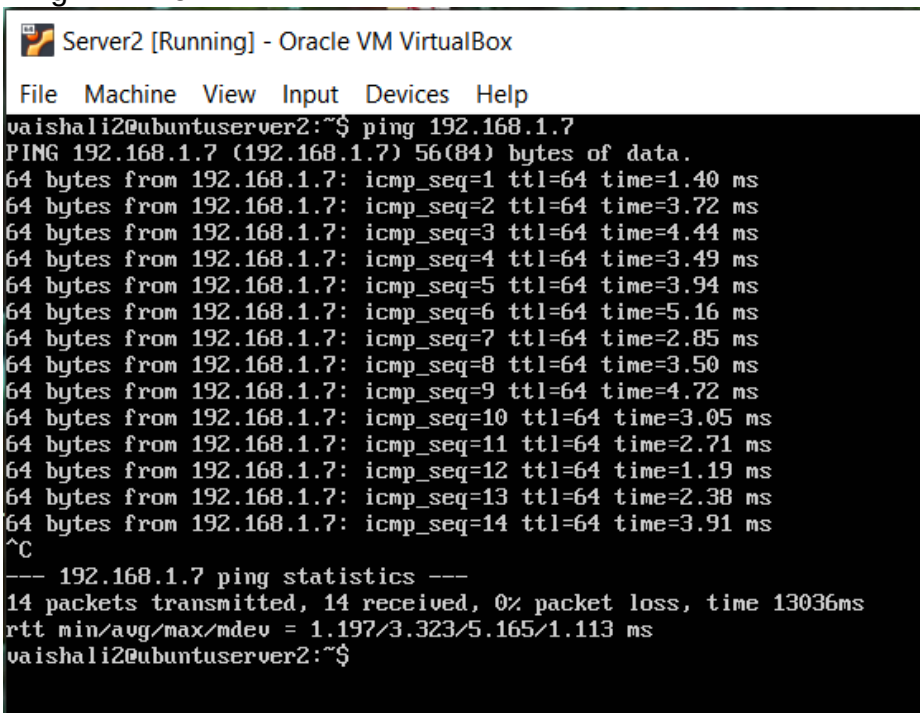
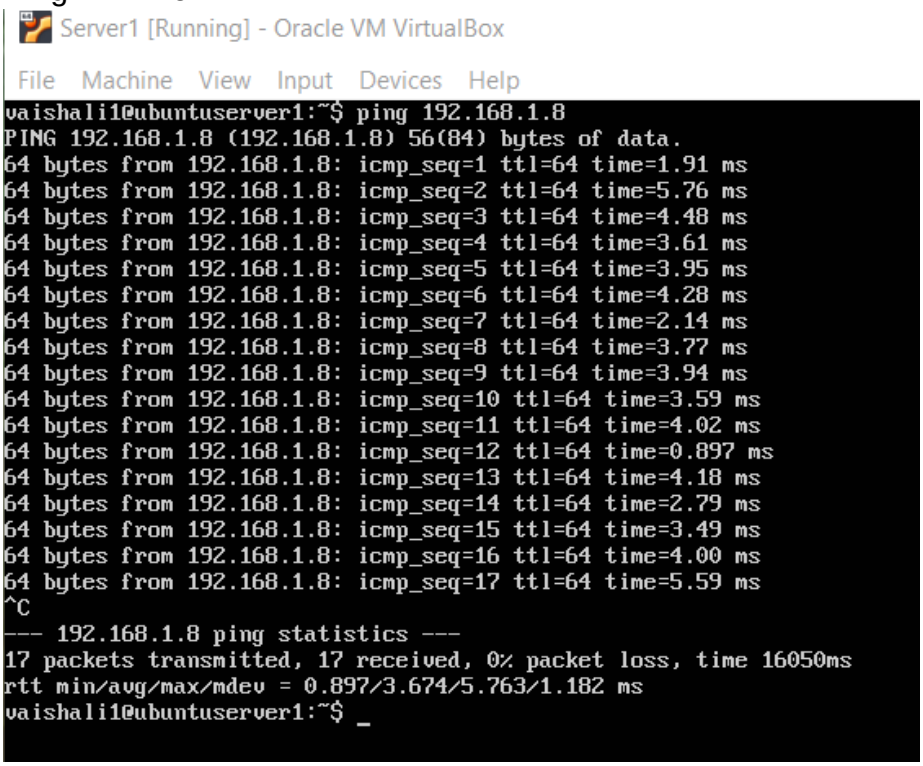
Ex.No.4 File Transfer between Virtual Machines

