A)

```
daniel@daniel-VirtualBox: ~

daniel@daniel-VirtualBox:~$ cat /etc/os-release
PRETTY_NAME="Ubuntu 22.04.3 LTS"
NAME="Ubuntu"
VERSION_ID="22.04"
VERSION="22.04.3 LTS (Jammy Jellyfish)"
VERSION_CODENAME=jammy
ID=ubuntu
ID_LIKE=debian
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-poli
cy"
UBUNTU_CODENAME=jammy
daniel@daniel-VirtualBox:~$
```

B)

```
daniel@daniel-VirtualBox:~$ java -version
java version "1.8.0_221"
Java(TM) SE Runtime Environment (build 1.8.0_221-b11)
Java HotSpot(TM) 64-Bit Server VM (build 25.221-b11, mixed mode)
daniel@daniel-VirtualBox:~$
```

C)

```
daniel@daniel-VirtualBox:~$ hadoop version
Hadoop 2.8.1
Subversion https://git-wip-us.apache.org/repos/asf/hadoop.git -r 20fe5304904fc2f
5a18053c389e43cd26f7a70fe
Compiled by vinodkv on 2017-06-02T06:14Z
Compiled with protoc 2.5.0
From source with checksum 60125541c2b3e266cbf3becc5bda666
This command was run using /home/daniel/Documents/hadoop/share/hadoop/common/had
oop-common-2.8.1.jar
daniel@daniel-VirtualBox:~$
```

D)

```
daniel@daniel-VirtualBox:~$ cd \Documents/hadoop/etc/hadoop
daniel@daniel-VirtualBox:~/Documents/hadoop/etc/hadoop$ ls
capacity-scheduler.xml        httpfs-env.sh              mapred-env.sh
configuration.xsl             httpfs-log4j.properties    mapred-queues.xml.template
container-executor.cfg        httpfs-signature.secret    mapred-site.xml.template
core-site.xml                 httpfs-site.xml            slaves
hadoop-env.cmd                kms-acls.xml               ssl-client.xml.example
hadoop-env.sh                 kms-env.sh                 ssl-server.xml.example
hadoop-metrics2.properties    kms-log4j.properties       yarn-env.cmd
hadoop-metrics.properties     kms-site.xml               yarn-env.sh
hadoop-policy.xml             log4j.properties           yarn-site.xml
hdfs-site.xml                 mapred-env.cmd
daniel@daniel-VirtualBox:~/Documents/hadoop/etc/hadoop$
```

E)

```
daniel@daniel-VirtualBox:~/Documents/hadoop/etc/hadoop$ jps
7328 ResourceManager
7648 NodeManager
7761 Jps
6978 DataNode
3702 org.eclipse.equinox.launcher_1.6.400.v20210924-0641.jar
7176 SecondaryNameNode
6813 NameNode
```

F)

Hadoop	Overview	Datanodes	Datanode Volume Failures	Snapshot	Startup Progress	Utilities ⌄

Overview 'localhost:9000' (active)

Started:	Wed Sep 27 22:06:19 -0500 2023
Version:	2.8.1, r20fe5304904fc2f5a18053c389e43cd26f7a70fe
Compiled:	Fri Jun 02 01:14:00 -0500 2017 by vinodkv from branch-2.8.1-private
Cluster ID:	CID-fee78903-e074-4366-b54b-9dc2204f6194
Block Pool ID:	BP-454164292-127.0.1.1-1695690773888

Summary

Security is off.

Safemode is off.

15 files and directories, 5 blocks = 20 total filesystem object(s).

Heap Memory used 96.23 MB of 181 MB Heap Memory. Max Heap Memory is 889 MB.

Non Heap Memory used 42.56 MB of 43.53 MB Commited Non Heap Memory. Max Non Heap Memory is <unbounded>.

Configured Capacity:	33.81 GB

G)

```
daniel@daniel-VirtualBox:~/Documents/hadoop/etc/hadoop$ hdfs dfs -ls -R /
drwxr-xr-x   - daniel supergroup          0 2023-09-27 17:29 /output2B
-rw-r--r--   1 daniel supergroup          0 2023-09-27 17:29 /output2B/_SUCCESS
-rw-r--r--   1 daniel supergroup         41 2023-09-27 17:29 /output2B/part-r-00000
drwxr-xr-x   - daniel supergroup          0 2023-09-27 20:15 /output2C
-rw-r--r--   1 daniel supergroup          0 2023-09-27 20:15 /output2C/_SUCCESS
-rw-r--r--   1 daniel supergroup         87 2023-09-27 20:15 /output2C/part-r-00000
drwxr-xr-x   - daniel supergroup          0 2023-09-27 15:28 /outputCountWords
-rw-r--r--   1 daniel supergroup          0 2023-09-27 15:28 /outputCountWords/_SUCCESS
-rw-r--r--   1 daniel supergroup     232411 2023-09-27 15:28 /outputCountWords/part-r-00000
drwxr-xr-x   - daniel supergroup          0 2023-09-26 17:03 /user
drwxr-xr-x   - daniel supergroup          0 2023-09-26 17:04 /user/daniel
drwxr-xr-x   - daniel supergroup          0 2023-09-26 18:00 /user/daniel/input
-rw-r--r--   1 daniel supergroup    6617121 2023-09-26 17:05 /user/daniel/input/big.txt
-rw-r--r--   1 daniel supergroup    2154522 2023-09-26 18:00 /user/daniel/input/input_hw1.txt
daniel@daniel-VirtualBox:~/Documents/hadoop/etc/hadoop$
```