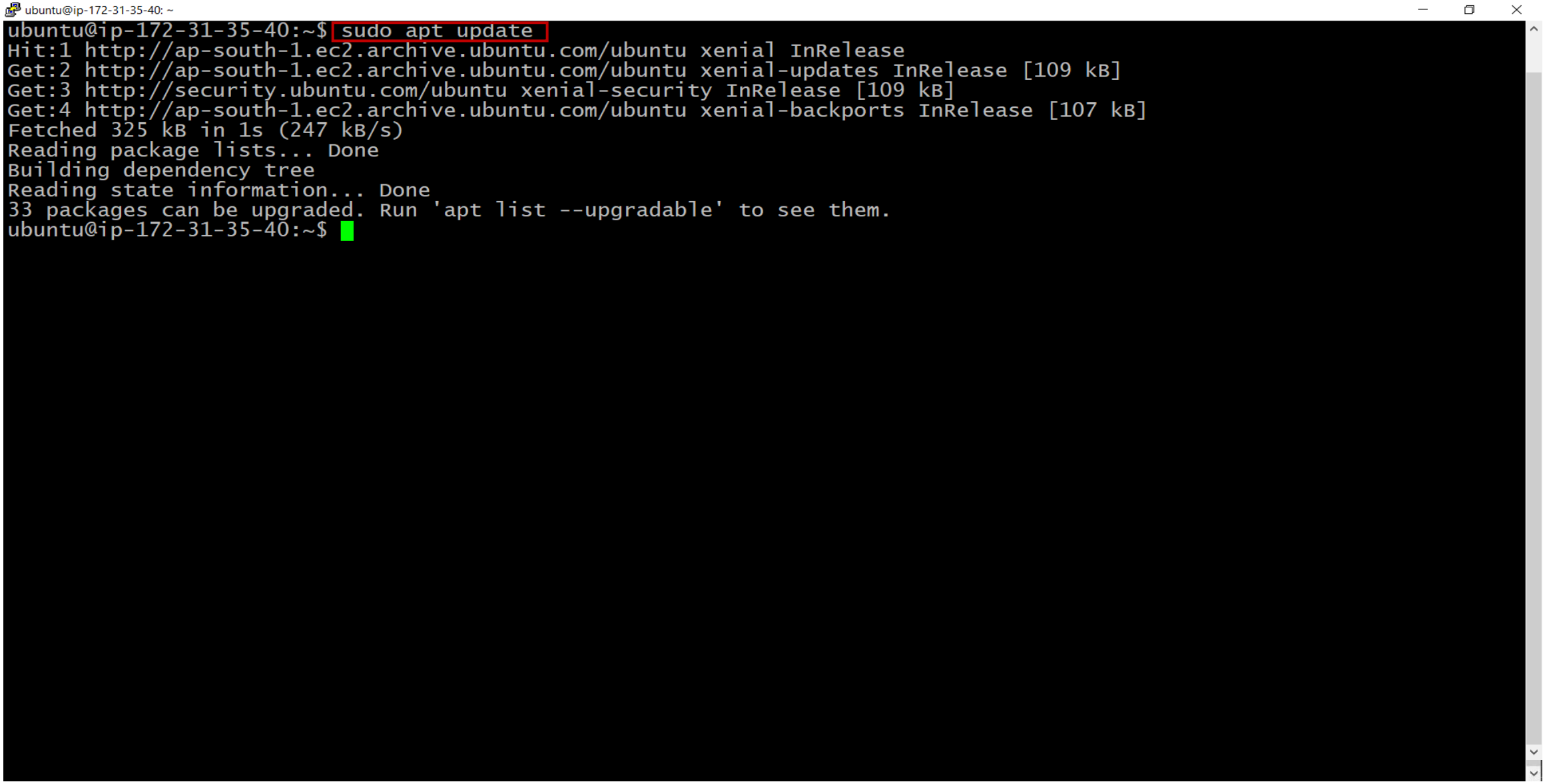
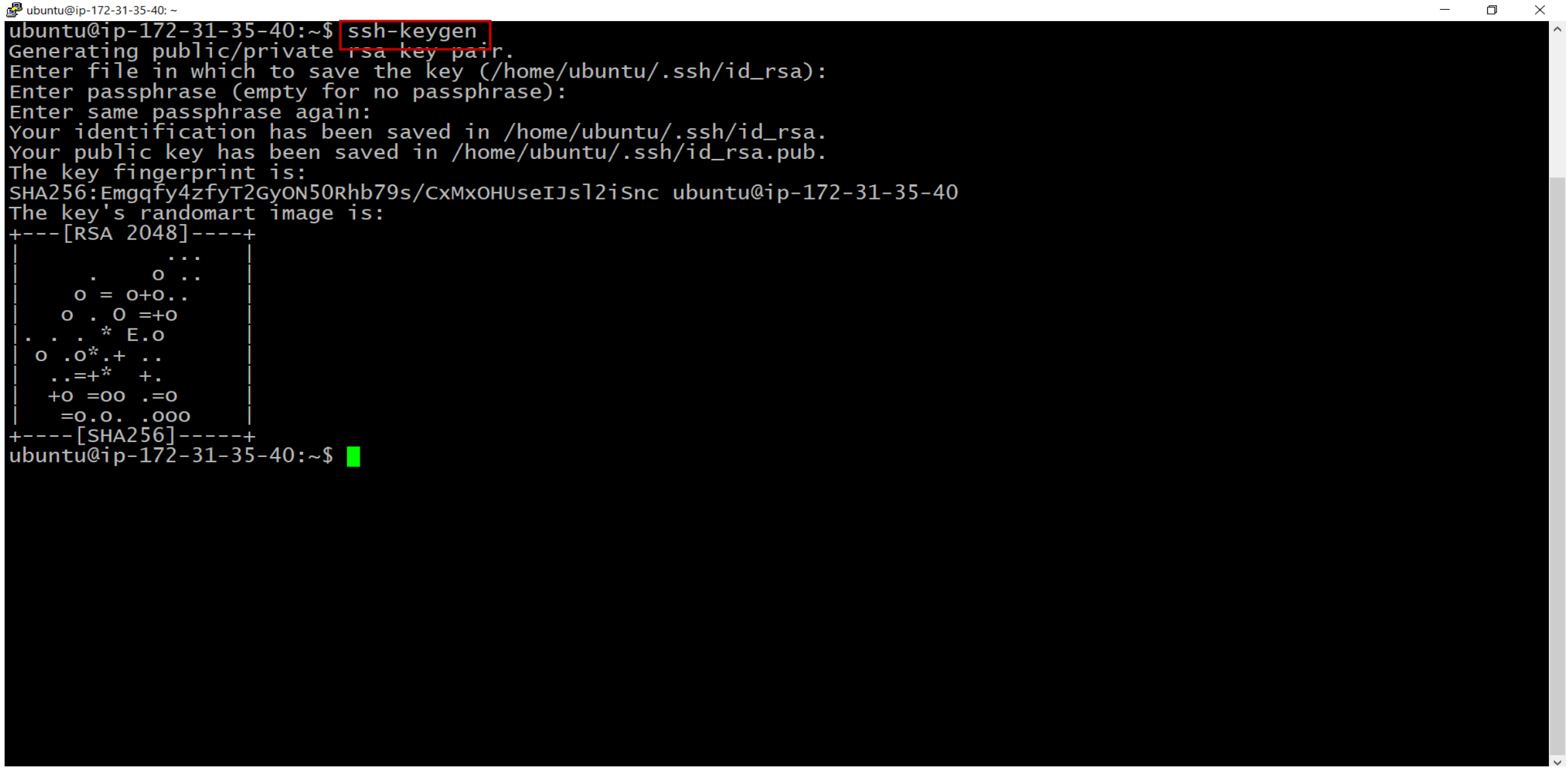
Single Node Cluster Installation

