

Date : 15/10/22

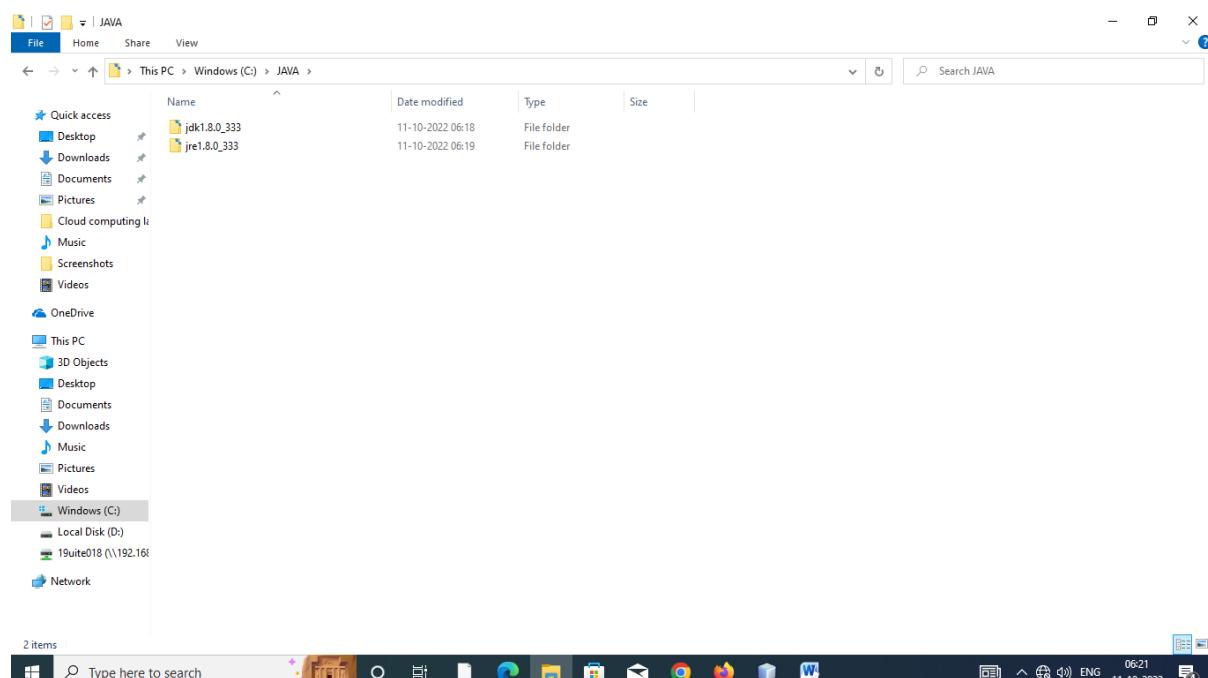
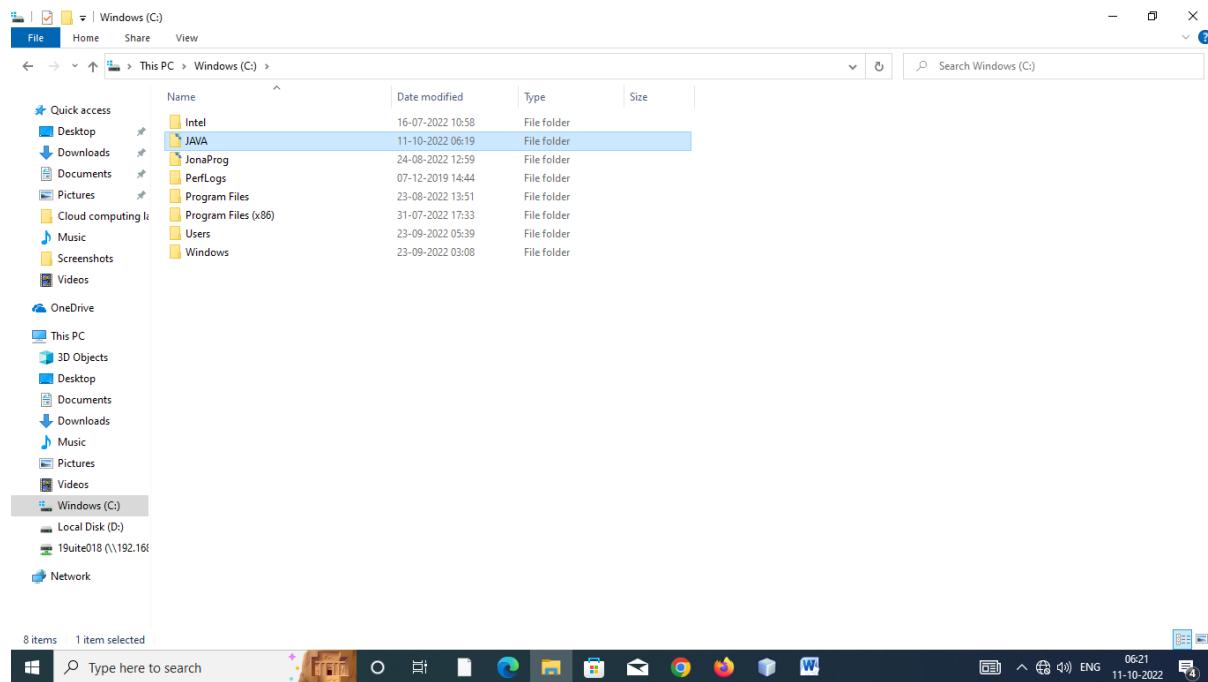
EX:9

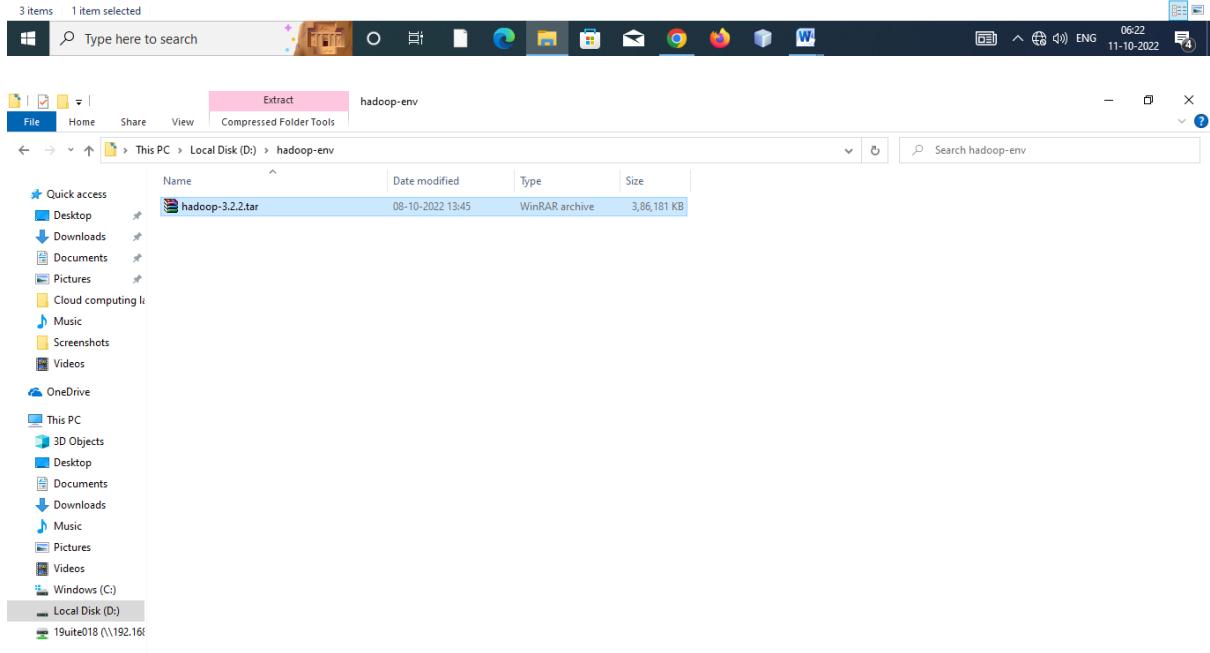
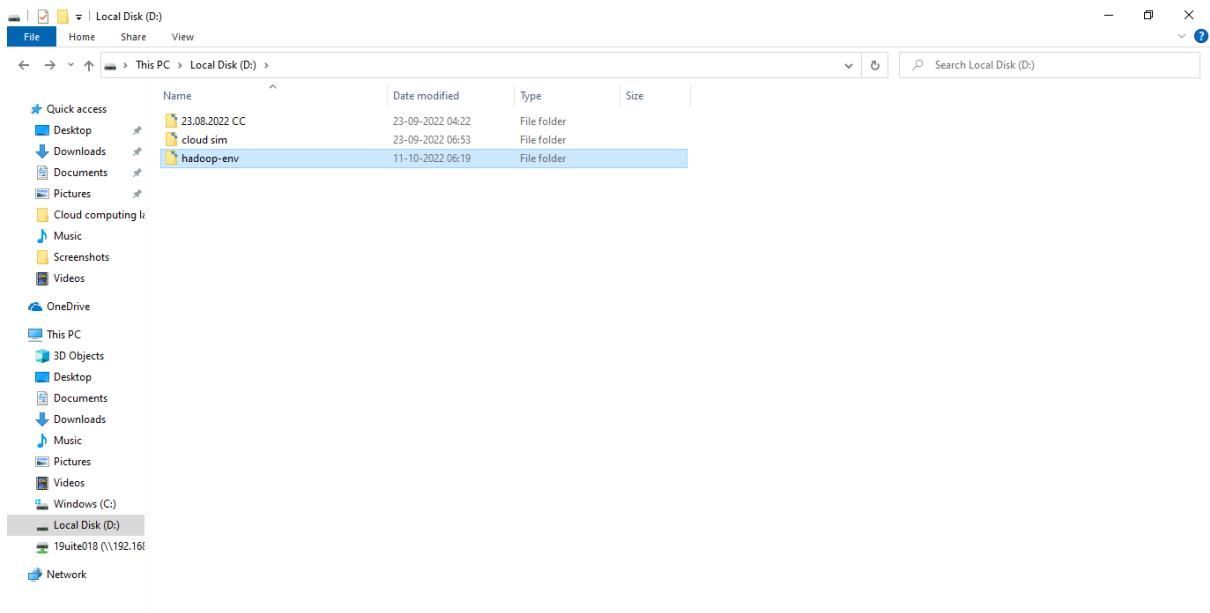
Name : Sutharsan G

