Assgnment-1

Tasks:

1. Start Hadoop single node on AcadGild VM. The command is start-all.sh.

Command-./**start-all.sh**

Description-
Starts all Hadoop daemons, the namenode, datanodes, secondary namenode , he jobtracker and tasktrackers (hadoop1)(the Resource Manager and Nodemanager in hadoop 2) and . Deprecated; use `start-dfs.sh` then `start-mapred.sh`
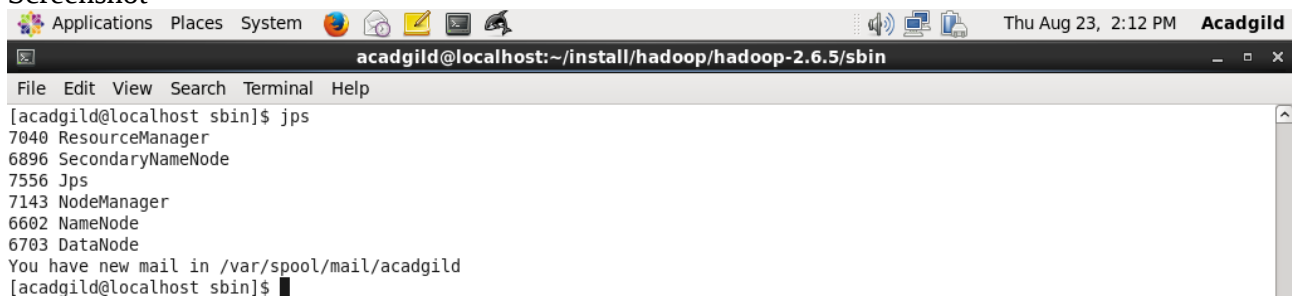
ScreenShot-

```
[acadgild@localhost sbin]$ ./start-all.sh
This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh
18/08/23 14:10:12 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Starting namenodes on [localhost]
localhost: starting namenode, logging to /home/acadgild/install/hadoop/hadoop-2.
6.5/logs/hadoop-acadgild-namenode-localhost.localdomain.out
localhost: starting datanode, logging to /home/acadgild/install/hadoop/hadoop-2.
6.5/logs/hadoop-acadgild-datanode-localhost.localdomain.out
Starting secondary namenodes [0.0.0.0]
0.0.0.0: starting secondarynamenode, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/hadoop-acadgild-secondaryname
node-localhost.localdomain.out
18/08/23 14:10:43 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
starting yarn daemons
starting resourcemanager, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/yarn-acadgild-resourcemanager-localhost.
localdomain.out
localhost: starting nodemanager, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/yarn-acadgild-nodemanager-localho
st.localdomain.out
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost sbin]$
```

2. Run a JPS command to see if all Hadoop daemons are running

Command- jps

Description- display list of all java processes.

Screenshot-

```
Applications  Places  System                                        Thu Aug 23, 2:12 PM   Acadgild
                    acadgild@localhost:~/install/hadoop/hadoop-2.6.5/sbin
File  Edit  View  Search  Terminal  Help
[acadgild@localhost sbin]$ jps
7040 ResourceManager
6896 SecondaryNameNode
7556 Jps
7143 NodeManager
6602 NameNode
6703 DataNode
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost sbin]$
```