01) sudo apt-get update



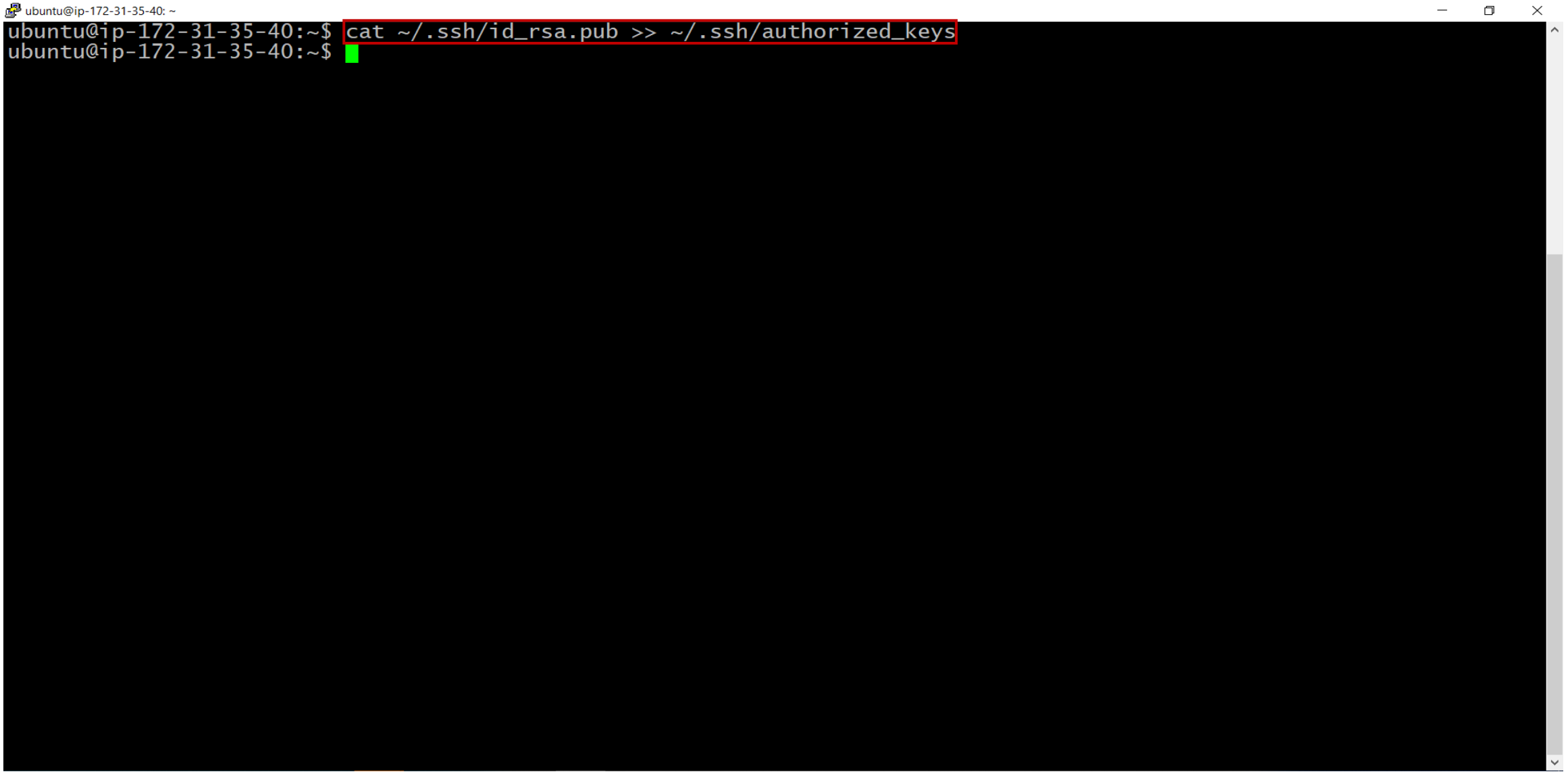
press enter

02) ssh-keygen



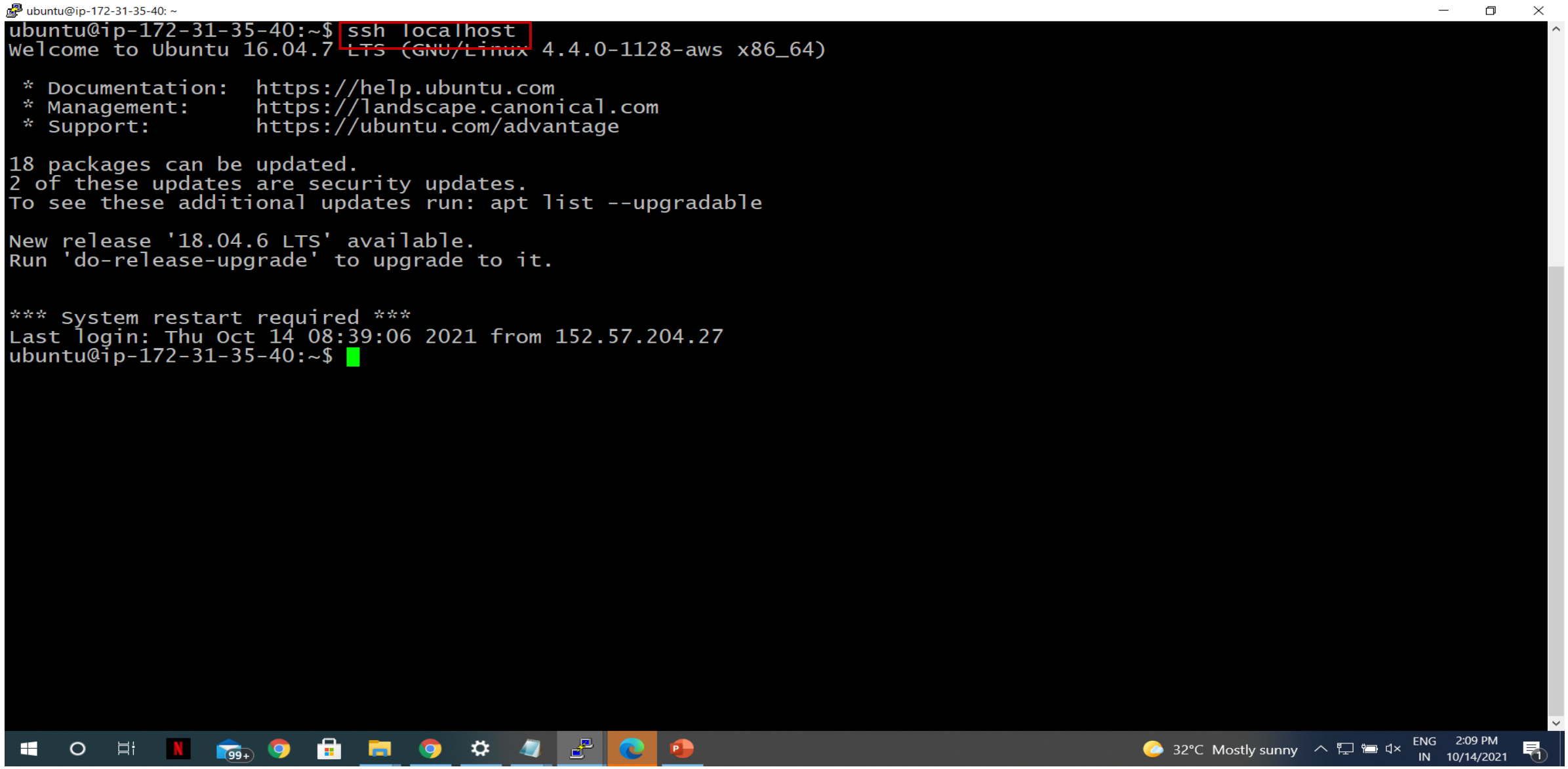
press enter 6 times

03) cat ~/.ssh/id_rsa.pub >> ~/.ssh/authorized_keys



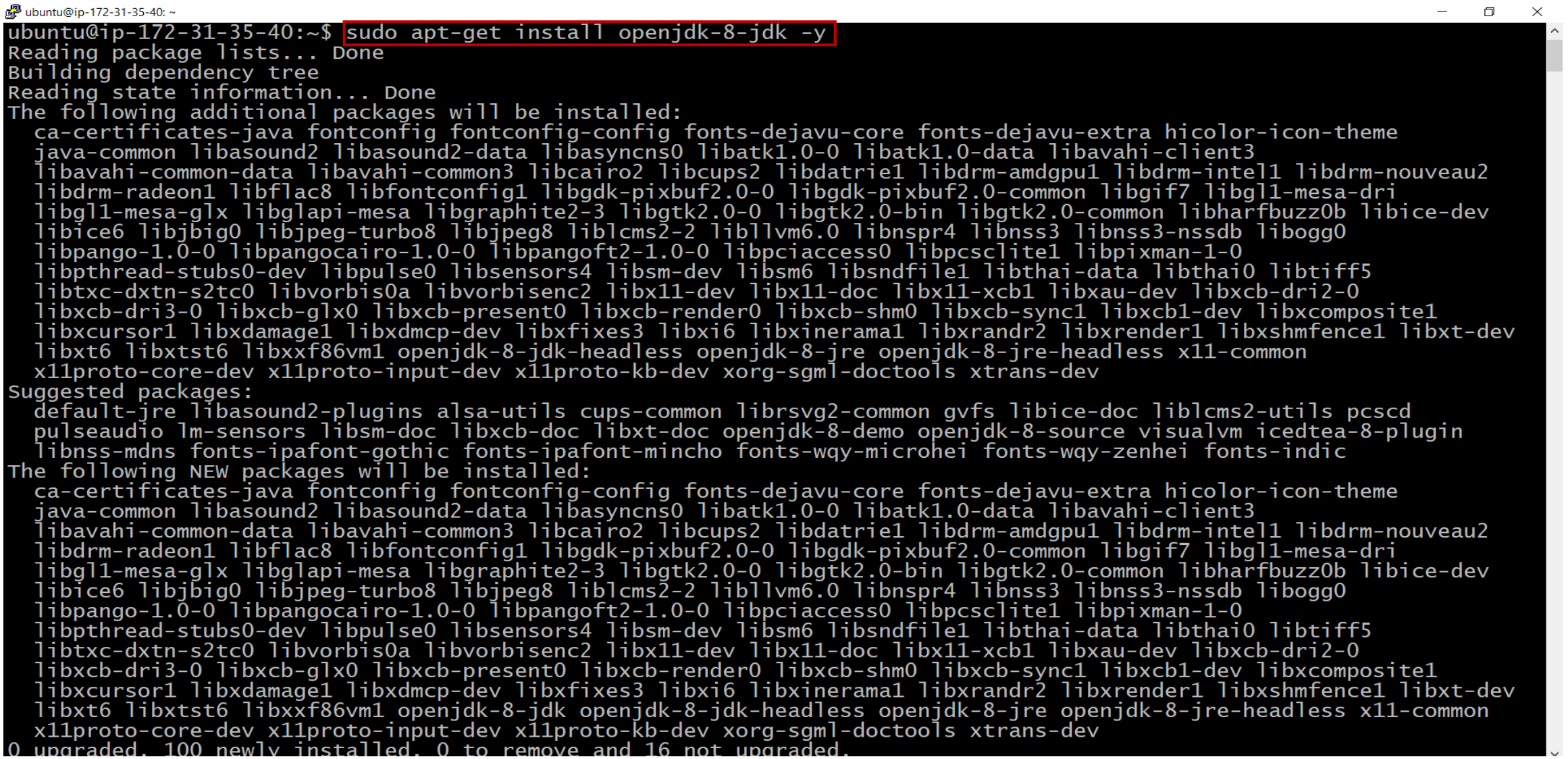
press enter

04) ssh localhost



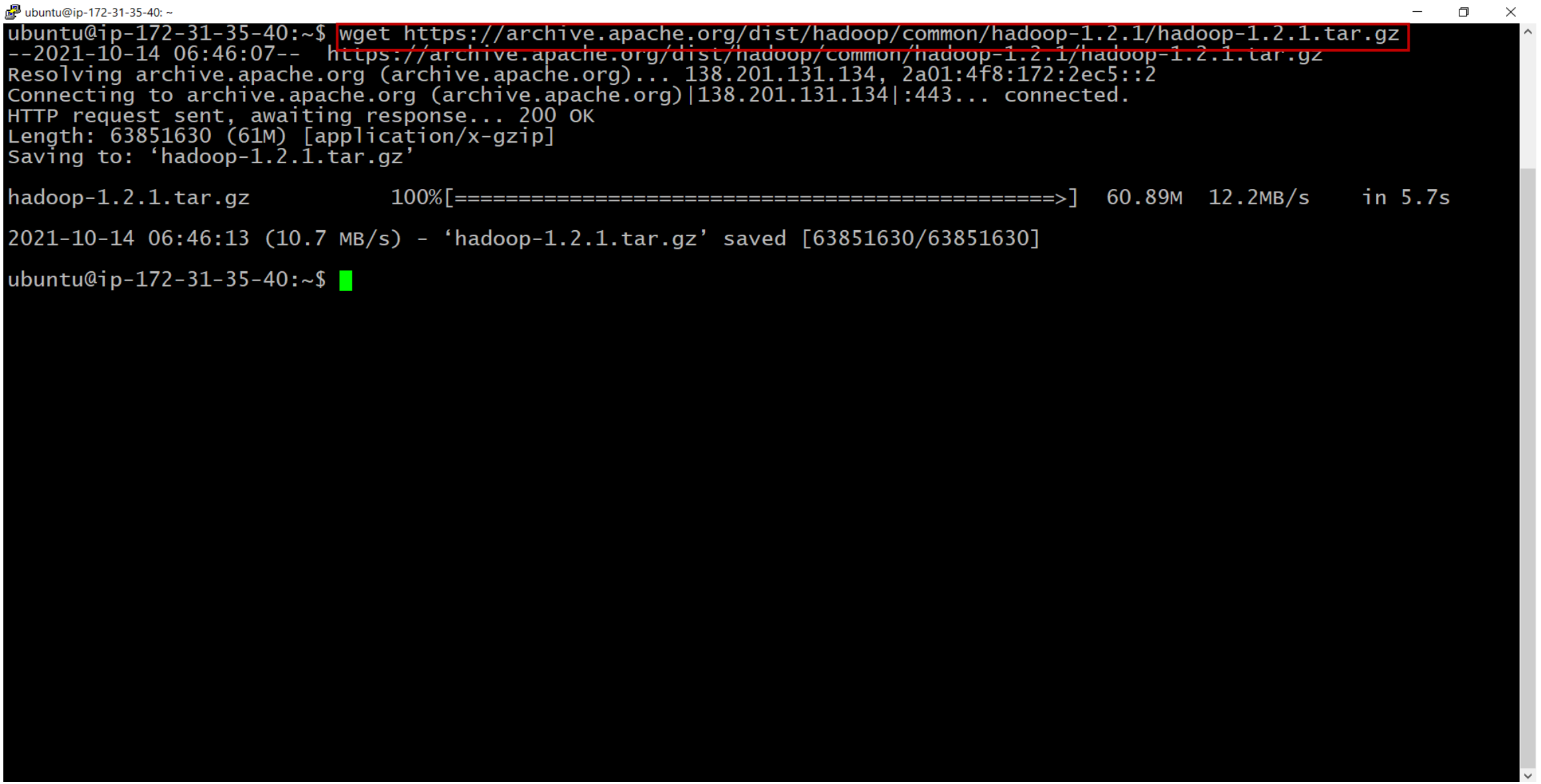
press enter

05) sudo apt-get install openjdk-8-jdk -y



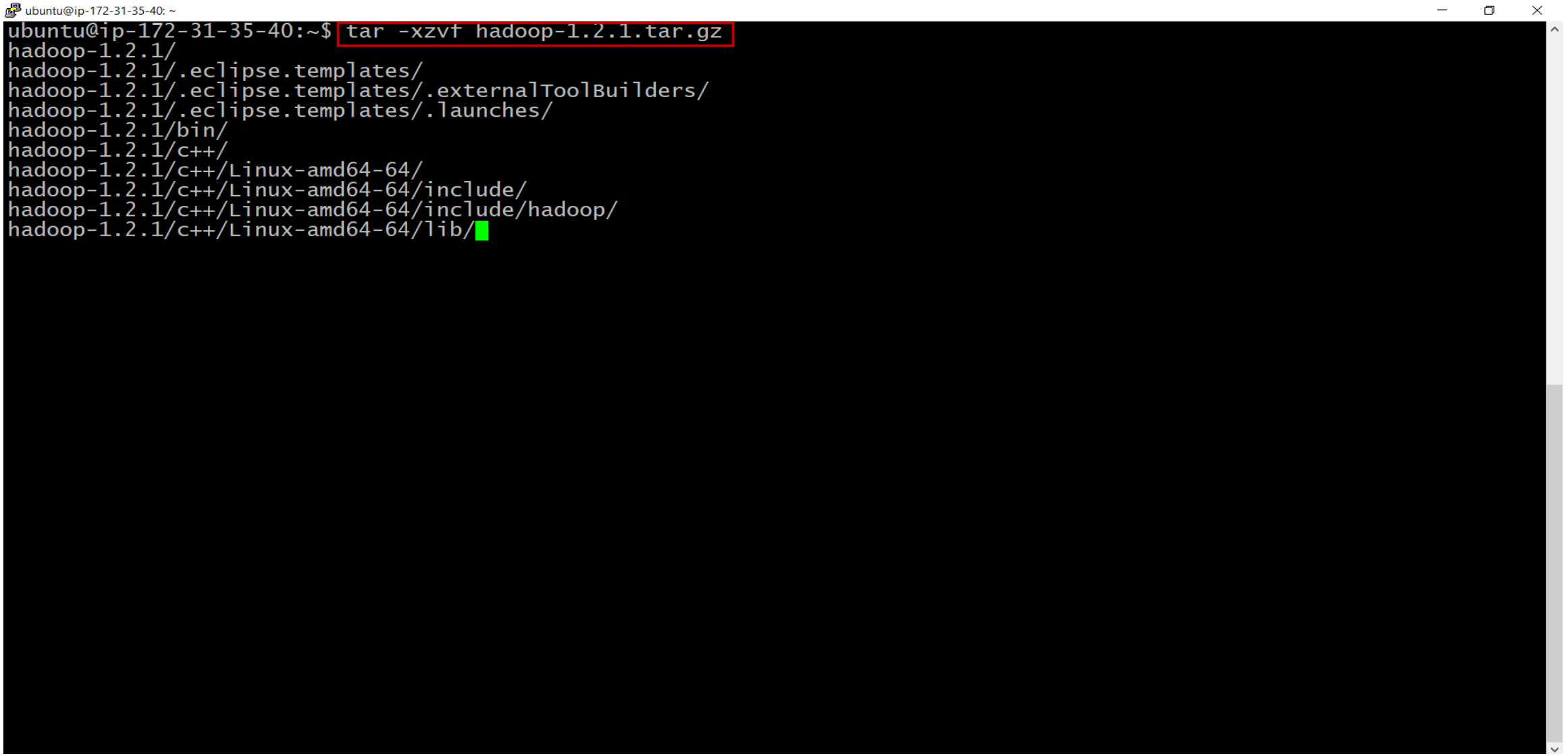
press enter

06) wget https://archive.apache.org/dist/hadoop/common/hadoop-1.2.1/hadoop-1.2.1.tar.gz



