[raghavendr48edu@ip-10-1-1-204 ~]$ spark-submit --class
org.apache.spark.examples.HdfsTest --master yarn --deploy-mode
cluster /opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/spark/examples/jars/spark-examples*.jar use_cases/sort.py
23/05/18 06:32:25 INFO client.RMProxy: Connecting to ResourceManager at ip-
10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032
23/05/18 06:32:25 INFO yarn. Client: Requesting a new application from cluster
with 3 NodeManagers
23/05/18 06:32:25 INFO conf.Configuration: resource-types.xml not found
23/05/18 06:32:25 INFO resource.ResourceUtils: Unable to find 'resource-
23/05/18 06:32:25 INFO yarn. Client: Verifying our application has not requested
more than the maximum memory capability of the cluster (20480 MB per
23/05/18 06:32:25 INFO yarn.Client: Will allocate AM container, with 1408 MB
memory including 384 MB overhead
23/05/18 06:32:25 INFO yarn. Client: Setting up container launch context for
our AM
23/05/18 06:32:25 INFO yarn.Client: Setting up the launch environment for our
AM container
23/05/18 06:32:25 INFO yarn.Client: Preparing resources for our AM container
23/05/18 06:32:25 INFO yarn.Client: Uploading resource
file:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/spark/examples/jars/spark-examples 2.11
application 1684298513961 0026/spark-examples 2.11-2.4.0-cdh6.2.1.jar
23/05/18 06:32:25 INFO yarn.Client: Uploading resource file:/tmp/spark-
254c41ee-8256-452e-ae25-
d9efd412afdd/ spark conf 2681805809164057652.zip -> hdfs://n
  spark_conf__.zip
23/05/18 06:32:25 INFO spark. Security Manager: Changing view acls to:
raghavendr48edu
23/05/18 06:32:25 INFO spark. Security Manager: Changing modify acls to:
raghavendr48edu
23/05/18 06:32:25 INFO spark. Security Manager: Changing view acls groups to:
```

23/05/18 06:32:25 INFO spark. Security Manager: Changing modify acls groups

to:

```
23/05/18 06:32:25 INFO spark. Security Manager: Security Manager:
authentication disabled; ui acls disabled; users with view permissions:
Set(raghavendr48edu);
avendr48edu); groups with modify permissions: Set()
23/05/18 06:32:25 INFO conf. HiveConf: Found configuration file
file:/etc/hive/conf.cloudera.hive/hive-site.xml
23/05/18 06:32:26 INFO security.YARNHadoopDelegationTokenManager:
Attempting to load user's ticket cache.
23/05/18 06:32:26 INFO yarn.Client: Submitting application
application_1684298513961_0026 to ResourceManager
23/05/18 06:32:26 INFO impl. YarnClientImpl: Submitted application
application 1684298513961 0026
23/05/18 06:32:27 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: ACCEPTED)
23/05/18 06:32:27 INFO yarn.Client:
      client token: N/A
      diagnostics: AM container is launched, waiting for AM container to Register
with RM
      ApplicationMaster host: N/A
      ApplicationMaster RPC port: -1
      queue: root.default
      start time: 1684391546066
      final status: UNDEFINED
      tracking URL: <a href="http://ip-10-1-1-204.ap-south-">http://ip-10-1-1-204.ap-south-</a>
1.compute.internal:6066/proxy/application 1684298513961 0026/
      user: raghavendr48edu
23/05/18 06:32:28 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: ACCEPTED)
23/05/18 06:32:29 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: ACCEPTED)
23/05/18 06:32:30 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: ACCEPTED)
23/05/18 06:32:31 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: RUNNING)
23/05/18 06:32:31 INFO yarn.Client:
      client token: N/A
      diagnostics: N/A
      ApplicationMaster host: ip-10-1-2-103.ap-south-1.compute.internal
      ApplicationMaster RPC port: 38195
      queue: root.default
      start time: 1684391546066
      final status: UNDEFINED
      tracking URL: <a href="http://ip-10-1-1-204.ap-south-">http://ip-10-1-1-204.ap-south-</a>
1.compute.internal:6066/proxy/application 1684298513961 0026/
      user: raghavendr48edu
23/05/18 06:32:32 INFO yarn.Client: Application report for
application 1684298513961 0026 (state: RUNNING)
23/05/18 06:32:33 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: RUNNING)
```

```
23/05/18 06:32:34 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: RUNNING)
23/05/18 06:32:35 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: RUNNING)
23/05/18 06:32:36 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: RUNNING)
23/05/18 06:32:37 INFO varn.Client: Application report for
application 1684298513961 0026 (state: RUNNING)
23/05/18 06:32:38 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: RUNNING)
23/05/18 06:32:39 INFO yarn.Client: Application report for
application 1684298513961 0026 (state: RUNNING)
23/05/18 06:32:40 INFO yarn.Client: Application report for
application 1684298513961 0026 (state: RUNNING)
23/05/18 06:32:41 INFO yarn.Client: Application report for
application 1684298513961 0026 (state: RUNNING)
23/05/18 06:32:42 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: RUNNING)
23/05/18 06:32:43 INFO yarn.Client: Application report for
application 1684298513961 0026 (state: RUNNING)
23/05/18 06:32:44 INFO yarn.Client: Application report for
application_1684298513961_0026 (state: FINISHED)
23/05/18 06:32:44 INFO yarn.Client:
      client token: N/A
      diagnostics: N/A
      ApplicationMaster host: ip-10-1-2-103.ap-south-1.compute.internal
      ApplicationMaster RPC port: 38195
      queue: root.default
      start time: 1684391546066
      final status: SUCCEEDED
      tracking URL: <a href="http://ip-10-1-1-204.ap-south-">http://ip-10-1-1-204.ap-south-</a>
1.compute.internal:6066/proxy/application 1684298513961 0026/
```

user: raghavendr48edu

23/05/18 06:32:44 INFO util.ShutdownHookManager: Shutdown hook called 23/05/18 06:32:44 INFO util.ShutdownHookManager: Deleting directory

/tmp/spark-254c41ee-8256-452e-ae25-d9efd412afdd

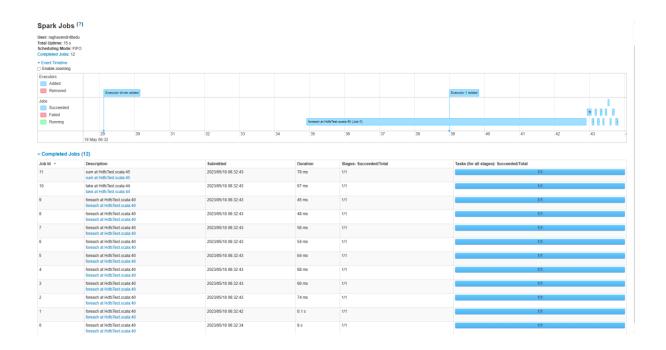
23/05/18 06:32:44 INFO util.ShutdownHookManager: Deleting directory

/tmp/spark-5991d061-6a93-4f8e-9e6b-5d591f6f0661

[raghavendr48edu@ip-10-1-1-204 ~]\$

From < https://bigdata.cloudlabs.edureka.co/shell/>

3. Analyze the behavior of spark application on Spark web UI



OR

[raghavendr48edu@ip-10-1-1-204 training_project3]\$ vi sort.py [raghavendr48edu@ip-10-1-1-204 training_project3]\$ spark-submit sort.py input_sort_py.txt

23/05/25 12:38:29 INFO spark.SparkContext: Running Spark version 2.4.0-cdh6.2.1

23/05/25 12:38:29 INFO logging.DriverLogger: Added a local log appender at: /tmp/spark-23ddc119-4019-420a-bbaa-

28c5a9565eb8/__driver_logs__/driver.log

23/05/25 12:38:29 INFO spark.SparkContext: Submitted application: HdfsTest py

23/05/25 12:38:29 INFO spark. Security Manager: Changing view acls to: raghavendr48edu

23/05/25 12:38:29 INFO spark. Security Manager: Changing modify acls to: raghavendr48edu

23/05/25 12:38:29 INFO spark. Security Manager: Changing view acls groups to: 23/05/25 12:38:29 INFO spark. Security Manager: Changing modify acls groups to:

23/05/25 12:38:29 INFO spark.SecurityManager: SecurityManager:

authentication disabled; ui acls disabled; users with view permissions:

Set(raghavendr48edu); groups with view permissions: Set(); users with modify permissions: Set(ragh

avendr48edu); groups with modify permissions: Set()

23/05/25 12:38:29 INFO util.Utils: Successfully started service 'sparkDriver' on port 39364.

23/05/25 12:38:29 INFO spark.SparkEnv: Registering MapOutputTracker

23/05/25 12:38:29 INFO spark.SparkEnv: Registering BlockManagerMaster

23/05/25 12:38:29 INFO storage.BlockManagerMasterEndpoint: Using org.apache.spark.storage.DefaultTopologyMapper for getting topology information

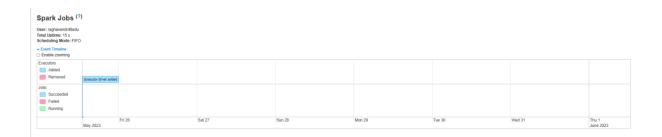
```
23/05/25 12:38:29 INFO storage.BlockManagerMasterEndpoint:
BlockManagerMasterEndpoint up
23/05/25 12:38:29 INFO storage.DiskBlockManager: Created local directory at
/tmp/blockmgr-8ec9ecdc-ab16-4e14-b50d-a20dc7347e38
23/05/25 12:38:29 INFO memory. Memory Store: Memory Store started with
capacity 366.3 MB
23/05/25 12:38:29 INFO spark.SparkEnv: Registering
OutputCommitCoordinator
23/05/25 12:38:30 INFO util. Utils: Using initial executors = 0, max of
spark.dynamicAllocation.initialExecutors, spark.dynamicAllocation.minExecutors
and spark.executor.instances
23/05/25 12:38:30 INFO client.RMProxy: Connecting to ResourceManager at ip-
10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032
23/05/25 12:38:30 INFO yarn.Client: Requesting a new application from cluster
with 3 NodeManagers
23/05/25 12:38:30 INFO conf. Configuration: resource-types.xml not found
23/05/25 12:38:30 INFO resource.ResourceUtils: Unable to find 'resource-
types.xml'.
23/05/25 12:38:30 INFO yarn. Client: Verifying our application has not requested
more than the maximum memory capability of the cluster (20480 MB per
container)
23/05/25 12:38:30 INFO yarn.Client: Will allocate AM container, with 896 MB
memory including 384 MB overhead
23/05/25 12:38:30 INFO yarn.Client: Setting up container launch context for
our AM
23/05/25 12:38:30 INFO yarn.Client: Setting up the launch environment for our
AM container
23/05/25 12:38:30 INFO yarn.Client: Preparing resources for our AM container
23/05/25 12:38:31 INFO yarn.Client: Uploading resource file:/tmp/spark-
23ddc119-4019-420a-bbaa-
28c5a9565eb8/ spark conf 7864336031031315848.zip ->
hdfs://nameservice1/user/raghavendr48edu/.sparkStaging/application 1684866
872278_1276/
  spark conf .zip
23/05/25 12:38:31 INFO spark. Security Manager: Changing view acls to:
raghavendr48edu
23/05/25 12:38:31 INFO spark. Security Manager: Changing modify acls to:
raghavendr48edu
23/05/25 12:38:31 INFO spark. Security Manager: Changing view acls groups to:
23/05/25 12:38:31 INFO spark. Security Manager: Changing modify acls groups
to:
23/05/25 12:38:31 INFO spark. Security Manager: Security Manager:
authentication disabled; ui acls disabled; users with view permissions:
Set(raghavendr48edu); groups with view permissions: Set(); users with modify
permissions: Set(ragh
avendr48edu); groups with modify permissions: Set()
23/05/25 12:38:31 INFO yarn.Client: Submitting application
application_1684866872278_1276 to ResourceManager
23/05/25 12:38:31 INFO impl. YarnClientImpl: Submitted application
application 1684866872278 1276
23/05/25 12:38:32 INFO yarn.Client: Application report for
```

application 1684866872278 1276 (state: ACCEPTED)

```
23/05/25 12:38:32 INFO yarn.Client:
      client token: N/A
      diagnostics: AM container is launched, waiting for AM container to Register
with RM
      ApplicationMaster host: N/A
      ApplicationMaster RPC port: -1
      queue: root.default
      start time: 1685018311519
      final status: UNDEFINED
      tracking URL: <a href="http://ip-10-1-1-204.ap-south-">http://ip-10-1-1-204.ap-south-</a>
1.compute.internal:6066/proxy/application 1684866872278 1276/
      user: raghavendr48edu
23/05/25 12:38:33 INFO yarn.Client: Application report for
application 1684866872278 1276 (state: ACCEPTED)
23/05/25 12:38:34 INFO varn. Client: Application report for
application_1684866872278_1276 (state: RUNNING)
23/05/25 12:38:34 INFO yarn.Client:
      client token: N/A
      diagnostics: N/A
      ApplicationMaster host: 10.1.2.103
      ApplicationMaster RPC port: -1
      queue: root.default
      start time: 1685018311519
      final status: UNDEFINED
      tracking URL: http://ip-10-1-1-204.ap-south-
1.compute.internal:6066/proxy/application 1684866872278 1276/
      user: raghavendr48edu
23/05/25 12:38:34 INFO cluster. YarnClientSchedulerBackend: Application
application 1684866872278 1276 has started running.
23/05/25 12:38:34 INFO cluster.SchedulerExtensionServices: Starting Yarn
extension services with app application_1684866872278_1276 and attemptId
None
23/05/25 12:38:34 INFO util. Utils: Successfully started service
'org.apache.spark.network.netty.NettyBlockTransferService' on port 37610.
23/05/25 12:38:34 INFO netty.NettyBlockTransferService: Server created on ip-
10-1-1-204.ap-south-1.compute.internal:37610
23/05/25 12:38:34 INFO storage.BlockManager: Using
org.apache.spark.storage.RandomBlockReplicationPolicy for block replication
policy
23/05/25 12:38:34 INFO storage.BlockManagerMaster: Registering
BlockManager BlockManagerId(driver, ip-10-1-1-204.ap-south-
1.compute.internal, 37610, None)
23/05/25 12:38:34 INFO storage.BlockManagerMasterEndpoint: Registering
block manager ip-10-1-1-204.ap-south-1.compute.internal:37610 with 366.3 MB
RAM, BlockManagerId(driver, ip-10-1-1-204.ap-south-1.compute.internal,
37610, None)
23/05/25 12:38:34 INFO storage.BlockManagerMaster: Registered
BlockManager BlockManagerId(driver, ip-10-1-1-204.ap-south-
1.compute.internal, 37610, None)
```

```
23/05/25 12:38:34 INFO storage.BlockManager: external shuffle service port =
7337
23/05/25 12:38:34 INFO storage.BlockManager: Initialized BlockManager:
BlockManagerId(driver, ip-10-1-1-204.ap-south-1.compute.internal, 37610,
None)
23/05/25 12:38:34 INFO cluster. YarnClientSchedulerBackend: Add WebUI Filter.
org.apache.hadoop.yarn.server.webproxy.amfilter.AmIpFilter, Map(PROXY HOS
TS -> ip-10-1-1-204.ap-south-1.compute.internal, PROXY URI BASES -
> http://ip-10-1-1-
204.ap-south-
1.compute.internal:6066/proxy/application_1684866872278_1276),
/proxy/application 1684866872278 1276
23/05/25 12:38:34 INFO util.log: Logging initialized @7043ms
23/05/25 12:38:35 INFO scheduler. EventLoggingListener: Logging events to
hdfs://nameservice1/user/spark/applicationHistory/application_1684866872278
1276
23/05/25 12:38:35 INFO util. Utils: Using initial executors = 0, max of
spark.dynamicAllocation.initialExecutors, spark.dynamicAllocation.minExecutors
and spark.executor.instances
23/05/25 12:38:35 WARN
cluster.YarnSchedulerBackend$YarnSchedulerEndpoint: Attempted to request
executors before the AM has registered!
23/05/25 12:38:35 INFO spark.SparkContext: Registered listener
com.cloudera.spark.lineage.NavigatorAppListener
23/05/25 12:38:35 INFO logging.DriverLogger$DfsAsyncWriter: Started driver
log file sync to:
/user/spark/driverLogs/application 1684866872278 1276 driver.log
23/05/25 12:38:35 INFO cluster. YarnClientSchedulerBackend:
SchedulerBackend is ready for scheduling beginning after reached
minRegisteredResourcesRatio: 0.8
23/05/25 12:38:35 INFO internal. Shared State: loading hive config file:
file:/etc/hive/conf.cloudera.hive/hive-site.xml
23/05/25 12:38:35 INFO internal. Shared State: spark.sql.warehouse.dir is not
set, but hive metastore warehouse dir is set. Setting spark sql warehouse dir to
the value of hive.metastore.warehouse.dir ('/user/hive/warehouse').
23/05/25 12:38:35 INFO internal. Shared State: Warehouse path is
'/user/hive/warehouse'.
23/05/25 12:38:35 INFO
cluster.YarnSchedulerBackend$YarnSchedulerEndpoint: ApplicationMaster
registered as NettyRpcEndpointRef(spark-client://YarnAM)
23/05/25 12:38:35 INFO state.StateStoreCoordinatorRef: Registered
StateStoreCoordinator endpoint
23/05/25 12:38:37 INFO datasources. FileSourceStrategy: Pruning directories
with:
23/05/25 12:38:37 INFO datasources. FileSourceStrategy: Post-Scan Filters:
23/05/25 12:38:37 INFO datasources. FileSourceStrategy: Output Data Schema:
struct<value: string>
23/05/25 12:38:37 INFO execution.FileSourceScanExec: Pushed Filters:
23/05/25 12:38:37 INFO codegen.CodeGenerator: Code generated in
181.767905 ms
23/05/25 12:38:38 INFO memory.MemoryStore: Block broadcast_0 stored as
values in memory (estimated size 337.3 KB, free 366.0 MB)
```

