Aim : Basic commands of linux and hadoop

Commands for Linux

1. sudo : Used to perform tasks that requires root permissions.
2. pwd : It shows the present working directory.

```
[cloudera@quickstart ~]$ pwd
/home/cloudera
```

3. cd : It is use to come back in the root directory.

```
[cloudera@quickstart ~]$ cd Desktop
[cloudera@quickstart Desktop]$
```

4. ls : It list down all the directories and folders present.

```
[cloudera@quickstart Desktop]$ ls
BDTDATA  Eclipse.desktop     Express.desktop  matix.pig~  wordcount.pig
data     Enterprise.desktop  matix.pig        Matrix      wordcount.pig~
```

5. cat : Displays the content of the file.

```
[cloudera@quickstart data]$ cat sid.txt
Hii Siddhesh here,
studying in DSAI Part-2
```

6. cp : Copy one file from current directory to another directory.

```
[cloudera@quickstart data]$ cp sid.txt /home/cloudera/Desktop/data/d1
[cloudera@quickstart data]$ cd d1
[cloudera@quickstart d1]$ ls
sid.txt
```

7. mv : Used to move and rename files and directories.

```
[cloudera@quickstart d1]$ mv sid.txt move.txt
[cloudera@quickstart d1]$ ls
move.txt
[cloudera@quickstart d1]$ cat move.txt
Hii Siddhesh here,
studying in DSAI Part-2
```

8. mkdir : Creates a new directory.

```
[cloudera@quickstart Desktop]$ mkdir siddhesh
[cloudera@quickstart Desktop]$ ls
BDTDATA  Eclipse.desktop     Express.desktop  matix.pig~  siddhesh       wordcount.pig~
data     Enterprise.desktop  matix.pig        Matrix      wordcount.pig
[cloudera@quickstart Desktop]$
```

9. rmdir : Deletes the directory.

```
[cloudera@quickstart Desktop]$ rmdir siddhesh
[cloudera@quickstart Desktop]$ ls
BDTDATA  Eclipse.desktop     Express.desktop  matix.pig~  wordcount.pig
data     Enterprise.desktop  matix.pig        Matrix      wordcount.pig~
[cloudera@quickstart Desktop]$
```

10. rm : Removes/ Deletes the file from a directory.

```
[cloudera@quickstart data]$ rm siddhesh.txt
rm: remove regular empty file `siddhesh.txt'? Y
[cloudera@quickstart data]$
```

11. touch : Creates an empty file.

```
[cloudera@quickstart data]$ touch siddhesh.txt
[cloudera@quickstart data]$ ls
details.txt  info.txt  siddhesh.txt  sid.txt
[cloudera@quickstart data]$
```

12. stat : Detail view of the file.

```
[cloudera@quickstart data]$ stat siddhesh.txt
  File: `siddhesh.txt'
  Size: 0               Blocks: 0          IO Block: 4096   regular empty file
Device: fd00h/64768d    Inode: 3278872     Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 501/cloudera)   Gid: ( 501/cloudera)
Access: 2023-04-02 21:02:23.116475076 -0700
Modify: 2023-04-02 21:02:23.116475076 -0700
Change: 2023-04-02 21:02:23.116475076 -0700
[cloudera@quickstart data]$
```

13. vi : Creates and open the file.

```
[cloudera@quickstart data]$ vi siddhesh.txt
```

```
Hii
This is Siddhesh
Studying in DSAi
Part-2
RJ Clg
Mumbai

~
~
~
~
~
~
~
~
~
~
~
~
~
-- INSERT --                                              7,1           All
```

14. head : Displays the first 10 lines of a text file.

```
[cloudera@quickstart data]$ head siddhesh.txt
Hii
This is Siddhesh
Studying in DSAi
Part-2
RJ Clg
Mumbai
```

15. tail : Displays the last 10 lines of a text file.

```
[cloudera@quickstart data]$ tail siddhesh.txt
Hii
This is Siddhesh
Studying in DSAi
Part-2
RJ Clg
Mumbai
```

Commands for Hadoop

1. hadoop version : Gives the version of the hadoop.

```
[cloudera@quickstart ~]$ hadoop version
Hadoop 2.6.0-cdh5.4.2
Subversion http://github.com/cloudera/hadoop -r 15b703c8725733b7b2813d2325659eb7d57e7a3f
Compiled by jenkins on 2015-05-20T00:03Z
Compiled with protoc 2.5.0
From source with checksum de74f1adb3744f8ee85d9a5b98f90d
This command was run using /usr/jars/hadoop-common-2.6.0-cdh5.4.2.jar
```

