

UNIX LAB BOOK SOLUTIONS:

1.1

```
atplab3_trg24@NDAUNIX:~  
login as: atplab3_trg24  
atplab3_trg24@10.51.103.212's password:  
Last login: Tue Sep  3 14:09:09 2019 from din80000650.corp.capgemini.com  
[atplab3_trg24@NDAUNIX ~]$
```

1.2

```
atplab3_trg24@NDAUNIX:~  
login as: atplab3_trg24  
atplab3_trg24@10.51.103.212's password:  
Last login: Tue Sep  3 14:28:59 2019 from din80000650.corp.capgemini.com  
[atplab3_trg24@NDAUNIX ~]$ exit
```

2.1

```
atplab3_trg24@NDAUNIX:~  
login as: atplab3_trg24  
atplab3_trg24@10.51.103.212's password:  
Last login: Tue Sep  3 14:31:58 2019 from din80000650.corp.capgemini.com  
[atplab3_trg24@NDAUNIX ~]$ pwd  
/home/atplab3_trg24  
[atplab3_trg24@NDAUNIX ~]$
```

2.2

```
atplab3_trg24@NDAUNIX:~/deepu
[atplab3_trg24@NDAUNIX ~]$ mkdir deepu
[atplab3_trg24@NDAUNIX ~]$ cd deepu
[atplab3_trg24@NDAUNIX deepu]$ pwd
/home/atplab3_trg24/deepu
[atplab3_trg24@NDAUNIX deepu]$
```


2.3

```
atplab3_trg24@NDAUNIX:~/deepu
[atplab3_trg24@NDAUNIX deepu]$ id -un
atplab3_trg24
[atplab3_trg24@NDAUNIX deepu]$
```

2.4


```
atplab3_trg24@NDAUNIX:~/deepu
[atplab3_trg24@NDAUNIX deepu]$ cat>fruits.txt
apple
banana
grapes
[atplab3_trg24@NDAUNIX deepu]$ ls
fruits.txt
[atplab3_trg24@NDAUNIX deepu]$ cat>animals.txt
Dog
cat
fox
[atplab3_trg24@NDAUNIX deepu]$ cat>things.txt
pen
pencil
pendrive
pot
[atplab3_trg24@NDAUNIX deepu]$ ls
animals.txt  fruits.txt  things.txt
[atplab3_trg24@NDAUNIX deepu]$ ls -a
.  ..  animals.txt  fruits.txt  things.txt
[atplab3_trg24@NDAUNIX deepu]$
```

2.5

 atplab3_trg24@NDAUNIX:~/deepu

```
[atplab3_trg24@NDAUNIX deepu]$ ls -la
total 20
drwxrwxr-x 2 atplab3_trg24 atplab3_trg24 4096 Sep  3 14:53 .
drwxrw---- 5 atplab3_trg24 atplab3_trg24 4096 Sep  3 14:41 ..
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24  12 Sep  3 14:53 animals.txt
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24  20 Sep  3 14:52 fruits.txt
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24  25 Sep  3 14:54 things.txt
[atplab3_trg24@NDAUNIX deepu]$
```

2.6

 atplab3_trg24@NDAUNIX:~/deepu

```
[atplab3_trg24@NDAUNIX deepu]$ ls -l
total 12
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24 12 Sep  3 14:53 animals.txt
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24 20 Sep  3 14:52 fruits.txt
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24 25 Sep  3 14:54 things.txt
[atplab3_trg24@NDAUNIX deepu]$
```

2.7

```
atplab3_trg24@NDAUNIX:~/deepu
[atplab3_trg24@NDAUNIX deepu]$ cat > chap1.txt
1
2
3
4
5
[atplab3_trg24@NDAUNIX deepu]$ cat > chap2.txt
a
b
c
d
e
[atplab3_trg24@NDAUNIX deepu]$ cat >chapa.txt
1a
2b
3c
4d
5e
[atplab3_trg24@NDAUNIX deepu]$ ls
animals.txt  chap1  chap1.txt  chap2.txt  chapa.txt  fruits.txt  things.txt
[atplab3_trg24@NDAUNIX deepu]$ ls chap*
chap1  chap1.txt  chap2.txt  chapa.txt
[atplab3_trg24@NDAUNIX deepu]$
```

2.8

```
[atplab3_trg24@NDAUNIX deepu]$ cd .
[atplab3_trg24@NDAUNIX deepu]$ cd ..
[atplab3_trg24@NDAUNIX ~]$ ls
deepu
[atplab3_trg24@NDAUNIX ~]$ mkdir c_prog
[atplab3_trg24@NDAUNIX ~]$ ls
c_prog  deepu
[atplab3_trg24@NDAUNIX ~]$ pwd
/home/atplab3_trg24
[atplab3_trg24@NDAUNIX ~]$ clear
```