I. Two VMs are created and Ubuntu 16.04 server has been installed with open-ssh server.

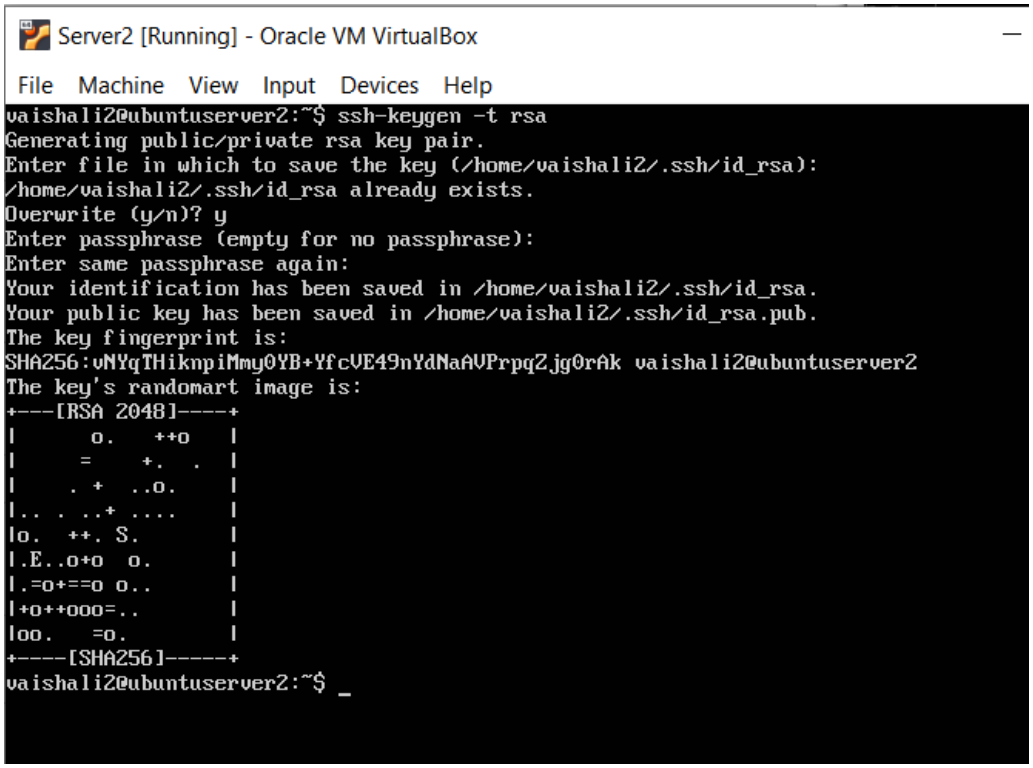
II. Ping VM1 from VM2

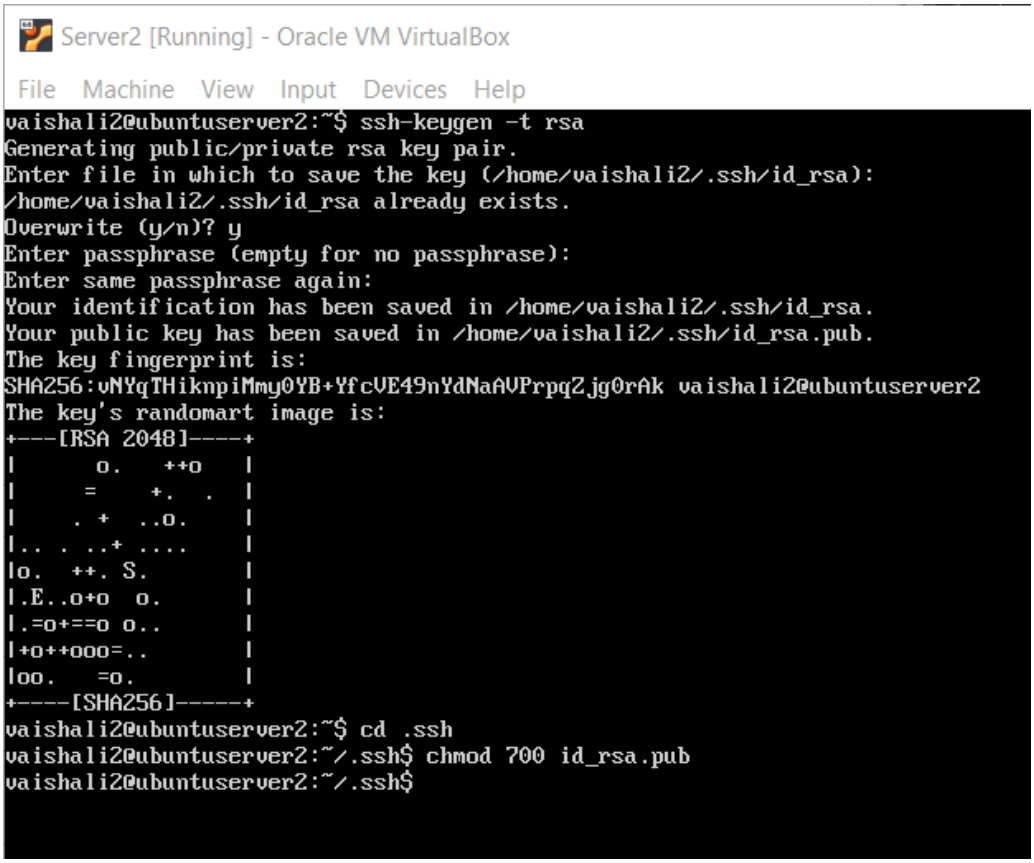


Ping VM2 from VM1

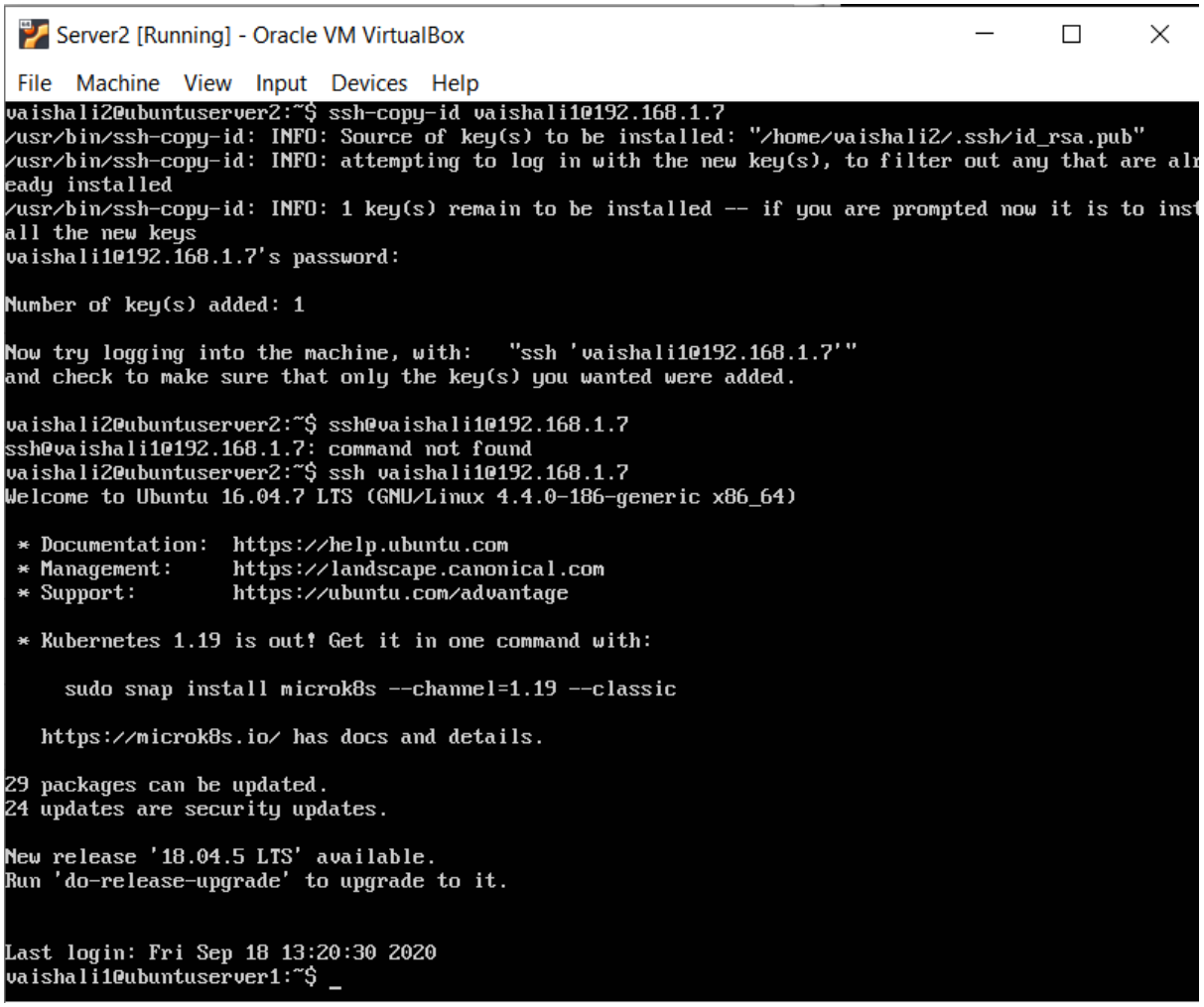


III. SSH public key and private keys are generated using the command: ssh-keygen –t rsa



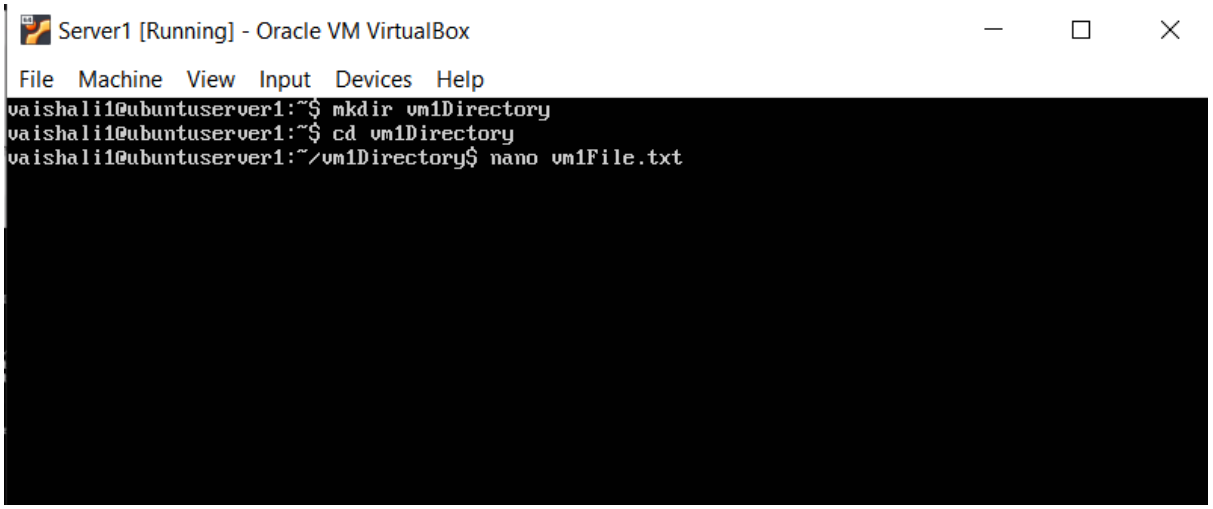


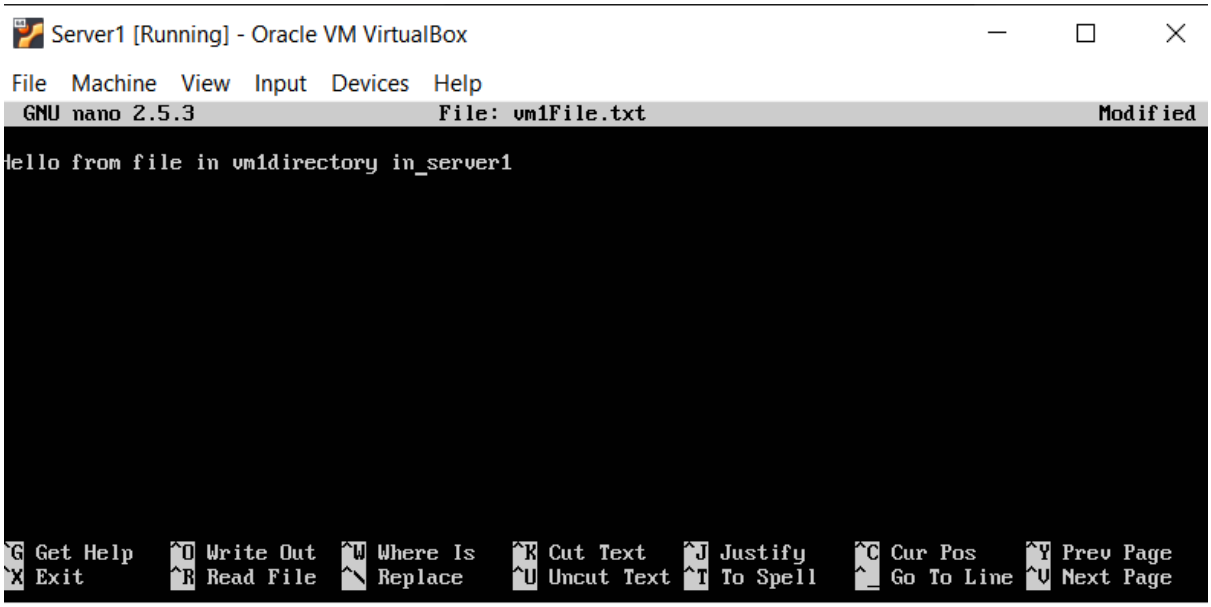