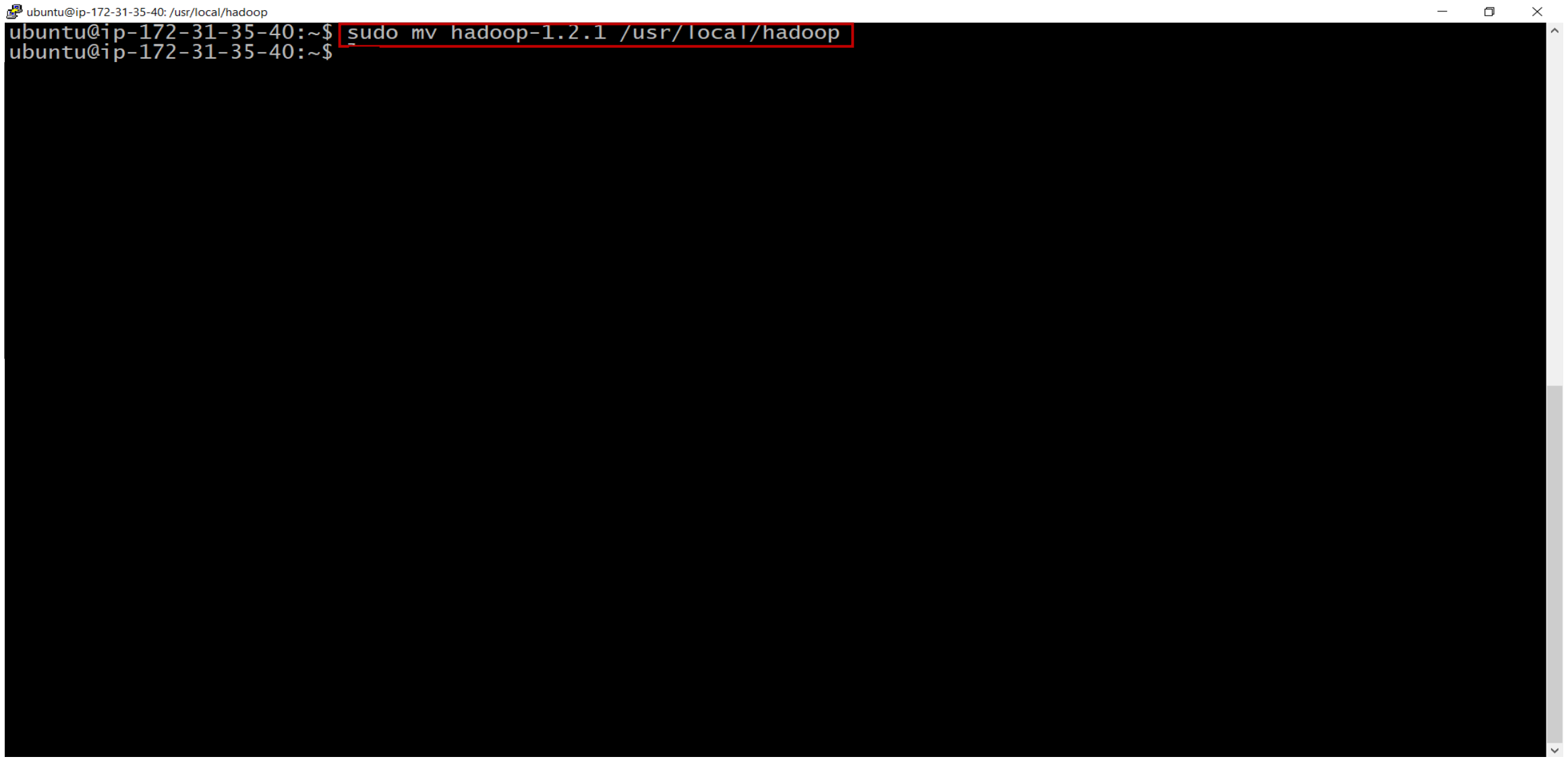
press enter

07) tar -xzvf hadoop-1.2.1.tar.gz



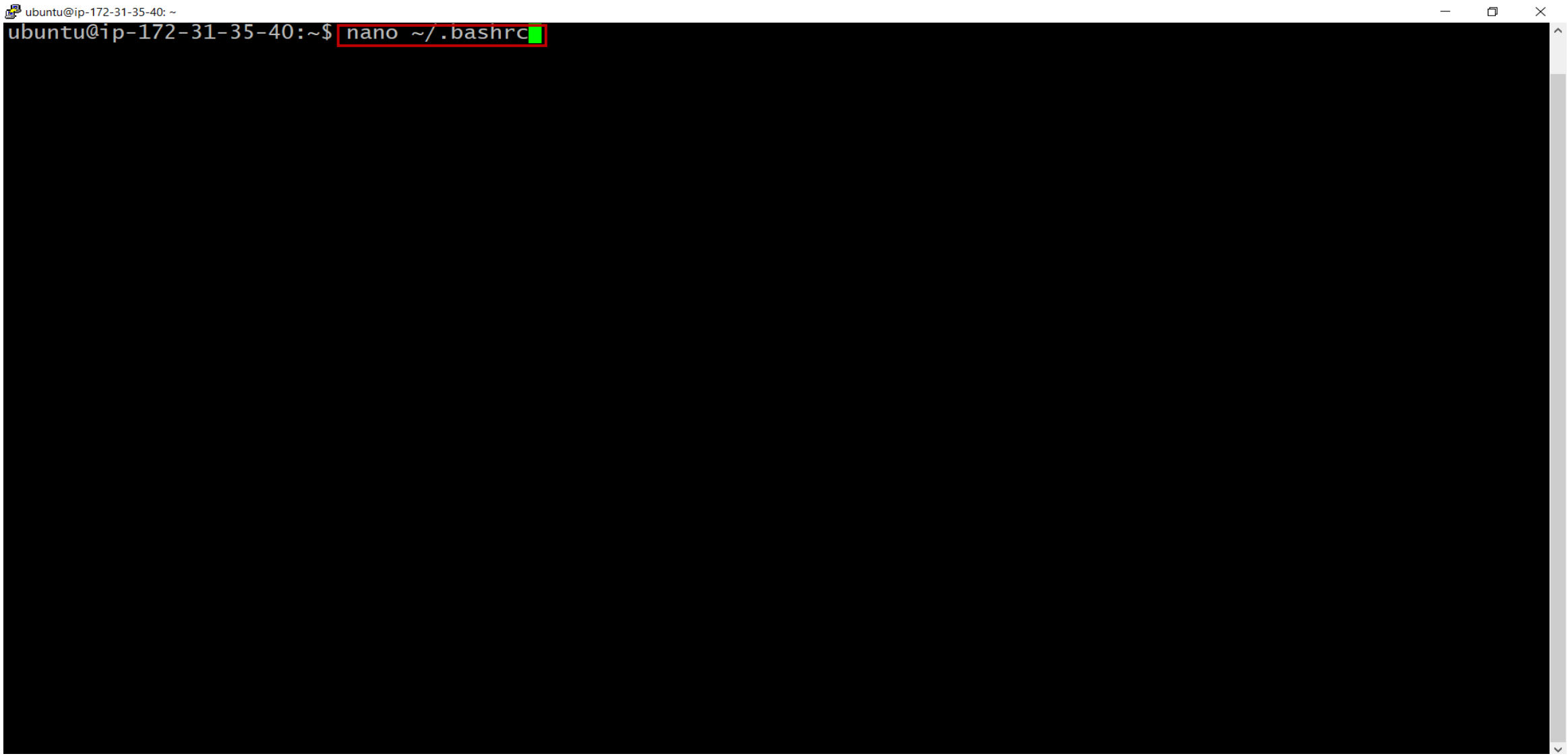
press enter

08) sudo mv hadoop-1.2.1 /usr/local/hadoop



press enter

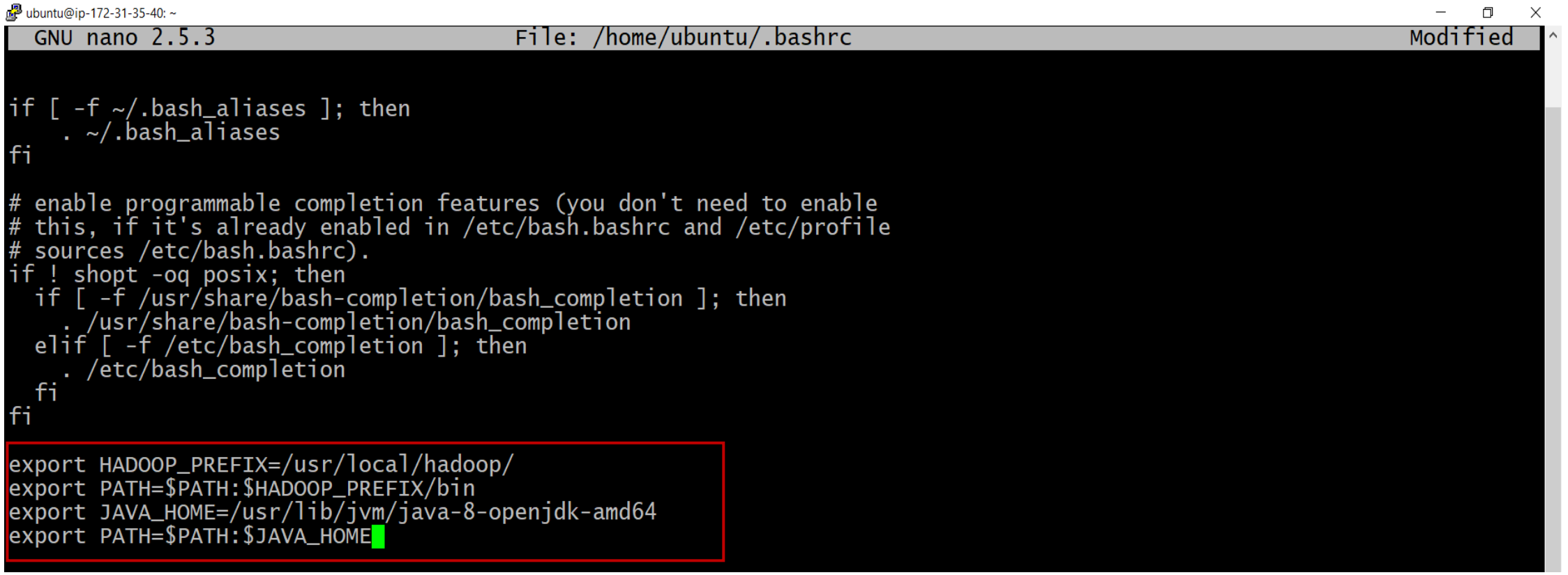
09) nano ~/.bashrc



press enter

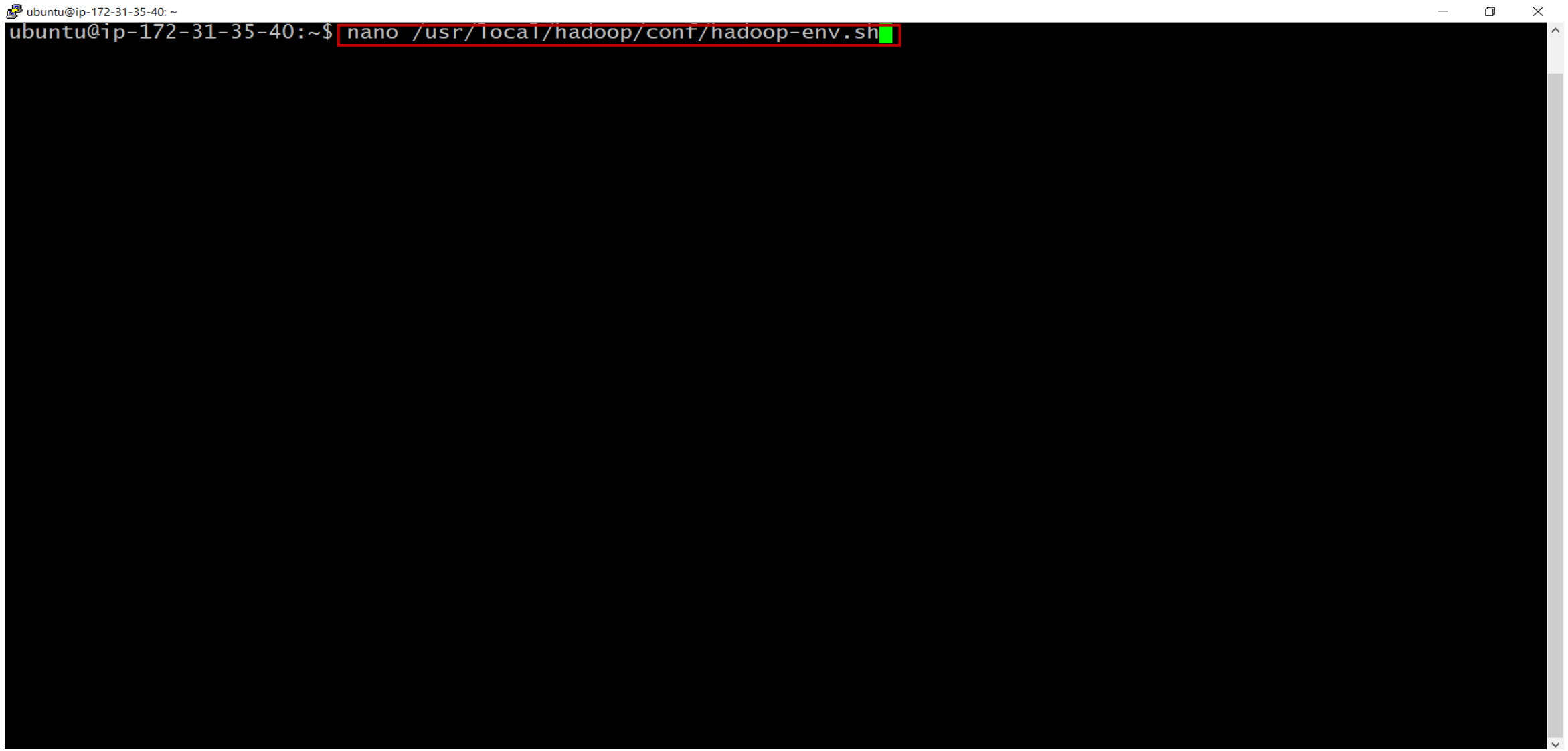
10) Scroll down at the bottom area & paste the commands

```
export HADOOP_PREFIX=/usr/local/hadoop/
export PATH=$PATH:$HADOOP_PREFIX/bin
export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
export PATH=$PATH:$JAVA_HOME
```



ctrl + O (to save) > Enter > ctrl + X (to exit)