2.9

```
[atplab3_trg24@NDAUNIX ~]$ mkdir newdir
[atplab3_trg24@NDAUNIX ~]$ mkdir newdirectory
[atplab3_trg24@NDAUNIX ~]$ ls
c_prog  deepu  newdir  newdirectory
[atplab3_trg24@NDAUNIX ~]$
```

2.10

```
[atplab3_trg24@NDAUNIX ~]$ ls -R
.:
c_prog deepu newdir newdirectory

./c_prog:

./deepu:
animals.txt chapl chapl.txt chap2.txt chapa.txt fruits.txt things.txt

./newdir:

./newdirectory:
[atplab3_trg24@NDAUNIX ~]$
```

2.11

```
[atplab3_trg24@NDAUNIX ~]$ rmdir newdirectory
[atplab3_trg24@NDAUNIX ~]$ ls
c_prog deepu newdir
[atplab3_trg24@NDAUNIX ~]$
```

2.12

```
[atplab3_trg24@NDAUNIX ~]$ mkdir temp
[atplab3_trg24@NDAUNIX ~]$ ls
c_prog deepu newdir temp
[atplab3_trg24@NDAUNIX ~]$
```

2.13

```
[atplab3_trg24@NDAUNIX ~]$ rmdir temp
[atplab3_trg24@NDAUNIX ~]$ ls
c_prog deepu newdir
[atplab3_trg24@NDAUNIX ~]$
```

2.14

```
[atplab3_trg24@NDAUNIX ~]$ mkdir temp
[atplab3_trg24@NDAUNIX ~]$ cd temp
[atplab3_trg24@NDAUNIX temp]$ mkdir directorynew
[atplab3_trg24@NDAUNIX temp]$ ls
directorynew
[atplab3_trg24@NDAUNIX temp]$ pwd
/home/atplab3_trg24/temp
[atplab3_trg24@NDAUNIX temp]$
```

2.15

```
[atplab3_trg24@NDAUNIX temp]$ pwd
/home/atplab3_trg24/temp
[atplab3_trg24@NDAUNIX temp]$ cd
[atplab3_trg24@NDAUNIX ~]$
```

2.16

```
[atplab3_trg24@NDAUNIX ~]$ cd temp
[atplab3_trg24@NDAUNIX temp]$ ls
directorynew
[atplab3_trg24@NDAUNIX temp]$ pwd
/home/atplab3_trg24/temp
[atplab3_trg24@NDAUNIX temp]$ cd
[atplab3_trg24@NDAUNIX ~]$ cd tmp
-bash: cd: tmp: No such file or directory
[atplab3_trg24@NDAUNIX ~]$ cd list2
-bash: cd: list2: No such file or directory
[atplab3_trg24@NDAUNIX ~]$ mkdir avi
[atplab3_trg24@NDAUNIX ~]$ cd temp
[atplab3_trg24@NDAUNIX temp]$ mkdir avi
[atplab3_trg24@NDAUNIX temp]$ ls
avi directorynew
[atplab3_trg24@NDAUNIX temp]$ mkdir tmp
[atplab3_trg24@NDAUNIX temp]$ cd tmp
[atplab3_trg24@NDAUNIX tmp]$ cd directory
-bash: cd: directory: No such file or directory
[atplab3_trg24@NDAUNIX tmp]$ ls
[atplab3_trg24@NDAUNIX tmp]$ mkdir avi
[atplab3_trg24@NDAUNIX tmp]$ ls
avi
[atplab3_trg24@NDAUNIX tmp]$ cd..
-bash: cd..: command not found
[atplab3_trg24@NDAUNIX tmp]$ cd
[atplab3_trg24@NDAUNIX ~]$ cd
[atplab3_trg24@NDAUNIX ~]$
```

2.17

```
[atplab3_trg24@NDAUNIX tmp]$ cd
[atplab3_trg24@NDAUNIX ~]$ cd
[atplab3_trg24@NDAUNIX ~]$ rmdir c_prog
[atplab3_trg24@NDAUNIX ~]$ ls
avi  deepu  newdir  temp
[atplab3_trg24@NDAUNIX ~]$
```

2.18

```
[atplab3_trg24@NDAUNIX ~]$ cd
[atplab3_trg24@NDAUNIX ~]$ cd ..
[atplab3_trg24@NDAUNIX home]$ cd ..
[atplab3_trg24@NDAUNIX /]$ ls
bin  cgroup  etc  initramfs-2.6.32-431.el6.x86_64.img  lib64  media  mnt  opt  root  scvmmagent_linux  srv  tmp  util
boot  dev  home  lib  lost+found  misc  net  proc  sbin  selinux  sys  usr  var
[atplab3_trg24@NDAUNIX /]$
```

