

Name:ULLAAS

USN:1NT19IS179

EXP-2 HADOOP COMMANDS

To start with hadoop

>hadoop version

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop version
Hadoop 3.2.1
Source code repository https://gitbox.apache.org/repos/asf/hadoop.git -r b3cbbb467e22ea829b3808f4b7b01d07e0bf3842
Compiled by rohithsharmaks on 2019-09-10T15:56Z
Compiled with protoc 2.5.0
From source with checksum 776eaf9eee9c0ffc370bcbcb1888737
This command was run using /home/hadoop/hadoop-3.2.1/share/hadoop/common/hadoop-common-3.2.1.jar
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

>start-dfs.sh

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ start-dfs.sh
Starting namenodes on [localhost]
Starting datanodes
Starting secondary namenodes [admin1-HP-280-G4-MT-Business-PC]
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

1.

Create a directory named by your name

>hadoop fs -mkdir /ullaas

>hadoop fs -ls /

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -mkdir /ullaas
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /
Found 3 items
drwxrwxr-x - hadoop supergroup 0 2021-07-28 12:58 /tmp
drwxr-xr-x - hadoop supergroup 0 2022-05-26 15:35 /ullaas
drwxr-xr-x - hadoop supergroup 0 2021-07-28 12:56 /user
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

2. Add two empty files into it

>hadoop fs -touchz /ullaas/one.txt

>hadoop fs -touchz /ullaas/two.txt

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -touchz /ullaas/one.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -touchz /ullaas/two.txt
```

3. List all the files in the directory that you have created

>hadoop fs -ls /ullaas

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /ullaas
Found 2 items
-rw-r--r-- 1 hadoop supergroup 0 2022-05-26 15:37 /ullaas/one.txt
-rw-r--r-- 1 hadoop supergroup 0 2022-05-26 15:37 /ullaas/two.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

4. Create one more directory by your usn and put that inside the directory of your name

>hadoop fs -mkdir /ullaas/1NT19IS179

>hadoop fs -ls /ullaas

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -mkdir /ullaas/1NT19IS179
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /ullaas
Found 3 items
drwxr-xr-x - hadoop supergroup 0 2022-05-26 15:38 /ullaas/1NT19IS179
-rw-r--r-- 1 hadoop supergroup 0 2022-05-26 15:37 /ullaas/one.txt
-rw-r--r-- 1 hadoop supergroup 0 2022-05-26 15:37 /ullaas/two.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

5. Create a file in your local system by the name_usn.txt and add the contents as "Syntax to list ls command is hadoop fs -ls "

>cat > ullaas_1NT19IS179.txt

>"Syntax to list ls command is hadoop fs -ls"

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ cat > ullaas_1NT19IS179.txt
"Syntax to list ls command is hadoop fs -ls"
^Z
[1]+  Stopped                  cat > ullaas_1NT19IS179.txt
```

► Put the file usn_name.txt in your hdfs directory called usn

>hadoop fs -touchz /ullaas/1NT19IS179/1NT19IS179_ullaas.txt

>hadoop fs -ls /ullaas/1NT19IS179

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -touchz /ullaas/1NT19IS179/1NT19IS179_ullaas.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /ullaas/1NT19IS179
Found 1 items
-rw-r--r--    1 hadoop supergroup          0 2022-05-26 15:41 /ullaas/1NT19IS179/1NT19IS179_ullaas.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

► Put empty file of hdfs into the local file system

```
>hadoop fs -copyToLocal /ullaas/1NT19IS179/1NT19IS179_ullaas.txt
>ls
```

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -copyToLocal /ullaas/1NT19IS179/1NT19IS179_ullaas.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ ls
1.js                apache-hive-3.1.2-bin      Downloads            hadoop-3.2.1.tar.gz    Pictures            soni                 v.c
1NT19IS179_ullaas.txt  apache-hive-3.1.2-bin.tar.gz  eclipse-workspace    lab2.js                prank.c             Templates            Videos
AMITHMM              Desktop                    genre.js             mov.js                  Public              tmpdata              t.txt
anime.c              dfsdata                    hadoop               Music                    s2.txt              snap                  ullaas_1NT19IS179.txt
a.out                Documents                  hadoop-3.2.1        p.c
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

► Use mv command to move files from local file system and hdfs file system

```
>hadoop fs -mv /ullaas/two.txt /ullaas/1NT19IS179
>hadoop fs -ls /ullaas/1NT19IS179
```

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -mv /ullaas/two.txt /ullaas/1NT19IS179
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /ullaas/1NT19IS179
Found 2 items
-rw-r--r--    1 hadoop supergroup          0 2022-05-26 15:41 /ullaas/1NT19IS179/1NT19IS179_ullaas.txt
-rw-r--r--    1 hadoop supergroup          0 2022-05-26 15:37 /ullaas/1NT19IS179/two.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

► Experiment of cp command

```
>hadoop fs -cp /ullaas/one.txt /ullaas/1NT19IS179
>hadoop fs -ls /ullaas/1NT19IS179
```

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -cp /ullaas/one.txt /ullaas/1NT19IS179
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /ullaas/1NT19IS179
Found 3 items
-rw-r--r--    1 hadoop supergroup          0 2022-05-26 15:41 /ullaas/1NT19IS179/1NT19IS179_ullaas.txt
-rw-r--r--    1 hadoop supergroup          0 2022-05-26 15:43 /ullaas/1NT19IS179/one.txt
-rw-r--r--    1 hadoop supergroup          0 2022-05-26 15:37 /ullaas/1NT19IS179/two.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```

► Display the total size of all the files in name directory

```
>hadoop fs -du /ullaas
>hadoop fs -du -s /ullaas
```

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -du /ullaas
0 0 /ullaas/1NT19IS179
0 0 /ullaas/one.txt
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -du -s /ullaas
0 0 /ullaas
```

- Display each file size in usn directory Use stat command on name and usn directories
- >hadoop fs -du /ullaas/1NT19IS179

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -du /ullaas/1NT19IS179
0 0 /ullaas/1NT19IS179/1NT19IS179_ullaas.txt
0 0 /ullaas/1NT19IS179/one.txt
0 0 /ullaas/1NT19IS179/two.txt
```

- Illustrate the use of append command

cat > one.txt

Hello

^Z

[4]+ Stopped cat > one.txt

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ cat > one.txt
HELLO
^Z
[1]+ Stopped cat > one.txt
```

>hadoop fs -appendToFile one.txt /ullaas/1NT19IS179/two.txt

>hadoop fs -cat /ullaas/1NT19IS179/two.txt

```
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -appendToFile one.txt /ullaas/1NT19IS179/two.txt
2022-05-26 15:54:25,794 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localhostTrusted = false, remoteHostTrusted = false
hadoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -cat /ullaas/1NT19IS179/two.txt
2022-05-26 15:56:12,100 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localhostTrusted = false, remoteHostTrusted = false
HELLO
hadoop@admin1-HP-280-G4-MT-Business-PC:~$
```