CSE 20

Assignment 1

Command lines

```
ciit@BT-21052503:/mnt/c/WINDOWS/system32$ cd ~/ciit@BT-21052503:~$ mkdir directory
 ciit@BT-21052503:~$ mkdir firstfile
 ciit@BT-21052503:~$ mkdir secondfile
 kiit@BT-21052503:~$ dir
                   Downloads Pictures
                                                            Templates directory
                                                                                                            file1.txt.save.1 thinclient_drives
Desktop
                   Firstfile Public
                                                            Thirdfile file1.txt
                                                                                                             firstfile
Documents Music
                                      Secondfile Videos
                                                                                file1.txt.save secondfile
 ciit@BT-21052503:~$ ls
                   Downloads Pictures
Firstfile Public
                                                                                                                                            thinclient_drives
                                                            Templates directory
                                                                                                            file1.txt.save.1
                                                            Thirdfile file1.txt
                                                                                                                                            ubuntu
                                                                                                            firstfile
                                                                                file1.txt.save secondfile
 ciit@BT-21052503:~$ ls -al
total 196
drwxr-xr-x 26 kiit kiit 4096 Jan 12 13:24 .
drwxr-xr-x 3 root root
                                            4096 Nov 23 2021
                                                                  2021 .ICEauthority
 rw----- 1 kiit kiit
                                              358 Nov 23
 -rw----- 1 kiit kiit
-rw----- 1 kiit kiit
-rw-r--r-- 1 kiit kiit
-rw-r--r-- 1 kiit kiit
                                               61 Nov 23 2021 .Xauthority
                                              422 Jan 12 13:23 .bash_history
                                              220 Nov 23 2021 .bash_logout
                                            3771 Nov 23
                                                                   2021 .bashrc
drwxr-xr-x 10 kiit kiit 4096 Nov 23 2021 .cache

      drwxr-xr-x
      10 kiit kiit
      4096 Nov
      23
      2021 .cache

      drwx-----
      9 kiit kiit
      4096 Nov
      23
      2021 .dous

      drwx-----
      3 kiit kiit
      4096 Nov
      23
      2021 .gnupg

      drwx------
      3 kiit kiit
      4096 Nov
      23
      2021 .landsce

      drwx------
      3 kiit kiit
      4096 Nov
      23
      2021 .landsce

      drwx------
      1 kiit kiit
      0 Jan
      12
      12:26 .motd_sk

      drwx------
      4 kiit kiit
      4096 Nov
      23
      2021 .mozille

      -rw-r-----
      1 kiit kiit
      807 Nov
      23
      2021 .profile

      -rw-r-----
      1 kiit kiit
      37746 Nov
      23
      2021 .xorgxrc

      -rw-r-----
      1 kiit kiit
      14 Nov
      23
      2021 .xsessic

      -rw-------
      1 kiit kiit
      11633 Nov
      23
      2021 .xsessic

                                                                  2021 .landscape
                                               0 Jan 12 12:26 .motd_shown
                                            4096 Nov 23 2021 .mozilla
                                                                   2021 .profile
                                                 0 Nov 23 2021 .sudo_as_admin_successful
                                                                   2021 .xorgxrdp.10.log
                                                                   2021 .xsession
drwxr-xr-x 2 kiit kiit 4096 Jan 12 13:21 Firstfile
drwxr-xr-x 2 kiit kiit 4096 Nov 23 2021 Music
```

```
🉏 kiit@BT-21052503: ∼/Firstfile/Secondfile
drwxr-xr-x 2 kiit kiit 4096 Nov 23 2021 Music
drwxr-xr-x 2 kiit kiit 4096 Nov 23 2021 Pictures
drwxr-xr-x 2 kiit kiit 4096 Nov 23 2021 Pictures
drwxr-xr-x 2 kiit kiit 4096 Nov 23 2021 Public
drwxr-xr-x 2 kiit kiit 4096 Jan 12 13:21 Secondfile
drwxr-xr-x 2 kiit kiit 4096 Nov 23 2021 Templates
drwxr-xr-x 2 kiit kiit 4096 Jan 12 13:21 Thirdfile
drwxr-xr-x 2 kiit kiit 4096 Nov 23 2021 Videos
drwxr-xr-x 2 kiit kiit 4096 Jan 12 13:24 directory