```
23/05/25 12:38:38 INFO memory.MemoryStore: Block broadcast 0 piece0
stored as bytes in memory (estimated size 32.3 KB, free 365.9 MB)
23/05/25 12:38:38 INFO storage.BlockManagerInfo: Added broadcast 0 piece0
in memory on ip-10-1-1-204.ap-south-1.compute.internal:37610 (size: 32.3 KB,
free: 366.3 MB)
23/05/25 12:38:38 INFO spark.SparkContext: Created broadcast 0 from
iavaToPvthon at NativeMethodAccessorImpl.iava:0
23/05/25 12:38:38 INFO execution. File Source Scan Exec: Planning scan with bin
packing, max size: 4194304 bytes, open cost is considered as scanning 4194304
bytes.
----> Iteration took: 1.621246337890625e-05 ms
----> Iteration took: 6.9141387939453125e-06 ms
----> Iteration took: 4.76837158203125e-06 ms
----> Iteration took: 4.0531158447265625e-06 ms
----> Iteration took: 4.0531158447265625e-06 ms
----> Iteration took: 3.814697265625e-06 ms
----> Iteration took: 4.76837158203125e-06 ms
----> Iteration took: 4.0531158447265625e-06 ms
----> Iteration took: 3.5762786865234375e-06 ms
----> Iteration took: 3.814697265625e-06 ms
23/05/25 12:38:38 INFO cluster. YarnClientSchedulerBackend: Interrupting
monitor thread
23/05/25 12:38:38 INFO cluster. YarnClientSchedulerBackend: Shutting down all
executors
23/05/25 12:38:38 INFO cluster. YarnScheduler Backend $YarnDriver Endpoint:
Asking each executor to shut down
23/05/25 12:38:38 INFO cluster. Scheduler Extension Services: Stopping
SchedulerExtensionServices
(serviceOption=None,
services=List(),
started=false)
23/05/25 12:38:38 INFO cluster. YarnClientScheduler Backend: Stopped
23/05/25 12:38:38 INFO spark.MapOutputTrackerMasterEndpoint:
MapOutputTrackerMasterEndpoint stopped!
23/05/25 12:38:38 INFO memory. Memory Store: Memory Store cleared
23/05/25 12:38:38 INFO storage.BlockManager: BlockManager stopped
23/05/25 12:38:38 INFO storage.BlockManagerMaster: BlockManagerMaster
stopped
23/05/25 12:38:38 INFO
scheduler.OutputCommitCoordinator$OutputCommitCoordinatorEndpoint:
OutputCommitCoordinator stopped!
23/05/25 12:38:38 INFO spark.SparkContext: Successfully stopped
SparkContext
23/05/25 12:38:38 INFO util.ShutdownHookManager: Shutdown hook called
23/05/25 12:38:38 INFO util.ShutdownHookManager: Deleting directory
/tmp/spark-23ddc119-4019-420a-bbaa-28c5a9565eb8/pyspark-a0d714ae-
d1a1-4947-88c4-2d4078b982b5
23/05/25 12:38:38 INFO util.ShutdownHookManager: Deleting directory
/tmp/spark-23ddc119-4019-420a-bbaa-28c5a9565eb8
23/05/25 12:38:38 INFO util.ShutdownHookManager: Deleting directory
/tmp/spark-f378884c-0204-440a-9c08-54c4e52c9c92
[raghavendr48edu@ip-10-1-1-204 training project3]$
```



- 4.Edit the application and add custom logs. Once executed check the Spark logs.
- a. Edit the scala file to add custom logger

```
vi SparkSort.scala import org.apache.spark.sql.SparkSession
object HdfsTest
{ /** Usage: HdfsTest [file] */
    def main(args: Array[String])
     {
         if (args.length < 1)
         System.err.println("Usage: HdfsTest ") System.exit(1)
         val spark=SparkSession.builder.appName("Custom
        HdfsTest").getOrCreate()
         println("Hello from Raghav")
        val file = spark.read.text(args(0)).rdd
        val mapped = file.map(s => s.length).cache()
        for (iter <- 1 to 10)
             val start = System.currentTimeMillis()
             for (x <- mapped) \{x + 2\}
             val end = System.currentTimeMillis()
             println("-->Iteration " + iter + " took " + (end-start) + "
             ms")
```

[raghavendr48edu@ip-10-1-1-204 training_project3]\$ cd src/main/scala/com/edureka/training/m4
[raghavendr48edu@ip-10-1-1-204 m4]\$ vi SparkSort.scala
[raghavendr48edu@ip-10-1-1-204 m4]\$ cd
/home/raghavendr48edu/training_project3

b. Compile and package the updated scala code sbt compile sbt package c. Re-submit the spark job with the scala code spark-submit --class com.edureka.training.m4.SparkSort --deploy-mode client target/scala-2.11/sparkme-project 2.11-1.0.jar input sort py.txt

```
[raghavendr48edu@ip-10-1-1-204 training_project3]$ sbt compile
[info] welcome to sbt 1.5.5 (Oracle Corporation Java 1.8.0 181)
[info] loading project definition from
/home/raghavendr48edu/training_project3/project
[info] loading settings for project training_project3 from build.sbt ...
[info] set current project to SparkMe Project (in build
file:/home/raghavendr48edu/training_project3/)
[info] Executing in batch mode. For better performance use sbt's shell
[info] compiling 2 Scala sources to
/home/raghavendr48edu/training_project3/target/scala-2.11/classes ...
[success] Total time: 5 s, completed May 25, 2023 1:05:35 PM
[raghavendr48edu@ip-10-1-1-204 training project3]$ sbt package
[info] welcome to sbt 1.5.5 (Oracle Corporation Java 1.8.0_181)
[info] loading project definition from
/home/raghavendr48edu/training_project3/project
[info] loading settings for project training project3 from build.sbt ...
[info] set current project to SparkMe Project (in build
file:/home/raghavendr48edu/training_project3/)
[success] Total time: 1 s, completed May 25, 2023 1:05:47 PM
[raghavendr48edu@ip-10-1-1-204 training_project3]$ spark-submit --class
HdfsTest --deploy-mode client target/scala-2.11/sparkme-project_2.11-
1.0.jar input_sort_py.txt
23/05/25 13:06:15 INFO spark.SparkContext: Running Spark version 2.4.0-
cdh6.2.1
23/05/25 13:06:15 INFO logging. DriverLogger: Added a local log appender at:
/tmp/spark-f12e6dab-06b6-44ff-af99-981e5c09d7a8/__driver_logs__/driver.log
23/05/25 13:06:15 INFO spark. SparkContext: Submitted application:
CustomHdfsTest
```

```
23/05/25 13:06:15 INFO spark. Security Manager: Changing view acls to:
raghavendr48edu
23/05/25 13:06:15 INFO spark. Security Manager: Changing modify acls to:
raghavendr48edu
23/05/25 13:06:15 INFO spark. Security Manager: Changing view acls groups to:
23/05/25 13:06:15 INFO spark. Security Manager: Changing modify acls groups
23/05/25 13:06:15 INFO spark. Security Manager: Security Manager:
authentication disabled; ui acls disabled; users with view permissions:
Set(raghavendr48edu); groups with view permissions: Set(); users with modify
permissions: Set(ragh
avendr48edu); groups with modify permissions: Set()
23/05/25 13:06:15 INFO util. Utils: Successfully started service 'sparkDriver' on
port 34843.
23/05/25 13:06:15 INFO spark.SparkEnv: Registering MapOutputTracker
23/05/25 13:06:15 INFO spark.SparkEnv: Registering BlockManagerMaster
23/05/25 13:06:15 INFO storage.BlockManagerMasterEndpoint: Using
org.apache.spark.storage.DefaultTopologyMapper for getting topology
information
23/05/25 13:06:15 INFO storage.BlockManagerMasterEndpoint:
BlockManagerMasterEndpoint up
23/05/25 13:06:15 INFO storage. DiskBlockManager: Created local directory at
/tmp/blockmgr-04a5a7dc-4c57-4a7b-b095-f5f7ec6764ac
23/05/25 13:06:15 INFO memory.MemoryStore: MemoryStore started with
capacity 366.3 MB
23/05/25 13:06:15 INFO spark.SparkEnv: Registering
OutputCommitCoordinator
23/05/25 13:06:15 INFO spark.SparkContext: Added JAR
file:/home/raghavendr48edu/training_project3/target/scala-2.11/sparkme-
project 2.11-1.0.jar at spark://ip-10-1-1-204.ap-south-
1.compute.internal:34843/jars/sparkme-project 2.11-1.0.j
ar with timestamp 1685019975886
23/05/25 13:06:15 INFO util. Utils: Using initial executors = 0, max of
```

spark.dynamicAllocation.initialExecutors, spark.dynamicAllocation.minExecutors and spark.executor.instances

23/05/25 13:06:16 INFO client.RMProxy: Connecting to ResourceManager at ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032

23/05/25 13:06:16 INFO yarn.Client: Requesting a new application from cluster with 3 NodeManagers

23/05/25 13:06:16 INFO conf.Configuration: resource-types.xml not found 23/05/25 13:06:16 INFO resource.ResourceUtils: Unable to find 'resource-types.xml'.

23/05/25 13:06:16 INFO yarn.Client: Verifying our application has not requested more than the maximum memory capability of the cluster (20480 MB per container)

23/05/25 13:06:16 INFO yarn.Client: Will allocate AM container, with 896 MB memory including 384 MB overhead

23/05/25 13:06:16 INFO yarn.Client: Setting up container launch context for our AM

23/05/25 13:06:16 INFO yarn.Client: Setting up the launch environment for our AM container

23/05/25 13:06:16 INFO yarn.Client: Preparing resources for our AM container