11) nano /usr/local/hadoop/conf/hadoop-env.sh

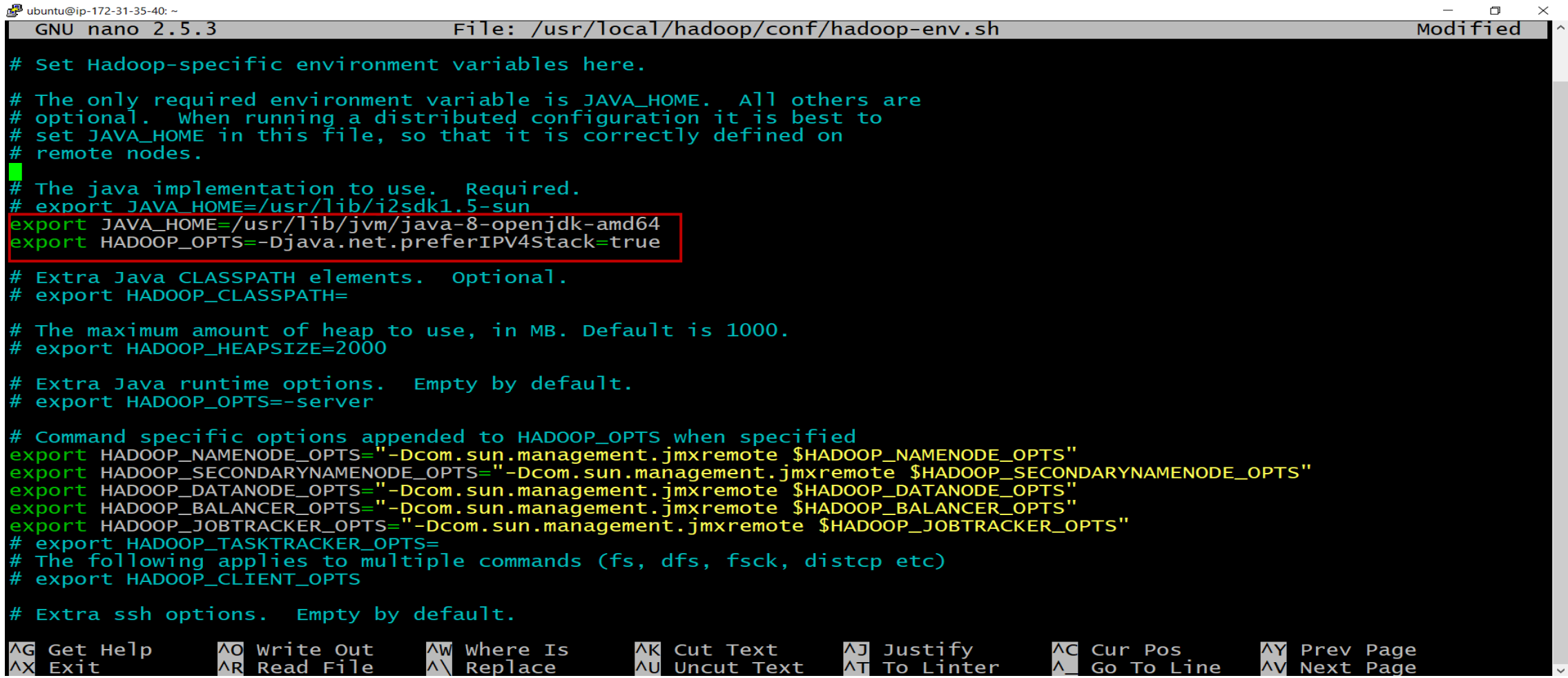


press enter

12) Paste the commands in the mentioned area as per the below image

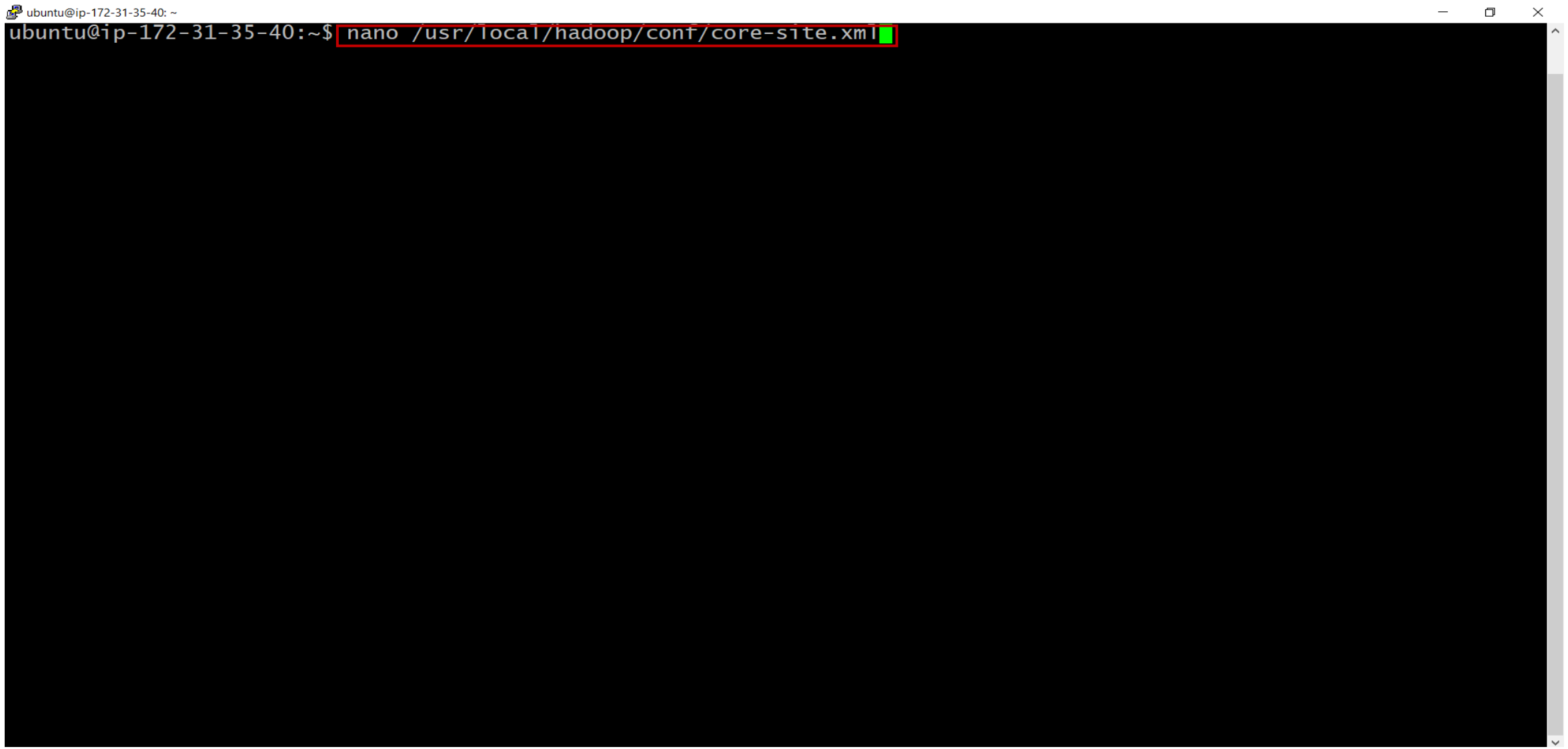
export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64

export HADOOP_OPTS=-Djava.net.preferIPV4Stack=true



ctrl + O (to save) > Enter > ctrl + X (to exit)

13) nano /usr/local/hadoop/conf/core-site.xml

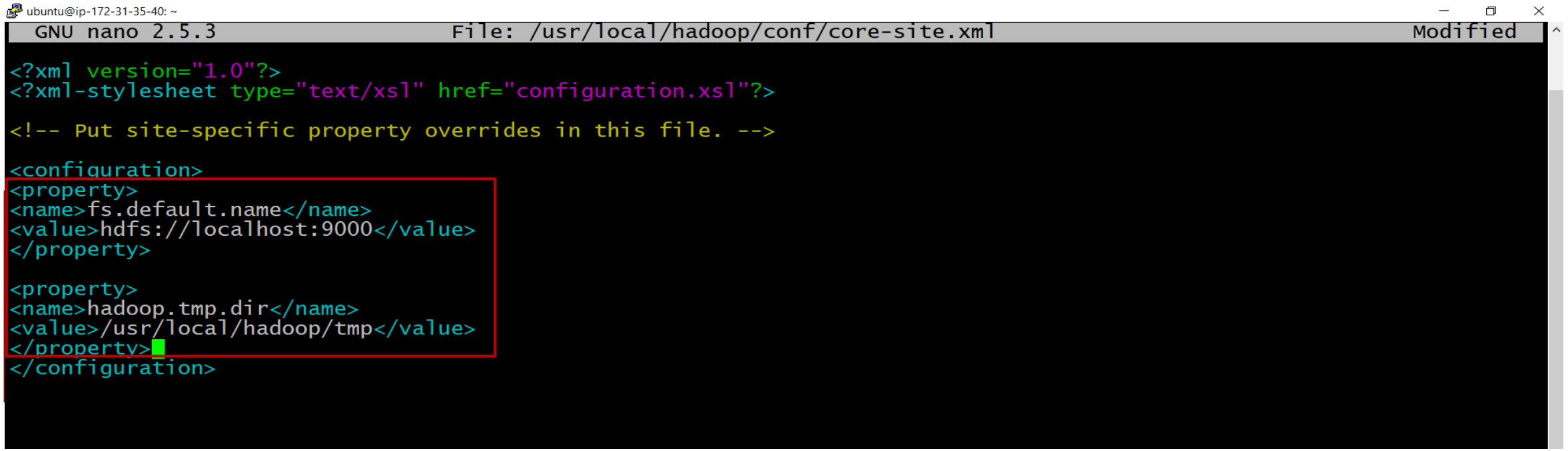


press enter

14) Paste the following commands in-between the <configuration> & </configuration>

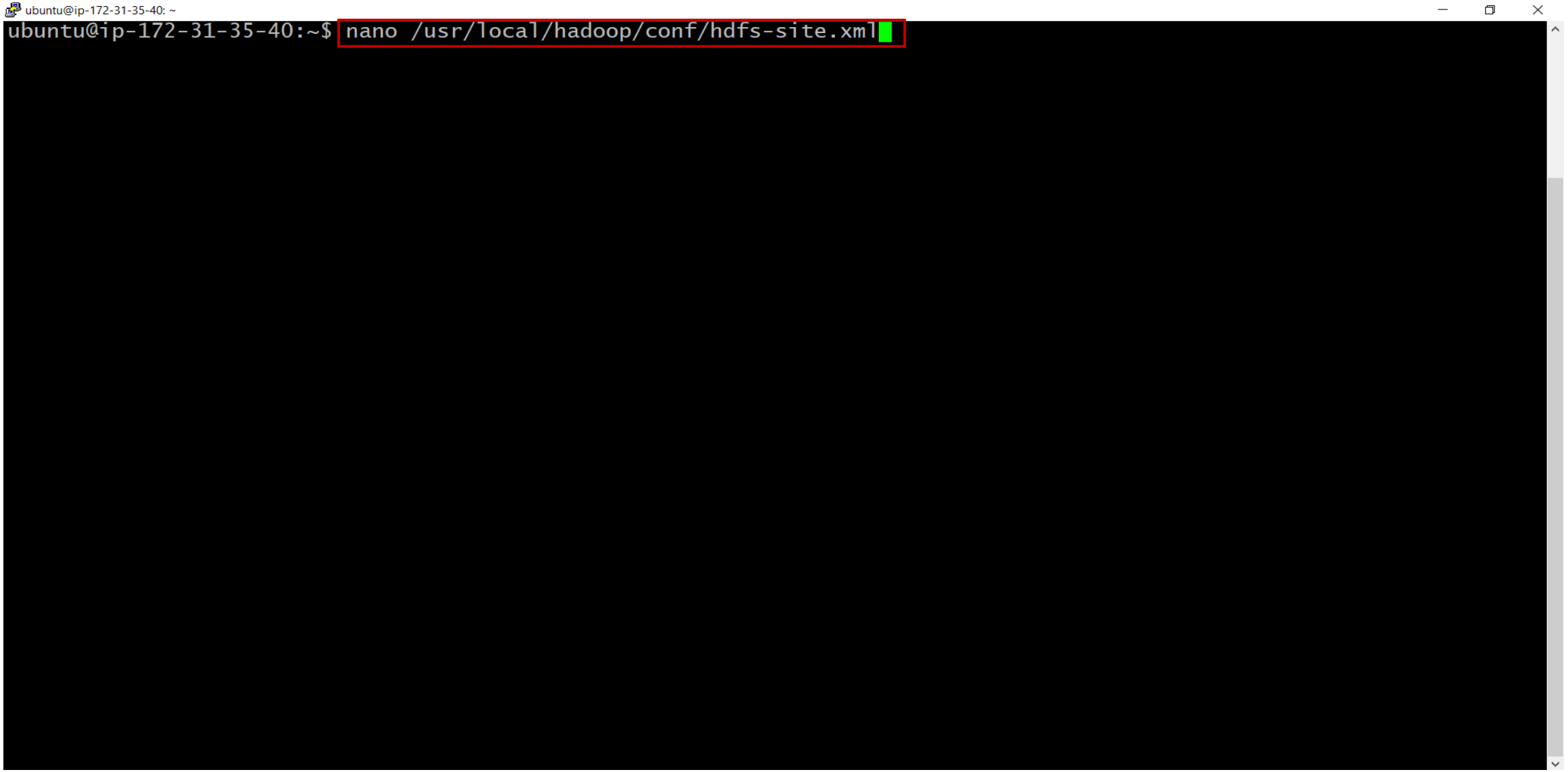
(If you create your own DNS, you need to rename the localhost to your hostname e.g is)

```
<property>
<name>fs.default.name</name>
<value>hdfs://localhost:9000</value>
</property>
<property>
<name>hadoop.tmp.dir</name>
<value>/usr/local/hadoop/tmp</value>
</property>
```



ctrl + O (to save) > Enter > ctrl + X (to exit)

