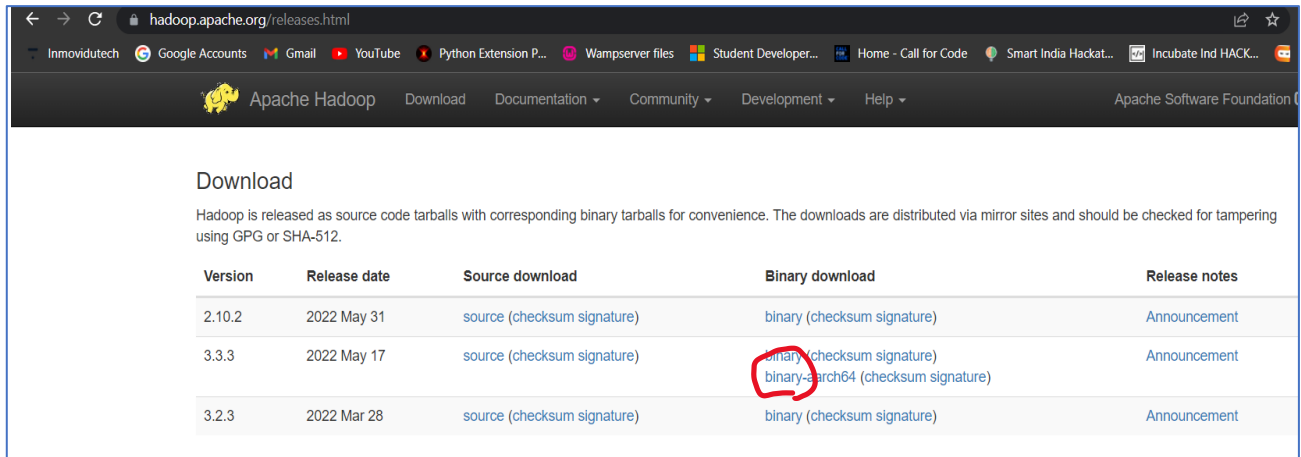


Steps to Install Hadoop on Windows

Step 1: Download Apache Hadoop from this website:

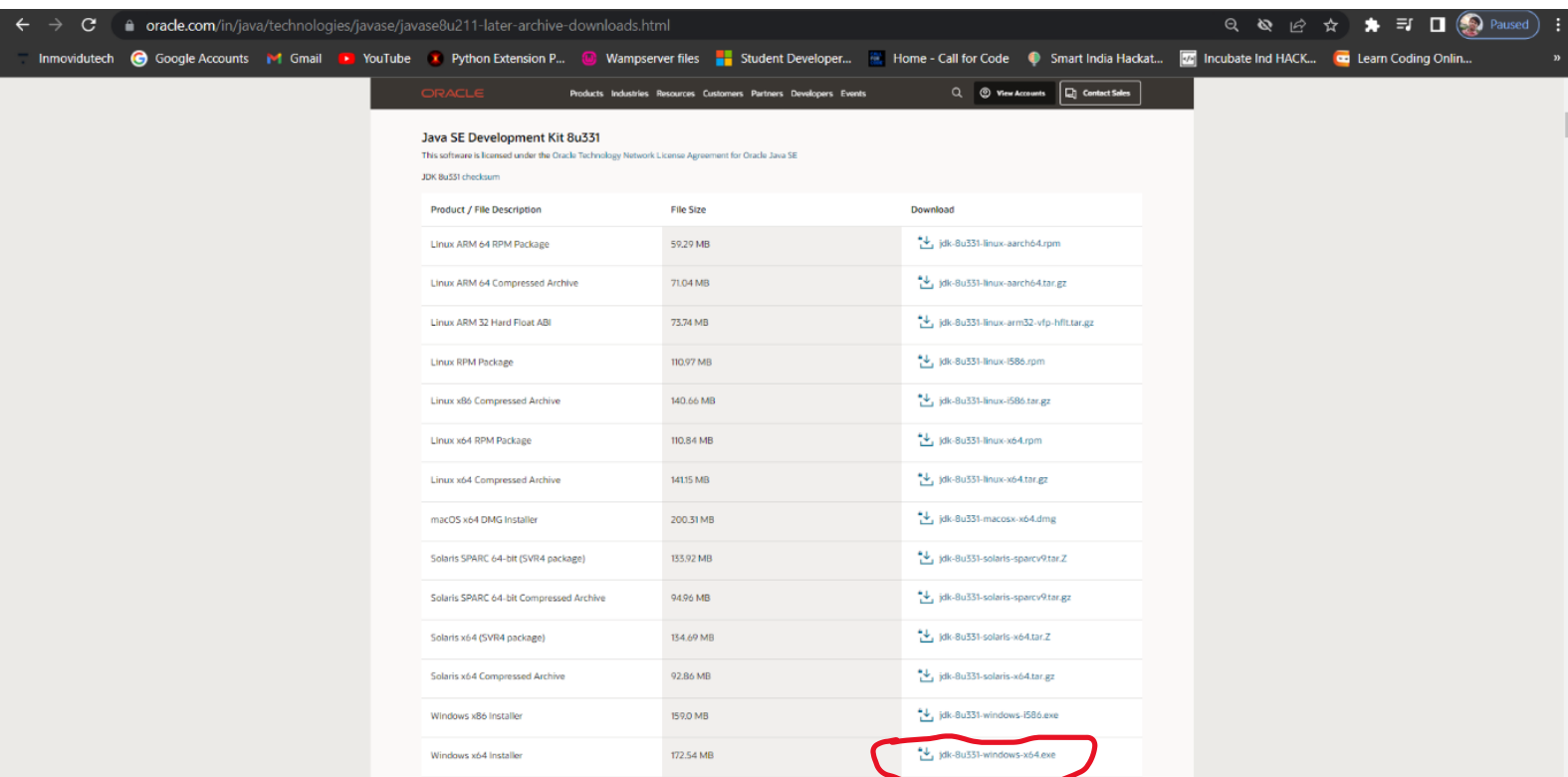
<https://hadoop.apache.org/releases.html> by clicking the binary

A screenshot of the Apache Hadoop releases page. The browser address bar shows 'hadoop.apache.org/releases.html'. The page has a dark header with the Apache Hadoop logo and navigation links: Download, Documentation, Community, Development, and Help. Below the header, the 'Download' section is visible. It contains a paragraph stating that Hadoop is released as source code tarballs with corresponding binary tarballs for convenience, and that downloads are distributed via mirror sites and should be checked for tampering using GPG or SHA-512. Below this is a table with five columns: Version, Release date, Source download, Binary download, and Release notes. The table lists three versions: 2.10.2, 3.3.3, and 3.2.3. In the 3.3.3 row, the 'binary (checksum signature)' and 'binary-aarch64 (checksum signature)' links are circled in red.

Version	Release date	Source download	Binary download	Release notes
2.10.2	2022 May 31	source (checksum signature)	binary (checksum signature)	Announcement
3.3.3	2022 May 17	source (checksum signature)	binary (checksum signature) binary-aarch64 (checksum signature)	Announcement
3.2.3	2022 Mar 28	source (checksum signature)	binary (checksum signature)	Announcement

Step 2: Download JDK 8 from this website:

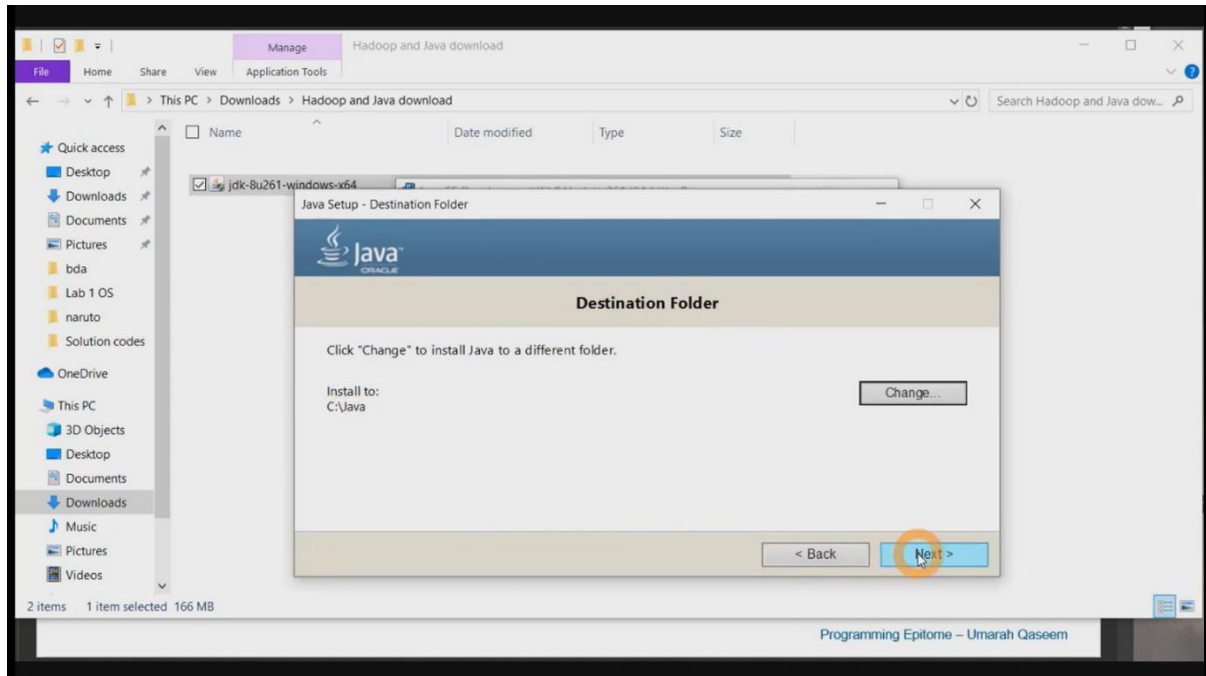
<https://www.oracle.com/in/java/technologies/javase/javase8u211-later-archive-downloads.html>

A screenshot of the Oracle Java SE Development Kit 8u331 download page. The browser address bar shows 'oracle.com/in/java/technologies/javase/javase8u211-later-archive-downloads.html'. The page has a dark header with the Oracle logo and navigation links: Products, Industries, Resources, Customers, Partners, Developers, and Events. Below the header, the 'Java SE Development Kit 8u331' section is visible. It contains a paragraph stating that the software is licensed under the Oracle Technology Network License Agreement for Oracle Java SE. Below this is a table with three columns: Product / File Description, File Size, and Download. The table lists various download options for different operating systems and architectures. In the 'Download' column, the 'jdk-8u331-windows-x64.exe' link is circled in red.

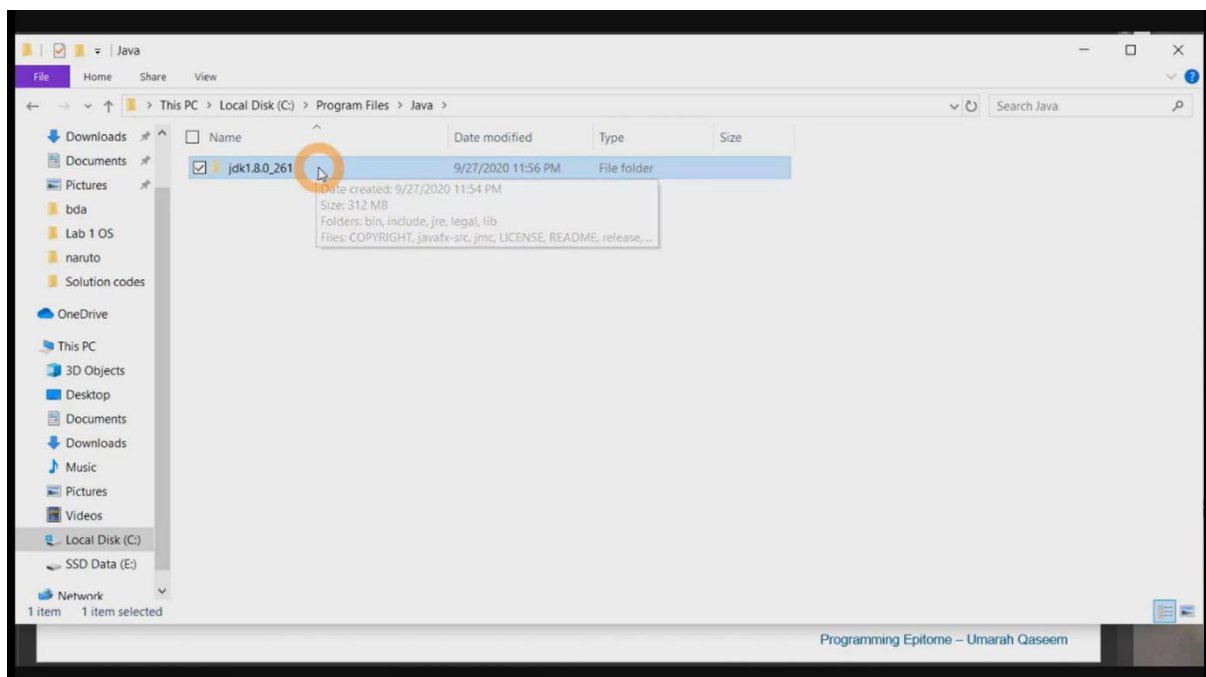
Product / File Description	File Size	Download
Linux ARM 64 RPM Package	59.29 MB	jdk-8u331-linux-aarch64.rpm
Linux ARM 64 Compressed Archive	71.04 MB	jdk-8u331-linux-aarch64.tar.gz
Linux ARM 32 Hard Float ABI	73.74 MB	jdk-8u331-linux-arm32-vfp-hflt.tar.gz
Linux RPM Package	110.97 MB	jdk-8u331-linux-i586.rpm
Linux x86 Compressed Archive	140.66 MB	jdk-8u331-linux-i586.tar.gz
Linux x64 RPM Package	110.84 MB	jdk-8u331-linux-x64.rpm
Linux x64 Compressed Archive	141.15 MB	jdk-8u331-linux-x64.tar.gz
macOS x64 DMG Installer	200.31 MB	jdk-8u331-macosx-x64.dmg
Solaris SPARC 64-bit (SVR4 package)	133.92 MB	jdk-8u331-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit Compressed Archive	94.96 MB	jdk-8u331-solaris-sparcv9.tar.gz
Solaris x64 (SVR4 package)	134.69 MB	jdk-8u331-solaris-x64.tar.Z
Solaris x64 Compressed Archive	92.86 MB	jdk-8u331-solaris-x64.tar.gz
Windows x86 Installer	159.0 MB	jdk-8u331-windows-i586.exe
Windows x64 Installer	172.54 MB	jdk-8u331-windows-x64.exe