IV. Exchange of keys using ssh-copy-id

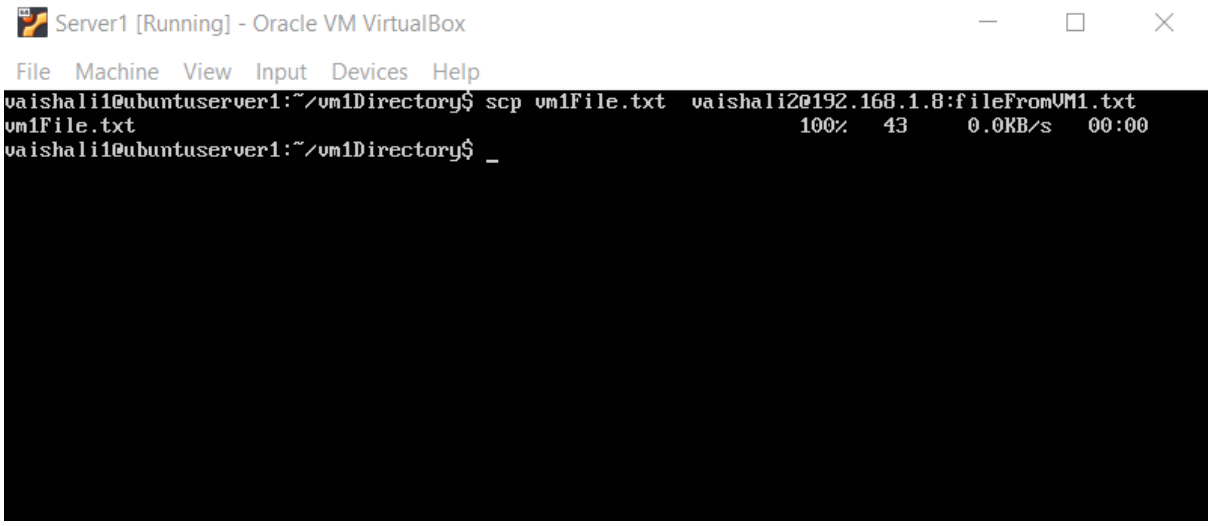


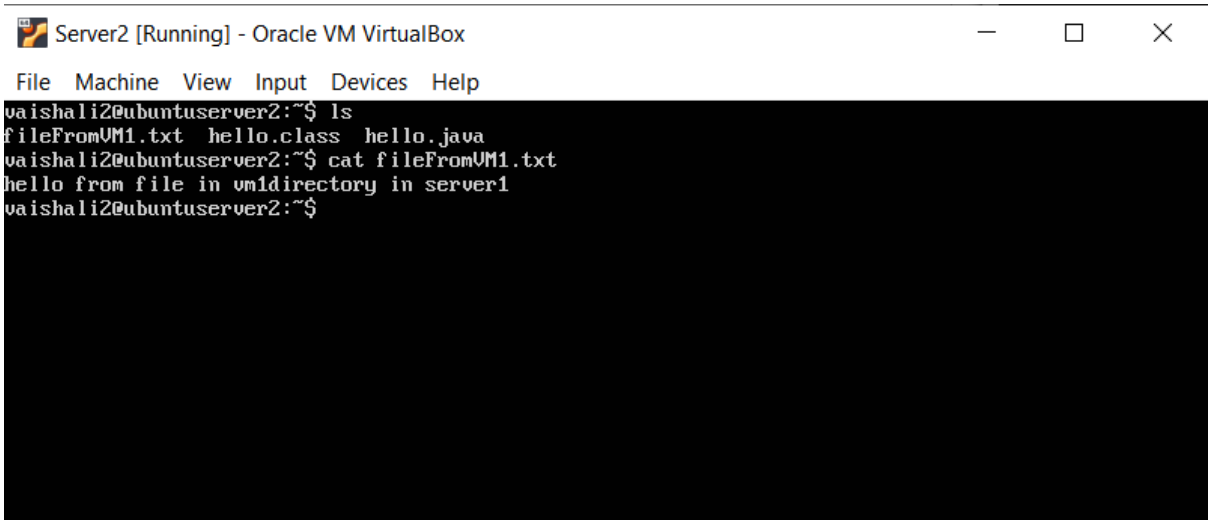
V. File Transfer between VMs on same Host and different Hosts

1. a) Transfer File from VM1 to VM2 using Secure copy command (scp)

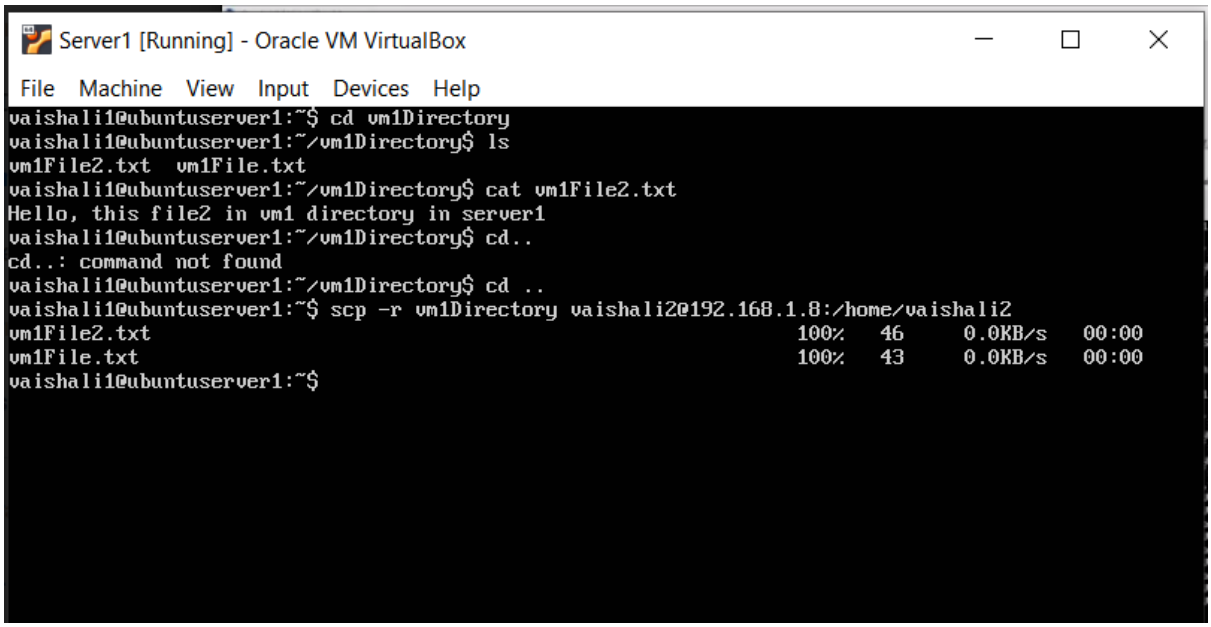


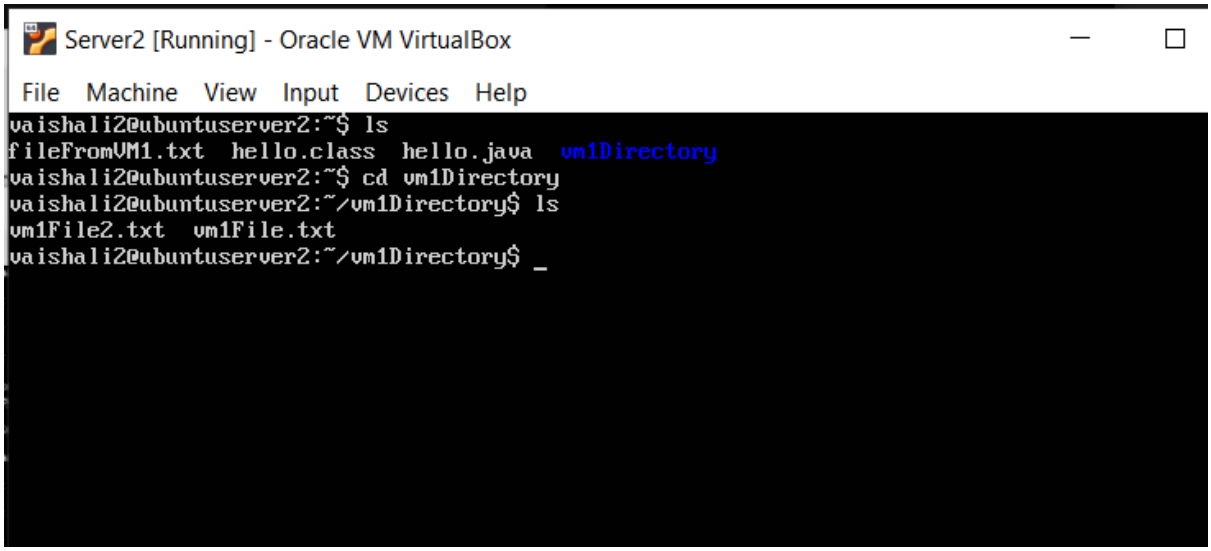

Server1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 2.5.3 File: vm1File.txt Modified
Hello from file in vm1directory in_server1
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos ^Y Prev Page
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Spell ^_ Go To Line ^V Next Page


Server1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
vaishali1@ubuntuserver1:~/vm1Directory$ scp vm1File.txt vaishali2@192.168.1.8:fileFromVM1.txt
vm1File.txt 100% 43 0.0KB/s 00:00
vaishali1@ubuntuserver1:~/vm1Directory$ _

