

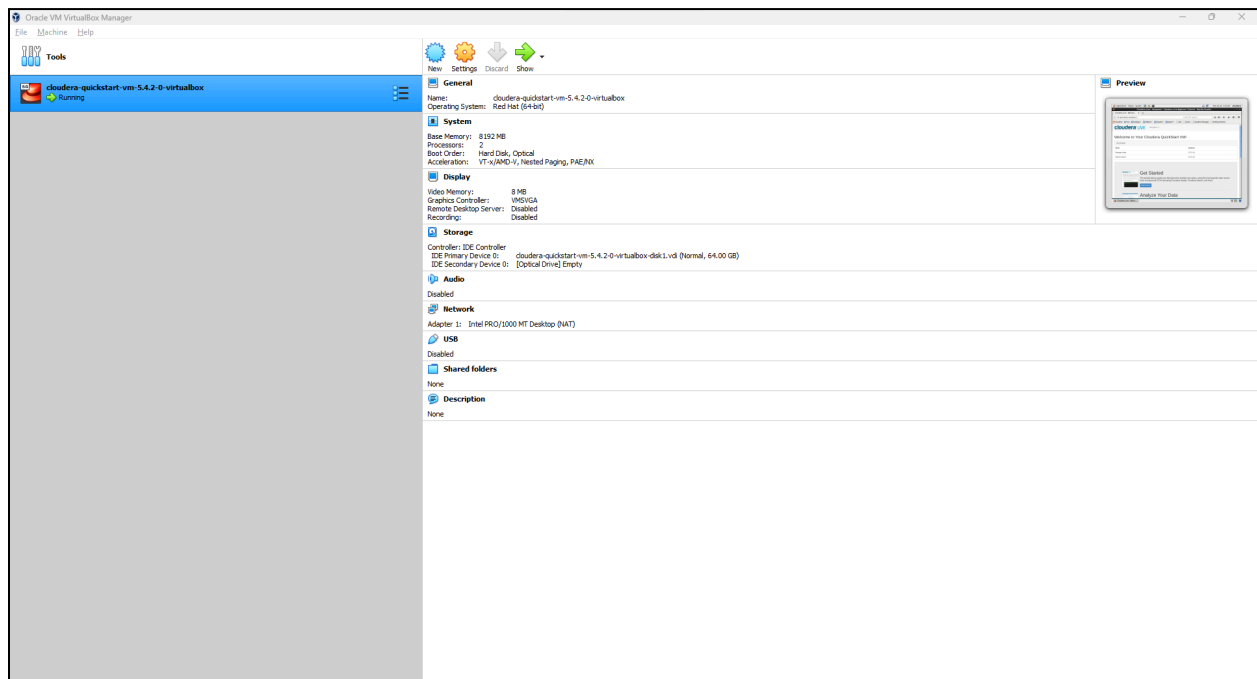
## MCA Sem III – Div A

### Big Data Analytics and Visualization

Subject Teacher: Dr. Ashwini Renavikar

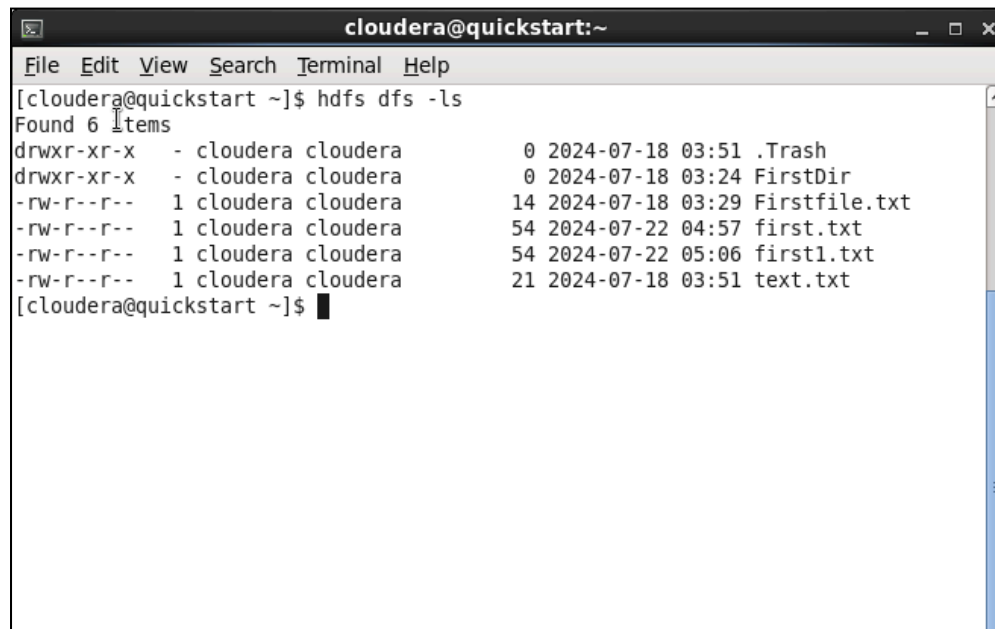
#### Lab 1: Installation of cloudera quickstart and HDFS commands

##### 1. Installation of oracle Virtual Machine and Cloudera Quickstart

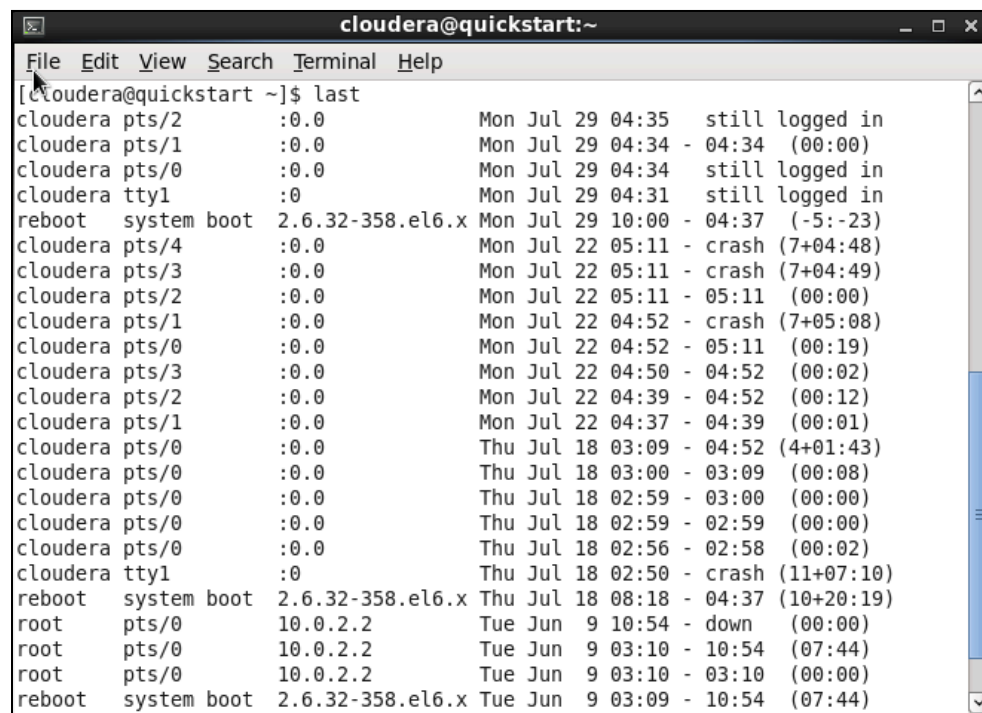


## 2. Perform following task on HDFS cluster using HDFS commands

- a. Check Linux login detail and list of all file available in the current directory their size and date

