

Hadoop Basic Commands

1) help HDFS Shell Command

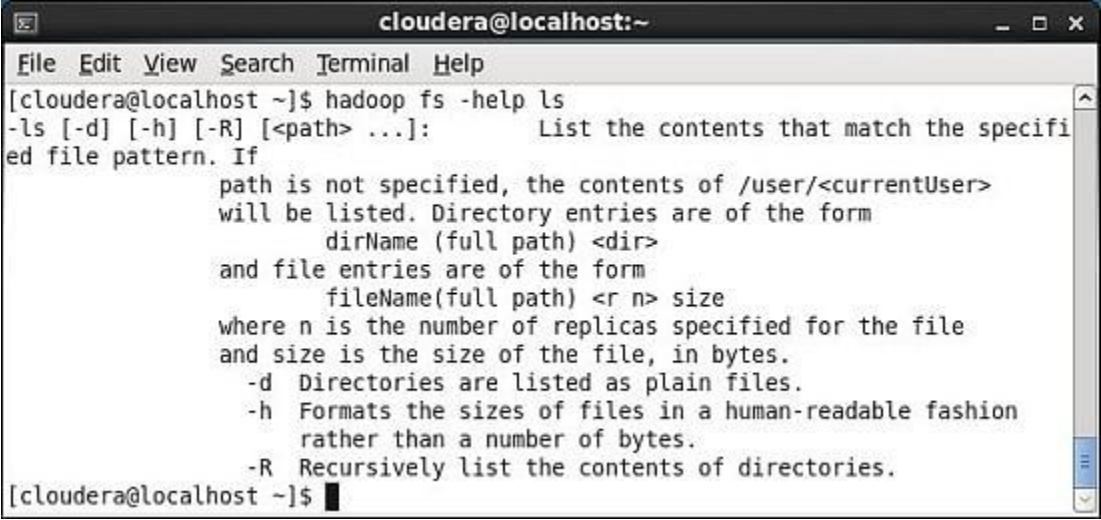
Syntax of help hdfs Command

```
$ hadoop fs -help
```

Help hdfs shell command helps hadoop developers figure out all the available hadoop commands and how to use them.

```
$ hadoop fs -help ls
```

Using the help command with a specific command lists the usage information along with the options to use the command.

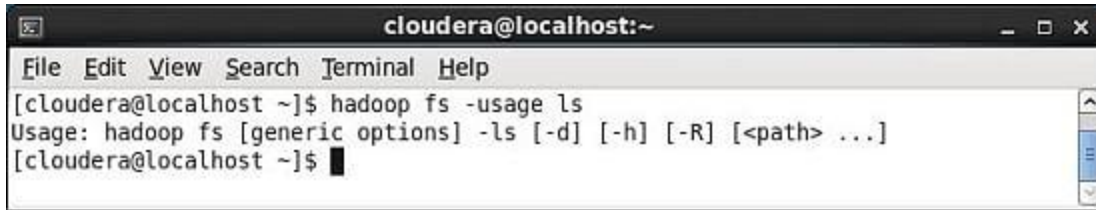


```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -help ls  
-ls [-d] [-h] [-R] [<path> ...]:      List the contents that match the specifi  
ed file pattern. If  
    path is not specified, the contents of /user/<currentUser>  
    will be listed. Directory entries are of the form  
        dirName (full path) <dir>  
    and file entries are of the form  
        fileName(full path) <r n> size  
    where n is the number of replicas specified for the file  
    and size is the size of the file, in bytes.  
    -d Directories are listed as plain files.  
    -h Formats the sizes of files in a human-readable fashion  
        rather than a number of bytes.  
    -R Recursively list the contents of directories.  
[cloudera@localhost ~]$
```

2) Usage HDFS Shell Command

```
$ hadoop fs -usage ls
```

Usage command gives all the options that can be used with a particular hdfs command.



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -usage ls  
Usage: hadoop fs [generic options] -ls [-d] [-h] [-R] [<path> ...]  
[cloudera@localhost ~]$
```

3) ls HDFS Shell Command

Syntax for ls Hadoop Command -

\$ hadoop fs -ls

This command will list all the available files and subdirectories under default directory. For instance, in our example the default directory for Cloudera VM is /user/cloudera



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -ls  
Found 4 items  
drwx----- - cloudera cloudera      0 2016-09-06 19:00 .staging  
drwxr-xr-x - cloudera cloudera      0 2016-09-06 18:50 Input  
drwxr-xr-x - cloudera cloudera      0 2016-09-06 19:00 Output  
drwxr-xr-x - cloudera cloudera      0 2016-08-25 19:53 tweets  
[cloudera@localhost ~]$
```

Variations of Hadoop ls Shell Command

\$ hadoop fs -ls /

Returns all the available files and subdirectories present under the root directory.