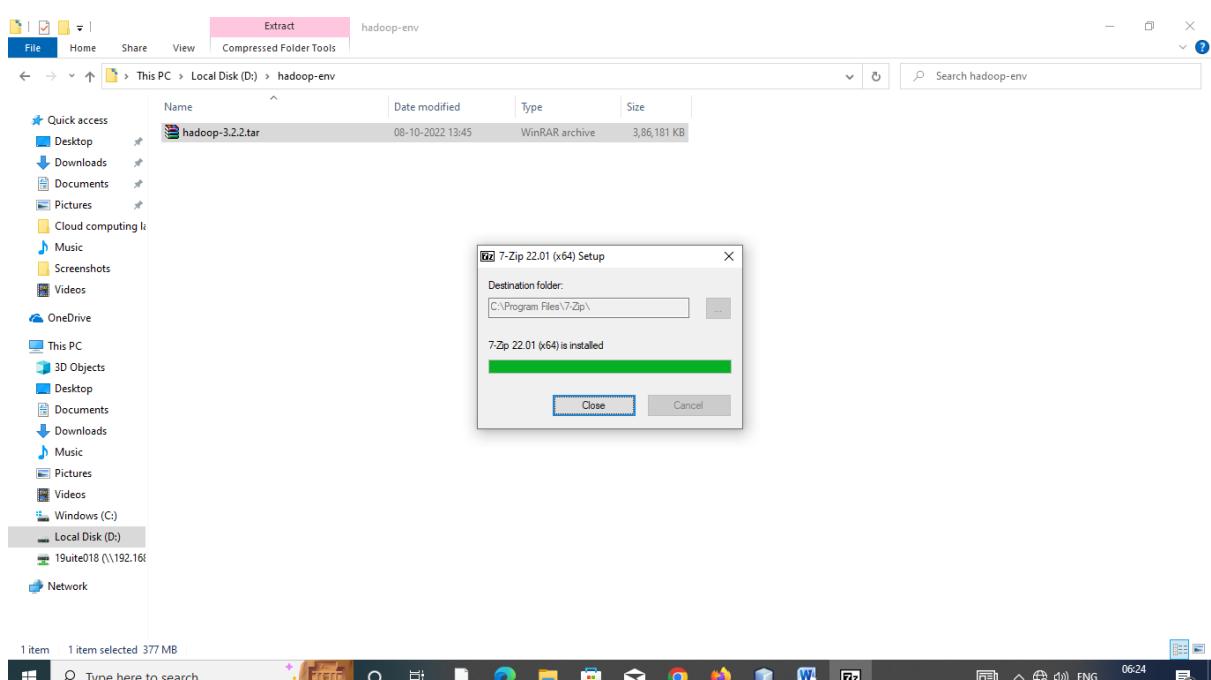
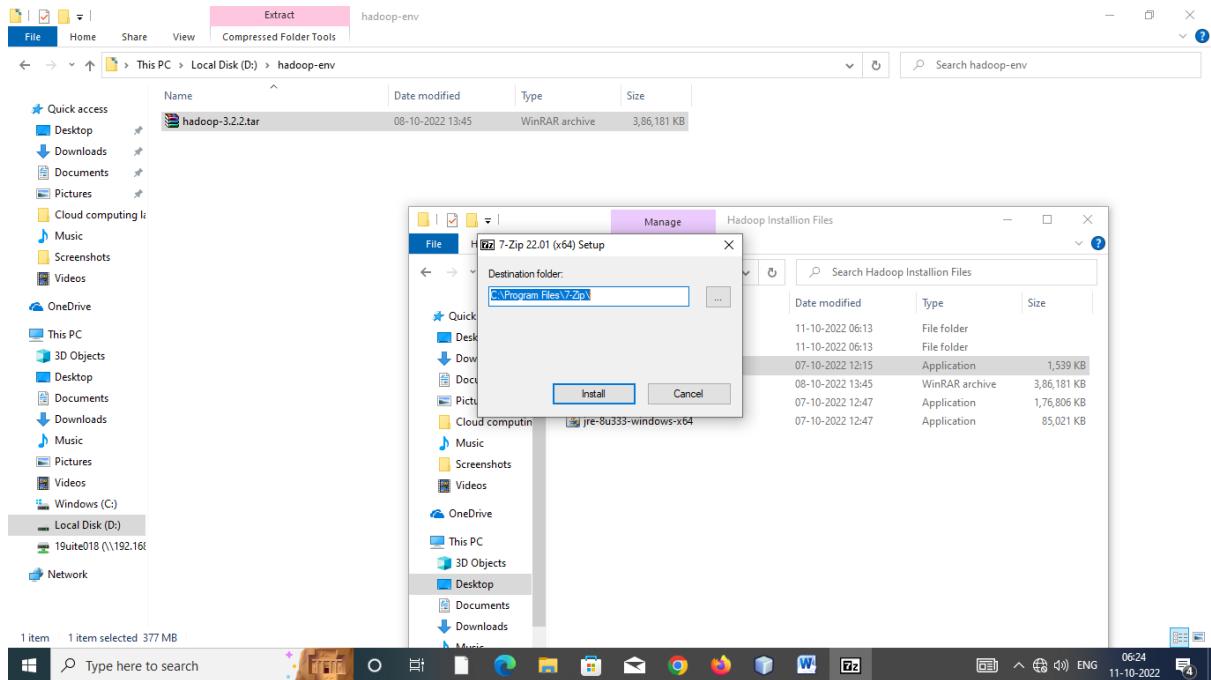
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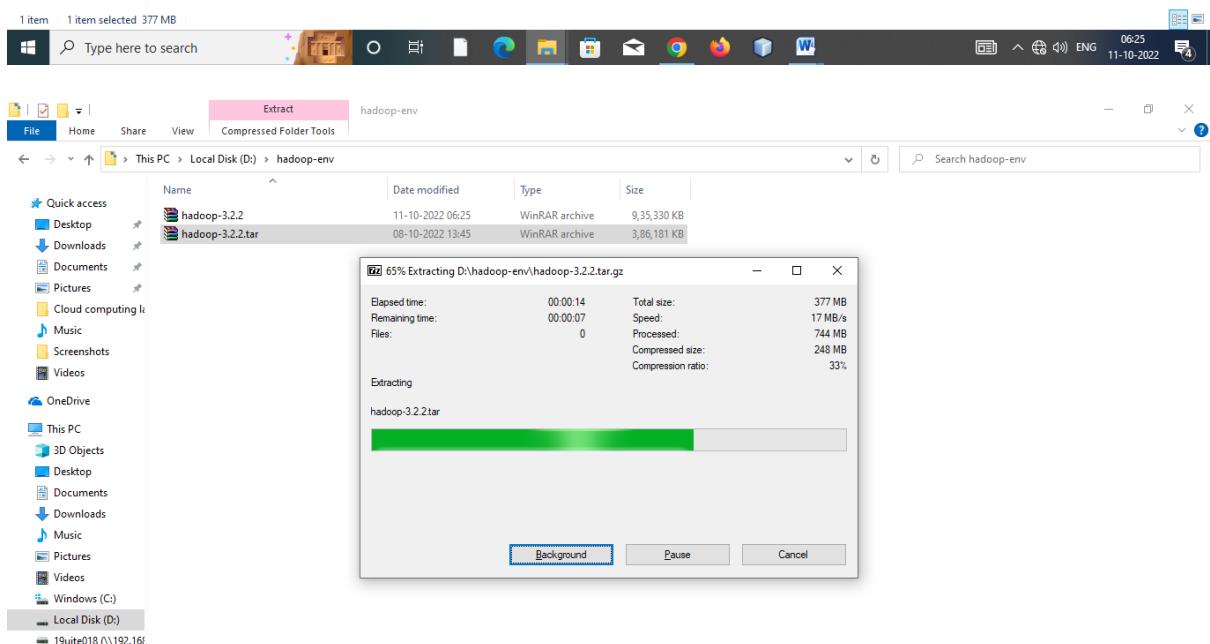
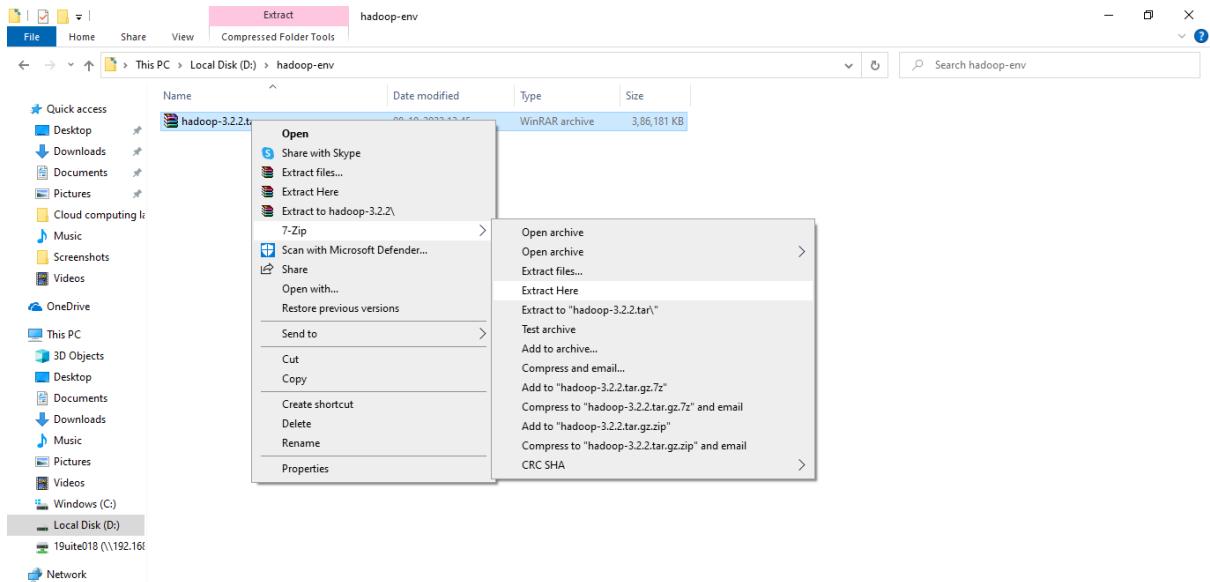
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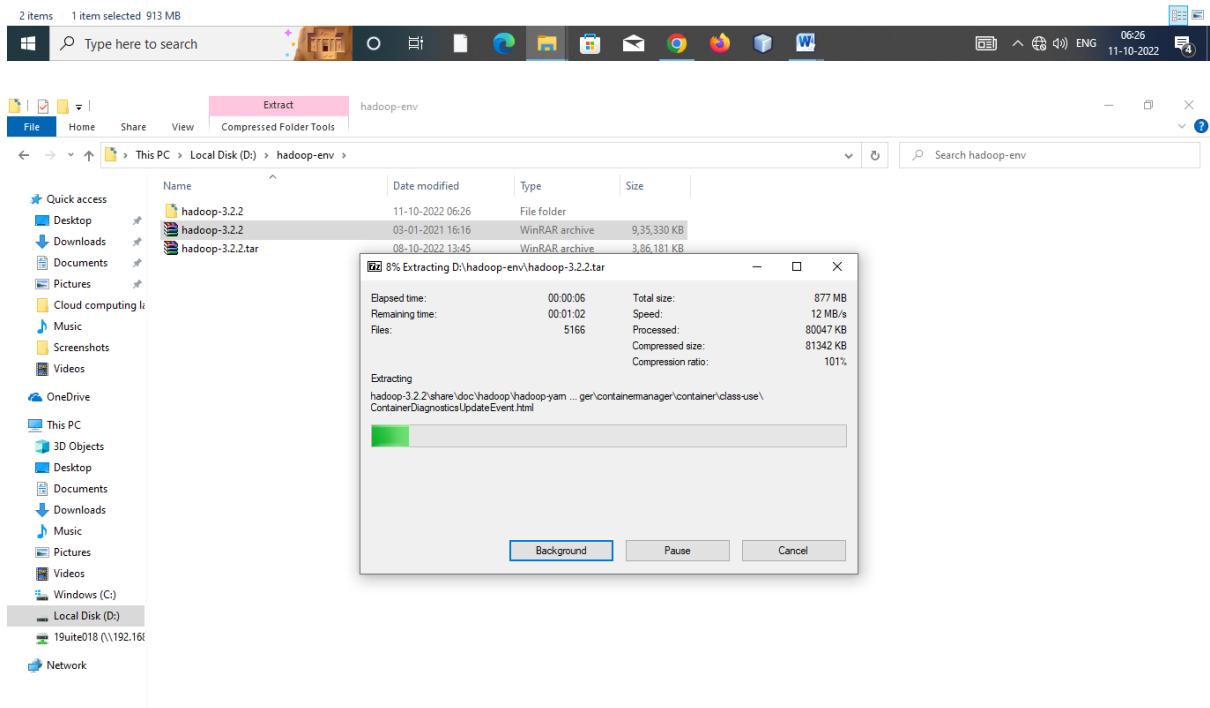
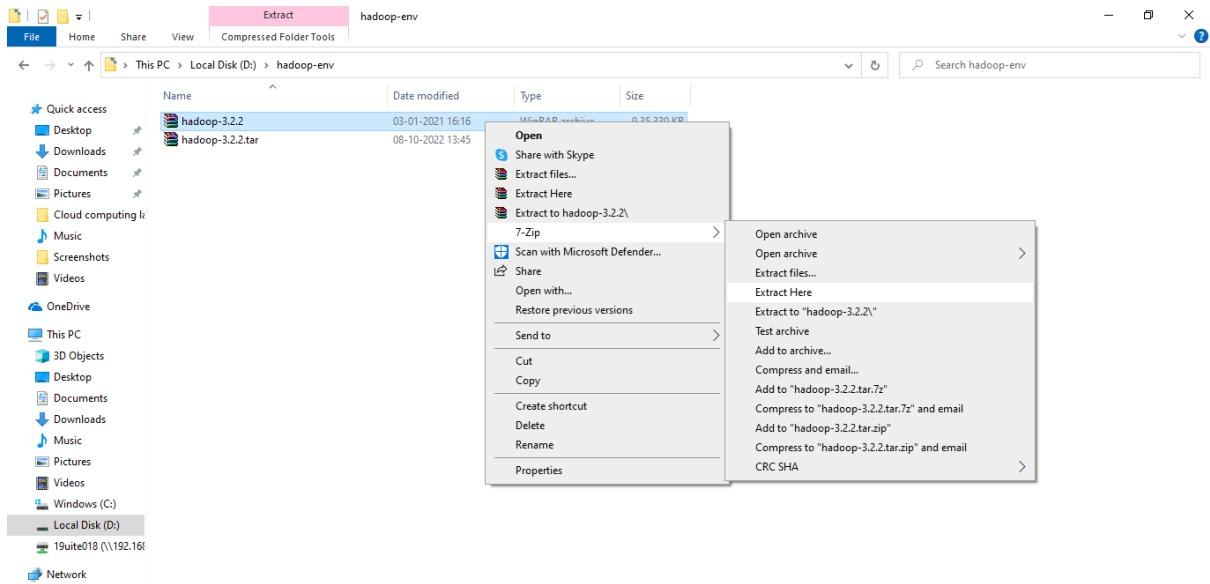
Installation of Single Node Hadoop Cluster