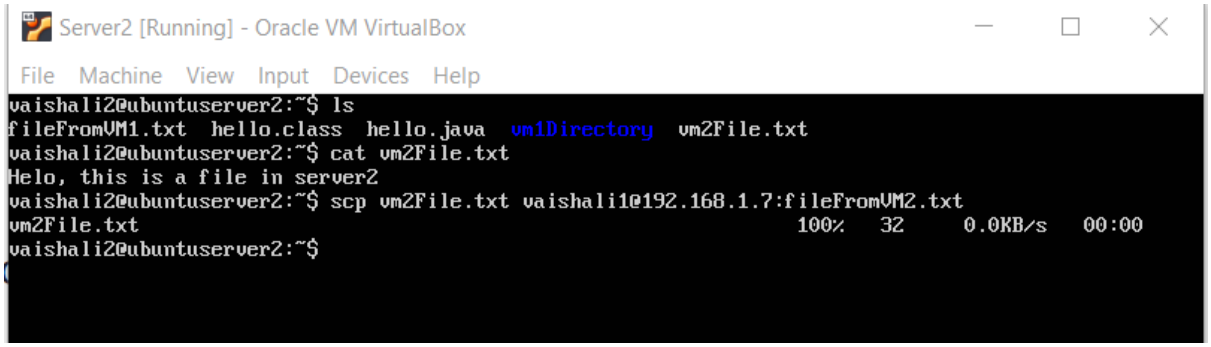

Server2 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
vaishali2@ubuntuserver2:~$ ls
fileFromVM1.txt hello.class hello.java
vaishali2@ubuntuserver2:~$ cat fileFromVM1.txt
hello from file in vm1directory in server1
vaishali2@ubuntuserver2:~$

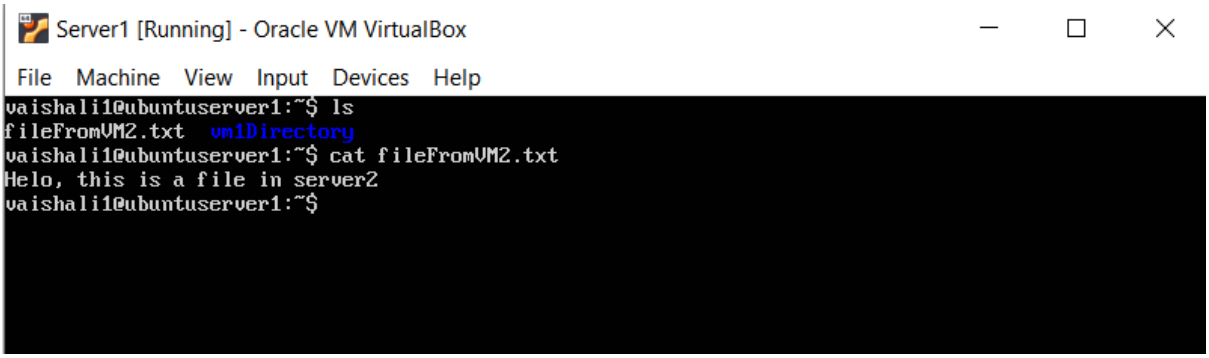
1. **b) Transfer Directory from VM1 to VM2 using Secure copy command (scp)**



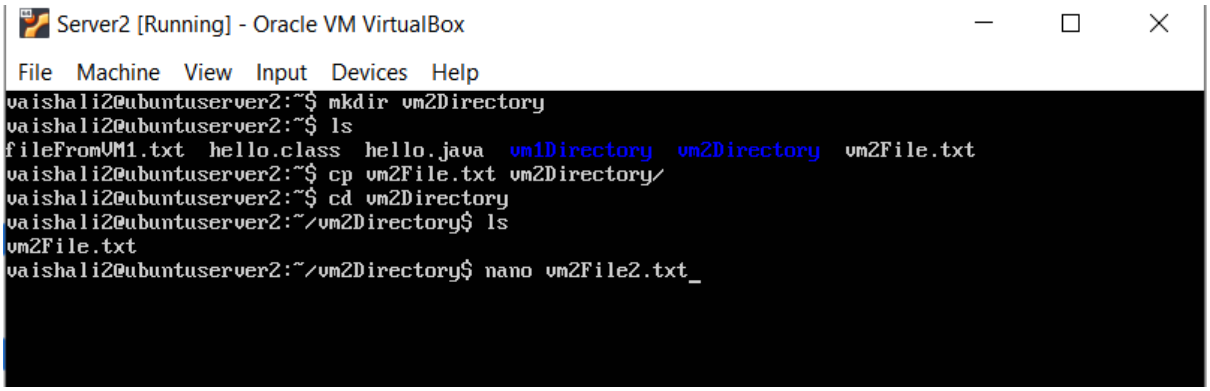


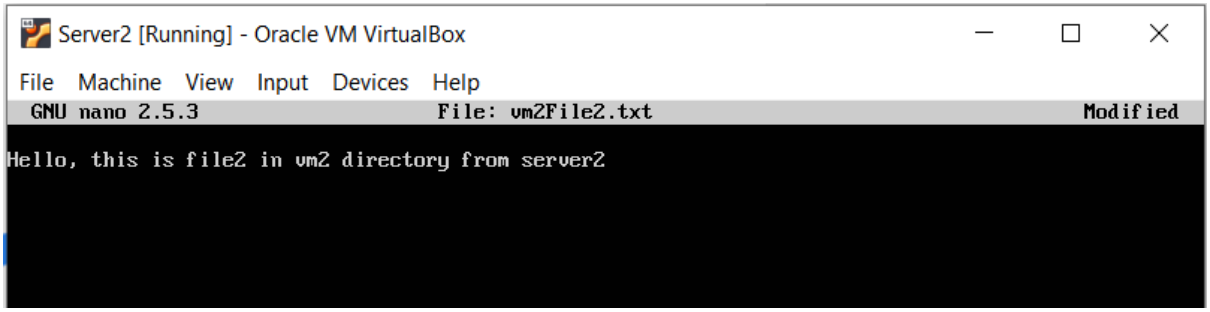
2. a) Transfer File from VM2 to VM1 using Secure copy command (scp)