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -ls /  
Found 5 items  
drwxr-xr-x - hbase hbase 0 2013-10-07 08:19 /hbase  
drwxr-xr-x - solr solr 0 2013-10-07 08:18 /solr  
drwxrwxrwx - hdfs supergroup 0 2013-10-07 08:18 /tmp  
drwxr-xr-x - hdfs supergroup 0 2013-10-07 08:20 /user  
drwxr-xr-x - hdfs supergroup 0 2013-10-07 08:18 /var  
[cloudera@localhost ~]$
```

\$ hadoop fs -ls -R /user/cloudera

Returns all the available files and recursively lists all the subdirectories under /user/Cloudera

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -ls -R /user/cloudera  
drwx----- - cloudera cloudera 0 2016-09-06 19:00 /user/cloudera/.sta  
ging  
drwxr-xr-x - cloudera cloudera 0 2016-09-06 18:50 /user/cloudera/Inpu  
t  
-rw-r--r-- 3 cloudera cloudera 3291648 2016-09-06 18:50 /user/cloudera/Inpu  
t/war_and_peace  
drwxr-xr-x - cloudera cloudera 0 2016-09-06 19:00 /user/cloudera/Outp  
ut  
-rw-r--r-- 3 cloudera cloudera 0 2016-09-06 19:00 /user/cloudera/Outp  
ut/SUCCESS  
drwxr-xr-x - cloudera cloudera 0 2016-09-06 18:57 /user/cloudera/Outp  
ut/logs  
drwxr-xr-x - cloudera cloudera 0 2016-09-06 19:00 /user/cloudera/Outp  
ut/logs/history  
-rw-r--r-- 3 cloudera cloudera 23558 2016-09-06 19:00 /user/cloudera/Outp  
ut/logs/history/job_201609061101_0001 1473213466855 cloudera_WordCount  
-rw-r--r-- 3 cloudera cloudera 75212 2016-09-06 18:57 /user/cloudera/Outp  
ut/logs/history/job_201609061101_0001 conf.xml  
-rw-r--r-- 3 cloudera cloudera 467842 2016-09-06 19:00 /user/cloudera/Outp  
ut/part-00000  
drwxr-xr-x - cloudera cloudera 0 2016-08-25 19:53 /user/cloudera/twee  
ts  
-rw-r--r-- 3 cloudera cloudera 2464 2016-08-25 19:53 /user/cloudera/twee  
ts/flume-twitter-partioned.conf  
-rw-r--r-- 3 cloudera cloudera 1369 2016-08-25 19:53 /user/cloudera/twee  
ts/flume.conf  
-rw-r--r-- 3 cloudera cloudera 1487 2016-08-25 19:53 /user/cloudera/twee  
ts/twitter-part.conf  
[cloudera@localhost ~]$
```

4) mkdir- Used to create a new directory in HDFS at a given location.

Example of HDFS mkdir Command -

```
$ hadoop fs -mkdir /user/cloudera/dezyre1
```

The above command will create a new directory named dezyre1 under the location /user/cloudera

A terminal window titled 'cloudera@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The command '[cloudera@localhost ~]\$ hadoop fs -mkdir /user/cloudera/dezyre1' is entered and executed, followed by a new prompt line '[cloudera@localhost ~]\$'.

Note : Cloudera and other [hadoop distribution vendors](#) provide /user/ directory with read/write permission to all users but other directories are available as read-only. Thus, to create a folder in the root directory, users require superuser permission as shown below -

```
$ sudo -u hdfs hadoop fs -mkdir /dezyre
```

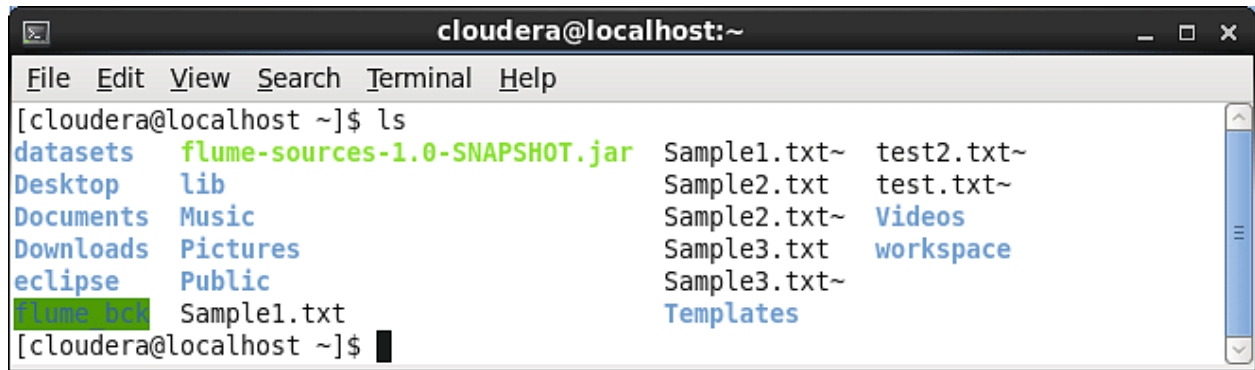
This command will create a new directory named dezyre under the / (root directory).

A terminal window titled 'cloudera@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The command '[cloudera@localhost ~]\$ sudo -u hdfs hadoop fs -mkdir /dezyre' is entered and executed, followed by a new prompt line '[cloudera@localhost ~]\$'.

5) copyFromLocal

Copy a file from local filesystem to HDFS location.

For the following examples, we will use Sample.txt file available in the /home/Cloudera location.