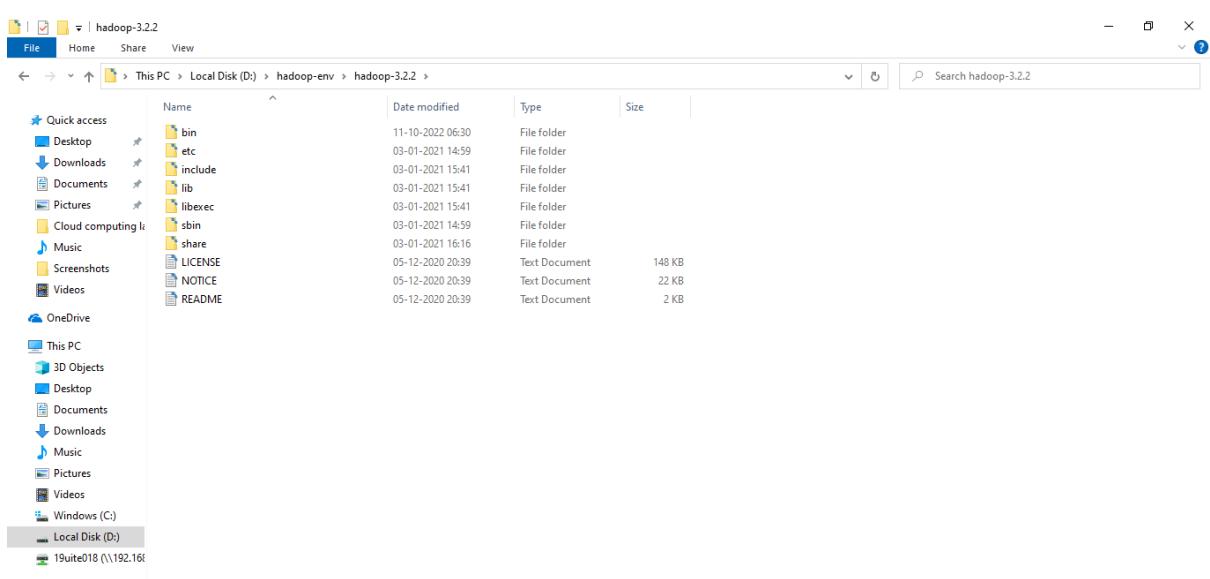
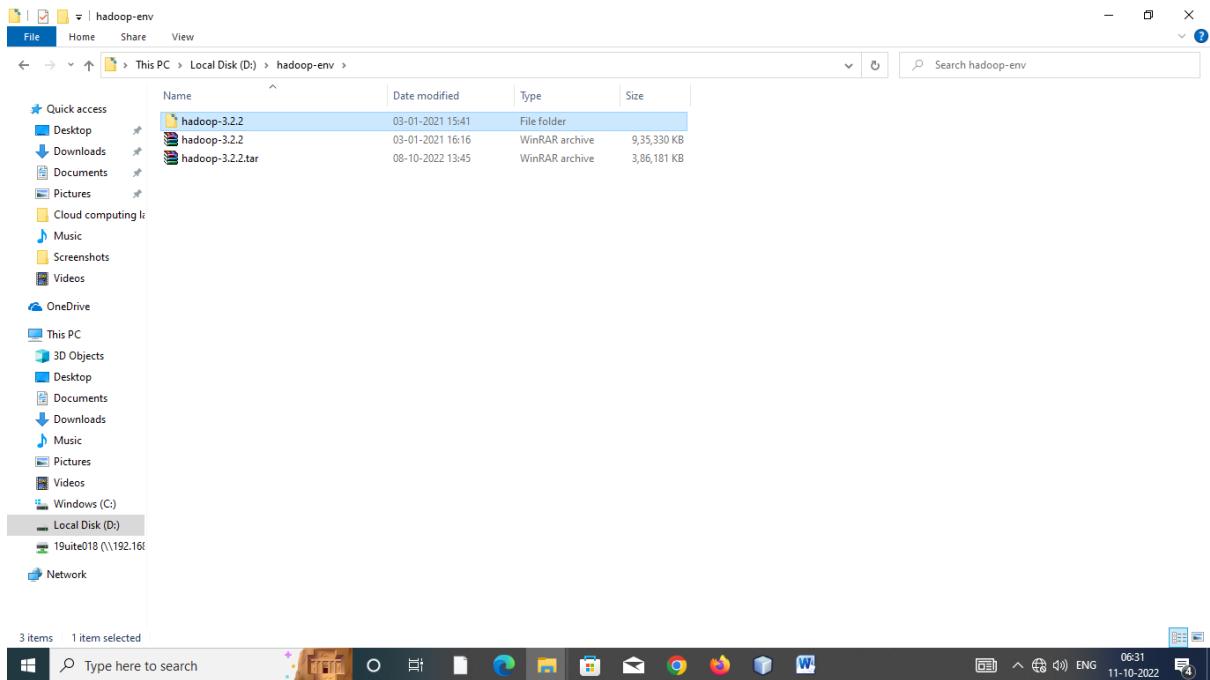


