

6. Problem Statement

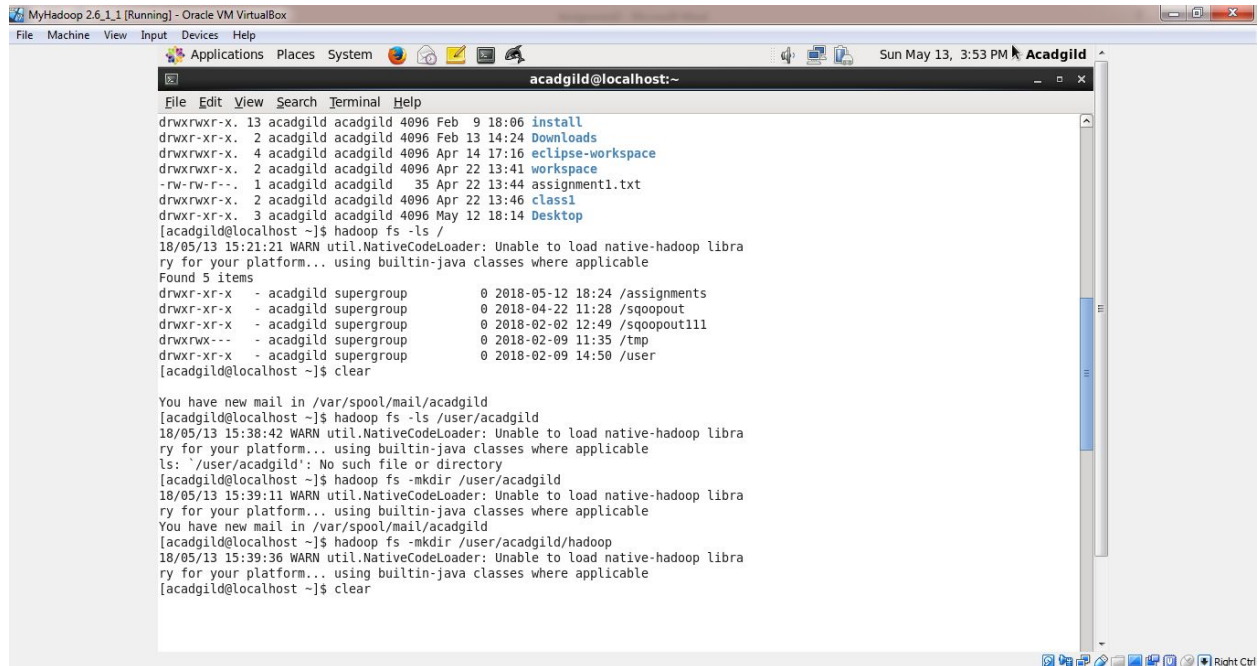
Task 1:

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.

