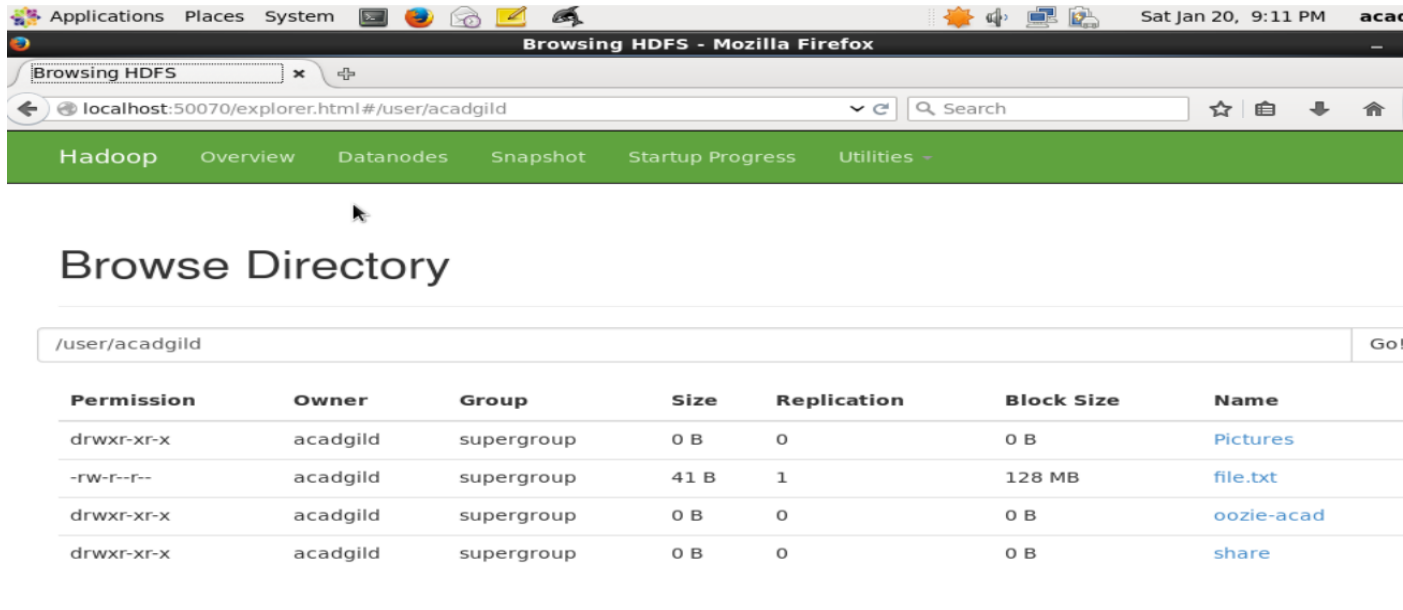


ASSIGNMENT 2.1

TASK1: To create a directory under /user/acadgild



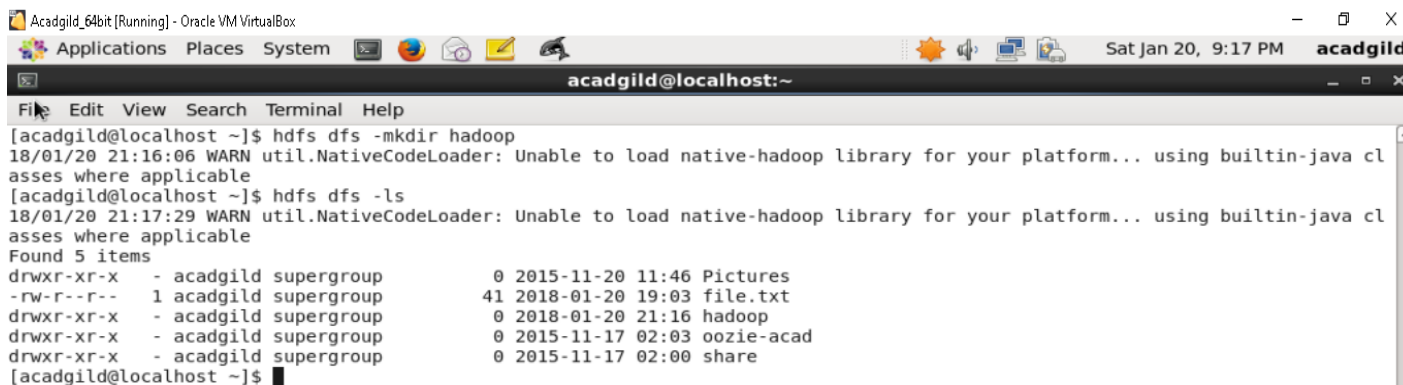
Permission	Owner	Group	Size	Replication	Block Size	Name
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	Pictures
-rw-r--r--	acadgild	supergroup	41 B	1	128 MB	file.txt
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	oozie-acad
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	share

To create a directory, we use **mkdir** command and **ls** command to check the directory in hdfs directory.

