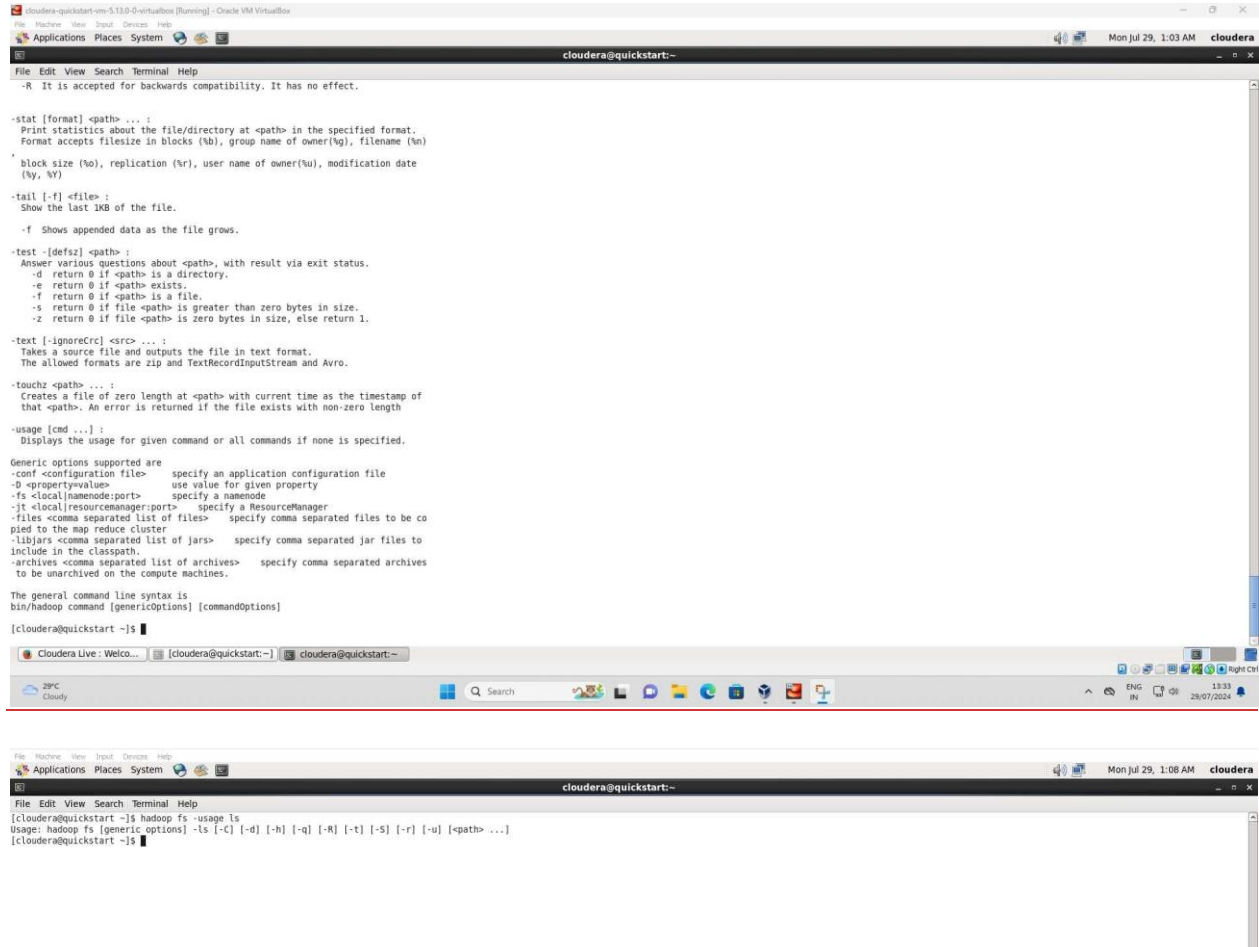


# Experiment No. 1

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Class:BE4

Roll No.09



The screenshot shows a terminal window titled "cloudera@quickstart:~" with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal displays the help text for the 'ls' command, which is part of the 'ls' utility. The text includes options like -R, -stat, -tail, -test, -text, -touchz, and -usage, along with generic options supported by the command. The terminal prompt is [cloudera@quickstart ~]\$.

```
cloudera@quickstart:~$ ls -R
-R It is accepted for backwards compatibility. It has no effect.

- stat [format] <path> ... :
  Print statistics about the file/directory at <path> in the specified format.
  Format accepts filesize in blocks (kb), group name of owner (g), filename (n)
  , block size (b), replication (r), user name of owner (u), modification date
  (y, %Y)

- tail [-f] <file> :
  Show the last 1KB of the file.

  -f Shows appended data as the file grows.

- test [-defsz] <path> :
  Answer various questions about <path>, with result via exit status.
  -d return 0 if <path> is a directory.
  -e return 0 if <path> exists.
  -f return 0 if <path> is a file.
  -s return 0 if file <path> is greater than zero bytes in size.
  -z return 0 if file <path> is zero bytes in size, else return 1.

- text [-ignoreCrc] <src> ... :
  Takes a source file and outputs the file in text format.
  The allowed formats are zip and TextRecordInputStream and Avro.

- touchz <path> ... :
  Creates a file of zero length at <path> with current time as the timestamp of
  that <path>. An error is returned if the file exists with non-zero length

- usage [cmd ...] :
  Displays the usage for given command or all commands if none is specified.

Generic options supported are
- conf <configuration file> specify an application configuration file
- D <property=value> use value for given property
- fs <local|namenode:port> specify a namenode
- jt <local|resourceManager:port> specify a ResourceManager