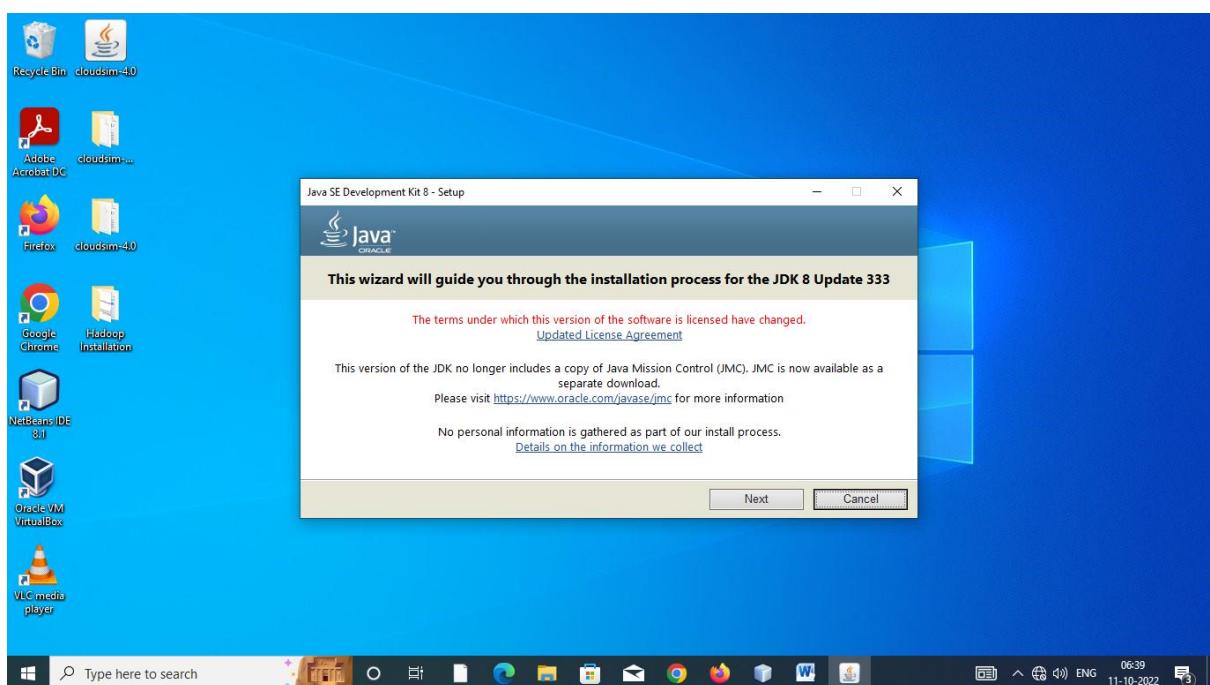
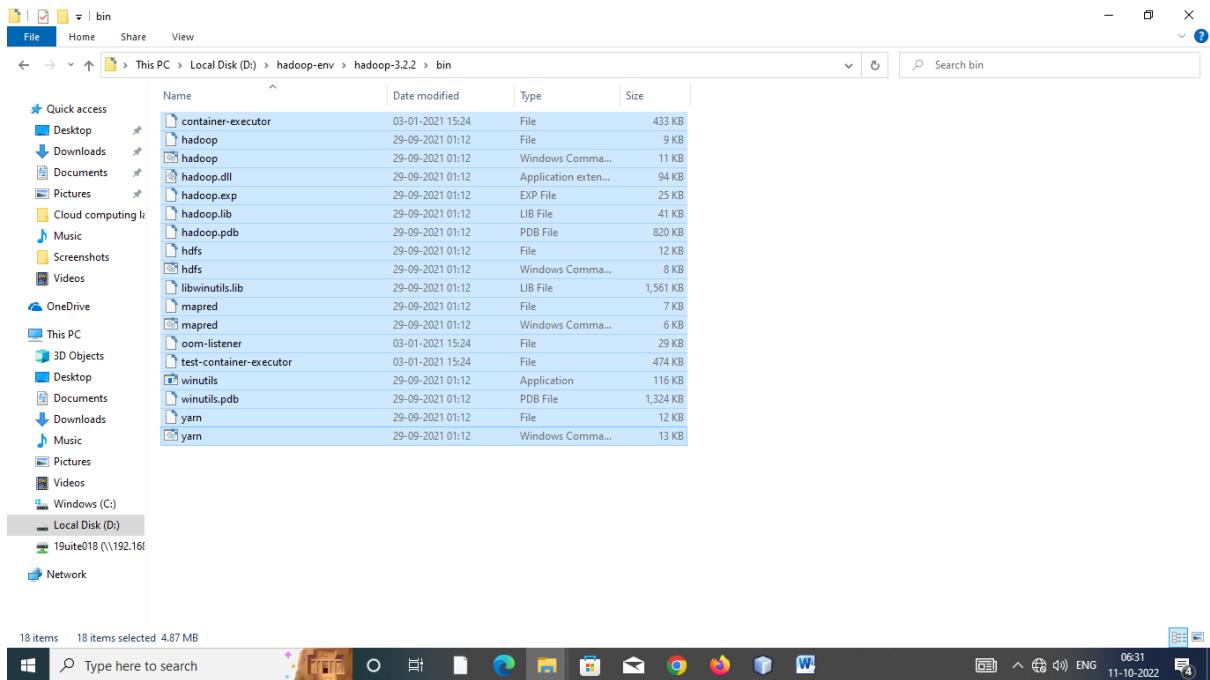


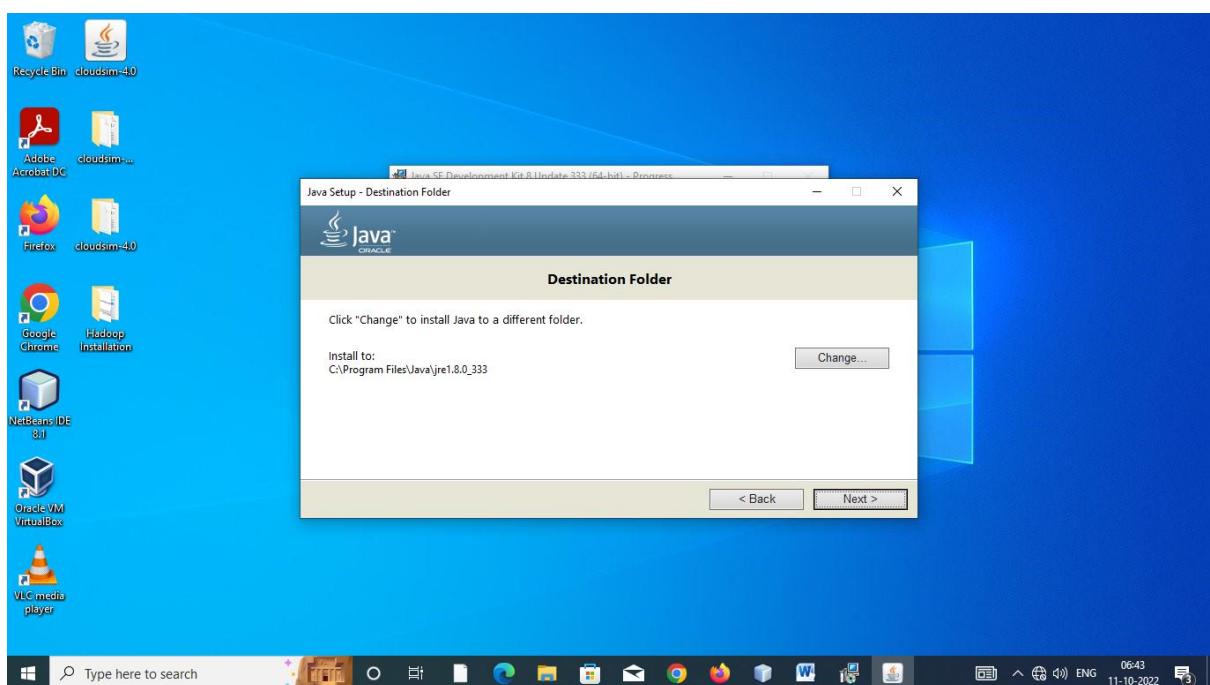
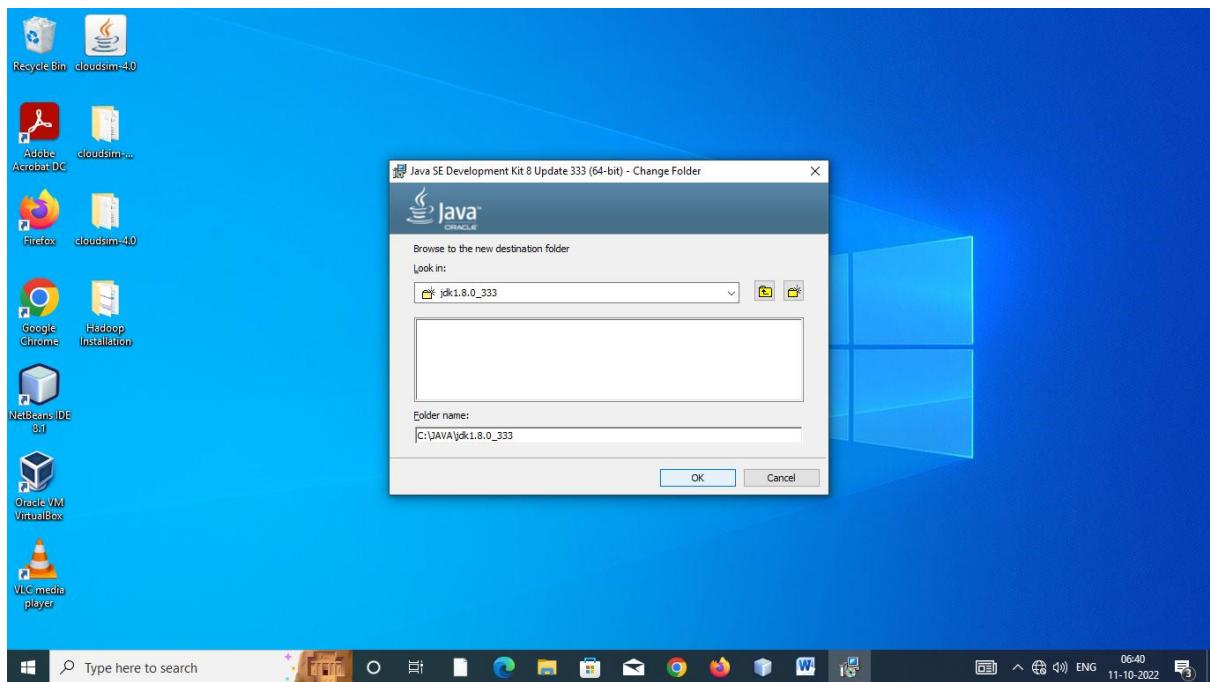