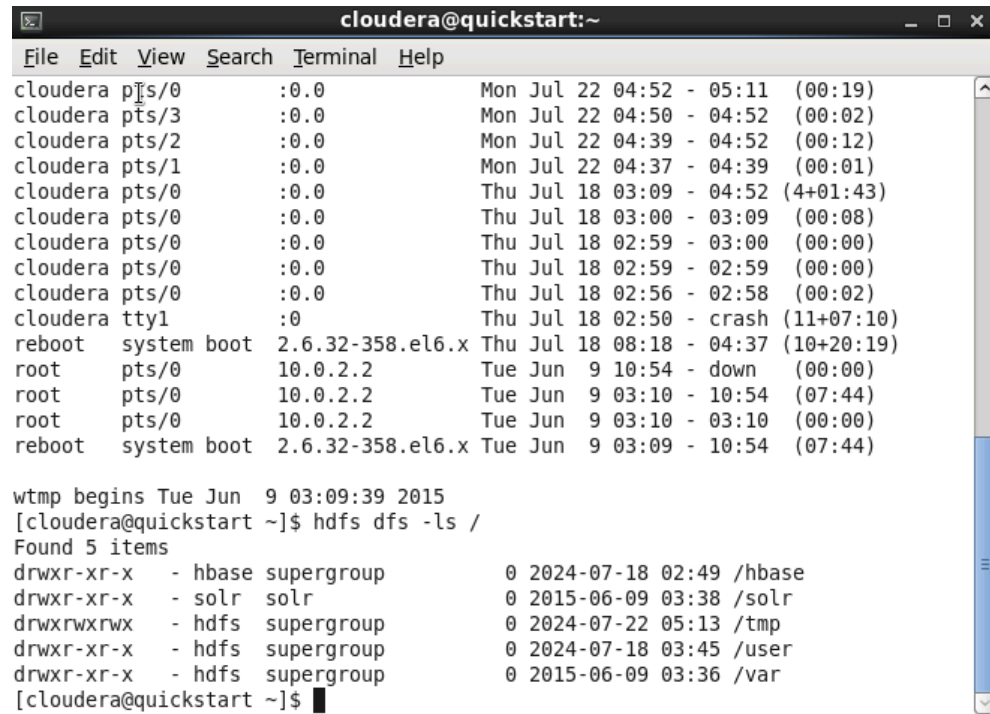


```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ hdfs dfs -ls  
Found 6 items  
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:51 .Trash  
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir  
-rw-r--r-- 1 cloudera cloudera 14 2024-07-18 03:29 Firstfile.txt  
-rw-r--r-- 1 cloudera cloudera 54 2024-07-22 04:57 first.txt  
-rw-r--r-- 1 cloudera cloudera 54 2024-07-22 05:06 first1.txt  
-rw-r--r-- 1 cloudera cloudera 21 2024-07-18 03:51 text.txt  
[cloudera@quickstart ~]$
```



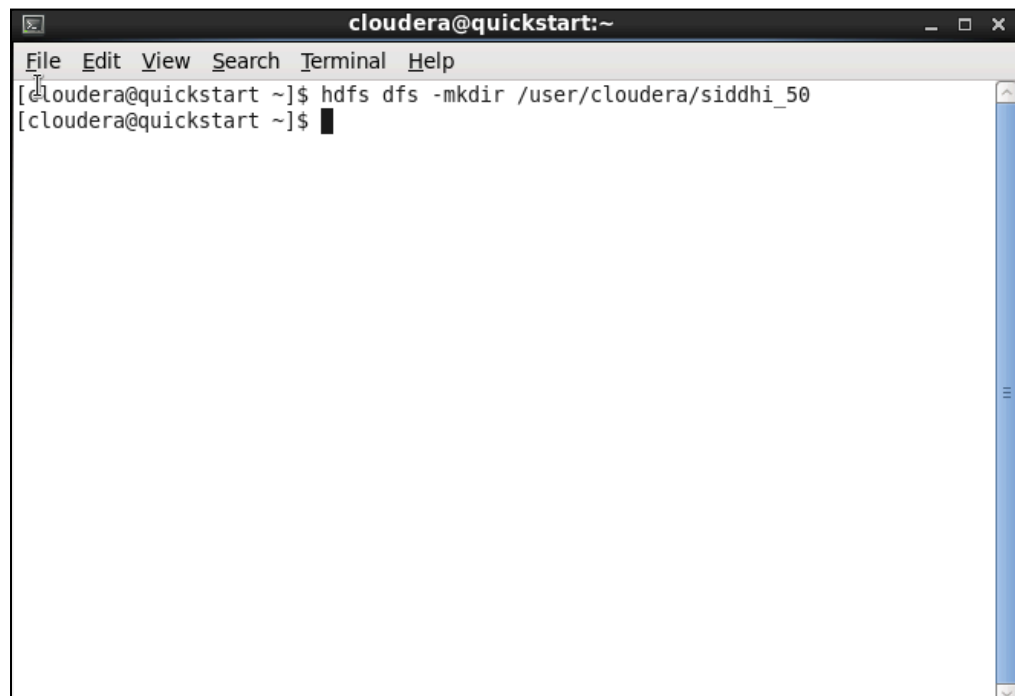
```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ last  
cloudera pts/2 :0.0 Mon Jul 29 04:35 still logged in  
cloudera pts/1 :0.0 Mon Jul 29 04:34 - 04:34 (00:00)  
cloudera pts/0 :0.0 Mon Jul 29 04:34 still logged in  
cloudera tty1 :0 Mon Jul 29 04:31 still logged in  
reboot system boot 2.6.32-358.el6.x Mon Jul 29 10:00 - 04:37 (-5:-23)  
cloudera pts/4 :0.0 Mon Jul 22 05:11 - crash (7+04:48)  
cloudera pts/3 :0.0 Mon Jul 22 05:11 - crash (7+04:49)  
cloudera pts/2 :0.0 Mon Jul 22 05:11 - 05:11 (00:00)  
cloudera pts/1 :0.0 Mon Jul 22 04:52 - crash (7+05:08)  
cloudera pts/0 :0.0 Mon Jul 22 04:52 - 05:11 (00:19)  
cloudera pts/3 :0.0 Mon Jul 22 04:50 - 04:52 (00:02)  
cloudera pts/2 :0.0 Mon Jul 22 04:39 - 04:52 (00:12)  
cloudera pts/1 :0.0 Mon Jul 22 04:37 - 04:39 (00:01)  
cloudera pts/0 :0.0 Thu Jul 18 03:09 - 04:52 (4+01:43)  
cloudera pts/0 :0.0 Thu Jul 18 03:00 - 03:09 (00:08)  
cloudera pts/0 :0.0 Thu Jul 18 02:59 - 03:00 (00:00)  
cloudera pts/0 :0.0 Thu Jul 18 02:59 - 02:59 (00:00)  
cloudera pts/0 :0.0 Thu Jul 18 02:56 - 02:58 (00:02)  
cloudera tty1 :0 Thu Jul 18 02:50 - crash (11+07:10)  
reboot system boot 2.6.32-358.el6.x Thu Jul 18 08:18 - 04:37 (10+20:19)  
root pts/0 10.0.2.2 Tue Jun 9 10:54 - down (00:00)  
root pts/0 10.0.2.2 Tue Jun 9 03:10 - 10:54 (07:44)  
root pts/0 10.0.2.2 Tue Jun 9 03:10 - 03:10 (00:00)  
reboot system boot 2.6.32-358.el6.x Tue Jun 9 03:09 - 10:54 (07:44)
```