-rw-r--r- 1 kiit kiit 75 Jan 12 13:10 file1.txt
-rw-r--r- 1 kiit kiit 76 Jan 12 13:13 file1.txt.save
-rw-r--r- 1 kiit kiit 76 Jan 12 13:13 file1.txt.save.1
drwxr-xr-x 2 kiit kiit 4096 Jan 12 13:24 firstfile
drwxr-xr-x 2 kiit kiit 4096 Jan 12 13:24 secondfile
drwxr-xr-x 2 kiit kiit 4096 Jan 12 13:24 thinclient_drives
drwxr-xr-x 4 kiit kiit 4096 Jan 12 12:58 ubuntu
kiit@BT-21052503:~$ ls -R
.:
                              Downloads Pictures
Firstfile Public
                                                                                                                   Templates directory Thirdfile file1.txt
                                                                                                                                                                                                               file1.txt.save.1 thinclient_drives
                                                                                                                                                                                                              firstfile
                                                                                                                                                                                                                                                                            ubuntu
                                                                    Secondfile Videos
                                                                                                                                                       file1.txt.save secondfile
    ./123y:
   ./Desktop:
    ./Documents:
    ./Downloads:
  ./Firstfile:
   ./Music:
    ./Pictures:
    ./Public:
   ./Secondfile:
      /Templates
```

```
🕽 kiit@BT-21052503: ~/Firstfile/Secondfile
 /Thirdfile:
 /Videos:
 /directory:
 /firstfile:
 /secondfile:
./thinclient_drives:
 /ubuntu/firstfile:
 /ubuntu/secondfile:
 iit@BT-21052503:~$ ls -a
               .bashrc
                                                         .xsession
                            .motd shown
                                                         .xsession-errors Music
 ICEauthority .config
                                                                                                            thinclient_drives
                                                                            Public file1.txt
Secondfile file1.txt.save
Templates file1.txt.save.1
                            .profile
.Xauthority
.bash_history .gnupg .sudo_as_admin_successful .bash_logout .landscape .xorgxrdp.10.log <a href="mailto:kit@BT-21052503:~firstfile">kit@BT-21052503:~firstfile</a> cat new.txt
 cat: new.txt: No such file or directory
 ciit@BT-21052503:~/firstfile$ cat> new.txt
This is a new file.
Hello world.
This is third line.
This OS is kinda cool.
I miss my old laptop
kiit@BT-21052503:~/firstfile$ cat
firstfile
firstfile
 iitigBT-21052503:~/firstfile$ echo > new.txt
(iit@BT-21052503:~/firstfile$ echo "this is using echo cmd" > new.txt
 kiit@BT-21052503:~/firstfile$ echo "this is using echo cmd" > new.txt
 ciit@BT-21052503:~/firstfile$ vi new.txt
 ciit@BT-21052503:~/firstfile$ vi new.txt
 dit@BT-21052503:~/firstfile$ echo "This is overwriting in a file" >new.txt
 ciit@BT-21052503:~/firstfile$ cat new.txt > output.txt
kiit@BT-21052503:~/firstfile$ cat output.txt
This is overwriting in a file
 kiit@BT-21052503:~/firstfile$ rm output.txt
 ciit@BT-21052503:~/firstfile$ ls
new.txt
kiit@BT-21052503:~/firstfile$ cd ~
kiit@BT-21052503:~$ dir
              Downloads Pictures Templates
Firstfile Public Thirdfile
Music Secondfile Videos
                                             Templates directory Thirdfile file1.txt
123y
                                                                                  file1.txt.save.1 thinclient_drives
Desktop
                                                                                  firstfile
                                                                                                          ubuntu
Documents Music
                                                             file1.txt.save secondfile
kiit@BT-21052503:~$ rmdir 123y
kiit@BT-21052503:~$ dir
Desktop Firstfile Public Thirdfile file1.txt firstfile
Documents Music Secondfile Videos file1.txt.save secondfile
Downloads Pictures Templates directory file1.txt.save.1 thinclient_drives
                                                                                                               ubuntu
kiit@BT-21052503:~$ cp new.txt secondfile
cp: cannot stat 'new.txt': No such file or directory
 .