2.19

```
[atplab3_trg24@NDAUNIX /]$ cd
[atplab3_trg24@NDAUNIX ~]$ cd ..
[atplab3_trg24@NDAUNIX home]$ cd ..
[atplab3_trg24@NDAUNIX /]$ ls .*
.autofsck  .autorelabel

..
bin  cgroup  etc  initramfs-2.6.32-431.el6.x86_64.img  lib64  media  mnt  opt  root  scvmmagent_linux  srv  tmp  util
boot  dev  home  lib  lost+found  misc  net  proc  sbin  selinux  sys  usr  var

...:
bin  cgroup  etc  initramfs-2.6.32-431.el6.x86_64.img  lib64  media  mnt  opt  root  scvmmagent_linux  srv  tmp  util
boot  dev  home  lib  lost+found  misc  net  proc  sbin  selinux  sys  usr  var
ls: cannot open directory .dbus: Permission denied
[atplab3_trg24@NDAUNIX /]$
```

2.20

```
[atplab3_trg24@NDAUNIX ~]$ cat > first.unix
Hi ! Good Morning everybody.
Welcome to the First exercise on UNIX.
Hope you enjoy doing the assignments.
[atplab3_trg24@NDAUNIX ~]$ cat first.unix
Hi ! Good Morning everybody.
Welcome to the First exercise on UNIX.
Hope you enjoy doing the assignments.
[atplab3_trg24@NDAUNIX ~]$
```

2.21

```
[atplab3_trg24@NDAUNIX ~]$ cat > first.unics
[atplab3_trg24@NDAUNIX ~]$ ls
avi  deepu  first.unics  first.unix  newdir  temp
[atplab3_trg24@NDAUNIX ~]$ cp first.unix first.unics
[atplab3_trg24@NDAUNIX ~]$ cat first.unics
Hi ! Good Morning everybody.
Welcome to the First exercise on UNIX.
Hope you enjoy doing the assignments.
[atplab3_trg24@NDAUNIX ~]$
```

2.22

```
[atplab3_trg24@NDAUNIX ~]$ cat first.unix > first.unics
[atplab3_trg24@NDAUNIX ~]$ cat first.unics
Hi ! Good Morning everybody.
Welcome to the First exercise on UNIX.
Hope you enjoy doing the assignments.
[atplab3_trg24@NDAUNIX ~]$ cat first.unix
Hi ! Good Morning everybody.
Welcome to the First exercise on UNIX.
Hope you enjoy doing the assignments.
[atplab3_trg24@NDAUNIX ~]$ ls
avi  deepu  first.unics  first.unix  newdir  temp
[atplab3_trg24@NDAUNIX ~]$
```


2.23

```
[atplab3_trg24@NDAUNIX ~]$ cd temp
[atplab3_trg24@NDAUNIX temp]$ mkdir lab23
[atplab3_trg24@NDAUNIX temp]$ ls
avi directorynew lab23 tmp
[atplab3_trg24@NDAUNIX temp]$
```

2.24

```
atplab3_trg24@NDAUNIX:~/temp/abcd
[atplab3_trg24@NDAUNIX temp]$ cp /home/atplab3_trg24/. /home/atplab3_trg24/temp/abcd
cp: omitting directory `/home/atplab3_trg24/.'
[atplab3_trg24@NDAUNIX temp]$ ls
abcd first
[atplab3_trg24@NDAUNIX temp]$ cd abcd
[atplab3_trg24@NDAUNIX abcd]$ ls
abcd
[atplab3_trg24@NDAUNIX abcd]$ cd /temp/abcd
```

2.25

```
[atplab3_trg24@NDAUNIX ~]$ mv first.unix second.unix
[atplab3_trg24@NDAUNIX ~]$ cat second.unix
Hi ! Good Morning everybody.
Welcome to the First exercise on UNIX.
Hope you enjoy doing the assignments.
[atplab3_trg24@NDAUNIX ~]$
```

2.26

```
[atplab3_trg24@NDAUNIX ~]$ rm first.unics
[atplab3_trg24@NDAUNIX ~]$ ls
avi deepu newdir second.unix temp
[atplab3_trg24@NDAUNIX ~]$
```

2.27

```
[atplab3_trg24@NDAUNIX ~]$ cd temp
[atplab3_trg24@NDAUNIX temp]$ rm *
rm: cannot remove `avi': Is a directory
rm: cannot remove `directorynew': Is a directory
rm: cannot remove `lab23': Is a directory
rm: cannot remove `lion': Is a directory
rm: cannot remove `tiger': Is a directory
rm: cannot remove `tmp': Is a directory
[atplab3_trg24@NDAUNIX temp]$
```