b. List all files of HDFS default directory

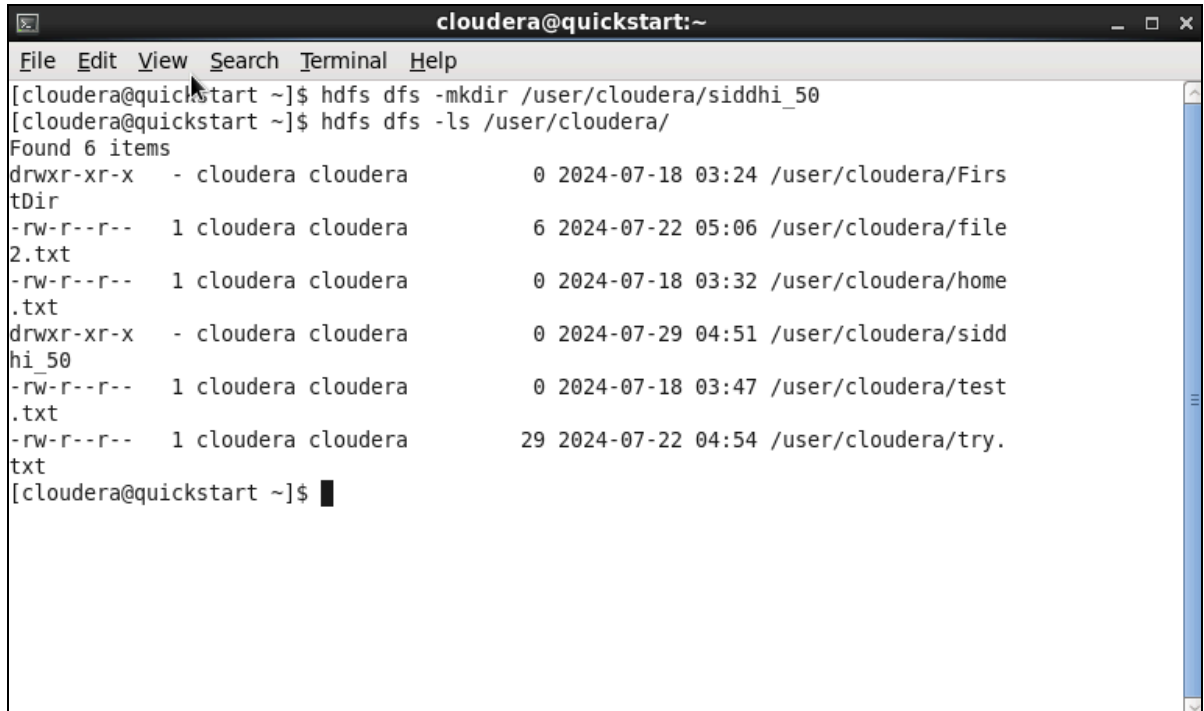
A terminal window titled 'cloudera@quickstart:~' showing the output of the 'hdfs dfs -ls /' command. The output lists 14 items in the root directory, including various 'pts' directories, a 'tty1' file, and system boot logs. Below this, the output of 'wtmp begins' is shown, followed by the command 'hdfs dfs -ls /' which returns 'Found 5 items'. These items are: '/hbase' (owned by hbase supergroup), '/solr' (owned by solr), '/tmp' (owned by hdfs supergroup), '/user' (owned by hdfs supergroup), and '/var' (owned by hdfs supergroup).

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
cloudera pts/0 :0.0 Mon Jul 22 04:52 - 05:11 (00:19)  
cloudera pts/3 :0.0 Mon Jul 22 04:50 - 04:52 (00:02)  
cloudera pts/2 :0.0 Mon Jul 22 04:39 - 04:52 (00:12)  
cloudera pts/1 :0.0 Mon Jul 22 04:37 - 04:39 (00:01)  
cloudera pts/0 :0.0 Thu Jul 18 03:09 - 04:52 (4+01:43)  
cloudera pts/0 :0.0 Thu Jul 18 03:00 - 03:09 (00:08)  
cloudera pts/0 :0.0 Thu Jul 18 02:59 - 03:00 (00:00)  
cloudera pts/0 :0.0 Thu Jul 18 02:59 - 02:59 (00:00)  
cloudera pts/0 :0.0 Thu Jul 18 02:56 - 02:58 (00:02)  
cloudera tty1 :0 Thu Jul 18 02:50 - crash (11+07:10)  
reboot system boot 2.6.32-358.el6.x Thu Jul 18 08:18 - 04:37 (10+20:19)  
root pts/0 10.0.2.2 Tue Jun 9 10:54 - down (00:00)  
root pts/0 10.0.2.2 Tue Jun 9 03:10 - 10:54 (07:44)  
root pts/0 10.0.2.2 Tue Jun 9 03:10 - 03:10 (00:00)  
reboot system boot 2.6.32-358.el6.x Tue Jun 9 03:09 - 10:54 (07:44)  
  
