

## Exp. 2

Adding files and directories, Retrieving files and Deleting files

Program:

### Format HDFS

```
mca@mca-V50t-13IMB:~$ hadoop namenode -format
```

### Start HDFS

```
$ start-all.sh
```

### Check that every process is running

```
$ jps
```

### Monitor HDFS Cluster

```
$ hdfs dfsadmin -report
```

### HDFS Commands

```
$ hdfs dfs -mkdir /MCAII //To create the folder "MCAII"
```

```
$ hdfs dfs -ls / // To list the files in the hadoop environment
```

```
$ ls //To display all the files in the system
```

```
$ hdfs dfs -ls -R / // Recursively displays entries in all subdirectories of a path
```

```
$ hdfs dfs -touchz /MCAII/sample.txt //touchz command creates a file in HDFS with file size equals to 0 byte.
```

```
$ gedit myFile1 // To create or edit the existing file
```

```
$ ls / Desktop // To list all the files in the Dsktop folder
```

**put command** - Copy file from the local file system to Hadoop file system

```
$ hdfs dfs -put ~/Desktop/welcome /MCAII // Copy the file welcome from local file system to hadoop under the folder MCAII
```

```
$ hdfs dfs -ls -R /
```

**copyFromLocal** - Copy file from the local file system to Hadoop file system

```
$ hdfs dfs -copyFromLocal ~/sample2 /MCAII
```

```
$ hdfs dfs -ls -R /
```

**get (or) copyToLocal Command** – Copy from hadoop file system to the local file system

`$ hdfs dfs -get /MCAII ~/testFolder`      // Copy all the files from MCAII to local file system folder "testFolder"

`$ hdfs dfs -copyToLocal /MCAII ~/testFolder`    //Copy all the files from MCAII to local file system folder "testFolder"

**cat command**      -      To display the contents of the file

`$ hadoop fs -cat /MCAII/sample2`      //Display the contents of the file sample2

`$ hdfs dfs -cat /MCAII/sample2`      //Display the contents of the file sample2

`$ cat ~/sample2`      // display the file from the local file system

**mv command**      -      To move the directory from from one location to another

`$ hdfs dfs -mkdir /submca`      //To create the folder 'submca'

`$ hdfs dfs -ls -R /`

`$ hdfs dfs -mv /submca /MCAII`

`$ hdfs dfs -ls -R /`

**cp command**      -      Copy files from one directory to another within HDFS

`hdfs dfs -cp /MCA/MCAII/welcome /MCA`      //Copy the file welcome to another folder

**rm command**      -      To remove a file from HDFS. This command does not delete directories. For recursive delete, use command `-rm -r`

`$ hadoop fs -rm /MCA/MCAII/sample.txt`      //remove the file sample.txt

`$ hdfs dfs -rmdir /testMCA`      //remove the directory testMCA