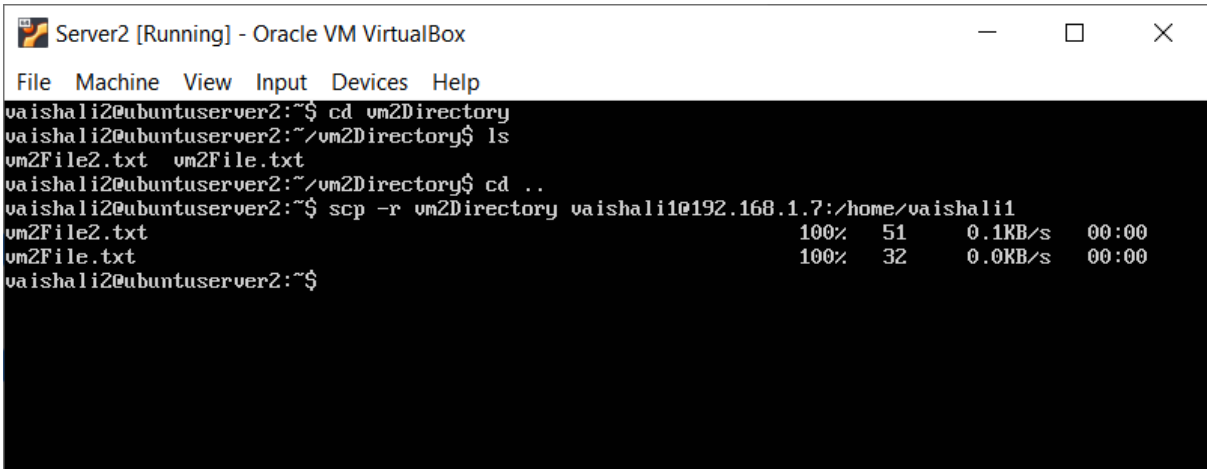


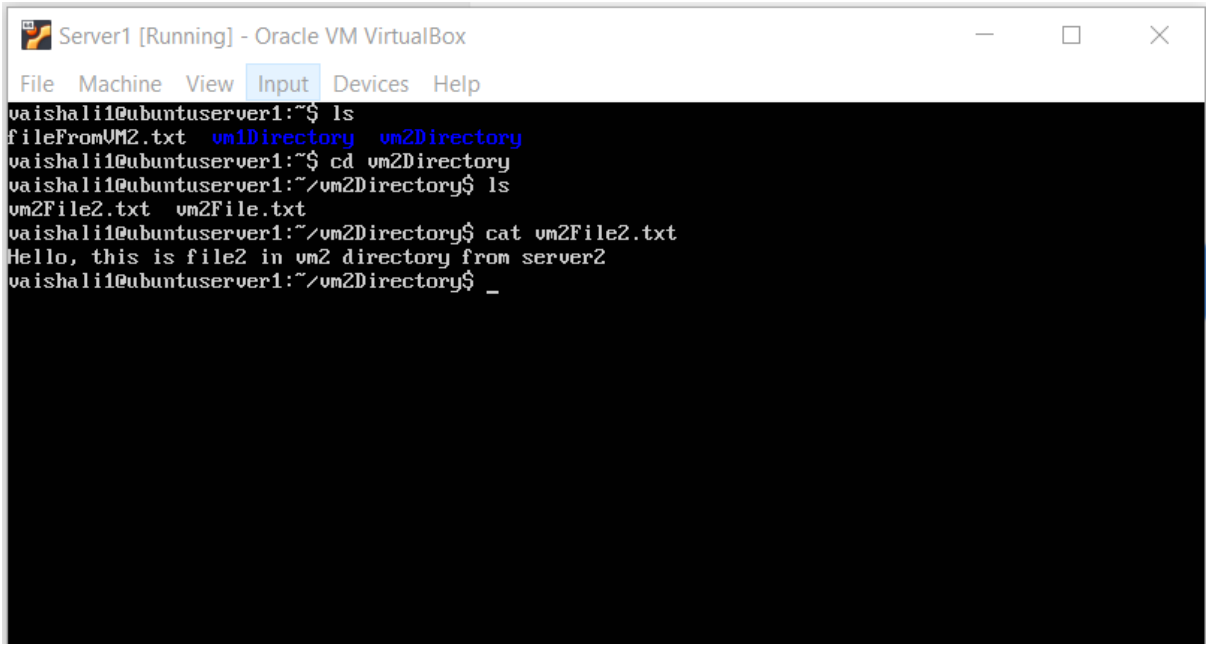


2. b) Transfer Directory from VM2 to VM1 using Secure copy command (scp)

