

# Assignment Day 2

## Task 1:

Check whether /user/acadgild directory exists or not in the HDFS.

If it doesn't exist, then create this.

Create a directory /user/acadgild/hadoop.

## **Ans:**

**hadoop fs -ls /user/acadgild**

(Lists files or folders **(if exists)** within **/user/acadgild**)

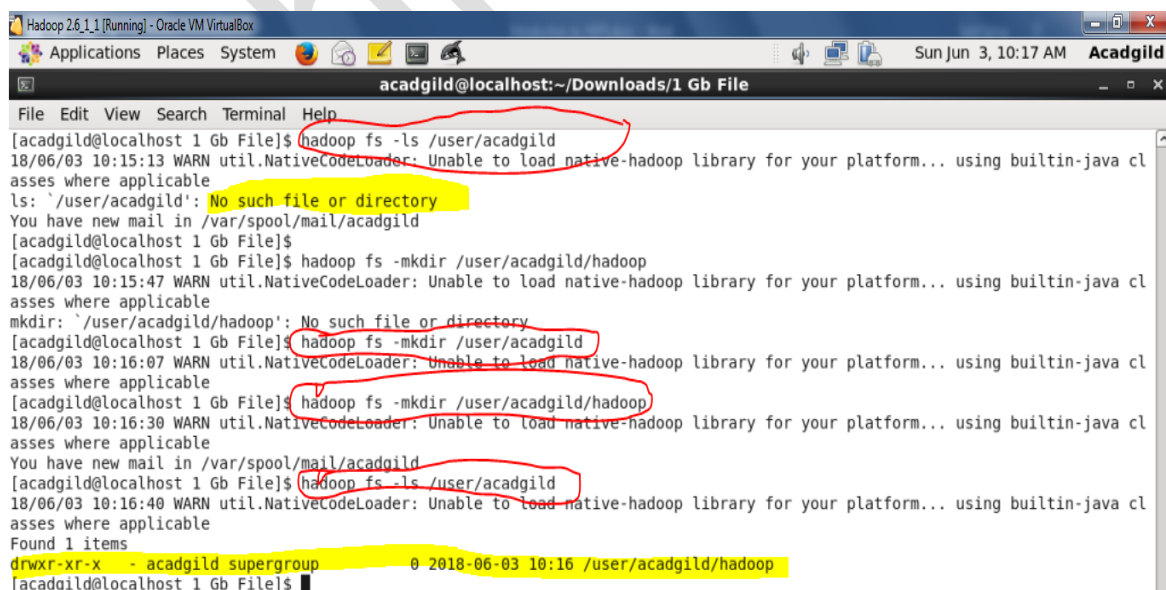
**hadoop fs -mkdir /user/acadgild**

(creates directory **acadgild** within **/user/**)

**hadoop fs -mkdir /user/acadgild/hadoop**

(creates directory **hadoop** within **/user/acadgild/**)

## **ScreenShot:**



```
Hadoop 2.6.1_1 [Running] - Oracle VM VirtualBox
Applications Places System
acadgild@localhost:~/Downloads/1 Gb File
File Edit View Search Terminal Help
[acadgild@localhost 1 Gb File]$ hadoop fs -ls /user/acadgild
18/06/03 10:15:13 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
ls: '/user/acadgild': No such file or directory
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost 1 Gb File]$
[acadgild@localhost 1 Gb File]$ hadoop fs -mkdir /user/acadgild/hadoop
18/06/03 10:15:47 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
mkdir: '/user/acadgild/hadoop': No such file or directory
[acadgild@localhost 1 Gb File]$ hadoop fs -mkdir /user/acadgild
18/06/03 10:16:07 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
[acadgild@localhost 1 Gb File]$ hadoop fs -mkdir /user/acadgild/hadoop
18/06/03 10:16:30 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost 1 Gb File]$ hadoop fs -ls /user/acadgild
18/06/03 10:16:40 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 1 items
drwxr-xr-x - acadgild supergroup 0 2018-06-03 10:16 /user/acadgild/hadoop
[acadgild@localhost 1 Gb File]$
```

## Task 2:

Create a file in HDFS under directory /user/acadgild/hadoop, with name word-count.txt.

