

BIG DATA TECHNOLOGIES LAB

(ACADEMIC YEAR : 2017-2018)

I SEMESTER

ASSIGNMENT 2

TOPIC : HDFS COMMANDS

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To see the help page of hdfs commands, you may type `hdfs dfs -help`

To see help of any command on hdfs you may type `hdfs dfs -help comamnd_name`

1. Create a directory on HDFS in your home directory (Hadoop Distributed File System).

Ans. [root@localhost /]# `hadoop fs -mkdir /Hadoopfs`

2. Create two more directories in a single command in your home directory.

Ans. [root@localhost /]# `hadoop fs -mkdir /Hadp /hgg`

3. List the directories created in HDFS and check in what sort order are the contents listed by default?

Ans. [root@localhost /]# `hadoop fs -ls /`

Found 8 items

```
drwxr-xr-x - root supergroup      0 2017-12-19 10:09 /Hadoopfs
drwxr-xr-x - root supergroup      0 2017-12-19 10:10 /Hadp
drwxr-xr-x - root supergroup      0 2017-12-19 10:10 /hgg
drwxr-xr-x - root supergroup      0 2017-12-16 11:54 /ip1
drwxr-xr-x - root supergroup      0 2017-12-16 12:01 /ip2
drwxr-xr-x - mapred supergroup    0 2017-12-13 15:16 /mapred
drwx----- - root supergroup      0 2017-12-16 11:51 /usr
drwxr-xr-x - root supergroup      0 2017-12-16 11:41 /wordcount
```

4. Create a sample file (eg: sample.txt) in any of the directories created above.

Ans. [root@localhost /]# `hadoop fs -touchz /Hadoopfs/sample.txt`

5. Copy a file from local file system to one of the directories created on HDFS. (This process of copying file from local file system to HDFS called as Uploading files to HDFS).

Ans. [root@master Desktop]# `hadoop fs -put Installing\ Pig\ And\ Hive.pdf /Hadoopfs`

6. View the uploaded file.

Ans. [root@master Desktop]# `hadoop fs -ls /Hadoopfs`

Found 2 items

```
-rw-r--r--  1 root supergroup    884385 2017-12-19 10:30 /Hadoopfs/Installing Pig And
Hive.pdf
-rw-r--r--  1 root supergroup      0 2017-12-19 10:25 /Hadoopfs/sample.txt
```

7. Copy one more file from local file system to HDFS to another directory created.

Ans. [root@localhost /]# hadoop fs -put data.txt /Hadp

8. Copy a file from HDFS to local file system (This is called as Downloading a file from HDFS to local file system).

Ans. [root@localhost /]# hadoop fs -get 64\ bit\ -\ Hadoop\ Install\ Process.pdf /Hadp

9. Look at the contents in the file that is uploaded on HDFS.

Ans. [root@localhost /]# hadoop fs -cat /Hadp/data.txt

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10. Copy the file from one directory to another directory in HDFS.

Ans. [root@localhost /]# hadoop fs -cp /Hadp/data.txt /Hadoopfs

11. Move the file from one directory to another directory in HDFS.

Ans. [root@localhost /]# hadoop fs -mv /Hadoopfs/data.txt /hgg

12. Copy a file from/To Local file system to HDFS. Use copyFromLocal and copyToLocal commands

Ans. [root@localhost /]# hadoop fs -copyFromLocal Labs.txt /

[root@localhost /]# hadoop fs -copyToLocal /Hadoopfs/sample.txt

13. Display last few lines from the file in HDFS.

Ans. [root@localhost /]# hadoop fs -tail /Labs.txt

1. Install and configure pig and hive on a given Hadoop environment.

2. Write a java mapreduce program to count the number of word occurrence in a document.

14. Display the size of the file in KB and MB in the HDFS.

Ans. [root@localhost /]# hadoop fs -du -h /Hadoopfs/Installing*.pdf

863.7 K /Hadoopfs/Installing Pig And Hive.pdf

15. Append a file from Local File to system to file on HDFS

Ans. [root@localhost /]# hadoop fs -appendToFile /Labs.txt

16. Merge two file contents (files present on HDFS) in to one file (this file should be present on Local file system)

Ans. [root@localhost /]# hadoop fs -cat /Labs.txt /Labs.txt | hadoop fs -put - /dataopllll.txt

17. Get Access Control Lists (ACL's) of the files and directories created.

Ans. [root@localhost /]#hdfs dfs –getfacl [-R] /Labs.txt

18. Copy one directory structure to another.

Ans. [root@localhost /]# hadoop fs -cp /Hdp /hgg

19. Set the replication to the file created to 4

Ans. [root@localhost /]# hadoop fs -setrep 4 /Labs.txt

Replication 4 set: /Labs.txt

[root@localhost /]# hadoop fs -ls /Labs.txt

Found 1 items

-rw-r--r-- 4 root supergroup 159 2017-12-19 11:13 /Labs.txt

20. Remove a file from the directory in HDFS.

Ans. [root@localhost /]# hadoop fs -rm /Labs.txt

Deleted /Labs.txt

21. Remove a directory in HDFS.

Ans. [root@localhost /]# hadoop fs -rmdir /Hdp