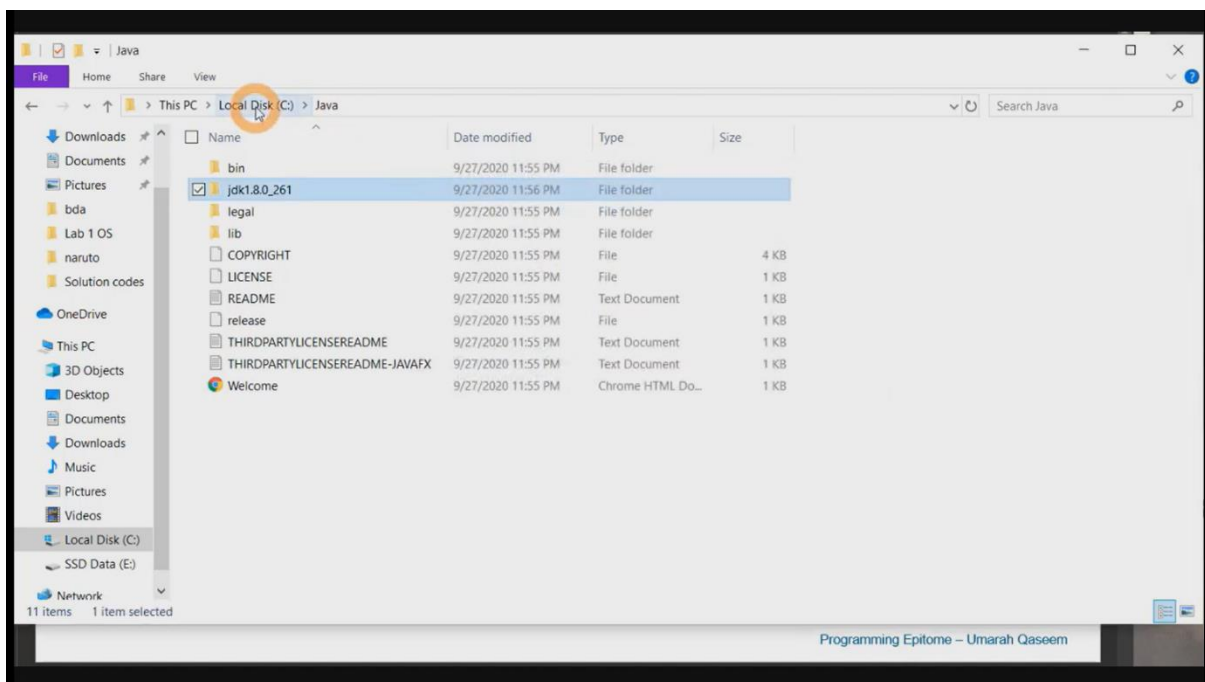
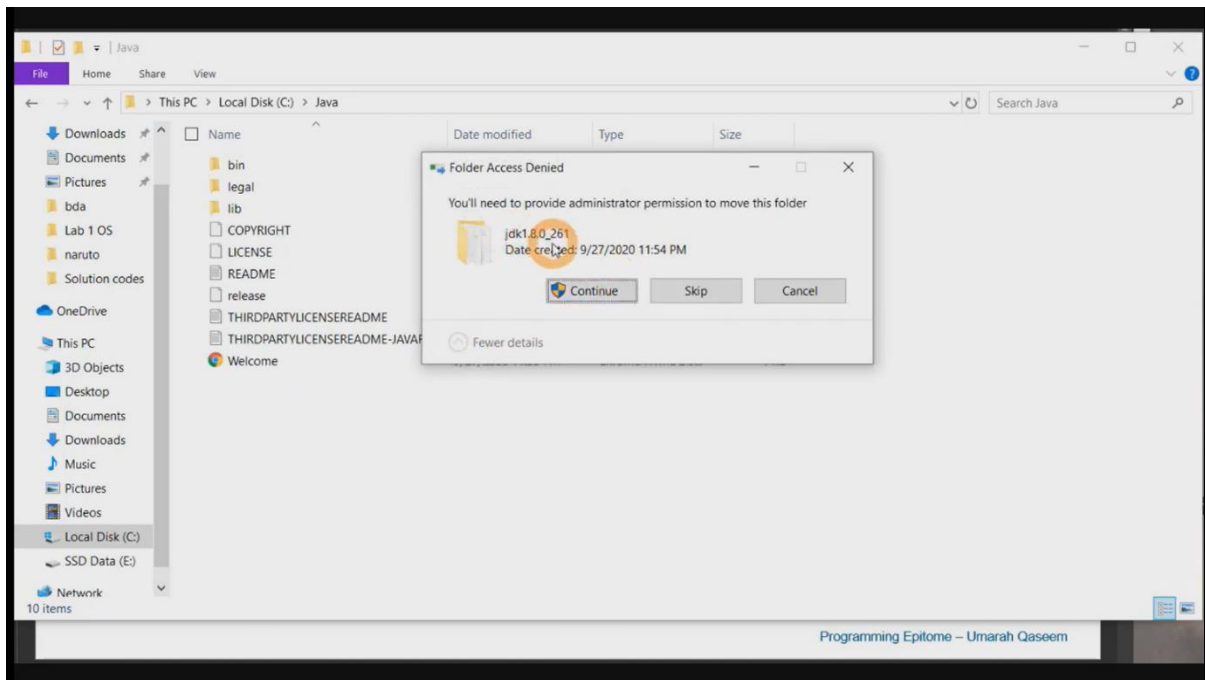
JDK Installation:

Step 3: Create a new folder named “Java” in your C drive. Now double click the downloaded Jdk file. While installing the JDK set the Destination folder as “C:\Java”.



Step 4: Now go to your C drive, then Program Files>java then move the file in that java folder to the “Java” folder which we created in the C drive.

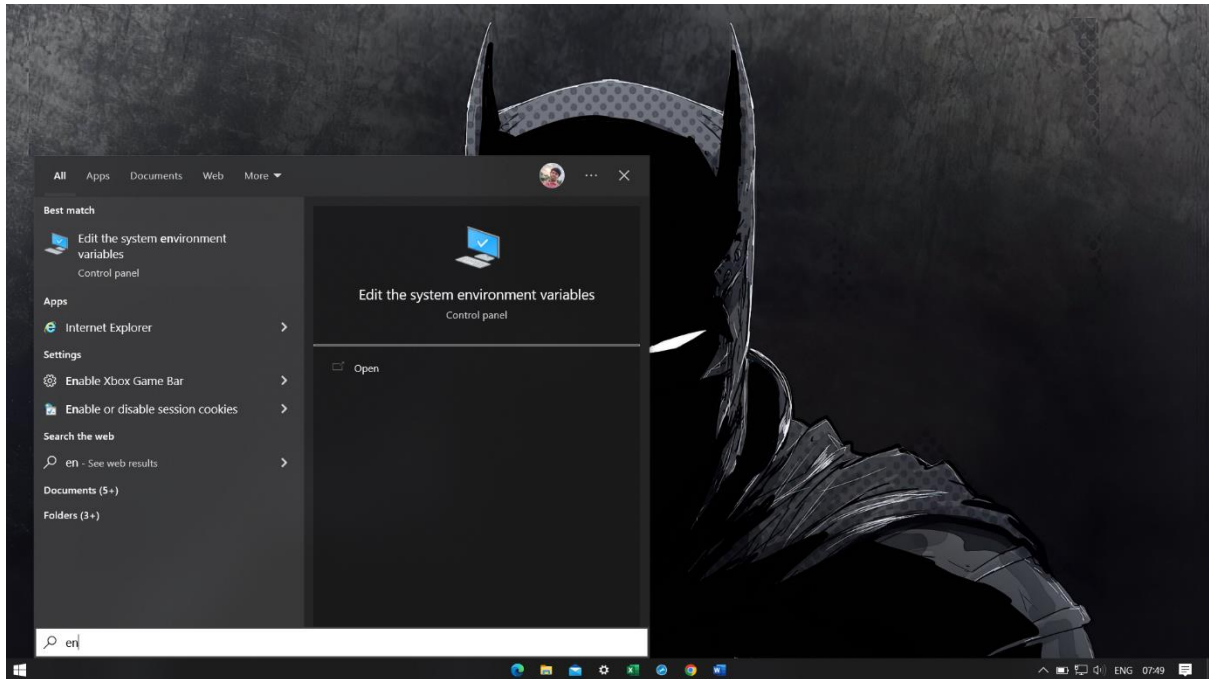




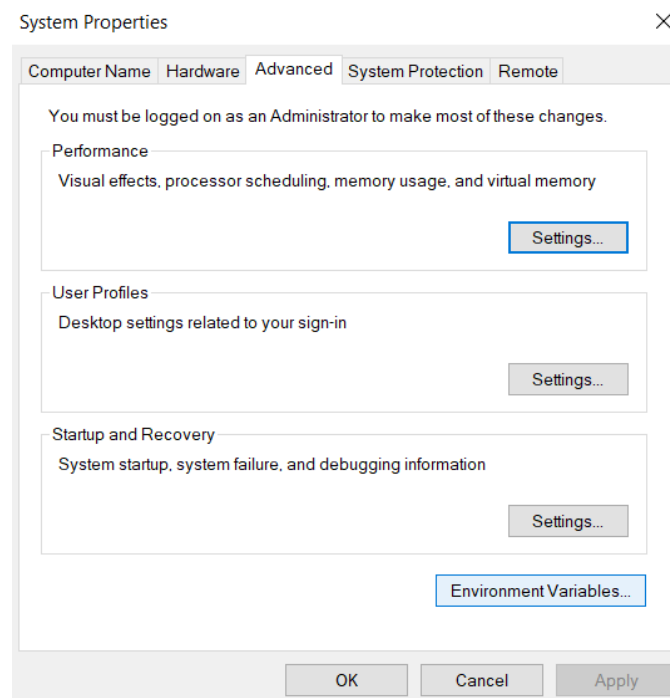
Step 5: Delete the java folder in Program Files folder