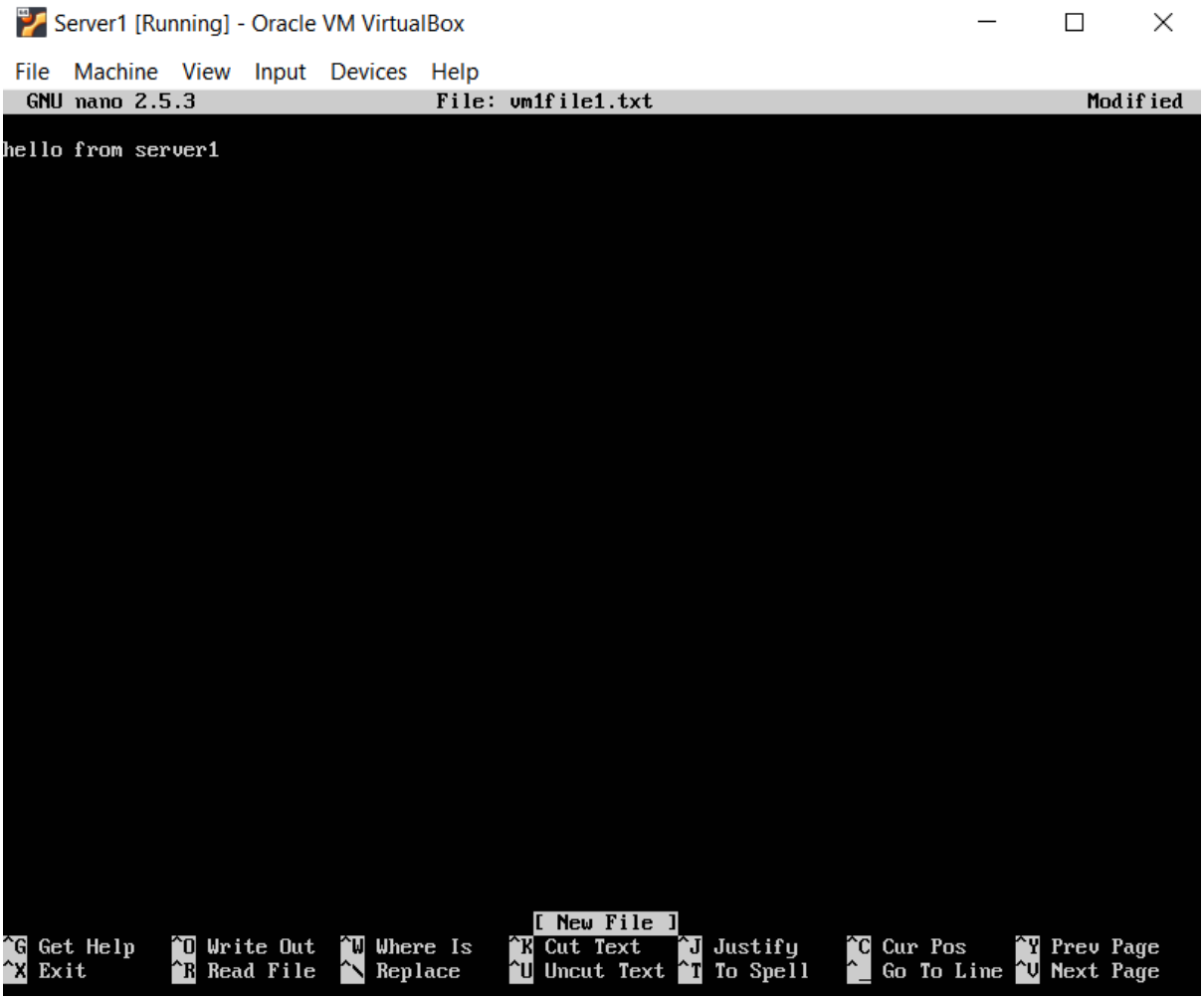


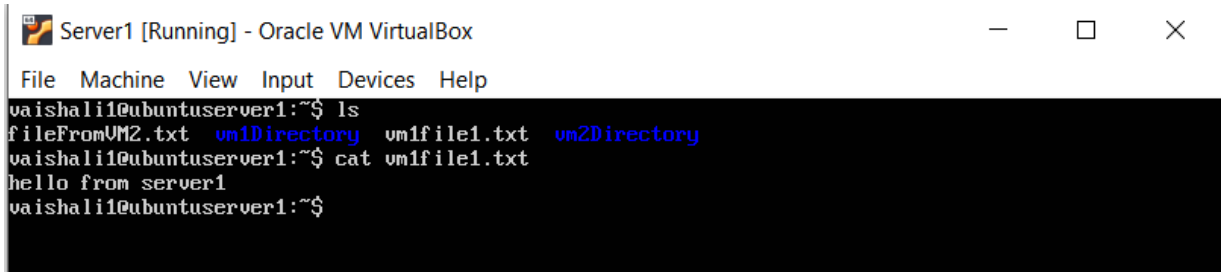


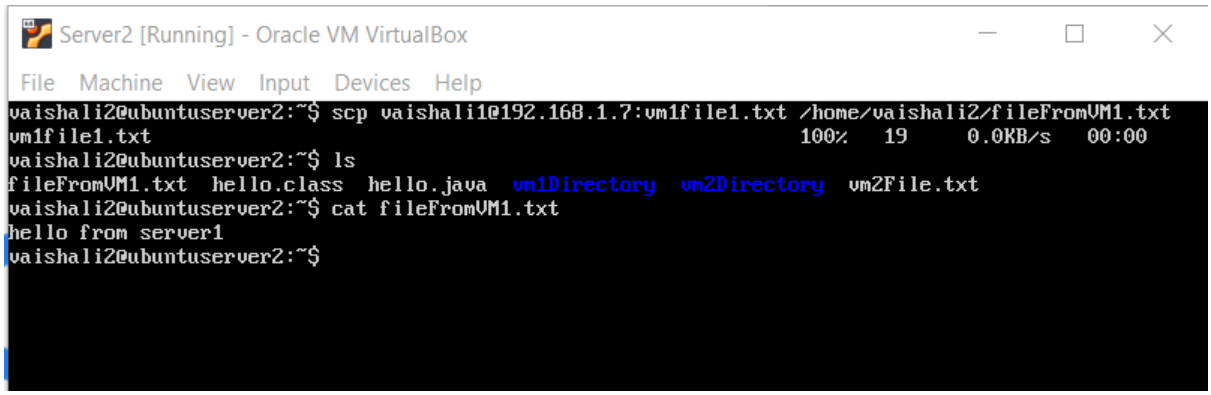




3. Receive a file from VM1 to VM2 using Secure copy command (scp)



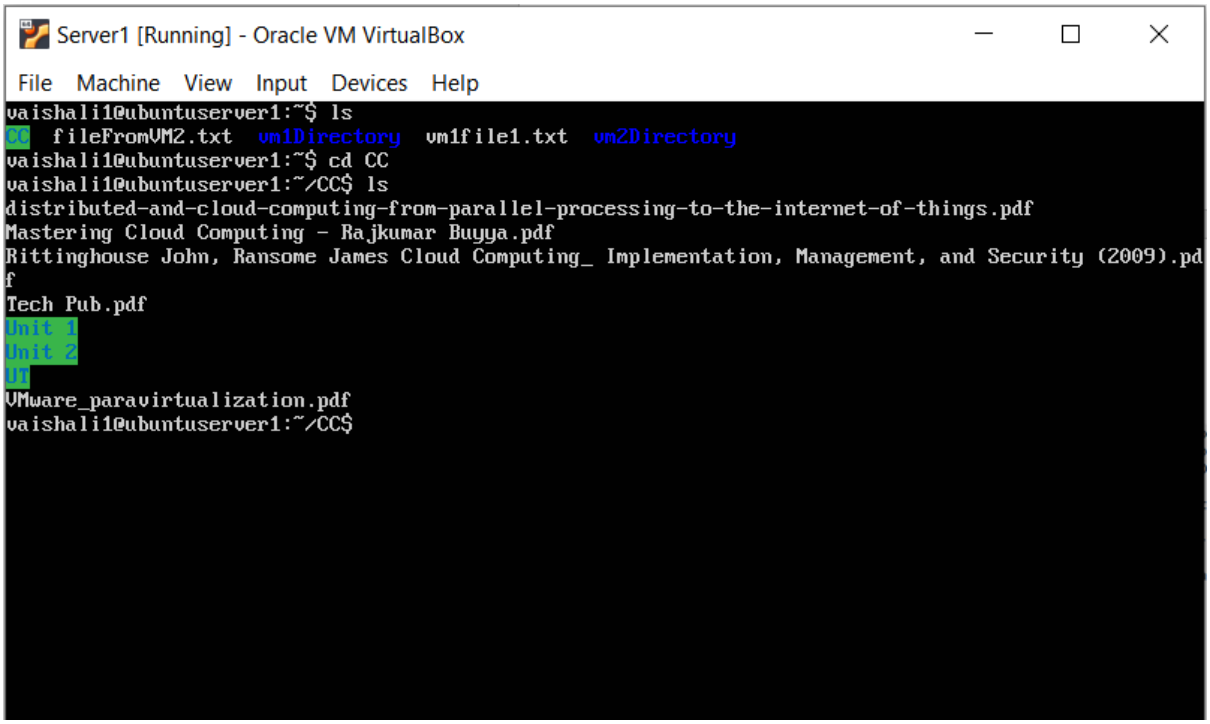




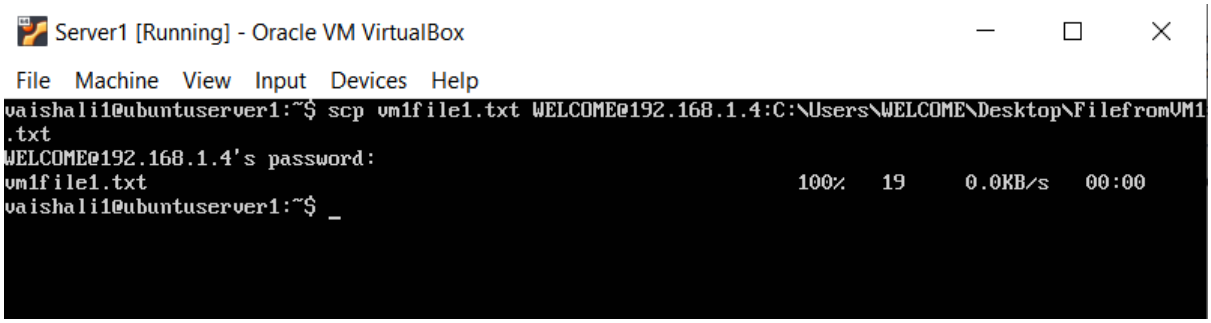
4. Transfer a file from physical machine (Windows as host OS) to VM1.