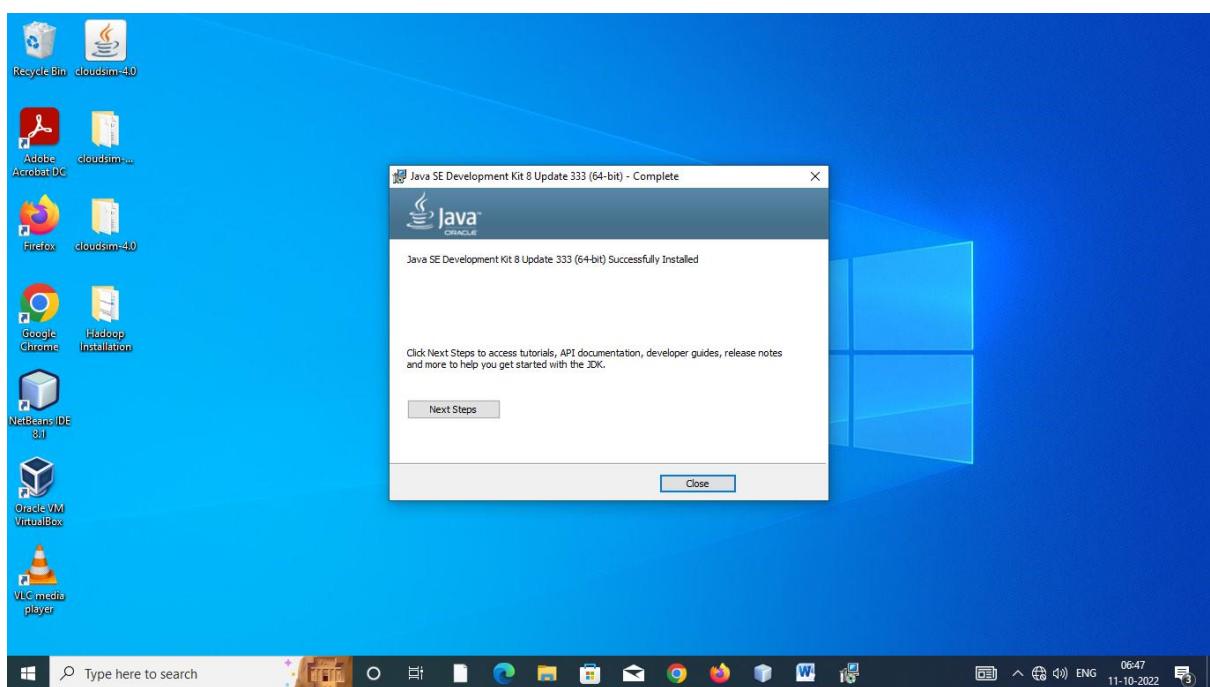
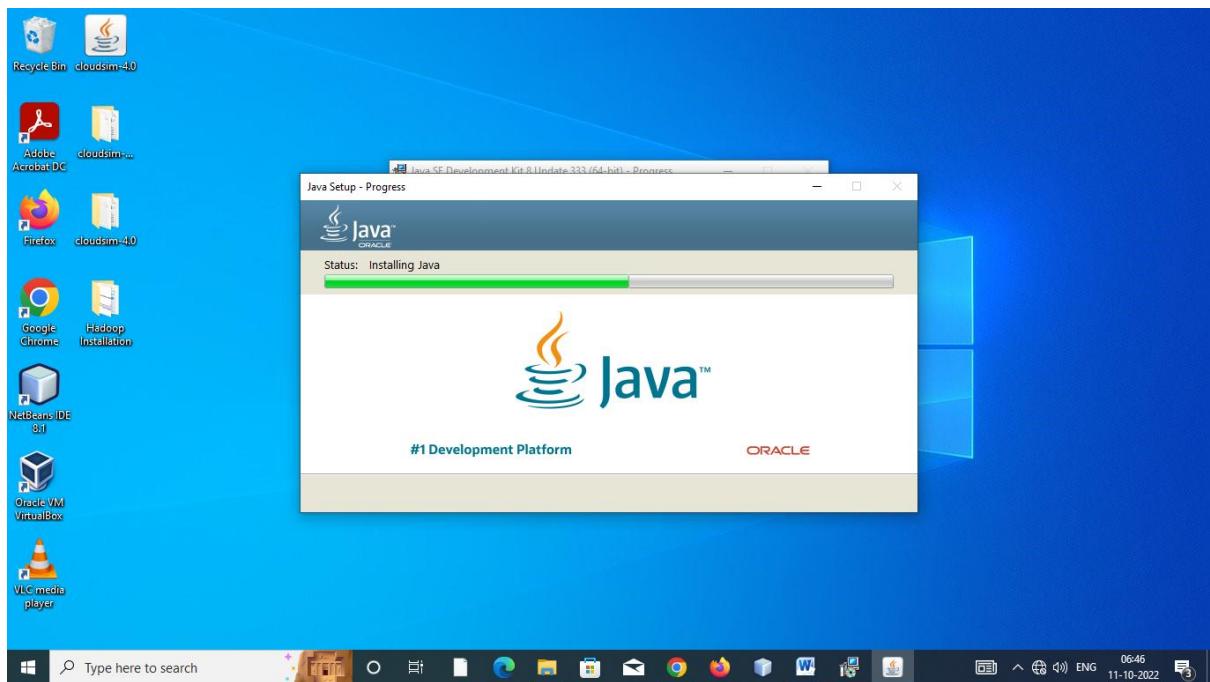