2.28

```
[atplab3_trg24@NDAUNIX temp]$ mv *a.txt *c.txt *o.txt /home/atplab3_trg24
mv: cannot stat `*a.txt': No such file or directory
mv: cannot stat `*c.txt': No such file or directory
mv: cannot stat `*o.txt': No such file or directory
[atplab3_trg24@NDAUNIX temp]$
```

```
[atplab3_trg24@NDAUNIX temp]$ cat > rgia.txt
aeroplanes
emirates
spicejet
[atplab3_trg24@NDAUNIX temp]$ mv *a.txt *c.txt *o.txt /home/atplab3_trg24
mv: cannot stat `*c.txt': No such file or directory
mv: cannot stat `*o.txt': No such file or directory
[atplab3_trg24@NDAUNIX temp]$ cd ..
[atplab3_trg24@NDAUNIX ~]$ ls
avi deepu newdir rgia.txt second.unix temp
[atplab3_trg24@NDAUNIX ~]$
```

2.29

```
[atplab3_trg24@NDAUNIX temp]$ cat > pradeep.unix
a
b
c
d
[atplab3_trg24@NDAUNIX temp]$ cp *.unix /home/atplab3_trg24/
[atplab3_trg24@NDAUNIX temp]$ cd
[atplab3_trg24@NDAUNIX ~]$ ls
avi deepu deepu.unix newdir pradeep.unix rgia.txt second.unix temp
[atplab3_trg24@NDAUNIX ~]$
```

2.30

```
[atplab3_trg24@NDAUNIX ~]$ cd temp
[atplab3_trg24@NDAUNIX temp]$ ls
avi directorynew lab23 lion pradeep.unix tiger tmp
[atplab3_trg24@NDAUNIX temp]$ rm -r *
[atplab3_trg24@NDAUNIX temp]$ ls
[atplab3_trg24@NDAUNIX temp]$
```

2.31

```
[atplab3_trg24@NDAUNIX ~]$ ls
avi deepu deepu.unix newdir pradeep.unix rgia.txt second.unix temp
[atplab3_trg24@NDAUNIX ~]$ cp pradeep.unix rgia.unix rgia.txt
cp: target `rgia.txt' is not a directory
[atplab3_trg24@NDAUNIX ~]$ mv pradeep.unix rgia.unix rgia.txt
mv: target `rgia.txt' is not a directory
[atplab3_trg24@NDAUNIX ~]$
```

2.32

```
[atplab3_trg24@NDAUNIX ~]$ cat > friends
Madhu 6966456 09/07/68
jamil 2345215 08/09/67
ajay 5546785 01/04/66
Mano 7820022 09/07/68
David 8281292 09/09/60
simmi 7864563 12/12/70
Navin 2224311 30/05/68
[atplab3_trg24@NDAUNIX ~]$ cat friends
Madhu 6966456 09/07/68
jamil 2345215 08/09/67
ajay 5546785 01/04/66
Mano 7820022 09/07/68
David 8281292 09/09/60
simmi 7864563 12/12/70
Navin 2224311 30/05/68
[atplab3_trg24@NDAUNIX ~]$ mv friends friends.unix
[atplab3_trg24@NDAUNIX ~]$ cat friends.unix
Madhu 6966456 09/07/68
jamil 2345215 08/09/67
ajay 5546785 01/04/66
Mano 7820022 09/07/68
David 8281292 09/09/60
simmi 7864563 12/12/70
Navin 2224311 30/05/68
[atplab3_trg24@NDAUNIX ~]$
```

2.33

```
[atplab3_trg24@NDAUNIX ~]$ cp friends.unix friends.txt
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt
Madhu 6966456 09/07/68
jamil 2345215 08/09/67
ajay 5546785 01/04/66
Mano 7820022 09/07/68
David 8281292 09/09/60
simmi 7864563 12/12/70
Navin 2224311 30/05/68
[atplab3_trg24@NDAUNIX ~]$
```

2.34

```
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt >> newfriends.txt
[atplab3_trg24@NDAUNIX ~]$ cat newfriends.txt
Madhu 6966456 09/07/68
jamil 2345215 08/09/67
ajay 5546785 01/04/66
Mano 7820022 09/07/68
David 8281292 09/09/60
simmi 7864563 12/12/70
Navin 2224311 30/05/68
[atplab3_trg24@NDAUNIX ~]$
```

2.35

```
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt newfriends.txt
Madhu 6966456 09/07/68
jamil 2345215 08/09/67
ajay 5546785 01/04/66
Mano 7820022 09/07/68
David 8281292 09/09/60
simmi 7864563 12/12/70
Navin 2224311 30/05/68
Madhu 6966456 09/07/68
jamil 2345215 08/09/67
ajay 5546785 01/04/66
Mano 7820022 09/07/68
David 8281292 09/09/60
simmi 7864563 12/12/70
Navin 2224311 30/05/68
[atplab3_trg24@NDAUNIX ~]$
```