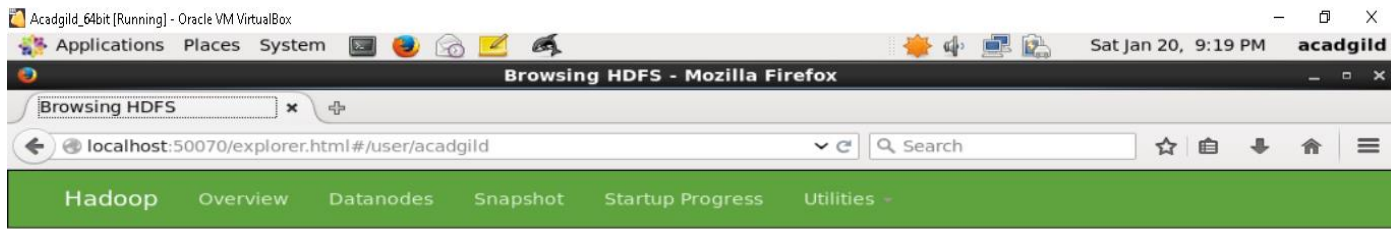
Command: `hdfs dfs -mkdir Hadoop`

`hdfs dfs -ls`

Output: ---



```
[acadgild@localhost ~]$ hdfs dfs -mkdir hadoop
18/01/20 21:16:06 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
[acadgild@localhost ~]$ hdfs dfs -ls
18/01/20 21:17:29 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 5 items
drwxr-xr-x - acadgild supergroup          0 2015-11-20 11:46 Pictures
-rw-r--r-- 1 acadgild supergroup        41 2018-01-20 19:03 file.txt
drwxr-xr-x - acadgild supergroup          0 2018-01-20 21:16 hadoop
drwxr-xr-x - acadgild supergroup          0 2015-11-17 02:03 oozie-acad
drwxr-xr-x - acadgild supergroup          0 2015-11-17 02:00 share
[acadgild@localhost ~]$
```



Browse Directory

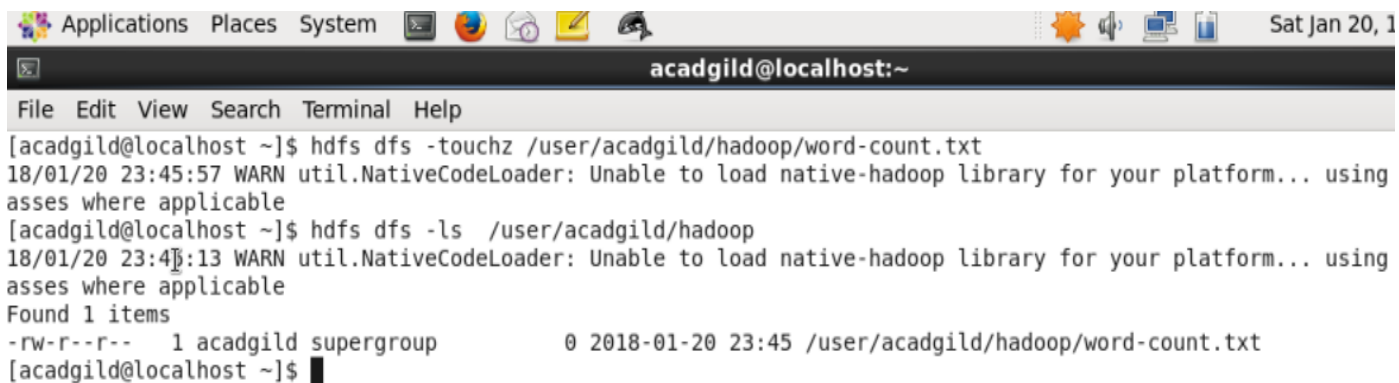
/user/acadgild						Go!
Permission	Owner	Group	Size	Replication	Block Size	Name
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	Pictures
-rw-r--r--	acadgild	supergroup	41 B	1	128 MB	file.txt
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	hadoop
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	oozie-acad
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	share

TASK2: Create a file under directory /user/acadgild/hadoop, with name word-count.txt and whatever data is type on screen should append to this file.

