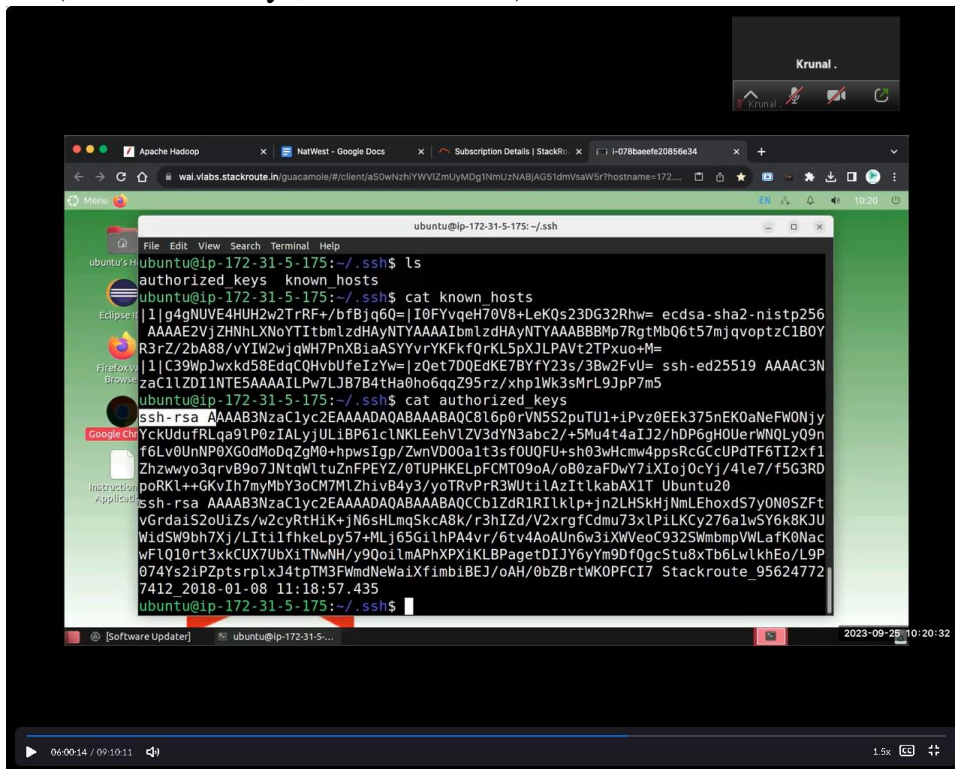


Single Node Hadoop Setup

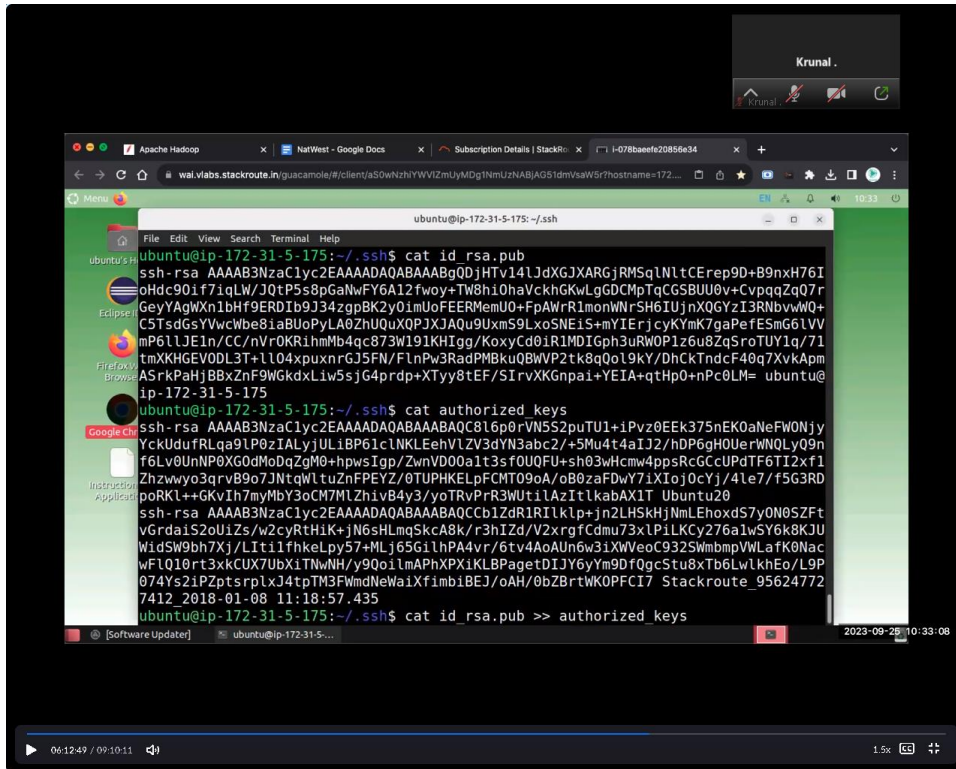
First check in terminal: java -version

- ssh localhost (enter)
- Give ubuntu password
- Exit
- Pwd(check for home directory)
- Ls
- ls -a
- ls -a | grep ssh
- Cd .ssh/
- Ls (authorised keys, known_hosts)