kiit@BT-21052503:~$ cp file1.txt ubuntu
kiit@BT-21052503:~$ dir
Desktop Firstfile Public
                                             Thirdfile file1.txt
                                                                                     firstfile
                                                                                                               ubuntu
Documents Music
                          Secondfile Videos
                                                             file1.txt.save
                                                                                    secondfile
kiit@BT-21052503:~/Firstfile/Secondfile$
```

dit@BT-21052503:~\$ cp firstfile -r Firstfile

```
kiit@BT-21052503:~$ cp firstfile -r Firstfile
kiit@BT-21052503:~$ cd Firstfile kiit@BT-21052503:~$ cd Firstfile kiit@BT-21052503:~$ firstfile kiit@BT-21052503:~$ file$ cd/
-bash: cd/: No such file or directory
kiit@BT-21052503:~$ firstfile$ cd /
kiit@BT-21052503:~$ cd Thirdfile or directory
kiit@BT-21052503:/$ cd Thirdfile or directory
kiit@BT-21052503:/$ cd ~
kiit@BT-21052503:~$ cd Thirdfile kiit@BT-21052503:~$ mv Thirdfile Scondfile
kiit@BT-21052503:~$ mv Thirdfile Secondfile
kiit@BT-21052503:~$ mv Secondfile Firstfile
kiit@BT-21052503:~$ ls
Desktop Downloads Music Public Videos file1.txt file1.txt.save.1 secondfile
kiit@BT-21052503:~$ cd Firstfile
kiit@BT-21052503:~$ firstfile Pictures Templates directory file1.txt.save firstfile
kiit@BT-21052503:~$ firstfile$ ls
Secondfile firstfile
kiit@BT-21052503:~$ firstfile$ cd Secondfile
kiit@BT-21052503:~$ firstfile$ cd Secondfile$
kiit@BT-21052503:~$ firstfile$ cd Secondfile$
kiit@BT-21052503:~$ firstfile$ cd Secondfile$
kiit@BT-21052503:~$ firstfile$ cd Secondfile$
```

```
ciit@BT-21052503:~/Firstfile/Secondfile$ uname
kiit@BT-21052503:~/Firstfile/Secondfile$ uname -a
Linux BT-21052503 5.10.102.1-microsoft-standard-WSL2 #1 SMP Wed Mar 2 00:30:59 UTC 2022 x86_64 x86_64 x86_64 GNU/Linu
xiit@BT-21052503:~/Firstfile/Secondfile$ history
   1 rm ~/.bash_history
   2 cat > first
3 dir /p
    7 mkdir ~
    8 mkdir ubuntu
   9 cd ubuntu
   10 pwd
  12 ls
  13 mkdir firstfile
      mkdir secondfile
  14
      dir
  15
  16 ls
17 ls -al
  22 cd /
  23 cd ~
      touch file1.txt
  24
  25 ls -al
26 ls
  27 stat file1.txt
28 cat file1.txt
  29 nano file1.txt
      mkdir ubuntu
   30
  31 mkdir oslab
```

```
29 nano file1.txt
30 mkdir ubuntu
31 mkdir oslab
32 pws
33 pwd
34 cd kiit
35 cd 21052503
36 ls
37
   pwd
38 mkdir 123t
39
   cd ..
40 mkdir 123t
41 cd ~
42 mkdir 123y
43 mkdir Firstfile
44 mkdir Secondfile
45 mkdir Thirdfile
46 ls
47 ls -a
48 ls -al
49 ls -R
50
   pwd
51 dir
52 cd ~/
53 mkdir directory
54 mkdir firstfile
55 mkdir secondfile
56 dir
57 ls
58 ls -al
59 ls -R
60 ls -a
   cd firstfile
61
62
   cat new.txt
63 cat> new.txt
64 cat
65 echo > new.txt
66 echo "this is using echo cmd" > new.txt
67 vi new.txt
68 echo "This is overwriting in a file" >new.txt
```

```
69 cat new.txt > output.txt
 70 cat output.txt
 71 rm output.txt
 72 ls
 73 cd ~
 74 dir
 75 rmdir 123y
 76 dir
 77 cp new.txt secondfile
 78 cp file1.txt ubuntu
 79 dir
 80 cp firstfile -r Firstfile
 81 cd Firstfile
 82 ls
 83 cd/
 84 cd /
 85 cd Thirdfile
 86 cd ~
 87 cd Thirdfile
 88 cd ~
 89 mv Thirdfile Secondfile
     mv Secondfile Firstfile
 90
 91 ls
 92 cd Firstfile
 93 ls
 94 cd Secondfile
 95
     ls
 96 uname
 97 uname -a
 98 history
iit@BT-21052503:~/Firstfile/Secondfile$
```

```
kiit@BT-21052503:~$ cal
    January 2023
Su Mo Tu We Th Fr Sa
1 2 3 4 5 6 7
8 9 10 11 <mark>12</mark> 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31
kiit@BT-21052503:~$ chkconfig --list
chkconfig: command not found
kiit@BT-21052503:~$ cvs checkout file1.txt
Command 'cvs' not found, but can be installed with:
sudo apt install cvs
kiit@BT-21052503:~$ sudo apt install cvs
[sudo] password for kiit:
Sorry, try again.
