

NAME :ANUMANDLA PAVAN

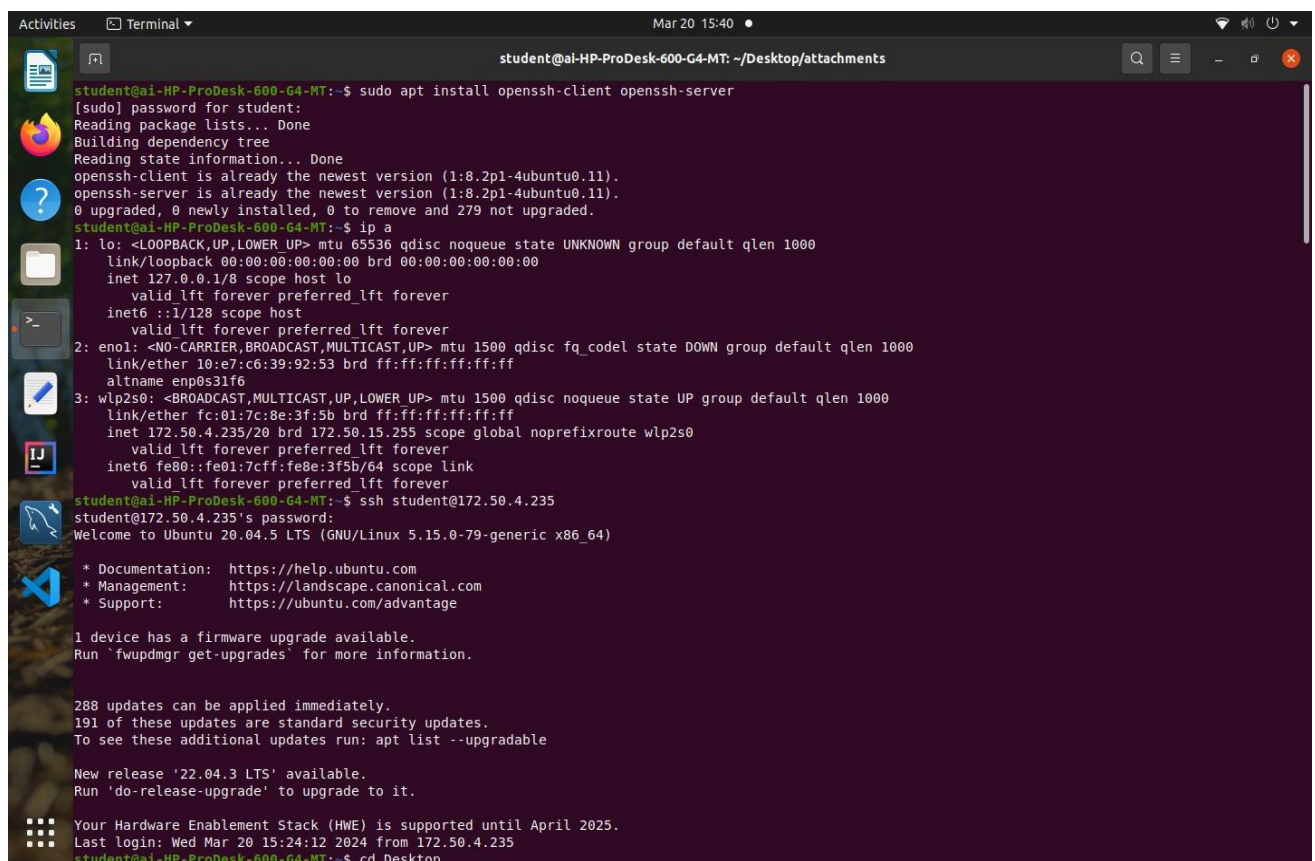
ROLLNO :422178

GROUP MATE :VEERAJA VEERAESH

ROLL NO : 422180

1)Using SSH command execute programs on two different machines

SCREEN SHOTS:



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student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/attachments
student@ai-HP-ProDesk-600-G4-MT:~$ sudo apt install openssh-client openssh-server
[sudo] password for student:
Reading package lists... Done
Building dependency tree
Reading state information... Done
openssh-client is already the newest version (1:8.2p1-4ubuntu0.11).
openssh-server is already the newest version (1:8.2p1-4ubuntu0.11).
0 upgraded, 0 newly installed, 0 to remove and 279 not upgraded.
student@ai-HP-ProDesk-600-G4-MT:~$ ip a
1: lo: <LOOPBACK,UP,LOWER UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid lft forever preferred_lft forever
2: eno1: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc fq_codel state DOWN group default qlen 1000
    link/ether 10:e7:c6:39:92:53 brd ff:ff:ff:ff:ff:ff
    altname enp0s31f6
3: wlp2s0: <BROADCAST,MULTICAST,UP,LOWER UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
    link/ether fc:01:7c:8e:3f:5b brd ff:ff:ff:ff:ff:ff
    inet 172.50.4.235/20 brd 172.50.15.255 scope global noprefixroute wlp2s0
        valid lft forever preferred_lft forever
    inet6 fe80::fe01:7cff:fe8e:3f5b/64 scope link
        valid lft forever preferred_lft forever
student@ai-HP-ProDesk-600-G4-MT:~$ ssh student@172.50.4.235
student@172.50.4.235's password:
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-79-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

1 device has a firmware upgrade available.
Run 'fwupdmgr get-upgrades' for more information.