wtmp begins Tue Jun 9 03:09:39 2015  
[cloudera@quickstart ~]$ hdfs dfs -ls /  
Found 5 items  
drwxr-xr-x - hbase supergroup 0 2024-07-18 02:49 /hbase  
drwxr-xr-x - solr solr 0 2015-06-09 03:38 /solr  
drwxrwxrwx - hdfs supergroup 0 2024-07-22 05:13 /tmp  
drwxr-xr-x - hdfs supergroup 0 2024-07-18 03:45 /user  
drwxr-xr-x - hdfs supergroup 0 2015-06-09 03:36 /var  
[cloudera@quickstart ~]$
```

c. Create new directory with your roll number + name

A terminal window titled 'cloudera@quickstart:~' showing the command 'hdfs dfs -mkdir /user/cloudera/siddhi\_50' being executed. The prompt returns to the shell, indicating the command was successful.

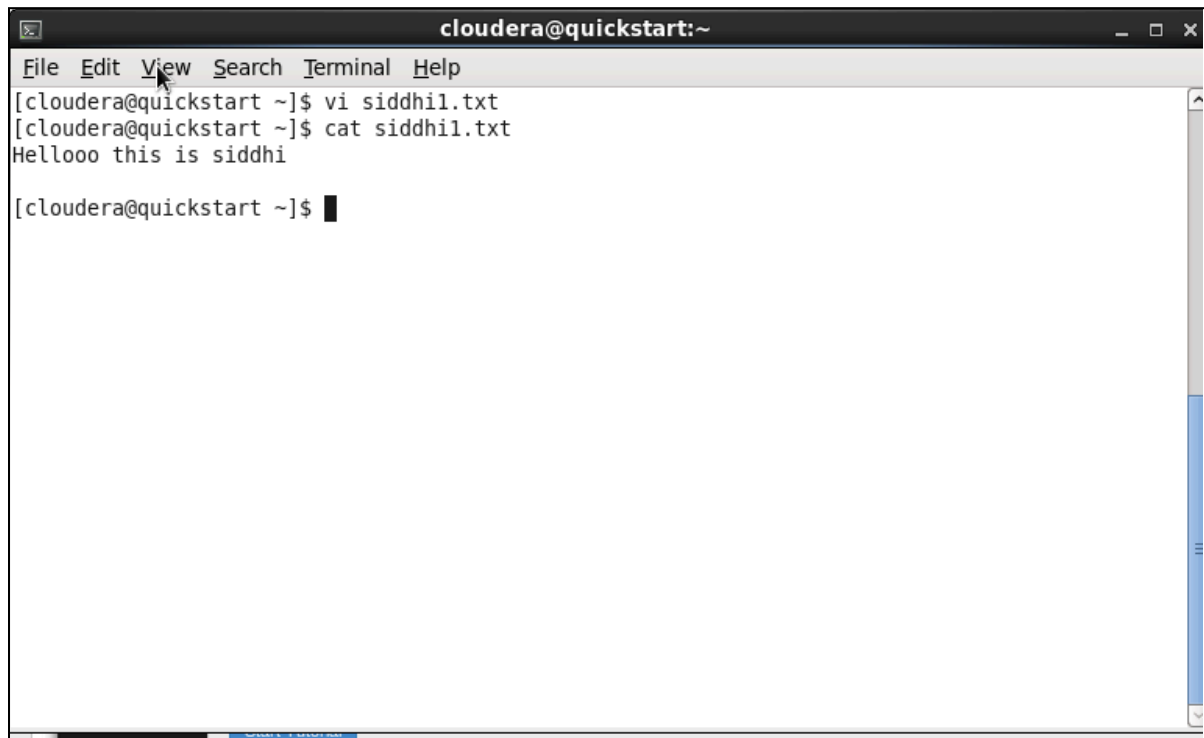
```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ hdfs dfs -mkdir /user/cloudera/siddhi_50  
[cloudera@quickstart ~]$
```



A terminal window titled 'cloudera@quickstart:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and output:

```
[cloudera@quickstart ~]$ hdfs dfs -mkdir /user/cloudera/siddhi_50
[cloudera@quickstart ~]$ hdfs dfs -ls /user/cloudera/
Found 6 items
drwxr-xr-x  - cloudera cloudera      0 2024-07-18 03:24 /user/cloudera/Firs
tDir
-rw-r--r--  1 cloudera cloudera      6 2024-07-22 05:06 /user/cloudera/file
2.txt
-rw-r--r--  1 cloudera cloudera      0 2024-07-18 03:32 /user/cloudera/home
.txt
drwxr-xr-x  - cloudera cloudera      0 2024-07-29 04:51 /user/cloudera/sidd
hi_50
-rw-r--r--  1 cloudera cloudera      0 2024-07-18 03:47 /user/cloudera/test
.txt
-rw-r--r--  1 cloudera cloudera     29 2024-07-22 04:54 /user/cloudera/try.
txt
[cloudera@quickstart ~]$
```

d. Create a text file with your roll number + name in Linux.



A terminal window titled 'cloudera@quickstart:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and output:

```
[cloudera@quickstart ~]$ vi siddhi1.txt
[cloudera@quickstart ~]$ cat siddhi1.txt
Hellooo this is siddhi
[cloudera@quickstart ~]$
```

e. Copy above file from Linux to HDFS

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ vi siddhi1.txt  
[cloudera@quickstart ~]$ cat siddhi1.txt  
Hellooo this is siddhi  
  
[cloudera@quickstart ~]$ hdfs dfs -put /home/cloudera/siddhi1.txt /user/cloudera/  
[cloudera@quickstart ~]$ hdfs dfs -ls  
Found 7 items  
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir  
-rw-r--r-- 1 cloudera cloudera 6 2024-07-22 05:06 file2.txt  
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt  
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt  
drwxr-xr-x - cloudera cloudera 0 2024-07-29 04:51 siddhi_50  
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt  
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt  
[cloudera@quickstart ~]$
```

f. Delete above file from Linux environment.

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
rm: '/siddhi_50': No such file or directory  
[cloudera@quickstart ~]$ hdfs dfs -rm -r /siddhi_50/  
rm: '/siddhi_50/': No such file or directory  
[cloudera@quickstart ~]$ hdfs dfs -rm -r /user/cloudera/siddhi_50/  
24/07/29 05:24:25 INFO fs.TrashPolicyDefault: Namenode trash configuration: Deletion interval  
= 1440 minutes, Emptier interval = 0 minutes.  
Moved: 'hdfs://quickstart.cloudera:8020/user/cloudera/siddhi_50' to trash at: hdfs://quicksta  
t.cloudera:8020/user/cloudera/.Trash/Current  
[cloudera@quickstart ~]$ hdfs dfs -ls  
Found 7 items  
drwx----- - cloudera cloudera 0 2024-07-29 05:20 .Trash  
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir  
-rw-r--r-- 1 cloudera cloudera 16 2024-07-29 05:13 NewSiddhi.txt  
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt  
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt  
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt  
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt  
[cloudera@quickstart ~]$ rm /home/cloudera/siddhi1.txt  
rm: remove regular file '/home/cloudera/siddhi1.txt'? y  
[cloudera@quickstart ~]$ ls  
cloudera-manager eclipse Firstfile1.txt Pictures Videos  
m_api.py enterprise-deployment.json kerberos Public workspace  
esktop express-deployment.json lib sid  
ocuments file3.txt Music siddhi1.txt  
ownloads FirstDir pl Templates  
[cloudera@quickstart ~]$
```

g. Copy above created file from HDFS into Linux default directory