Whatever we type on screen should get appended to the file.

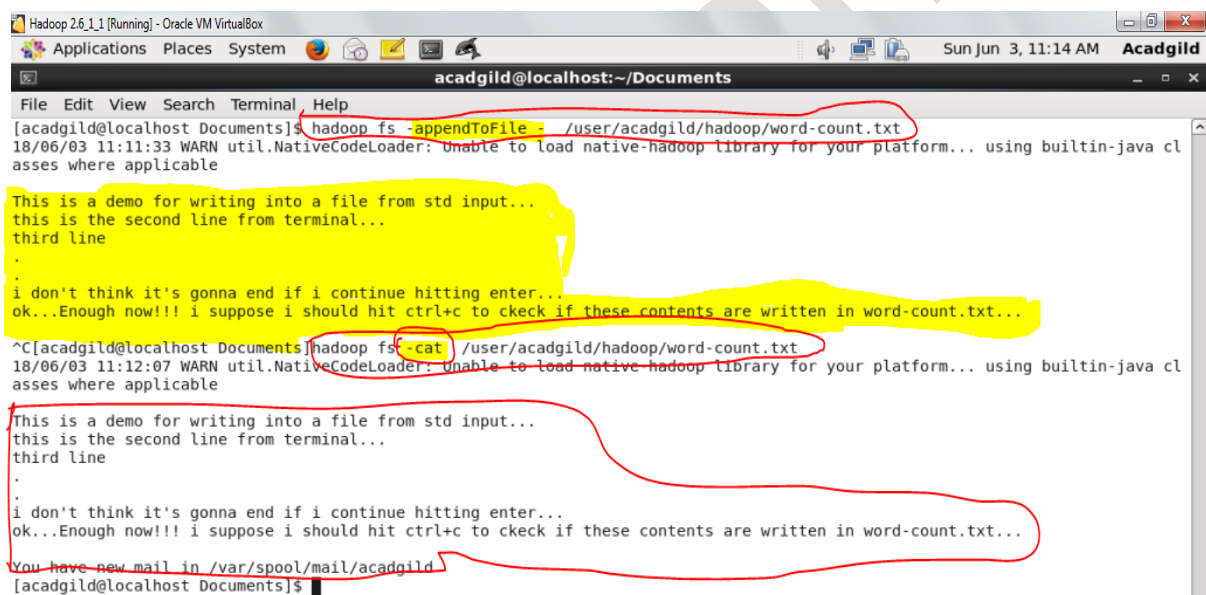
Try to type (on screen) few lines from any online article or textbook.

**Ans:**

**hadoop fs -appendToFile - /user/acadgild/hadoop/word-count.txt**

(Creates a file "word-count.txt" within /user/acadgild/hadoop/ & the "-" after appendToFile allows the input from **stdin** i.e. **Terminal** directly to be written into the file word-count.txt Press 'ctrl+c' to exit writing into the file)

**ScreenShot:**



```
Hadoop 2.6.1_1 [Running] - Oracle VM VirtualBox
Applications Places System
acadgild@localhost: ~/Documents
File Edit View Search Terminal Help
[acadgild@localhost Documents]$ hadoop fs -appendToFile - /user/acadgild/hadoop/word-count.txt
18/06/03 11:11:33 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable

This is a demo for writing into a file from std input...
this is the second line from terminal...
third line
.
.
i don't think it's gonna end if i continue hitting enter...
ok...Enough now!!! i suppose i should hit ctrl+c to ckeck if these contents are written in word-count.txt...

^C[acadgild@localhost Documents]$ hadoop fs -cat /user/acadgild/hadoop/word-count.txt
18/06/03 11:12:07 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable

This is a demo for writing into a file from std input...
this is the second line from terminal...
third line
.
.
i don't think it's gonna end if i continue hitting enter...
ok...Enough now!!! i suppose i should hit ctrl+c to ckeck if these contents are written in word-count.txt...

You have new mail in /var/spool/mail/acadgild
[acadgild@localhost Documents]$
```

### **Task 3:**

Create a file max-temp.txt in local FS.