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ ls  
datasets      flume-sources-1.0-SNAPSHOT.jar  Sample1.txt~  test2.txt~  
Desktop       lib                               Sample2.txt   test.txt~  
Documents     Music                           Sample2.txt~  Videos  
Downloads     Pictures                        Sample3.txt   workspace  
eclipse       Public                          Sample3.txt~  
Flume hck     Sample1.txt                     Templates  
[cloudera@localhost ~]$
```

Example - \$ `hadoop fs -copyFromLocal Sample1.txt /user/cloudera/dezyre1`

Copy/Upload Sample1.txt available in /home/cloudera (local default) to /user/cloudera/dezyre1 (hdfs path)



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -copyFromLocal Sample1.txt /user/cloudera/dezyre1  
[cloudera@localhost ~]$
```

6) put –

This hadoop command uploads a single file or multiple source files from local file system to hadoop distributed file system (HDFS).

Ex - \$ `hadoop fs -put Sample2.txt /user/cloudera/dezyre1`

Copy/Upload Sample2.txt available in /home/cloudera (local default) to /user/cloudera/dezyre1 (hdfs path)

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -put Sample2.txt /user/cloudera/dezyre1  
[cloudera@localhost ~]$
```

7) moveFromLocal

This hadoop command functions similar to the put command but the source file will be deleted after copying.

Example - `$ hadoop fs -moveFromLocal Sample3.txt /user/cloudera/dezyre1`

Move Sample3.txt available in /home/cloudera (local default) to /user/cloudera/dezyre1 (hdfs path). Source file will be deleted after moving.

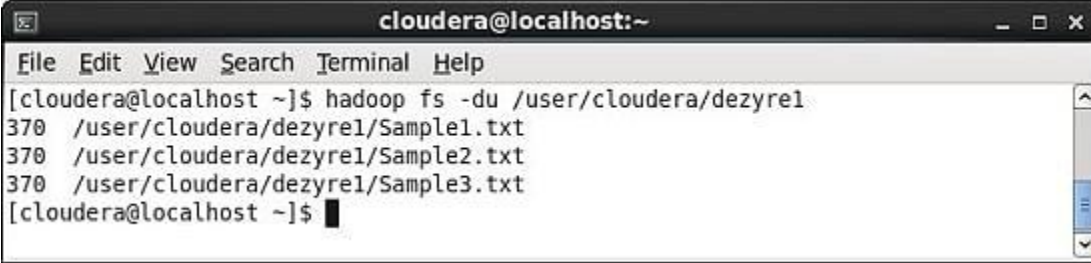
```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -moveFromLocal Sample3.txt /user/cloudera/dezyre1  
[cloudera@localhost ~]$
```

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ ls  
datasets  eclipse  Music  Sample1.txt~  Videos  
Desktop    flume-sources-1.0-SNAPSHOT.jar  Pictures  Sample2.txt  workspace  
Documents  lib      Public  Sample2.txt~  
Downloads  Sample1.txt  Templates  
[cloudera@localhost ~]$
```

8) du

Displays the disk usage for all the files available under a given directory.

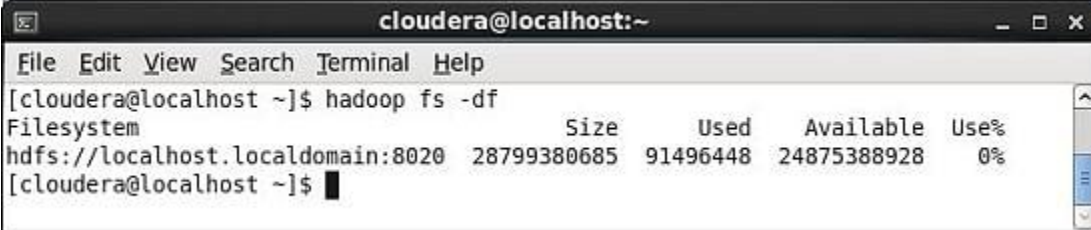
Example - \$ `hadoop fs -du /user/cloudera/dezyre1`



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -du /user/cloudera/dezyre1  
370 /user/cloudera/dezyre1/Sample1.txt  
370 /user/cloudera/dezyre1/Sample2.txt  
370 /user/cloudera/dezyre1/Sample3.txt  
[cloudera@localhost ~]$
```

9) Display disk usage of current hadoop distributed file system.

Example - \$ `hadoop fs -df`



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -df  
Filesystem              Size      Used    Available  Use%  
hdfs://localhost.localdomain:8020 28799380685 91496448 24875388928    0%  
[cloudera@localhost ~]$
```

10) Expunge

This HDFS command empties the trash by deleting all the files and directories.