3. Run few Unix commands like pwd, ls -ls, etc

Command – pwd, ls , ls -ls ,cd , mkdir

Description-

pwd – gives current working directory or currrent location

ls- Lists files in current directory

cd – change directory

mkdir- make directory

Screen shot-

```
[acadgild@localhost sbin]$ ls
distribute-exclude.sh  httpfs.sh              start-all.cmd       start-secure-dns.sh  stop-balancer.sh     stop-yarn.sh
hadoop-daemon.sh       kms.sh                 start-all.sh        start-yarn.cmd       stop-dfs.cmd         yarn-daemon.sh
hadoop-daemons.sh      mr-jobhistory-daemon.sh start-balancer.sh  start-yarn.sh        stop-dfs.sh          yarn-daemons.sh
hdfs-config.cmd        refresh-namenodes.sh   start-dfs.cmd       stop-all.cmd         stop-secure-dns.sh
hdfs-config.sh         slaves.sh              start-dfs.sh        stop-all.sh          stop-yarn.cmd
[acadgild@localhost sbin]$ pwd
/home/acadgild/install/hadoop/hadoop-2.6.5/sbin
[acadgild@localhost sbin]$ 
```

```
[acadgild@localhost sbin]$ ls -ls
total 120
4 -rwxr-xr-x. 1 acadgild acadgild 2752 Oct  3  2016 distribute-exclude.sh
3 -rwxr-xr-x. 1 acadgild acadgild 6452 Oct  3  2016 hadoop-daemon.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1360 Oct  3  2016 hadoop-daemons.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1640 Oct  3  2016 hdfs-config.cmd
4 -rwxr-xr-x. 1 acadgild acadgild 1427 Oct  3  2016 hdfs-config.sh
4 -rwxr-xr-x. 1 acadgild acadgild 2291 Oct  3  2016 httpfs.sh
4 -rwxr-xr-x. 1 acadgild acadgild 2059 Oct  3  2016 kms.sh
4 -rwxr-xr-x. 1 acadgild acadgild 4080 Oct  3  2016 mr-jobhistory-daemon.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1648 Oct  3  2016 refresh-namenodes.sh
4 -rwxr-xr-x. 1 acadgild acadgild 2145 Oct  3  2016 slaves.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1779 Oct  3  2016 start-all.cmd
4 -rwxr-xr-x. 1 acadgild acadgild 1471 Oct  3  2016 start-all.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1128 Oct  3  2016 start-balancer.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1401 Oct  3  2016 start-dfs.cmd
4 -rwxr-xr-x. 1 acadgild acadgild 3705 Oct  3  2016 start-dfs.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1357 Oct  3  2016 start-secure-dns.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1571 Oct  3  2016 start-yarn.cmd
4 -rwxr-xr-x. 1 acadgild acadgild 1347 Oct  3  2016 start-yarn.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1770 Oct  3  2016 stop-all.cmd
4 -rwxr-xr-x. 1 acadgild acadgild 1462 Oct  3  2016 stop-all.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1179 Oct  3  2016 stop-balancer.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1455 Oct  3  2016 stop-dfs.cmd
4 -rwxr-xr-x. 1 acadgild acadgild 3206 Oct  3  2016 stop-dfs.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1340 Oct  3  2016 stop-secure-dns.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1642 Oct  3  2016 stop-yarn.cmd
4 -rwxr-xr-x. 1 acadgild acadgild 1340 Oct  3  2016 stop-yarn.sh
3 -rwxr-xr-x. 1 acadgild acadgild 4295 Oct  3  2016 yarn-daemon.sh
4 -rwxr-xr-x. 1 acadgild acadgild 1353 Oct  3  2016 yarn-daemons.sh
[acadgild@localhost sbin]$ █
```

```
File  Edit  View  Search  Terminal  Help
acadgild@localhost sbin]$ cd /home/acadgild/
ou have new mail in /var/spool/mail/acadgild
acadgild@localhost ~]$ pwd
home/acadgild
acadgild@localhost ~]$ mkdir DemoFiles
acadgild@localhost ~]$ cd DemoFiles/
acadgild@localhost DemoFiles]$ █
```

4. Create a file from the terminal using nano editor (example: nano test.txt), and add some content in it. Cat it to see if the content is saved.