```
23/05/25 13:06:17 INFO yarn.Client: Uploading resource file:/tmp/spark-
f12e6dab-06b6-44ff-af99-
981e5c09d7a8/ spark conf 4661786933308266813.zip ->
hdfs://nameservice1/user/raghavendr48edu/.sparkStaging/application_1684866
872278_1287/
 _spark_conf__.zip
23/05/25 13:06:17 INFO spark. Security Manager: Changing view acls to:
raghavendr48edu
23/05/25 13:06:17 INFO spark. Security Manager: Changing modify acls to:
raghavendr48edu
23/05/25 13:06:17 INFO spark. Security Manager: Changing view acls groups to:
23/05/25 13:06:17 INFO spark. Security Manager: Changing modify acls groups
23/05/25 13:06:17 INFO spark. Security Manager: Security Manager:
authentication disabled; ui acls disabled; users with view permissions:
Set(raghavendr48edu); groups with view permissions: Set(); users with modify
permissions: Set(ragh
avendr48edu); groups with modify permissions: Set()
23/05/25 13:06:17 INFO yarn.Client: Submitting application
application 1684866872278 1287 to ResourceManager
23/05/25 13:06:17 INFO impl. YarnClientImpl: Submitted application
application_1684866872278_1287
23/05/25 13:06:18 INFO yarn.Client: Application report for
application_1684866872278_1287 (state: ACCEPTED)
23/05/25 13:06:18 INFO yarn.Client:
     client token: N/A
      diagnostics: AM container is launched, waiting for AM container to Register
with RM
      ApplicationMaster host: N/A
     ApplicationMaster RPC port: -1
     queue: root.default
     start time: 1685019977354
     final status: UNDEFINED
     tracking URL: http://ip-10-1-1-204.ap-south-
1.compute.internal:6066/proxy/application_1684866872278_1287/
     user: raghavendr48edu
23/05/25 13:06:19 INFO yarn.Client: Application report for
application_1684866872278_1287 (state: ACCEPTED)
23/05/25 13:06:20 INFO yarn.Client: Application report for
application_1684866872278_1287 (state: ACCEPTED)
23/05/25 13:06:21 INFO yarn.Client: Application report for
application 1684866872278 1287 (state: ACCEPTED)
23/05/25 13:06:22 INFO yarn.Client: Application report for
application 1684866872278 1287 (state: RUNNING)
23/05/25 13:06:22 INFO yarn.Client:
     client token: N/A
      diagnostics: N/A
     ApplicationMaster host: 10.1.2.175
     ApplicationMaster RPC port: -1
     queue: root.default
```

start time: 1685019977354

final status: UNDEFINED

tracking URL: http://ip-10-1-1-204.ap-south-

1.compute.internal:6066/proxy/application 1684866872278 1287/

user: raghavendr48edu

23/05/25 13:06:22 INFO cluster. Yarn Client Scheduler Backend: Application

application_1684866872278_1287 has started running.

23/05/25 13:06:22 INFO cluster.SchedulerExtensionServices: Starting Yarn extension services with app application_1684866872278_1287 and attemptId None

23/05/25 13:06:22 INFO util. Utils: Successfully started service

'org.apache.spark.network.netty.NettyBlockTransferService' on port 42947.

23/05/25 13:06:22 INFO netty.NettyBlockTransferService: Server created on ip-

10-1-1-204.ap-south-1.compute.internal:42947

23/05/25 13:06:22 INFO storage.BlockManager: Using

org.apache.spark.storage.RandomBlockReplicationPolicy for block replication policy

23/05/25 13:06:22 INFO storage.BlockManagerMaster: Registering

BlockManager BlockManagerId(driver, ip-10-1-1-204.ap-south-

1.compute.internal, 42947, None)

23/05/25 13:06:22 INFO storage.BlockManagerMasterEndpoint: Registering block manager ip-10-1-1-204.ap-south-1.compute.internal:42947 with 366.3 MB RAM, BlockManagerId(driver, ip-10-1-1-204.ap-south-1.compute.internal, 42947, None)

23/05/25 13:06:22 INFO storage.BlockManagerMaster: Registered BlockManager BlockManagerId(driver, ip-10-1-1-204.ap-south-

1.compute.internal, 42947, None)

23/05/25 13:06:22 INFO storage.BlockManager: external shuffle service port = 7337

23/05/25 13:06:22 INFO storage.BlockManager: Initialized BlockManager: BlockManagerId(driver, ip-10-1-1-204.ap-south-1.compute.internal, 42947, None)

23/05/25 13:06:22 INFO cluster.YarnClientSchedulerBackend: Add WebUI Filter. org.apache.hadoop.yarn.server.webproxy.amfilter.AmIpFilter, Map(PROXY_HOS TS -> ip-10-1-1-204.ap-south-1.compute.internal, PROXY_URI_BASES -> http://ip-10-1-1-

204.ap-south-

1.compute.internal:6066/proxy/application_1684866872278_1287),

/proxy/application_1684866872278_1287

23/05/25 13:06:22 INFO util.log: Logging initialized @8510ms

23/05/25 13:06:22 INFO scheduler.EventLoggingListener: Logging events to hdfs://nameservice1/user/spark/applicationHistory/application_1684866872278 _ 1287

23/05/25 13:06:22 INFO util.Utils: Using initial executors = 0, max of spark.dynamicAllocation.initialExecutors, spark.dynamicAllocation.minExecutors and spark.executor.instances

23/05/25 13:06:22 WARN

cluster.YarnSchedulerBackend\$YarnSchedulerEndpoint: Attempted to request executors before the AM has registered!

23/05/25 13:06:22 INFO spark.SparkContext: Registered listener com.cloudera.spark.lineage.NavigatorAppListener

23/05/25 13:06:22 INFO logging.DriverLogger\$DfsAsyncWriter: Started driver log file sync to:

/user/spark/driverLogs/application_1684866872278_1287_driver.log 23/05/25 13:06:22 INFO cluster.YarnClientSchedulerBackend: SchedulerBackend is ready for scheduling beginning after reached minRegisteredResourcesRatio: 0.8

Hello From Raghav

23/05/25 13:06:23 INFO internal.SharedState: loading hive config file: file:/etc/hive/conf.cloudera.hive/hive-site.xml

23/05/25 13:06:23 INFO internal. Shared State: spark.sql.warehouse.dir is not set, but hive.metastore.warehouse.dir is set. Setting spark.sql.warehouse.dir to the value of hive.metastore.warehouse.dir ('/user/hive/warehouse').

23/05/25 13:06:23 INFO internal. Shared State: Warehouse path is '/user/hive/warehouse'.

23/05/25 13:06:23 INFO state.StateStoreCoordinatorRef: Registered StateStoreCoordinator endpoint

23/05/25 13:06:23 INFO

cluster.YarnSchedulerBackend\$YarnSchedulerEndpoint: ApplicationMaster registered as NettyRpcEndpointRef(spark-client://YarnAM)

23/05/25 13:06:25 INFO datasources. FileSourceStrategy: Pruning directories with:

23/05/25 13:06:25 INFO datasources. FileSourceStrategy: Post-Scan Filters:

23/05/25 13:06:25 INFO datasources.FileSourceStrategy: Output Data Schema: struct<value: string>

23/05/25 13:06:25 INFO execution. File Source Scan Exec: Pushed Filters:

23/05/25 13:06:26 INFO codegen.CodeGenerator: Code generated in 193.529709 ms

23/05/25 13:06:26 INFO memory.MemoryStore: Block broadcast_0 stored as values in memory (estimated size 336.4 KB, free 366.0 MB)

23/05/25 13:06:26 INFO memory.MemoryStore: Block broadcast_0_piece0 stored as bytes in memory (estimated size 32.2 KB, free 365.9 MB)

23/05/25 13:06:26 INFO storage.BlockManagerInfo: Added broadcast_0_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 32.2 KB, free: 366.3 MB)

23/05/25 13:06:26 INFO spark.SparkContext: Created broadcast 0 from rdd at SparkSort.scala:23

23/05/25 13:06:26 INFO execution.FileSourceScanExec: Planning scan with bin packing, max size: 4194304 bytes, open cost is considered as scanning 4194304 bytes.

23/05/25 13:06:26 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33

23/05/25 13:06:26 INFO scheduler.DAGScheduler: Got job 0 (foreach at SparkSort.scala:33) with 1 output partitions

23/05/25 13:06:26 INFO scheduler.DAGScheduler: Final stage: ResultStage 0 (foreach at SparkSort.scala:33)

23/05/25 13:06:26 INFO scheduler.DAGScheduler: Parents of final stage: List()

23/05/25 13:06:26 INFO scheduler.DAGScheduler: Missing parents: List()

23/05/25 13:06:26 INFO scheduler.DAGScheduler: Submitting ResultStage 0 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents

- 23/05/25 13:06:26 INFO memory.MemoryStore: Block broadcast_1 stored as values in memory (estimated size 10.6 KB, free 365.9 MB)
- 23/05/25 13:06:26 INFO memory.MemoryStore: Block broadcast_1_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
- 23/05/25 13:06:26 INFO storage.BlockManagerInfo: Added broadcast_1_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.3 MB)
- 23/05/25 13:06:26 INFO spark.SparkContext: Created broadcast 1 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:26 INFO scheduler.DAGScheduler: Submitting 1 missing tasks from ResultStage 0 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:26 INFO cluster. Yarn Scheduler: Adding task set 0.0 with 1 tasks
- 23/05/25 13:06:26 INFO spark.ExecutorAllocationManager: Requesting 1 new executor because tasks are backlogged (new desired total will be 1)
- 23/05/25 13:06:38 INFO cluster.YarnSchedulerBackend\$YarnDriverEndpoint: Registered executor NettyRpcEndpointRef(spark-client://Executor) (10.1.2.40:51290) with ID 1
- 23/05/25 13:06:38 INFO spark.ExecutorAllocationManager: New executor 1 has registered (new total is 1)
- 23/05/25 13:06:38 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 0.0 (TID 0, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, NODE_LOCAL, 8347 bytes)
- 23/05/25 13:06:38 INFO storage.BlockManagerMasterEndpoint: Registering block manager ip-10-1-2-40.ap-south-1.compute.internal:41263 with 366.3 MB RAM, BlockManagerId(1, ip-10-1-2-40.ap-south-1.compute.internal, 41263, None)
- 23/05/25 13:06:39 INFO storage.BlockManagerInfo: Added broadcast_1_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.3 MB)
- 23/05/25 13:06:48 INFO storage.BlockManagerInfo: Added broadcast_0_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 32.2 KB, free: 366.3 MB)
- 23/05/25 13:06:51 INFO storage.BlockManagerInfo: Added rdd_4_0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 32.0 B, free: 366.3 MB)
- 23/05/25 13:06:51 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 0.0 (TID 0) in 13505 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:51 INFO cluster. YarnScheduler: Removed TaskSet 0.0, whose tasks have all completed, from pool
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: ResultStage 0 (foreach at SparkSort.scala:33) finished in 25.105 s
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Job 0 finished: foreach at SparkSort.scala:33, took 25.158750 s
- -->Iteration 1 took 25171 ms
- 23/05/25 13:06:51 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Got job 1 (foreach at SparkSort.scala:33) with 1 output partitions

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23/05/25 13:06:51 INFO scheduler.DAGScheduler: Final stage: ResultStage 1 (foreach at SparkSort.scala:33)
```

- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Parents of final stage: List()
- 23/05/25 13:06:51 INFO scheduler. DAGScheduler: Missing parents: List()
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Submitting ResultStage 1 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents
- 23/05/25 13:06:51 INFO memory.MemoryStore: Block broadcast_2 stored as values in memory (estimated size 10.6 KB, free 365.9 MB)
- 23/05/25 13:06:51 INFO memory.MemoryStore: Block broadcast_2_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
- 23/05/25 13:06:51 INFO storage.BlockManagerInfo: Added broadcast_2_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.3 MB)
- 23/05/25 13:06:51 INFO spark.SparkContext: Created broadcast 2 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Submitting 1 missing tasks from ResultStage 1 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:51 INFO cluster.YarnScheduler: Adding task set 1.0 with 1 tasks
- 23/05/25 13:06:51 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 1.0 (TID 1, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:51 INFO storage.BlockManagerInfo: Added broadcast_2_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.3 MB)
- 23/05/25 13:06:51 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 1.0 (TID 1) in 263 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:51 INFO cluster. YarnScheduler: Removed TaskSet 1.0, whose tasks have all completed, from pool
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: ResultStage 1 (foreach at SparkSort.scala:33) finished in 0.294 s
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Job 1 finished: foreach at SparkSort.scala:33, took 0.302399 s
- -->Iteration 2 took 307 ms
- 23/05/25 13:06:51 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Got job 2 (foreach at SparkSort.scala:33) with 1 output partitions
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Final stage: ResultStage 2 (foreach at SparkSort.scala:33)
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Parents of final stage: List()
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Missing parents: List()
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Submitting ResultStage 2 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents
- 23/05/25 13:06:51 INFO memory.MemoryStore: Block broadcast_3 stored as values in memory (estimated size 10.6 KB, free 365.9 MB)
- 23/05/25 13:06:51 INFO memory.MemoryStore: Block broadcast_3_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)

- 23/05/25 13:06:51 INFO storage.BlockManagerInfo: Added broadcast_3_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.3 MB)
- 23/05/25 13:06:51 INFO spark.SparkContext: Created broadcast 3 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:51 INFO scheduler.DAGScheduler: Submitting 1 missing tasks from ResultStage 2 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:51 INFO cluster. Yarn Scheduler: Adding task set 2.0 with 1 tasks
- 23/05/25 13:06:51 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 2.0 (TID 2, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_3_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.3 MB)
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 2.0 (TID 2) in 116 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Removed TaskSet 2.0, whose tasks have all completed, from pool
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: ResultStage 2 (foreach at SparkSort.scala:33) finished in 0.131 s
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Job 2 finished: foreach at SparkSort.scala:33, took 0.138163 s
- -->Iteration 3 took 144 ms
- 23/05/25 13:06:52 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Got job 3 (foreach at SparkSort.scala:33) with 1 output partitions
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Final stage: ResultStage 3 (foreach at SparkSort.scala:33)
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Parents of final stage: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Missing parents: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting ResultStage 3 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_4 stored as values in memory (estimated size 10.6 KB, free 365.9 MB)
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_4_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_4_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO spark.SparkContext: Created broadcast 4 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting 1 missing tasks from ResultStage 3 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:52 INFO cluster. Yarn Scheduler: Adding task set 3.0 with 1 tasks

- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 3.0 (TID 3, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_4_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 3.0 (TID 3) in 91 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Removed TaskSet 3.0, whose tasks have all completed, from pool
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: ResultStage 3 (foreach at SparkSort.scala:33) finished in 0.106 s
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Job 3 finished: foreach at SparkSort.scala:33, took 0.112156 s
- -->Iteration 4 took 118 ms
- 23/05/25 13:06:52 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Got job 4 (foreach at SparkSort.scala:33) with 1 output partitions
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Final stage: ResultStage 4 (foreach at SparkSort.scala:33)
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Parents of final stage: List()
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Missing parents: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting ResultStage 4 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_5 stored as values in memory (estimated size 10.6 KB, free 365.9 MB)
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_5_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.9 MB)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_5_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO spark.SparkContext: Created broadcast 5 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting 1 missing tasks from ResultStage 4 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:52 INFO cluster. Yarn Scheduler: Adding task set 4.0 with 1 tasks
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 4.0 (TID 4, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_5_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 4.0 (TID 4) in 90 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Removed TaskSet 4.0, whose tasks have all completed, from pool

- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: ResultStage 4 (foreach at SparkSort.scala:33) finished in 0.101 s
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Job 4 finished: foreach at SparkSort.scala:33, took 0.105685 s
- -->Iteration 5 took 110 ms
- 23/05/25 13:06:52 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Got job 5 (foreach at SparkSort.scala:33) with 1 output partitions
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Final stage: ResultStage 5 (foreach at SparkSort.scala:33)
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Parents of final stage: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Missing parents: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting ResultStage 5 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_6 stored as values in memory (estimated size 10.6 KB, free 365.9 MB)
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_6_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_6_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO spark.SparkContext: Created broadcast 6 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Submitting 1 missing tasks from ResultStage 5 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:52 INFO cluster. Yarn Scheduler: Adding task set 5.0 with 1 tasks
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 5.0 (TID 5, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_6_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 5.0 (TID 5) in 94 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Removed TaskSet 5.0, whose tasks have all completed, from pool
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: ResultStage 5 (foreach at SparkSort.scala:33) finished in 0.105 s
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Job 5 finished: foreach at SparkSort.scala:33, took 0.109608 s
- -->Iteration 6 took 114 ms
- 23/05/25 13:06:52 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Got job 6 (foreach at SparkSort.scala:33) with 1 output partitions
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Final stage: ResultStage 6 (foreach at SparkSort.scala:33)

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23/05/25 13:06:52 INFO scheduler.DAGScheduler: Parents of final stage: List()
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- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Missing parents: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting ResultStage 6 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_7 stored as values in memory (estimated size 10.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_7_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_7_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO spark.SparkContext: Created broadcast 7 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Submitting 1 missing tasks from ResultStage 6 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Adding task set 6.0 with 1 tasks
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 6.0 (TID 6, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_7_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 6.0 (TID 6) in 65 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Removed TaskSet 6.0, whose tasks have all completed, from pool
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: ResultStage 6 (foreach at SparkSort.scala:33) finished in 0.077 s
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Job 6 finished: foreach at SparkSort.scala:33, took 0.080482 s
- -->Iteration 7 took 85 ms
- 23/05/25 13:06:52 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Got job 7 (foreach at SparkSort.scala:33) with 1 output partitions
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Final stage: ResultStage 7 (foreach at SparkSort.scala:33)
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Parents of final stage: List()
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Missing parents: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting ResultStage 7 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing
- parents
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_8 stored as values in memory (estimated size 10.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_8_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)

- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_8_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO spark.SparkContext: Created broadcast 8 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting 1 missing tasks from ResultStage 7 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:52 INFO cluster. Yarn Scheduler: Adding task set 7.0 with 1 tasks
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 7.0 (TID 7, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_8_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 7.0 (TID 7) in 100 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Removed TaskSet 7.0, whose tasks have all completed, from pool
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: ResultStage 7 (foreach at SparkSort.scala:33) finished in 0.111 s
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Job 7 finished: foreach at SparkSort.scala:33, took 0.114674 s
- -->Iteration 8 took 119 ms
- 23/05/25 13:06:52 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Got job 8 (foreach at SparkSort.scala:33) with 1 output partitions
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Final stage: ResultStage 8 (foreach at SparkSort.scala:33)
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Parents of final stage: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Missing parents: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting ResultStage 8 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_9 stored as values in memory (estimated size 10.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_9_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_9_piece0 in memory on ip-10-1-1-204.ap-south-1.compute.internal:42947 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO spark.SparkContext: Created broadcast 9 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting 1 missing tasks from ResultStage 8 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:52 INFO cluster. Yarn Scheduler: Adding task set 8.0 with 1 tasks

- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 8.0 (TID 8, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added broadcast_9_piece0 in memory on ip-10-1-2-40.ap-south-1.compute.internal:41263 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 8.0 (TID 8) in 70 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Removed TaskSet 8.0, whose tasks have all completed, from pool
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: ResultStage 8 (foreach at SparkSort.scala:33) finished in 0.081 s
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Job 8 finished: foreach at SparkSort.scala:33, took 0.084467 s
- -->Iteration 9 took 89 ms
- 23/05/25 13:06:52 INFO spark.SparkContext: Starting job: foreach at SparkSort.scala:33
- 23/05/25 13:06:52 INFO scheduler. DAGScheduler: Got job 9 (foreach at SparkSort.scala:33) with 1 output partitions
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Final stage: ResultStage 9 (foreach at SparkSort.scala:33)
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Parents of final stage: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Missing parents: List()
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting ResultStage 9 (MapPartitionsRDD[4] at map at SparkSort.scala:25), which has no missing parents
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_10 stored as values in memory (estimated size 10.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_10_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added
- broadcast_10_piece0 in memory on ip-10-1-1-204.ap-south-
- 1.compute.internal:42947 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO spark.SparkContext: Created broadcast 10 from broadcast at DAGScheduler.scala:1164
- 23/05/25 13:06:52 INFO scheduler.DAGScheduler: Submitting 1 missing tasks from ResultStage 9 (MapPartitionsRDD[4] at map at SparkSort.scala:25) (first 15 tasks are for partitions Vector(0))
- 23/05/25 13:06:52 INFO cluster. Yarn Scheduler: Adding task set 9.0 with 1 tasks
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Starting task 0.0 in stage 9.0 (TID 9, ip-10-1-2-40.ap-south-1.compute.internal, executor 1, partition 0, PROCESS_LOCAL, 8347 bytes)
- 23/05/25 13:06:52 INFO storage.BlockManagerInfo: Added
- broadcast_10_piece0 in memory on ip-10-1-2-40.ap-south-
- 1.compute.internal:41263 (size: 5.6 KB, free: 366.2 MB)
- 23/05/25 13:06:52 INFO scheduler.TaskSetManager: Finished task 0.0 in stage 9.0 (TID 9) in 56 ms on ip-10-1-2-40.ap-south-1.compute.internal (executor 1) (1/1)
- 23/05/25 13:06:52 INFO cluster. YarnScheduler: Removed TaskSet 9.0, whose tasks have all completed, from pool

```
23/05/25 13:06:52 INFO scheduler.DAGScheduler: ResultStage 9 (foreach at
SparkSort.scala:33) finished in 0.069 s
23/05/25 13:06:52 INFO scheduler.DAGScheduler: Job 9 finished: foreach at
SparkSort.scala:33, took 0.074613 s
-->Iteration 10 took 79 ms
23/05/25 13:06:52 INFO cluster. YarnClientSchedulerBackend: Interrupting
monitor thread
23/05/25 13:06:52 INFO cluster. YarnClientSchedulerBackend: Shutting down all
executors
23/05/25 13:06:52 INFO cluster. YarnScheduler Backend $YarnDriver Endpoint:
Asking each executor to shut down
23/05/25 13:06:52 INFO cluster. Scheduler Extension Services: Stopping
SchedulerExtensionServices
(serviceOption=None,
services=List(),
started=false)
23/05/25 13:06:52 INFO cluster. YarnClientSchedulerBackend: Stopped
23/05/25 13:06:52 INFO spark.MapOutputTrackerMasterEndpoint:
MapOutputTrackerMasterEndpoint stopped!
23/05/25 13:06:52 INFO memory. Memory Store: Memory Store cleared
23/05/25 13:06:52 INFO storage.BlockManager: BlockManager stopped
23/05/25 13:06:52 INFO storage.BlockManagerMaster: BlockManagerMaster
stopped
23/05/25 13:06:52 INFO
scheduler.OutputCommitCoordinator$OutputCommitCoordinatorEndpoint:
OutputCommitCoordinator stopped!
23/05/25 13:06:52 INFO spark.SparkContext: Successfully stopped
SparkContext
23/05/25 13:06:52 INFO util. Shutdown Hook Manager: Shutdown hook called
23/05/25 13:06:52 INFO util.ShutdownHookManager: Deleting directory
/tmp/spark-8cca7a44-6b6a-4454-93d1-cdc4d2a3f436
23/05/25 13:06:52 INFO util.ShutdownHookManager: Deleting directory
/tmp/spark-f12e6dab-06b6-44ff-af99-981e5c09d7a8
[raghavendr48edu@ip-10-1-1-204 training project3]$
```

From < https://bigdata.cloudlabs.edureka.co/shell/>

If you see Hello From Raghav is logged during execution

[raghavendr48edu@ip-10-1-1-204 training_project3]\$ yarn logs -- application_1684866872278_1287

WARNING: YARN_OPTS has been replaced by HADOOP_OPTS. Using value of YARN_OPTS.