[sudo] password for kiit:
Sorry, try again.
[sudo] password for kiit:
sudo: 3 incorrect password attempts
kiit@BT-21052503:~$
kiit@BT-21052503:~$
kiit@BT-21052503:~$
kiit@BT-21052503:~$ dstat --list
Command 'dstat' not found, but can be installed with:
sudo apt install dstat # version 0.7.4-6, or
```

```
ciit@BT-21052503:/mnt/c/WINDOWS/system32$ cd ~
 iit@BT-21052503:~$ cd Firstfile
 iit@BT-21052503:~/Firstfile$ find Seconfile
find: 'Seconfile': No such file or directory
dit@BT-21052503:~/Firstfile$ find Secondfile
Secondfile
Secondfile/Thirdfile
ciit@BT-21052503:~/Firstfile$ locate Thirdfile
Command 'locate' not found, but can be installed with:
sudo apt install mlocate
kiit@BT-21052503:~/Firstfile$ cd ~
ciit@BT-21052503:~$ ls
Desktop Downloads Music Public Videos file1.txt file1.txt.s
Documents Firstfile Pictures Templates directory file1.txt.save firstfile
                                                                        file1.txt.save.1 secondfile
ciit@BT-21052503:~$ cd firstfile
ciit@BT-21052503:~/firstfile$ ls
new.txt
(iit@BT-21052503:~/firstfile$ cat new.txt | grep 20
(iit@BT-21052503:~/firstfile$ cat new.txt | grep 1
 iit@BT-21052503:~/firstfile$ man cat
 iit@BT-21052503:~/firstfile$ ps
 PID TTY TIME CMD
9 pts/0 00:00:00 bash
55 pts/0 00:00:00 ps
iit@BT-21052503:~/firstfile$ cd ~
 iit@BT-21052503:~$ gzip file1.txt
 iit@BT-21052503:~$ ls
Desktop Downloads Music Public Videos file1.txt.gz file1.txt.sococuments Firstfile Pictures Templates directory file1.txt.save firstfile
                                                       file1.txt.gz file1.txt.save.1 secondfile
 iit@BT-21052503:~$ gunzip file1.txt
ciit@BT-21052503:~$ ls
Desktop Downloads Music Public Videos file1.txt file1.txt.s
Documents Firstfile Pictures Templates directory file1.txt.save firstfile
                                                                        file1.txt.save.1 secondfile
                                                                                          thinclient_drives
ciit@BT-21052503:~$ host
Usage: host [-aCdilrTvVw] [-c class] [-N ndots] [-t type] [-W time]
[-R number] [-m flag] hostname [server]
-a is equivalent to -v -t ANY
         -a is equivalent to -v -t ANY
         -A is like -a but omits RRSIG, NSEC, NSEC3
         -c specifies query class for non-IN data
         -C compares SOA records on authoritative nameservers
         -d is equivalent to -v
         -1 lists all hosts in a domain, using AXFR
         -m set memory debugging flag (trace|record|usage)
         -N changes the number of dots allowed before root lookup is done
         -r disables recursive processing
         -R specifies number of retries for UDP packets
         -s a SERVFAIL response should stop query
         -t specifies the query type
         -T enables TCP/IP mode
         -U enables UDP mode
         -v enables verbose output
         -V print version number and exit
         -w specifies to wait forever for a reply
         -W specifies how long to wait for a reply
         -4 use IPv4 query transport only
         -6 use IPv6 query transport only
ciit@BT-21052503:~$ hostname
BT-21052503
kiit@BT-21052503:~$ ping google.com
PING google.com (142.250.182.14) 56(84) bytes of data.