- files <comma separated list of files> specify comma separated files to be co
  pied to the map reduce cluster
- libjars <comma separated list of jars> specify comma separated jar files to
  include in the classpath.
- archives <comma separated list of archives> specify comma separated archives
  to be unarchived on the compute machines.

The general command line syntax is
bin/hadoop command [genericOptions] [commandOptions]

[cloudera@quickstart ~]$
```

The terminal window also shows a taskbar at the bottom with various application icons and system status information (29°C, Cloudy, 11:33 AM, 29/07/2024).

```
File Machine View Input Devices Help
Applications Places System

cloudera@quickstart:~
File Edit View Search Terminal Help
[cloudera@quickstart ~]$ hadoop fs -ls
Found 7 items
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 22:53 Sample.txt
drwxr-xr-x - cloudera cloudera 0 2024-07-16 01:48 bda
drwxr-xr-x - cloudera cloudera 0 2024-07-14 22:33 dezyrel
drwxr-xr-x - cloudera cloudera 0 2024-07-15 23:05 dezyrel1
drwxr-xr-x - cloudera cloudera 0 2024-07-18 22:42 hello
drwxr-xr-x - cloudera cloudera 0 2024-07-18 22:47 ls
drwxr-xr-x - cloudera cloudera 0 2024-07-15 23:14 sakec
[cloudera@quickstart ~]$ hadoop fs -ls /
Found 8 items
drwxrwxrwx - hdfs supergroup 0 2017-10-23 09:15 /benchmarks
drwxr-xr-x - hbase supergroup 0 2024-07-29 00:50 /hbase
drwxr-xr-x - cloudera supergroup 0 2024-07-18 22:44 /root
drwxr-xr-x - hdfs supergroup 0 2024-07-15 23:15 /sakec
drwxr-xr-x - solr solr 0 2017-10-23 09:18 /solr
drwxrwxrwt - hdfs supergroup 0 2024-07-14 22:18 /tmp
drwxr-xr-x - hdfs supergroup 0 2017-10-23 09:17 /user
drwxr-xr-x - hdfs supergroup 0 2017-10-23 09:17 /var
[cloudera@quickstart ~]$ hadoop fs -ls -R /user/cloudera
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 22:53 /user/cloudera/Sample.txt
drwxr-xr-x - cloudera cloudera 0 2024-07-16 01:48 /user/cloudera/bda
drwxr-xr-x - cloudera cloudera 0 2024-07-14 22:33 /user/cloudera/dezyrel
drwxr-xr-x - cloudera cloudera 0 2024-07-15 23:05 /user/cloudera/dezyrel1
-rw-r--r-- 1 cloudera cloudera 52 2024-07-15 23:05 /user/cloudera/dezyrel1/Sample1.txt