Put some 10-15 records of date and temperature example:

dd-mm-yyyy,temperature

Example:

10-01-1990,10

10-02-1991,20

Move this file to HDFS at /user/acadgild/hadoop.

### **Ans :**

**nano** max-temp.txt

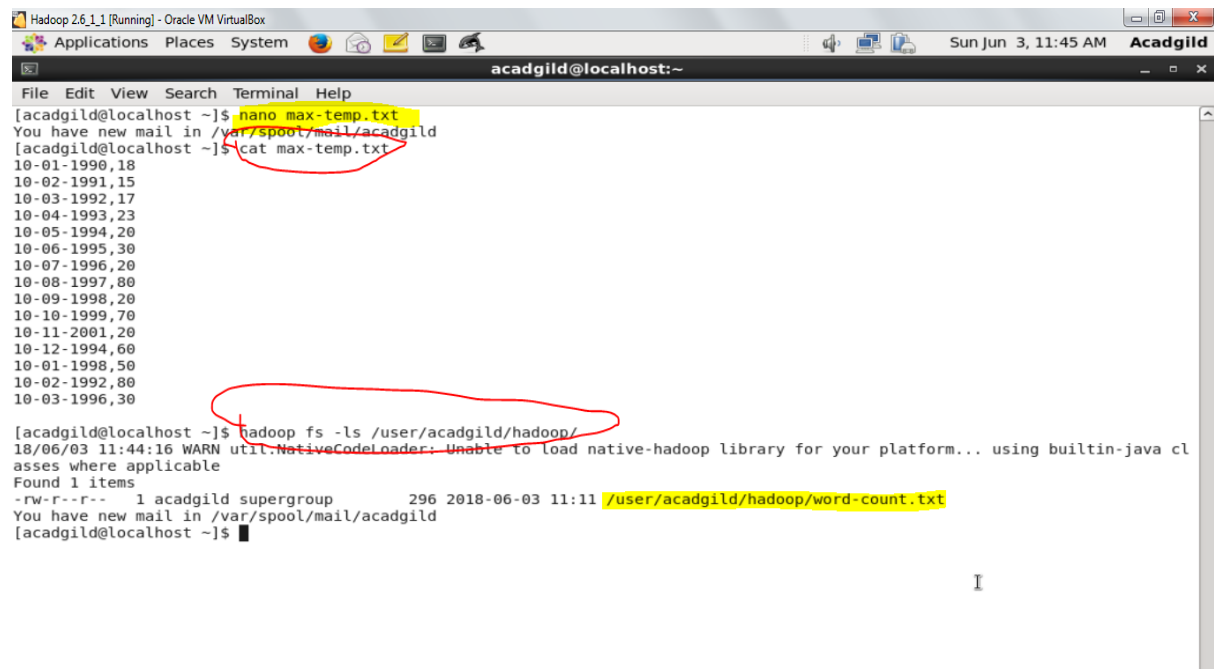
(Creates a file max-temp.txt. Have input 15 dates in format dd-mm-yyyy,temperature)

**hadoop fs -moveFromLocal** max-temp.txt /user/acadgild/hadoop/

(Moves the file from **local** file system at the path where max-temp.txt file is located onto hadoop cluster **/user/acadgild/hadoop/**)

## ScreenShot:

Creation of file max-temp.txt & displaying that /user/acadgild/hadoop/ consists of only one file in the beginning.