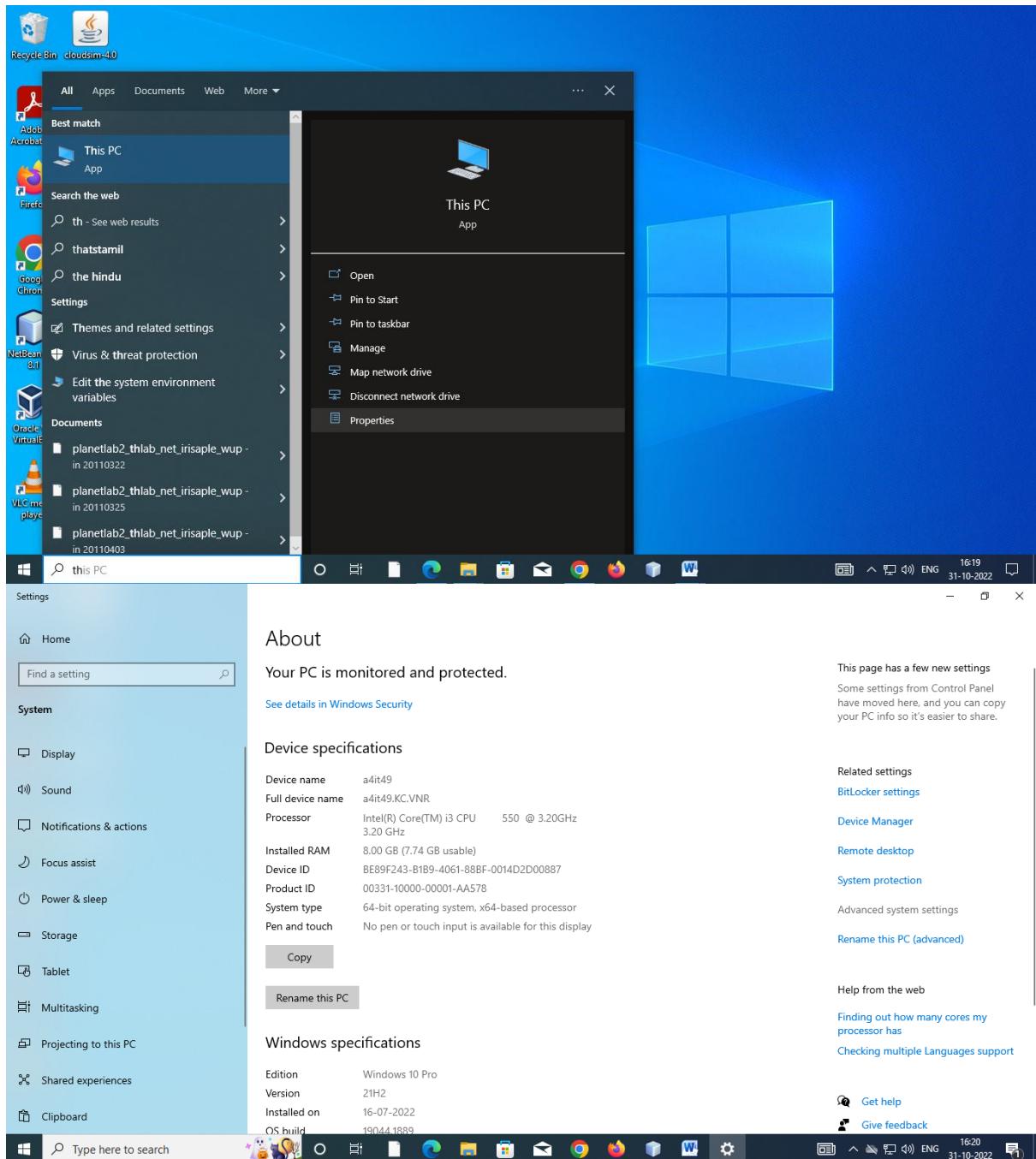


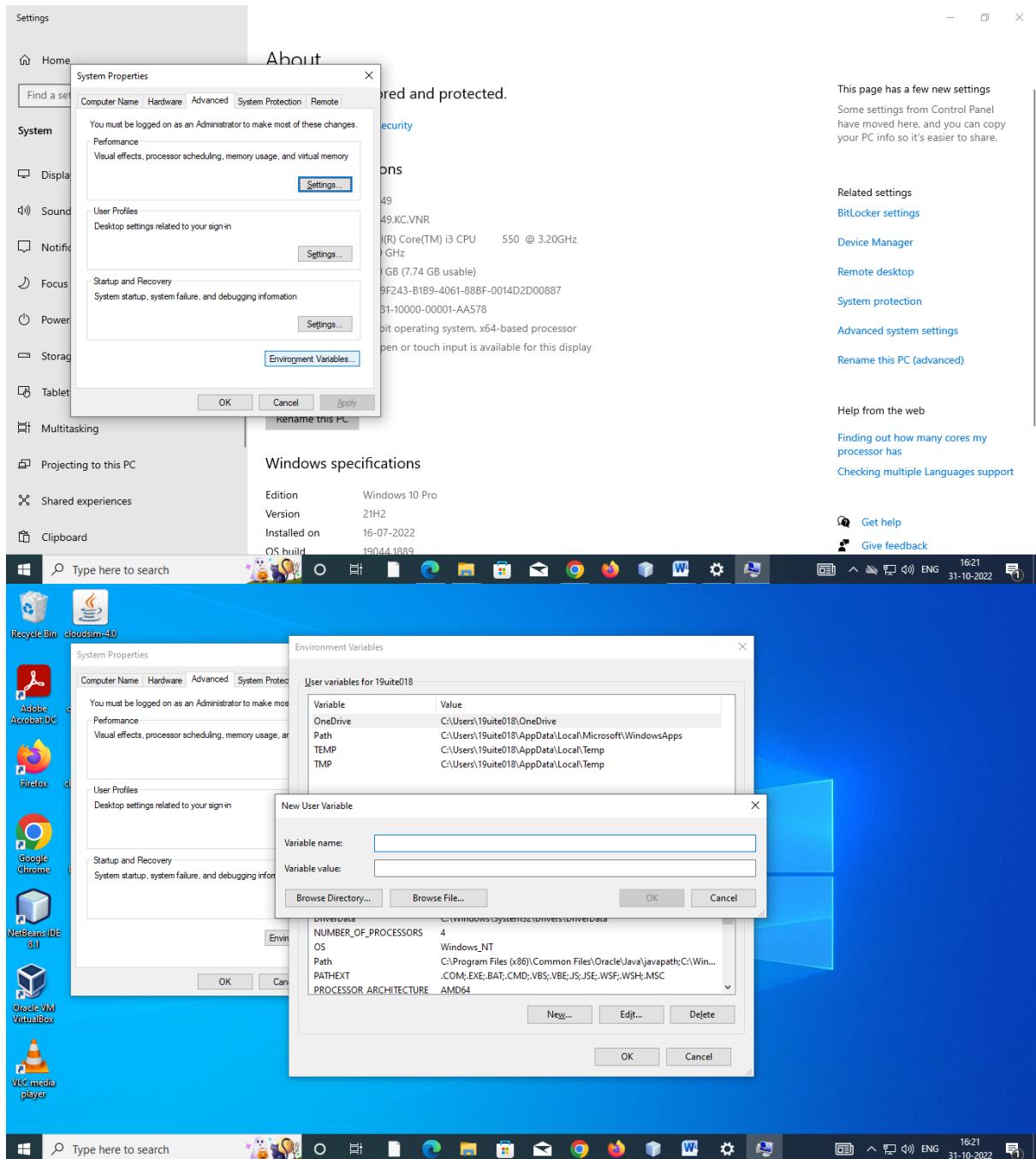


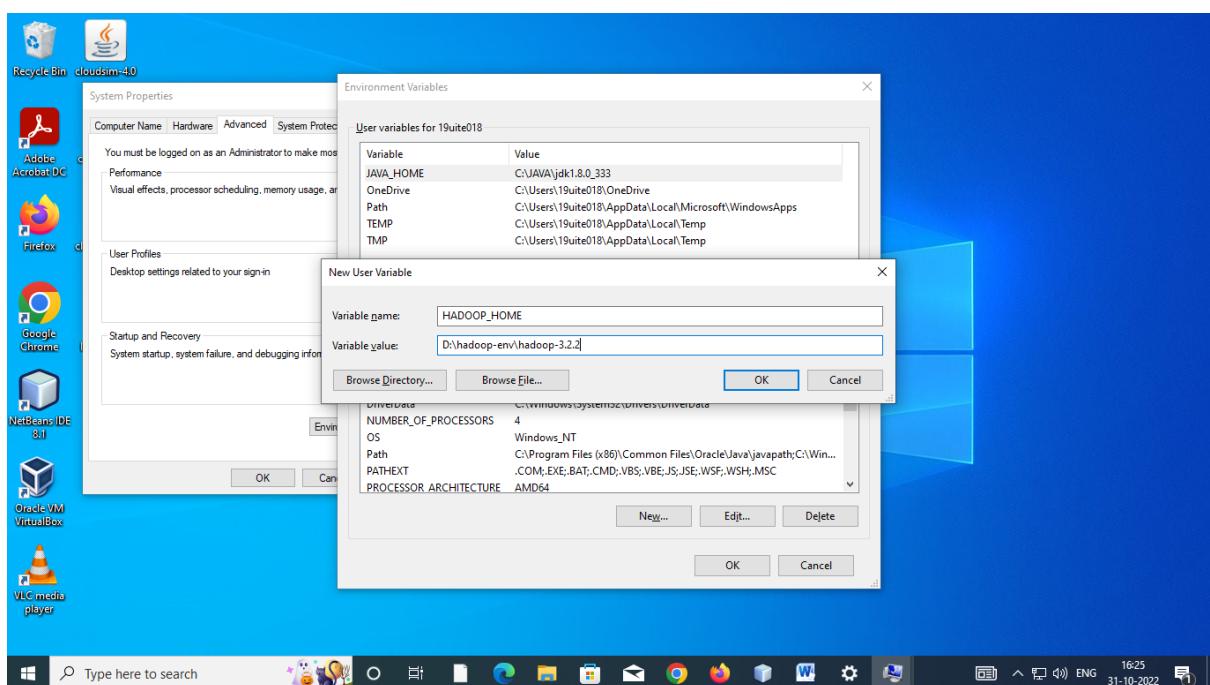
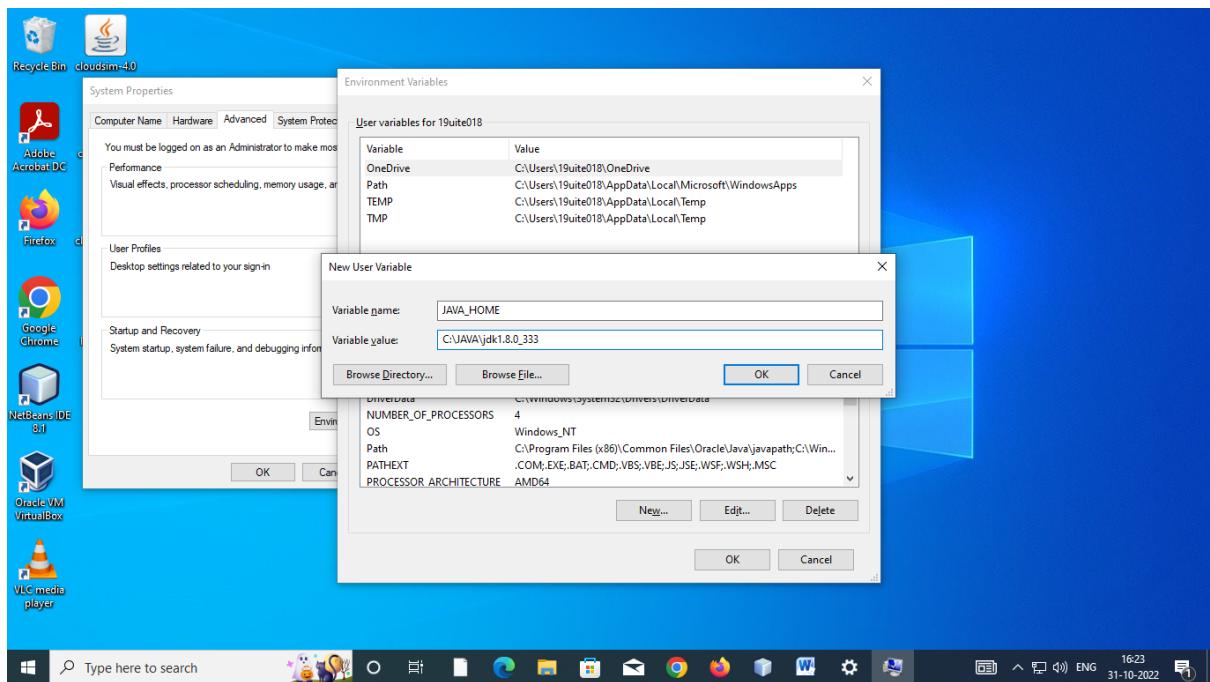