We first create an empty file with name word-count.txt by **touchz** command.

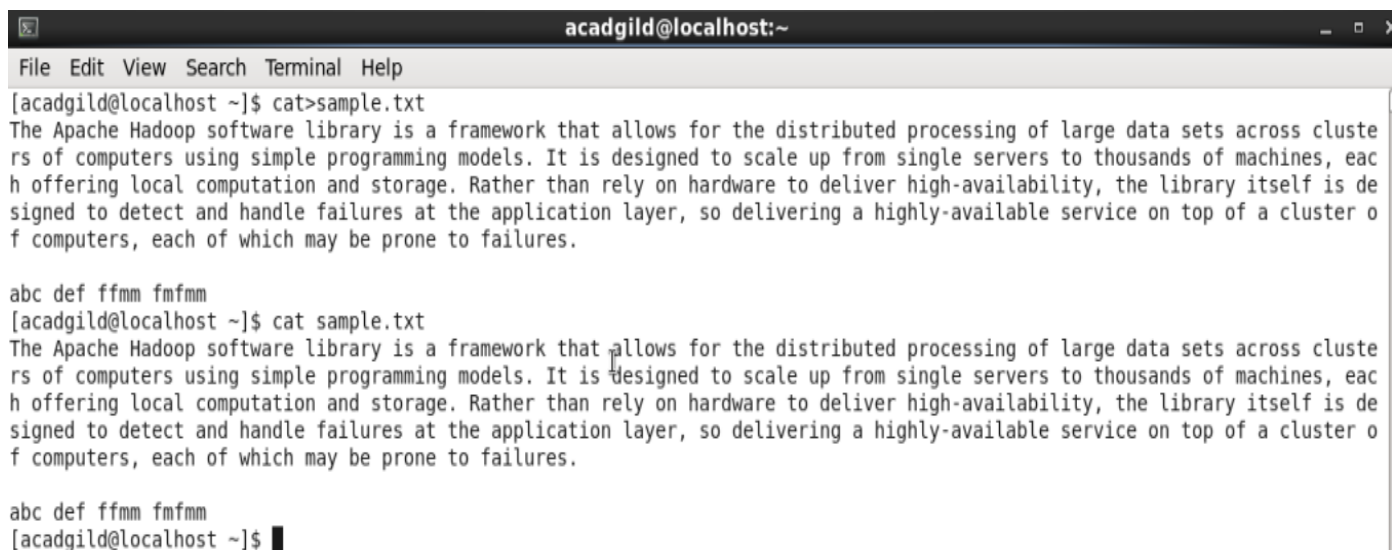
Command: `hdfs dfs -touchz /user/acadgild/hadoop/word-count.txt`

`hdfs dfs -ls /user/acadgild/hadoop/`



Now we will create a text file by sample.txt and then whatever we type on the terminal will be update in the file, by using the **cat** command.

Command: `cat > sample.txt`

A terminal window titled 'acadgild@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command '[acadgild@localhost ~]\$ cat>sample.txt' followed by a multi-line text input: 'The Apache Hadoop software library is a framework that allows for the distributed processing of large data sets across clusters of computers using simple programming models. It is designed to scale up from single servers to thousands of machines, each offering local computation and storage. Rather than rely on hardware to deliver high-availability, the library itself is designed to detect and handle failures at the application layer, so delivering a highly-available service on top of a cluster of computers, each of which may be prone to failures.' This is followed by a second command '[acadgild@localhost ~]\$ cat sample.txt' which outputs the same text. The prompt '[acadgild@localhost ~]\$' is shown again at the bottom with a cursor.

```
acadgild@localhost:~  
File Edit View Search Terminal Help  
[acadgild@localhost ~]$ cat>sample.txt  
The Apache Hadoop software library is a framework that allows for the distributed processing of large data sets across clusters of computers using simple programming models. It is designed to scale up from single servers to thousands of machines, each offering local computation and storage. Rather than rely on hardware to deliver high-availability, the library itself is designed to detect and handle failures at the application layer, so delivering a highly-available service on top of a cluster of computers, each of which may be prone to failures.  
  
abc def ffmm fmfm  
[acadgild@localhost ~]$ cat sample.txt  
The Apache Hadoop software library is a framework that allows for the distributed processing of large data sets across clusters of computers using simple programming models. It is designed to scale up from single servers to thousands of machines, each offering local computation and storage. Rather than rely on hardware to deliver high-availability, the library itself is designed to detect and handle failures at the application layer, so delivering a highly-available service on top of a cluster of computers, each of which may be prone to failures.  
  
abc def ffmm fmfm  
[acadgild@localhost ~]$
```

Now we append the data from sample.txt to existing file word-count.txt under directory /user/acadgild/hadoop and will check the data in file by using **cat** command.