Step 6: Now set environment variables and path by:

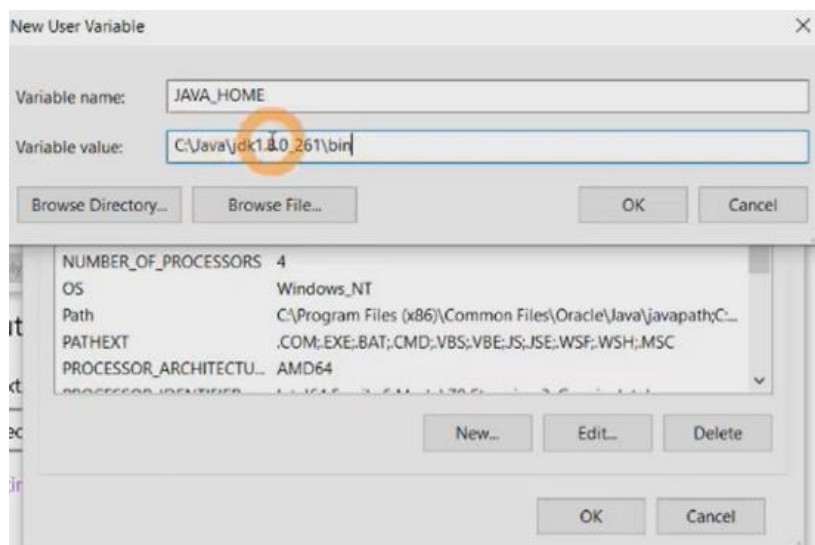
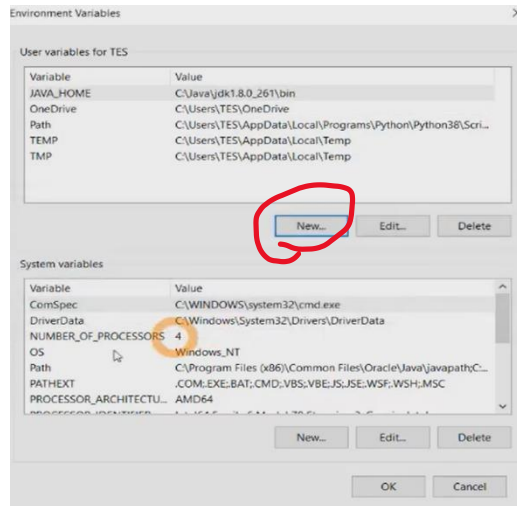
6.1. Search for Edit the system environment variables in control panel



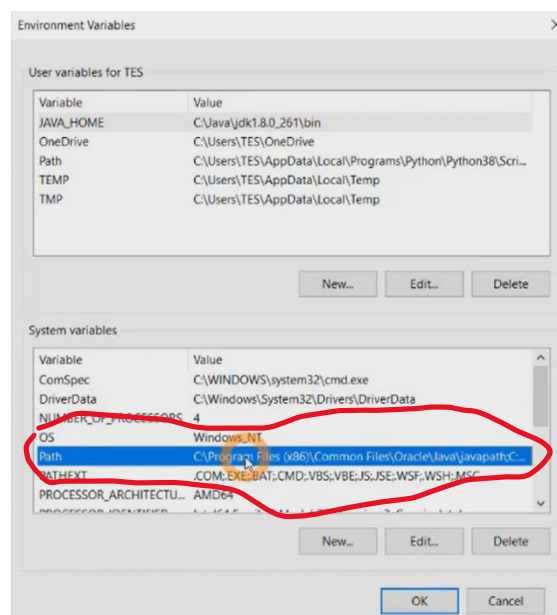
6.2. Now click on Environment variables.



6.3. Now click new and give the variable name as “JAVA_HOME” and variable value as the path where the java is installed (Eg: C:\Java\jdk1.8.0_261\bin) and then click OK.



6.4. Now create the path by selecting the path and click edit. In that paste the path of the java (Eg: C:\Java\jdk1.8.0_261\bin) and click OK.



6.5. Now Close all the Tabs.

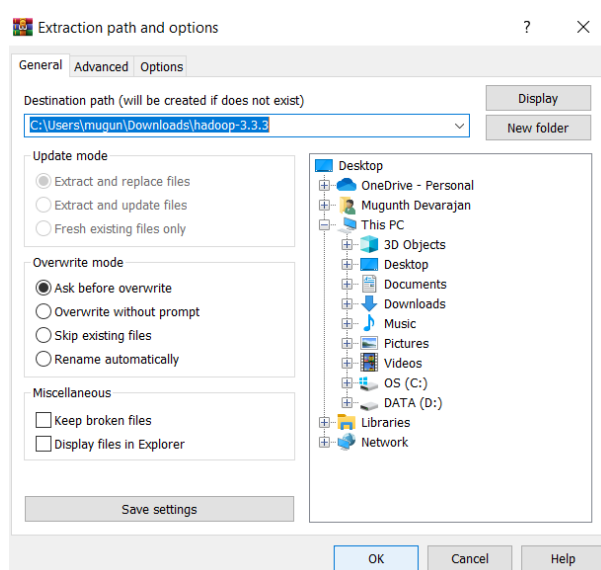
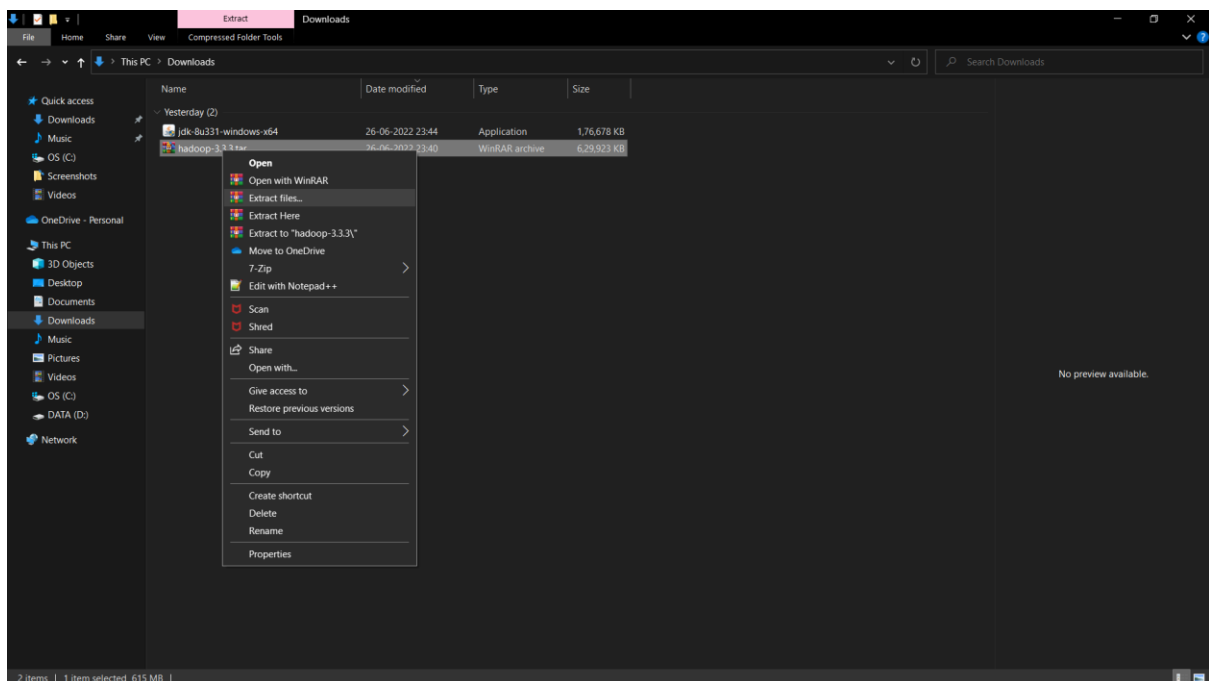
6.6. You have Java package installed successfully.