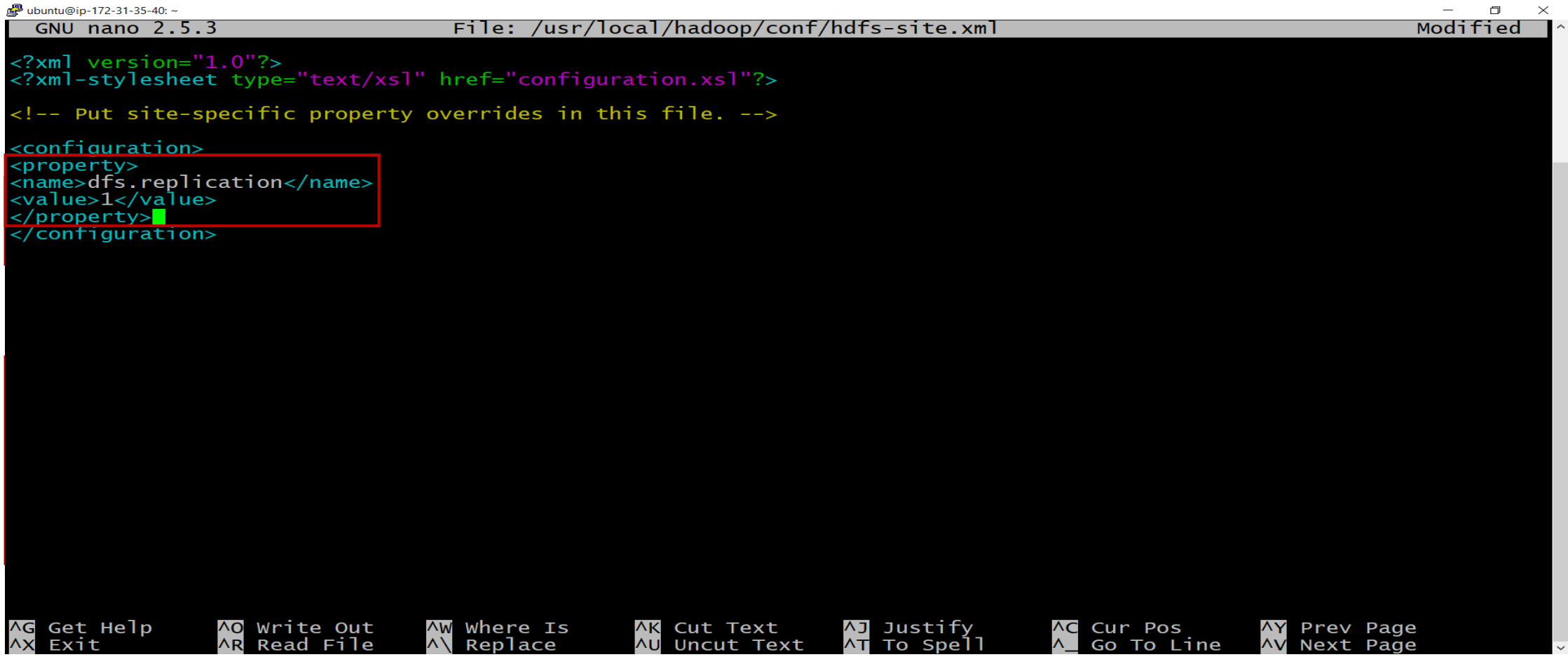
15) nano /usr/local/hadoop/conf/hdfs-site.xml



press enter

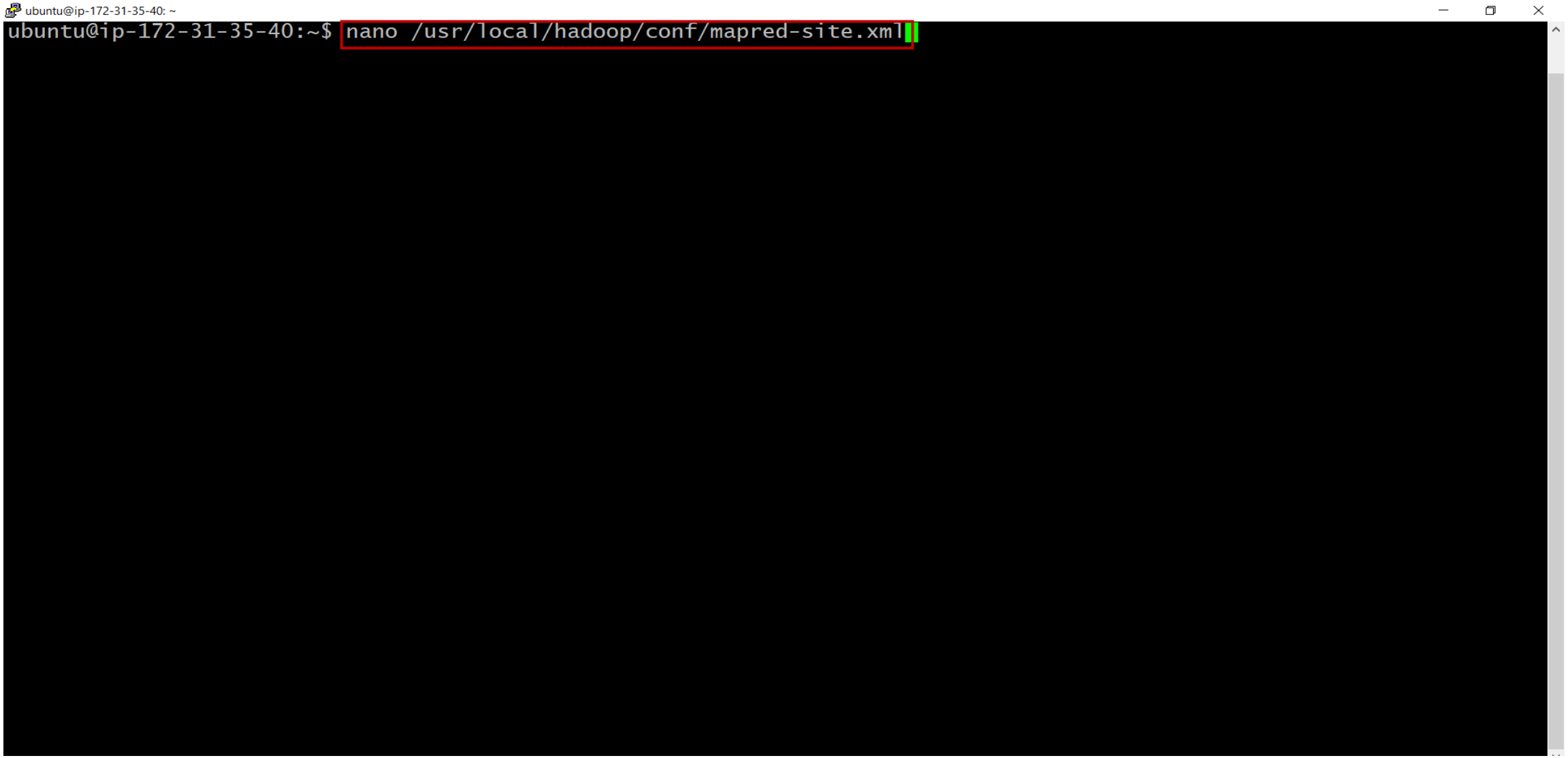
16) Paste the following commands in-between the <configuration> & </configuration>

```
<property>
 <name>dfs.replication</name>
 <value>1</value>
 </property>
```



ctrl + O (to save) > Enter > ctrl + X (to exit)

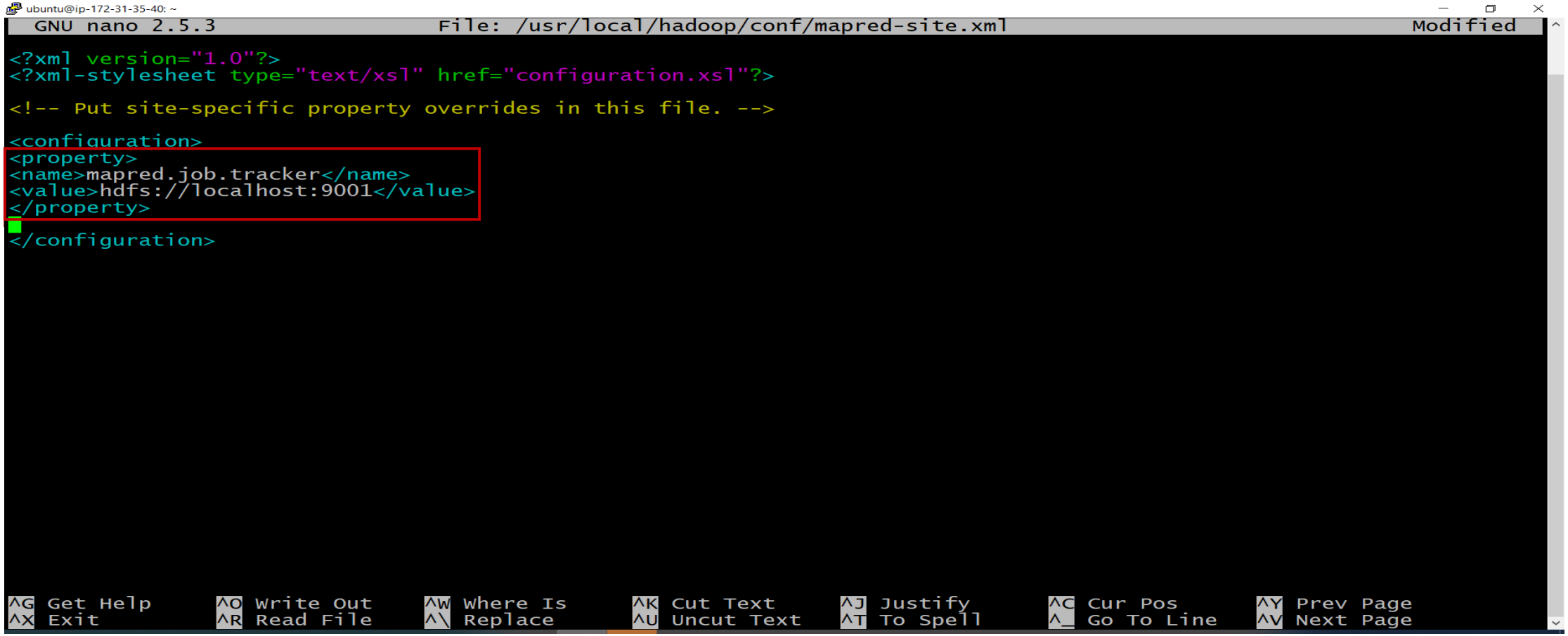
17) nano /usr/local/hadoop/conf/mapred-site.xml



press enter

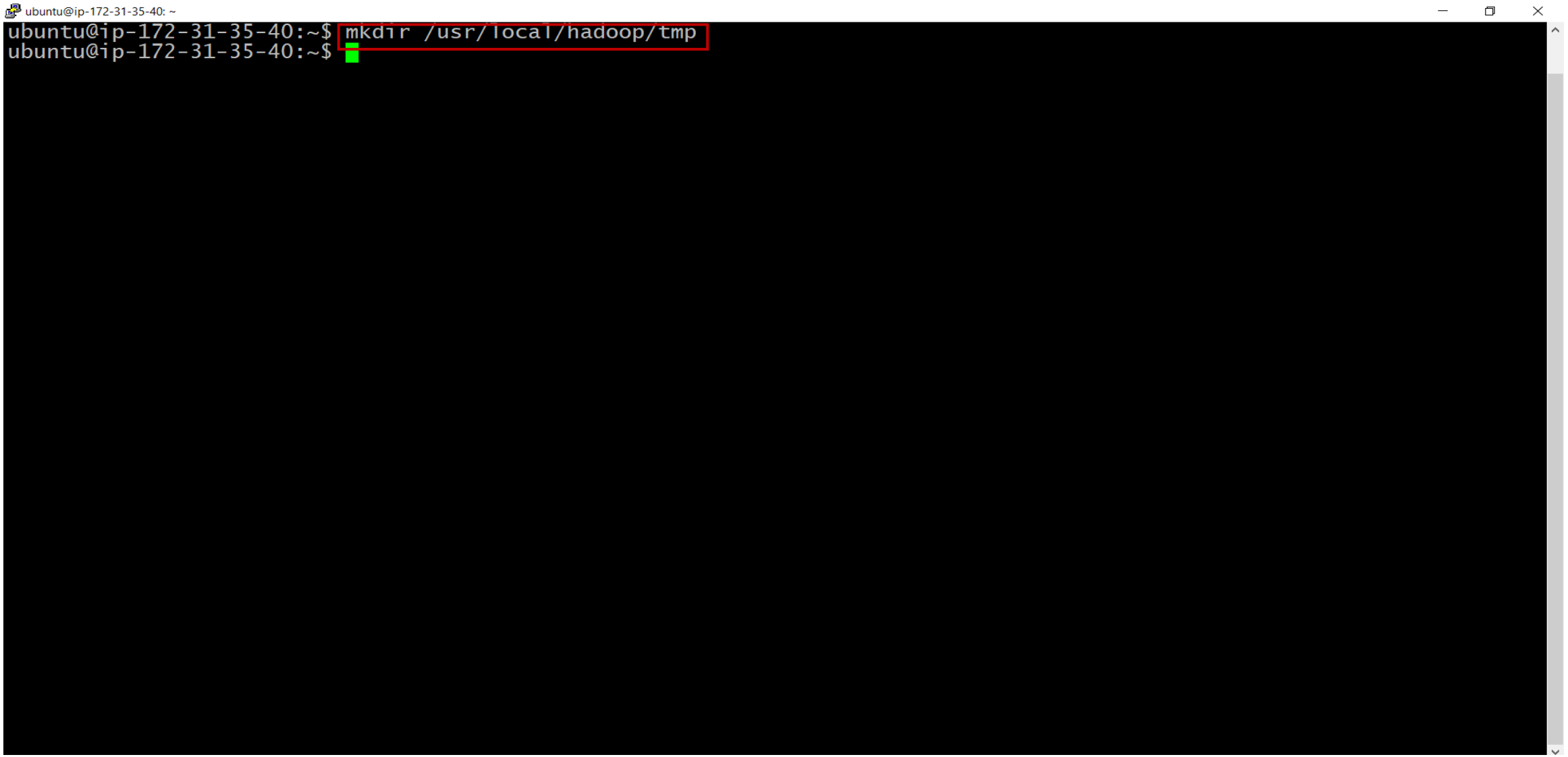
18) Paste the following commands in-between the <configuration> & </configuration>
(If you create your own DNS, you need to rename the localhost to your hostname e.g is)

```
<property>
<name>mapred.job.tracker</name>
<value>hdfs://localhost:9001</value>
</property>
```