Commands: `hdfs dfs -appendToFile sample.txt /user/acadgild/hadoop/word-count.txt`
`hdfs dfs -cat /user/acadgild/hadoop/word-count.txt`

```
Applications Places System Sat Jan 20, 11:54 PM acadgild@localhost:~
File Edit View Search Terminal Help
[acadgild@localhost ~]$ hdfs dfs -appendToFile sample.txt /user/acadgild/hadoop/word-count.txt
18/01/20 23:53:14 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
[acadgild@localhost ~]$ hdfs dfs -cat /user/acadgild/hadoop/word-count.txt
18/01/20 23:54:02 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
The Apache Hadoop software library is a framework that allows for the distributed processing of large data sets across clusters of computers using simple programming models. It is designed to scale up from single servers to thousands of machines, each offering local computation and storage. Rather than rely on hardware to deliver high-availability, the library itself is designed to detect and handle failures at the application layer, so delivering a highly-available service on top of a cluster of computers, each of which may be prone to failures.

abc def fmm fmm
[acadgild@localhost ~]$
```

TASK3: Create a file max-temp.txt in local FS , put some records and move the file in hdfs under directory /user/acadgild/hadoop

Use cat command to create a max-temp.txt in local file system.

Command: cat>max-temp.txt

cat max-temp.txt

```
acadgild@localhost:~
File Edit View Search Terminal Tabs Help
acadgild@localhost:~
[acadgild@localhost ~]$ cat> max-temp.txt
dd-mm-yyyy,temperature
10-01-1990,26
12-03-1991,29
13-01-1992,30
14-02-1993,25
22-05-1994,35
05-03-1996,29
04-06-1997,31
11-05-1998,23
[acadgild@localhost ~]$ cat max-temp.txt
dd-mm-yyyy,temperature
10-01-1990,26
12-03-1991,29
13-01-1992,30
14-02-1993,25
22-05-1994,35
05-03-1996,29
04-06-1997,31
11-05-1998,23
```

By manually entering some data in max-temp.txt, we can put file in hdfs by using **put** command.

Command: hdfs dfs -put max-temp.txt /user/acadgild/hadoop/

```
acadmild@localhost:~  
File Edit View Search Terminal Tabs Help  
acadmild@localhost:~ acadmild@localhost:~  
[acadmild@localhost ~]$ hdfs dfs -put max-temp.txt /user/acadmild/hadoop/  
18/01/21 00:12:47 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform...  
asses where applicable  
[acadmild@localhost ~]$ hdfs dfs -ls /user/acadmild/hadoop/  
18/01/21 00:13:23 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform...  
asses where applicable  
Found 2 items  
-rw-r--r--  1 acadmild supergroup      135 2018-01-21 00:12 /user/acadmild/hadoop/max-temp.txt  
-rw-r--r--  1 acadmild supergroup      573 2018-01-20 23:53 /user/acadmild/hadoop/word-count.txt  
[acadmild@localhost ~]$
```

TASK4: To change the permission of the file max-temp.txt, such that only the owner and group members have full control over the file

To change the permission of the file max-temp.txt, we use **chmod** command to give the permission only to user and owner.

770—we have select this option to provide full access to owner and group and denied access to others.

Command: hdfs dfs -chmod 770 /user/acadmild/hadoop/max-temp.txt

```
acadgild@localhost:~  
File Edit View Search Terminal Tabs Help  
acadgild@localhost:~ acadgild@localhost:~  
[acadgild@localhost ~]$ hdfs dfs -chmod 770 /user/acadgild/hadoop/max-temp.txt  
18/01/21 04:03:12 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl  
asses where applicable  
[acadgild@localhost ~]$ hdfs dfs -ls -h /user/acadgild/hadoop/  
18/01/21 04:03:36 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      135 2018-01-21 00:12 /user/acadgild/hadoop/max-temp.txt  
-rw-r--r--  1 acadgild supergroup      573 2018-01-20 23:53 /user/acadgild/hadoop/word-count.txt  
[acadgild@localhost ~]$
```