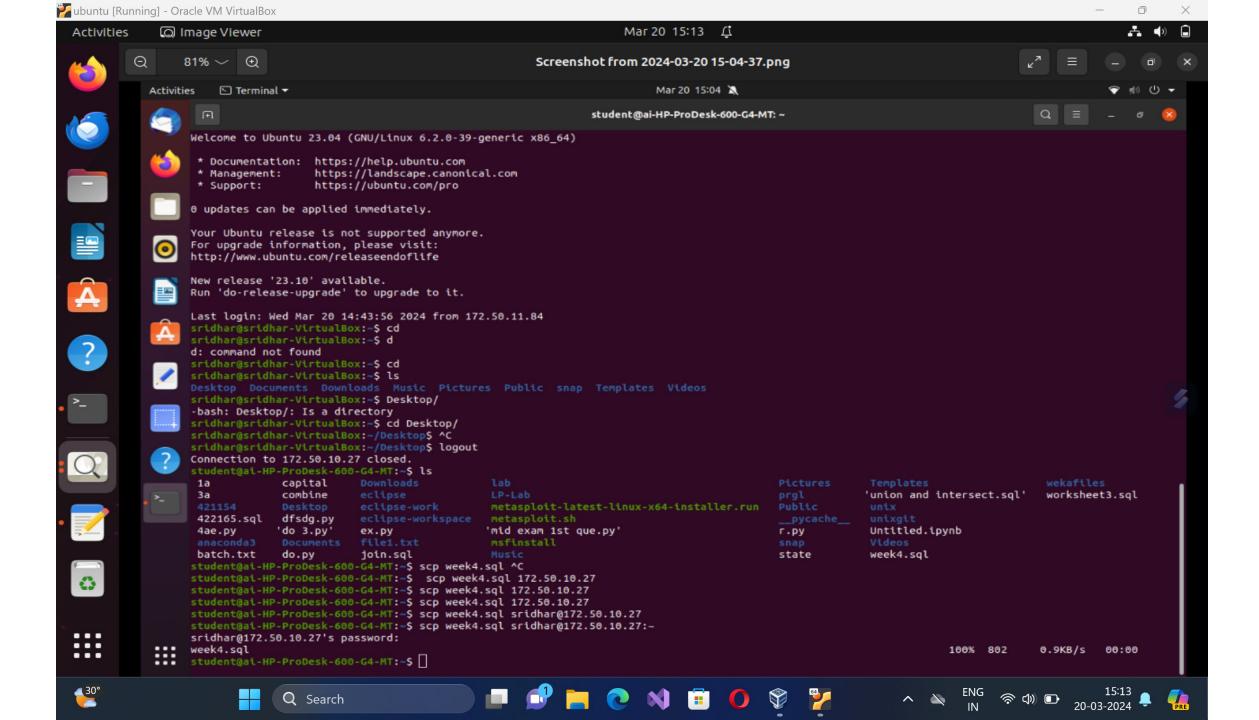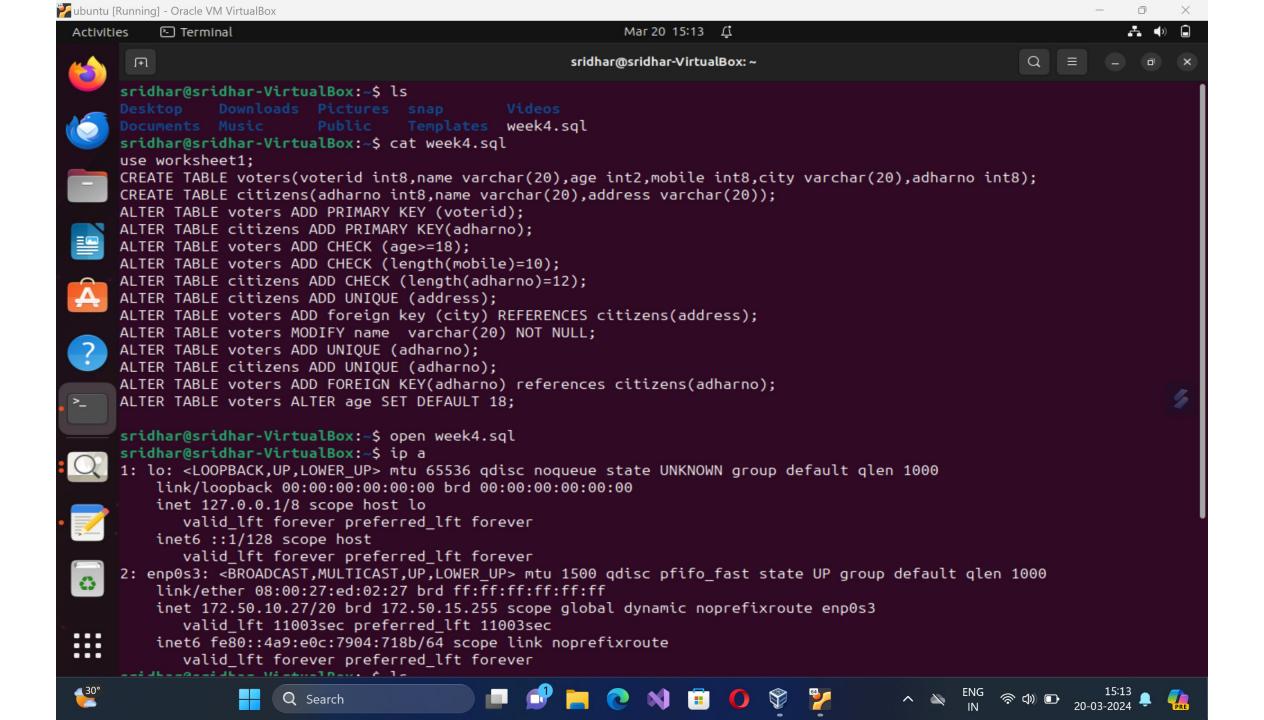# UNIX LAB

