DATA SCIENCE AND BIG DATA ANALYTICS

EXPERIMENT-9: Experiment for data loading from local machine to Hadoop.

<u>AIM:</u> Experiment for data loading from local machine to Hadoop.

DESCRIPTION:

Initially you have to format the configured HDFS file system, open namenode (HDFS server), and execute the following command.

\$ hadoop namenode -format

After formatting the HDFS, start the distributed file system. The following command will start the namenode as well as the data nodes as cluster.

\$ start-dfs.sh

Listing Files in HDFS

After loading the information in the server, we can find the list of files in a directory, status of a file, using 'ls'. Given below is the syntax of ls that you can pass to a directory or a filename as an argument.

\$ \$HADOOP_HOME/bin/hadoop fs -ls <args>

Inserting Data into HDFS

Assume we have data in the file called file.txt in the local system which is ought to be saved in the hdfs file system. Follow the steps given below to insert the required file in the Hadoop file system.

Step 1

You have to create an input directory.

\$ \$HADOOP_HOME/bin/hadoop fs -mkdir /user/input

Step 2

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

\$ \$HADOOP_HOME/bin/hadoop fs -put /home/file.txt /user/input

Step 3

You can verify the file using Is command.

\$ \$HADOOP HOME/bin/hadoop fs -ls /user/input

Retrieving Data from HDFS

Assume we have a file in HDFS called outfile. Given below is a simple demonstration for retrieving the required file from the Hadoop file system.

Step 1

Initially, view the data from HDFS using cat command.

\$ \$HADOOP_HOME/bin/hadoop fs -cat /user/output/outfile

Step 2

Get the file from HDFS to the local file system using get command.

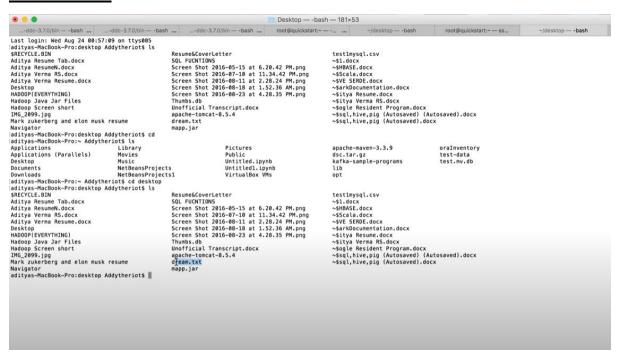
\$\$HADOOP_HOME/bin/hadoop fs -get /user/output/ /home/hadoop_tp/

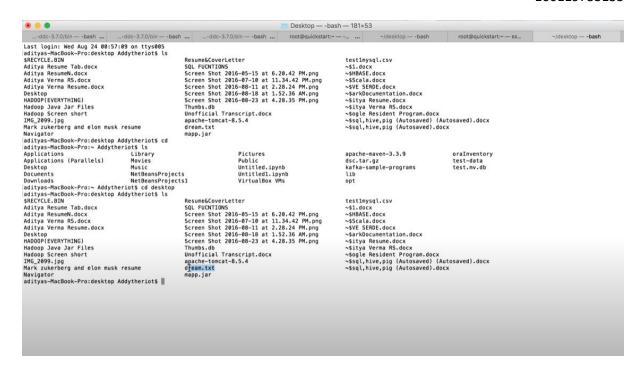
Shutting Down the HDFS

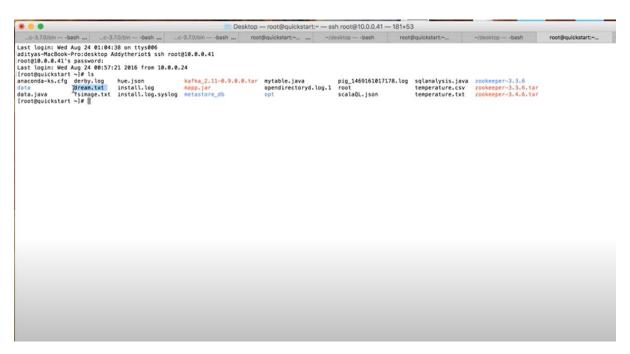
You can shut down the HDFS by using the following command.

\$ stop-dfs.sh

PROCEDURE:







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