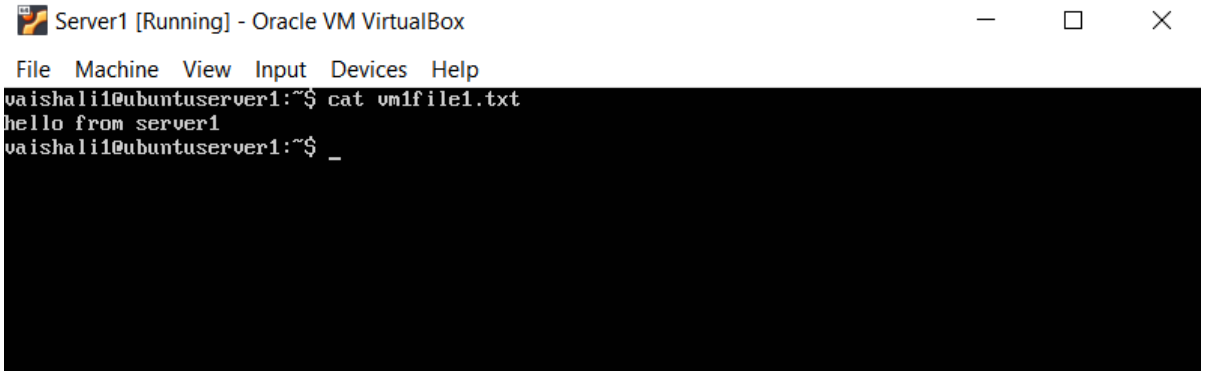
```
C:\Users\WELCOME\Desktop>scp -r CC vaishali1@192.168.1.7:/home/vaishali1
The authenticity of host '192.168.1.7 (192.168.1.7)' can't be established.
ECDSA key fingerprint is SHA256:DZwUH6hJ8cVzw8ryaKqMEZms/dCOEg8ulAs4n6qUHvU.
Are you sure you want to continue connecting (yes/no)?
Warning: Permanently added '192.168.1.7' (ECDSA) to the list of known hosts.
vaishali1@192.168.1.7's password:
distributed-and-cloud-computing-from-parallel-processing-to-the-internet-of-things.pdf          100%   24MB  20.2MB/s   00:01
Mastering Cloud Computing - Rajkumar Buyya.pdf                                                 100%   35MB  28.3MB/s   00:01
Rittinghouse John, Ransome James Cloud Computing_ Implementation, Management, and Security (2009 100% 7798KB  17.9MB/s   00:00
Tech Pub.pdf                                                                                   100%   62MB  18.5MB/s   00:03
Cloud Computing Applications.pdf                                                               100%  761KB   5.6MB/s   00:00
Introduction to Cloud.pdf                                                                      100% 1061KB  13.0MB/s   00:00
Lecture2_Definition of Cloud.pdf                                                               100%   37KB   1.3MB/s   00:00
Lecture3_EvolutionOfCloudComputing.pdf                                                         100%  761KB  13.1MB/s   00:00
Lecture3_HistoryofCloud.pdf                                                                    100%  923KB  13.4MB/s   00:00
Lecture5_PrinciplesOfParallelDistributedComputing.pdf                                          100% 1039KB   7.1MB/s   00:00
Lecture7_Characteristics of Cloud by NIST.pdf                                                  100%  282KB   5.3MB/s   00:00
Lecture8_Elasticity in Cloud.pdf                                                               100%   67KB   3.5MB/s   00:00
Lecture9_OnDemandProvisioning.pdf                                                              100%  512KB  14.3MB/s   00:00
Lecture1_SOA.pdf                                                                               100%  544KB   8.0MB/s   00:00
Lecture2_WebServices.pdf                                                                       100% 1272KB  11.8MB/s   00:00
Lecture3_REST.pdf                                                                              100%  622KB   9.4MB/s   00:00
Lecture4_Publish_Subscribe_Systems.pdf                                                         100%  275KB   5.2MB/s   00:00
Lecture5_Hypervisor_Xen.pdf                                                                    100%  168KB   4.1MB/s   00:00
Lecture5_Implementation_Levels_Virtualization.pdf                                              100%  831KB   6.1MB/s   00:00
Lecture5_Virtualization-Introuction.pdf                                                        100%  444KB   4.4MB/s   00:00
Lecture6_Virtualization_Types_of_Virtualization_2016_UG.pdf                                    100% 1665KB  11.2MB/s   00:00
Lecture7_Virtualization Support and Disaster Recovery.pdf                                      100%  249KB   4.5MB/s   00:00
312217104181-Set 2.pdf                                                                         100% 3338KB  18.9MB/s   00:00
CS8791_Cloud_UT1_QP_2020 -Descriptive.pdf                                                      100%   10KB 436.4KB/s   00:00
VMware_paravirtualization.pdf                                                                  100% 1431KB  10.7MB/s   00:00

C:\Users\WELCOME\Desktop>
```



5. Try to transfer a file from VM1 to physical machine (Windows as host OS).





```
C:\Users\WELCOME\Desktop>dir
 Volume in drive C has no label.
 Volume Serial Number is 28EA-A1FE

 Directory of C:\Users\WELCOME\Desktop

19-09-2020  22:37    <DIR>          .
19-09-2020  22:37    <DIR>          ..
13-09-2020  23:43    <DIR>          BDA
09-09-2020  23:53    <DIR>          Blockchain
13-09-2020  23:49    <DIR>          CC
19-09-2020  22:35    <DIR>          CC lab
13-09-2020  23:44    <DIR>          CNS
17-09-2020  14:12    <DIR>          CNS lab
03-07-2019  21:07         3,402,746 CSE SYLLABUS.pdf'
10-12-2008  16:11           307,234 DSC00016.JPG
19-09-2020  22:37                19 FilefromVM1.txt
26-08-2020  17:41    <DIR>          FYP
13-09-2020  23:40    <DIR>          HCI
13-09-2020  23:51    <DIR>          Mgmt
08-10-2019  19:53        26,757,632 ngrok.exe
19-09-2020  13:00    <DIR>          SnS
18-09-2020  11:47             1,937 Zoom.lnk
               5 File(s)     30,469,568 bytes
              12 Dir(s)  14,498,914,304 bytes free

C:\Users\WELCOME\Desktop>type FilefromVM1.txt
hello from server1

C:\Users\WELCOME\Desktop>
```