```

cloudera@quickstart:~
File Edit View Search Terminal Help
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 5 items
drwxr-xr-x - hbase supergroup 0 2024-07-18 02:49 /hbase
drwxr-xr-x - solr solr 0 2015-06-09 03:38 /solr
drwxrwxrwx - hdfs supergroup 0 2024-07-18 03:44 /tmp
drwxr-xr-x - hdfs supergroup 0 2024-07-18 03:44 /user
drwxr-xr-x - hdfs supergroup 0 2015-06-09 03:36 /var
[cloudera@quickstart ~]$ cd /home/cloudera
[cloudera@quickstart ~]$ ls
cloudera-manager eclipse Firstfile1.txt Pictures Videos
cm_api.py enterprise-deployment.json kerberos Public workspace
Desktop express-deployment.json lib sid
Documents file3.txt Music siddhi1.txt
Downloads FirstDir pl Templates
[cloudera@quickstart ~]$ hdfs dfs -get /user/cloudera/siddhi1.txt /home/cloudera/siddhi1.txt
[cloudera@quickstart ~]$ ls
cloudera-manager eclipse Firstfile1.txt Pictures Templates
cm_api.py enterprise-deployment.json kerberos Public Videos
Desktop express-deployment.json lib sid workspace
Documents file3.txt Music siddhi1.txt
Downloads FirstDir pl siddhi1.txt
[cloudera@quickstart ~]$

```

h. Move Linux data in HDFS default folder

```

cloudera@quickstart:~
File Edit View Search Terminal Help
cm_api.py enterprise-deployment.json kerberos Public Videos
Desktop express-deployment.json lib sid workspace
Documents file3.txt Music siddhi1.txt
Downloads FirstDir pl siddhi1.txt
[cloudera@quickstart ~]$ vi NewSiddhi.txt
[cloudera@quickstart ~]$ hdfs dfs -moveFromLocal /home/cloudera/NewSiddhi.txt /user/cloudera/
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 5 items
drwxr-xr-x - hbase supergroup 0 2024-07-18 02:49 /hbase
drwxr-xr-x - solr solr 0 2015-06-09 03:38 /solr
drwxrwxrwx - hdfs supergroup 0 2024-07-18 03:44 /tmp
drwxr-xr-x - hdfs supergroup 0 2024-07-18 03:44 /user
drwxr-xr-x - hdfs supergroup 0 2015-06-09 03:36 /var
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir
-rw-r--r-- 1 cloudera cloudera 16 2024-07-29 05:13 NewSiddhi.txt
-rw-r--r-- 1 cloudera cloudera 6 2024-07-22 05:06 file2.txt
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt
drwxr-xr-x - cloudera cloudera 0 2024-07-29 04:51 siddhi_50
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt
[cloudera@quickstart ~]$

```

i. Remove in HDFS cluster.

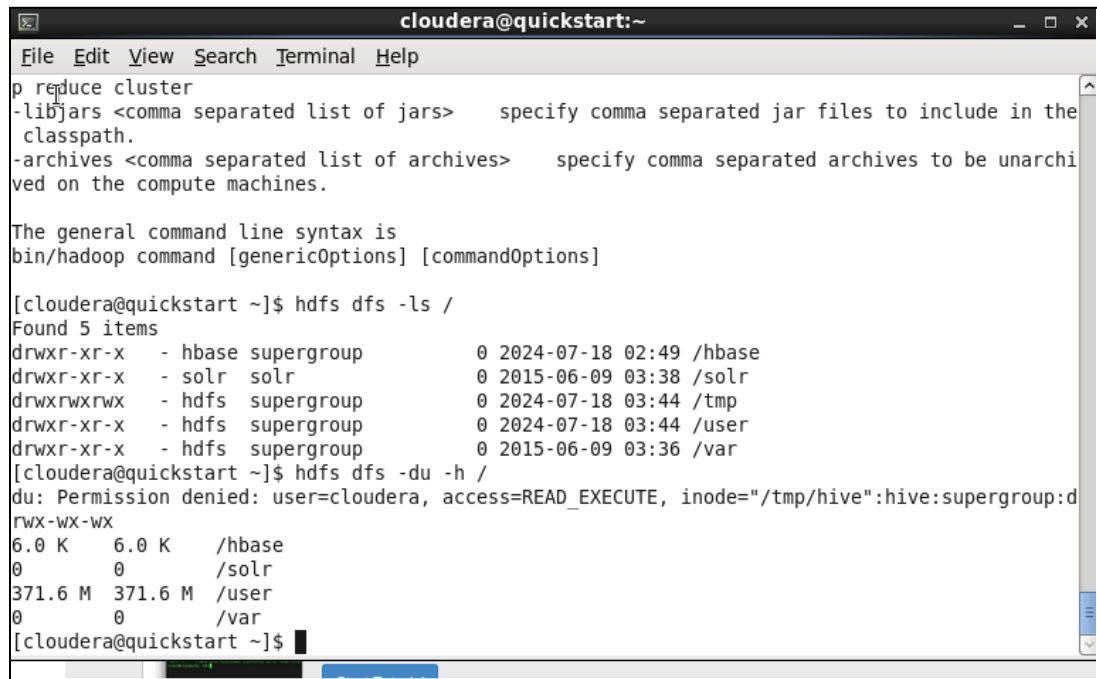
```
File Edit View Search Terminal Help
371.6 M 371.6 M /user
0 0 /var
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir
-rw-r--r-- 1 cloudera cloudera 16 2024-07-29 05:13 NewSiddhi.txt
-rw-r--r-- 1 cloudera cloudera 6 2024-07-22 05:06 file2.txt
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt
drwxr-xr-x - cloudera cloudera 0 2024-07-29 04:51 siddhi_50
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt
[cloudera@quickstart ~]$ hdfs dfs -rm /user/cloudera/file2.txt
24/07/29 05:20:42 INFO fs.TrashPolicyDefault: Namenode trash configuration: Deletion interval
= 1440 minutes, Emptier interval = 0 minutes.
Moved: 'hdfs://quickstart.cloudera:8020/user/cloudera/file2.txt' to trash at: hdfs://quickstar
t.cloudera:8020/user/cloudera/.Trash/Current
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwx----- - cloudera cloudera 0 2024-07-29 05:20 .Trash
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir
-rw-r--r-- 1 cloudera cloudera 16 2024-07-29 05:13 NewSiddhi.txt
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt
drwxr-xr-x - cloudera cloudera 0 2024-07-29 04:51 siddhi_50
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt
```

j. Remove Directory from HDFS cluster which has at least one file.