drwxr-xr-x - cloudera cloudera 0 2024-07-18 22:42 /user/cloudera/hello
drwxr-xr-x - cloudera cloudera 0 2024-07-18 22:47 /user/cloudera/ls
drwxr-xr-x - cloudera cloudera 0 2024-07-15 23:14 /user/cloudera/sakec
-rw-r--r-- 1 cloudera cloudera 52 2024-07-15 23:14 /user/cloudera/sakec/Sample1.txt
[cloudera@quickstart ~]$
```

```
cloudera-quickstart-vm-5.13.0-0-virtualbox [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places System

cloudera@quickstart:~
File Edit View Search Terminal Help
[cloudera@quickstart ~]$ hadoop fs -mkdir /user/cloudera/dezyrel
[cloudera@quickstart ~]$
```

```
[cloudera@quickstart ~]$ ls
cloudera-manager Desktop eclipse folder Music Public sample3.txt Videos
cm_api.py Documents enterprise-deployment.json kerberos parcels sample1.txt sample.txt workspace
data Downloads express-deployment.json lib Pictures sample2.txt Templates
[cloudera@quickstart ~]$ hadoop fs -copyFromLocal sample1.txt /user/cloudera/dezyrel
[cloudera@quickstart ~]$ hadoop fs -moveFromLocal sample3.txt /user/cloudera/dezyrel
bash: hadoop: command not found
[cloudera@quickstart ~]$ hadoop fs -moveFromLocal sample3.txt /user/cloudera/dezyrel
[cloudera@quickstart ~]$ ls
cloudera-manager data Documents eclipse express-deployment.json kerberos Music Pictures sample1.txt sample.txt Videos
cm_api.py Desktop Downloads enterprise-deployment.json folder lib parcels Public sample2.txt Templates workspace
[cloudera@quickstart ~]$ hadoop fs -du /user/cloudera/dezyrel
0 0 /user/cloudera/dezyrel/sample.txt
0 0 /user/cloudera/dezyrel/sample1.txt
0 0 /user/cloudera/dezyrel/sample3.txt
[cloudera@quickstart ~]$ hadoop fs -df
Filesystem Size Used Available Use%
hdfs://quickstart.cloudera:8020 58531520512 872669184 45669336588 1%
[cloudera@quickstart ~]$

[cloudera@quickstart ~]$ hadoop fs -df
Filesystem Size Used Available Use%
hdfs://quickstart.cloudera:8020 58531520512 872669184 45669336588 1%
[cloudera@quickstart ~]$ hadoop fs -cat /user/cloudera/dezyrel/sample1.txt
[cloudera@quickstart ~]$ hadoop fs -cat /user/cloudera/dezyrel/sample1.txt
```