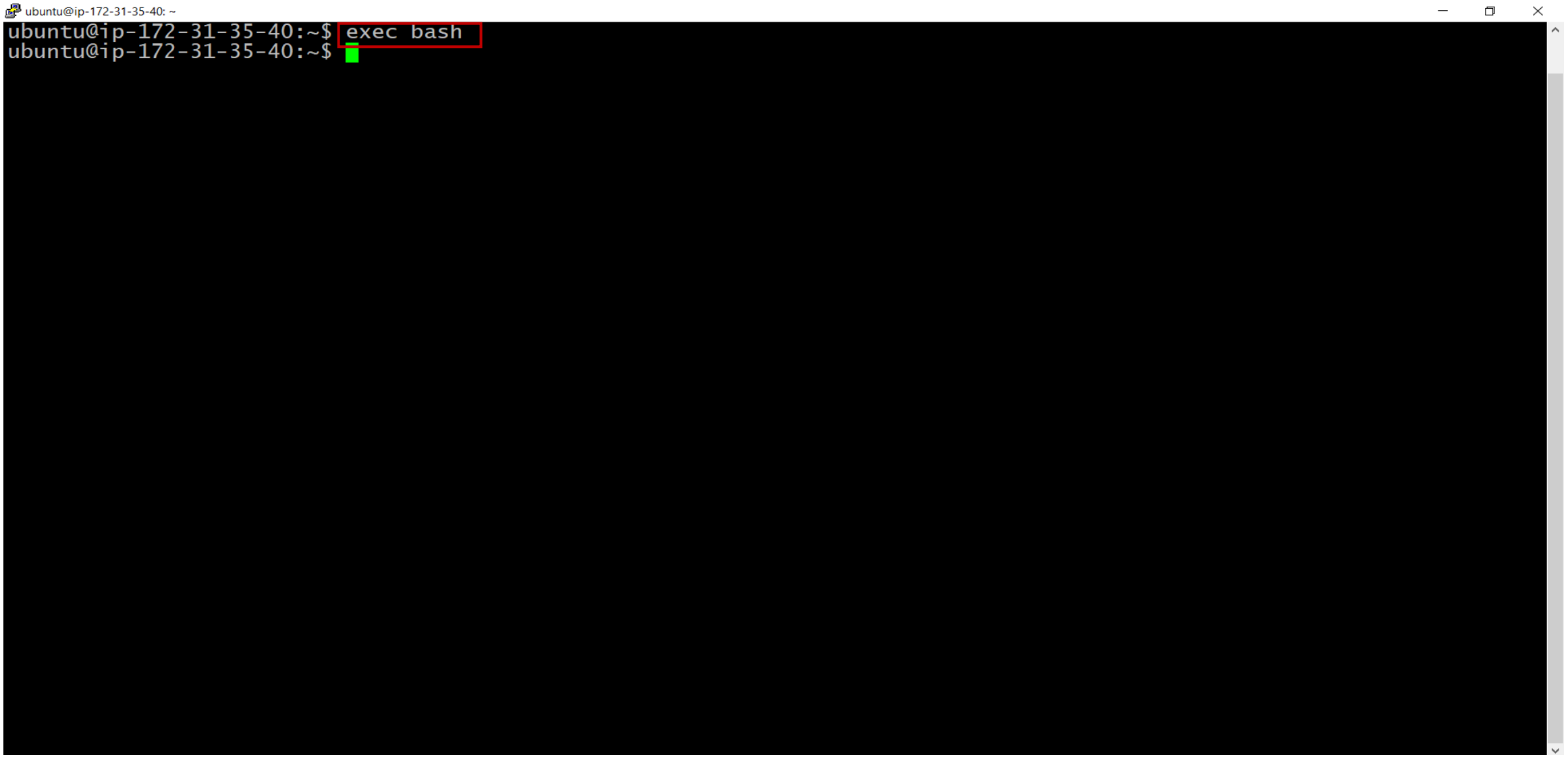
ctrl + O (to save) > Enter > ctrl + X (to exit)

