

1. Start Hadoop single node on ACADGILD VM.

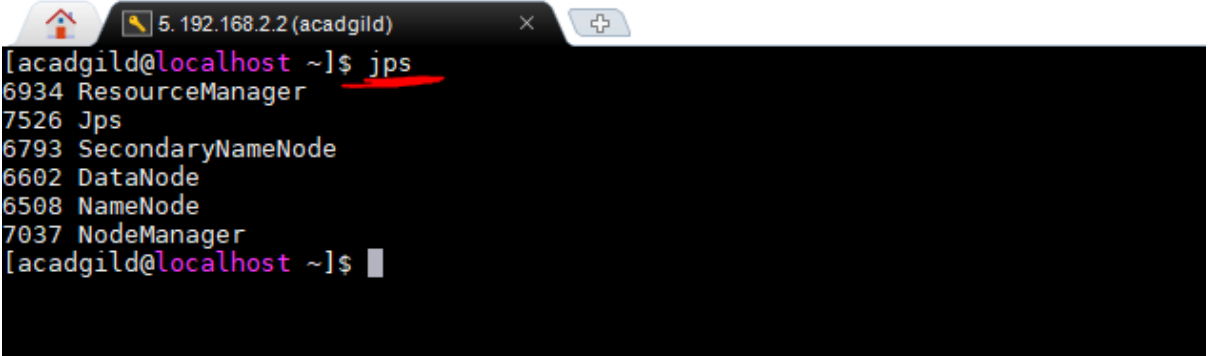
Command-start-all.sh

This command starts all the daemons in Hadoop – Name node, Data Node, Secondary Name node and Resource manager, Node manager

```
[acadgild@localhost ~]$ start-all.sh
This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh
18/07/23 15:43:51 WARN util.NativeCodeLoader: Unable to load native-hadoop library 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-secondarynamenode-localhost.localdomain.out
18/07/23 15:44:52 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes 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-localhost.localdomain.out
[acadgild@localhost ~]$
```

2. Run jps command

This command checks if the Hadoop daemons are running.



```
[acadgild@localhost ~]$ jps
6934 ResourceManager
7526 Jps
6793 SecondaryNameNode
6602 DataNode
6508 NameNode
7037 NodeManager
[acadgild@localhost ~]$
```

3. Run pwd,ls –ls commands

```

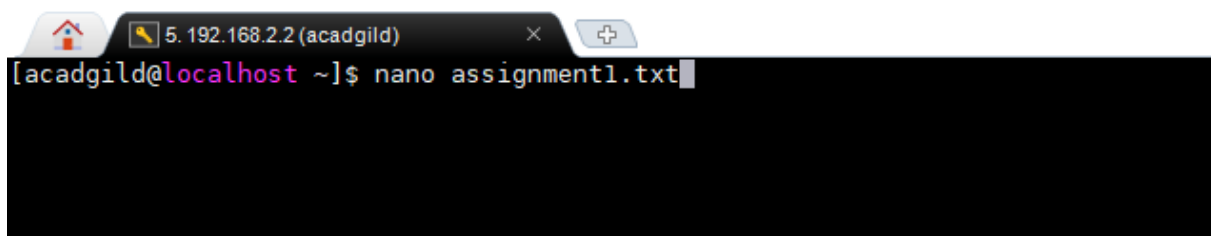
[acadgild@localhost ~]$ pwd
/home/acadgild
[acadgild@localhost ~]$ ls -ls
total 68
4 drwxr-xr-x. 3 acadgild acadgild 4096 May 15 17:57 Desktop
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Documents
4 drwxr-xr-x. 4 acadgild acadgild 4096 May 16 17:15 Downloads
4 drwxrwxr-x. 3 acadgild acadgild 4096 May 15 16:13 eclipse
4 drwxrwxr-x. 3 acadgild acadgild 4096 May 15 16:16 eclipse-workspace
4 -rw-rw-r--. 1 acadgild acadgild 10 Jul 23 00:44 hhh.txt
4 drwxrwxr-x. 3 acadgild acadgild 4096 May 16 17:24 IdeaProjects
4 drwxrwxr-x. 13 acadgild acadgild 4096 May 16 13:33 install
4 drwxrwxr-x. 8 acadgild acadgild 4096 May 16 17:16 IntelliJ
4 drwxrwxr-x. 5 acadgild acadgild 4096 May 16 13:41 metastore_db
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Music
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Pictures
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Public
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Templates
4 -rw-rw-r--. 1 acadgild acadgild 27 Jul 21 11:07 test.txt
4 -rw-rw-r--. 1 acadgild acadgild 2435 May 22 13:36 tweets
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Videos
[acadgild@localhost ~]$

