Aim : File Manipulation in HDFS.

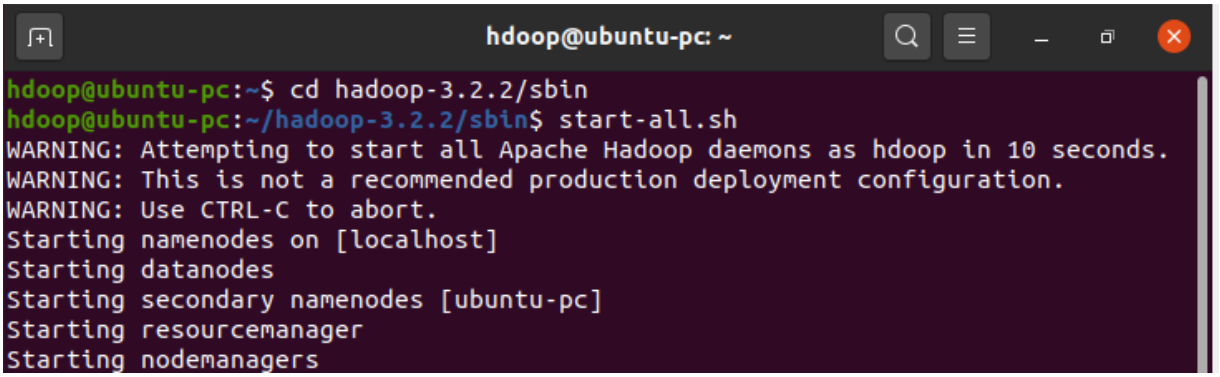
Objective: To carry out file manipulation in hdfs.

Tools Used: Hadoop

Actual Work Done:

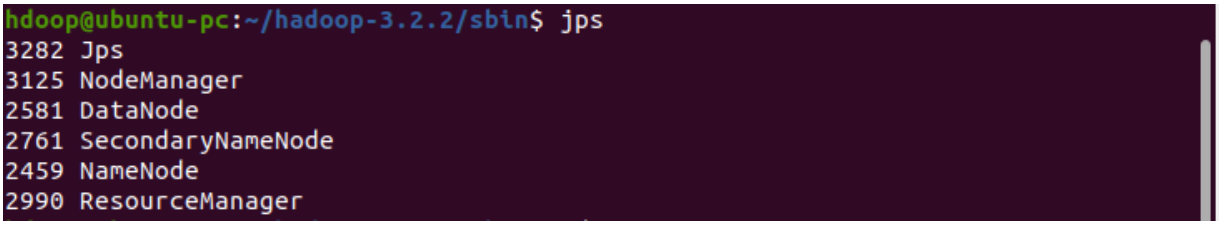
To use HDFS commands, start the Hadoop services using the following command:

sbin/start-all.sh



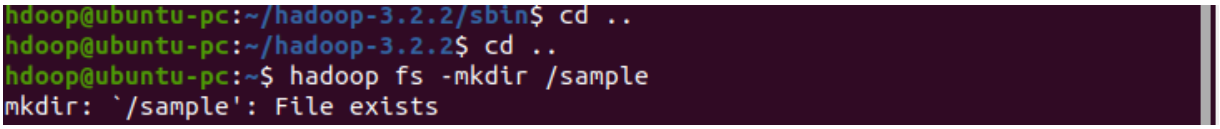
To check if Hadoop is up and running:

Jps



mkdir:

To create a directory, similar to Unix ls command.



cp:

Copy files from one directory to another within HDFS, similar to Unix cp command.

```
hdoop@ubuntu-pc:~$ hadoop fs -cp /sample/text.txt /sample1
hdoop@ubuntu-pc:~$ hadoop fs -rm -r /sample1
Deleted /sample1
```

rm:

Remove a file from HDFS, similar to Unix rm command. This command does not delete directories. For recursive delete, use command -rm -r.


```
hdoop@ubuntu-pc:~$ hadoop fs -cp /sample/text.txt /sample1
hdoop@ubuntu-pc:~$ hadoop fs -rm -r /sample1
Deleted /sample1
```


Put:

Transfer and store a data file from local systems to the Hadoop file system using the put command.

```
hdoop@ubuntu-pc:~$ hadoop fs -put /home/sunbeam/text.txt /sample
hdoop@ubuntu-pc:~$ hadoop fs -cat text.txt
```

Cat:

Initially, view the data from HDFS using **cat** command.

```
hdoop@ubuntu-pc:~$ hadoop fs -cat /sample/text.txt
Hadoop Framework.
HDFS is storage for Hadoop.
```

Get:

Gets the file from HDFS to the local file system using **get** command.

```
hdoop@ubuntu-pc:~$ hadoop fs -get /sample/text.txt /home/sunbeam
get: `/home/sunbeam/text.txt': File exists
```

You can shut down the HDFS by using the following command.

```
hdoop@ubuntu-pc:~/hadoop-3.2.2/sbin$ stop-all.sh
WARNING: Stopping all Apache Hadoop daemons as hdoop in 10 seconds.
WARNING: Use CTRL-C to abort.
Stopping namenodes on [localhost]
Stopping datanodes
Stopping secondary namenodes [ubuntu-pc]
Stopping nodemanagers
Stopping resourcemanager
```

Conclusion/Outcome: Thus, I have carried out file Manipulation successfully.