Week-11

Name:K.sridhar Varma

Roll no:422165

File
Transfer

Activities   Image Viewer   Mar 20 15:13

81%   Screenshot from 2024-03-20 15-04-37.png

Activities   Terminal   Mar 20 15:04

student@ai-HP-ProDesk-600-G4-MT: ~

```
Welcome to Ubuntu 23.04 (GNU/Linux 6.2.0-39-generic x86_64)

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

0 updates can be applied immediately.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releaseendoflife

New release '23.10' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Wed Mar 20 14:43:56 2024 from 172.50.11.84
sridhar@sridhar-VirtualBox:~$ cd
sridhar@sridhar-VirtualBox:~$ d
d: command not found
sridhar@sridhar-VirtualBox:~$ cd
sridhar@sridhar-VirtualBox:~$ ls
Desktop   Documents   Downloads   Music   Pictures   Public   snap   Templates   Videos
sridhar@sridhar-VirtualBox:~$ Desktop/
-bash: Desktop/: Is a directory
sridhar@sridhar-VirtualBox:~$ cd Desktop/
sridhar@sridhar-VirtualBox:~/Desktop$ ^C
sridhar@sridhar-VirtualBox:~/Desktop$ logout
Connection to 172.50.10.27 closed.
student@ai-HP-ProDesk-600-G4-MT:~$ ls
1a            capital     Downloads           lab                                        Pictures       Templates                     wekafiles
3a            combine     eclipse             LP-Lab                                     prgl           'union and intersect.sql'     worksheet3.sql
421154        Desktop     eclipse-work        metasploit-latest-linux-x64-installer.run  Public         unix
422165.sql    dfsdg.py    eclipse-workspace   metasploit.sh                              __pycache__    unixgit
4ae.py        'do 3.py'   ex.py               'mid exam 1st que.py'                       r.py           Untitled.ipynb
anaconda3     Documents   file1.txt           msfinstall                                 snap           Videos
batch.txt     do.py       join.sql            Music                                      state          week4.sql
student@ai-HP-ProDesk-600-G4-MT:~$ scp week4.sql ^C
student@ai-HP-ProDesk-600-G4-MT:~$  scp week4.sql 172.50.10.27
student@ai-HP-ProDesk-600-G4-MT:~$ scp week4.sql 172.50.10.27
student@ai-HP-ProDesk-600-G4-MT:~$ scp week4.sql 172.50.10.27
student@ai-HP-ProDesk-600-G4-MT:~$ scp week4.sql sridhar@172.50.10.27
student@ai-HP-ProDesk-600-G4-MT:~$ scp week4.sql sridhar@172.50.10.27:~
sridhar@172.50.10.27's password:
week4.sql                                                        100%   802     0.9KB/s   00:00
student@ai-HP-ProDesk-600-G4-MT:~$
```