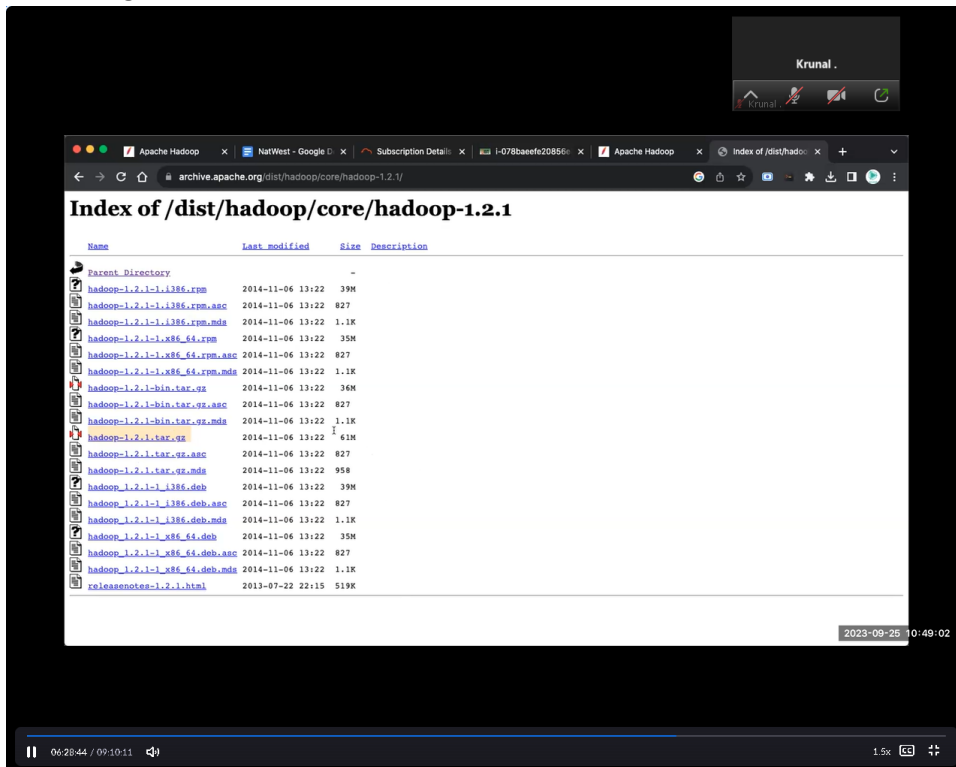


- Cd
- Ls
- Ssh -keygen
- Cd .ssh
- Ls
- Cat id_rsa
- Cat id_rsa.pub

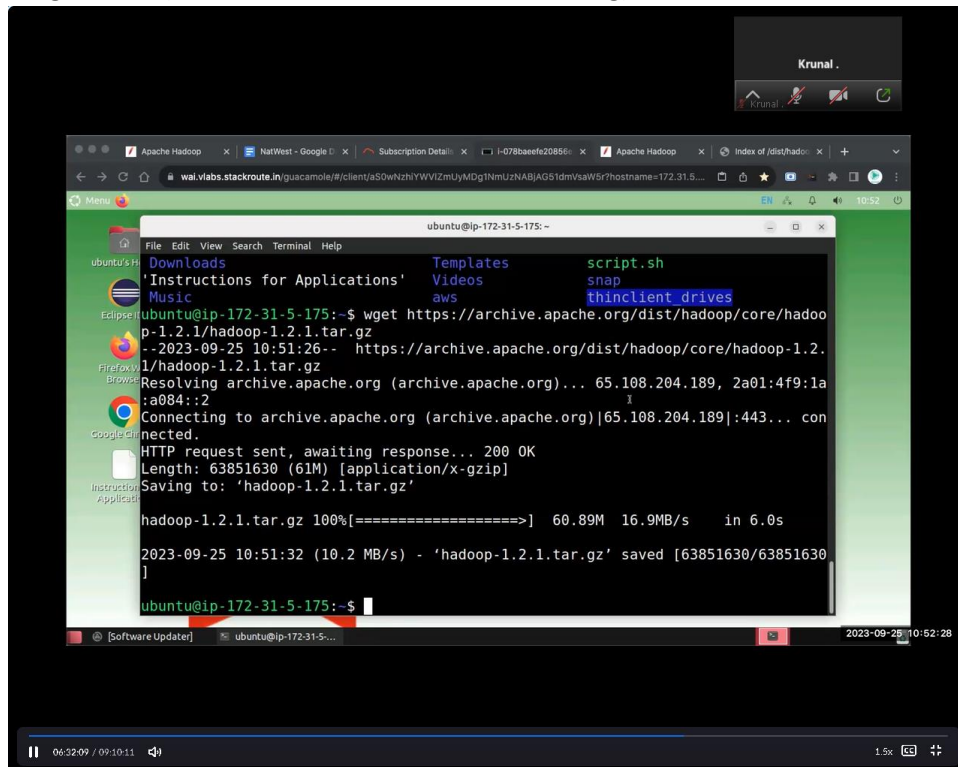
- Cat id_rsa.pub >> auhtorised_keys (to copy/paste password)



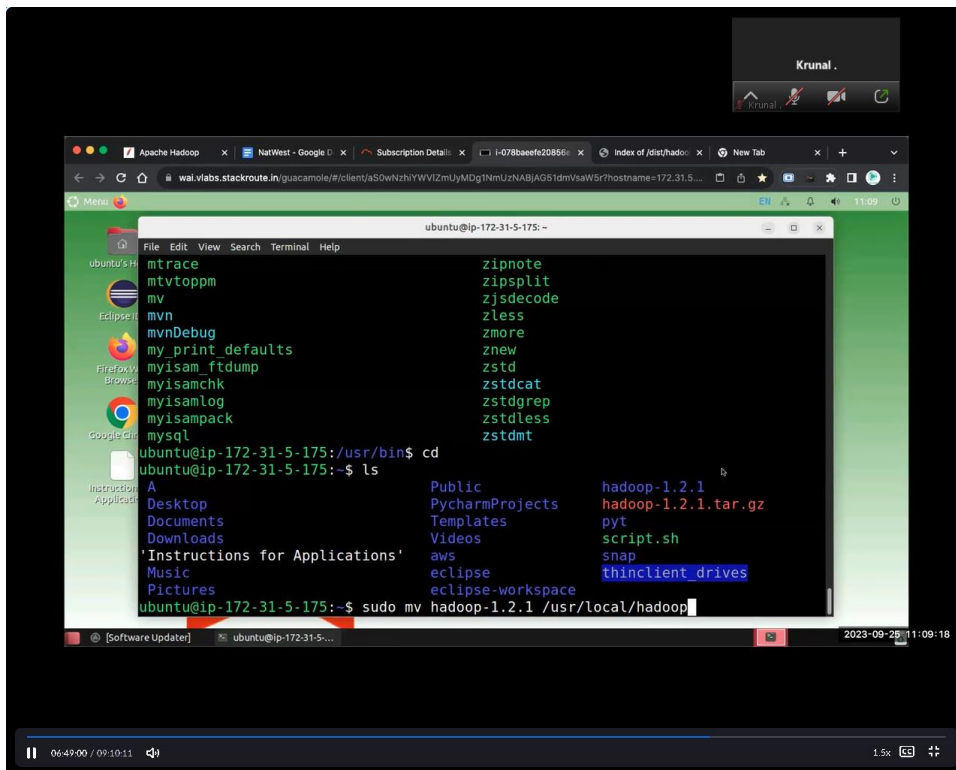
- Cat authorised_keys
- Sudo apt update
- Website: Apache hadoop (archive hadoop)2nd link()
- Setct .tar.gz file