Example - \$ `hadoop fs -expunge`

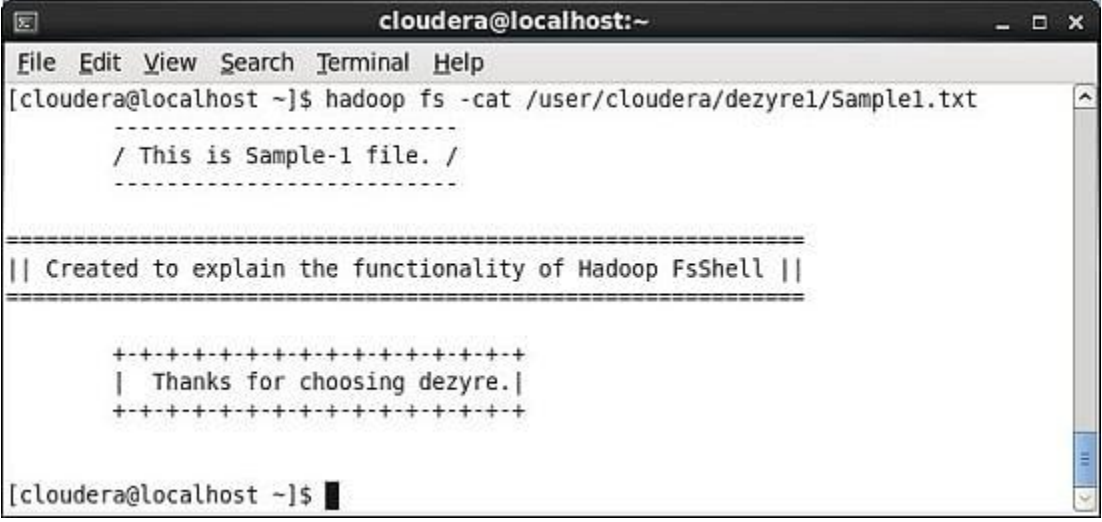


```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -expunge  
[cloudera@localhost ~]$
```

11) Cat

This is similar to the cat command in Unix and displays the contents of a file.

Example - `$ hadoop fs -cat /user/cloudera/dezyre1/Sample1.txt`



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -cat /user/cloudera/dezyre1/Sample1.txt  
-----  
/ This is Sample-1 file. /  
-----  
|| Created to explain the functionality of Hadoop FsShell ||  
-----  
+---+---+---+---+---+---+---+---+---+  
| Thanks for choosing dezyre. |  
+---+---+---+---+---+---+---+---+---+  
[cloudera@localhost ~]$
```

12) cp

Copy files from one HDFS location to another HDFS location.

Example – `$ hadoop fs -cp /user/cloudera/dezyre/war_and_peace /user/cloudera/dezyre1/`


```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -cp /user/cloudera/dezyre/war_and_peace /user/  
cloudera/dezyre1/  
[cloudera@localhost ~]$
```

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -ls /user/cloudera/dezyre  
Found 1 items  
-rw-r--r--  3 cloudera cloudera    3291648 2016-09-29 14:19 /user/cloudera/dezy  
re/war_and_peace  
[cloudera@localhost ~]$
```

13) mv

Move files from one HDFS location to another HDFS location.

Example – \$ hadoop fs -mv /user/cloudera/dezyre1/Sample1.txt /user/cloudera/dezyre/

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -ls /user/cloudera/dezyre1  
Found 4 items  
-rw-r--r--  3 cloudera cloudera    370 2016-09-29 13:14 /user/cloudera/dezy  
re1/Sample1.txt  
-rw-r--r--  3 cloudera cloudera    370 2016-09-29 13:16 /user/cloudera/dezy  
re1/Sample2.txt  
-rw-r--r--  3 cloudera cloudera    370 2016-09-29 13:17 /user/cloudera/dezy  
re1/Sample3.txt  
-rw-r--r--  3 cloudera cloudera   3291648 2016-09-29 14:22 /user/cloudera/dezy  
re1/war_and_peace  
[cloudera@localhost ~]$
```

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -ls /user/cloudera/dezyre  
Found 1 items  
-rw-r--r--  3 cloudera cloudera    3291648 2016-09-29 14:19 /user/cloudera/dezyre/war_and_peace  
[cloudera@localhost ~]$
```

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -mv /user/cloudera/dezyre1/Sample1.txt /user/cloudera/dezyre/  
[cloudera@localhost ~]$
```

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -ls /user/cloudera/dezyre  
Found 2 items  
-rw-r--r--  3 cloudera cloudera      370 2016-09-29 13:14 /user/cloudera/dezyre/Sample1.txt  
-rw-r--r--  3 cloudera cloudera    3291648 2016-09-29 14:19 /user/cloudera/dezyre/war_and_peace  
[cloudera@localhost ~]$
```

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -ls /user/cloudera/dezyre1  
Found 3 items  
-rw-r--r--  3 cloudera cloudera      370 2016-09-29 13:16 /user/cloudera/dezyre1/Sample2.txt  
-rw-r--r--  3 cloudera cloudera      370 2016-09-29 13:17 /user/cloudera/dezyre1/Sample3.txt  
-rw-r--r--  3 cloudera cloudera    3291648 2016-09-29 14:22 /user/cloudera/dezyre1/war_and_peace  
[cloudera@localhost ~]$
```

14) rm

Removes the file or directory from the mentioned HDFS location.

Example – \$ `hadoop fs -rm -r /user/cloudera/dezyre3`

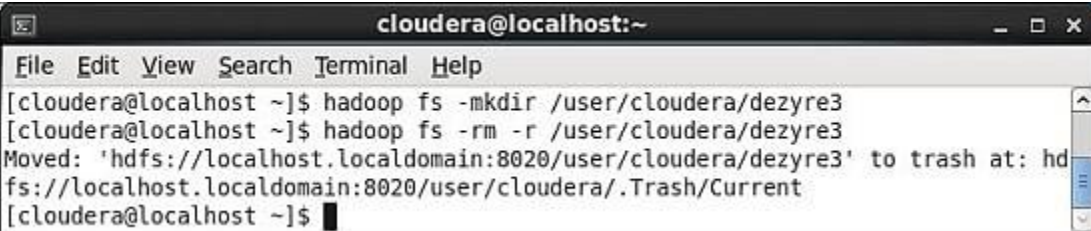