Testing Java:

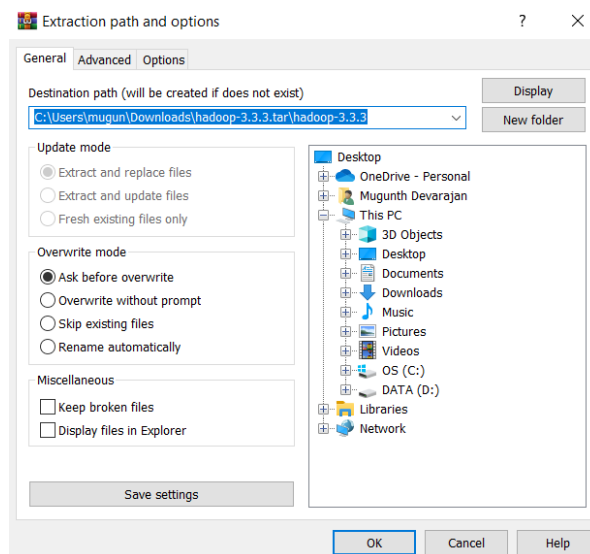
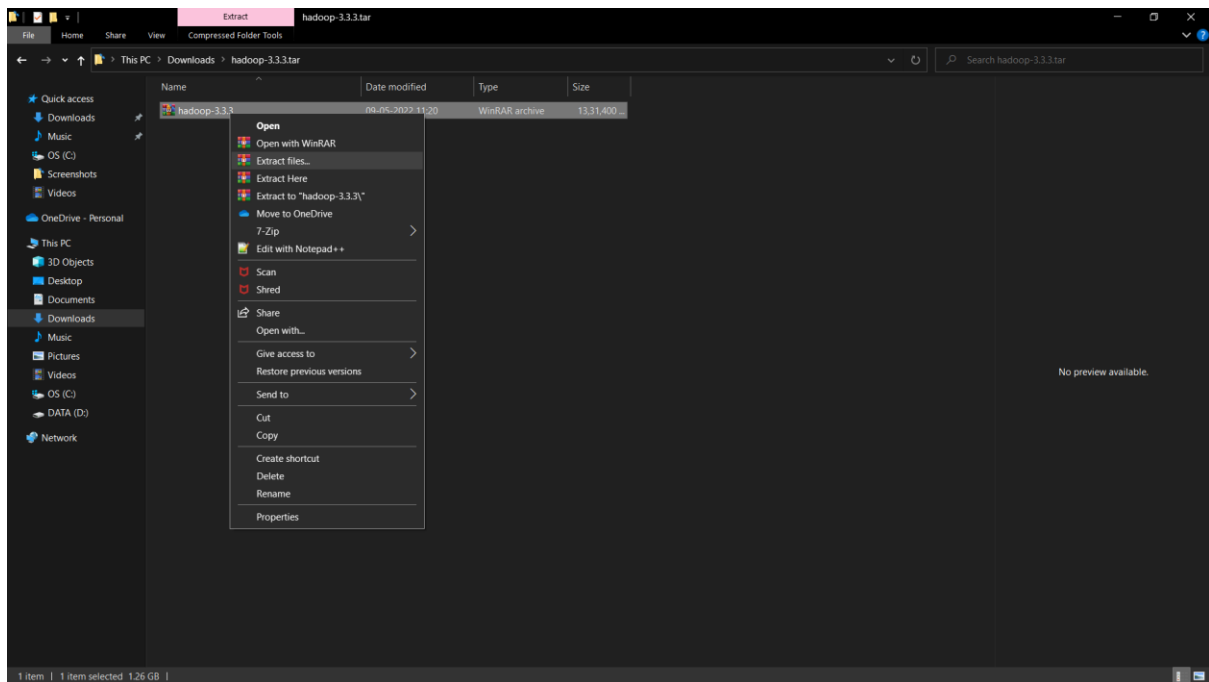
1. Open cmd prompt in admin mode.
2. Type “javac”, which should display various options available in java package.
3. Type “java –version” to check the version of the java package.

Hadoop Installation:

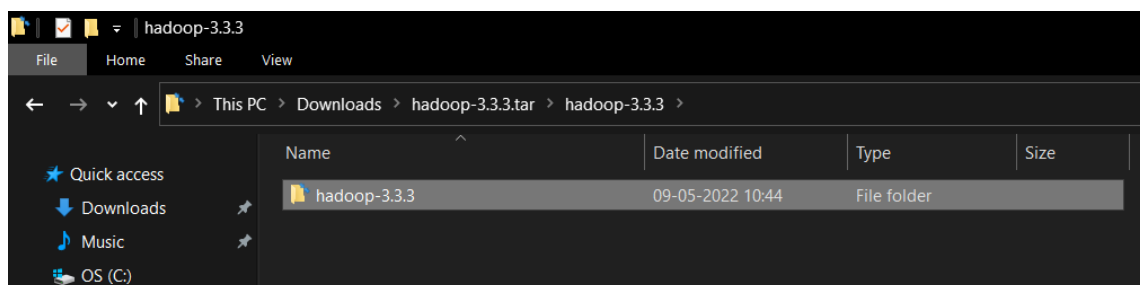
Step 7: Unzip the downloaded Hadoop file.

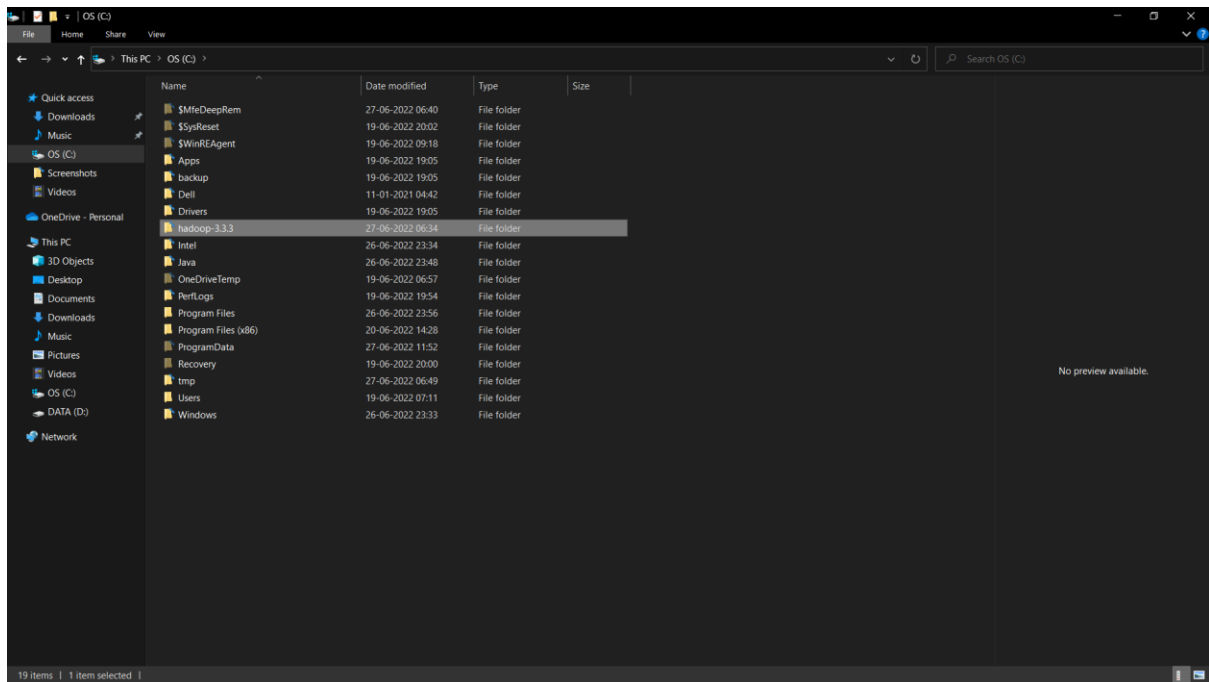


Step 8: Now open the unzipped file (hadoop-3.3.3.tar) which contains another zip file (hadoop-3.3.3), now unzip it.



Step 9: Now open the unzipped file (hadoop-3.3.3) and move the hadoop-3.3.3 file to C drive.





Configuring Hadoop:

Step 10: Now go to “C:\hadoop-3.3.3\etc\hadoop”.

Note: Before Step 11 install Notepad ++.

Step 11: Open the core-site.xml, mapred-site.xml, hdfs-site.xml, yarn-site.xml, hadoop-env in Notepad ++.