```

pwd command gives the present working directory. It gives the full system path of the current working directory

ls -ls gives the file listing in the pwd

4. Using nano command

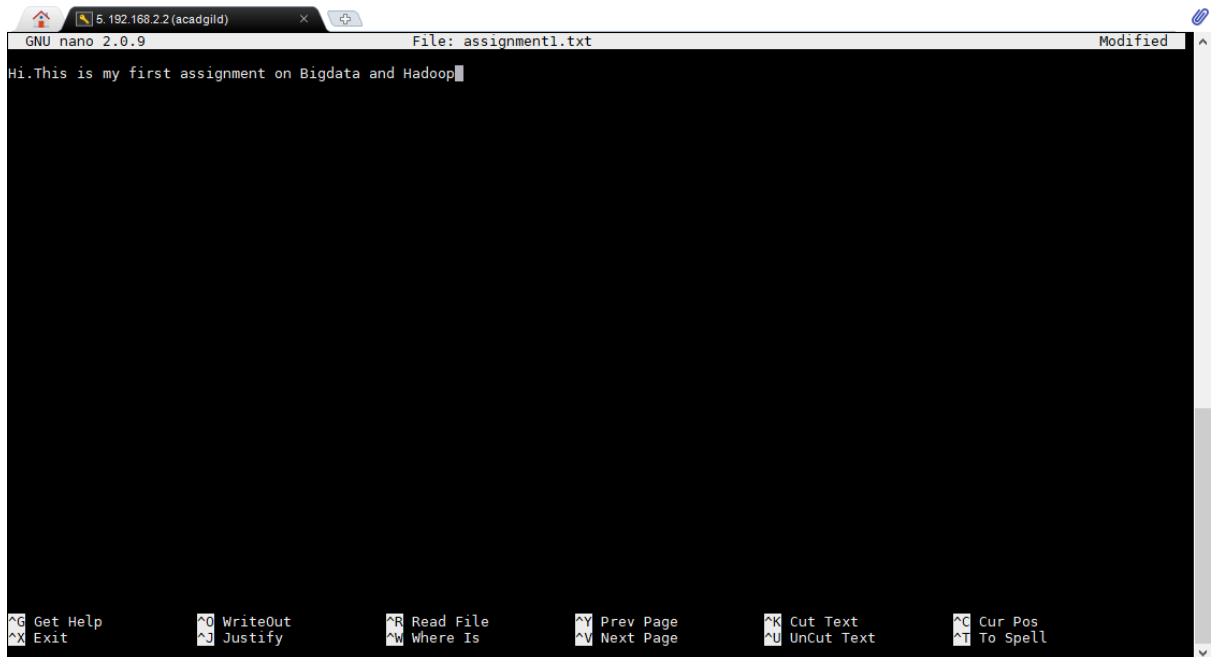


```

[acadgild@localhost ~]$ nano assignment1.txt