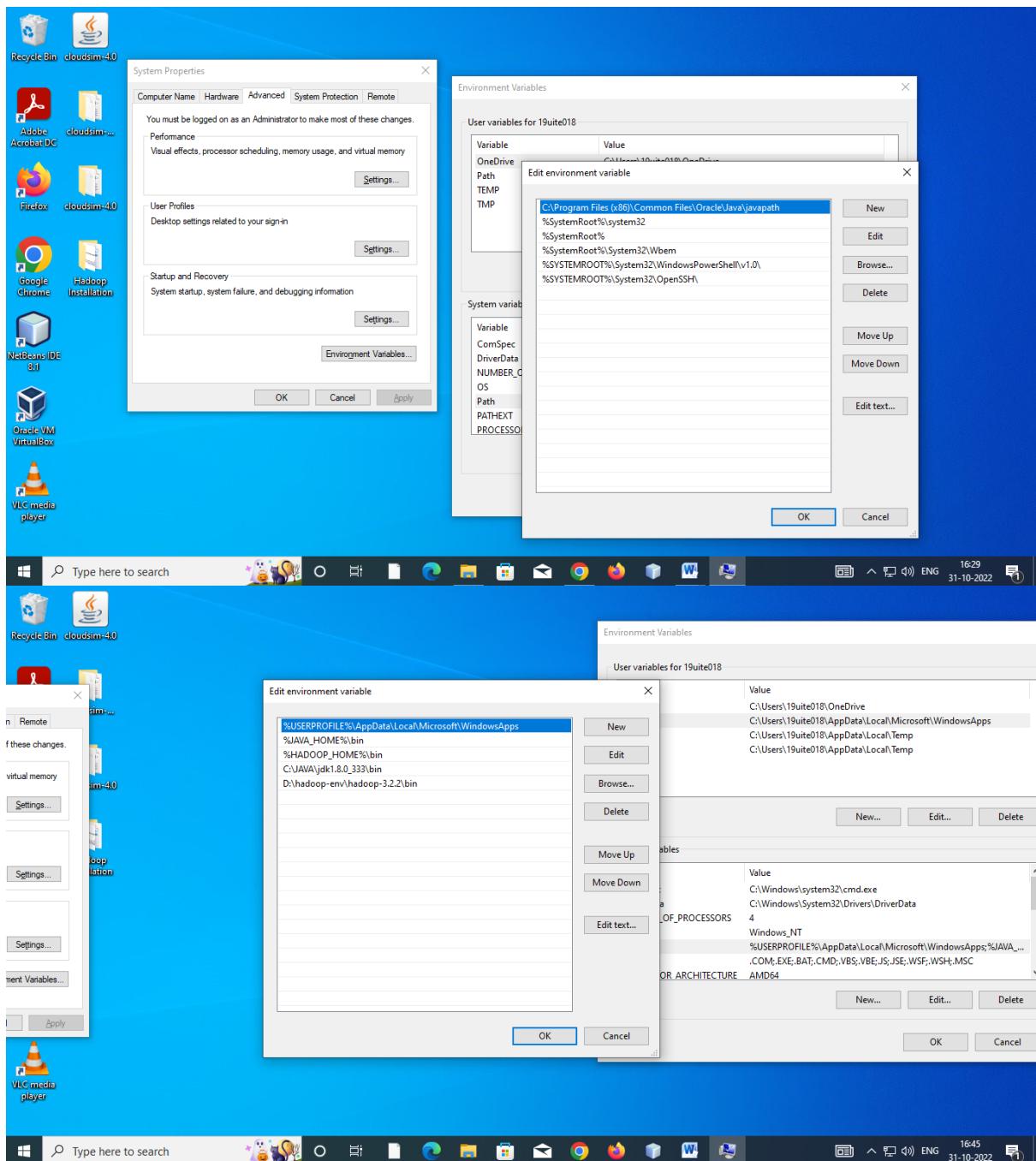


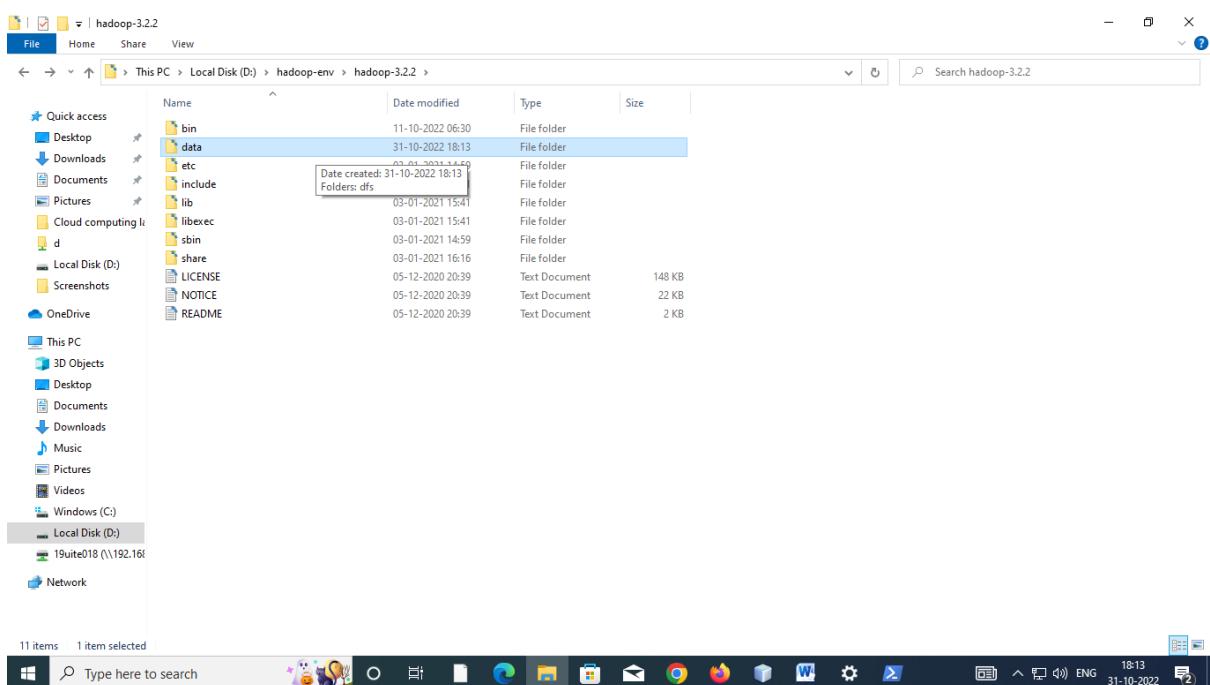
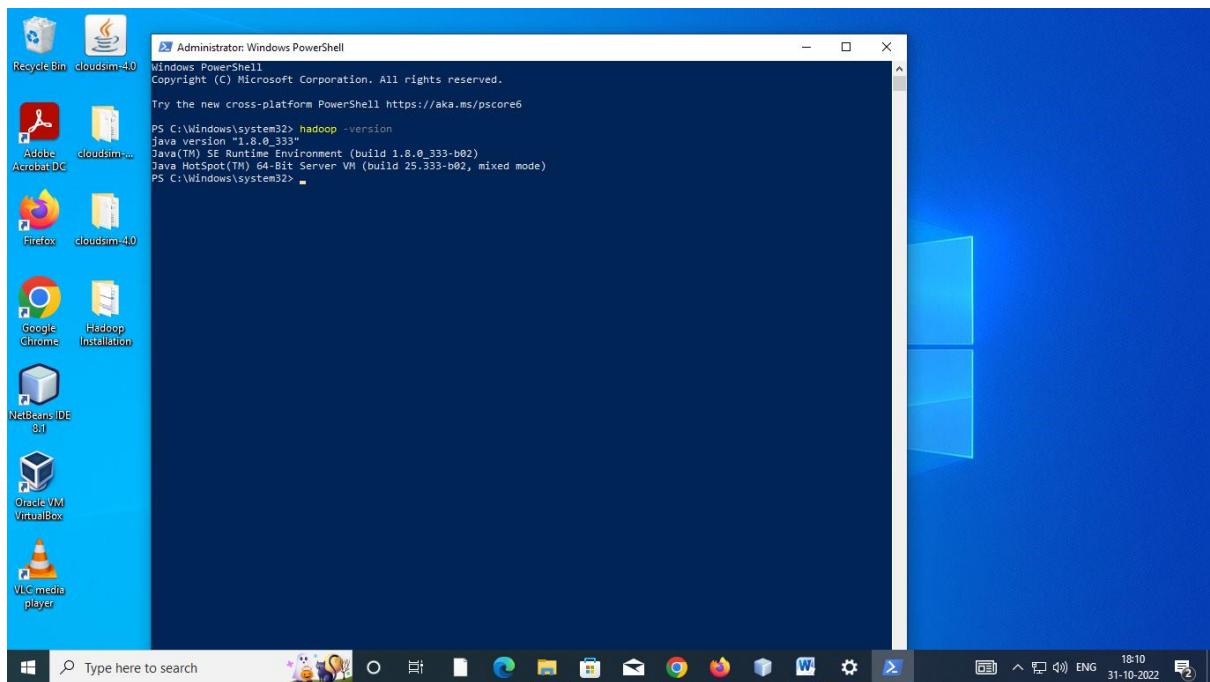


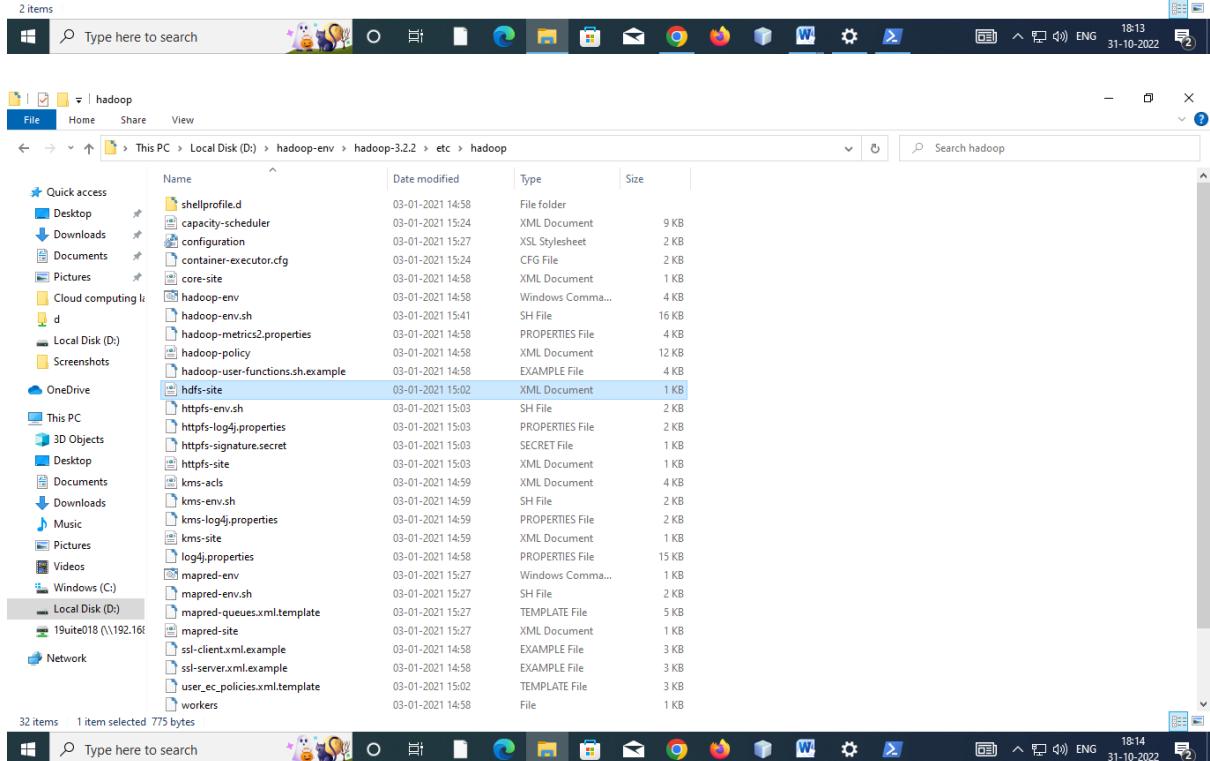
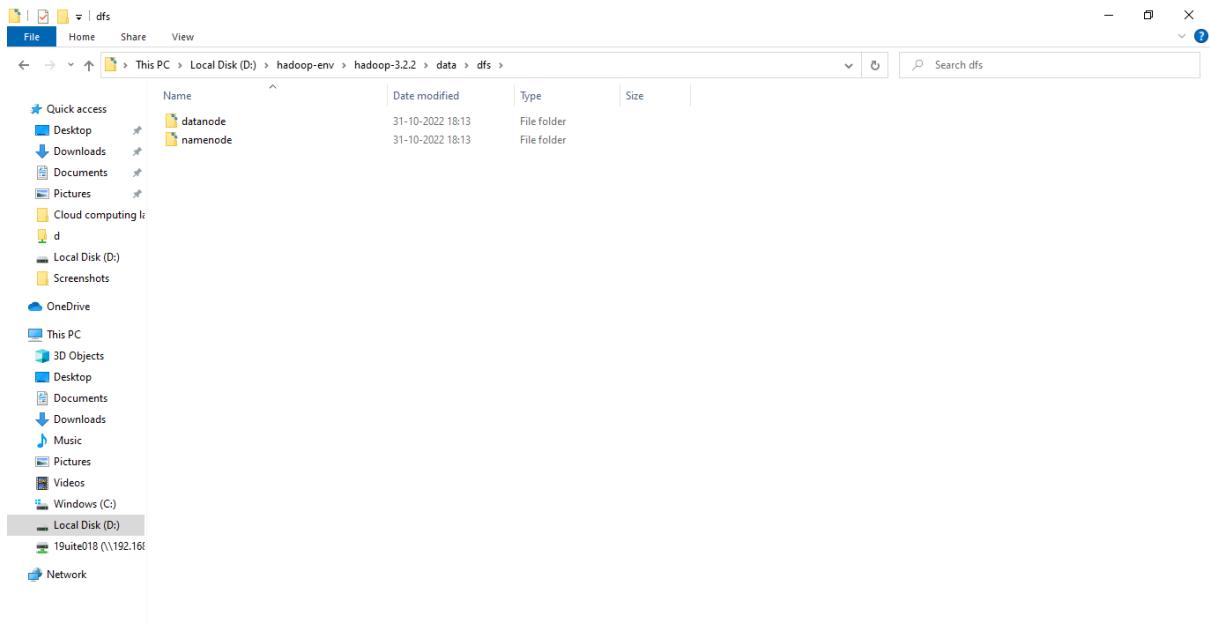












```
*hdfs-site - Notepad
File Edit Format View Help
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
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You may obtain a copy of the License at
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WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
<property>
<name>dfs.replication</name>
<value>1</value>
</property>
<property>
<name>dfs.namenode.name.dir</name>
<value>file:///D:/hadoop-env/hadoop-3.2.2/data/dfs/namenode</value>
</property>
<property>
<name>dfs.datanode.data.dir</name>
<value>file:///D:/hadoop-env/hadoop-3.2.2/data/dfs/datanode</value>
</property>

</configuration>
```

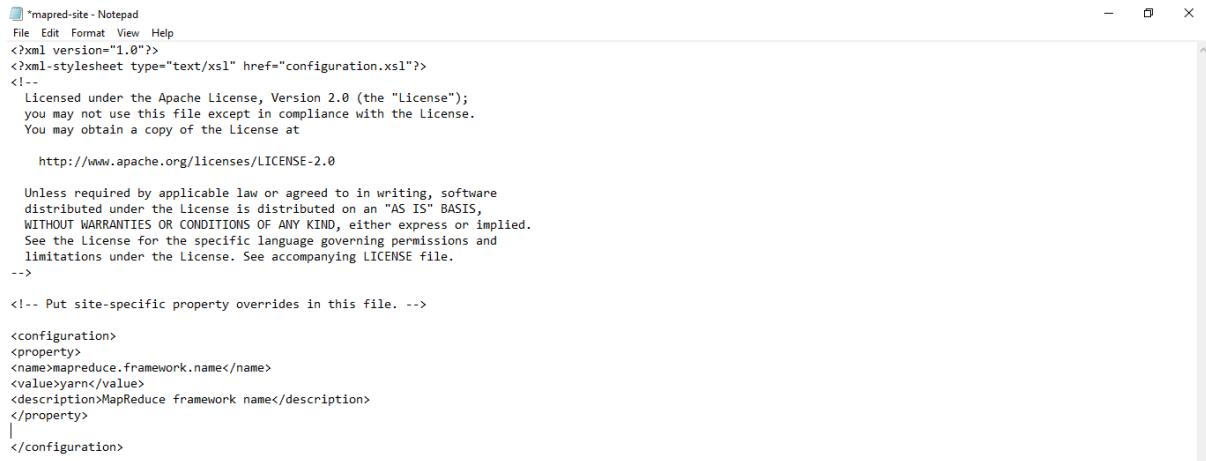
```
*core-site - Notepad
File Edit Format View Help
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
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WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
<property>
<name>fs.default.name</name>
<value>hdfs://localhost:9820</value>
</property>
|</configuration>
```

```
*core-site - Notepad
File Edit Format View Help
Ln 24, Col 1 100% Unix (LF) UTF-8
18:18 ENG 31-10-2022
```