```
cloudera@quickstart:~
File Edit View Search Terminal Help
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt
drwxr-xr-x - cloudera cloudera 0 2024-07-29 04:51 siddhi_50
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt
[cloudera@quickstart ~]$
[cloudera@quickstart ~]$ hdfs dfs -rm -r /FirstDir
rm: '/FirstDir': No such file or directory
[cloudera@quickstart ~]$ hdfs dfs -rm -r /siddhi_50
rm: '/siddhi_50': No such file or directory
[cloudera@quickstart ~]$ hdfs dfs -rm -r /siddhi_50/
rm: '/siddhi_50/': No such file or directory
[cloudera@quickstart ~]$ hdfs dfs -rm -r /user/cloudera/siddhi_50/
24/07/29 05:24:25 INFO fs.TrashPolicyDefault: Namenode trash configuration: Deletion interval
= 1440 minutes, Emptier interval = 0 minutes.
Moved: 'hdfs://quickstart.cloudera:8020/user/cloudera/siddhi_50' to trash at: hdfs://quickstar
t.cloudera:8020/user/cloudera/.Trash/Current
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 7 items
drwx----- - cloudera cloudera 0 2024-07-29 05:20 .Trash
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir
-rw-r--r-- 1 cloudera cloudera 16 2024-07-29 05:13 NewSiddhi.txt
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt
[cloudera@quickstart ~]$
```



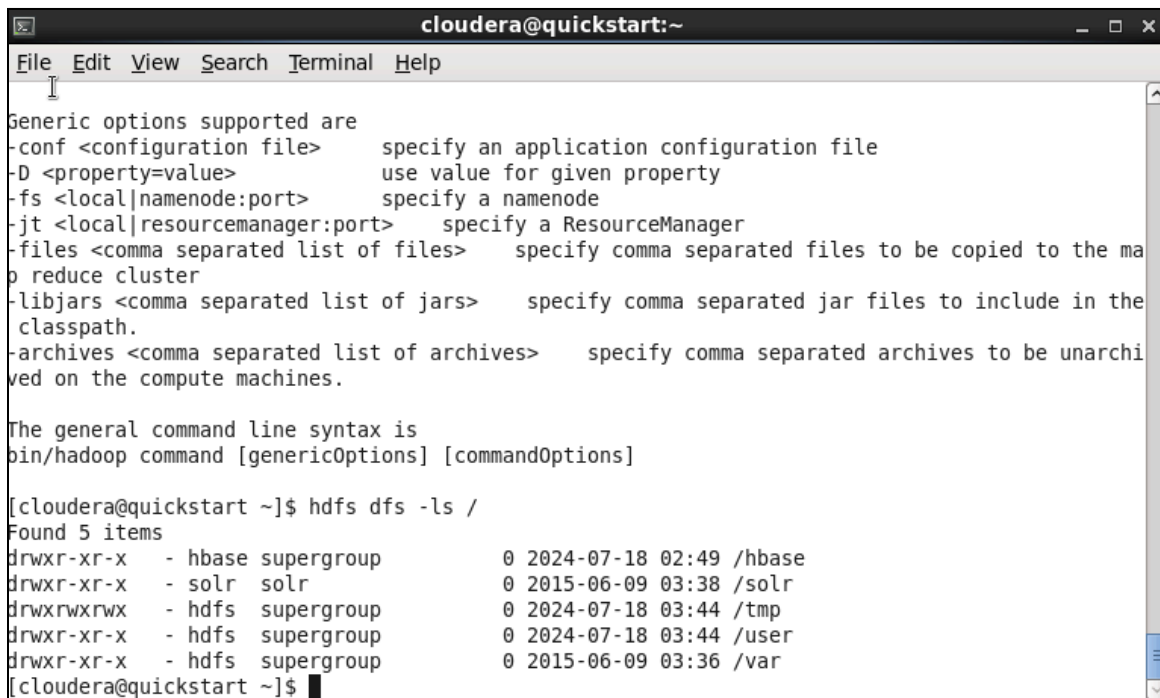
k. Check the size of each file in directory of HDFS



The screenshot shows a terminal window titled 'cloudera@quickstart:~'. It displays the output of the command 'hdfs dfs -ls /'. The output lists five items: /hbase, /solr, /tmp, /user, and /var, each with its permissions, owner, group, size, and modification time. The /user directory is the largest, with a size of 371.6 M.

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
p 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 unarchi  
ved on the compute machines.  
  
The general command line syntax is  
bin/hadoop command [genericOptions] [commandOptions]  
  
[cloudera@quickstart ~]$ hdfs dfs -ls /  
Found 5 items  
drwxr-xr-x - hbase supergroup          0 2024-07-18 02:49 /hbase  
drwxr-xr-x - solr solr                  0 2015-06-09 03:38 /solr  
drwxrwxrwx - hdfs supergroup            0 2024-07-18 03:44 /tmp  
drwxr-xr-x - hdfs supergroup            0 2024-07-18 03:44 /user  
drwxr-xr-x - hdfs supergroup            0 2015-06-09 03:36 /var  
[cloudera@quickstart ~]$ hdfs dfs -du -h /  
du: Permission denied: user=cloudera, access=READ_EXECUTE, inode="/tmp/hive":hive:supergroup:d  
rwx-wx-wx  
6.0 K      6.0 K      /hbase  
0          0          /solr  
371.6 M    371.6 M    /user  
0          0          /var  
[cloudera@quickstart ~]$
```