```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -mkdir /user/cloudera/dezyre3  
[cloudera@localhost ~]$ hadoop fs -rm -r /user/cloudera/dezyre3  
Moved: 'hdfs://localhost.localdomain:8020/user/cloudera/dezyre3' to trash at: hdfs://localhost.localdomain:8020/user/cloudera/.Trash/Current  
[cloudera@localhost ~]$
```

rm -r

Example – \$ `hadoop fs -rm -r /user/cloudera/dezyre3`

Deletes or removes the directory and its content from HDFS location in a recursive manner.



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -mkdir /user/cloudera/dezyre3  
[cloudera@localhost ~]$ hadoop fs -rm -r /user/cloudera/dezyre3  
Moved: 'hdfs://localhost.localdomain:8020/user/cloudera/dezyre3' to trash at: hdfs://localhost.localdomain:8020/user/cloudera/.Trash/Current  
[cloudera@localhost ~]$
```

Example – \$ `hadoop fs -rm /user/cloudera/dezyre1`

Delete or remove the files from HDFS location.

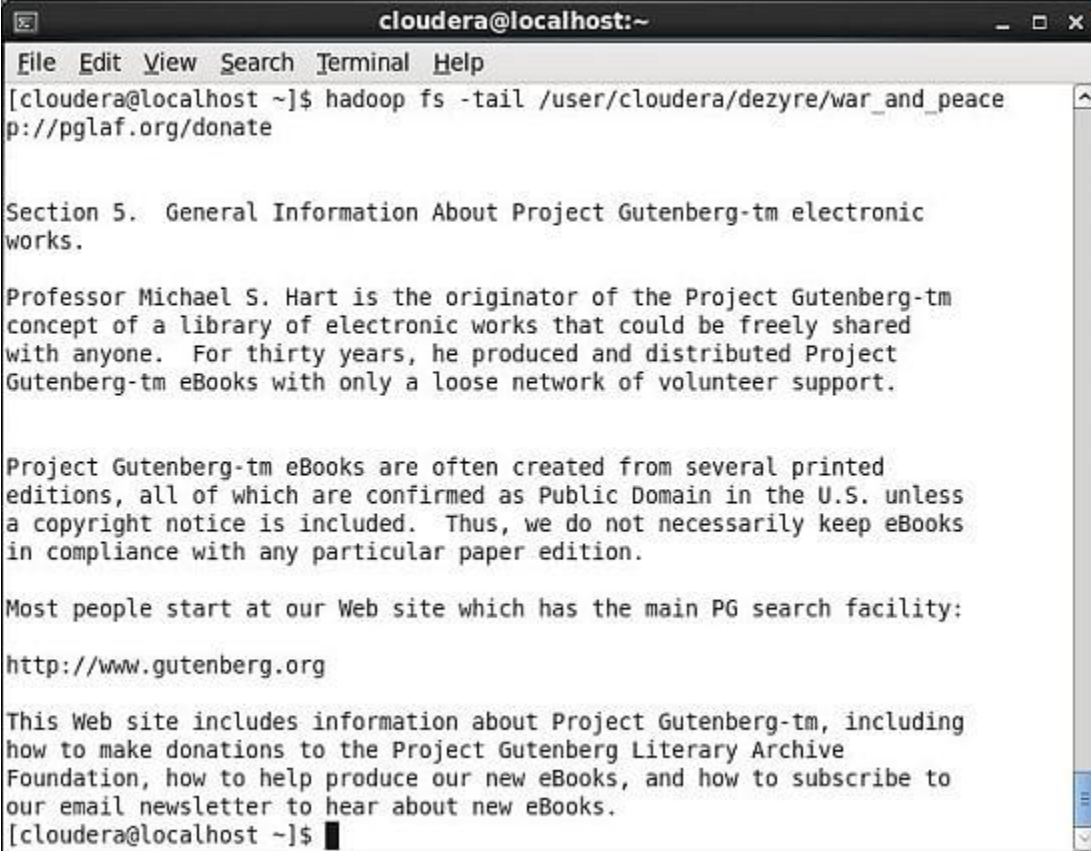


```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -rm /user/cloudera/dezyre1/war_and_peace  
Moved: 'hdfs://localhost.localdomain:8020/user/cloudera/dezyre1/war_and_peace' to trash at: hdfs://localhost.localdomain:8020/user/cloudera/.Trash/Current  
[cloudera@localhost ~]$
```

15) tail

This hadoop command will show the last kilobyte of the file to stdout.