23/05/25 13:16:00 INFO client.RMProxy: Connecting to ResourceManager at ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032

End of LogType:prelaunch.err

```
*******
Container: container_1684866872278_1287_01_000001 on ip-10-1-2-175.ap-
south-1.compute.internal_8041
LogAggregationType: AGGREGATED
______
   LogType:prelaunch.out
LogLastModifiedTime:Thu May 25 13:06:54 +0000 2023
LogLength:70
LogContents:
Setting up env variables
Setting up job resources
Launching container
End of LogType:prelaunch.out
***********************************
*******
Container: container 1684866872278 1287 01 000001 on ip-10-1-2-175.ap-
south-1.compute.internal_8041
LogAggregationType: AGGREGATED
______
  LogType:stderr
LogLastModifiedTime:Thu May 25 13:06:54 +0000 2023
LogLength: 34735
LogContents:
23/05/25 13:06:19 INFO util. Signal Utils: Registered signal handler for TERM
23/05/25 13:06:19 INFO util. Signal Utils: Registered signal handler for HUP
23/05/25 13:06:19 INFO util. Signal Utils: Registered signal handler for INT
23/05/25 13:06:20 INFO spark. Security Manager: Changing view acls to:
yarn,raghavendr48edu
23/05/25 13:06:20 INFO spark. Security Manager: Changing modify acls to:
yarn,raghavendr48edu
23/05/25 13:06:20 INFO spark. Security Manager: Changing view acls groups to:
23/05/25 13:06:20 INFO spark. Security Manager: Changing modify acls groups
to:
23/05/25 13:06:20 INFO spark. Security Manager: Security Manager:
authentication disabled; ui acls disabled; users with view permissions: Set(yarn,
raghavendr48edu); groups with view permissions: Set(); users with modify
permissions: Se
t(yarn, raghavendr48edu); groups with modify permissions: Set()
23/05/25 13:06:21 INFO yarn.ApplicationMaster: ApplicationAttemptId:
appattempt_1684866872278_1287_000001
23/05/25 13:06:21 INFO client.RMProxy: Connecting to ResourceManager at ip-
10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8030
23/05/25 13:06:21 INFO yarn. YarnRMClient: Registering the Application Master
23/05/25 13:06:22 INFO client.TransportClientFactory: Successfully created
connection to ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:34843
```

after 162 ms (0 ms spent in bootstraps)

```
23/05/25 13:06:22 INFO yarn.ApplicationMaster: Preparing Local resources
23/05/25 13:06:23 INFO yarn.ApplicationMaster:
______
YARN executor launch context:
 env:
  CLASSPATH ->
{{PWD}}<CPS>{{PWD}}/__spark_conf__<CPS>{{PWD}}/__spark_libs__/*<
CPS>{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/spark/jars/*<CPS>{{HADOOP_COMMON_HOME}}/..
/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/l
ib/spark/hive/*<CPS>$HADOOP CLIENT CONF DIR<CPS>$HADOOP COMMON
HOME/*<CPS>$HADOOP COMMON HOME/lib/*<CPS>$HADOOP HDFS HOME
/*<CPS>$HADOOP_HDFS_HOME/lib/*<CPS>$HADOOP_YARN_HOME/*<CPS>$
HADOOP YARN HOME/lib/*<CPS>$HADOOP_CLIENT_CONF_DIR<CPS
>$PWD/mr-
framework/*<CPS>$MR2_CLASSPATH<CPS>{{HADOOP_COMMON_HOME}}/../
../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/accessors-smart-
1.2.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/acc
essors-smart.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/asm-
5.0.4.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/asm.jar:{{HADOOP_COMMON_HOME}}
}/../../
CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/avro.jar:{{HADOOP_COMMON_HOME}}
\\..\..\CDH-6.2.1-1.cdh6.2.1.p0.1425774\lib\/hadoop\client\/aws-java-sdk-
bundle-1.11.271.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.14257
74/lib/hadoop/client/aws-java-sdk-
bundle.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/azure-data-lake-store-sdk-
2.2.9.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hado
op/client/azure-data-lake-store-
sdk.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-beanutils-
1.9.3.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/com
mons-beanutils.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-cli-
1.2.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
cli.jar:{{HADOOP_COMMON_
HOME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
codec-1.11.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
codec.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-1.cd
h6.2.1.p0.1425774/lib/hadoop/client/commons-collections-
3.2.2.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
```

```
collections.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774
/lib/hadoop/client/commons-compress-
1.18.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
compress.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commo
ns-configuration2-2.1.1.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
configuration2.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-io-2.6.j
ar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
io.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-lang-
2.6.jar:{{HADOOP_COMMON_HOME}}/../../
CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
lang.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-lang3-
3.7.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/
lib/hadoop/client/commons-
lang3.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-logging-
1.1.3.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-l
ogging.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-math3-
3.1.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
math3.jar:{{HADOOP_COMMON_HO
ME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
net-3.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
net.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-1.cdh6.2.1.
p0.1425774/lib/hadoop/client/curator-client-
2.12.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-
client.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/clie
nt/curator-framework-2.12.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-
framework.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-recipes-2
.12.0.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-
recipes.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/gson-
2.2.4.jar:{{HADOOP COMMON HOME}}/../
../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/gson.jar:{{HADOOP_COMMON_HOME
}}/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/quava-
```

```
11.0.2.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/had
oop/client/guava.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-annotations-3.0.0-
cdh6.2.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-annot
ations.iar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-auth-3.0.0-
cdh6.2.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-auth.jar:{{HADOOP_COMM
ON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-aws-3.0.0-
cdh6.2.1.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-
aws.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2
.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-azure-3.0.0-
cdh6.2.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-azure-datalake-3.0.0-
cdh6.2.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6
.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-azure-
datalake.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-
azure.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/l
ib/hadoop/client/hadoop-common-3.0.0-
cdh6.2.1.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-
common.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/had
oop-hdfs-client-3.0.0-cdh6.2.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-hdfs-
client.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapred
uce-client-common-3.0.0-
cdh6.2.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-client-
common.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client
/hadoop-mapreduce-client-core-3.0.0-
cdh6.2.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-client-
core.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/had
oop/client/hadoop-mapreduce-client-jobclient-3.0.0-
cdh6.2.1.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-client-
jobclient.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-1.cdh6.2.
1.p0.1425774/lib/hadoop/client/hadoop-yarn-api-3.0.0-
cdh6.2.1.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-yarn-
api.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib
```

```
/hadoop/client/hadoop-yarn-client-3.0.0-
cdh6.2.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-yarn-
client.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/cl
ient/hadoop-yarn-common-3.0.0-
cdh6.2.1.iar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-yarn-
common.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/htrac
e-core4-4.1.0-incubating.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/htrace-
core4.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/httpclient-4.5.3.jar:{{HA
DOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/httpclient.jar:{{HADOOP COMMON H
OME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/httpcore-
4.4.6.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1
1.cdh6.2.1.p0.1425774/lib/hadoop/client/httpcore.jar:{{HADOOP_COMMON_HO
ME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/jaxb-api-
2.2.11.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/clie
nt/jaxb-api.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jcip-annotations-1.0-
1.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jcip-annotations.jar:{{HADOO
P_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/json-smart-
2.3.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/json-
smart.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-1.
cdh6.2.1.p0.1425774/lib/hadoop/client/jsp-api-
2.1.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsp-
api.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsr30
5-3.0.0.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsr305.jar:{{HADOOP_COMMON_HOM
E}}/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsr311-api-
1.1.1.jar:{{HADOOP_COMMON_HOME}}/../.
./../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsr311-
api.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-admin-
1.0.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.142577
4/lib/hadoop/client/kerb-admin.jar:{{HADOOP_COMMON_HOME}}/../../CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-client-
1.0.0.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-client.ja
r:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-common-
```

```
1.0.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
common.jar:{{HADOOP_COMMON_HOME}}/../../..
/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-core-
1.0.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
core.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/
hadoop/client/kerb-crypto-1.0.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
crypto.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-identity-1.0.0
.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
identity.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-server-
1.0.0.jar:{{HADOOP_COMMON_HOME}}/../
../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
server.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-simplekdc-
1.0.0.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.
1425774/lib/hadoop/client/kerb-
simplekdc.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-util-
1.0.0.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-u
til.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-asn1-
1.0.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
asn1.jar:{{HADOOP COMMON HOME}}/../.
./../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-config-
1.0.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
config.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.14
25774/lib/hadoop/client/kerby-pkix-
1.0.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
pkix.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-util-
1.0.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
util.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-xdr-
1.0.0.jar:{{HADOOP COMMON HOME}}/../
../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
xdr.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/log4j-
1.2.17.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/li
b/hadoop/client/log4j.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/nimbus-jose-jwt-
```

```
4.41.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/nimbus-jose-jwt.ja
r:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/okhttp-
2.7.5.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/okhttp.jar:{{HADOOP_COMMON_HOM
E}}/../../CDH-6.2.1
-1.cdh6.2.1.p0.1425774/lib/hadoop/client/okio-
1.6.0.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/okio.jar:{{HADOOP_COMMON_HOME}
}/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/parana
mer-2.8.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/paranamer.jar:{{HADOOP COMMON
HOME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/protobuf-
java-2.5.0.jar:{{HADOOP_COMMON_HOME}}
\\..\..\CDH-6.2.1-1.cdh6.2.1.p0.1425774\lib\hadoop\client\protobuf-
java.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/re2j-
1.1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.14257
74/lib/hadoop/client/re2j.jar:{{HADOOP_COMMON_HOME}}/../../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/snappy-java-
1.1.4.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/snappy-java.jar:{{H
ADOOP COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/stax2-api-
3.1.4.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/stax2-
api.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.
1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/wildfly-openssl-
1.0.4.Final.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/wildfly-
openssl.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-1.cdh6.2.1.p0.142
5774/lib/hadoop/client/woodstox-core-
5.0.3.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/woodstox-
core.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/xz-1.6
.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/xz.jar:{{HADOOP_COMMON_HOME}}/
../../CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/client-facing-
thirdparty/audience-annotations-0.5.0.jar:
{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/client-facing-thirdparty/commons-
logging-1.2.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/client-facing-th
irdparty/findbugs-annotations-1.3.9-
1.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/client-facing-thirdparty/htrace-
core4-4.2.0-incubating.jar:{{HADOOP_COMMON_HOME}}/../../CDH-6.2.1-
1.cdh6.
2.1.p0.1425774/lib/hbase/bin/../lib/shaded-clients/hbase-shaded-mapreduce-
2.1.0-cdh6.2.1.jar:{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
```

```
1.cdh6.2.1.p0.1425774/lib/hbase/hbase-
spark.jar<CPS>{{PWD}}/__spark_conf__/_hadoop_conf__
  MKL NUM THREADS -> 1
  SPARK_DIST_CLASSPATH -> /opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/accessors-smart-
1.2.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/accessors-
smart.jar:/opt/cloudera/parce
ls/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/asm-
5.0.4.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/asm.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/avro.jar:/opt/cl
oudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/aws-java-
sdk-bundle-1.11.271.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/aws-java-sdk-
bundle.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.
1.p0.1425774/lib/hadoop/client/azure-data-lake-store-sdk-
2.2.9.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/azure-data-lake-store-
sdk.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/c
lient/commons-beanutils-1.9.3.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
beanutils.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-cli-1.2.jar:/opt/cloudera/p
arcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
cli.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-codec-
1.11.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/cl
ient/commons-codec.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-collections-
3.2.2.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
collections.jar:/opt/cloudera/
parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
compress-1.18.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
compress.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/
hadoop/client/commons-configuration2-2.1.1.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
configuration2.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-io-2.6.ja
r:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
io.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-lang-
2.6.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774
/lib/hadoop/client/commons-lang.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-lang3-
3.7.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-lang3.jar:/opt/cloudera/p
arcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-logging-
1.1.3.jar:/opt/cloudera/parcels/CDH-6.2.1-
```

```
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
logging.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/ha
doop/client/commons-math3-3.1.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
math3.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-net-
3.1.iar:/opt/cloudera/par
cels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/commons-
net.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-client-
2.12.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/c
lient/curator-client.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-framework-
2.12.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-framework.jar:/opt/cloudera/p
arcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-recipes-
2.12.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/curator-
recipes.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/h
adoop/client/gson-2.2.4.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/gson.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/guava-
11.0.2.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh
6.2.1.p0.1425774/lib/hadoop/client/guava.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-annotations-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-a
nnotations.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-auth-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-
auth.jar:/opt/cloudera/parcels/CDH-6.2
.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-aws-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-
aws.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/had
oop-azure-3.0.0-cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-azure-datalake-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-azure-datalake
.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-
azure.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-common-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cd
h6.2.1.p0.1425774/lib/hadoop/client/hadoop-
common.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-hdfs-client-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client
```

```
/hadoop-hdfs-client.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-client-common-
3.0.0-cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-
client-common.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-client-core-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-client-c
ore.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-client-jobclient-
3.0.0-cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-mapreduce-client-jobcli
ent.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-yarn-api-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-yarn-
api.jar:/opt/cloudera/parcels/CDH-6.
2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-yarn-client-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-yarn-
client.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/
hadoop/client/hadoop-yarn-common-3.0.0-
cdh6.2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/hadoop-yarn-
common.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/htrace-core4-4.1
.0-incubating.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/htrace-
core4.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/httpclient-
4.5.3.jar:/opt/cloudera/parcels/CDH-6.2.1-1.c
dh6.2.1.p0.1425774/lib/hadoop/client/httpclient.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/httpcore-
4.4.6.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/httpcore.jar:/opt/cl
oudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/jaxb-api-
2.2.11.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jaxb-
api.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/
client/jcip-annotations-1.0-1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jcip-
annotations.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/json-smart-2.3.jar:/opt/cloudera/par
cels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/json-
smart.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsp-api-
2.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsp-a
pi.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsr305-
3.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
```

```
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsr305.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/li
b/hadoop/client/jsr311-api-1.1.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/jsr311-
api.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-admin-
1.0.0.iar:/opt/cloudera/parc
els/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
admin.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-client-
1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/
kerb-client.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-common-
1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
common.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh
6.2.1.p0.1425774/lib/hadoop/client/kerb-core-
1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
core.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-crypto-1.0.0.jar:
/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
crypto.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-identity-
1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.14257
74/lib/hadoop/client/kerb-identity.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-server-
1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-server.jar:/opt/cloudera/
parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-simplekdc-
1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
simplekdc.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/had
oop/client/kerb-util-1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerb-
util.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-asn1-
1.0.0.jar:/opt/cloudera/parcels/CDH
-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
asn1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-config-
1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
config.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-pkix-
1.0.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
pkix.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p
0.1425774/lib/hadoop/client/kerby-util-1.0.0.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
```

```
util.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-xdr-1.0.0.jar:/opt/cl
oudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/kerby-
xdr.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/log4j-
1.2.17.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/cl
ient/log4j.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/nimbus-jose-jwt-
4.41.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/nimbus-jose-
jwt.jar:/opt/cloudera/parcels/CDH-6.2
.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/okhttp-
2.7.5.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/okhttp.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/okio-1.6.0.jar:/opt/
cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/okio.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/paranamer-
2.8.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/clie
nt/paranamer.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/protobuf-java-
2.5.0.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/protobuf-
java.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/re2j-
1.1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/re2j.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/snappy-java-1.1.4.jar:/opt/cl
oudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/snappy-
java.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/stax2-api-
3.1.4.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hado
op/client/stax2-api.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/wildfly-openssl-
1.0.4.Final.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/wildfly-openssl.jar:/opt/cloudera/p
arcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop/client/woodstox-core-
5.0.3.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/woodstox-
core.jar:/opt/cloudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hadoop
/client/xz-1.6.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/client/xz.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/client-facing-
thirdparty/audience-annotations-0.5.0.jar:/opt/c
loudera/parcels/CDH-6.2.1-1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/client-
facing-thirdparty/commons-logging-1.2.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/client-facing-thirdparty/findbugs-
annotati
ons-1.3.9-1.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/client-facing-thirdparty/htrace-
```

```
core4-4.2.0-incubating.jar:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hbase/bin/../lib/shaded-cli
ents/hbase-shaded-mapreduce-2.1.0-cdh6.2.1.jar:/opt/cloudera/parcels/CDH-
6.2.1-1.cdh6.2.1.p0.1425774/lib/hbase/hbase-spark.jar
  SPARK_YARN_STAGING_DIR ->
hdfs://nameservice1/user/raghavendr48edu/.sparkStaging/application 1684866
872278 1287
  SPARK_USER -> raghavendr48edu
  OPENBLAS_NUM_THREADS -> 1
 command:
  LD LIBRARY PATH=\"{{HADOOP COMMON HOME}}/../../CDH-6.2.1-
1.cdh6.2.1.p0.1425774/lib/hadoop/lib/native:$LD LIBRARY PATH\" \
   {{JAVA_HOME}}/bin/java \
   -server \
   -Xmx1024m \
   -Diava.io.tmpdir={{PWD}}/tmp \
   '-Dspark.driver.port=34843' \
   '-Dspark.authenticate=false' \
   '-Dspark.network.crypto.enabled=false' \
   '-Dspark.shuffle.service.port=7337' \
   -Dspark.yarn.app.container.log.dir=<LOG_DIR> \
   -XX:OnOutOfMemoryError='kill %p' \
   org.apache.spark.executor.CoarseGrainedExecutorBackend \
   --driver-url \
   spark://CoarseGrainedScheduler@ip-10-1-1-204.ap-south-
1.compute.internal:34843 \
   --executor-id \
   <executorId> \
   --hostname \
   <hostname> \
   --cores \
   1\
   --app-id \
   application_1684866872278_1287 \
   --user-class-path \
   file:$PWD/ app .jar \
   1><LOG DIR>/stdout \
   2><LOG_DIR>/stderr
 resources:
    _spark_conf__ -> resource { scheme: "hdfs" host: "nameservice1" port: -1
"/user/raghavendr48edu/.sparkStaging/application 1684866872278 1287/ sp
ark_conf__.zip" } size: 169453 timestamp: 1685019977258 type: ARCHIVE
visibilit
y: PRIVATE
______
```