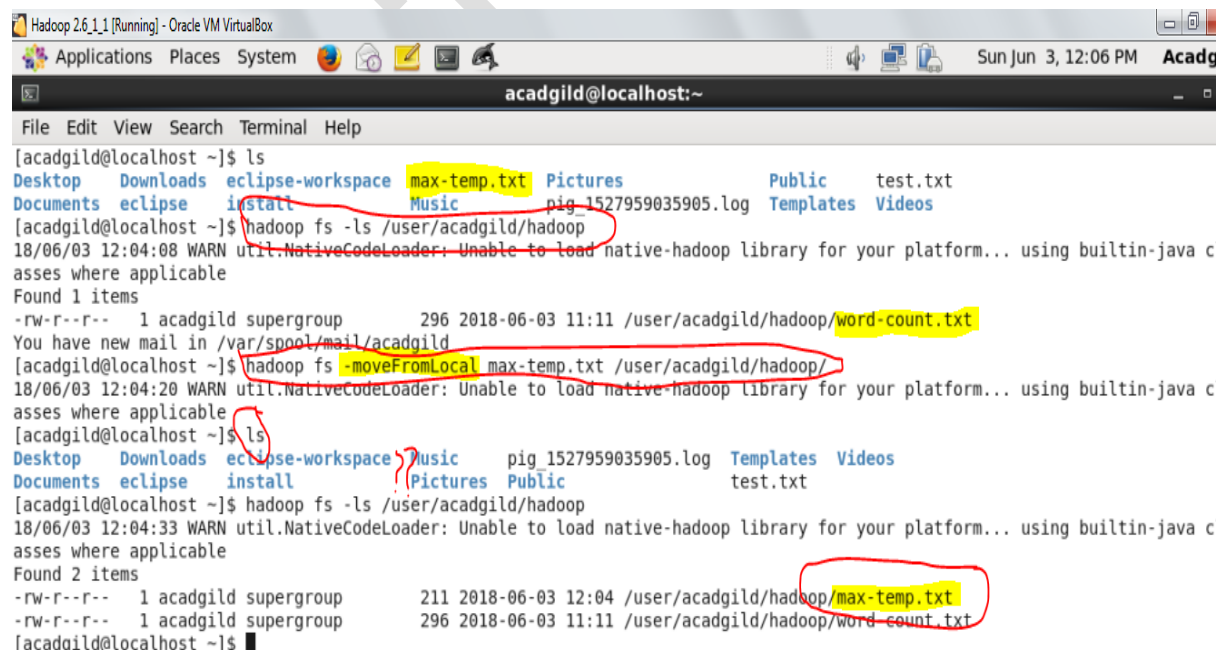


The screenshot shows a terminal window titled "Hadoop 2.6.1 [Running] - Oracle VM VirtualBox". The user is logged in as "acadgild@localhost". The terminal shows the following commands and output:

```
[acadgild@localhost ~]$ nano max-temp.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ cat max-temp.txt
10-01-1990,18
10-02-1991,15
10-03-1992,17
10-04-1993,23
10-05-1994,20
10-06-1995,30
10-07-1996,20
10-08-1997,80
10-09-1998,20
10-10-1999,70
10-11-2001,20
10-12-1994,60
10-01-1998,50
10-02-1992,80
10-03-1996,30

[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop/
18/06/03 11:44:16 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java c
asses where applicable
Found 1 items
-rw-r--r-- 1 acadgild supergroup          296 2018-06-03 11:11 /user/acadgild/hadoop/word-count.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$
```

After moving the file from local onto hadoop. File max-temp.txt relocates from local file system onto hadoop file system.



The screenshot shows a terminal window titled "Hadoop 2.6.1 [Running] - Oracle VM VirtualBox". The user is logged in as "acadgild@localhost". The terminal shows the following commands and output:

```
[acadgild@localhost ~]$ ls
Desktop  Downloads  eclipse-workspace  max-temp.txt  Pictures  Public  test.txt
Documents  eclipse  install  Music  pig_1527959035905.log  Templates  Videos

[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/06/03 12:04:08 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java c
asses where applicable
Found 1 items
-rw-r--r-- 1 acadgild supergroup          296 2018-06-03 11:11 /user/acadgild/hadoop/word-count.txt
You have new mail in /var/spool/mail/acadgild

[acadgild@localhost ~]$ hadoop fs -moveFromLocal max-temp.txt /user/acadgild/hadoop/
18/06/03 12:04:20 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java c
asses where applicable

[acadgild@localhost ~]$ ls
Desktop  Downloads  eclipse-workspace  Music  pig_1527959035905.log  Templates  Videos
Documents  eclipse  install  Pictures  Public  test.txt

[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/06/03 12:04:33 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java c
asses where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup          211 2018-06-03 12:04 /user/acadgild/hadoop/max-temp.txt
-rw-r--r-- 1 acadgild supergroup          296 2018-06-03 11:11 /user/acadgild/hadoop/word-count.txt
[acadgild@localhost ~]$
```

## Task 4:

Change the permission of the file /user/acadgild/hadoop/max-temp.txt, such that only the owner and

the group members have full control over the file.

