**Hadoop Installation**

$ sudo apt update -y

$ sudo apt install openjdk-8-jdk -y

$ sudo apt install openssh-server openssh-client -y

$ ssh-keygen -t rsa -P '' -f ~/.ssh/id\_rsa

$ cat ~/.ssh/id\_rsa.pub >> ~/.ssh/authorized\_keys

$ chmod 0600 ~/.ssh/authorized\_keys

$ ssh localhost

$ sudo wget https://archive.apache.org/dist/hadoop/core/hadoop-2.7.3/hadoop-2.7.3.tar.gz

$ tar -xvf hadoop-2.7.3.tar.gz

$ sudo mkdir /home/mca/Hadoop

$ chmod 775 -R ~/Hadoop

$ sudo mv ~/hadoop-2.7.3 /home/mca/Hadoop

**<---- Edit .bashrc File ---->**

**$ sudo nano ~/.bashrc**

export JAVA\_HOME=/usr/lib/jvm/java-8-openjdk-amd64

export HADOOP\_HOME=/home/mca/Hadoop

export HADOOP\_INSTALL=$HADOOP\_HOME

export PATH=$PATH:$HADOOP\_HOME/bin

export PATH=$PATH:$HADOOP\_HOME/sbin

export HADOOP\_MAPRED\_HOME=$HADOOP\_HOME

export HADOOP\_COMMON\_HOME=$HADOOP\_HOME

export HADOOP\_HDFS\_HOME=$HADOOP\_HOME

export YARN\_HOME=$HADOOP\_HOME

export HADOOP\_COMMON\_LIB\_NATIVE\_DIR=$HADOOP\_HOME/lib/native

export HADOOP\_OPTS="-Djava.library.path=$HADOOP\_HOME/lib/native"

**$ source ~/.bashrc**

**<---- Edit hadoop-env.sh File ---->**

**$ sudo nano $HADOOP\_HOME/etc/hadoop/hadoop-env.sh**

export JAVA\_HOME=/usr/lib/jvm/java-8-openjdk-amd64

**$ sudo nano $HADOOP\_HOME/etc/hadoop/core-site.xml**

<property>

<name>hadoop.tmp.dir</name>

<value>/home/mca/tmpdata</value>

<description>A base for other temporary directories.</description>

</property>

<property>

<name>fs.default.name</name>

<value>hdfs://localhost:54310</value>

<description>The name of the default file system></description>

</property>

**$ sudo mv $HADOOP\_HOME/etc/hadoop/mapred-site.xml.template $HADOOP\_HOME/etc/hadoop/mapred-site.xml**

**<---- Edit mapred-site.xml File ---->**

**$ sudo nano $HADOOP\_HOME/etc/hadoop/mapred-site.xml**

<property>

<name>mapred.job.tracker</name>

<value>localhost:54311</value>

</property>

**<---- Edit hdfs-site.xml File ---->**

**$ sudo nano $HADOOP\_HOME/etc/hadoop/hdfs-site.xml**

<property>

<name>dfs.replication</name>

<value>1</value>

</property>

<property>

<name>dfs.namenode.name.dir</name>

<value>/home/mca/dfsdata/namenode</value>

</property>

<property>

<name>dfs.datanode.name.dir</name>

<value>/home/mca/dfsdata/namenode</value>

</property>

**<------------------------------After Installation------------------------------>**

In Browser: http://localhost:50070

$ hdfs namenode -format

$ start-all.sh

$ jps

**Hive Installation**

$ sudo apt update -y

$ wget https://downloads.apache.org/hive/hive-3.1.2/apache-hive-3.1.2-bin.tar.gz

$ tar xzf apache-hive-3.1.2-bin.tar.gz

**$ sudo nano ~/.bashrc**

**#Add below lines in this file**

export HIVE\_HOME=/home/mca/apache-hive-3.1.2-bin

export PATH=$PATH:$HIVE\_HOME/bin

**<---- hive-config.sh File ---->**

**$ sudo nano $HIVE\_HOME/bin/hive-config.sh**

**#Add below lines in this file**

export HADOOP\_HOME=/home/mca/Hadoop

**<------------------ Create Hive directories in HDFS ------------------>**

$ hdfs dfs -mkdir /tmp

$ hdfs dfs -chmod g+w /tmp

$ hdfs dfs -mkdir -p /user/hive/warehouse

$ hdfs dfs -chmod g+w /user/hive/warehouse

**<------------------ Initialize Derby and hive ------------------>**

$ schematool -initSchema -dbType derby

**<------------------ Launching Hive ------------------>**

$ hive