- 23/05/25 13:06:23 INFO util.Utils: Using initial executors = 0, max of spark.dynamicAllocation.initialExecutors, spark.dynamicAllocation.minExecutors and spark.executor.instances
- 23/05/25 13:06:23 INFO conf.Configuration: resource-types.xml not found 23/05/25 13:06:23 INFO resource.ResourceUtils: Unable to find 'resource-types.xml'.
- 23/05/25 13:06:24 INFO yarn.ApplicationMaster: Started progress reporter thread with (heartbeat: 3000, initial allocation: 200) intervals
- 23/05/25 13:06:26 INFO yarn.YarnAllocator: Driver requested a total number of 1 executor(s).
- 23/05/25 13:06:26 INFO yarn.YarnAllocator: Will request 1 executor container(s), each with 1 core(s) and 1408 MB memory (including 384 MB of overhead)
- 23/05/25 13:06:26 INFO yarn.YarnAllocator: Submitted container request for host ip-10-1-2-40.ap-south-1.compute.internal,ip-10-1-2-175.ap-south-
- 1.compute.internal,ip-10-1-2-103.ap-south-1.compute.internal.
- 23/05/25 13:06:28 INFO yarn.YarnAllocator: Launching container container_1684866872278_1287_01_000002 on host ip-10-1-2-40.ap-south-1.compute.internal for executor with ID 1
- 23/05/25 13:06:28 INFO yarn.YarnAllocator: Received 1 containers from YARN, launching executors on 1 of them.
- 23/05/25 13:06:52 INFO yarn.YarnAllocator: Driver requested a total number of 0 executor(s).
- 23/05/25 13:06:52 INFO yarn.ApplicationMaster\$AMEndpoint: Driver terminated or disconnected! Shutting down. ip-10-1-1-204.ap-south-
- 1.compute.internal:34843
- 23/05/25 13:06:52 INFO yarn.ApplicationMaster\$AMEndpoint: Driver terminated or disconnected! Shutting down. ip-10-1-1-204.ap-south-
- 1.compute.internal:34843
- 23/05/25 13:06:52 INFO yarn.ApplicationMaster: Final app status: SUCCEEDED, exitCode: 0
- 23/05/25 13:06:52 INFO yarn.ApplicationMaster: Unregistering ApplicationMaster with SUCCEEDED
- 23/05/25 13:06:52 INFO impl.AMRMClientImpl: Waiting for application to be successfully unregistered.
- 23/05/25 13:06:53 INFO yarn.ApplicationMaster: Deleting staging directory hdfs://nameservice1/user/raghavendr48edu/.sparkStaging/application_1684866 872278 1287
- 23/05/25 13:06:53 INFO util.ShutdownHookManager: Shutdown hook called

ind of LogType:stderr ***********************************

Ind of LogType:stdout

End of LogType:prelaunch.err

```
*******
Container: container 1684866872278 1287 01 000002 on ip-10-1-2-40.ap-
south-1.compute.internal_8041
LogAggregationType: AGGREGATED
______
  LogType:prelaunch.out
LogLastModifiedTime:Thu May 25 13:06:53 +0000 2023
LogLength:70
LogContents:
Setting up env variables
Setting up job resources
Launching container
End of LogType:prelaunch.out
************************************
*******
Container: container 1684866872278 1287 01 000002 on ip-10-1-2-40.ap-
south-1.compute.internal_8041
LogAggregationType: AGGREGATED
______
  LogType:stderr
LogLastModifiedTime:Thu May 25 13:06:53 +0000 2023
LogLength: 14898
LogContents:
23/05/25 13:06:31 INFO executor.CoarseGrainedExecutorBackend: Started
daemon with process name: 20157@ip-10-1-2-40.ap-south-1.compute.internal
23/05/25 13:06:31 INFO util. Signal Utils: Registered signal handler for TERM
23/05/25 13:06:31 INFO util. Signal Utils: Registered signal handler for HUP
23/05/25 13:06:31 INFO util. Signal Utils: Registered signal handler for INT
23/05/25 13:06:34 INFO spark. Security Manager: Changing view acls to:
yarn,raghavendr48edu
23/05/25 13:06:34 INFO spark. Security Manager: Changing modify acls to:
yarn,raghavendr48edu
23/05/25 13:06:34 INFO spark. Security Manager: Changing view acls groups to:
23/05/25 13:06:34 INFO spark. Security Manager: Changing modify acls groups
to:
23/05/25 13:06:34 INFO spark. Security Manager: Security Manager:
authentication disabled; ui acls disabled; users with view permissions: Set(yarn,
raghavendr48edu); groups with view permissions: Set(); users with modify
permissions: Se
t(yarn, raghavendr48edu); groups with modify permissions: Set()
23/05/25 13:06:35 INFO client. Transport Client Factory: Successfully created
connection to ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:34843
after 366 ms (0 ms spent in bootstraps)
```

23/05/25 13:06:36 INFO spark. Security Manager: Changing view acls to:

yarn,raghavendr48edu

```
23/05/25 13:06:36 INFO spark. Security Manager: Changing modify acls to: yarn, raghaven dr48edu
```

23/05/25 13:06:36 INFO spark. Security Manager: Changing view acls groups to: 23/05/25 13:06:36 INFO spark. Security Manager: Changing modify acls groups to:

23/05/25 13:06:36 INFO spark. Security Manager: Security Manager:

authentication disabled; ui acls disabled; users with view permissions: Set(yarn, raghavendr48edu); groups with view permissions: Set(); users with modify permissions: Se

t(yarn, raghavendr48edu); groups with modify permissions: Set()

23/05/25 13:06:36 INFO client.TransportClientFactory: Successfully created connection to ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:34843 after 40 ms (0 ms spent in bootstraps)

23/05/25 13:06:36 INFO storage.DiskBlockManager: Created local directory at /mnt/data/yarn/nm/usercache/raghavendr48edu/appcache/application_1684866 872278_1287/blockmgr-c7497527-690a-445b-9ce9-1e4c41ff4676

23/05/25 13:06:36 INFO memory.MemoryStore: MemoryStore started with capacity 366.3 MB

23/05/25 13:06:38 INFO executor.CoarseGrainedExecutorBackend: Connecting to driver: spark://CoarseGrainedScheduler@ip-10-1-1-204.ap-south-1.compute.internal:34843

23/05/25 13:06:38 INFO executor.CoarseGrainedExecutorBackend: Successfully registered with driver

23/05/25 13:06:38 INFO executor. Executor: Starting executor ID 1 on host ip-10-1-2-40.ap-south-1.compute.internal

23/05/25 13:06:38 INFO util. Utils: Successfully started service

'org.apache.spark.network.netty.NettyBlockTransferService' on port 41263.

23/05/25 13:06:38 INFO netty.NettyBlockTransferService: Server created on ip-10-1-2-40.ap-south-1.compute.internal:41263

23/05/25 13:06:38 INFO storage.BlockManager: Using

org.apache.spark.storage.RandomBlockReplicationPolicy for block replication policy

23/05/25 13:06:38 INFO storage.BlockManagerMaster: Registering

BlockManager BlockManagerId(1, ip-10-1-2-40.ap-south-1.compute.internal, 41263, None)

23/05/25 13:06:38 INFO storage.BlockManagerMaster: Registered

BlockManager BlockManagerId(1, ip-10-1-2-40.ap-south-1.compute.internal, 41263, None)

23/05/25 13:06:38 INFO storage.BlockManager: external shuffle service port = 7337

23/05/25 13:06:38 INFO storage.BlockManager: Registering executor with local external shuffle service.

23/05/25 13:06:38 INFO client.TransportClientFactory: Successfully created connection to ip-10-1-2-40.ap-south-1.compute.internal/10.1.2.40:7337 after 44 ms (0 ms spent in bootstraps)

23/05/25 13:06:38 INFO storage.BlockManager: Initialized BlockManager: BlockManagerId(1, ip-10-1-2-40.ap-south-1.compute.internal, 41263, None) 23/05/25 13:06:38 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 0

23/05/25 13:06:38 INFO executor. Executor: Running task 0.0 in stage 0.0 (TID 0)

```
23/05/25 13:06:38 INFO executor. Executor: Fetching spark://ip-10-1-1-204.ap-
south-1.compute.internal:34843/jars/sparkme-project_2.11-1.0.jar with
timestamp 1685019975886
23/05/25 13:06:38 INFO client. Transport Client Factory: Successfully created
connection to ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:34843
after 11 ms (0 ms spent in bootstraps)
23/05/25 13:06:38 INFO util. Utils: Fetching spark: //ip-10-1-1-204.ap-south-
1.compute.internal:34843/jars/sparkme-project 2.11-1.0.jar to
/mnt/data/yarn/nm/usercache/raghavendr48edu/appcache/application_1684866
872278_1287/spark-cec639e8
-f970-406d-8627-b2651deaeb04/fetchFileTemp7968286197553735895.tmp
23/05/25 13:06:38 INFO util. Utils: Copying
/mnt/data/yarn/nm/usercache/raghavendr48edu/appcache/application 1684866
872278 1287/spark-cec639e8-f970-406d-8627-
b2651deaeb04/2257928111685019975886 cache to
/mnt/data/yarn/nm/usercache/ragha
vendr48edu/appcache/application_1684866872278_1287/container_168486687
2278_1287_01_000002/./sparkme-project_2.11-1.0.jar
23/05/25 13:06:38 INFO executor. Executor: Adding
file:/mnt/data/yarn/nm/usercache/raghavendr48edu/appcache/application 1684
866872278 1287/container 1684866872278 1287 01 000002/./sparkme-
project 2.11-1.0.jar to class loader
23/05/25 13:06:39 INFO broadcast. TorrentBroadcast: Started reading broadcast
variable 1
23/05/25 13:06:39 INFO client.TransportClientFactory: Successfully created
connection to ip-10-1-1-204.ap-south-1.compute.internal/10.1.1.204:42947
after 3 ms (0 ms spent in bootstraps)
23/05/25 13:06:39 INFO memory.MemoryStore: Block broadcast_1_piece0
stored as bytes in memory (estimated size 5.6 KB, free 366.3 MB)
23/05/25 13:06:39 INFO broadcast. TorrentBroadcast: Reading broadcast
variable 1 took 273 ms
23/05/25 13:06:40 INFO memory.MemoryStore: Block broadcast 1 stored as
values in memory (estimated size 10.6 KB, free 366.3 MB)
23/05/25 13:06:43 INFO codegen.CodeGenerator: Code generated in
1023.979536 ms
23/05/25 13:06:47 INFO codegen.CodeGenerator: Code generated in 51.370738
ms
23/05/25 13:06:47 INFO datasources. FileScanRDD: Reading File path:
hdfs://nameservice1/user/raghavendr48edu/input_sort_py.txt, range: 0-85,
partition values: [empty row]
23/05/25 13:06:48 INFO codegen.CodeGenerator: Code generated in 48.007236
23/05/25 13:06:48 INFO broadcast. TorrentBroadcast: Started reading broadcast
variable 0
23/05/25 13:06:48 INFO memory.MemoryStore: Block broadcast 0 piece0
stored as bytes in memory (estimated size 32.2 KB, free 366.3 MB)
23/05/25 13:06:48 INFO broadcast. TorrentBroadcast: Reading broadcast
variable 0 took 76 ms
23/05/25 13:06:48 INFO memory.MemoryStore: Block broadcast 0 stored as
values in memory (estimated size 443.0 KB, free 365.8 MB)
```

23/05/25 13:06:51 INFO memory.MemoryStore: Block rdd_4_0 stored as values

in memory (estimated size 32.0 B, free 365.8 MB)