l. Check the last modified time of current directory

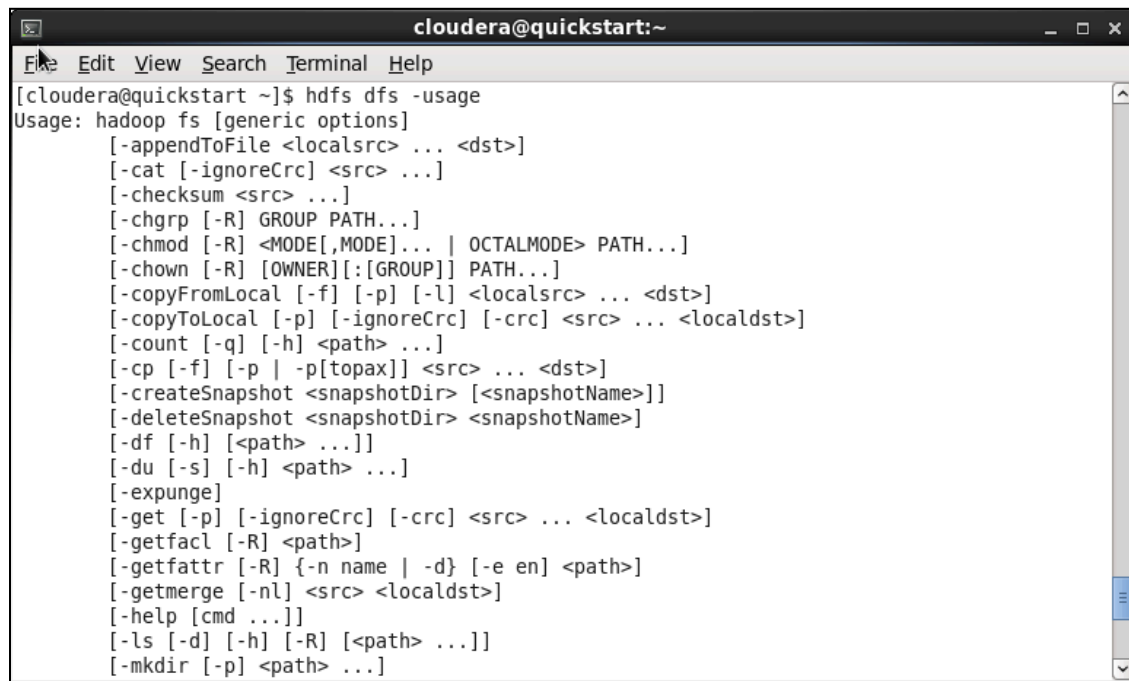


The screenshot shows a terminal window titled 'cloudera@quickstart:~'. It displays the output of the command 'hdfs dfs -ls /'. The output lists five items: /hbase, /solr, /tmp, /user, and /var, each with its permissions, owner, group, size, and modification time. The /user directory is the largest, with a size of 371.6 M.

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
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 copied to the ma  
p 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 unarchi  
ved on the compute machines.  
  
The general command line syntax is  
bin/hadoop command [genericOptions] [commandOptions]  
  
[cloudera@quickstart ~]$ hdfs dfs -ls /  
Found 5 items  
drwxr-xr-x - hbase supergroup          0 2024-07-18 02:49 /hbase  
drwxr-xr-x - solr solr                  0 2015-06-09 03:38 /solr  
drwxrwxrwx - hdfs supergroup            0 2024-07-18 03:44 /tmp  
drwxr-xr-x - hdfs supergroup            0 2024-07-18 03:44 /user  
drwxr-xr-x - hdfs supergroup            0 2015-06-09 03:36 /var  
[cloudera@quickstart ~]$
```

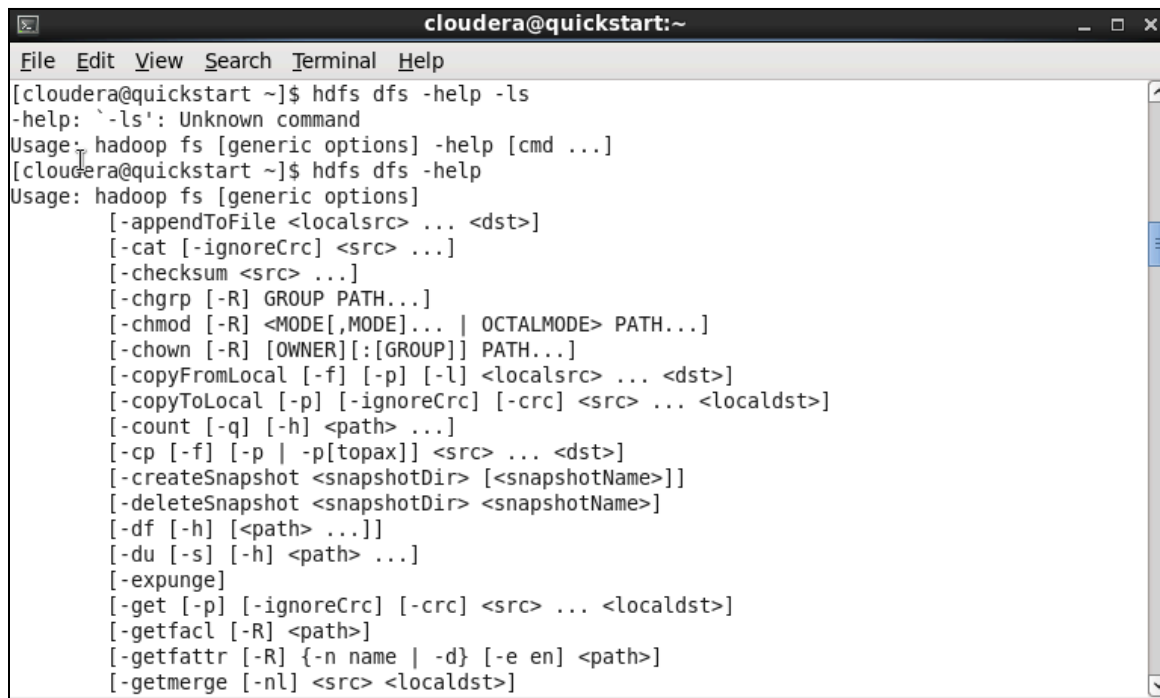


m. HDFS Command to know the usage of any command on HDFS



```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ hdfs dfs -usage  
Usage: hadoop fs [generic options]  
    [-appendToFile <localsrc> ... <dst>]  
    [-cat [-ignoreCrc] <src> ...]  
    [-checksum <src> ...]  
    [-chgrp [-R] GROUP PATH...]  
    [-chmod [-R] <MODE[,MODE]... | OCTALMODE> PATH...]  
    [-chown [-R] [OWNER][:[GROUP]] PATH...]  
    [-copyFromLocal [-f] [-p] [-l] <localsrc> ... <dst>]  
    [-copyToLocal [-p] [-ignoreCrc] [-crc] <src> ... <localdst>]  
    [-count [-q] [-h] <path> ...]  
    [-cp [-f] [-p | -p[topax]] <src> ... <dst>]  
    [-createSnapshot <snapshotDir> [<snapshotName>]]  
    [-deleteSnapshot <snapshotDir> <snapshotName>]  
    [-df [-h] [<path> ...]]  
    [-du [-s] [-h] <path> ...]  
    [-expunge]  
    [-get [-p] [-ignoreCrc] [-crc] <src> ... <localdst>]  
    [-getfacl [-R] <path>]  
    [-getfattr [-R] {-n name | -d} [-e en] <path>]  
    [-getmerge [-nl] <src> <localdst>]  
    [-help [cmd ...]]  
    [-ls [-d] [-h] [-R] [<path> ...]]  
    [-mkdir [-p] <path> ...]
```

n. HDFS Command to get help for any command on HDFS



