

ASSIGNMENT 2

HDFS – INTRODUCTION

PROBLEM STATEMENT –

1. Check whether /user/acadgild directory exists or not in the HDFS. If it doesn't exist, create a directory /user/acadgild/hadoop.
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.
3. Create a file max-temp.txt in local FS. Put some 10-15 records of date and temperature. Move this file to HDFS at /user/acadgild/hadoop.
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.

SOLUTION-

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

The directory /user/acadgild already exist. To create a directory 'hadoop' under /user/acadgild, use the command mkdir.

```
[acadgild@localhost ~]$ hadoop fs -mkdir /user/acadgild/hadoop
```

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

The appendToFile command appends data from local FS to a file on HDFS or reads data from stdin and appends it to a file on HDFS.

```
[acadgild@localhost ~]$ hadoop fs -appendToFile - /user/acadgild/hadoop/word-count.txt
18/08/19 20:56:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using
The appendToFile command in Hadoop appends data from local FS to a file in HDFS or appends data from stdin.
```

```
[acadgild@localhost ~]$ hadoop fs -cat /user/acadgild/hadoop/word-count.txt
18/08/19 20:59:18 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using
The appendToFile command in Hadoop appends data from local FS to a file in HDFS or appends data from stdin.
```

3. **hadoop fs -put max-temp.txt /user/acadgild/hadoop/**

```
[acadgild@localhost ~]$ cat max-temp.txt
10-01-1990,23
10-01-1994,25
27-12-1997,28
30-11-2001,34
22-03-2004,24
03-07-2006,21
09-01-2009,32
23-10-2012,19
20-09-2015,34
02-10-2016,17
[acadgild@localhost ~]$ ls -l max-temp.txt
-rw-rw-r--. 1 acadgild acadgild 140 Aug 19 20:12 max-temp.txt
```

max-temp.txt is created in local FS and contents of file are in the above screenshot.

The command to move the file to HDFS at /user/acadgild/hadoop is,

hadoop fs -put max-temp.txt /user/acadgild/hadoop/

```
[acadgild@localhost ~]$ hadoop fs -put max-temp.txt /user/acadgild/hadoop/
18/08/19 20:18:42 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platf
[acadgild@localhost ~]$ hadoop fs -cat /user/acadgild/hadoop/max-temp.txt
18/08/19 20:18:53 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platf
10-01-1990,23
10-01-1994,25
27-12-1997,28
30-11-2001,34
22-03-2004,24
03-07-2006,21
09-01-2009,32
23-10-2012,19
20-09-2015,34
02-10-2016,17
```

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

To change the permission of file max-temp.txt, the command chmod is used.

7- read(4), write(2), execute(1)

0- no permission

The first 7 is the permission for the owner(user), second 7 is the permission for the group and 0 is the permission for others.

```
[acadgild@localhost ~]$ hadoop fs -chmod 770 /user/acadgild/hadoop/max-temp.txt
18/08/19 20:23:48 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform.
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop/max-temp.txt
18/08/19 20:24:03 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform.
-rwxrwx--- 1 acadgild supergroup 140 2018-08-19 20:18 /user/acadgild/hadoop/max-temp.txt
[acadgild@localhost ~]$
```