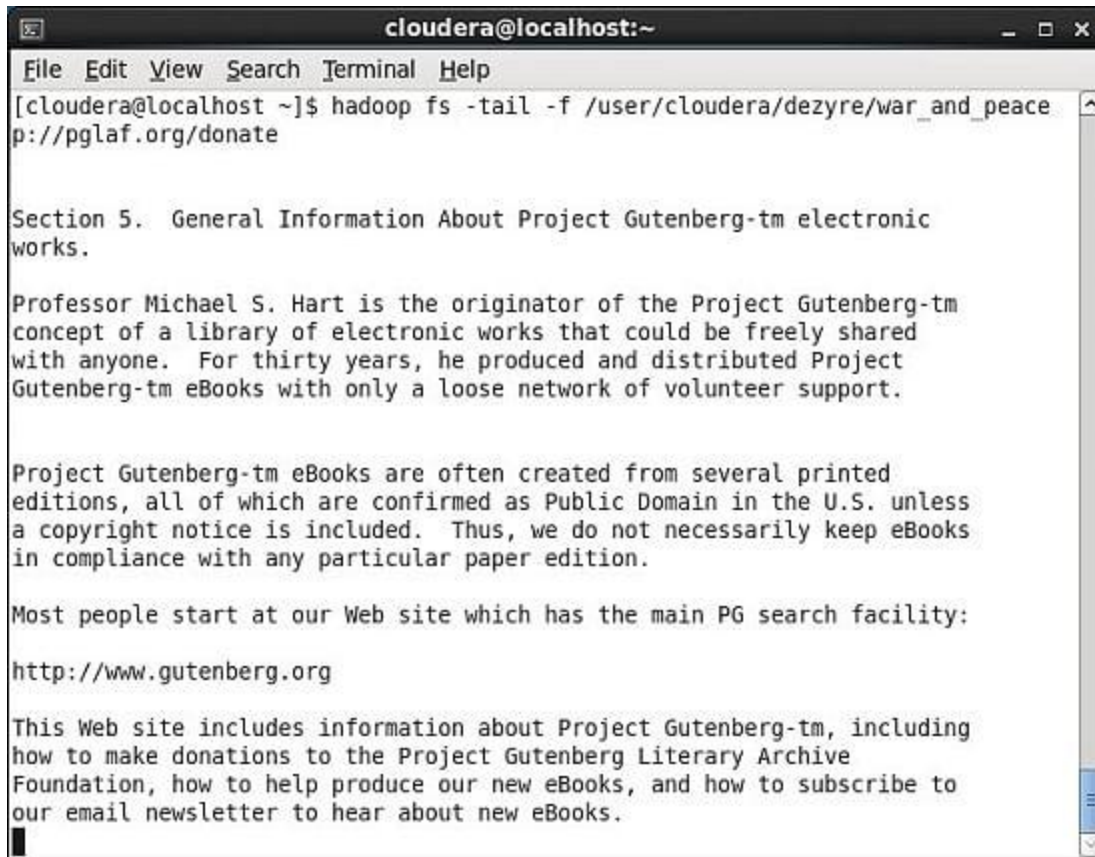
Example – `$ hadoop fs -tail /user/cloudera/dezyre/war_and_peace`



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -tail /user/cloudera/dezyre/war_and_peace  
p://pglaf.org/donate  
  
Section 5. General Information About Project Gutenberg-tm electronic  
works.  
  
Professor Michael S. Hart is the originator of the Project Gutenberg-tm  
concept of a library of electronic works that could be freely shared  
with anyone. For thirty years, he produced and distributed Project  
Gutenberg-tm eBooks with only a loose network of volunteer support.  
  
Project Gutenberg-tm eBooks are often created from several printed  
editions, all of which are confirmed as Public Domain in the U.S. unless  
a copyright notice is included. Thus, we do not necessarily keep eBooks  
in compliance with any particular paper edition.  
  
Most people start at our Web site which has the main PG search facility:  
  
http://www.gutenberg.org  
  
This Web site includes information about Project Gutenberg-tm, including  
how to make donations to the Project Gutenberg Literary Archive  
Foundation, how to help produce our new eBooks, and how to subscribe to  
our email newsletter to hear about new eBooks.  
[cloudera@localhost ~]$
```

Example – `$ hadoop fs -tail -f /user/cloudera/dezyre/war_and_peace`

Using the tail commands with -f option, shows the last kilobyte of the file from end in a page wise format.

A screenshot of a terminal window titled 'cloudera@localhost:~'. The terminal shows the command '[cloudera@localhost ~]\$ hadoop fs -tail -f /user/cloudera/dezyre/war_and_peace p://pglaf.org/donate' and its output. The output is a text file from Project Gutenberg, specifically 'Section 5. General Information About Project Gutenberg-tm electronic works.' It mentions Professor Michael S. Hart as the originator of the Project Gutenberg-tm concept and describes the project's mission to provide free access to electronic works. It also mentions that eBooks are often created from several printed editions and that the project does not necessarily keep eBooks in compliance with any particular paper edition. The text concludes with a link to the Project Gutenberg website: 'http://www.gutenberg.org' and a brief description of the website's content. The terminal window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The output text is as follows:

```
Section 5. General Information About Project Gutenberg-tm electronic
works.

Professor Michael S. Hart is the originator of the Project Gutenberg-tm
concept of a library of electronic works that could be freely shared
with anyone. For thirty years, he produced and distributed Project
Gutenberg-tm eBooks with only a loose network of volunteer support.


Project Gutenberg-tm eBooks are often created from several printed
editions, all of which are confirmed as Public Domain in the U.S. unless
a copyright notice is included. Thus, we do not necessarily keep eBooks
in compliance with any particular paper edition.