- 23/05/25 13:06:51 INFO executor. Executor: Finished task 0.0 in stage 0.0 (TID 0). 1438 bytes result sent to driver
- 23/05/25 13:06:51 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 1
- 23/05/25 13:06:51 INFO executor. Executor: Running task 0.0 in stage 1.0 (TID 1)
- 23/05/25 13:06:51 INFO broadcast.TorrentBroadcast: Started reading broadcast variable 2
- 23/05/25 13:06:51 INFO memory.MemoryStore: Block broadcast_2_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:51 INFO broadcast.TorrentBroadcast: Reading broadcast variable 2 took 71 ms
- 23/05/25 13:06:51 INFO memory.MemoryStore: Block broadcast_2 stored as values in memory (estimated size 10.6 KB, free 365.8 MB)
- 23/05/25 13:06:51 INFO storage.BlockManager: Found block rdd_4_0 locally
- 23/05/25 13:06:51 INFO executor. Executor: Finished task 0.0 in stage 1.0 (TID 1). 1352 bytes result sent to driver
- 23/05/25 13:06:51 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 2
- 23/05/25 13:06:51 INFO executor. Executor: Running task 0.0 in stage 2.0 (TID 2)
- 23/05/25 13:06:51 INFO broadcast.TorrentBroadcast: Started reading broadcast variable 3
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_3_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Reading broadcast variable 3 took 60 ms
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_3 stored as values in memory (estimated size 10.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO storage.BlockManager: Found block rdd_4_0 locally
- 23/05/25 13:06:52 INFO executor. Executor: Finished task 0.0 in stage 2.0 (TID 2). 1352 bytes result sent to driver
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 3
- 23/05/25 13:06:52 INFO executor. Executor: Running task 0.0 in stage 3.0 (TID 3)
- 23/05/25 13:06:52 INFO broadcast.TorrentBroadcast: Started reading broadcast variable 4
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_4_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO broadcast.TorrentBroadcast: Reading broadcast variable 4 took 37 ms
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_4 stored as values in memory (estimated size 10.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO storage.BlockManager: Found block rdd_4_0 locally 23/05/25 13:06:52 INFO executor.Executor: Finished task 0.0 in stage 3.0 (TID
- 3). 1352 bytes result sent to driver
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 4
- 23/05/25 13:06:52 INFO executor. Executor: Running task 0.0 in stage 4.0 (TID 4)

```
23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Started reading broadcast variable 5
```

- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_5_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Reading broadcast variable 5 took 37 ms
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_5 stored as values in memory (estimated size 10.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO storage.BlockManager: Found block rdd_4_0 locally 23/05/25 13:06:52 INFO executor.Executor: Finished task 0.0 in stage 4.0 (TID 4). 1352 bytes result sent to driver
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 5
- 23/05/25 13:06:52 INFO executor. Executor: Running task 0.0 in stage 5.0 (TID 5)
- 23/05/25 13:06:52 INFO broadcast.TorrentBroadcast: Started reading broadcast variable 6
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_6_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.8 MB)
- 23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Reading broadcast variable 6 took 34 ms
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_6 stored as values in memory (estimated size 10.6 KB, free 365.7 MB)
- 23/05/25 13:06:52 INFO storage.BlockManager: Found block rdd_4_0 locally
- 23/05/25 13:06:52 INFO executor. Executor: Finished task 0.0 in stage 5.0 (TID 5). 1352 bytes result sent to driver
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 6
- 23/05/25 13:06:52 INFO executor. Executor: Running task 0.0 in stage 6.0 (TID 6)
- 23/05/25 13:06:52 INFO broadcast.TorrentBroadcast: Started reading broadcast variable 7
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_7_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.7 MB)
- 23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Reading broadcast variable 7 took 28 ms
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_7 stored as values in memory (estimated size 10.6 KB, free 365.7 MB)
- 23/05/25 13:06:52 INFO storage.BlockManager: Found block rdd_4_0 locally
- 23/05/25 13:06:52 INFO executor. Executor: Finished task 0.0 in stage 6.0 (TID 6). 1352 bytes result sent to driver
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 7
- 23/05/25 13:06:52 INFO executor. Executor: Running task 0.0 in stage 7.0 (TID 7)
- 23/05/25 13:06:52 INFO broadcast.TorrentBroadcast: Started reading broadcast variable 8
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_8_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.7 MB)
- 23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Reading broadcast variable 8 took 28 ms

```
23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_8 stored as values in memory (estimated size 10.6 KB, free 365.7 MB)
```

- 23/05/25 13:06:52 INFO storage.BlockManager: Found block rdd_4_0 locally 23/05/25 13:06:52 INFO executor.Executor: Finished task 0.0 in stage 7.0 (TID 7). 1352 bytes result sent to driver
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 8
- 23/05/25 13:06:52 INFO executor. Executor: Running task 0.0 in stage 8.0 (TID 8)
- 23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Started reading broadcast variable 9
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_9_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.7 MB)
- 23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Reading broadcast variable 9 took 28 ms
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_9 stored as values in memory (estimated size 10.6 KB, free 365.7 MB)
- 23/05/25 13:06:52 INFO storage.BlockManager: Found block rdd_4_0 locally
- 23/05/25 13:06:52 INFO executor. Executor: Finished task 0.0 in stage 8.0 (TID 8). 1352 bytes result sent to driver
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Got assigned task 9
- 23/05/25 13:06:52 INFO executor. Executor: Running task 0.0 in stage 9.0 (TID 9)
- 23/05/25 13:06:52 INFO broadcast.TorrentBroadcast: Started reading broadcast variable 10
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_10_piece0 stored as bytes in memory (estimated size 5.6 KB, free 365.7 MB)
- 23/05/25 13:06:52 INFO broadcast. TorrentBroadcast: Reading broadcast variable 10 took 27 ms
- 23/05/25 13:06:52 INFO memory.MemoryStore: Block broadcast_10 stored as values in memory (estimated size 10.6 KB, free 365.7 MB)
- 23/05/25 13:06:52 INFO storage.BlockManager: Found block rdd_4_0 locally 23/05/25 13:06:52 INFO executor.Executor: Finished task 0.0 in stage 9.0 (TID
- 9). 1352 bytes result sent to driver
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Driver commanded a shutdown
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Driver from ip-10-1-1-204.ap-south-1.compute.internal:34843 disconnected during shutdown
- 23/05/25 13:06:52 INFO executor.CoarseGrainedExecutorBackend: Driver from ip-10-1-1-204.ap-south-1.compute.internal:34843 disconnected during shutdown
- 23/05/25 13:06:52 INFO memory.MemoryStore: MemoryStore cleared
- 23/05/25 13:06:52 INFO storage.BlockManager: BlockManager stopped
- 23/05/25 13:06:52 INFO util. Shutdown Hook Manager: Shutdown hook called
- 23/05/25 13:06:52 INFO util. Shutdown Hook Manager: Deleting directory
- /mnt/data/yarn/nm/usercache/raghavendr48edu/appcache/application_1684866 872278 1287/spark-cec639e8-f970-406d-8627-b2651deaeb04

End of LogType:stderr

End of LogType:stdout

From < https://bigdata.cloudlabs.edureka.co/shell/>

5. Transfer the sample dataset from RDBMS to HDFS

Step 9.1: Download Dataset -Download dataset and transfer to cloud lab using FTP Step 9.2: Load data in mysql - Login into mysql - Create schema in mysql

show databases; use database Show tables;

127 login: raghavendr48edu

raghavendr48edu@127.0.0.1's password:

Last login: Thu May 18 14:47:35 2023 from localhost

[raghavendr48edu@ip-10-1-1-204 ~]\$ mysql -u raghavendr48edu - pRedKangaroo99\$

mysql: [Warning] Using a password on the command line interface can be insecure.

Welcome to the MySQL monitor. Commands end with; or \g.

Your MySQL connection id is 3441

Server version: 5.7.33 MySQL Community Server (GPL)

Copyright (c) 2000, 2021, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

Or

[raghavendr48edu@ip-10-1-1-204 ~]\$ **mysql -u raghavendr48edu -p** Enter password:

Welcome to the MySQL monitor. Commands end with; or \g.

Your MySQL connection id is 3538

Server version: 5.7.33 MySQL Community Server (GPL)

Copyright (c) 2000, 2021, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>

From < https://bigdata.cloudlabs.edureka.co/shell/>

From https://bigdata.cloudlabs.edureka.co/shell/

mysql> create table financial_regulation(SYMBOL varchar(100),SERIES varchar(50), OPEN double, HIGH double, LOW double, CLOSE double, LAST double, PREVCLOSE double, TOTTRDQTY double,TOITRDVAL double,TIMESTAMP date, TOTALTRADES int,ISIN varchar(50)); ERROR 1046 (3D000): No database selected

mysql> show databases

-> show databases;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'sh

ow databases' at line 2

mysql> show databases;

```
mysql> use raghavendr48edu
Database changed
mysql> show tables;
Empty set (0.00 sec)
```

mysql> create table financial_regulation(SYMBOL varchar(100),SERIES varchar(50), OPEN double, HIGH double, LOW double, CLOSE double, PREVCLOSE double, TOTTRDQTY double,TOITRDVAL double,TIMESTAMP date, TOTALTRADES int,ISIN varchar(50)); Query OK, 0 rows affected (0.01 sec)

```
mysql> show tables;
+-----+
| Tables_in_raghavendr48edu |
+-----+
| financial_regulation |
+-----+
1 row in set (0.00 sec)
```

From < https://bigdata.cloudlabs.edureka.co/shell/>

- Load csv in table

```
mysql> load data local infile
'/home/raghavendr48edu/FINAL FROM DF.csv' into table
financial_regulation FIELDS TERMINATED BY ',';
Query OK, 846405 rows affected, 10 warnings (5.98 sec)
Records: 846405 Deleted: 0 Skipped: 0 Warnings: 10
mysgl> select * from financial regulation limit 5;
+----+
| SYMBOL | SERIES | OPEN | HIGH | LOW | CLOSE | LAST |
PREVCLOSE | TOTTRDOTY | TOITRDVAL | TIMESTAMP | TOTALTRADES | ISIN
+----+
| SYMBOL | SERIES | 0 | 0 | 0 | 0 | 0 |
                                                  0 |
                0 | ISIN
0 | 0000-00-00 |
| 20MICRONS | EQ |
                 37.8 |
                        37.8 | 36.15 | 36.85 | 37.4 |
27130 | 994657.9 | 2017-06-28 | 202 | INE144J01027 |
| 3IINFOTECH | EQ | 4.1 | 4.85 | 4 | 4.55 | 4.65 |
20157058 | 92148517.65 | 2017-06-28 |
                             7353 | INE748C01020 |
| 3MINDIA | EQ | 13425.15 | 13469.55 | 12920 | 13266.7 | 13300 |
          2290 | 30304923.35 | 2017-06-28 |
                                      748 | INE470A01017 |
13460.55
63MOONS
         | EQ |
                  61 | 61.9 | 60.35 | 61 | 61.1 |
                                              60.65 l
27701 | 1689421 | 2017-06-28 | 437 | INE111B01023 |
```

```
+-----+
5 rows in set (0.01 sec)
From < https://bigdata.cloudlabs.edureka.co/shell/>
mysql> exit;
Bye
mysgl> load data local infile
'/home/raghavendr48edu/FINAL_FROM_DF.csv' into table
financial_regulation FIELDS TERMINATED BY ',' IGNORE 1 ROWS;
Query OK, 846404 rows affected (6.07 sec)
Records: 846404 Deleted: 0 Skipped: 0 Warnings: 0
mysgl> select * from financial regulation limit 5;
+-----+
       | SERIES | OPEN | HIGH | LOW | CLOSE | LAST |
I SYMBOL
PREVCLOSE | TOTTRDOTY | TOITRDVAL | TIMESTAMP | TOTALTRADES | ISIN
+----+
                      37.8 | 36.15 | 36.85 | 37.4 |
| 20MICRONS | EQ | 37.8 |
      994657.9 | 2017-06-28 |
                         202 | INE144J01027 |
27130 |
| 3IINFOTECH | EQ |
                4.1 |
                    4.85 | 4 | 4.55 | 4.65 |
20157058 | 92148517.65 | 2017-06-28 |
                            7353 | INE748C01020 |
| 3MINDIA | EQ | 13425.15 | 13469.55 | 12920 | 13266.7 | 13300 |
13460.55 l
         2290 | 30304923.35 | 2017-06-28 | 748 | INE470A01017 |
                 61 | 61.9 | 60.35 | 61 | 61.1 |
| 63MOONS | EQ
                                          60.65
            1689421 | 2017-06-28 | 437 | INE111B01023 |
27701 |
| 8KMILES | EQ | 546.1 | 548 | 535 | 537.45 | 535.2 |
                                           547.45 I
                         1866 | INE650K01021 |
79722 | 43208620.05 | 2017-06-28 |
+----+
5 rows in set (0.00 sec)
mysql> exit;
Bye
```

From < https://bigdata.cloudlabs.edureka.co/shell/>

Step 9.3: Transferring data from Mysql to HDFS - List Databases

sqoop list-databases --connect jdbc:mysql://sqoopdb.edu.cloudlab.com/userdb -- username raghavendr48edu --password RedKangaroo99\$

sqoop list-databases --connect jdbc:mysql://localhost --username raghavendr48edu --password RedKangaroo99\$

Warning: /opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/bin/../lib/sqoop/../accumulo does not exist! Accumulo imports will fail.

Please set \$ACCUMULO HOME to the root of your Accumulo installation.

SLF4J: Class path contains multiple SLF4J bindings.

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/slf4j-log4j12-

1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.clas

sl

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/log4j-slf4j-impl-

2.8.2.jar!/org/slf4j/impl/StaticLoggerBinder.cl

ass]

SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanati on.

SLF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]

23/05/19 10:10:48 INFO sqoop.Sqoop: Running Sqoop version: 1.4.7-cdh6.2.1

23/05/19 10:10:49 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.

23/05/19 10:10:49 INFO manager.MySQLManager: Preparing to use a MySQL streaming resultset.

information schema

raghavendr48edu

From < https://bigdata.cloudlabs.edureka.co/shell/>

[raghavendr48edu@ip-10-1-1-204 ~]\$ sqoop list-databases --connect jdbc:mysql://ip-10-1-1-204.ap-south-1.compute.internal --username raghavendr48edu --password RedKangaroo99\$

Warning: /opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/bin/../lib/sqoop/../accumulo does not exist! Accumulo imports will fail.

Please set \$ACCUMULO_HOME to the root of your Accumulo installation.

SLF4J: Class path contains multiple SLF4J bindings.

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/slf4j-log4j12-

1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.clas

s]

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/log4j-slf4j-impl-

2.8.2.jar!/org/slf4j/impl/StaticLoggerBinder.cl

ass]

SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanati on.

SLF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]

23/05/19 10:14:17 INFO sqoop.Sqoop: Running Sqoop version: 1.4.7-cdh6.2.1

23/05/19 10:14:17 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.

23/05/19 10:14:17 INFO manager.MySQLManager: Preparing to use a MySQL streaming resultset.

information_schema

raghavendr48edu

[raghavendr48edu@ip-10-1-1-204 ~]\$

From <https://bigdata.cloudlabs.edureka.co/shell/>

[raghavendr48edu@ip-10-1-1-204 ~]\$ sqoop list-databases --connect jdbc:mysql://ip-10-1-1-204.ap-south1.compute.internal:3306/raghavendr48edu --username raghavendr48edu --password RedKangaroo99\$

Warning: /opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/bin/../lib/sqoop/../accumulo does not exist! Accumulo imports will fail.

Please set \$ACCUMULO HOME to the root of your Accumulo installation.

SLF4J: Class path contains multiple SLF4J bindings.

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/slf4j-log4j12-

1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.clas

s]

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/log4j-slf4j-impl-

2.8.2. jar!/org/slf4j/impl/StaticLoggerBinder.cl

ass]

SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanati on.

SLF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]

23/05/19 14:30:29 INFO sqoop.Sqoop: Running Sqoop version: 1.4.7-cdh6.2.1

23/05/19 14:30:29 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.