288 updates can be applied immediately.
191 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: Wed Mar 20 15:24:12 2024 from 172.50.4.235
student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop
```

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Activities Terminal Mar 20 15:40 student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/attachments

student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ ls
'422178 DATA BASE MANAGEMENT SYSTEN LAB' 622104 attachments.zip file2.txt file4.txt num.txt wifi_off_command.sh
'422178 unix Tools and Shell Scripting lab' attachments file1.txt file3.txt new state.txt wifi_on_command.sh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ cd attachments
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/attachments$ ls
cities.txt day-temp.txt forgrep.txt foruniq.txt grepscript.sh months.txt numbers.txt week9.txt
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/attachments$ ./grepscript.sh
\~bash: ./grepscript.sh: Permission denied
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/attachments$ chmod +x grepscript.sh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/attachments$ ./grepscript.sh
Original File:
This is a sample text file.
It contains various lines of text.
Line 1: 12345, apple, banana
Line 2: 67890, orange, grapes
Line 3: !@#$, cherry, mango
Line 4: This is a longer line with more words.
...
Lines containing line:
It contains various lines of text.
Line 4: This is a longer line with more words.
...
First 3 lines of the file:
This is a sample text file.
It contains various lines of text.
Line 1: 12345, apple, banana
...
Last 3 lines of the file:
Line 3: !@#$, cherry, mango
Line 4: This is a longer line with more words.
...
Second field of each line (comma-separated):
This is a sample text file.
It contains various lines of text.
apple
orange
cherry
Line 4: This is a longer line with more words.
...
Lines of the file pasted side by side:
This is a sample text file. It contains various lines of text. Line 1: 12345, apple, banana Line 2: 67890, orange, grapes Line 3: !@#$,
cherry, mango Line 4: This is a longer line with more words. ...
```

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Activities Terminal Mar 20 15:40 student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/attachments

cherry, mango Line 4: This is a longer line with more words. ...
Sorted lines of the file:
...
This is a sample text file.
Unique lines of the file:
This is a sample text file.
It contains various lines of text.
Line 1: 12345, apple, banana
Line 2: 67890, orange, grapes
Line 3: !@#$, cherry, mango
Line 4: This is a longer line with more words.
...
File with all uppercase characters converted to lowercase:
this is a sample text file.
it contains various lines of text.
line 1: 12345, apple, banana
line 2: 67890, orange, grapes
line 3: !@#$, cherry, mango
line 4: this is a longer line with more words.
...
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/attachments$ chmod +x awk_command.sh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/attachments$ ./awk_command.sh
Contents of file1.txt

s01 em1 10000 25
s02 em2 12000 24
s03 em3 11020 22
s04 em4 13000 23
s05 em5 19000 26
s06 em6 20000 25
s07 em7 25000 27
s08 em8 32000 28

Emulate cat command using awk
s01 em1 10000 25
s02 em2 12000 24
```

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Activities Terminal Mar 20 15:40 student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/attachments

s02 em2 12000 24
s03 em3 11020 22
s04 em4 13000 23
s05 em5 19000 26
s06 em6 20000 25
s07 em7 25000 27
s08 em8 32000 28

printing only first two columns using awk

s01 em1
s02 em2
s03 em3
s04 em4
s05 em5
s06 em6
s07 em7
s08 em8

printing records starting with s and ending with 25

s01 em1 10000 25
s06 em6 20000 25

printing sum of values in field 3

Sum= 142020
Average= 17752.50

print substring containing last 2 letters of field 1, field2 and first two digits of field 3

01 em1 10
02 em2 12
03 em3 11
04 em4 13
05 em5 19
06 em6 20
07 em7 25
08 em8 32

print junior if 3rd column less than equal to 15000

s01 junior
s02 junior
s03 junior
s04 junior
s05 senior
s06 senior
s07 senior
s08 senior
```

```
Activities Terminal Mar 20 15:40 student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/attachments

03 em3 11
04 em4 13
05 em5 19
06 em6 20
07 em7 25
08 em8 32

print junior if 3rd column less than equal to 15000

s01 junior
s02 junior
s03 junior
s04 junior
s05 senior
s06 senior
s07 senior
s08 senior

print squares of the numbers in field 4

25 squared = 625
24 squared = 576
22 squared = 484
23 squared = 529
26 squared = 676
25 squared = 625
27 squared = 729
28 squared = 784

Count the number of words in the file

No of records= 8
No of words= 32
No of characters= 136

Enter a number to calculate sum of first n numbers

25 = 325
24 = 300
22 = 253
23 = 276
26 = 351
25 = 325
27 = 378
28 = 406

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/attachments$
```