Most people start at our Web site which has the main PG search facility:

http://www.gutenberg.org

This Web site includes information about Project Gutenberg-tm, including
how to make donations to the Project Gutenberg Literary Archive
Foundation, how to help produce our new eBooks, and how to subscribe to
our email newsletter to hear about new eBooks.
```

16) copyToLocal: Copies the files to the local filesystem . This is similar to hadoop fs -get

command but in this case the destination location must be a local file reference

Example - \$ hadoop fs -copyFromLocal /user/cloudera/dezyre1/Sample1.txt
/home/cloudera/hdfs_bkp/

Copy/Download Sample1.txt available in /user/cloudera/dezyre1 (hdfs path) to
/home/cloudera/hdfs_bkp/ (local path)


```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -copyToLocal /user/cloudera/dezyre1/Sample1.txt /home/cloudera/hdfs_bkp/  
[cloudera@localhost ~]$ ls -l /home/cloudera/hdfs_bkp/  
total 4  
-rwxr-xr-x 1 cloudera cloudera 370 Oct 13 18:59 Sample1.txt  
[cloudera@localhost ~]$
```

17) get

Downloads or Copies the files to the local filesystem.

Example - \$ hadoop fs -get /user/cloudera/dezyre1/Sample2.txt /home/cloudera/hdfs_bkp/

Copy/Download Sample2.txt available in /user/cloudera/dezyre1 (hdfs path) to /home/cloudera/hdfs_bkp/ (local path)

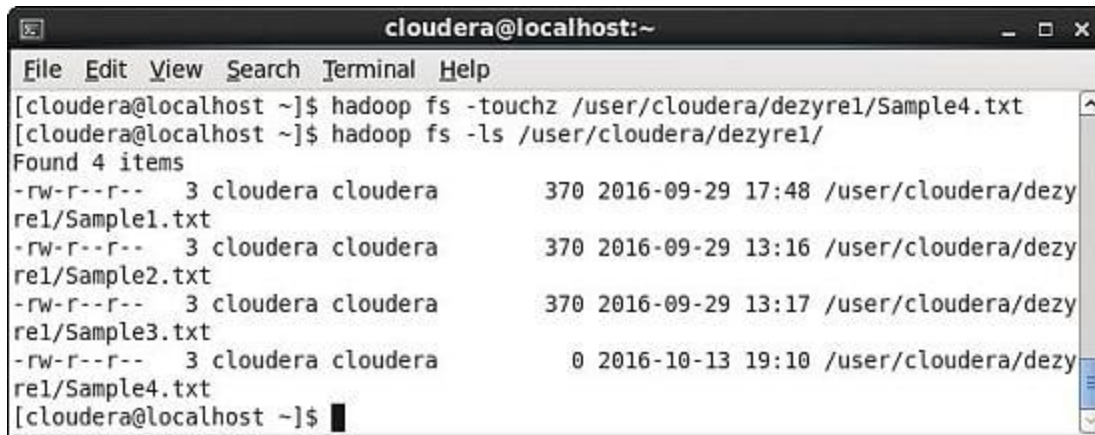
```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -get /user/cloudera/dezyre1/Sample2.txt /home/cloudera/hdfs_bkp/  
[cloudera@localhost ~]$ ls -l /home/cloudera/hdfs_bkp/  
total 8  
-rwxr-xr-x 1 cloudera cloudera 370 Oct 13 18:59 Sample1.txt  
-rwxr-xr-x 1 cloudera cloudera 370 Oct 13 19:00 Sample2.txt  
[cloudera@localhost ~]$
```

18) touchz

Used to create an empty file at the specified location.

Example - \$ hadoop fs -touchz /user/cloudera/dezyre1/Sample4.txt

It will create a new empty file Sample4.txt in /user/cloudera/dezyre1/ (hdfs path)



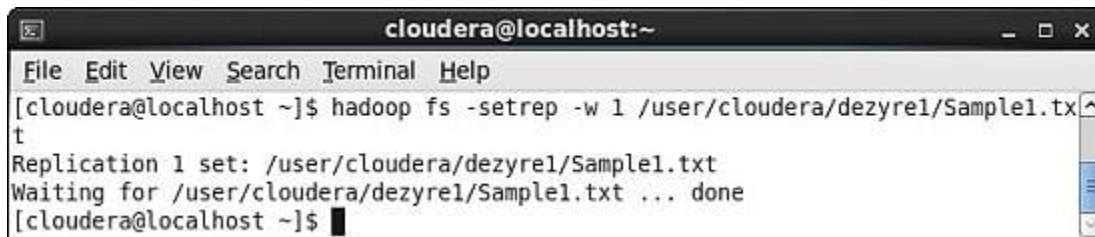
```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -touchz /user/cloudera/dezyrel/Sample4.txt  
[cloudera@localhost ~]$ hadoop fs -ls /user/cloudera/dezyrel/  
Found 4 items  
-rw-r--r--  3 cloudera cloudera      370 2016-09-29 17:48 /user/cloudera/dezy  
rel/Sample1.txt  
-rw-r--r--  3 cloudera cloudera      370 2016-09-29 13:16 /user/cloudera/dezy  
rel/Sample2.txt  
-rw-r--r--  3 cloudera cloudera      370 2016-09-29 13:17 /user/cloudera/dezy  
rel/Sample3.txt  
-rw-r--r--  3 cloudera cloudera        0 2016-10-13 19:10 /user/cloudera/dezy  
rel/Sample4.txt  
[cloudera@localhost ~]$
```

19) setrep

This hadoop fs command is used to set the replication for a specific file.

Example - \$ hadoop fs -setrep -w 1 /user/cloudera/dezyrel/Sample1.txt

It will set the replication factor of Sample1.txt to 1