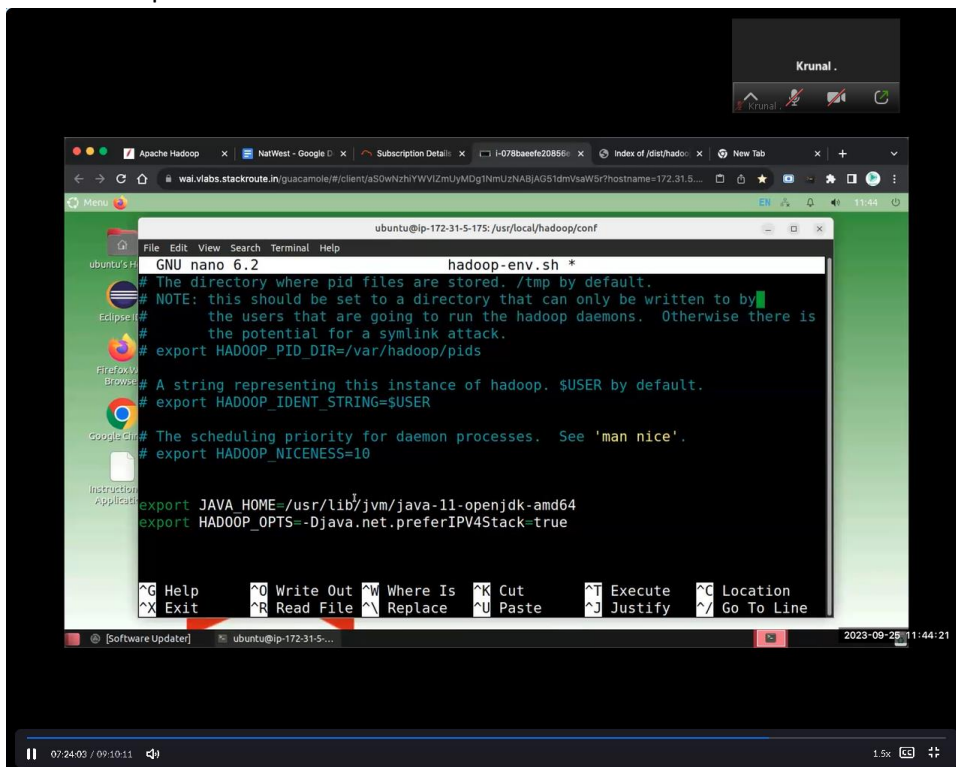
- Weget & link(in terminal link will start downloading)



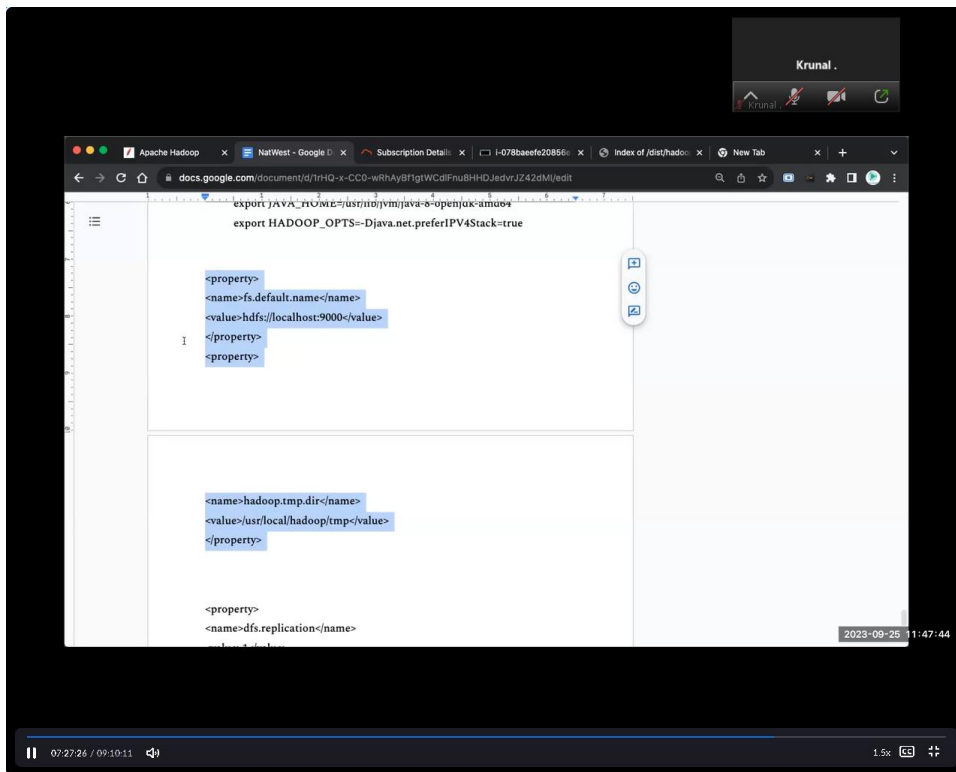
-
- Whereis jdk
- Whereis java
- Cd /usr/lib/jvm
- Ls
- Cd java-11-openjdk-amd64/
- Ls
- Pwd
- Ls
- Tar -xzf hadoop-1.2.1.tar.gz
- Ls
- Cd /usr/bin
- Ls
-
-
-
-
- Sudo mv hadoop-1.2.1 /usr/local/hadoop
- /usr/lib/jvm/java-1.17.0-openjdk-amd64