2. ls : List down all the files in hadoop.

```
[cloudera@quickstart ~]$ hadoop fs -ls
Found 4 items
drwxr-xr-x   - cloudera cloudera          0 2023-03-19 23:10 .Trash
drwxr-xr-x   - cloudera cloudera          0 2023-01-16 20:18 myHDFSdir
drwxr-xr-x   - cloudera cloudera          0 2023-03-27 23:07 oozie-oozi
drwxr-xr-x   - cloudera cloudera          0 2023-03-01 21:56 training
```

```
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 9 items
drwxr-xr-x   - hbase    supergroup          0 2023-03-27 22:21 /hbase
drwxr-xr-x   - cloudera supergroup          0 2023-01-22 23:14 /inputdir
drwxr-xr-x   - cloudera supergroup          0 2023-01-29 23:21 /matrix
drwxr-xr-x   - cloudera supergroup          0 2023-01-16 20:25 /myHDFSdir
drwxr-xr-x   - cloudera supergroup          0 2023-03-28 00:07 /myimpaladata
drwxr-xr-x   - solr     solr                0 2023-03-27 22:26 /solr
drwxrwxrwx   - hdfs     supergroup          0 2023-03-27 23:52 /tmp
drwxr-xr-x   - hdfs     supergroup          0 2022-11-11 20:02 /user
drwxr-xr-x   - hdfs     supergroup          0 2015-06-09 03:36 /var
```

3. mkdir : Create a directory.

```
[cloudera@quickstart ~]$ hdfs dfs -mkdir /siddhesh
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 11 items
drwxrwxrwx   - hdfs     supergroup          0 2017-10-23 09:15 /benchmarks
drwxr-xr-x   - cloudera supergroup          0 2023-02-18 00:53 /char_inputdir
drwxr-xr-x   - cloudera supergroup          0 2023-02-18 01:01 /char_outputdir
drwxr-xr-x   - hbase    supergroup          0 2023-04-03 06:12 /hbase
drwxr-xr-x   - cloudera supergroup          0 2023-02-25 06:51 /inputdir
drwxr-xr-x   - cloudera supergroup          0 2023-02-25 06:55 /outputsdir
drwxr-xr-x   - cloudera supergroup          0 2023-04-03 06:46 /siddhesh
```

4. touchz : Creates a new file.

```
[cloudera@quickstart ~]$ hdfs dfs -touchz /siddhesh/file.txt
```

5. put : Copy files/folders from local file system to HDFS.

```
[cloudera@quickstart ~]$ hdfs dfs -put Desktop/weather.txt /siddhesh
```

6. cat : Prints the file contents.

```
[cloudera@quickstart ~]$ hdfs dfs -cat /siddhesh/char_count.txt
Hii, myself Siddhesh.
I am studying in RJ College
I am a Data Science Student in RJ College
```

7. cp : Use to copy files within HDFS

```
[cloudera@quickstart ~]$ hdfs dfs -mkdir /sid
[cloudera@quickstart ~]$ hdfs -cp /siddhesh /sid
Error: Could not find or load main class .sid
[cloudera@quickstart ~]$ hdfs dfs -cp /siddhesh /sid
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 12 items
drwxrwxrwx   - hdfs      supergroup          0 2017-10-23 09:15 /benchmarks
drwxr-xr-x   - cloudera supergroup          0 2023-02-18 00:53 /char_inputdir
drwxr-xr-x   - cloudera supergroup          0 2023-02-18 01:01 /char_outputdir
drwxr-xr-x   - hbase     supergroup          0 2023-04-03 06:12 /hbase
drwxr-xr-x   - cloudera supergroup          0 2023-02-25 06:51 /inputdir
drwxr-xr-x   - cloudera supergroup          0 2023-02-25 06:55 /outputsdir
drwxr-xr-x   - cloudera supergroup          0 2023-04-03 06:56 /sid
drwxr-xr-x   - cloudera supergroup          0 2023-04-03 06:52 /siddhesh
drwxr-xr-x   - solr      solr                0 2017-10-23 09:18 /solr
drwxrwxrwt   - hdfs      supergroup          0 2023-02-03 02:48 /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 ~]$ hdfs dfs -cp /siddhesh /sid
cp: `/sid/siddhesh/char_count.txt': File exists
cp: `/sid/siddhesh/file.txt': File exists
cp: `/sid/siddhesh/weather.txt': File exists
[cloudera@quickstart ~]$ hdfs dfs -ls /sid
Found 1 items
drwxr-xr-x   - cloudera supergroup          0 2023-04-03 06:56 /sid/siddhesh
```

8. rm : Deletes a file from the HDFS.

```
[cloudera@quickstart ~]$ hdfs dfs -rmr /sid
rmr: DEPRECATED: Please use 'rm -r' instead.
^[[ADeleted /sid
[cloudera@quickstart ~]$ hdfs dfs rm -r /sid
rm: Unknown command
Did you mean -rm?  This command begins with a dash.
[cloudera@quickstart ~]$ hdfs dfs -ls
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 11 items
drwxrwxrwx   - hdfs     supergroup          0 2017-10-23 09:15 /benchmarks
drwxr-xr-x   - cloudera supergroup          0 2023-02-18 00:53 /char_inputdir
drwxr-xr-x   - cloudera supergroup          0 2023-02-18 01:01 /char_outputdir
drwxr-xr-x   - hbase    supergroup          0 2023-04-03 06:12 /hbase
drwxr-xr-x   - cloudera supergroup          0 2023-02-25 06:51 /inputdir
drwxr-xr-x   - cloudera supergroup          0 2023-02-25 06:55 /outputsdir
drwxr-xr-x   - cloudera supergroup          0 2023-04-03 06:52 /siddhesh
drwxr-xr-x   - solr     solr                0 2017-10-23 09:18 /solr
drwxrwxrwt   - hdfs     supergroup          0 2023-02-03 02:48 /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
```