23/05/19 14:30:30 INFO manager.MySQLManager: Preparing to use a MySQL streaming resultset.

information_schema

raghavendr48edu

From https://bigdata.cloudlabs.edureka.co/shell/

```
[raghavendr48edu@ip-10-1-1-204 ~]$ sqoop import --connect
jdbc:mysql://ip-10-1-1-204.ap-south-
1.compute.internal:3306/raghavendr48edu --username raghavendr48
edu --password RedKangaroo99$ --table financial_regulation --m 1 --
driver com.mysql.jdbc.Driver --target-dir
/user/raghavendr48edu/financial_regulation_data/
Warning: /opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/bin/../lib/sqoop/../accumulo does not exist! Accumulo
imports will fail.
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/jars/slf4j-log4j12-
1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.clas
SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/jars/log4j-slf4j-impl-
2.8.2.jar!/org/slf4j/impl/StaticLoggerBinder.cl
assl
SLF4J: See <a href="http://www.slf4j.org/codes.html#multiple">http://www.slf4j.org/codes.html#multiple</a> bindings for an explanati
SLF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]
23/05/19 17:01:33 INFO sqoop.Sqoop: Running Sqoop version: 1.4.7-cdh6.2.1
23/05/19 17:01:33 WARN tool.BaseSqoopTool: Setting your password on the
command-line is insecure. Consider using -P instead.
23/05/19 17:01:33 WARN sqoop.ConnFactory: Parameter --driver is set to an
explicit driver however appropriate connection manager is not being set (via --
ection-manager). Sgoop is going to fall back to
org.apache.sqoop.manager.GenericJdbcManager. Please specify explicitly which
connection manager should be use
d next time.
23/05/19 17:01:33 INFO manager.SqlManager: Using default fetchSize of 1000
23/05/19 17:01:33 INFO tool.CodeGenTool: Beginning code generation
23/05/19 17:01:34 INFO manager.SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/19 17:01:34 INFO manager.SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/19 17:01:34 INFO orm.CompilationManager: HADOOP_MAPRED_HOME is
/opt/cloudera/parcels/CDH/lib/hadoop-mapreduce
23/05/19 17:01:35 ERROR orm.CompilationManager: Could not rename
/tmp/sgoop-
raghavendr48edu/compile/09fd834432c724d694319b2fb5866004/financial requ
lation.jav
a to /home/raghavendr48edu/./financial regulation.java. Error: Destination
'/home/raghavendr48edu/./financial_regulation.java' already exists
23/05/19 17:01:35 INFO orm.CompilationManager: Writing jar file: /tmp/sqoop-
raghavendr48edu/compile/09fd834432c724d694319b2fb5866004/financial requ
lation.jar
23/05/19 17:01:35 INFO mapreduce.ImportJobBase: Beginning import of
financial_regulation
```

```
23/05/19 17:01:36 INFO Configuration.deprecation: mapred.jar is deprecated.
Instead, use mapreduce.job.jar
23/05/19 17:01:36 INFO manager.SqlManager: Executing SQL statement:
SELECT t.* FROM financial_regulation AS t WHERE 1=0
23/05/19 17:01:36 INFO Configuration.deprecation: mapred.map.tasks is
deprecated. Instead, use mapreduce.job.maps
23/05/19 17:01:36 INFO client.RMProxy: Connecting to ResourceManager at ip-
10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032
23/05/19 17:01:37 INFO mapreduce.JobResourceUploader: Disabling Erasure
Coding for path: /user/raghavendr48edu/.staging/job_1684298513961_0686
23/05/19 17:01:39 INFO db.DBInputFormat: Using read committed transaction
isolation
23/05/19 17:01:39 INFO mapreduce. JobSubmitter: number of splits:1
23/05/19 17:01:39 INFO Configuration.deprecation:
yarn.resourcemanager.system-metrics-publisher.enabled is deprecated. Instead,
use varn.system-metrics-publi
sher.enabled
23/05/19 17:01:39 INFO mapreduce. JobSubmitter: Submitting tokens for job:
job 1684298513961 0686
23/05/19 17:01:39 INFO mapreduce. JobSubmitter: Executing with tokens: []
23/05/19 17:01:40 INFO conf. Configuration: resource-types.xml not found
23/05/19 17:01:40 INFO resource.ResourceUtils: Unable to find 'resource-
types.xml'.
23/05/19 17:01:40 INFO impl. YarnClientImpl: Submitted application
application 1684298513961 0686
23/05/19 17:01:40 INFO mapreduce. Job: The url to track the job: http://ip-10-
1-1-204.ap-south-
1.compute.internal:6066/proxy/application 1684298513961 0686/
23/05/19 17:01:40 INFO mapreduce.Job: Running job:
job 1684298513961 0686
23/05/19 17:01:47 INFO mapreduce. Job job 1684298513961 0686
running in uber mode: false
23/05/19 17:01:47 INFO mapreduce. Job: map 0% reduce 0%
23/05/19 17:02:02 INFO mapreduce. Job: map 100% reduce 0%
23/05/19 17:02:03 INFO mapreduce.Job: Job job_1684298513961_0686
completed successfully
23/05/19 17:02:03 INFO mapreduce.Job: Counters: 33
     File System Counters
          FILE: Number of bytes read=0
          FILE: Number of bytes written=246524
          FILE: Number of read operations=0
          FILE: Number of large read operations=0
          FILE: Number of write operations=0
          HDFS: Number of bytes read=85
          HDFS: Number of bytes written=80474953
          HDFS: Number of read operations=6
          HDFS: Number of large read operations=0
          HDFS: Number of write operations=2
          HDFS: Number of bytes read erasure-coded=0
     Job Counters
          Launched map tasks=1
          Other local map tasks=1
```

Total time spent by all maps in occupied slots (ms)=13055

Total time spent by all reduces in occupied slots (ms)=0

Total time spent by all map tasks (ms)=13055

Total vcore-milliseconds taken by all map tasks=13055

Total megabyte-milliseconds taken by all map tasks=13368320

Map-Reduce Framework

Map input records=846404

Map output records=846404

Input split bytes=85

Spilled Records=0

Failed Shuffles=0

Merged Map outputs=0

GC time elapsed (ms)=1286

CPU time spent (ms)=13760

Physical memory (bytes) snapshot=759418880

Virtual memory (bytes) snapshot=2604331008

Total committed heap usage (bytes)=791150592

Peak Map Physical memory (bytes)=759418880

Peak Map Virtual memory (bytes)=2604331008

File Input Format Counters

Bytes Read=0

File Output Format Counters

Bytes Written=80474953

23/05/19 17:02:03 INFO mapreduce.ImportJobBase: Transferred 76.7469 MB in

26.7332 seconds (2.8708 MB/sec)

23/05/19 17:02:03 INFO mapreduce.ImportJobBase: Retrieved 846404 records.

[raghavendr48edu@ip-10-1-1-204 ~]\$

From < https://bigdata.cloudlabs.edureka.co/shell/>

6. Validate the loaded data by comparing the statistics of data both in source and HDFS

[raghavendr48edu@ip-10-1-1-204 $^{\sim}$]\$ hdfs dfs -cat /user/raghavendr48edu/financial_regulation_data/*|wc -l 846404

From < https://chat.openai.com/c/969e01fc-3524-47bc-a24f-101e1128de61>

[raghavendr48edu@ip-10-1-1-204 ~]\$ hdfs dfs -cat /user/raghavendr48edu/financial_regulation_data/*|head -5

20MICRONS,EQ,37.8,37.8,36.15,36.85,37.4,37.05,27130.0,994657.9,2017-06-28,202,INE144J01027

3IINFOTECH,EQ,4.1,4.85,4.0,4.55,4.65,4.05,2.0157058E7,9.214851765E7,2017 -06-28,7353,INE748C01020

3MINDIA,EQ,13425.15,13469.55,12920.0,13266.7,13300.0,13460.55,2290.0,3. 030492335E7,2017-06-28,748,INE470A01017

63MOONS,EQ,61.0,61.9,60.35,61.0,61.1,60.65,27701.0,1689421.0,2017-06-28,437,INE111B01023

8KMILES,EQ,546.1,548.0,535.0,537.45,535.2,547.45,79722.0,4.320862005E7, 2017-06-28,1866,INE650K01021

cat: Unable to write to output stream.

From < https://bigdata.cloudlabs.edureka.co/shell/>

7.Create a new directory EQ in HDFS and transfer the data where series is EQ

hdfs dfs -mkdir /user/raghavendr48edu/financial_regulation_data/eq

[raghavendr48edu@ip-10-1-1-204 ~]\$ hdfs dfs -rm -r /user/raghavendr48edu/financial_regulation_data/eq

23/05/19 11:35:18 INFO fs.TrashPolicyDefault: Moved:

'hdfs://nameservice1/user/raghavendr48edu/financial_regulation_data/eq' to trash at: hdfs://nameservice1

/user/raghavendr48edu/.Trash/Current/user/raghavendr48edu/financial_regulation_data/eq

[raghavendr48edu@ip-10-1-1-204 \sim]\$ sqoop import --connect

jdbc:mysql://ip-10-1-1-204.ap-south-

1.compute.internal:3306/raghavendr48edu --username raghavendr48edu --password RedKangaroo99\$ -m 1 --table financial_regulation --where "SERIES='EQ'" --target-dir

/user/raghavendr48edu/financial_regulation_data/eq --driver com.mysql.jdbc.Driver

Warning: /opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/bin/../lib/sqoop/../accumulo does not exist! Accumulo imports will fail.

Please set \$ACCUMULO_HOME to the root of your Accumulo installation.

SLF4J: Class path contains multiple SLF4J bindings.

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/slf4j-log4j12-

1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.clas

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/log4j-slf4j-impl-

2.8.2.jar!/org/slf4j/impl/StaticLoggerBinder.cl

ass]

```
SLF4J: See <a href="http://www.slf4j.org/codes.html#multiple_bindings">http://www.slf4j.org/codes.html#multiple_bindings</a> for an explanati
SLF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]
23/05/19 17:09:52 INFO sqoop.Sqoop: Running Sqoop version: 1.4.7-cdh6.2.1
23/05/19 17:09:52 WARN tool.BaseSqoopTool: Setting your password on the
command-line is insecure. Consider using -P instead.
23/05/19 17:09:52 WARN sgoop.ConnFactory: Parameter --driver is set to an
explicit driver however appropriate connection manager is not being set (via --
conn
ection-manager). Sqoop is going to fall back to
org.apache.sqoop.manager.GenericJdbcManager. Please specify explicitly which
connection manager should be use
d next time.
23/05/19 17:09:52 INFO manager.SqlManager: Using default fetchSize of 1000
23/05/19 17:09:52 INFO tool.CodeGenTool: Beginning code generation
23/05/19 17:09:53 INFO manager.SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/19 17:09:53 INFO manager. SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/19 17:09:53 INFO orm.CompilationManager: HADOOP MAPRED HOME is
/opt/cloudera/parcels/CDH/lib/hadoop-mapreduce
23/05/19 17:09:55 ERROR orm.CompilationManager: Could not rename
/tmp/sgoop-
raghavendr48edu/compile/0edf9693a832d2505650f6de1279c071/financial_regul
ation.iav
a to /home/raghavendr48edu/./financial regulation.java. Error: Destination
'/home/raghavendr48edu/./financial regulation.java' already exists
23/05/19 17:09:55 INFO orm.CompilationManager: Writing jar file: /tmp/sqoop-
raghavendr48edu/compile/0edf9693a832d2505650f6de1279c071/financial_regul
ation.jar
23/05/19 17:09:55 INFO mapreduce. Import JobBase: Beginning import of
financial regulation
23/05/19 17:09:55 INFO Configuration.deprecation: mapred.jar is deprecated.
Instead, use mapreduce.job.jar
23/05/19 17:09:55 INFO manager.SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/19 17:09:56 INFO Configuration.deprecation: mapred.map.tasks is
deprecated. Instead, use mapreduce.job.maps
23/05/19 17:09:56 INFO client.RMProxy: Connecting to ResourceManager at ip-
10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032
23/05/19 17:09:56 INFO mapreduce. JobResource Uploader: Disabling Erasure
Coding for path: /user/raghavendr48edu/.staging/job_1684298513961_0687
23/05/19 17:09:58 INFO db.DBInputFormat: Using read committed transaction
isolation
23/05/19 17:09:59 INFO mapreduce. JobSubmitter: number of splits:1
23/05/19 17:09:59 INFO Configuration.deprecation:
yarn.resourcemanager.system-metrics-publisher.enabled is deprecated. Instead,
use yarn.system-metrics-publi
```

23/05/19 17:09:59 INFO mapreduce. JobSubmitter: Submitting tokens for job:

23/05/19 17:09:59 INFO mapreduce. JobSubmitter: Executing with tokens: []

sher.enabled

job 1684298513961 0687

```
23/05/19 17:09:59 INFO conf. Configuration: resource-types.xml not found
23/05/19 17:09:59 INFO resource. Resource Utils: Unable to find 'resource-
types.xml'.
23/05/19 17:09:59 INFO impl. YarnClientImpl: Submitted application
application_1684298513961_0687
23/05/19 17:09:59 INFO mapreduce. Job: The url to track the job: <a href="http://ip-10-">http://ip-10-</a>
1-1-204.ap-south-
1.compute.internal:6066/proxy/application 1684298513961 0687/
23/05/19 17:09:59 INFO mapreduce.Job: Running job:
job_1684298513961_0687
23/05/19 17:10:08 INFO mapreduce.Job: Job job_1684298513961_0687
running in uber mode: false
23/05/19 17:10:08 INFO mapreduce.Job: map 0% reduce 0%
23/05/19 17:10:27 INFO mapreduce. Job: map 100% reduce 0%
23/05/19 17:10:27 INFO mapreduce.Job: Job job_1684298513961_0687
completed successfully
23/05/19 17:10:27 INFO mapreduce.Job: Counters: 33
     File System Counters
          FILE: Number of bytes read=0
          FILE: Number of bytes written=246865
          FILE: Number of read operations=0
          FILE: Number of large read operations=0
          FILE: Number of write operations=0
          HDFS: Number of bytes read=85
          HDFS: Number of bytes written=70804177
          HDFS: Number of read operations=6
          HDFS: Number of large read operations=0
          HDFS: Number of write operations=2
          HDFS: Number of bytes read erasure-coded=0
     Job Counters
          Launched map tasks=1
          Other local map tasks=1
          Total time spent by all maps in occupied slots (ms)=17585
          Total time spent by all reduces in occupied slots (ms)=0
          Total time spent by all map tasks (ms)=17585
          Total vcore-milliseconds taken by all map tasks=17585
          Total megabyte-milliseconds taken by all map tasks=18007040
     Map-Reduce Framework
          Map input records=739199
          Map output records=739199
          Input split bytes=85
          Spilled Records=0
          Failed Shuffles=0
          Merged Map outputs=0
          GC time elapsed (ms)=4161
          CPU time spent (ms)=16810
          Physical memory (bytes) snapshot=695107584
          Virtual memory (bytes) snapshot=2596241408
          Total committed heap usage (bytes)=769130496
          Peak Map Physical memory (bytes)=695107584
          Peak Map Virtual memory (bytes)=2596241408
     File Input Format Counters
```

Bytes Read=0
File Output Format Counters
Bytes Written=70804177
23/05/19 17:10:27 INFO mapreduce.ImportJobBase: Transferred 67.5241 MB in 31.6986 seconds (2.1302 MB/sec)

23/05/19 17:10:27 INFO mapreduce.ImportJobBase: Retrieved 739199 records. [raghavendr48edu@ip-10-1-1-204 ~]\$

From < https://bigdata.cloudlabs.edureka.co/shell/>

8.Set total trades which are less than 500 to 0 and transfer only updated rows.

mysql> alter table financial_regulation add column timestamp;

```
ERROR 1060 (42S21): Duplicate column name 'timestamp'
mysgl> alter table financial regulation add column time stamp timestamp;
Ouery OK, 0 rows affected (8.37 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysgl> select * from financial regulation limit 5;
| SYMBOL | SERIES | OPEN | HIGH | LOW | CLOSE | LAST |
PREVCLOSE | TOTTRDQTY | TOITRDVAL | TIMESTAMP | TOTALTRADES | ISIN
I time stamp
| 20MICRONS | EQ | 37.8 | 37.8 | 36.15 | 36.85 | 37.4 | 37.05 |
27130 | 994657.9 | 2017-06-28 | 202 | INE144J01027 | 2023-05-21
06:29:03 I
| 3IINFOTECH | EQ | 4.1 | 4.85 | 4 | 4.55 | 4.65 | 4.05 |
20157058 | 92148517.65 | 2017-06-28 | 7353 | INE748C01020 | 2023-05-
21 06:29:03 I
| 3MINDIA | EQ | 13425.15 | 13469.55 | 12920 | 13266.7 | 13300 |
         2290 | 30304923.35 | 2017-06-28 | 748 | INE470A01017 |
13460.55 |
2023-05-21 06:29:03 |
| 63MOONS | EQ
                61 | 61.9 | 60.35 | 61 | 61.1 |
27701 |
      1689421 | 2017-06-28 | 437 | INE111B01023 | 2023-05-21
06:29:03 |
        1 8KMILES
79722 | 43208620.05 | 2017-06-28 | 1866 | INE650K01021 | 2023-05-21
06:29:03 |
```

```
5 rows in set (0.00 sec)
mysal > alter table financial regulation add column currentdate DATE;
(you get null values)
Query OK, 0 rows affected (7.66 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysgl> update financial regulation SET currentdate=CURRENT_DATE;
Ouery OK, 846404 rows affected (16.18 sec)
Rows matched: 846404 Changed: 846404 Warnings: 0
mysgl> alter table financial regulation add updatetrades INT(11);
Query OK, 0 rows affected (7.02 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysgl> update financial regulation set updatetrades=0 where
TOTALTRADES<500;
Query OK, 399261 rows affected (8.48 sec)
Rows matched: 399261 Changed: 399261 Warnings: 0
[raghavendr48edu@ip-10-1-1-204 ~]$ lastvalue=$(mysql -u
raghavendr48edu -p -h ip-10-1-1-204.ap-south-1.compute.internal -D
raghavendr48edu -e "SELECT max(time_stamp) from
financial_regulation" -sN)
Enter password:
[raghavendr48edu@ip-10-1-1-204 ~]$ sqoop import --connect
jdbc:mysql://ip-10-1-1-204.ap-south-
1.compute.internal/raghavendr48edu --username raghavendr48edu --
password RedKangaroo99$ --table financial regulation --where
"SERIES='EQ'" --incremental lastmodified --check-column time_stamp -
-last-value "$lastvalue" --target-dir
/user/raghavendr48edu/financial_regulation_updated/ --driver
com.mysql.jdbc.Driver -m 1
Warning: /opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/bin/../lib/sqoop/../accumulo does not exist! Accumulo
imports will fail.
Please set $ACCUMULO HOME to the root of your Accumulo installation.
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/jars/slf4j-log4j12-
```