ENG
IN

15:13
20-03-2024

```
sridhar@sridhar-VirtualBox:~$ ls
Desktop     Downloads    Pictures    snap        Videos
Documents   Music        Public      Templates   week4.sql
sridhar@sridhar-VirtualBox:~$ cat week4.sql
use worksheet1;
CREATE TABLE voters(voterid int8,name varchar(20),age int2,mobile int8,city varchar(20),adharno int8);
CREATE TABLE citizens(adharno int8,name varchar(20),address varchar(20));
ALTER TABLE voters ADD PRIMARY KEY (voterid);
ALTER TABLE citizens ADD PRIMARY KEY(adharno);
ALTER TABLE voters ADD CHECK (age>=18);
ALTER TABLE voters ADD CHECK (length(mobile)=10);
ALTER TABLE citizens ADD CHECK (length(adharno)=12);
ALTER TABLE citizens ADD UNIQUE (address);
ALTER TABLE voters ADD foreign key (city) REFERENCES citizens(address);
ALTER TABLE voters MODIFY name  varchar(20) NOT NULL;
ALTER TABLE voters ADD UNIQUE (adharno);
ALTER TABLE citizens ADD UNIQUE (adharno);
ALTER TABLE voters ADD FOREIGN KEY(adharno) references citizens(adharno);
ALTER TABLE voters ALTER age SET DEFAULT 18;

sridhar@sridhar-VirtualBox:~$ open week4.sql
sridhar@sridhar-VirtualBox:~$ 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: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 08:00:27:ed:02:27 brd ff:ff:ff:ff:ff:ff
    inet 172.50.10.27/20 brd 172.50.15.255 scope global dynamic noprefixroute enp0s3
       valid_lft 11003sec preferred_lft 11003sec
    inet6 fe80::4a9:e0c:7904:718b/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
```

Device -1

Rules updated (v6)
sridhar@sridhar-VirtualBox:~$ sudo ufw reload
Firewall not enabled (skipping reload)
sridhar@sridhar-VirtualBox:~$ sudo ufw allow 22/tcp
Skipping adding existing rule
Skipping adding existing rule (v6)
sridhar@sridhar-VirtualBox:~$ ssh student@172.50.11.69
The authenticity of host '172.50.11.69 (172.50.11.69)' can't be established.
ED25519 key fingerprint is SHA256:UE03EP20xdvRJUtEwmkxXIM7eFOLB6x5vQK2ok5dXs8.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.50.11.69' (ED25519) to the list of known hosts.
student@172.50.11.69's password:
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.13.0-40-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.

564 updates can be applied immediately.
453 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.

2 updates could not be installed automatically. For more details,
see /var/log/unattended-upgrades/unattended-upgrades.log
Your Hardware Enablement Stack (HWE) is supported until April 2025.

Activities   Terminal   Mar 20 15:44

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

Run 'do-release-upgrade' to upgrade to it.

2 updates could not be installed automatically. For more details,
see /var/log/unattended-upgrades/unattended-upgrades.log
Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: Wed Mar 20 15:31:05 2024 from 127.0.0.1
student@ai-HP-ProDesk-600-G4-MT:~$ ls
 172.50.10.27   'do 3.py'   metasploit-latest-linux-x64-installer.run   state
 1a   Documents   metasploit.sh   Templates
 3a   do.py   'mid exam 1st que.py'   'union and intersect.sql'
 421154   Downloads   msfinstall   unix
 422165.sql   eclipse   Music   unixgit
 4ae.py   eclipse-work   Pictures   Untitled.ipynb
 anaconda3   eclipse-workspace   prgl   Videos
 batch.txt   ex.py   Public   week4.sql
 capital   file1.txt   __pycache__   wekafiles
 combine   join.sql   r.py   worksheet3.sql
 Desktop   lab   snap
 dfsdg.py   LP-Lab   sridhar@172.50.10.27
student@ai-HP-ProDesk-600-G4-MT:~$ Desktop/
-bash: Desktop/: Is a directory
student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ ls
 1.png   422165   622128   622222   'bst 3.py'   crc.py   scripts   tree.py
 421110   422213   622163   'bst 2.py' 'bs t.py'   double.py   test
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ cd 422165
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422165$ ls
lab1.sql LAB2 LAB4 student.sql teacher.sql WEEK3Q1.sql
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422165$ cd
student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ ls
 1.png   422165   622128   622222   'bst 3.py'   crc.py   scripts   tree.py
 421110   422213   622163   'bst 2.py' 'bs t.py'   double.py   test

```
student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ ls
 1.png      422165    622128    622222     'bst 3.py'    crc.py       scripts    tree.py
 421110    422213    622163   'bst 2.py'  'bs t.py'     double.py    test
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ cd 422165
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422165$ ls
lab1.sql  LAB2  LAB4  student.sql  teacher.sql  WEEK3Q1.sql
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422165$ cd
student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ ls
 1.png      422165    622128    622222     'bst 3.py'    crc.py       scripts    tree.py
 421110    422213    622163   'bst 2.py'  'bs t.py'     double.py    test
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ python crc.py

Command 'python' not found, did you mean:

  command 'python3' from deb python3
  command 'python' from deb python-is-python3

student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ python3 crc.py
message 10010001101001
Remainder :  111
Encoded Data 10010001101001111


msg recived 10010001101001111
and remainder is  000
so correct msg recived
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ python3 tree.py
inorder transvel
4->2->5->1->3->preorder transvel
1 ->2 ->4 ->5 ->3 ->postorder transvel
4->5->2->3->1->student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ python3 double.py
Doubly Linked List (Forward):
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ cd 422165
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422165$ ls
lab1.sql  LAB2  LAB4  student.sql  teacher.sql  WEEK3Q1.sql
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422165$ cd
student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ ls
 1.png     422165    622128    622222    'bst 3.py'   crc.py      scripts   tree.py
 421110    422213    622163   'bst 2.py' 'bs t.py'    double.py   test
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ python crc.py

Command 'python' not found, did you mean:

  command 'python3' from deb python3
  command 'python' from deb python-is-python3

student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ python3 crc.py
message 10010001101001
Remainder :  111
Encoded Data 10010001101001111


msg recived 10010001101001111
and remainder is  000
so correct msg recived
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ python3 tree.py
inorder transvel
4->2->5->1->3->preorder transvel
1 ->2 ->4 ->5 ->3 ->postorder transvel
4->5->2->3->1->student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ python3 double.py
Doubly Linked List (Forward):
1 <-> 2 <-> 10 <-> 3 <-> 4 <-> 5 <-> None

Doubly Linked List (Backward):
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$
```