```

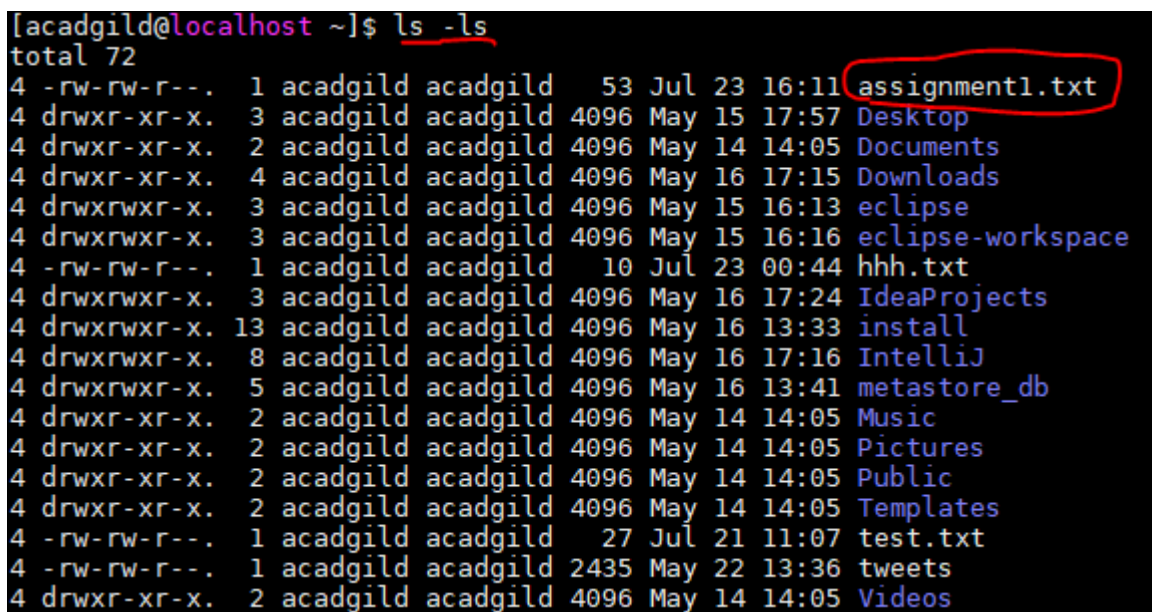
Press ENTER



The screenshot shows a web browser window with a tab titled '5. 192.168.2.2 (acadgild)'. The main content area displays a terminal window running the GNU nano 2.0.9 text editor. The editor is editing a file named 'assignment1.txt'. The text inside the file is 'Hi.This is my first assignment on Bigdata and Hadoop'. The nano editor's status bar at the bottom shows various keyboard shortcuts: ^G Get Help, ^X Exit, ^O WriteOut, ^J Justify, ^R Read File, ^W Where Is, ^Y Prev Page, ^V Next Page, ^K Cut Text, ^U UnCut Text, ^C Cur Pos, and ^T To Spell.

Press Ctrl +O and hit enter

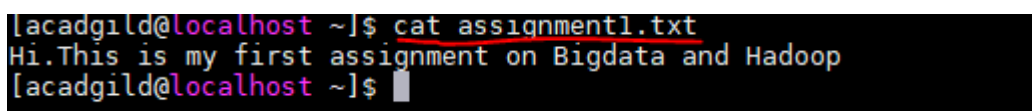
Type command `ls -ls` to check if the file is created in acadgild folder



The screenshot shows a terminal window with the command `[acadgild@localhost ~]$ ls -ls` entered. The output lists files and directories in the current directory. The file `assignment1.txt` is highlighted with a red circle. The output is as follows:

```
total 72
4 -rw-rw-r--. 1 acadgild acadgild 53 Jul 23 16:11 assignment1.txt
4 drwxr-xr-x. 3 acadgild acadgild 4096 May 15 17:57 Desktop
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Documents
4 drwxr-xr-x. 4 acadgild acadgild 4096 May 16 17:15 Downloads
4 drwxrwxr-x. 3 acadgild acadgild 4096 May 15 16:13 eclipse
4 drwxrwxr-x. 3 acadgild acadgild 4096 May 15 16:16 eclipse-workspace
4 -rw-rw-r--. 1 acadgild acadgild 10 Jul 23 00:44 hhh.txt
4 drwxrwxr-x. 3 acadgild acadgild 4096 May 16 17:24 IdeaProjects
4 drwxrwxr-x. 13 acadgild acadgild 4096 May 16 13:33 install
4 drwxrwxr-x. 8 acadgild acadgild 4096 May 16 17:16 IntelliJ
4 drwxrwxr-x. 5 acadgild acadgild 4096 May 16 13:41 metastore_db
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Music
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Pictures
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Public
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Templates
4 -rw-rw-r--. 1 acadgild acadgild 27 Jul 21 11:07 test.txt
4 -rw-rw-r--. 1 acadgild acadgild 2435 May 22 13:36 tweets
4 drwxr-xr-x. 2 acadgild acadgild 4096 May 14 14:05 Videos
```