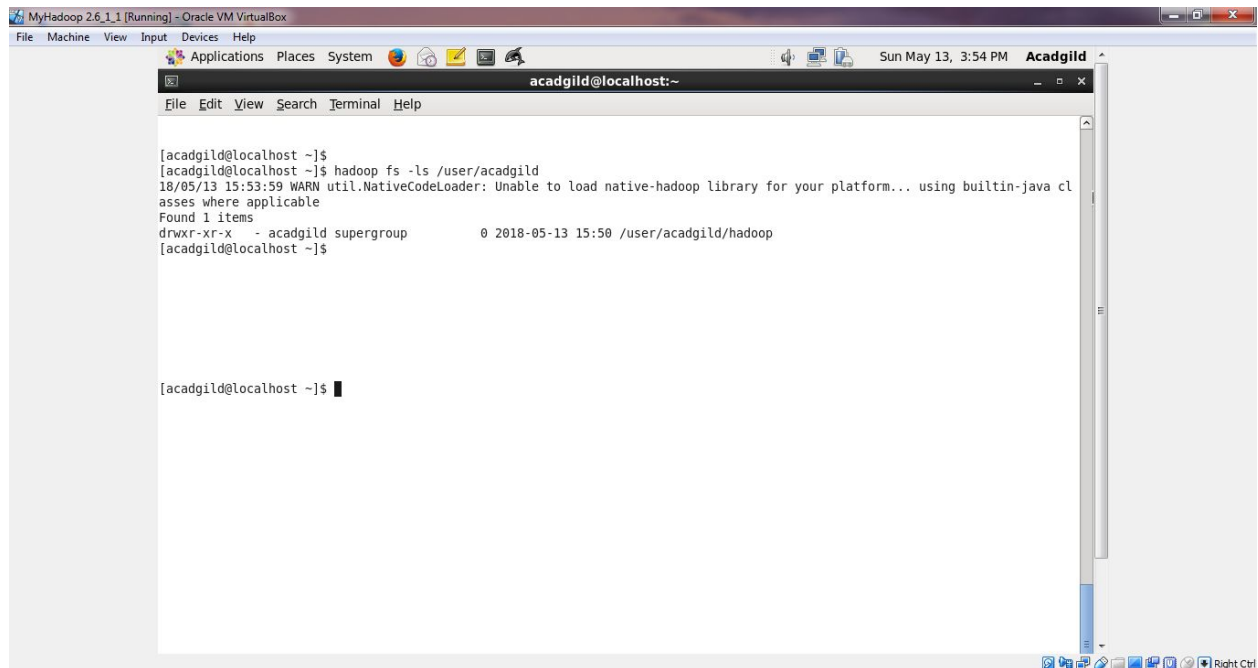
Hadoop fs -mkdir creates a directory with the name specified in the arguments.



```
MyHadoop 2.6.1.1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places System
acadgild@localhost:~
File Edit View Search Terminal Help
drwxrwxr-x. 13 acadgild acadgild 4096 Feb  9 18:06 install
drwxr-xr-x.  2 acadgild acadgild 4096 Feb 13 14:24 Downloads
drwxrwxr-x.  4 acadgild acadgild 4096 Apr 14 17:16 eclipse-workspace
drwxrwxr-x.  2 acadgild acadgild 4096 Apr 22 13:41 workspace
-rw-rw-r--.  1 acadgild acadgild  35 Apr 22 13:44 assignment1.txt
drwxrwxr-x.  2 acadgild acadgild 4096 Apr 22 13:46 class1
drwxr-xr-x.  3 acadgild acadgild 4096 May 12 18:14 Desktop
[acadgild@localhost ~]$ hadoop fs -ls /
18/05/13 15:21:21 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Found 5 items
drwxr-xr-x - acadgild supergroup          0 2018-05-12 18:24 /assignments
drwxr-xr-x - acadgild supergroup          0 2018-04-22 11:28 /sqoopout
drwxr-xr-x - acadgild supergroup          0 2018-02-02 12:49 /sqoopout111
drwxrwx-- - acadgild supergroup          0 2018-02-09 11:35 /tmp
drwxr-xr-x - acadgild supergroup          0 2018-02-09 14:50 /user
[acadgild@localhost ~]$ clear

You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild
18/05/13 15:38:42 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
ls: '/user/acadgild': No such file or directory
[acadgild@localhost ~]$ hadoop fs -mkdir /user/acadgild
18/05/13 15:39:11 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -mkdir /user/acadgild/hadoop
18/05/13 15:39:36 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
[acadgild@localhost ~]$ clear
```

Hadoop fs -ls lists all files in a directory



```
MyHadoop 2.6.1.1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places System
acadgild@localhost:~
File Edit View Search Terminal Help

[acadgild@localhost ~]$
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild
18/05/13 15:53:59 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 2018-05-13 15:50 /user/acadgild/hadoop
[acadgild@localhost ~]$

[acadgild@localhost ~]$
```