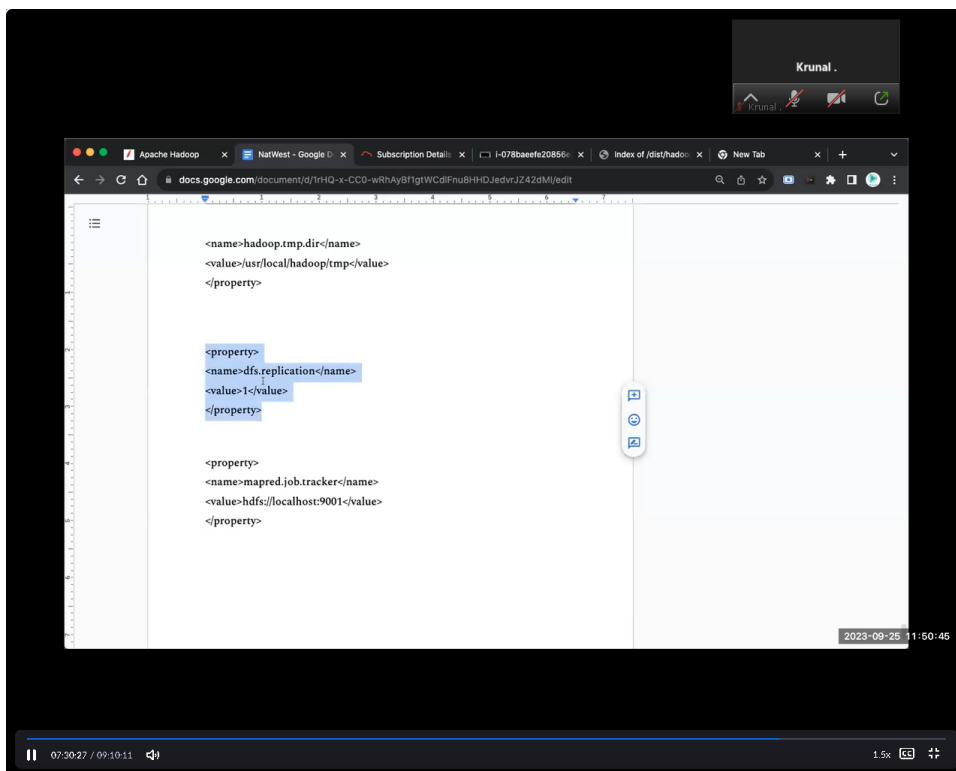
-
- Cd /usr/local/hadoop
- Ls
- Cd conf/
- Ls
- Nano haddop-env.sh