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=1 ttl=115 time=48.2 ms
```

64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=2 ttl=115 time=51.0 ms

```
ciit@BT-21052503:~$ lsblk
NAME MAJ:MIN RM
                 SIZE RO TYPE MOUNTPOINT
sda
      8:0 0
                 256G 0 disk
sdb
      8:16
            0 339.8M 1 disk
sdc
      8:32 0 256G 0 disk /
kiit@BT-21052503:~$ fdisk
fdisk: bad usage
Try 'fdisk --help' for more information.
ciit@BT-21052503:~$ lshw
WARNING: you should run this program as super-user.
bt-21052503
   description: Computer
   width: 64 bits
   capabilities: smp vsyscall32
  *-core
       description: Motherboard
      physical id: 0
     *-memory
          description: System memory
          physical id: 1
          size: 7936MiB
     *-cpu
          product: AMD Ryzen 7 5700U with Radeon Graphics
          vendor: Advanced Micro Devices [AMD]
          physical id: 2
          bus info: cpu@0
         width: 64 bits
```

```
iit@BT-21052503:~$ 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: bond0: <BROADCAST,MULTICAST,MASTER> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether e6:e6:90:52:70:a1 brd ff:ff:ff:ff:ff:ff
3: dummy0: <BROADCAST,NOARP> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 32:75:d4:58:f5:e2 brd ff:ff:ff:ff:ff
4: tunl0@NONE: <NOARP> mtu 1480 qdisc noop state DOWN group default qlen 1000
   link/ipip 0.0.0.0 brd 0.0.0.0
5: sit@@NONE: <NOARP> mtu 1480 qdisc noop state DOWN group default qlen 1000
    link/sit 0.0.0.0 brd 0.0.0.0
6: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000
    link/ether 00:15:5d:de:1d:52 brd ff:ff:ff:ff:ff
    inet 172.17.248.178/20 brd 172.17.255.255 scope global eth0
       valid_lft forever preferred_lft forever
    inet6 fe80::215:5dff:fede:1d52/64 scope link
      valid lft forever preferred lft forever
```

```
kiit@BT-21052503:~$ date
Thu Jan 12 21:06:48 IST 2023
 ciit@BT-21052503:~$ time
 real
        0m0.000s
 user
        0m0.000s
        0m0.000s
sys
 kiit@BT-21052503:~$ TZ=GMT date
Thu Jan 12 15:37:32 GMT 2023
 ciit@BT-21052503:~$ TZ=IST
 kiit@BT-21052503:~$ TZ=IST date
 Thu Jan 12 15:38:06 IST 2023
 ciit@BT-21052503:~$ -d "1997-09-01"
 -d: command not found
 kiit@BT-21052503:~$ df
 Filesvstem
              1K-blocks
                             Used Available Use% Mounted on
/dev/sdc
               263174212 2556240 247179816
                                               2% /
                 3904148
                                72
                                     3904076
                                               1% /mnt/wslg
 none
                 3904148
                                     3904144
                                               1% /mnt/wsl
 none
                                4
               498799612 273674556 225125056 55% /init
 tools
none
                 3901720
                           0 3901720 0% /dev
                 3904148
                                               0% /run
none
                                0 3904148
                 3904148
                                0 3904148
                                               0% /run/lock
none
                3904148
                                0 3904148
                                               0% /run/shm
none
                                0 3904148
                                               0% /run/user
                3904148
none
                 3904148
                                0
                                     3904148
                                               0% /sys/fs/cgroup
 tmpfs
 drivers
               498799612 273674556 225125056 55% /usr/lib/wsl/drivers
lib
               498799612 273674556 225125056 55% /usr/lib/wsl/lib
                 3904148
                               76
                                    3904072 1% /mnt/wslg/versions.txt
none
none
                 3904148
                                76
                                     3904072 1% /mnt/wslg/doc
               498799612 273674556 225125056 55% /mnt/c
drvfs
 kiit@BT-21052503:~$ free
                           used
                                                 shared buff/cache
                                                                      available
              total
                                       free
            7808296
                         316364
                                    7346428
                                                    324
                                                             145504
                                                                        7287932
Mem:
            2097152
                              0
                                    2097152
Swap:
ciit@BT-21052503:~$ free
                                     free
                                               shared buff/cache
             total
                          used
                                                                   available
           7808296
                        316364
                                                  324
                                                           145504
                                                                      7287932
                                   7346428
Mem:
           2097152
                                   2097152
Swap:
                             0
kiit@BT-21052503:~$ uptime
21:11:15 up 2:42, 0 users, load average: 0.00, 0.00, 0.00
kiit@BT-21052503:~$ sudo i
[sudo] password for kiit:
Sorry, try again.
[sudo] password for kiit:
sudo: 1 incorrect password attempt
kiit@BT-21052503:~$ help
GNU bash, version 5.0.17(1)-release (x86_64-pc-linux-gnu)
These shell commands are defined internally. Type `help' to see this list.
Type `help name' to find out more about the function `name'.
Use `info bash' to find out more about the shell in general.
Use `man -k' or `info' to find out more about commands not in this list.
```