Step 12: Paste the following in each file

a) File C:/Hadoop-3.3.3/etc/hadoop/core-site.xml, paste below xml paragraph and

save this file.

```
<configuration>
```

```
<property>
```

```
<name>fs.default.name</name>
```

```
<value>hdfs://localhost:9000</value>
```

```
</property>
```

```
</configuration>
```

Now give ctrl+s to save the file

b) C:/Hadoop-3.3.3/etc/hadoop/mapred-site.xml, paste below xml paragraph and save

this file.

```
<configuration>
<property>
<name>mapreduce.framework.name</name>
<value>yarn</value>
</property>
</configuration>
```

Now give ctrl+s to save the file

c) Create folder "data" under "C:\Hadoop-3.3.3"

1) Create folder "datanode" under "C:\Hadoop-3.3.3\data"

2) Create folder "namenode" under "C:\Hadoop-3.3.3\data"

d) Edit file C:\Hadoop-3.3.3/etc/hadoop/hdfs-site.xml, paste below xml paragraph

and save this file.

```
<configuration>
<property>
<name>dfs.replication</name>
<value>1</value>
</property>
<property>
<name>dfs.namenode.name.dir</name>
<value>file:///C:/hadoop-3.3.3/data/namenode</value>
</property>
```

```
<property>
<name>dfs.datanode.data.dir</name>
<value>file:///C:/hadoop-3.3.3/data/datanode</value>
</property>
</configuration>
```

Now give ctrl+s to save the file

e) Edit file C:/Hadoop-3.3.3/etc/hadoop/yarn-site.xml, paste below xml paragraph

and save this file.

```
<configuration>
<property>
<name>yarn.nodemanager.aux-services</name>
<value>mapreduce_shuffle</value>
</property>
<property>
<name>yarn.nodemanager.auxservices.mapreduce.shuffle.class</name>
<value>org.apache.hadoop.mapred.ShuffleHandler</value>
</property>
</configuration>
```

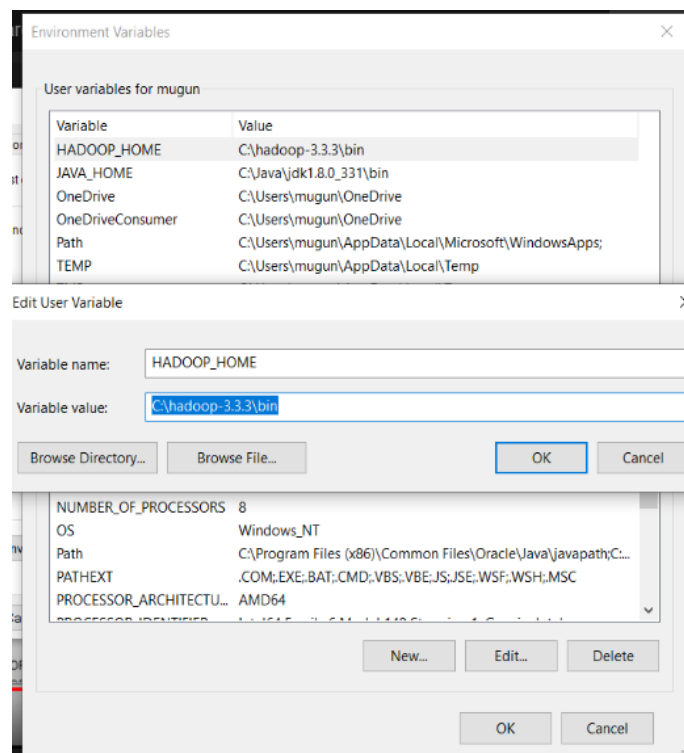
Now give ctrl+s to save the file

f) Edit C:/Hadoop-3.3.3/etc/hadoop/hadoop-env.cmd,

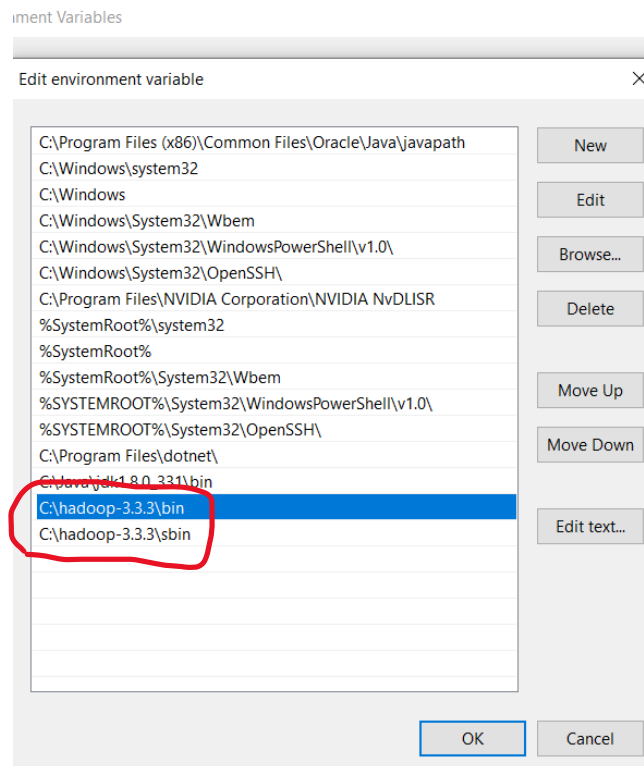
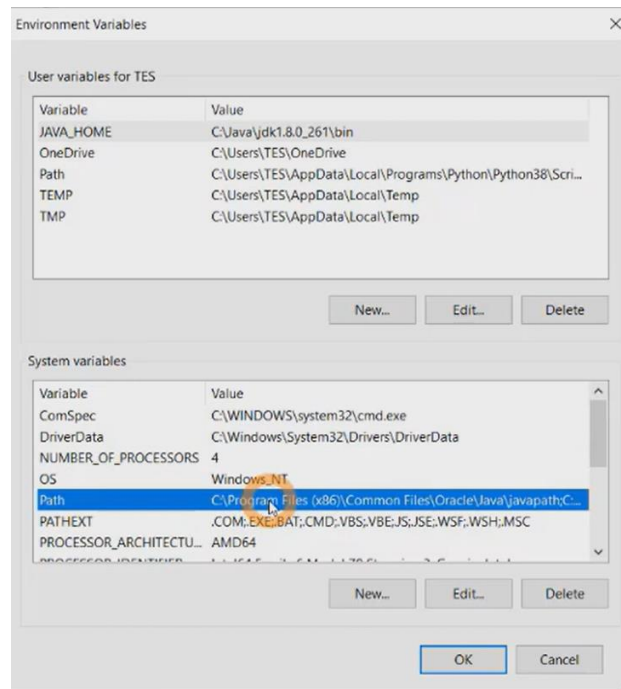
type the variable value given in Step 6.3 (Eg: C:\Java\jdk1.8.0_261) (without bin) to “set JAVA_HOME” and give ctrl+s to save the file

```
*C:\hadoop-3.3.0\etc\hadoop\hadoop-env.cmd - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
core-site.xml mapred-site.xml yarn-site.xml hdfs-site.xml hadoop-env.cmd
13  #rem WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
14  #rem See the License for the specific language governing permissions and
15  #rem limitations under the License.
16
17  #rem Set Hadoop-specific environment variables here.
18
19  #rem The only required environment variable is JAVA_HOME. All others are
20  #rem optional. When running a distributed configuration it is best to
21  #rem set JAVA_HOME in this file, so that it is correctly defined on
22  #rem remote nodes.
23
24  #rem The java implementation to use. Required.
25  set JAVA_HOME=C:\Java\jdk1.8.0_261
26
27  #rem The jsvc implementation to use. Jsvc is required to run secure datanodes.
28  #rem set JSVC_HOME=%JSVC_HOME%
29
30  #rem set HADOOP_CONF_DIR=
31
32  #rem Extra Java CLASSPATH elements. Automatically insert capacity-scheduler.
33  if exist %HADOOP_HOME%\contrib\capacity-scheduler (
34    if not defined HADOOP_CLASSPATH (
35      set HADOOP_CLASSPATH=%HADOOP_HOME%\contrib\capacity-scheduler\*.jar
36    ) else (
37      set HADOOP_CLASSPATH=%HADOOP_CLASSPATH%;%HADOOP_HOME%\contrib\capacity-scheduler\*.jar
38    )
39  )
Batch file length: 4,008 lines: 91 Ln: 25 Col: 35 Sel: 0 | 0 Windows (CR LF) UTF-8 INS
```

Step 13: Open the “Edit the system Environment Variable” in control Panel. Now click new and give the variable name as “HADOOP_HOME” and variable value as the path where the hadoop is installed (Eg: C:\hadoop-3.3.3\bin) and then click OK.