Device-2

Activities   Terminal   Mar 20 16:10

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422134

```
sridhar@sridhar-VirtualBox:~$ ssh student@172.50.11.84
student@172.50.11.84's password:
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.8.0-59-generic x86_64)

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

559 updates can be applied immediately.
461 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 16:05:19 2024 from 172.50.10.27
student@ai-HP-ProDesk-600-G4-MT:~$ ls
1.py                fib.a68g                nqueen.c
411931              file1.txt               number
420153              file2.txt               Pictures
422163              file3.txt               Public
9212119             file4.txt               Q1.c
alphabet.a68g       Firefox_wallpaper.png   question1.py
anaconda3           hai.dir                 randomimage
a.out               heapify.py              snap
a.sml               infix.c                 state
bfs.py              lowercase.hs            Templates
bit_stuffing.class  LP                      test1.a68
bit_stuffing.java   MandC.py                test2.a68
capital             MissionariesandCannibals.py  test3.a68
counter             mst.cpp                 test4.a68
                    Music                   test5.a68
                    myproject               test6.a68
```

Show Apps

Activities   Terminal   Mar 20 16:10

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422134

```
anaconda3              hai.dir                      randomimage
a.out                  heapify.py                   snap
a.sml                  infix.c                      state
bfs.py                 lowercase.hs                 Templates
bit_stuffing.class     LP                           test1.a68
bit_stuffing.java      MandC.py                     test2.a68
capital                MissionariesandCannibals.py  test3.a68
counter                mst.cpp                      test4.a68
Desktop                Music                        test5.a68
dhillu                 myproject                    test6.a68
direct                 myProject                    test.a68
Documents              NETWORKPROGRAMMINGLAB        ttt.ipynb
Downloads              new                          unix
eclipse                new2.py                      Videos
eclipse-workspace      new.py                       'webprogramming lab 620114'
factor.sml             'np lab'                     wekafiles
student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ ls
 422134    ARP_RARP.class
 422163    ARP_RARP.java
 422179   'Kousik Gate class'
 422223    lab5.pdf
 622101    NetworkNode.class
 622160    number-plate-recognition-using-tensorflow-featured-image.jpeg
 622252    Packet.class
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ cd 422134/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ ls
 a.out      fact3.c    factorial.sh    fibonacci.sh.sh    squares.sh
 fact2.c    fact.c     fibonacci.sh    second.sh          'Untitled Document 1'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ gcc fact3.c
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ ./a.out
Segmentation fault (core dumped)
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ bach ^C
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$
```

```
sridhar@sridhar-VirtualBox:~$ ssh student@172.50.11.84
student@172.50.11.84's password:
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.8.0-59-generic x86_64)

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

559 updates can be applied immediately.
461 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 16:08:45 2024 from 172.50.10.27
student@ai-HP-ProDesk-600-G4-MT:~$ cd Desktop/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ cd 422134/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ ls
 a.out      fact3.c   factorial.sh    fibonacci.sh.sh   squares.sh
 fact2.c    fact.c    fibonacci.sh    second.sh         'Untitled Document 1'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ chmod +x fibonnacci.sh
chmod: cannot access 'fibonnacci.sh': No such file or directory
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ chmod +x fibonacci.sh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ bash fibonacci.sh
enter the value of n:5
the fibonacci series is:
01123
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ chmod +x squares.sh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$ bash squares.sh
enter the number:7
the sum of squares of 7 is: 140
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422134$
```