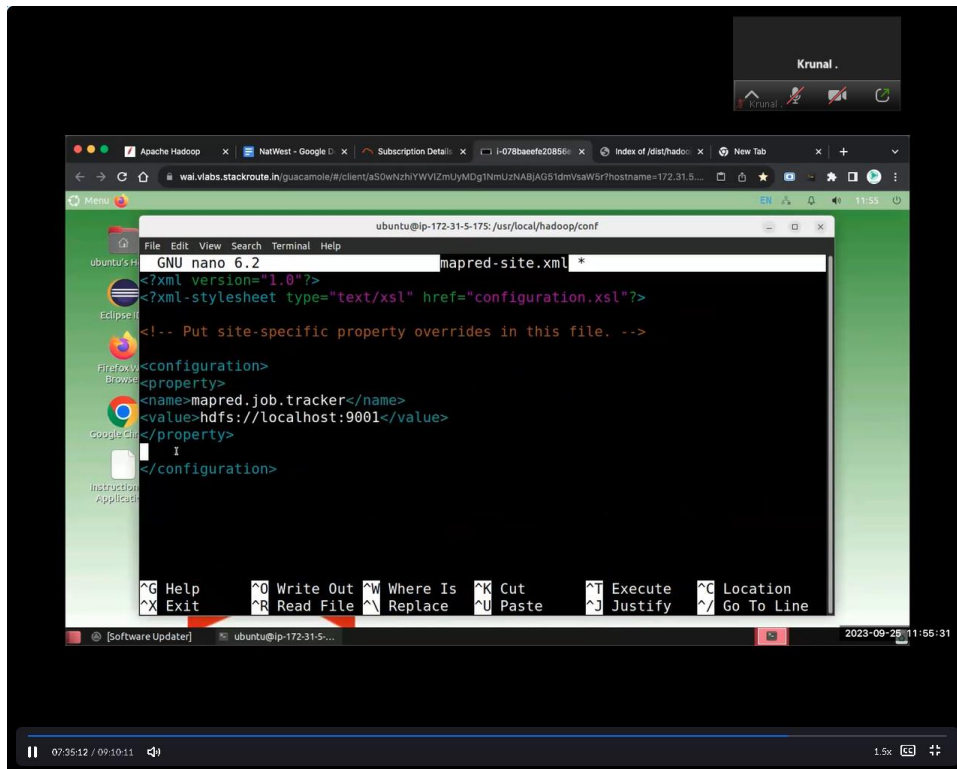
-
- Nano core-site.xml



-
- Nano `hdfs-site.xml`



* nano mapred.xml



- Cat hadoop-env.sh
- Cd ..
- /usr/local/hadoop/: Ls
- /usr/local/hadoop: Mkdir tmp
- Ls
- Cd conf
- Ls
- Nano .bashrc
- **Command to be added to .bashrc:**
 - export HADOOP_PREFIX=/usr/local/hadoop/
 - export PATH=\$PATH:\$HADOOP_PREFIX/bin
 - export JAVA_HOME=/usr/lib/jvm/java-11-openjdk-amd64
 - export PATH=\$PATH:\$JAVA_HOME
 - *****
- Exec bash
- Hadoop namenode -format
- Start-all.sh
- Ui for hadoop

Upgrades: There are no upgrades in progress.

[Browse the filesystem](#)
[NameNode Logs](#)

Cluster Summary

39 files and directories, 18 blocks = 57 total. Heap Size is 126 MB / 1000 MB (12%)

Configured Capacity	: 36.58 GB
DFS Used	: 388 KB
Non DFS Used	: 26.78 GB
DFS Remaining	: 9.81 GB
DFS Used%	: 0 %
DFS Remaining%	: 25.42 %
Live Nodes	: 1
Dead Nodes	: 0
Decommissioning Nodes	: 0
Number of Under-Replicated Blocks	: 2