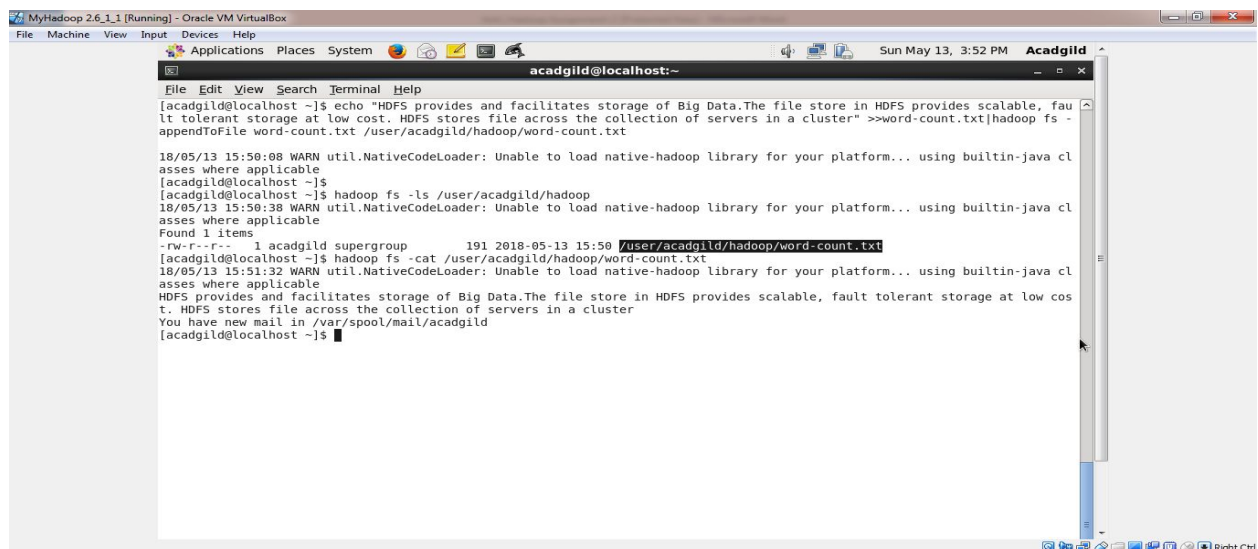
Task 2:

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.

Output of echo is appended to file word-count.txt and appendToFile command in Hadoop adds the file to Hadoop file system.



```
MyHadoop 2.6.1.1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places System
acadgild@localhost:~
File Edit View Search Terminal Help

[acadgild@localhost ~]$ echo "HDFS provides and facilitates storage of Big Data.The file store in HDFS provides scalable, fault
tolerant storage at low cost. HDFS stores file across the collection of servers in a cluster" >>word-count.txt[hadoop fs -
appendToFile word-count.txt /user/acadgild/hadoop/word-count.txt

18/05/13 15:50:09 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
[acadgild@localhost ~]$
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/05/13 15:50:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 1 items
-rw-r--r-- 1 acadgild supergroup          191 2018-05-13 15:50 /user/acadgild/hadoop/word-count.txt
[acadgild@localhost ~]$ hadoop fs -cat /user/acadgild/hadoop/word-count.txt
18/05/13 15:51:32 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
HDFS provides and facilitates storage of Big Data.The file store in HDFS provides scalable, fault tolerant storage at low cos
t. HDFS stores file across the collection of servers in a cluster
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$
```

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

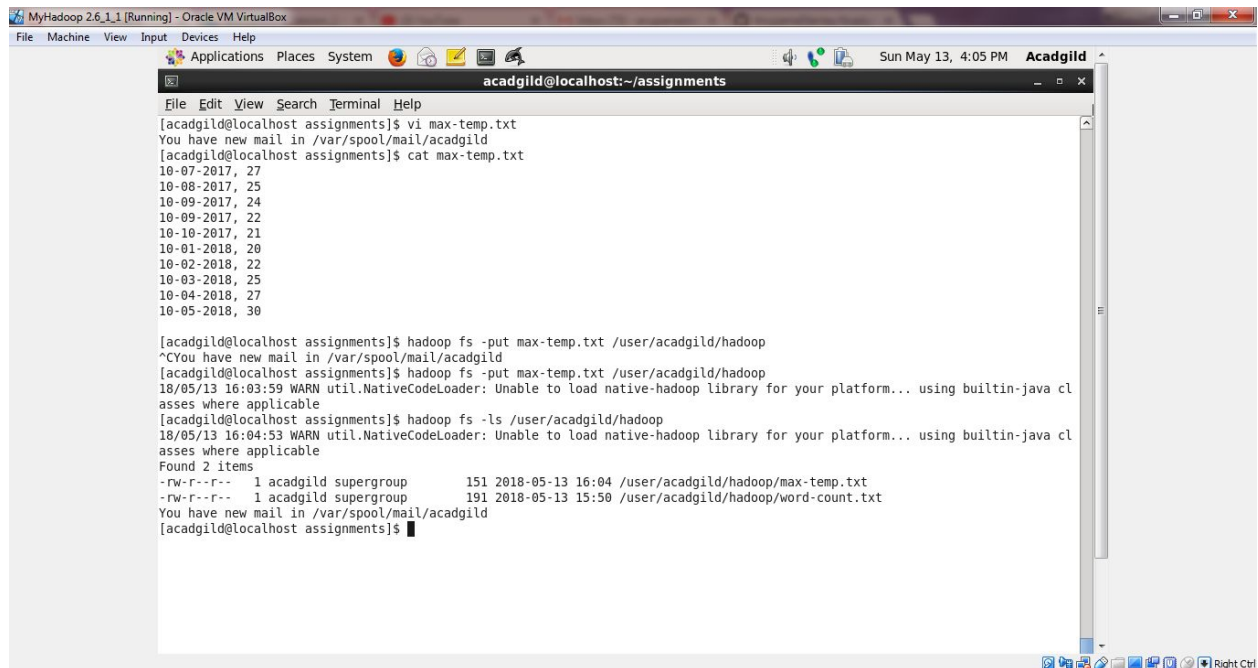
Example:

10-01-1990,10

10-02-1991,20

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

Created a file max-temp.txt using vi command and using Hadoop fs -put commnd, moved this file to HDFS directory /user/acadgild/Hadoop.



```
MyHadoop 2.6.1.1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places System
acadgild@localhost: ~/assignments
File Edit View Search Terminal Help
[acadgild@localhost assignments]$ vi max-temp.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost assignments]$ cat max-temp.txt
10-07-2017, 27
10-08-2017, 25
10-09-2017, 24
10-09-2017, 22
10-10-2017, 21
10-01-2018, 20
10-02-2018, 22
10-03-2018, 25
10-04-2018, 27
10-05-2018, 30

[acadgild@localhost assignments]$ hadoop fs -put max-temp.txt /user/acadgild/hadoop
^CYou have new mail in /var/spool/mail/acadgild
[acadgild@localhost assignments]$ hadoop fs -put max-temp.txt /user/acadgild/hadoop
18/05/13 16:03:59 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
[acadgild@localhost assignments]$ hadoop fs -ls /user/acadgild/hadoop
18/05/13 16:04:53 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 151 2018-05-13 16:04 /user/acadgild/hadoop/max-temp.txt
-rw-r--r-- 1 acadgild supergroup 191 2018-05-13 15:50 /user/acadgild/hadoop/word-count.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost assignments]$
```

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.

Hadoop fs -chmod 770 provides full permission to owner and group and no permission to others on the file.

```
MyHadoop 2.6.1.1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
[acadgild@localhost assignments]$ vi max-temp.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost assignments]$ cat max-temp.txt
10-07-2017, 27
10-08-2017, 25
10-09-2017, 24
10-09-2017, 22
10-10-2017, 21
10-01-2018, 20
10-02-2018, 22
10-03-2018, 25
10-04-2018, 27
10-05-2018, 30

[acadgild@localhost assignments]$ hadoop fs -put max-temp.txt /user/acadgild/hadoop
^CYou have new mail in /var/spool/mail/acadgild
[acadgild@localhost assignments]$ hadoop fs -put max-temp.txt /user/acadgild/hadoop
18/05/13 16:03:59 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
[acadgild@localhost assignments]$ hadoop fs -ls /user/acadgild/hadoop
18/05/13 16:04:53 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 151 2018-05-13 16:04 /user/acadgild/hadoop/max-temp.txt
-rw-r--r-- 1 acadgild supergroup 191 2018-05-13 15:50 /user/acadgild/hadoop/word-count.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost assignments]$ hadoop fs -chmod 770 /user/acadgild/hadoop/max-temp.txt
18/05/13 16:06:40 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 assignments]$ hadoop fs -ls /user/acadgild/hadoop
18/05/13 16:06:54 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 151 2018-05-13 16:04 /user/acadgild/hadoop/max-temp.txt
-rw-r--r-- 1 acadgild supergroup 191 2018-05-13 15:50 /user/acadgild/hadoop/word-count.txt
[acadgild@localhost assignments]$
```