-----  
THIS IS A SAMPLE FILE  
-----

```
[cloudera@quickstart ~]$ hadoop fs -ls /user/cloudera/dezyrel
Found 3 items
-rw-r--r--  1 cloudera cloudera      0 2024-08-05 00:59 /user/cloudera/dezyrel/sample.txt
-rw-r--r--  1 cloudera cloudera      0 2024-08-05 01:05 /user/cloudera/dezyrel/sample1.txt
-rw-r--r--  1 cloudera cloudera      0 2024-08-05 01:10 /user/cloudera/dezyrel/sample3.txt
[cloudera@quickstart ~]$ hadoop fs -ls /user/cloudera/dezyre
[cloudera@quickstart ~]$ hadoop fs -mv /user/cloudera/dezyrel/sample1.txt /user/cloudera/dezyre/
[cloudera@quickstart ~]$
[cloudera@quickstart ~]$ hadoop fs -ls /user/cloudera/dezyre
Found 1 items
-rw-r--r--  1 cloudera cloudera      0 2024-08-05 01:05 /user/cloudera/dezyre/sample1.txt

[cloudera@quickstart ~]$ hadoop fs -mkdir /home/cloudera/hdfs_bkp
mkdir: `/home/cloudera/hdfs_bkp': No such file or directory
[cloudera@quickstart ~]$ hadoop fs -mkdir /user/cloudera/hdfs_bkp
[cloudera@quickstart ~]$ hadoop fs -copyToLocal /user/cloudera/dezyrel/sample.txt /home/cloudera/hdfs_bkp
[cloudera@quickstart ~]$ ls -l /home/cloudera/hdfs_bkp
-rw-r--r--  1 cloudera cloudera 0 Aug  5 01:37 /home/cloudera/hdfs_bkp
[cloudera@quickstart ~]$ hadoop fs -touchz /user/cloudera/dezyrel/sample2.txt
[cloudera@quickstart ~]$ hadoop fs -touchz /user/cloudera/dezyrel/Sample4.txt
[cloudera@quickstart ~]$ hadoop fs -ls /user/cloudera/dezyrel/
Found 4 items
-rw-r--r--  1 cloudera cloudera      0 2024-08-05 01:41 /user/cloudera/dezyrel/Sample2.txt
-rw-r--r--  1 cloudera cloudera      0 2024-08-05 01:41 /user/cloudera/dezyrel/Sample4.txt
-rw-r--r--  1 cloudera cloudera    86 2024-08-05 01:01 /user/cloudera/dezyrel/emp_data.txt
-rw-r--r--  1 cloudera cloudera      0 2024-08-05 00:57 /user/cloudera/dezyrel/sample.txt
[cloudera@quickstart ~]$ S
```

```

File Edit View Search Terminal Help
[cloudera@quickstart ~]$ sudo -u hdfs hadoop fs -mkdir /dezyre
mkdir: '/dezyre': File exists
[cloudera@quickstart ~]$ sudo -u hdfs hadoop fs -mkdir /dezyre3
[cloudera@quickstart ~]$ hadoop fs -ls
Found 8 items
drwxr-xr-x - cloudera cloudera 0 2024-07-18 22:42 abd
drwxr-xr-x - cloudera cloudera 0 2024-07-18 22:41 bda
drwxr-xr-x - cloudera cloudera 0 2024-07-29 22:48 departments
drwxr-xr-x - cloudera cloudera 0 2024-08-05 01:41 dezyrel
drwxr-xr-x - cloudera cloudera 0 2024-07-15 22:46 dezyrel1
drwxr-xr-x - cloudera cloudera 0 2024-08-05 01:35 hdfs bkp
drwxr-xr-x - cloudera cloudera 0 2024-07-18 22:43 hello
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 22:52 sample1.txt
[cloudera@quickstart ~]$ sudo -u hdfs hadoop fs -chgrp -R cloudera/dezyre3
-chgrp: Not enough arguments: expected 2 but got 1
Usage: hadoop fs [generic options] -chgrp [-R] GROUP PATH...
[cloudera@quickstart ~]$ sudo -u hdfs hadoop fs -chgrp -R cloudera /dezyre3
[cloudera@quickstart ~]$ hadoop fs -ls /dezyre3
[cloudera@quickstart ~]$ hadoop fs -ls /
Found 11 items
drwxrwxrwx - hdfs supergroup 0 2017-10-23 09:15 /benchmarks
drwxr-xr-x - hdfs supergroup 0 2024-07-18 22:44 /dezyre
drwxr-xr-x - hdfs cloudera 0 2024-08-05 01:45 /dezyre3
drwxr-xr-x - cloudera supergroup 0 2024-07-29 23:28 /emp
drwxr-xr-x - hbase supergroup 0 2024-08-05 01:10 /hbase
drwxr-xr-x - hdfs supergroup 0 2024-07-18 22:45 /qwerty
drwxr-xr-x - cloudera supergroup 0 2024-07-15 23:18 /sakec
drwxr-xr-x - solr solr 0 2017-10-23 09:18 /solr
drwxrwxrwt - hdfs supergroup 0 2024-07-14 22:18 /tmp
drwxr-xr-x - hdfs supergroup 0 2017-10-23 09:17 /user
drwxr-xr-x - hdfs supergroup 0 2017-10-23 09:17 /var
[cloudera@quickstart ~]$ sudo -u hdfs hadoop fs -chown -R cloudera /dezyre3
[cloudera@quickstart ~]$ hadoop fs -ls /
Found 11 items
drwxrwxrwx - hdfs supergroup 0 2017-10-23 09:15 /benchmarks
drwxr-xr-x - hdfs supergroup 0 2024-07-18 22:44 /dezyre
drwxr-xr-x - cloudera cloudera 0 2024-08-05 01:45 /dezyre3
drwxr-xr-x - cloudera supergroup 0 2024-07-29 23:28 /emp
drwxr-xr-x - hbase supergroup 0 2024-08-05 01:10 /hbase
drwxr-xr-x - hdfs supergroup 0 2024-07-18 22:45 /qwerty
drwxr-xr-x - cloudera supergroup 0 2024-07-15 23:18 /sakec
drwxr-xr-x - solr solr 0 2017-10-23 09:18 /solr
drwxrwxrwt - hdfs supergroup 0 2024-07-14 22:18 /tmp
drwxr-xr-x - hdfs supergroup 0 2017-10-23 09:17 /user
drwxr-xr-x - hdfs supergroup 0 2017-10-23 09:17 /var
[cloudera@quickstart ~]$ s

```