Task 1 Group 6 README

Accessing the dataset

Logging into cluster

If you are off campus, a VPN must be used. The client is often Cisco. To log into the cluster, the following command is used:

```
ssh YOURusername@hadoop-nn001.cs.okstate.edu
```

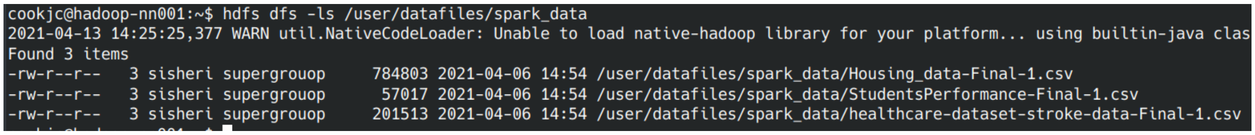
If you are on Linux, you can use `sshpass` to skip typing in your password each time. It may be possible to use this on Windows, though the author of this does not use Windows and is unaware if its possible. The discussion of this method of logging in is located at the stack overflow link

```
# https://stackoverflow.com/a/16734873/11637415
sshpass -p "YOURPassword" ssh -o \
StrictHostKeyChecking=no YOURusername@hadoop-nn001.cs.okstate.edu
```

Moving dataset to local machine

The dataset is located in the hadoop file system (HDFS) on the cluster; `/user/datafiles/spark_data`. To list the fhe files in that path the following command can be typed:

```
hdfs dfs -ls /user/datafiles/spark_data
```



```
cookjc@hadoop-nn001:~$ hdfs dfs -ls /user/datafiles/spark_data
2021-04-13 14:25:25,377 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java clas
Found 3 items
-rw-r--r--   3 sisheri supergrouop     784803 2021-04-06 14:54 /user/datafiles/spark_data/Housing_data-Final-1.csv
-rw-r--r--   3 sisheri supergrouop      57017 2021-04-06 14:54 /user/datafiles/spark_data/StudentsPerformance-Final-1.csv
-rw-r--r--   3 sisheri supergrouop     201513 2021-04-06 14:54 /user/datafiles/spark_data/healthcare-dataset-stroke-data-Final-1.csv
```

Figure 1: The hdfs files on the cluster for the big data group assignment

The `Housing` dataset has been assigned to us (Group 6). Spark has a `write once, run everywhere` methodology. We now want to move the `Housing_data-Final-1.csv` dataset to our `/home` directory so we can then copy it off the cluster to our own local machine for running spark programs.

```
hadoop fs -copyToLocal \
/user/datafiles/spark_data/Housing_data-Final-1.csv .
```

Now the file can be moved off the cluster to our local machine. From a terminal window that is not logged into the cluster, `scp` can now be used to move the data off the cluster.

```
scp -r \
cookjc@hadoop-nn001.cs.okstate.edu:/home/cookjc/\
Housing_data-Final-1.csv .
```