19) mkdir /usr/local/hadoop/tmp



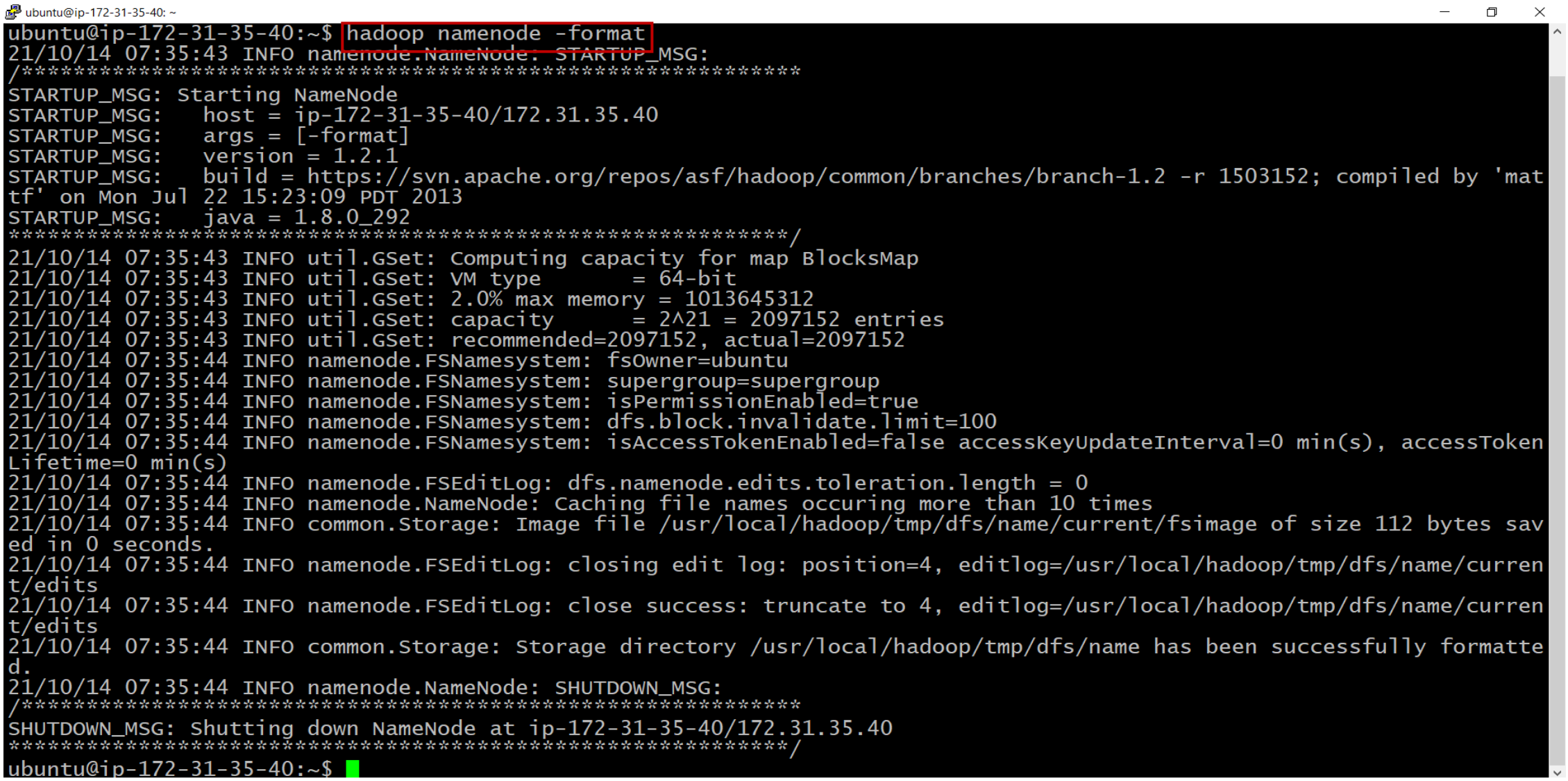
press enter

20) exec bash



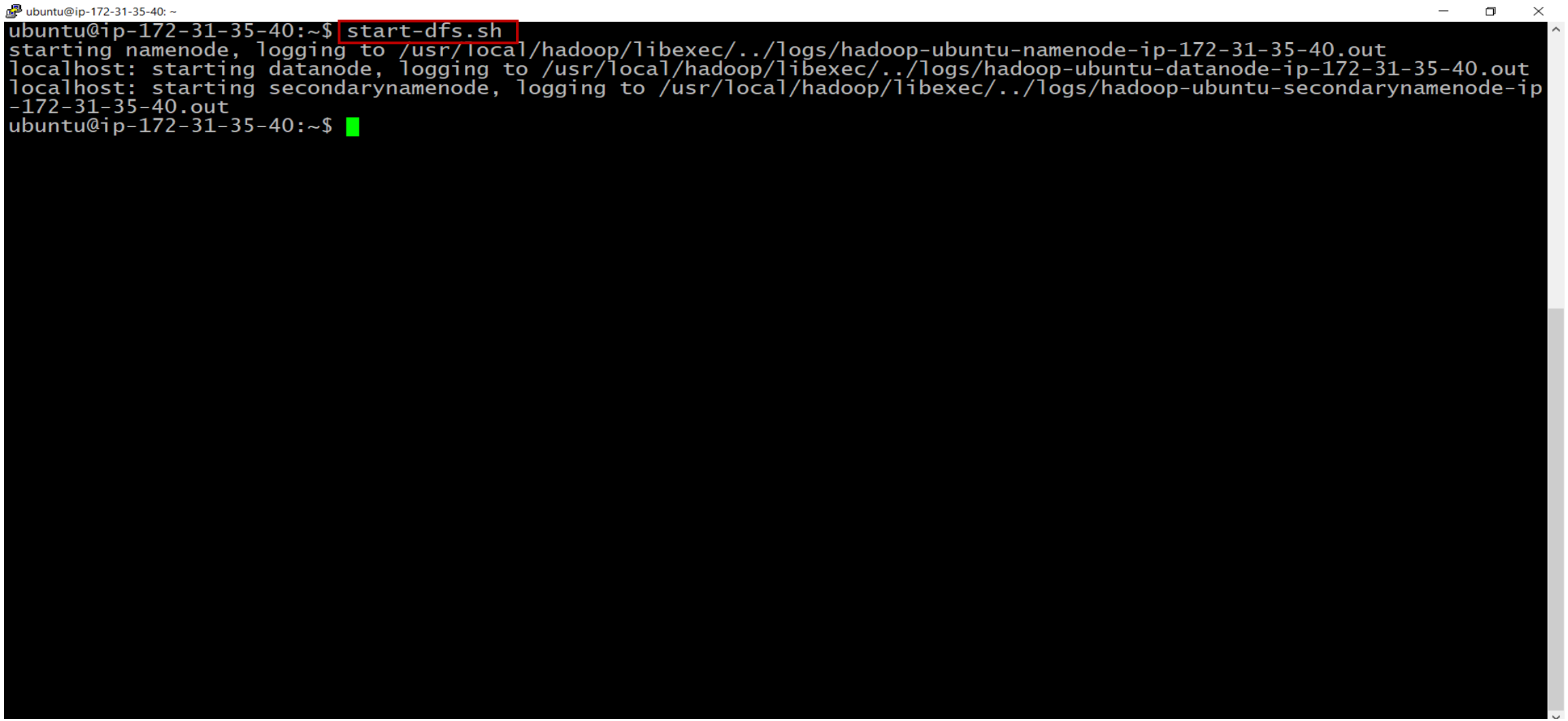
press enter

21) hadoop namenode -format



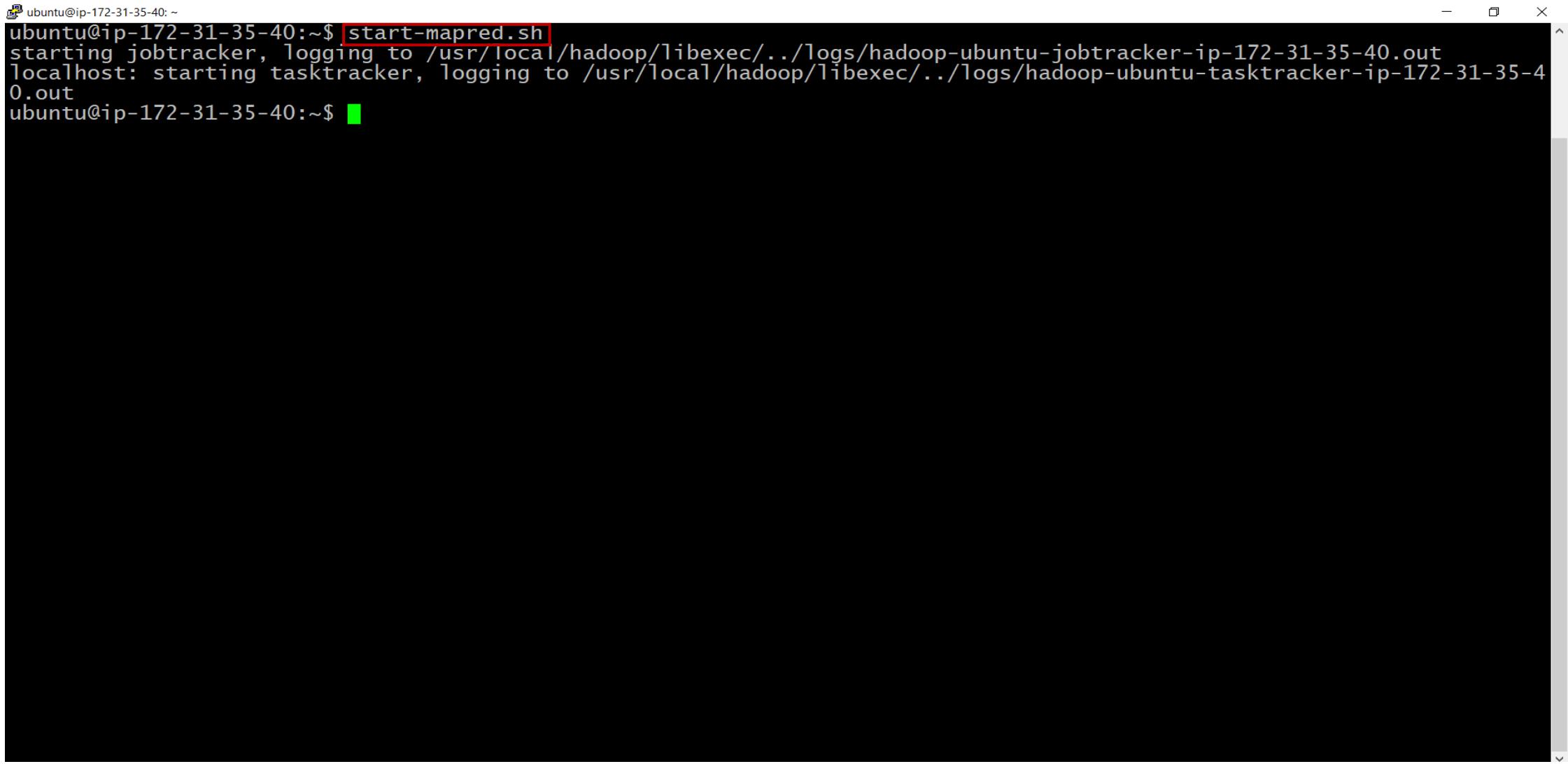
press enter

22) start-dfs.sh



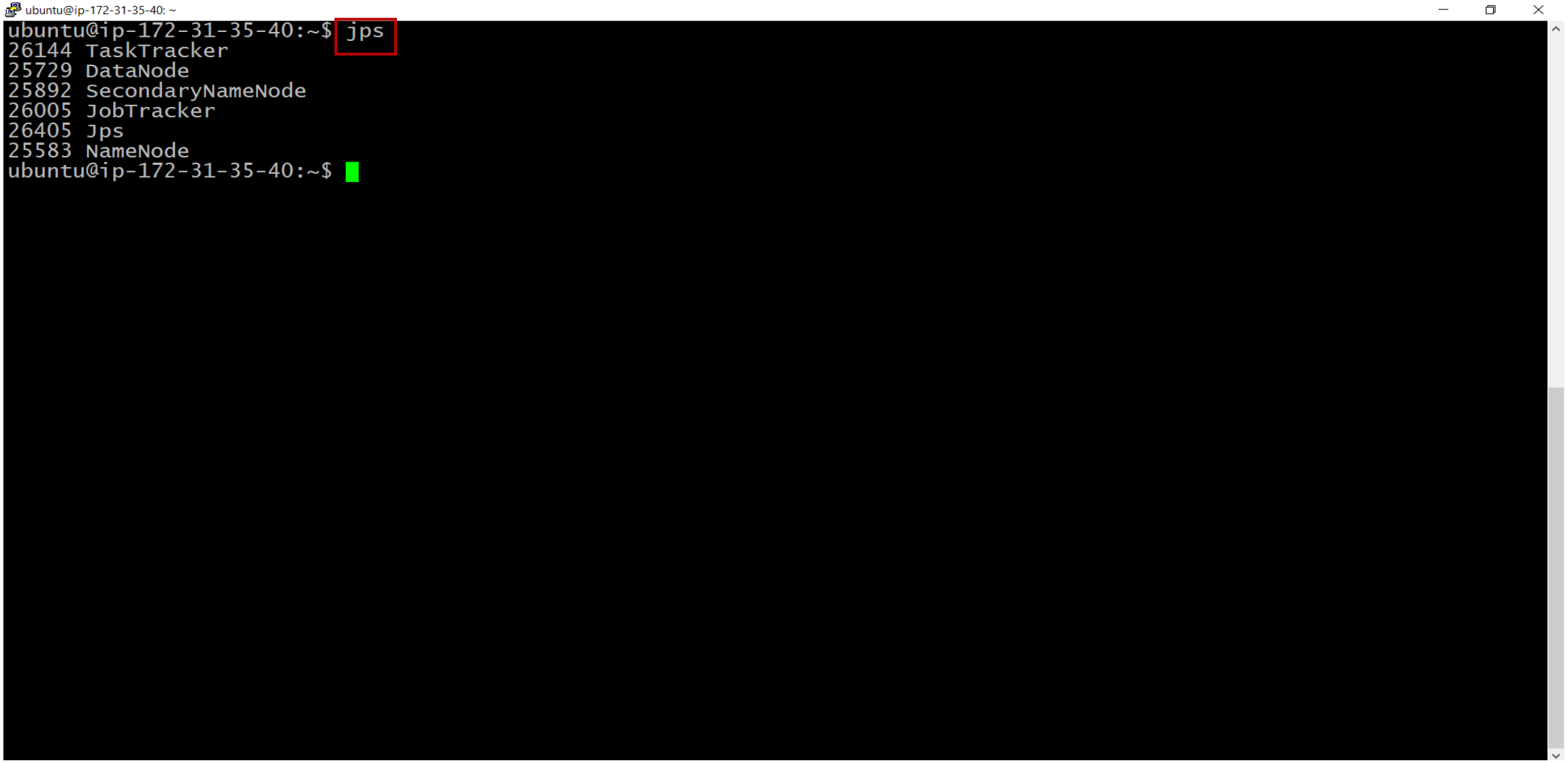
press enter

23) start-mapred.sh



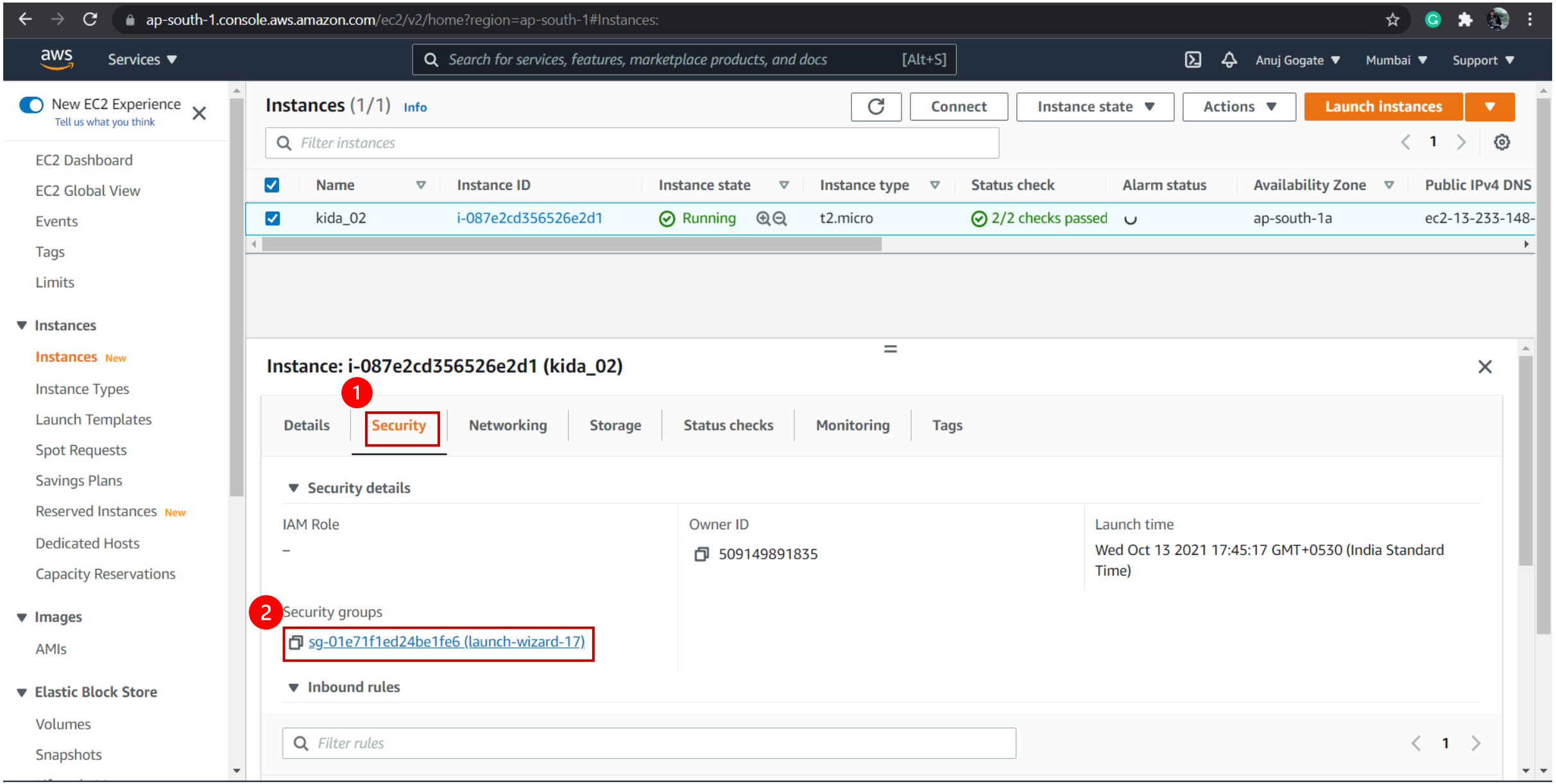
press enter

24) jps

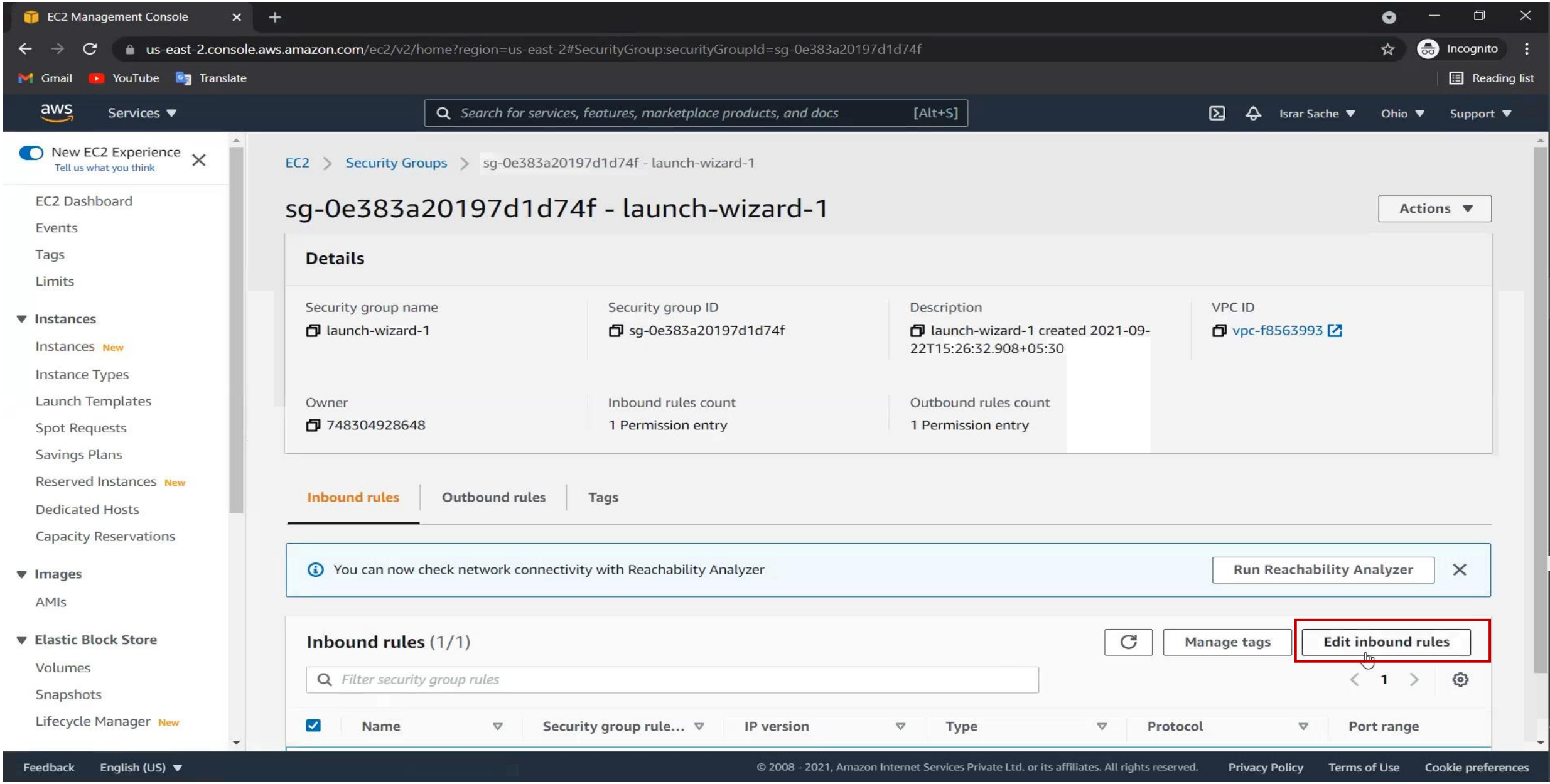


press enter

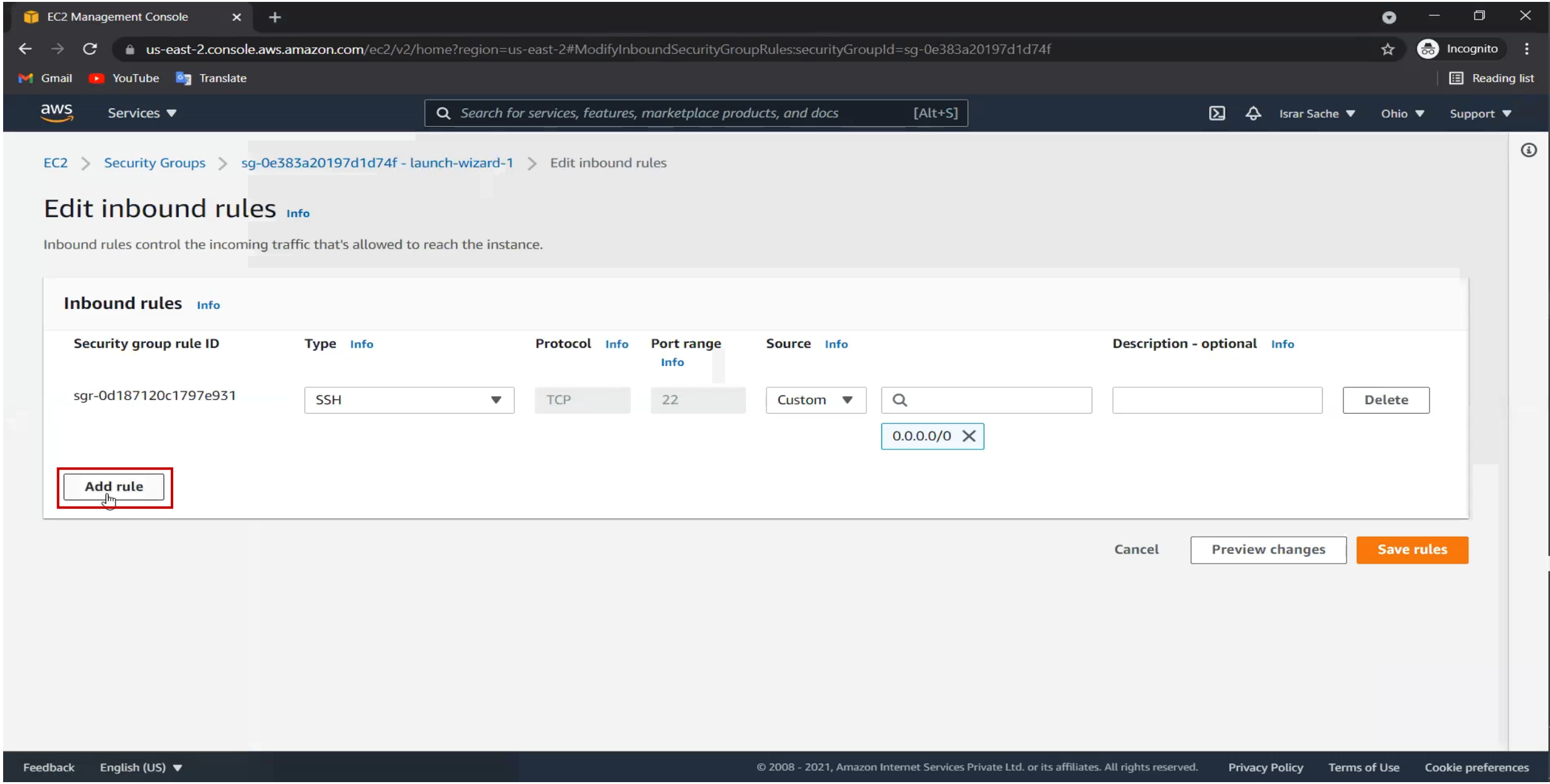