Step 14: Now create the path by selecting the path and click edit. In that click new and type “C:\hadoop-3.3.3\bin” and “C:\hadoop-3.3.3\sbin” (separately) and click OK.



Step 15: In hadoop bin folder some necessary files are missing so now click on this link to download those files:

<https://drive.google.com/file/d/1kVhX9snOZ3oLUxDjh3AVI8fcRnEWAAE4/view>

Verifying whether the installation is successful or not:

Step 18: Now type the following commands:

```
C:\Windows\system32>hdfs namenode -format
```

```
2022-06-27 09:08:58,002 INFO namenode.NameNode: STARTUP_MSG:  
*****  
STARTUP_MSG: Starting NameNode  
STARTUP_MSG: host = DESKTOP-0SNGK0J/192.168.56.1  
STARTUP_MSG: args = [-format]  
STARTUP_MSG: version = 3.3.3  
STARTUP_MSG: classpath = C:\hadoop-3.3.3\etc\hadoop;c:\hadoop-3.3.3\share\hadoop\common;c:\hadoop-3.3.3\share\hadoop\common\lib\accessors-smart-2.4.7.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\animal-sniffer-annotations-1.17.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\asm-5.0.4.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\audience-annotations-0.5.0.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\avro-1.7.7.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\checker-qual-2.5.2.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-beanutils-1.9.4.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-cli-1.2.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-codec-1.15.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-collections-2.2.2.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-compress-1.21.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-configuration2-2.1.1.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-daemon-1.0.13.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-io-2.8.0.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-lang3-3.12.0.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-logging-1.1.3.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-math3-3.1.1.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-net-3.6.3.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\commons-text-1.4.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\curator-client-4.2.0.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\curator-framework-4.2.0.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\curator-recipes-4.2.0.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\dnsjava-2.1.7.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\failureaccess-1.0.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\gson-2.8.9.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\guava-27.0-jre.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\hadoop-annotations-3.3.3.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\hadoop-auth-3.3.3.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\hadoop-shaded-guava-1.1.1.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\hadoop-shaded-protobuf-3.7.1.1.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\httpclient-4.5.13.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\httpcore-4.14.3.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\j2objc-annotations-1.1.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\jackson-annotations-2.13.2.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\jackson-core-2.13.2.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\jackson-databind-2.13.2.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\jackson-jaxrs-1.9.13.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\jackson-mapper-asl-1.9.13.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\jackson-xc-1.9.13.jar;c:\hadoop-3.3.3\share\hadoop\common\lib\jakarta.activation-api-
```

```

Select Administrator: Command Prompt
2022-06-27 09:08:12,628 INFO metrics.TopMetrics: NNTop conf: dfs.namenode.top.num.users = 10
2022-06-27 09:08:12,628 INFO metrics.TopMetrics: NNTop conf: dfs.namenode.top.windows.minutes = 1,5,25
2022-06-27 09:08:12,644 INFO namenode.FSNamesystem: Retry cache on namenode is enabled
2022-06-27 09:08:12,644 INFO namenode.FSNamesystem: Retry cache will use 0.03 of total heap and retry cache entry expiry time
is 600000 millis
2022-06-27 09:08:12,644 INFO util.GSet: Computing capacity for map NameNodeRetryCache
2022-06-27 09:08:12,644 INFO util.GSet: VM type = 64-bit
2022-06-27 09:08:12,644 INFO util.GSet: 0.029999999329447746% max memory 889 MB = 273.1 KB
2022-06-27 09:08:12,644 INFO util.GSet: capacity = 2^15 = 32768 entries
Re-format filesystem in Storage Directory root=C:\hadoop-3.3.3\data\namenode; location= null ? (Y or N) y
2022-06-27 09:08:23,048 INFO namenode.FSImage: Allocated new BlockPoolId: BP-1570596152-192.168.56.1-1656346103048
2022-06-27 09:08:23,048 INFO common.Storage: Will remove files: [C:\hadoop-3.3.3\data\namenode\current\edits_inprogress_00000
000000000000001, C:\hadoop-3.3.3\data\namenode\current\fsimage_0000000000000000000, C:\hadoop-3.3.3\data\namenode\current\fsim
age_00000000000000000000.md5, C:\hadoop-3.3.3\data\namenode\current\seen_txid, C:\hadoop-3.3.3\data\namenode\current\VERSION]
2022-06-27 09:08:23,095 INFO common.Storage: Storage directory C:\hadoop-3.3.3\data\namenode has been successfully formatted.
2022-06-27 09:08:23,126 INFO namenode.FSImageFormatProtobuf: Saving image file C:\hadoop-3.3.3\data\namenode\current\fsimage.
ckpt_00000000000000000000 using no compression
2022-06-27 09:08:23,251 INFO namenode.FSImageFormatProtobuf: Image file C:\hadoop-3.3.3\data\namenode\current\fsimage.ckpt_00
000000000000000000 of size 400 bytes saved in 0 seconds .
2022-06-27 09:08:23,267 INFO namenode.NNStorageRetentionManager: Going to retain 1 images with txid >= 0
2022-06-27 09:08:23,298 INFO namenode.FSNamesystem: Stopping services started for active state
2022-06-27 09:08:23,298 INFO namenode.FSNamesystem: Stopping services started for standby state
2022-06-27 09:08:23,298 INFO namenode.FSImage: FSImageSaver clean checkpoint: txid=0 when meet shutdown.
2022-06-27 09:08:23,298 INFO namenode.NameNode: SHUTDOWN_MSG:
/*****
SHUTDOWN_MSG: Shutting down NameNode at DESKTOP-0SNGK0J/192.168.56.1
*****/
C:\Windows\system32>