cat command to check the content of the file



The screenshot shows a terminal window with the command `[acadgild@localhost ~]$ cat assignment1.txt` entered. The output is the content of the file: `Hi.This is my first assignment on Bigdata and Hadoop`. The prompt `[acadgild@localhost ~]$` is shown again on the next line.

5. Localhost:50070 in browser

Overview of HDFS file system

Hadoop 2.6.5 New 32 Bit [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Applications Places System

Mon Jul 23, 4:38 PM acadgild

Namenode information - Mozilla Firefox

Namenode information x +

localhost:50070/dfshealth.html#tab-overview

Search

Hadoop Overview Datanodes Snapshot Startup Progress Utilities -

Overview 'localhost:8020' (active)

Started:	Mon Jul 23 15:44:09 IST 2018
Version:	2.6.5, re8c9fe0b4c252caf2ebf1464220599650f119997
Compiled:	2016-10-02T23:43Z by sjlee from branch-2.6.5
Cluster ID:	CID-b1cc4527-fe93-4080-9c86-db6cf093a9cc
Block Pool ID:	BP-577305157-127.0.0.1-1526457801927

Summary

Security is off.
Safemode is off.

Summary

Security is off.

Safemode is off.

60 files and directories, 17 blocks = 77 total filesystem object(s).

Heap Memory used 42.17 MB of 87.87 MB Heap Memory. Max Heap Memory is 966.69 MB.

Non Heap Memory used 23.87 MB of 24.27 MB Committed Non Heap Memory. Max Non Heap Memory is -1 B.

Configured Capacity:	44.7 GB
DFS Used:	320 KB
Non DFS Used:	13.23 GB
DFS Remaining:	31.47 GB
DFS Used%:	0%
DFS Remaining%:	70.4%
Block Pool Used:	320 KB
Block Pool Used%:	0%

Name node status and storage information

NameNode Journal Status

Current transaction ID: 280

Journal Manager	State
FileJournalManager(root=/home/acadgild/install/data/dfs/name)	EditLogFileOutputStream(/home/acadgild/install/data/dfs/name/current/edits_inprogress_0000000000000000280)

NameNode Storage

Storage Directory	Type	State
/home/acadgild/install/data/dfs/name	IMAGE_AND_EDITS	Active

Datanode information

Hadoop

Overview

Datanodes

Snapshot

Startup Progress

Utilities

Datanode Information

In operation

Node	Last contact	Admin State	Capacity	Used	Non DFS Used	Remaining	Blocks	Block pool used	Failed Volumes	Version
localhost (127.0.0.1:50010)	0	In Service	44.7 GB	320 KB	13.23 GB	31.47 GB	17	320 KB (0%)	0	2.6.5

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Snapshot

Snapshot Summary

Snapshottable directories: 0

Path	Snapshot Number	Snapshot Quota	Modification Time	Permission	Owner	Group
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Snapshotted directories: 0

Snapshot ID	Snapshot Directory	Modification Time
-------------	--------------------	-------------------

Browse files

Browse Directory

/						Go!
Permission	Owner	Group	Size	Replication	Block Size	Name
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	hbase
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	output
-rw-r--r--	acadgild	supergroup	27 B	1	128 MB	test.txt
-rw-r--r--	acadgild	supergroup	10 B	1	128 MB	test2.txt
drwx-wx-wx	acadgild	supergroup	0 B	0	0 B	tmp

Check the blocks of the file.

File information - test2.txt



[Download](#)

Block information --

Block 0



Block ID: 1073741847

Block Pool ID: BP-577305157-127.0.0.1-1526457801927

Generation Stamp: 1023

Size: 10

Availability:

- localhost

Close