

acadgild@localhost Desktop]\$ `hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordcount file1.txt wc`

As per instruction, copied the `hadoop-mapreduce-examples-2.9.0.jar` file and executed using the above command



The screenshot shows the Hadoop web interface in a browser. The URL is `localhost:8088/cluster/app/application_1519642599877_0001`. The page title is "Application application\_1519642599877\_0001". On the left, there is a sidebar with a "Cluster" menu containing links for "About", "Nodes", "Node Labels", "Applications", "NEW", "NEW\_SAVING", "SUBMITTED", "ACCEPTED", "RUNNING", "FINISHED", "FAILED", "KILLED", "Scheduler", and "Tools". The main content area displays application details:

Application Overview	
User:	acadgild
Name:	word count
Application Type:	MAPREDUCE
Application Tags:	
Application Priority:	0 (Higher Integer value indicates higher priority)
YarnApplicationState:	FINISHED
Queue:	default
FinalStatus Reported by AM:	SUCCEEDED
Started:	Mon Feb 26 16:31:45 +0530 2018
Elapsed:	27sec
Tracking URL:	History
Log Aggregation Status:	DISABLED
Application Timeout (Remaining Time):	Unlimited
Diagnostics:	
Unmanaged Application:	false
Application Node Label expression:	<Not set>
AM container Node Label expression:	<DEFAULT PARTITION>

Execute WordMedian , WordMean , WordStandardDeviation programs using

`hadoop-mapreduce-examples-2.9.0.jar` file present in your AcadGild VM.

Commands Used:

1. `JPS` : To show the JVM process status
2. (Start/Stop) `Start-all.sh` : To start hadoop required daemon processes. As it is deprecated below 3 & 4 shell commands can use.
3. (Start/Stop) `Start-dfs.sh` : DFS is specific to Hadoop (Data File System) . The command starts the processes of HDFS. FS is Generic file system, it can perform operations with from/to local or HDFS.
4. (Start/Stop) `Start-yarn.sh`: Start/stop HDFS and YARN daemons separately from the master machine on all the nodes. It is advisable to use these commands now over `start-all.sh` & `stop-all.sh`.
5. `Cat > file1.txt` : Create a text file and ctrl+c to save and quit
6. `Cat file1.txt` : To view the file
7. `hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordcount file1.txt wc`  
Above command explaining: run the "wordcount" class with parameter "file1.txt" and produce output into "wc"
8. `hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordmedian file1.txt wmedian`
9. `hadoop jar hadoop-mapreduce-examples-2.9.0.jar wordmeam file1.txt wmean`

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running
3	0	0	3	0

  

Cluster Nodes Metrics		
Active Nodes	Decommissioning Nodes	Decommissioned Nodes
1	0	0

  

Scheduler Metrics	
Scheduler Type	Scheduling Resource Type
Capacity Scheduler	[MEMORY]
Minimum Allocation: <memory:1024, vCores:1>	

  

ID	User	Name	Application Type	Queue	Application Priority	StartTime	FinishTime
application_1519642599877_0003	acadgild	word mean	MAPREDUCE	default	0	Mon Feb 26 17:47:31 +0550 2018	Mon Feb 26 17:47:55 +0550 2018
application_1519642599877_0002	acadgild	word median	MAPREDUCE	default	0	Mon Feb 26 17:33:25 +0550 2018	Mon Feb 26 17:33:48 +0550 2018
application_1519642599877_0001	acadgild	word count	MAPREDUCE	default	0	Mon Feb 26 16:31:45 +0550 2018	Mon Feb 26 16:32:13 +0550 2018

Showing 1 to 3 of 3 entries

## 10. Result files existing in HDFS. The command used below screen to list Hadoop fs -ls

```
[acadgild@localhost ~]$
[acadgild@localhost ~]$ hadoop fs -ls wc
18/02/26 19:04:24 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup 0 2018-02-26 16:32 wc/_SUCCESS
-rw-r--r-- 1 acadgild supergroup 12 2018-02-26 16:32 wc/part-r-00000
[acadgild@localhost ~]$ hadoop fs -ls wmean
18/02/26 19:04:46 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup 0 2018-02-26 17:47 wmean/_SUCCESS
-rw-r--r-- 1 acadgild supergroup 19 2018-02-26 17:47 wmean/part-r-00000
[acadgild@localhost ~]$ hadoop fs -ls wmedian
18/02/26 19:05:07 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup 0 2018-02-26 17:33 wmedian/_SUCCESS
-rw-r--r-- 1 acadgild supergroup 5 2018-02-26 17:33 wmedian/part-r-00000
[acadgild@localhost ~]$
```

## 11. Result files to view needs to mention the part file with CAT command

```
[acadgild@localhost ~]$
[acadgild@localhost ~]$ hadoop fs -cat wc/part-r-00000
18/02/26 19:09:59 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
A
4
B
6
C
5
[acadgild@localhost ~]$ hadoop fs -cat wmean/part-r-00000
18/02/26 19:10:36 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
count
15
length
15
[acadgild@localhost ~]$ hadoop fs -cat wmedian/part-r-00000
18/02/26 19:10:51 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
1
15
[acadgild@localhost ~]$
```