25) Open the security groups



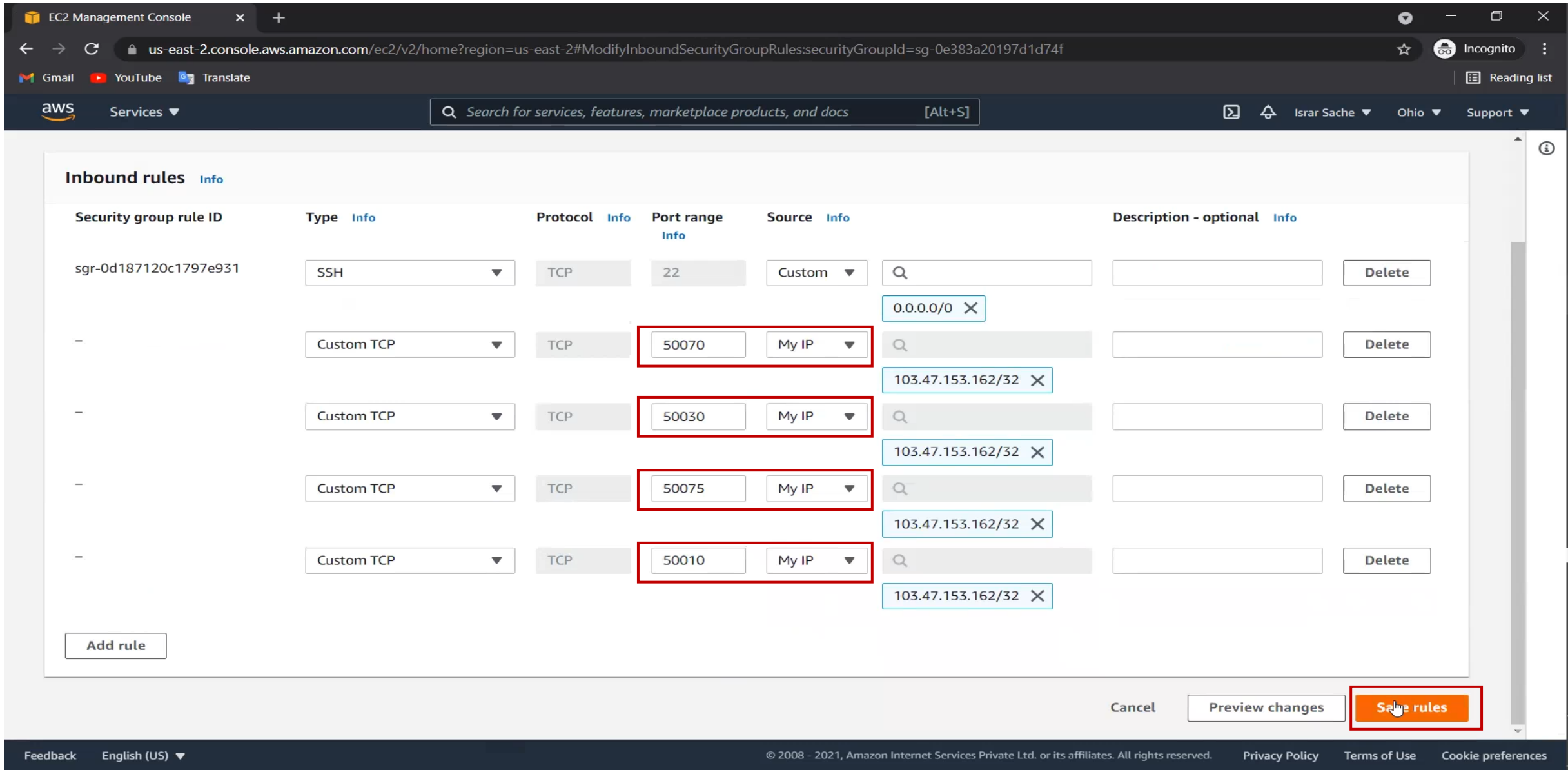
26) Click on edit inbound rules



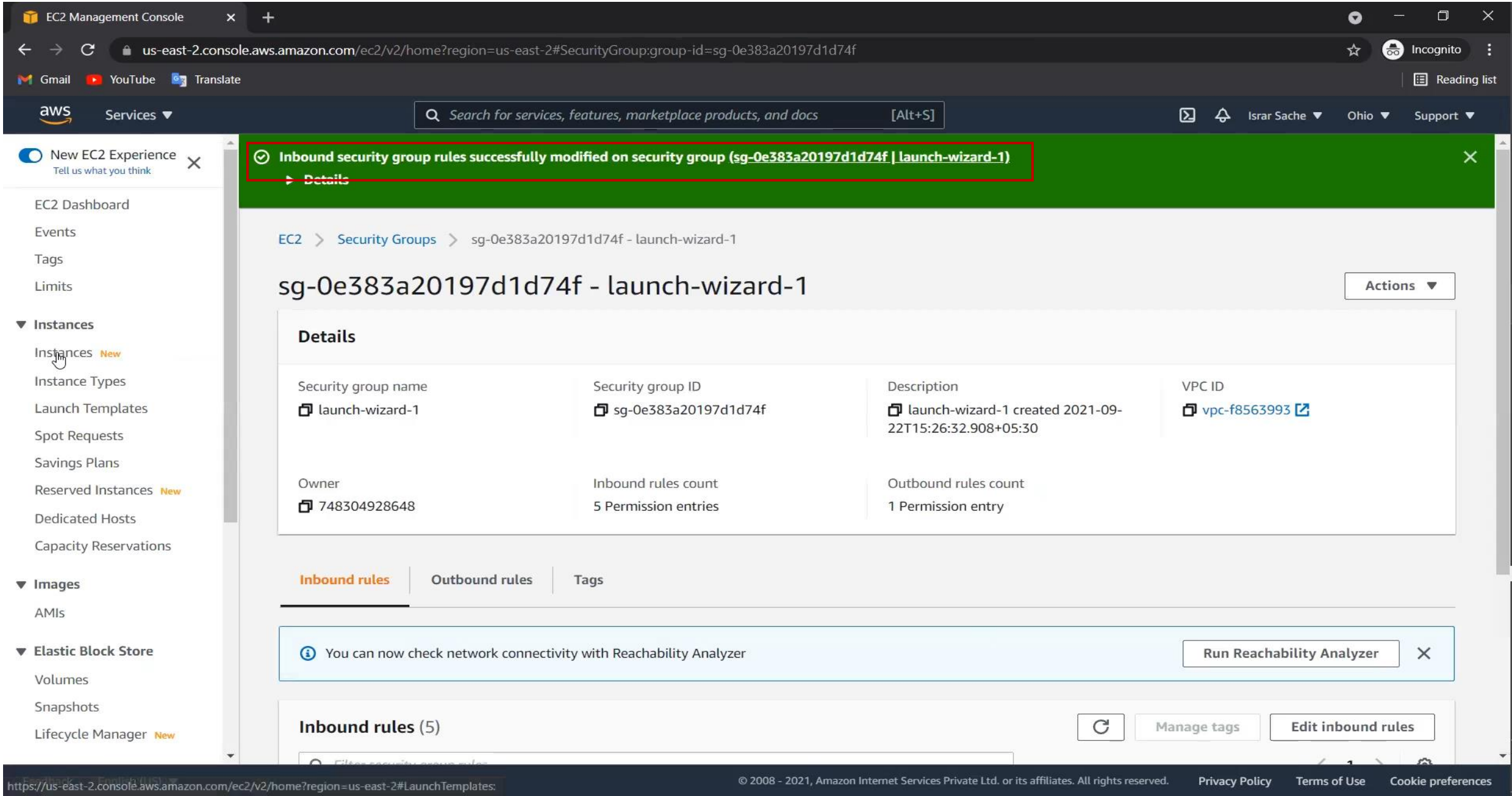
27) Click on Add rule for 4 times



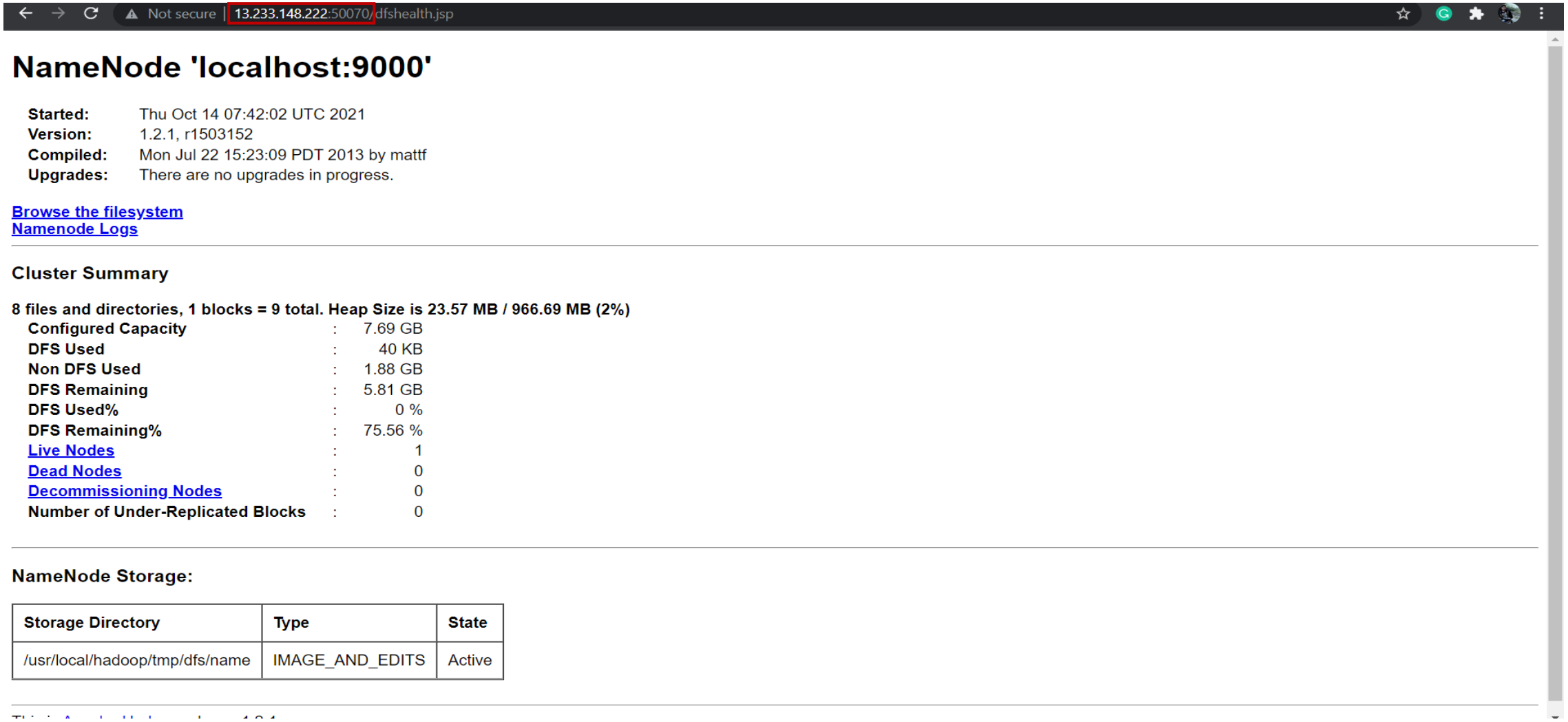
28) Configure the port range to 50070, 50030, 50075, 50010 & change there source to My Ip and click on save rules



29) Now you have successfully modified on the security groups



30) To review, open Incognito mode and launch yourpublicIPv4address:50070



31) Also, open yourpublicIPv4address:50030