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BATCH : C1
USN : 1NT19IS107
DT : 24-05-2022

Checking the hadoop version.

```
hdoop@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 776eaf9eee9c0ffc370bcbc1888737
This command was run using /home/hdoop/hadoop-3.2.1/share/hadoop/common/hadoop-common-3.2.1.jar
```

1.Create a directory named by your name.

hadoop fs -mkdir /harshini
 hadoop fs -ls /

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -mkdir /harshini

hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /
Found 3 items
drwxr-xr-x   - hdoop supergroup          0 2022-05-24 09:32 /harshini
drwxrwxr-x   - hdoop supergroup          0 2021-07-28 12:58 /tmp
drwxr-xr-x   - hdoop supergroup          0 2021-07-28 12:56 /user
```

2. Add two empty files into it.

hadoop fs -touchz /harshini/empty1.txt
hadoop fs -touchz /harshini/empty2.txt

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -touchz /harshini/empty1.txt
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -touchz /harshini/empty2.txt
```

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

hadoop fs -ls /harshini

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /harshini
Found 2 items
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 09:33 /harshini/empty1.txt
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 09:33 /harshini/empty2.txt
```

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

 hadoop fs -mkdir /harshini/1NT19IS107
hadoop fs -ls /harshini

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop  fs -mkdir /harshini/1NT19IS107
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /harshini
Found 3 items
drwxr-xr-x   - hdoop supergroup          0 2022-05-24 09:46 /harshini/1NT19IS107
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 09:33 /harshini/empty1.txt
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 09:33 /harshini/empty2.txt
```

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 > harshini_1NT19IS107.txt
Syntax to list ls command is hadoop fs -ls

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ cat > harshini_1NT19IS107.txt
Syntax to list ls command is hadoop fs -ls
^Z
[2]+  Stopped                 cat > harshini_1NT19IS107.txt
```

Put the file usn_name.txt in your hdfs directory called usn
Put empty file of hdfs into the local file system.

hadoop fs -touchz /harshini/1NT19IS107/1NT19IS107_harshini.txt
hadoop fs -touchz /harshini/1NT19IS107/emp1.txt
hadoop fs -ls /harshini/1NT19IS107

 hadoop fs -copyToLocal /harshini/1NT19IS107/1NT19IS107_harshini.txt
ls

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -touchz /harshini/1NT19IS107/1NT19IS107_harshini.txt
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /harshini/1NT19IS107
Found 2 items
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 10:29 /harshini/1NT19IS107/1NT19IS107_harshini.txt
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 10:23 /harshini/1NT19IS107/emp1.txt
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -copyToLocal /harshini/1NT19IS107/1NT19IS107_harshini.txt
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ ls
1NT19IS107              apache-hive-3.1.2-bin.tar.gz  books.js    Downloads          hadoop-3.2.1.tar.gz      netflix.js  snap       Videos
1NT19IS107_harshini.txt asha                          Desktop     eclipse-workspace  harshini_1NT19IS107.txt  Pictures    Templates
a.out                   Asha_402                      dfsdata     emp1.txt           meme.c                   prank       test1.js
apache-hive-3.1.2-bin   boo.js                        Documents   hadoop-3.2.1       Music                    Public      tmpdata
```

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

hadoop fs -mv /harshini/empty2.txt /harshini/1NT19IS107
hadoop fs -ls /harshini/1NT19IS107

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -mv /harshini/empty2.txt /harshini/1NT19IS107
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /harshini/1NT19IS107
Found 4 items
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 10:29 /harshini/1NT19IS107/1NT19IS107_harshini.txt
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 10:23 /harshini/1NT19IS107/emp1.txt
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 10:46 /harshini/1NT19IS107/empty1.txt
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 09:33 /harshini/1NT19IS107/empty2.txt
```

Experiment of cp command

hadoop fs -cp /harshini/empty1.txt /harshini/1NT19IS107
 hadoop fs -ls /harshini/1NT19IS107

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -cp /harshini/empty1.txt /harshini/1NT19IS107
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -ls /harshini/1NT19IS107
Found 3 items
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 10:29 /harshini/1NT19IS107/1NT19IS107_harshini.txt
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 10:23 /harshini/1NT19IS107/emp1.txt
-rw-r--r--   1 hdoop supergroup          0 2022-05-24 10:46 /harshini/1NT19IS107/empty1.txt
```

Display the total size of all files in name directory

hadoop fs -du /harshini

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -moveFromLocal harshini_1NT19IS107.txt /harshini
2022-05-24 10:52:45,056 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -du /harshini
0    0   /harshini/1NT19IS107
0    0   /harshini/empty1.txt
0    0   /harshini/empty2.txt
43   43  /harshini/harshini_1NT19IS107.txt
hdoop@admin1-HP-280-G4-MT-Business-PC:~$
```

hadoop fs -du -s /harshini

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -du -s /harshini
43   43  /harshini
```

Display each file size in USN directory Use stat command on name and usn directories.

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -du /harshini/1NT19IS107
0  0  /harshini/1NT19IS107/1NT19IS107_harshini.txt
0  0  /harshini/1NT19IS107/emp1.txt
0  0  /harshini/1NT19IS107/empty1.txt
0  0  /harshini/1NT19IS107/empty2.txt
```

Illustrate the use of append command

cat > empty1.txt
Hello World

hadoop fs -appendToFile empty1.txt /harshini/1NT19IS107/empty2.txt

hadoop fs -cat /harshini/1NT19IS107/empty2.txt

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ cat > empty1.txt
Hello World
^Z
[1]+  Stopped                 cat > empty1.txt
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -appendToFile empty1.txt /harshini/1NT19IS107/empty2.txt
2022-05-24 15:59:12,915 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
```

```
hdoop@admin1-HP-280-G4-MT-Business-PC:~$ hadoop fs -cat /harshini/1NT19IS107/empty2.txt
2022-05-24 16:00:00,032 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
Hello World
```