26/09

```
File Edit View Search Terminal Help
WARNING: All illegal access operations will be denied in a future release
ubuntu@ip-172-31-34-95:~$ hdfs dfs -ls /
Command 'hdfs' not found, did you mean:
  Command 'hfs' from deb hfsutils-tcltk (3.2.6-15build2)
  Command 'hdfsls' from deb hdf4-tools (4.2.15-4)
Try: sudo apt install <deb name>
ubuntu@ip-172-31-34-95:~$ hadoop fs -ls /
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.util.KerberosUtil (file:/usr/local/hadoop/hadoop-core-1.2.1.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
WARNING: All illegal access operations will be denied in a future release
Found 3 items
drwxr-xr-x - ubuntu supergroup      0 2023-09-26 10:09 /pydata
drwxr-xr-x - ubuntu supergroup      0 2023-09-26 07:56 /user
drwxr-xr-x - ubuntu supergroup      0 2023-09-26 07:55 /usr
ubuntu@ip-172-31-34-95:~$ ls
Day1-linux      Public          file1
Day1-test       PycharmProjects file2
Day3_part1      Templates      hadoop-1.2.1.tar.gz
Day4.1          Videos        tf.sh
Desktop         abc.sh         javaExamples
Documents       app1           python
Downloads       aws            shell_script
'Instructions for Applications' day2-linux     snap
Music           eclipse        thinclient_drives
Pictures        eclipse-workspace
ubuntu@ip-172-31-34-95:~$ echo 'just a text file' > sample.txt
ubuntu@ip-172-31-34-95:~$ ls
Day1-linux      Public          file1
Day1-test       PycharmProjects file2
Day3_part1      Templates      hadoop-1.2.1.tar.gz
Day4.1          Videos        tf.sh
Desktop         abc.sh         javaExamples
Documents       app1           python
Downloads       aws            sample.txt
'Instructions for Applications' day2-linux     shell_script
Music           eclipse        snap
Pictures        eclipse-workspace thinclient_drives
ubuntu@ip-172-31-34-95:~$ hadoop fs -put sample.txt /pydata/
```



```

-rw-r--r-- 1 ubuntu supergroup 17 2023-09-26 10:18 /pydata/sample.txt
ubuntu@ip-172-31-34-95:~$ ls
Day1-linux Documents Public app1 file1
Day1-test Downloads PycharmProjects aws file2
Day3_part1 'Instructions for Applications' Templates day2-linux hadoop-1.2.1.tar.gz
Day4.1 Music Videos eclipse if.sh
Desktop Pictures abc.sh eclipse-workspace javaExamples
ubuntu@ip-172-31-34-95:~$ hadoop fs -put hadoop-1.2.1.tar.gz /pydata/
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.util.KerberosUtil (file
.2.1.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.security.authentication
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
WARNING: All illegal access operations will be denied in a future release
ubuntu@ip-172-31-34-95:~$ ls
Day1-linux Documents Public app1 file1
Day1-test Downloads PycharmProjects aws file2
Day3_part1 'Instructions for Applications' Templates day2-linux hadoop-1.2.1.tar.gz
Day4.1 Music Videos eclipse if.sh
Desktop Pictures abc.sh eclipse-workspace javaExamples
ubuntu@ip-172-31-34-95:~$ hadoop fs -ls /pydata/
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.util.KerberosUtil (file
.2.1.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.security.authentication
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
WARNING: All illegal access operations will be denied in a future release
Found 2 items
-rw-r--r-- 1 ubuntu supergroup 63851630 2023-09-26 10:26 /pydata/hadoop-1.2.1.tar.gz
-rw-r--r-- 1 ubuntu supergroup 17 2023-09-26 10:18 /pydata/sample.txt
ubuntu@ip-172-31-34-95:~$

```

https://archive.apache.org/dist/kafka/3.5.1/kafka_2.13-3.5.1.tgz

```

-rw-r--r-- 1 ubuntu supergroup 17 2023-09-26 10:18 /pydata
ubuntu@ip-172-31-34-95:~$ cd
ubuntu@ip-172-31-34-95:~$ ls
Day1-linux Documents Public app1
Day1-test Downloads PycharmProjects aws
Day3_part1 'Instructions for Applications' Templates day2-linux hadoop-1.2.1.tar.gz
Day4.1 Music Videos eclipse if.sh
Desktop Pictures abc.sh eclipse-workspace javaExamples
ubuntu@ip-172-31-34-95:~$ wget https://archive.apache.org/dist/kafka
--2023-09-26 10:55:24-- https://archive.apache.org/dist/kafka/3.5.1
Resolving archive.apache.org (archive.apache.org)... 65.108.204.189,
Connecting to archive.apache.org (archive.apache.org)|65.108.204.189
HTTP request sent, awaiting response... 200 OK
Length: 106748875 (102M) [application/x-gzip]
Saving to: 'kafka_2.13-3.5.1.tgz'

kafka_2.13-3.5.1.tgz      100%[=====
2023-09-26 10:55:32 (13.3 MB/s) - 'kafka_2.13-3.5.1.tgz' saved [1067
ubuntu@ip-172-31-34-95:~$ ls | grep kafka
kafka_2.13-3.5.1.tgz
ubuntu@ip-172-31-34-95:~$ tar -xzvf kafka_2.13-3.5.1.tgz

```