2.36

```
[atplab3_trg24@NDAUNIX ~]$ who -q | tr ' ' '\n'
BI_SAP18
atplab3_trg38
atplab3_trg37
aug13_trg1
aug13_trg15
aug13_trg6
aug13_trg3
aug13_trg4
aug13_trg5
BI_SAP28
aug13_trg2
aug13_trg13
aug13_trg14
BI_SAP31
aug13_trg10
aug13_trg8
Lab9_mum35
aug13_trg9
aug13_trg7
atplab3_trg40
atplab3_trg34
atplab3_trg10
atplab3_trg13
atplab3_trg39
atplab3_trg2
atplab3_trg28
atplab3_trg33
atplab3_trg41
atplab3_trg42
atplab3_trg14
atplab3_trg18
atplab3_trg12
atplab3_trg11
atplab3_trg8
atplab3_trg7
atplab3_trg6
atplab3_trg24
atplab3_trg17
atplab3_trg9
atplab3_trg22
atplab3_trg4
```

```
[atplab3_trg24@NDAUNIX ~]$ who -q | tr ' ' '\n' >> users.txt
[atplab3_trg24@NDAUNIX ~]$ cat users.txt
BI_SAP18
atplab3_trg38
atplab3_trg37
aug13_trg1
aug13_trg15
aug13_trg6
aug13_trg3
aug13_trg4
aug13_trg5
BI_SAP28
aug13_trg2
aug13_trg13
aug13_trg14
BI_SAP31
aug13_trg10
aug13_trg8
Lab9_mum35
aug13_trg9
aug13_trg7
atplab3_trg40
atplab3_trg34
atplab3_trg10
atplab3_trg13
atplab3_trg39
atplab3_trg2
atplab3_trg28
atplab3_trg33
atplab3_trg41
atplab3_trg42
```

2.37

```
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt >> users.txt
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt users.txt
Madhu      6966456 09/07/68
jamil      2345215 08/09/67
ajay       5546785 01/04/66
Mano       7820022 09/07/68
David      8281292 09/09/60
simmi      7864563 12/12/70
Navin      2224311 30/05/68
BI_SAP18
atplab3_trg38
atplab3_trg37
aug13_trg1
aug13_trg15
aug13_trg6
aug13_trg3
aug13_trg4
aug13_trg5
BI_SAP28
aug13_trg2
aug13_trg13
aug13_trg14
BI_SAP31
aug13_trg10
```

2.38

```
[atplab3_trg24@NDAUNIX ~]$ date
Tue Sep  3 17:39:04 IST 2019
[atplab3_trg24@NDAUNIX ~]$ █
```


2.39

```
[atplab3_trg24@NDAUNIX ~]$ cal 01 11 96
      November 96
Su Mo Tu We Th Fr Sa
                1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30

[atplab3_trg24@NDAUNIX ~]$
```

2.40

```
[atplab3_trg24@NDAUNIX ~]$ date "+ %"
%
[atplab3_trg24@NDAUNIX ~]$ date "+ %m"
09
[atplab3_trg24@NDAUNIX ~]$ date "+%m"
09
[atplab3_trg24@NDAUNIX ~]$ date "+%d"
03
[atplab3_trg24@NDAUNIX ~]$ date "+%D"
09/03/19
[atplab3_trg24@NDAUNIX ~]$ date "+%/%Training Activity"
%/17:44:21raining Activity
[atplab3_trg24@NDAUNIX ~]$ date "+%/% Training Activity"
%//% Training Activity
[atplab3_trg24@NDAUNIX ~]$ date "%Training Activity"
date: invalid date `%Training Activity'
[atplab3_trg24@NDAUNIX ~]$ date "+%Training Activity"
17:45:25raining Activity
[atplab3_trg24@NDAUNIX ~]$ date "+%r"
05:45:39 PM
[atplab3_trg24@NDAUNIX ~]$
```

3.1

atplab3_trg24@NDAUNIX:~

```
[atplab3_trg24@NDAUNIX ~]$ cat > chap1.txt
abc
defe
fefcv
[atplab3_trg24@NDAUNIX ~]$ ls -la chap1.txt
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24 15 Sep  9 09:14 chap1.txt
[atplab3_trg24@NDAUNIX ~]$ chmod u+x chap1.txt
[atplab3_trg24@NDAUNIX ~]$ ls -la chap1.txt
-rwxrw-r-- 1 atplab3_trg24 atplab3_trg24 15 Sep  9 09:14 chap1.txt
[atplab3_trg24@NDAUNIX ~]$
```