Others do not have any control over it.

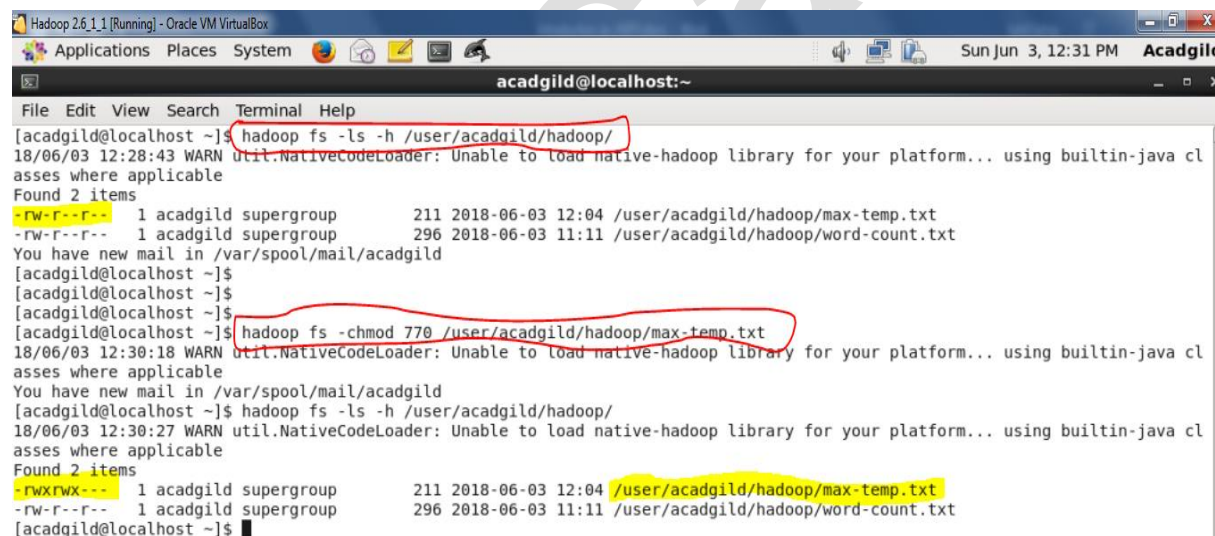
## **Ans:**

**hadoop fs -chmod 770 /user/acadgild/hadoop/max-temp.txt**

(Octal method of changing permission of a file. From left to right permission is set for user, group, other respectively.

**7-> All permission, 0-> No Permission)**

## **ScreenShot:**



The screenshot shows a terminal window titled 'Hadoop 2.6.1.1 [Running] - Oracle VM VirtualBox'. The user 'acadgild' is at the 'localhost' prompt. The terminal shows the following commands and output:

```
[acadgild@localhost ~]$ hadoop fs -ls -h /user/acadgild/hadoop/
18/06/03 12:28:43 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup          211 2018-06-03 12:04 /user/acadgild/hadoop/max-temp.txt
-rw-r--r-- 1 acadgild supergroup          296 2018-06-03 11:11 /user/acadgild/hadoop/word-count.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$
[acadgild@localhost ~]$
[acadgild@localhost ~]$ hadoop fs -chmod 770 /user/acadgild/hadoop/max-temp.txt
18/06/03 12:30:18 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls -h /user/acadgild/hadoop/
18/06/03 12:30:27 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 2 items
-rwxrwx--- 1 acadgild supergroup          211 2018-06-03 12:04 /user/acadgild/hadoop/max-temp.txt
-rw-r--r-- 1 acadgild supergroup          296 2018-06-03 11:11 /user/acadgild/hadoop/word-count.txt
[acadgild@localhost ~]$
```

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End

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