```


- 3. now type “start-dfs” to start hadoop.**

```
Administrator: Command Prompt
C:\hadoop-3.3.3\data\nameNode\current\VERSION\
2022-06-27 09:09:17,546 INFO com.Storage: Storage directory C:\hadoop-3.3.3\data\nameNode has been successfully formatted.

2022-06-27 09:09:17,562 INFO nameNode.FSImageFormatProtobuf: Saving image file C:\hadoop-3.3.3\data\nameNode\current\fsimage.
ckpt.000000000000000000000000 using no compression
2022-06-27 09:09:17,655 INFO nameNode.FSImageFormatProtobuf: Image file C:\hadoop-3.3.3\data\nameNode\current\fsimage.ckpt.00
00000000000000000000 of size 400 bytes saved in 0 seconds
2022-06-27 09:09:17,671 INFO nameNode.HMStorageRetentionManager: Going to retain 1 images with txid >= 0
2022-06-27 09:09:17,687 INFO nameNode.FSNamesystem: Stopping services started for active state
2022-06-27 09:09:17,687 INFO nameNode.FSNamesystem: Stopping services started for standby state
2022-06-27 09:09:17,687 INFO nameNode.FSImage: FSImageSaver clean checkpoint: txid=0 when meet shutdown.
2022-06-27 09:09:17,687 INFO nameNode.NameNode: SHUTDOWN_MSG:
=====
SHUTDOWN_MSG: Shutting down NameNode at DESKTOP-0SNGK0J/192.168.56.1
=====

C:\Windows\system32>cd..
C:\Windows>cd..
C:\>cd start-dfs
The system cannot find the path specified.

Administrator: Apache Hadoop Distribution
at org.apache.hadoop.hdfs.server.d
at org.apache.hadoop.hdfs.server.d
at org.apache.hadoop.hdfs.server.d
at org.apache.hadoop.hdfs.server.d
at org.apache.hadoop.hdfs.server.d
at org.apache.hadoop.hdfs.server.d
at org.apache.hadoop.hdfs.server.d
at org.apache.hadoop.hdfs.server.d
at java.lang.Thread.run(Thread:750)
2022-06-27 09:10:55,079 ERROR datanode.DataNode: Initialization failed for Block pool <registering> (Datanode Uuid 98ab6
098-5097-4c4d-94bc-fb51d457a8bb) service to localhost/127.0.0.1:9000. Exiting.
java.io.IOException: All specified directories have failed to load.
at org.apache.hadoop.hdfs.server.datanode.DataStorage.recoverTransitionRead(DataStorage.java:562)
at org.apache.hadoop.hdfs.server.datanode.DataNode.initStartBlockPool(DataNode.java:1739)
at org.apache.hadoop.hdfs.server.datanode.DataNode.initBlockPool(DataNode.java:1675)
at org.apache.hadoop.hdfs.server.datanode.BPOfferService.verifyAndSetNameSpaceInfo(BPOfferService.java:394)
at org.apache.hadoop.hdfs.server.datanode.BPServiceActor.connectToBlockAndShards(BPServiceActor.java:295)
at org.apache.hadoop.hdfs.server.datanode.BPServiceActor.run(BPServiceActor.java:854)
at java.lang.Thread.run(Thread:750)
2022-06-27 09:10:55,079 WARN datanode.DataNode: Ending block pool service for: Block pool <registering> (Datanode Uuid 9
8ab6098-5097-4c4d-94bc-fb51d457a8bb) service to localhost/127.0.0.1:9000
2022-06-27 09:10:55,095 INFO datanode.DataNode: Removed block pool <registering> (Datanode Uuid 98ab6098-5097-4c4d-94bc-
fb51d457a8bb)
2022-06-27 09:10:57,110 WARN datanode.DataNode: Exiting Datanode
2022-06-27 09:10:57,110 INFO datanode.DataNode: SHUTDOWN_MSG:
=====
SHUTDOWN_MSG: Shutting down DataNode at DESKTOP-0SNGK0J/192.168.56.1
=====

hange: STATE* Network topology has 0 racks and 0 datanodes
hange: STATE* UnderReplicatedBlocks has 0 blocks
ment.BlockManager: Total number of blocks = 0
ment.BlockManager: Number of invalid blocks = 0
ment.BlockManager: Number of under-replicated blocks = 0
ment.BlockManager: Number of over-replicated blocks = 0
ment.BlockManager: Number of blocks being written = 0
hange: STATE* Replication Queue initialization scan for invalid, over- and under

IPC Server Responder: starting
IPC Server listener on 9000: starting
meloNode: NameNode RPC up at: localhost/127.0.0.1:9000
Namesystem: Starting services required for active state
Directory: Initializing quota with 12 thread(s)
Directory: Quota initialization completed in 10 milliseconds

ARCHIVE=0, PROVIDED=0
ment.CacheReplicationMonitor: Starting CacheReplicationMonitor with interval 300
```

- 4. then type “start-yarn” to start yarn.**

[illegible]

Note: the cmd prompts should run without getting terminated immediately

5. In browser type “localhost:9870” to view/ check the working of hadoop.

The screenshot shows the Hadoop NameNode Information page in a web browser. The page has a green header with the Hadoop logo and navigation tabs: Overview, Datanodes, Datanode Volume Failures, Snapshot, Startup Progress, and Utilities. The main content area is titled "Overview 'localhost:9000' (✓active)". Below this is a table with the following information:

Started:	Tue Oct 06 21:37:14 +0500 2020
Version:	3.3.0, raa96f1871bfd858f9bac59cf2a81ec470da649af
Compiled:	Mon Jul 06 23:44:00 +0500 2020 by brahma from branch-3.3.0
Cluster ID:	CID-a82841e9-ff3d-4d92-b3d2-cfec2770d94a
Block Pool ID:	BP-1478081281-192.168.76.1-1602002167487

Below the table is a section titled "Summary" with the text "Security is off".

6. In browser type “localhost:8088” to view/ check the working of yarn.

The screenshot shows the Hadoop YARN Application Manager page in a web browser. The page has a header with the Hadoop logo and navigation tabs: Cluster, All Applications, and Tools. The main content area is titled "Cluster Metrics" and contains the following information:

Apps Submitted	Apps Pending	Apps Running	Apps
0	0	0	0

Below this is a section titled "Cluster Nodes Metrics" with the following information:

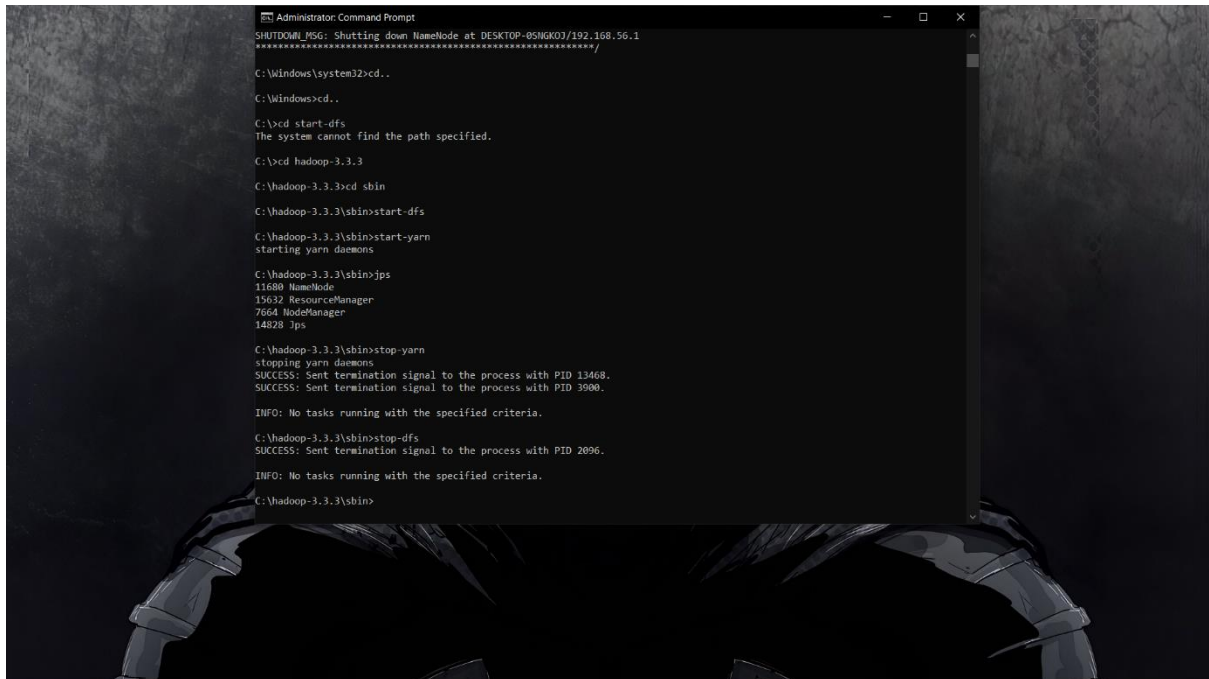
Active Nodes	Decommissioning Nodes
1	0

Below this is a section titled "Scheduler Metrics" with the following information:

Scheduler Type	Scheduling Resource Type
Capacity Scheduler	[memory-mb (unit=Mi), vcores]

Below this is a table with the following columns: ID, User, Name, Application Type, Application Tags, Queue, and Application Priority. The table is currently empty, showing "Showing 0 to 0 of 0 entries".

7. Type “tjs”.
8. Type “stop-yarn” to stop yarn.
9. Type “stop-dfs” to terminate hadoop.



```
Administrator Command Prompt
SHUTDOWN.PSG: Shutting down NameNode at DESKTOP-QSNGK07/192.168.56.1
*****/

C:\Windows\system32>cd..
C:\Windows>cd..
C:\>cd start-dfs
The system cannot find the path specified.
C:\>cd hadoop-3.3.3
C:\hadoop-3.3.3>cd sbin
C:\hadoop-3.3.3\sbin>start-dfs
C:\hadoop-3.3.3\sbin>start-yarn
starting yarn daemons
C:\hadoop-3.3.3\sbin>jps
11680 NameNode
15632 ResourceManager
7664 NodeManager
14828 Jps
C:\hadoop-3.3.3\sbin>stop-yarn
stopping yarn daemons
SUCCESS: Sent termination signal to the process with PID 13468.
SUCCESS: Sent termination signal to the process with PID 3980.
INFO: No tasks running with the specified criteria.
C:\hadoop-3.3.3\sbin>stop-dfs
SUCCESS: Sent termination signal to the process with PID 2096.
INFO: No tasks running with the specified criteria.
C:\hadoop-3.3.3\sbin>
```