3.2

```
[atplab3_trg24@NDAUNIX ~]$ cat > add.c
afasfcsv
[atplab3_trg24@NDAUNIX ~]$ chmod ugo+x add.c
[atplab3_trg24@NDAUNIX ~]$ ls -la add.c
-rwxrwxr-x 1 atplab3_trg24 atplab3_trg24 9 Sep  9 09:17 add.c
[atplab3_trg24@NDAUNIX ~]$
```

3.3

```
[atplab3_trg24@NDAUNIX ~]$ cat > aa.c
afscdx
[atplab3_trg24@NDAUNIX ~]$ ls -la aa.c
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24 7 Sep  9 09:18 aa.c
[atplab3_trg24@NDAUNIX ~]$ chmod u+x aa.c
[atplab3_trg24@NDAUNIX ~]$ ls -la aa.c
-rwxrw-r-- 1 atplab3_trg24 atplab3_trg24 7 Sep  9 09:18 aa.c
[atplab3_trg24@NDAUNIX ~]$ chmod go+r aa.c
[atplab3_trg24@NDAUNIX ~]$ ls -la aa.c
-rwxrw-r-- 1 atplab3_trg24 atplab3_trg24 7 Sep  9 09:18 aa.c
[atplab3_trg24@NDAUNIX ~]$ chmod u-x aa.c
[atplab3_trg24@NDAUNIX ~]$ ls -la aa.c
-rw-rw-r-- 1 atplab3_trg24 atplab3_trg24 7 Sep  9 09:18 aa.c
[atplab3_trg24@NDAUNIX ~]$
```

3.4

```
[atplab3_trg24@NDAUNIX ~]$ cat >aa.c
[atplab3_trg24@NDAUNIX ~]$ cat >kk.c
[atplab3_trg24@NDAUNIX ~]$ cat >nato
[atplab3_trg24@NDAUNIX ~]$ cat >myfile
[atplab3_trg24@NDAUNIX ~]$ cat >a.c
[atplab3_trg24@NDAUNIX ~]$ chmod u+x a.c kk.c nato myfile
[atplab3_trg24@NDAUNIX ~]$ ls -la a.c kk.c nato my file
ls: cannot access my: No such file or directory
ls: cannot access file: No such file or directory
-rwxrw-r-- 1 atplab3_trg24 atplab3_trg24 0 Sep  9 09:23 a.c
-rwxrw-r-- 1 atplab3_trg24 atplab3_trg24 0 Sep  9 09:22 kk.c
-rwxrw-r-- 1 atplab3_trg24 atplab3_trg24 0 Sep  9 09:22 nato
[atplab3_trg24@NDAUNIX ~]$
```

3.5

```
atplab3_trg24@NDAUNIX:/bin
[atplab3_trg24@NDAUNIX ~]$ cd /
[atplab3_trg24@NDAUNIX /]$ cd
[atplab3_trg24@NDAUNIX ~]$ cd ..
[atplab3_trg24@NDAUNIX home]$ cd ..
[atplab3_trg24@NDAUNIX /]$ cd bin
[atplab3_trg24@NDAUNIX bin]$ ls
alsaunmute  cgset       dbus-cleanup-sockets  echo       gettext     kill
arch         cgsnapshot  dbus-daemon           ed         grep        link
awk          chgrp       dbus-monitor          egrep      gtar        ln
basename     chmod       dbus-send             env        gunzip      load
bash         chown       dbus-uuidgen          ex         gzip        logg
cat          cp          dd                    false      hostname    logi
cgclassify   cpio        df                    fgrep      ipcalc      ls
cgcreate     csh         dmesg                find        iptables-xml  lsbl
cgdelete     cut         dnsdomainname        findmnt    iptables-xml-1.4.7  lscg
cgexec       dash        domainname           fusermount kbd_mode    lssu
cgget        date        dumpkeys             gawk       keyctl      mail
[atplab3_trg24@NDAUNIX bin]$
```

