Experiment 1

Aim:- To execute the HDFS Commands

Theory:- Write about the basics of HDFS.

Architecture of HDFS –(To be handwritten)

Commands to be executed (The outputs of the following commands should be pasted along with the command)

1. File commands for listing
2. **Hdfs dfs –ls / :-** List all the files/directories for the given hdfs destination path.
3. **hdfs dfs -ls -d /hadoop1:-** Directories are listed as plain files. In this case, this command will list the details of hadoop folder.
4. **hdfs dfs -ls -R /home**:- Recursively list all files in hadoop directory and all subdirectories in hadoop directory.
5. File commands for reading and writing files
6. hdfs dfs -put Test2.txt:- The put command is used to copy a file from a local file system to HDFS
7. hdfs dfs -cat Test1.txt:- To see the contents of the file Test1.txt. (Note:- First create the file test1.txt in the desktop. You can see it in the panel of local files. Then you may add it to the remote files. Use put command for copying it to the HDFS and then use cat command to see the contents
8. hdfs dfs -tail /user/vagrant/Test2.txt: tail command can be used in the place of cat command as well
9. File commands for displaying the version of hadoop
10. Hadoop version:- Used to display the version of hadoop
11. File commands for making a directory and copying contents inside that directory
12. hdfs dfs -mkdir sample:- creating a sample directory
13. hdfs dfs -ls -R /:- Check if the sample directory is created
14. To copy from the remote file of the local system to the hadoop distributed file system. Copy the file ABC in the folder abc/ABC to the test folder in hadoop with a file name ABC.

vagrant@master:~$ hdfs dfs -copyFromLocal /home/vagrant/abc/ABC/ABC.txt /user/vagrant/test/ABC1.txt

1. hdfs dfs -copyFromLocal /home/vagrant/abc/ABC/ /user/vagrant/sample: This command is used for copying from the local directory to a hdfs directory sample
2. File commands for copying from hdfs to the local directory
3. hdfs dfs -copyToLocal /user/vagrant/sample/Posts.txt /home/vagrant/abc: This command is used to copy from a hdfs folder sample a file Posts to a local folder abc

**(Please find the cheatsheet attached for the commands to be executed. Also refer to HDFS file commands tutorial and all the commands have to be practiced)**