```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ hdfs dfs -help -ls  
-help: `ls': Unknown command  
Usage: hadoop fs [generic options] -help [cmd ...]  
[cloudera@quickstart ~]$ hdfs dfs -help  
Usage: hadoop fs [generic options]  
    [-appendToFile <localsrc> ... <dst>]  
    [-cat [-ignoreCrc] <src> ...]  
    [-checksum <src> ...]  
    [-chgrp [-R] GROUP PATH...]  
    [-chmod [-R] <MODE[,MODE]... | OCTALMODE> PATH...]  
    [-chown [-R] [OWNER][:[GROUP]] PATH...]  
    [-copyFromLocal [-f] [-p] [-l] <localsrc> ... <dst>]  
    [-copyToLocal [-p] [-ignoreCrc] [-crc] <src> ... <localdst>]  
    [-count [-q] [-h] <path> ...]  
    [-cp [-f] [-p | -p[topax]] <src> ... <dst>]  
    [-createSnapshot <snapshotDir> [<snapshotName>]]  
    [-deleteSnapshot <snapshotDir> <snapshotName>]  
    [-df [-h] [<path> ...]]  
    [-du [-s] [-h] <path> ...]  
    [-expunge]  
    [-get [-p] [-ignoreCrc] [-crc] <src> ... <localdst>]  
    [-getfacl [-R] <path>]  
    [-getfattr [-R] {-n name | -d} [-e en] <path>]  
    [-getmerge [-nl] <src> <localdst>]
```

O. Use put, get, copyToLocal, copyFromLocal, moveToLocal and moveFromLocal commands to share files from and to edge node and HDFS

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ vi siddhil.txt  
[cloudera@quickstart ~]$ cat siddhil.txt  
Hellooo this is siddhi  
  
[cloudera@quickstart ~]$ hdfs dfs -put /home/cloudera/siddhil.txt /user/cloudera/  
[cloudera@quickstart ~]$ hdfs dfs -ls  
Found 7 items  
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir  
-rw-r--r-- 1 cloudera cloudera 6 2024-07-22 05:06 file2.txt  
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt  
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhil.txt  
drwxr-xr-x - cloudera cloudera 0 2024-07-29 04:51 siddhi_50  
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt  
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt  
[cloudera@quickstart ~]$
```

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt  
[cloudera@quickstart ~]$ hdfs dfs -ls /  
Found 5 items  
drwxr-xr-x - hbase supergroup 0 2024-07-18 02:49 /hbase  
drwxr-xr-x - solr solr 0 2015-06-09 03:38 /solr  
drwxrwxrwx - hdfs supergroup 0 2024-07-18 03:44 /tmp  
drwxr-xr-x - hdfs supergroup 0 2024-07-18 03:44 /user  
drwxr-xr-x - hdfs supergroup 0 2015-06-09 03:36 /var  
[cloudera@quickstart ~]$ cd /home/cloudera  
[cloudera@quickstart ~]$ ls  
cloudera-manager eclipse Firstfile1.txt Pictures Videos  
cm_api.py enterprise-deployment.json kerberos Public workspace  
Desktop express-deployment.json lib sid  
Documents file3.txt Music siddhil.txt  
Downloads FirstDir pl Templates  
[cloudera@quickstart ~]$ hdfs dfs -get /user/cloudera/siddhil.txt /home/cloudera/siddhiget.tx  
t  
[cloudera@quickstart ~]$ ls  
cloudera-manager eclipse Firstfile1.txt Pictures Templates  
cm_api.py enterprise-deployment.json kerberos Public Videos  
Desktop express-deployment.json lib sid workspace  
Documents file3.txt Music siddhil.txt  
Downloads FirstDir pl siddhiget.txt  
[cloudera@quickstart ~]$
```

```

cloudera@quickstart:~
File Edit View Search Terminal Help
cm_api.py enterprise-deployment.json kerberos Public Videos
Desktop express-deployment.json lib sid workspace
Documents file3.txt Music siddhi1.txt
Downloads FirstDir pl siddhiget.txt
[cloudera@quickstart ~]$ vi NewSiddhi.txt
[cloudera@quickstart ~]$ hdfs dfs -moveFromLocal /home/cloudera/NewSiddhi.txt /user/cloudera/
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 5 items
drwxr-xr-x - hbase supergroup 0 2024-07-18 02:49 /hbase
drwxr-xr-x - solr solr 0 2015-06-09 03:38 /solr
drwxrwxrwx - hdfs supergroup 0 2024-07-18 03:44 /tmp
drwxr-xr-x - hdfs supergroup 0 2024-07-18 03:44 /user
drwxr-xr-x - hdfs supergroup 0 2015-06-09 03:36 /var
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir
-rw-r--r-- 1 cloudera cloudera 16 2024-07-29 05:13 NewSiddhi.txt
-rw-r--r-- 1 cloudera cloudera 6 2024-07-22 05:06 file2.txt
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt
drwxr-xr-x - cloudera cloudera 0 2024-07-29 04:51 siddhi_50
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt
[cloudera@quickstart ~]$

```

```

[cloudera@quickstart ~]$ hdfs dfs -copyToLocal /user/cloudera/NewSiddhi.txt /home/cloudera/sidd.txt
[cloudera@quickstart ~]$ ls
cloudera-manager eclipse Firstfile1.txt Pictures Templates
cm_api.py enterprise-deployment.json kerberos Public Videos
Desktop express-deployment.json lib sid workspace
Documents file3.txt Music siddhiget.txt
Downloads FirstDir pl sidd.txt
[cloudera@quickstart ~]$

```

```

[cloudera@quickstart ~]$ hdfs dfs -moveToLocal /user/cloudera/NewSiddhi.txt /home/cloudera/movesidd.txt
MoveToLocal: Option '-moveToLocal' is not implemented yet.
[cloudera@quickstart ~]$ hdfs dfs -copyFromLocal /home/cloudera/sidd.txt /user/cloudera/siddhi
new.txt
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwx----- - cloudera cloudera 0 2024-07-29 05:20 .Trash
drwxr-xr-x - cloudera cloudera 0 2024-07-18 03:24 FirstDir
-rw-r--r-- 1 cloudera cloudera 16 2024-07-29 05:13 NewSiddhi.txt
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:32 home.txt
-rw-r--r-- 1 cloudera cloudera 25 2024-07-29 05:02 siddhi1.txt
-rw-r--r-- 1 cloudera cloudera 16 2024-07-29 05:33 siddhinew.txt
-rw-r--r-- 1 cloudera cloudera 0 2024-07-18 03:47 test.txt
-rw-r--r-- 1 cloudera cloudera 29 2024-07-22 04:54 try.txt
[cloudera@quickstart ~]$

```