```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -setrep -w 1 /user/cloudera/dezyrel/Sample1.tx  
t  
Replication 1 set: /user/cloudera/dezyrel/Sample1.txt  
Waiting for /user/cloudera/dezyrel/Sample1.txt ... done  
[cloudera@localhost ~]$
```

20) chgrp

This hadoop command is basically used to change the group name.

Example - \$ sudo -u hdfs hadoop fs -chgrp -R cloudera /dezyre

It will change the /dezyre directory group membership from supergroup to cloudera (To perform this operation superuser permission is required)

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ sudo -u hdfs hadoop fs -mkdir /dezyre  
[cloudera@localhost ~]$ hadoop fs -ls /  
Found 6 items  
drwxr-xr-x - hdfs supergroup      0 2016-10-13 19:21 /dezyre  
drwxr-xr-x - hbase hbase          0 2013-10-07 08:19 /hbase  
drwxr-xr-x - solr solr            0 2013-10-07 08:18 /solr  
drwxrwxrwx - hdfs supergroup      0 2013-10-07 08:18 /tmp  
drwxr-xr-x - hdfs supergroup      0 2016-10-13 19:20 /user  
drwxr-xr-x - hdfs supergroup      0 2013-10-07 08:18 /var  
[cloudera@localhost ~]$
```

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ sudo -u hdfs hadoop fs -chgrp -R cloudera /dezyre  
[cloudera@localhost ~]$ hadoop fs -ls /dezyre  
[cloudera@localhost ~]$ hadoop fs -ls /  
Found 6 items  
drwxr-xr-x - hdfs cloudera      0 2016-10-13 19:21 /dezyre  
drwxr-xr-x - hbase hbase          0 2013-10-07 08:19 /hbase  
drwxr-xr-x - solr solr            0 2013-10-07 08:18 /solr  
drwxrwxrwx - hdfs supergroup      0 2013-10-07 08:18 /tmp  
drwxr-xr-x - hdfs supergroup      0 2016-10-13 19:20 /user  
drwxr-xr-x - hdfs supergroup      0 2013-10-07 08:18 /var  
[cloudera@localhost ~]$
```

21) chown

This command lets you change both the owner and group name simultaneously.

Example - `$ sudo -u hdfs hadoop fs -chown -R cloudera /dezyre`

It will change the /dezyre directory ownership from hdfs user to cloudera user (To perform this operation superuser is permission required)

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ sudo -u hdfs hadoop fs -chown -R cloudera /dezyre  
[cloudera@localhost ~]$ hadoop fs -ls /  
Found 6 items  
drwxr-xr-x - cloudera cloudera          0 2016-10-13 19:21 /dezyre  
drwxr-xr-x - hbase hbase                0 2013-10-07 08:19 /hbase  
drwxr-xr-x - solr solr                  0 2013-10-07 08:18 /solr  
drwxrwxrwx - hdfs supergroup            0 2013-10-07 08:18 /tmp  
drwxr-xr-x - hdfs supergroup            0 2016-10-13 19:20 /user  
drwxr-xr-x - hdfs supergroup            0 2013-10-07 08:18 /var  
[cloudera@localhost ~]$
```

22) hadoop chmod

Used to change the permissions of a given file/dir.

Example - \$ hadoop fs -chmod /dezyre

It will change the /dezyre directory permission to 700 (drwx-----).

```
cloudera@localhost:~  
File Edit View Search Terminal Help  
[cloudera@localhost ~]$ hadoop fs -chmod 700 /dezyre  
[cloudera@localhost ~]$ hadoop fs -ls /  
Found 6 items  
drwx----- - cloudera cloudera          0 2016-10-13 19:21 /dezyre  
drwxr-xr-x - hbase hbase                0 2013-10-07 08:19 /hbase  
drwxr-xr-x - solr solr                  0 2013-10-07 08:18 /solr  
drwxrwxrwx - hdfs supergroup            0 2013-10-07 08:18 /tmp  
drwxr-xr-x - hdfs supergroup            0 2016-10-13 19:20 /user  
drwxr-xr-x - hdfs supergroup            0 2013-10-07 08:18 /var  
[cloudera@localhost ~]$
```

Note : hadoop chmod 777

Download the text to Alice's Adventures in Wonderland from <http://www.gutenberg.org/cache/epub/11/pg11.txt> and run wordcount on it. This can be done by using hadoop commands. How many times does the word Cheshire occur? (Do not include the word 'Cheshire with an apostrophe. The string -->'Cheshire<-- does not count)

```
hadoop fs -copyFromLocal alice.txt
```

```
hadoop jar /usr/jars/hadoop-examples.jar wordcount alice.txt count
```

```
hadoop fs -copyToLocal count/part-r-00000 count.txt
```

```
more local.txt
```