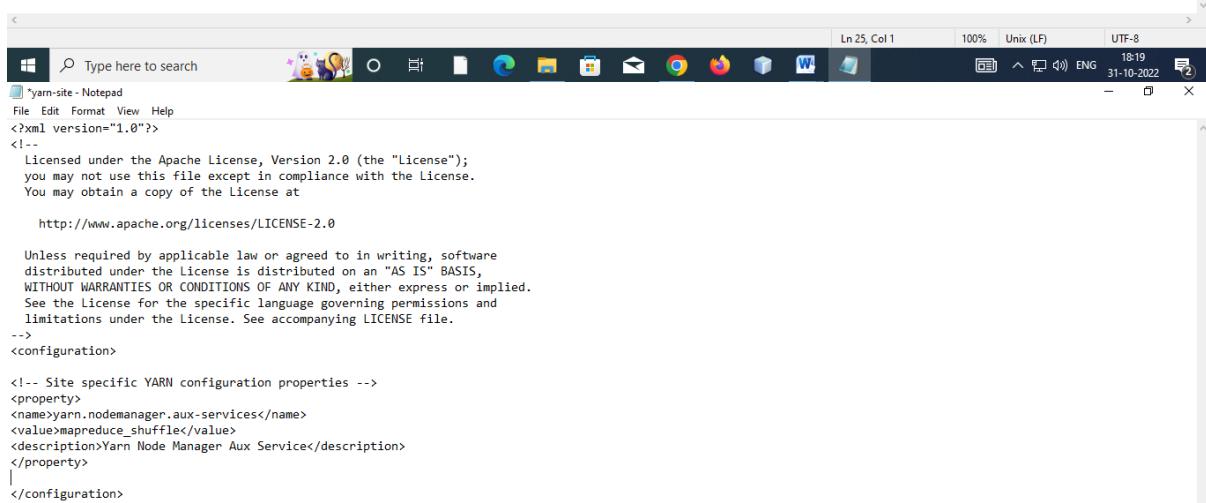


```
*mapred-site - Notepad
File Edit Format View Help
<xml version="1.0"?>
<x?ml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
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  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

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



```
*yarn-site - Notepad
File Edit Format View Help
<xml version="1.0"?>
<!--
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  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at
    http://www.apache.org/licenses/LICENSE-2.0

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  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<configuration>
<!-- Site specific YARN configuration properties -->
<property>
<name>yarn.nodemanager.aux-services</name>
<value>mapreduce_shuffle</value>
<description>Yarn Node Manager Aux Service</description>
</property>
|
</configuration>
```



```
*yarn-site - Notepad
File Edit Format View Help
Ln 23, Col 1 100% Unix (LF) UTF-8
18:20 ENG 31-10-2022
<!--
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  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

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


Administrator: Windows PowerShell
PS D:\hadoop-env\hadoop-3.2.2\sbin> ./start-dfs.cmd
PS D:\hadoop-env\hadoop-3.2.2\sbin>

```

2022-10-31 18:28:14,581 INFO blockmanagement.BlockManager: Number of over-replicated blocks = 0
2022-10-31 18:28:14,581 INFO blockmanagement.BlockManager: Number of blocks being written = 0
2022-10-31 18:28:14,581 INFO hdfs.StateChange: STATE* Replication Queue initialization scan for invalid, over- and under-replicated blocks completed in 18 msec
2022-10-31 18:28:14,674 INFO ipc.Server: IPC Server Responder: starting
2022-10-31 18:28:14,674 INFO ipc.Server: IPC Server listener on 9820: starting
2022-10-31 18:28:14,682 INFO namenode.NameNode: NameNode RPC up at: localhost/127.0.0.1:9820
2022-10-31 18:28:14,687 INFO namenode.FSNamesystem: Starting services
2022-10-31 18:28:14,687 INFO namenode.FSDirectory: Initializing quota
2022-10-31 18:28:14,736 INFO namenode.FSDirectory: Quota initializati

```

Administrator: Windows PowerShell
PS D:\hadoop-env\hadoop-3.2.2\sbin> ./start-dfs.cmd
PS D:\hadoop-env\hadoop-3.2.2\sbin> ./start-yarn.cmd
starting yarn daemons
PS D:\hadoop-env\hadoop-3.2.2\sbin>

```

022-10-31 18:32:18,258 INFO placement.MultiNodeSortingManager: Starting NodeSortingService=MultiNodeSortingManager
022-10-31 18:32:18,304 INFO ipc.CallQueueManager: Using callQueueCapacity: 5000, scheduler: class org.apache.hadoop.ipc.CallQueueManager$DefaultScheduler@1000
022-10-31 18:32:18,308 INFO ipc.Server: Starting Socket Reader #1
022-10-31 18:32:18,314 INFO pb.RpcServerFactoryPBImpl: Adding protocol: org.apache.hadoop.ipc.RpcServer
022-10-31 18:32:18,315 INFO ipc.Server: IPC Server Responder: started
022-10-31 18:32:18,315 INFO ipc.Server: Starting Socket Reader #1
022-10-31 18:32:18,315 INFO ipc.Server: IPC Server listener on port 9803
022-10-31 18:32:18,315 INFO util.JvmPauseMonitor: Starting JVM pause monitor
022-10-31 18:32:18,345 INFO ipc.CallQueueManager: Using callQueueCapacity: 5000, scheduler: class org.apache.hadoop.ipc.CallQueueManager$DefaultScheduler@1000
022-10-31 18:32:18,345 INFO ipc.Server: Starting Socket Reader #1
022-10-31 18:32:18,355 INFO ipc.Server: Starting Socket Reader #1
022-10-31 18:32:18,374 INFO pb.RpcServerFactoryPBImpl: Adding protocol: org.apache.hadoop.ipc.RpcServer
022-10-31 18:32:18,375 INFO ipc.Server: IPC Server Responder: started
022-10-31 18:32:18,375 INFO ipc.Server: IPC Server listener on port 9803
022-10-31 18:32:18,524 INFO ipc.CallQueueManager: Using callQueueCapacity: 5000, scheduler: class org.apache.hadoop.ipc.CallQueueManager$DefaultScheduler@1000
022-10-31 18:32:18,528 INFO ipc.Server: Starting Socket Reader #1
022-10-31 18:32:18,533 INFO pb.RpcServerFactoryPBImpl: Adding protocol: org.apache.hadoop.ipc.RpcServer
022-10-31 18:32:18,534 INFO ipc.Server: IPC Server Responder: started
022-10-31 18:32:18,534 INFO ipc.Server: IPC Server listener on port 9803
022-10-31 18:32:18,534 INFO ipc.Server: IPC Server Responder: started
022-10-31 18:32:18,534 INFO ipc.Server: IPC Server listener on port 9803
022-10-31 18:32:18,551 INFO resourcemanager.ResourceManager: Trans

```

```
Administrator: Windows PowerShell
PS D:\hadoop-env\hadoop-3.2.2\sbin> .\start-dfs.cmd
PS D:\hadoop-env\hadoop-3.2.2\sbin> .\start-yarn.cmd
starting yarn daemons
PS D:\hadoop-env\hadoop-3.2.2\sbin> jps
240 NameNode
6160 Jps
7124 DataNode
5288 ResourceManager
1932 NodeManager
PS D:\hadoop-env\hadoop-3.2.2\sbin> -
```



OUTPUT:

The screenshot shows the 'DFS Health Overview' page from a browser. The top navigation bar includes tabs for 'Hadoop', 'Overview', 'Datanodes', 'Datanode Volume Failures', 'Snapshot', 'Startup Progress', and 'Utilities'. The main content area displays the following information:

Started:	Mon Oct 31 18:28:12 +0530 2022
Version:	3.2.2, r7a3bc90b05f257c8ace2f76d74264906f0f7a932
Compiled:	Sun Jan 03 14:56:00 +0530 2021 by hexiaoqiao from branch-3.2.2
Cluster ID:	CID-8e3bd0a-913e-4e80-80b0-8c6fed996391
Block Pool ID:	BP-1203456125-192.168.56.1-1667220717770

Summary

Security is off.
Safemode is off.
1 files and directories, 0 blocks (0 replicated blocks, 0 erasure coded block groups) = 1 total filesystem object(s).
Heap Memory used 78.69 MB of 192 MB Heap Memory. Max Heap Memory is 889 MB.
Non Heap Memory used 49.13 MB of 50.27 MB Committed Non Heap Memory. Max Non Heap Memory is <unbounded>.

The screenshot shows the 'DataNode Information' page from a browser. The top navigation bar includes tabs for 'Hadoop', 'Overview', and 'Utilities'. The main content area displays the following information:

Cluster ID:	CID-8e3bd0a-913e-4e80-80b0-8c6fed996391
Version:	3.2.2, r7a3bc90b05f257c8ace2f76d74264906f0f7a932

DataNode on a4it49.KC.VNR:9866

Cluster ID:	CID-8e3bd0a-913e-4e80-80b0-8c6fed996391
Version:	3.2.2, r7a3bc90b05f257c8ace2f76d74264906f0f7a932

Block Pools

Namenode Address	Block Pool ID	Actor State	Last Heartbeat	Last Block Report	Last Block Report Size (Max Size)
localhost:9820	BP-1203456125-192.168.56.1-1667220717770	RUNNING	2s	12 minutes	0 B (64 MB)

Volume Information

Directory	Storage Type	Capacity Used	Capacity Left	Capacity Reserved	Reserved Space for Replicas	Blocks
D:\hadoop-env\hadoop-3.2.2\data\dfs\datanode	DISK	322 B	224.1 GB	0 B	0 B	0

The screenshot shows the Windows taskbar with the browser window for the DataNode information page still open. The taskbar also shows icons for File Explorer, Edge, and other system applications.

All Applications +

localhost:8088/cluster

Logged in as: ds.who

All Applications

hadoop

Cluster Metrics

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Used Resources	Total Resources	Reserved Resources	Physical Mem Used %	Physical Vcores Used %
0	0	0	0	0	<memory:0, vCores:0>	<memory:8192, vCores:8>	<memory:0, vCores:0>	48	0

Cluster Nodes Metrics

Active Nodes	Decommissioning Nodes	Decommissioned Nodes	Lost Nodes	Unhealthy Nodes	Rebooted Nodes	Shutdown Nodes
1	0	0	0	0	0	0

Scheduler Metrics

Scheduler Type	Scheduling Resource Type	Minimum Allocation	Maximum Allocation	Maximum Cluster Application Priority
Capacity Scheduler	[memory_mb (Unit=M), vcores]	<memory:1024, vCores:1>	<memory:8192, vCores:4>	0

Show 20 entries

No data available in table

Search:

ID User Name Application Queue Application Priority StartTime LaunchTime FinishTime State FinalStatus Running Containers Allocated CPU Memory Allocated GPUs Reserved CPU Reserved Memory Reserved GPUs % of Queue % of Cluster Progress Tracking UI Blacklisted Nodes

Showing 0 to 0 of 0 entries

First Previous Next Last

