Week-3	Hadoop Commands
3. a)	Basic File Commands

- There are many more commands in **"$HADOOP_HOME/bin/hadoop fs**" than are demonstrated here, although these basic operations will get you started.
- Running **./bin/hadoop dfs** with no additional arguments will list all the commands that can be run with the FsShell system.
- **$HADOOP_HOME/bin/hadoop fs -help commandName** will display a short usage summary for the operation.
  - The following conventions are used for parameters:
  - **"<path>"** means any file or directory name.
  - **"<path>..."** means one or more file or directory names.
  - **"<file>"** means any filenam e.
  - **"<src>"** and **"<dest>"** are path names in a directed operation.
  - **"<localSrc>"** and **"<localDest>"** are paths as above, but on the local file system.
  - **"<hdfsSrc>"** and **"<hdfsDest>"** are paths as above, but on the Hadoop distributed file system.

S.No.	HDFS basic commands
1.	**Version** displays the Hadoop framework version and respective Hadoop distribution version ➢ hadoop version ➢ hdfs version
Note: When you start hadoop, for some time limit hadoop stays in safemode. You can either wait (you can see the time limit being decreased on Namenode web UI) until the time limit or You can turn it off with **hadoop dfsadmin –safemode leave** **sudo –u hdfs hdfs dfsadmin –safemode leave** The above command turns off the safemode of Hadoop / HDFS	
2.	**–ls <path>** Lists the contents of the directory specified by path, showing the names, permissions, owner, size and modification date for each entry. ➢ hdfs dfs –ls / =lists directories and files at the root of HDFS ➢ hdfs dfs –ls /user = lists directories and files in the user directory
In cloudera type in browser type http://localhost:50070/ to view dfs health http://localhost:50070/explorer.html#/ to view hdfs directories through Browse Directory	

3.	**–mkdir <path/FolderName>** To create a named directory in given path of HDFS. In Hadoop dfs there is no home directory by default. ➢ hdfs dfs –mkdir /ABP ➢ hdfs dfs –mkdir /ABP/abpsubdir =creates sub directory ➢ hdfs dfs –mkdir /user/ABP1 = creates sub directory in user
4.	**–ls –R <path> [-lsr <path> command is deprecated]** To get the list of complete directories and files (recursively list all files-directories and all their subdirectories) of HDFS. ➢ hdfs dfs –ls –R / ➢ hdfs dfs –ls –R /ABP ➢ hdfs dfs –ls –R /user/
Create new file with content in local file system (files present on OS). **gedit abpfile1** Create a file with name **"abpfile1"**, type the content in it. To view files of local file system, go to **cloudera** desktop double click **cloudera's home** icon. Its path for programming is **/home/cloudera/**	
5.	**–put <localSrc> <hdfsDest>** To copy file/folder from local file system to HDFS store. Both files exist ➢ hdfs dfs –put /home/cloudera/abpfile1.txt /user/ABP1 =file copied and exists in both locations ➢ hdfs dfs –ls –R user/ABP1/ =check for destination location file
6.	**–get <hdfsSr> <localDest>** To copy a file/folder from HDFS to local file system. Both files exist ➢ hdfs dfs –get /user/abpfile1 /home/cloudera/abpget1
7.	**–copyFromLocal <localSrc> <hdfsDest> (Identical to –put)** To copy a file/folder from local file system to HDFS store. Both files exist ➢ hdfs dfs –copyFromLocal /home/cloudera/abpget1 /user/ABP1
8.	**–copyToLocal <hdfsSrc> <localDest> (Identical to –get)** To copy a file/folder from HDFS to local file system. Both files exist ➢ hdfs dfs –copyToLocal /user/ABP1/abpget1 /home/cloudera/
9.	**–moveFromLocal <localSrc> <hdfsDest>** To move a file/folder from local file system to HDFS store. Works like –put, but deletes moved file/folder from lfs, and exists only in HDFS store. ➢ hdfs dfs –moveFromLocal /home/cloudera/abpget1 /user/ABP1
10.	**–moveToLocal <hdfsSrc> <localDest>** To move a file/folder from HDFS store to local file system. Works like -get, but deletes moved file/folder from HDFS store, and exists only in lfs. ➢ hdfs dfs –moveToLocal /user/ABP1/abpget1 /home/cloudera/

11.	**–copyFromLocal <localSrc> <hdfsDest> (Identical to –put)** To copy a file from local file system to HDFS store. Both files exist ➢ hdfs dfs –copyFromLocal /home/cloudera/abpget1 /user/ABP1
12.	**–copyToLocal <hdfsSrc> <localDest> (Identical to –get)** To copy a file from HDFS to local file system. Both files exist ➢ hdfs dfs –copyToLocal /user/ABP1/abpget1 /home/cloudera/
13.	**–cat <filen-ame>** To display the contents of an HDFS file on console. ➢ hdfs dfs –cat /home/cloudera/abpget1
14.	**–cp <hdfsSrc> <hdfsDest>** To copy the file or directory from given source to destination within HDFS. ➢ hdfs dfs –cp /A123 /user/
15.	**–mv <hdfsSrc> <hdfsDest>** To move the file from the specified source to destination within HDFS. ➢ hdfs dfs –mv /user/ABP1/abpfile1 /A123