4.1

```
atplab3_trg24@NDAUNIX:~  
[atplab3_trg24@NDAUNIX ~]$ help > lsdoc  
[atplab3_trg24@NDAUNIX ~]$ cat lsdoc  
GNU bash, version 4.1.2(1)-release (x86_64-redhat-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.  
  
A star (*) next to a name means that the command is disabled.  
  
job_spec [&  
(( expression ))  
. filename [arguments]  
:  
[ arg... ]  
[[ expression ]]  
alias [-p] [name[=value] ... ]  
bg [job_spec ...]  
bind [-lpvsPVS] [-m keymap] [-f filea>  
break [n]  
builtin [shell-builtin [arg ...]]  
caller [expr]  
case WORD in [PATTERN [| PATTERN]...) >  
cd [-L|-P] [dir]  
command [-pVv] command [arg ...]  
compgen [-abdefgjkuv] [-o option] [>  
complete [-abdefgjkuv] [-pr] [-DE] [>  
comptopt [-o|+o option] [-DE] [name ...>  
continue [n]  
coproc [NAME] command [redirections]  
declare [-aAfFilrtux] [-p] [name[=valu>  
dirs [-clpv] [+N] [-N]  
disown [-h] [-ar] [jobspec ...]  
echo [-neE] [arg ...]  
enable [-a] [-dnps] [-f filename] [nam>  
eval [arg ...]  
exec [-cl] [-a name] [command [argumen>  
exit [n]  
export [-fn] [name[=value] ...] or exp>  
false  
fc [-e ename] [-lnr] [first] [last] or>  
fg [job_spec]  
for NAME [in WORDS ... ] ; do COMMANDS>  
history [-c] [-d offset] [n] or histo>  
if COMMANDS; then COMMANDS; [ elif CO>  
jobs [-lnprs] [jobspec ...] or jobs ->  
kill [-s sigspec | -n signum | -sigsp>  
let arg [arg ...]  
local [option] name[=value] ...  
logout [n]  
mapfile [-n count] [-O origin] [-s co>  
popd [-n] [+N | -N]  
printf [-v var] format [arguments]  
pushd [-n] [+N | -N | dir]  
pwd [-LP]  
read [-ers] [-a array] [-d delim] [-i>  
readarray [-n count] [-O origin] [-s >  
readonly [-af] [name[=value] ...] or >  
return [n]  
select NAME [in WORDS ... ;] do COMMA>  
set [--abefhkmnptuvxBCHP] [-o option->  
shift [n]  
shopt [-pqsu] [-o] [optname ...]  
source filename [arguments]  
suspend [-f]  
test [expr]  
time [-p] pipeline  
times  
trap [-lp] [[arg] signal_spec ...]  
true  
type [-afptP] name [name ...]  
typeset [-aAfFilrtux] [-p] name[=valu>  
ulimit [-SHacdefilmnpqrstuvx] [limit]>  
umask [-p] [-S] [mode]  
unalias [-a] name [name ...]  
unset [-f] [-v] [name ...]
```

4.2

```
[atplab3_trg24@NDAUNIX ~]$ more lsdoc
GNU bash, version 4.1.2(1)-release (x86_64-redhat-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.

A star (*) next to a name means that the command is disabled.

job_spec [&]
(( expression ))
. filename [arguments]
:
[ arg... ]
[[ expression ]]
alias [-p] [name[=value] ... ]
bg [job_spec ...]
bind [-lpvsPVS] [-m keymap] [-f filename]
break [n]
builtin [shell-builtin [arg ...]]
caller [expr]
case WORD in [PATTERN [| PATTERN]...) >
cd [-L|-P] [dir]
command [-pVv] command [arg ...]
compgen [-abcdefgjkshuv] [-o option] [>
complete [-abcdefgjkshuv] [-pr] [-DE] [>
compopt [-o|+o option] [-DE] [name ...>
continue [n]
coproc [NAME] command [redirections]
declare [-aAfFilrtux] [-p] [name[=valu>
dirs [-clpv] [+N] [-N]
disown [-h] [-ar] [jobspec ...]
echo [-neE] [arg ...]
enable [-a] [-dnps] [-f filename] [nam>
eval [arg ...]
exec [-cl] [-a name] [command [argumen>
exit [n]
export [-fn] [name[=value] ...] or exp>
false
history [-c] [-d offset] [n] or histo>
if COMMANDS; then COMMANDS; [ elif CO>
jobs [-lnprs] [jobspec ...] or jobs ->
kill [-s sigspec | -n signum | -sigsp>
let arg [arg ...]
local [option] name[=value] ...
logout [n]
mapfile [-n count] [-O origin] [-s co>
popd [-n] [+N | -N]
printf [-v var] format [arguments]
pushd [-n] [+N | -N | dir]
pwd [-LP]
read [-ers] [-a array] [-d delim] [-i>
readarray [-n count] [-O origin] [-s >
readonly [-af] [name[=value] ...] or >
return [n]
select NAME [in WORDS ... ;] do COMMA>
set [--abefghkmnpstuvxBCHP] [-o option->
shift [n]
shopt [-pqsu] [-o] [optname ...]
source filename [arguments]
suspend [-f]
test [expr]
time [-p] pipeline
times
trap [-lp] [[arg] signal_spec ...]
true
type [-afptP] name [name ...]
typeset [-aAfFilrtux] [-p] name[=valu>
ulimit [-SHacdefilmnpqrstuvx] [limit]>
```