Command : nano test.txt
          cat test.txt
Description-

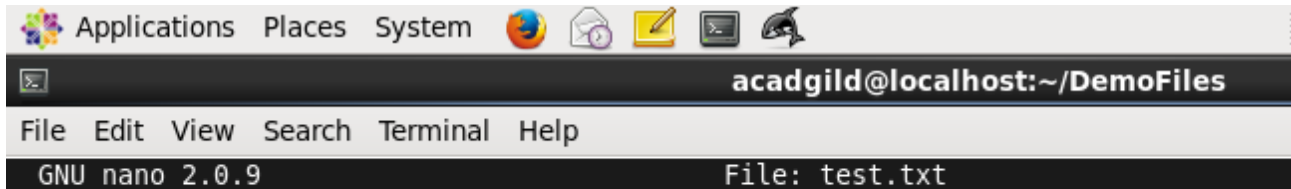Nano is a modeless editor so you can start typing immediately to insert text.
If you want to save the changes you've made, press Ctrl + O. To exit nano, type Ctrl + X. If

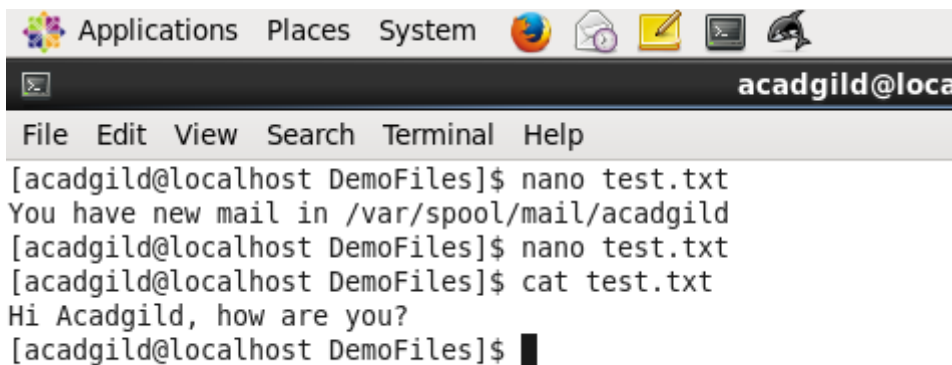you ask nano to exit from a modified file, it will ask you if you want to save it. Just press N in case

you don't, or Y in case you do. It will then ask you for a filename. Just type it in and press Enter.

If you accidentally confirmed that you want to save the file but you actually don't, you can always cancel by pressing `Ctrl` + `C` when you're prompted for a filename.

Screenshot:

5. Open the hdfs web page by typing localhost:50070 in the browser. Check all the details of the HDFS.

Description- Open Browser and type localhost:50070 in the browser. It will redirect to hdfs web page .Summary of the HDFS file system is listed on the overview page

Screenshot:

Namenode information - Mozilla Firefox

Namenode information

localhost:50070/dfshealth.html#tab-overview

Search

Hadoop Overview Datanodes Snapshot Startup Progress Utilities

Overview 'localhost:8

Started:	Thu A
Version:	2.6.5
Compiled:	2016
Cluster ID:	CID-7
Block Pool ID:	BP-4:

Summary

Security is off.

Safemode is off.

26 files and directories, 3 blocks = 29 total filesystem object(s).

Heap Memory used 28.41 MB of 50.17 MB Heap Memory. Max Heap Memory is 966.69 MB.

Non Heap Memory used 39.44 MB of 40.38 MB Commited Non Heap Memory. Max Non Heap Memory is -1 B.

acadgild@localhost:~/...   How to Use Nano Text ...   Namenode informatio...

Namenode information - Mozilla Firefox

Namenode information

localhost:50070/dfshealth.html#tab-overview

Search

Hadoop Overview Datanodes Snapshot Startup Progress Utilities

Overview 'localhost:8020' (active)

Started:	Thu Aug 23 14:10:19 IST 2018
Version:	2.6.5, re8c9fe0b4c252caf2ebf1464220599650f119997
Compiled:	2016-10-02T23:43Z by sjlee from branch-2.6.5
Cluster ID:	CID-7b3f9bd8-f34c-4fb8-87aa-f76b6dfbd809
Block Pool ID:	BP-437583619-127.0.0.1-1517555661954

Summary

Security is off