1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.class]

```
SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-
1.cdh6.2.1.p0.1425774/jars/log4j-slf4j-impl-
2.8.2.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See <a href="http://www.slf4j.org/codes.html#multiple_bindings">http://www.slf4j.org/codes.html#multiple_bindings</a> for an explanati
on.
SLF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]
23/05/21 06:51:32 INFO sgoop. Sgoop: Running Sgoop version: 1.4.7-cdh6.2.1
23/05/21 06:51:32 WARN tool.BaseSqoopTool: Setting your password on the
command-line is insecure. Consider using -P instead.
23/05/21 06:51:32 WARN sqoop.ConnFactory: Parameter --driver is set to an
explicit driver however appropriate connection manager is not being set (via --
connection-manager). Sgoop is going to fall back to org.
apache.sqoop.manager.GenericJdbcManager. Please specify explicitly which
connection manager should be used next time.
23/05/21 06:51:32 INFO manager.SqlManager: Using default fetchSize of 1000
23/05/21 06:51:32 INFO tool.CodeGenTool: Beginning code generation
23/05/21 06:51:33 INFO manager. SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/21 06:51:33 INFO manager.SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/21 06:51:33 INFO orm.CompilationManager: HADOOP_MAPRED_HOME is
/opt/cloudera/parcels/CDH/lib/hadoop-mapreduce
23/05/21 06:51:34 ERROR orm.CompilationManager: Could not rename
/tmp/sgoop-
raghavendr48edu/compile/c82967a11cb29494d2a150e8a6f06ecc/financial regul
ation.java to /home/raghavendr48edu/./financial regulation.ja
va. Error: Destination '/home/raghavendr48edu/./financial_regulation.java'
already exists
23/05/21 06:51:34 INFO orm.CompilationManager: Writing jar file: /tmp/sgoop-
raghavendr48edu/compile/c82967a11cb29494d2a150e8a6f06ecc/financial regul
ation.iar
23/05/21 06:51:35 INFO manager.SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/21 06:51:35 INFO tool.ImportTool: Incremental import based on column
time stamp
23/05/21 06:51:35 INFO tool.ImportTool: Lower bound value: '2023-05-21
06:32:38'
23/05/21 06:51:35 INFO tool.ImportTool: Upper bound value: '2023-05-21
06:51:35.0'
23/05/21 06:51:35 INFO mapreduce. Import JobBase: Beginning import of
financial regulation
23/05/21 06:51:36 INFO Configuration.deprecation: mapred.jar is deprecated.
Instead, use mapreduce.job.jar
23/05/21 06:51:36 INFO manager.SqlManager: Executing SQL statement:
SELECT t.* FROM financial_regulation AS t WHERE 1=0
23/05/21 06:51:36 INFO Configuration.deprecation: mapred.map.tasks is
deprecated. Instead, use mapreduce.job.maps
23/05/21 06:51:36 INFO client.RMProxy: Connecting to ResourceManager at ip-
10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032
```

23/05/21 06:51:36 INFO mapreduce.JobResourceUploader: Disabling Erasure Coding for path: /user/raghavendr48edu/.staging/job 1684298513961 0928

```
23/05/21 06:51:39 INFO db.DBInputFormat: Using read committed transaction
isolation
23/05/21 06:51:39 INFO mapreduce. JobSubmitter: number of splits:1
23/05/21 06:51:39 INFO Configuration.deprecation:
yarn.resourcemanager.system-metrics-publisher.enabled is deprecated. Instead,
use yarn.system-metrics-publisher.enabled
23/05/21 06:51:39 INFO mapreduce. JobSubmitter: Submitting tokens for job:
iob 1684298513961 0928
23/05/21 06:51:39 INFO mapreduce.JobSubmitter: Executing with tokens: []
23/05/21 06:51:39 INFO conf.Configuration: resource-types.xml not found
23/05/21 06:51:39 INFO resource. Resource Utils: Unable to find 'resource-
types.xml'.
23/05/21 06:51:39 INFO impl. YarnClientImpl: Submitted application
application 1684298513961 0928
23/05/21 06:51:39 INFO mapreduce. Job: The url to track the job: http://ip-10-
1-1-204.ap-south-
1.compute.internal:6066/proxy/application 1684298513961 0928/
23/05/21 06:51:39 INFO mapreduce. Job: Running job:
job 1684298513961 0928
23/05/21 06:51:47 INFO mapreduce.Job: Job job 1684298513961 0928
running in uber mode: false
23/05/21 06:51:47 INFO mapreduce.Job: map 0% reduce 0%
23/05/21 06:52:02 INFO mapreduce. Job: map 100% reduce 0%
23/05/21 06:52:03 INFO mapreduce.Job: Job job 1684298513961 0928
completed successfully
23/05/21 06:52:03 INFO mapreduce.Job: Counters: 33
     File System Counters
          FILE: Number of bytes read=0
          FILE: Number of bytes written=247448
          FILE: Number of read operations=0
          FILE: Number of large read operations=0
          FILE: Number of write operations=0
          HDFS: Number of bytes read=85
          HDFS: Number of bytes written=33605184
          HDFS: Number of read operations=6
          HDFS: Number of large read operations=0
          HDFS: Number of write operations=2
          HDFS: Number of bytes read erasure-coded=0
     Job Counters
          Launched map tasks=1
          Other local map tasks=1
          Total time spent by all maps in occupied slots (ms)=12072
          Total time spent by all reduces in occupied slots (ms)=0
          Total time spent by all map tasks (ms)=12072
          Total vcore-milliseconds taken by all map tasks=12072
          Total megabyte-milliseconds taken by all map tasks=12361728
     Map-Reduce Framework
          Map input records=293796
          Map output records=293796
          Input split bytes=85
          Spilled Records=0
```

```
Failed Shuffles=0
          Merged Map outputs=0
          GC time elapsed (ms)=1497
          CPU time spent (ms)=10130
          Physical memory (bytes) snapshot=498610176
          Virtual memory (bytes) snapshot=2588659712
          Total committed heap usage (bytes)=569901056
          Peak Map Physical memory (bytes)=498610176
          Peak Map Virtual memory (bytes)=2588659712
     File Input Format Counters
          Bytes Read=0
     File Output Format Counters
          Bytes Written=33605184
23/05/21 06:52:03 INFO mapreduce.ImportJobBase: Transferred 32.0484 MB in
27.0969 seconds (1.1827 MB/sec)
23/05/21 06:52:03 INFO mapreduce.ImportJobBase: Retrieved 293796 records.
23/05/21 06:52:03 INFO tool.ImportTool: Final destination exists, will run
merge job.
23/05/21 06:52:03 INFO tool.ImportTool: Moving data from temporary directory
sgoop/972ebccb5f1442768d2441d6dc44fef7 financial regulation to final
destination /user/raghavendr48edu/financial regulation updated
23/05/21 06:52:03 INFO tool.ImportTool: Incremental import complete! To run
another incremental import of all data following this import, supply the following
arguments:
23/05/21 06:52:03 INFO tool.ImportTool: --incremental lastmodified
23/05/21 06:52:03 INFO tool.ImportTool: --check-column time stamp
23/05/21 06:52:03 INFO tool.ImportTool: --last-value 2023-05-21 06:51:35.0
23/05/21 06:52:03 INFO tool.ImportTool: (Consider saving this with 'sgoop job
--create')
[raghavendr48edu@ip-10-1-1-204 ~]$
```

From < https://bigdata.cloudlabs.edureka.co/shell/>

```
mysql> select count(*) from financial_regulation where SERIES="EQ" and updatetrades=0;
+-----+
| count(*) |
+-----+
| 293796 |
+-----+
1 row in set (0.58 sec)
```

Or

[raghavendr48edu@ip-10-1-1-204 \sim]\$ sqoop import --connect idbc:mysql://ip-10-1-1-204.ap-south-

1.compute.internal/raghavendr48edu --username raghavendr48edu --password RedKangaroo99\$ --table financial_regulatio

n --where "SERIES='EQ'" --incremental append --check-column updatetrades --target-dir

/user/raghavendr48edu/incremental_append/ --driver com.mysql.jdbc.Driver -m 1

Warning: /opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/bin/../lib/sqoop/../accumulo does not exist! Accumulo imports will fail.

Please set \$ACCUMULO_HOME to the root of your Accumulo installation.

SLF4J: Class path contains multiple SLF4J bindings.

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/slf4j-log4j12-

1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.class]

SLF4J: Found binding in [jar:file:/opt/cloudera/parcels/CDH-6.2.1-

1.cdh6.2.1.p0.1425774/jars/log4j-slf4j-impl-

2.8.2.jar!/org/slf4j/impl/StaticLoggerBinder.class]

SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanati on.

SLF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]

23/05/21 11:36:00 INFO sqoop.Sqoop: Running Sqoop version: 1.4.7-cdh6.2.1 23/05/21 11:36:00 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.

23/05/21 11:36:00 WARN sqoop.ConnFactory: Parameter --driver is set to an explicit driver however appropriate connection manager is not being set (via --connection-manager). Sqoop is going to fall back to org.

apache.sqoop.manager.GenericJdbcManager. Please specify explicitly which connection manager should be used next time.

23/05/21 11:36:00 INFO manager.SqlManager: Using default fetchSize of 1000

23/05/21 11:36:00 INFO tool.CodeGenTool: Beginning code generation

23/05/21 11:36:00 INFO manager.SqlManager: Executing SQL statement:

SELECT t.* FROM financial_regulation AS t WHERE 1=0

23/05/21 11:36:00 INFO manager.SqlManager: Executing SQL statement:

SELECT t.* FROM financial_regulation AS t WHERE 1=0

23/05/21 11:36:00 INFO orm.CompilationManager: HADOOP_MAPRED_HOME is /opt/cloudera/parcels/CDH/lib/hadoop-mapreduce

23/05/21 11:36:02 ERROR orm.CompilationManager: Could not rename /tmp/sqoop-

raghavendr48edu/compile/41827c3d892387105201a4e66603ddd3/financial_regulation.java to /home/raghavendr48edu/./financial_regulation.ja

va. Error: Destination '/home/raghavendr48edu/./financial_regulation.java' already exists

23/05/21 11:36:02 INFO orm.CompilationManager: Writing jar file: /tmp/sqoop-raghavendr48edu/compile/41827c3d892387105201a4e66603ddd3/financial_regulation.jar

23/05/21 11:36:02 INFO tool.ImportTool: Maximal id query for free form incremental import: SELECT MAX(updatetrades) FROM financial_regulation WHERE SERIES='EQ'

23/05/21 11:36:03 INFO tool.ImportTool: Incremental import based on column updatetrades

23/05/21 11:36:03 INFO tool.ImportTool: Upper bound value: 0

```
23/05/21 11:36:03 INFO mapreduce. Import JobBase: Beginning import of
financial_regulation
23/05/21 11:36:03 INFO Configuration.deprecation: mapred.jar is deprecated.
Instead, use mapreduce.job.jar
23/05/21 11:36:03 INFO manager. SqlManager: Executing SQL statement:
SELECT t.* FROM financial regulation AS t WHERE 1=0
23/05/21 11:36:04 INFO Configuration.deprecation: mapred.map.tasks is
deprecated. Instead, use mapreduce.job.maps
23/05/21 11:36:04 INFO client.RMProxy: Connecting to ResourceManager at ip-
10-1-1-204.ap-south-1.compute.internal/10.1.1.204:8032
23/05/21 11:36:04 INFO mapreduce.JobResourceUploader: Disabling Erasure
Coding for path: /user/raghavendr48edu/.staging/job 1684298513961 0933
23/05/21 11:36:06 INFO db.DBInputFormat: Using read committed transaction
isolation
23/05/21 11:36:06 INFO mapreduce. JobSubmitter: number of splits:1
23/05/21 11:36:06 INFO Configuration.deprecation:
yarn.resourcemanager.system-metrics-publisher.enabled is deprecated. Instead,
use yarn.system-metrics-publisher.enabled
23/05/21 11:36:06 INFO mapreduce. JobSubmitter: Submitting tokens for job:
job 1684298513961 0933
23/05/21 11:36:06 INFO mapreduce.JobSubmitter: Executing with tokens: []
23/05/21 11:36:06 INFO conf. Configuration: resource-types.xml not found
23/05/21 11:36:06 INFO resource.ResourceUtils: Unable to find 'resource-
types.xml'.
23/05/21 11:36:06 INFO impl. YarnClientImpl: Submitted application
application 1684298513961 0933
23/05/21 11:36:07 INFO mapreduce. Job: The url to track the job: http://ip-10-
1-1-204.ap-south-
1.compute.internal:6066/proxy/application 1684298513961 0933/
23/05/21 11:36:07 INFO mapreduce. Job: Running job:
iob 1684298513961 0933
23/05/21 11:36:15 INFO mapreduce.Job: Job job_1684298513961_0933
running in uber mode: false
23/05/21 11:36:15 INFO mapreduce.Job: map 0% reduce 0%
23/05/21 11:36:25 INFO mapreduce. Job: map 100% reduce 0%
23/05/21 11:36:25 INFO mapreduce.Job: Job job 1684298513961 0933
completed successfully
23/05/21 11:36:25 INFO mapreduce.Job: Counters: 33
     File System Counters
          FILE: Number of bytes read=0
          FILE: Number of bytes written=247289
          FILE: Number of read operations=0
          FILE: Number of large read operations=0
          FILE: Number of write operations=0
          HDFS: Number of bytes read=85
          HDFS: Number of bytes written=33605184
          HDFS: Number of read operations=6
          HDFS: Number of large read operations=0
          HDFS: Number of write operations=2
          HDFS: Number of bytes read erasure-coded=0
     Job Counters
```

```
Launched map tasks=1
          Other local map tasks=1
          Total time spent by all maps in occupied slots (ms)=8272
          Total time spent by all reduces in occupied slots (ms)=0
          Total time spent by all map tasks (ms)=8272
          Total vcore-milliseconds taken by all map tasks=8272
          Total megabyte-milliseconds taken by all map tasks=8470528
     Map-Reduce Framework
          Map input records=293796
          Map output records=293796
          Input split bytes=85
          Spilled Records=0
          Failed Shuffles=0
          Merged Map outputs=0
          GC time elapsed (ms)=795
          CPU time spent (ms)=9130
          Physical memory (bytes) snapshot=522072064
          Virtual memory (bytes) snapshot=2602045440
          Total committed heap usage (bytes)=780664832
          Peak Map Physical memory (bytes)=522072064
          Peak Map Virtual memory (bytes)=2602045440
     File Input Format Counters
          Bytes Read=0
     File Output Format Counters
          Bytes Written=33605184
23/05/21 11:36:25 INFO mapreduce.ImportJobBase: Transferred 32.0484 MB in
21.1136 seconds (1.5179 MB/sec)
23/05/21 11:36:25 INFO mapreduce.ImportJobBase: Retrieved 293796 records.
23/05/21 11:36:25 INFO util. AppendUtils: Creating missing output directory -
incremental append
23/05/21 11:36:25 INFO tool.ImportTool: Incremental import complete! To run
another incremental import of all data following this import, supply the following
23/05/21 11:36:25 INFO tool.ImportTool: --incremental append
23/05/21 11:36:25 INFO tool.ImportTool: --check-column updatetrades
23/05/21 11:36:25 INFO tool.ImportTool: --last-value 0
23/05/21 11:36:25 INFO tool.ImportTool: (Consider saving this with 'sqoop job
```

From < https://bigdata.cloudlabs.edureka.co/shell/>

[raghavendr48edu@ip-10-1-1-204 ~]\$

--create')