4.3

```
atplab3_trg24@NDAUNIX:~
[atplab3_trg24@NDAUNIX ~]$ head -4 lsdoc
GNU bash, version 4.1.2(1)-release (x86_64-redhat-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.
[atplab3_trg24@NDAUNIX ~]$
```

4.4

```
atplab3_trg24@NDAUNIX:~  
[atplab3_trg24@NDAUNIX ~]$ tail -7 lsdoc  
fg [job_spec]                                unalias [-a] name [name ...]  
for NAME [in WORDS ... ] ; do COMMANDS>      unset [-f] [-v] [name ...]  
for (( exp1; exp2; exp3 )); do COMMAND>        until COMMANDS; do COMMANDS; done  
function name { COMMANDS ; } or name (>        variables - Names and meanings of som>  
getopts optstring name [arg]                  wait [id]  
hash [-lr] [-p pathname] [-dt] [name .>      while COMMANDS; do COMMANDS; done  
help [-dms] [pattern ...]                     { COMMANDS ; }  
[atplab3_trg24@NDAUNIX ~]$
```

4.5

```
atplab3_trg24@NDAUNIX:~  
[atplab3_trg24@NDAUNIX ~]$ rm lsdoc  
[atplab3_trg24@NDAUNIX ~]$ ls  
aa.c          deepu          fruits.txt     pradeep        sample  
a.c           deepu.unix         kk.c          pradeep.txt    script  
add.c         fl                lev1          pradeep.unix   script1.sh  
animals.txt   flbackup          myfile        prem           second.unix  
archive       file1             nato          rgia.txt       shellscrip.sh  
archive.tar   file1backup       newdir        s1.sh          temp  
avi           file1backup-05Sep19 newfriends.txt s2.sh          users.txt  
chandu        first.unics       pc            s3.sh          vi-test  
chapl.txt     friends.txt       poem          s4.sh  
count         friends.unix      practice     s5.sh
```

4.6

```
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt >> newfriends.txt  
[atplab3_trg24@NDAUNIX ~]$ cat newfriends.txt  
Madhu 6966456 09/07/68  
jamil 2345215 08/09/67  
ajay 5546785 01/04/66  
Mano 7820022 09/07/68  
David 8281292 09/09/60  
simmi 7864563 12/12/70  
Navin 2224311 30/05/68  
[atplab3_trg24@NDAUNIX ~]$
```

4.7

```
atplab3_trg24@NDAUNIX:~  
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt  
Madhu : 09/07/1991  
jamil : 09/07/1991  
ajay : 01/04/1992  
Mano : 09/01/1999  
David : 09/09/1999  
simmi : 12/12/1998  
Navin : 30/05/1996  
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt | grep ma*  
jamil : 09/07/1991  
simmi : 12/12/1998  
[atplab3_trg24@NDAUNIX ~]$ grep -i ma* friends.txt  
Madhu : 09/07/1991  
jamil : 09/07/1991  
Mano : 09/01/1999  
simmi : 12/12/1998  
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt | grep -i ma* friends.txt  
Madhu : 09/07/1991  
jamil : 09/07/1991  
Mano : 09/01/1999  
simmi : 12/12/1998  
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt | grep -i ma*  
Madhu : 09/07/1991  
jamil : 09/07/1991  
Mano : 09/01/1999  
simmi : 12/12/1998  
[atplab3_trg24@NDAUNIX ~]$
```


4.8

```
atplab3_trg24@NDAUNIX:~  
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt | grep -i ma*[i][d] friends.txt  
[atplab3_trg24@NDAUNIX ~]$ cat friends.txt  
Madhu : 09/07/1991  
jamil : 09/07/1991  
ajay : 01/04/1992  
Mano : 09/01/1999  
David : 09/09/1999  
simmi : 12/12/1998  
Navin : 30/05/1996  
[atplab3_trg24@NDAUNIX ~]$
```

4.9

```
[atplab3_trgl7@NDAUNIX ~]$ ls -d $PWD/*  
/home/atplab3_trgl7/aa.c           /home/atplab3_trgl7/sample-test  
/home/atplab3_trgl7/a.c           /home/atplab3_trgl7/sample.txt  
/home/atplab3_trgl7/add.c         /home/atplab3_trgl7/Samp.tar.gz  
/home/atplab3_trgl7/dharani       /home/atplab3_trgl7/samp-test  
/home/atplab3_trgl7/Dhiksha       /home/atplab3_trgl7/shellscrip.sh  
/home/atplab3_trgl7/direct        /home/atplab3_trgl7/shell.sh  
/home/atplab3_trgl7/files.txt     /home/atplab3_trgl7/task.sh  
/home/atplab3_trgl7/first         /home/atplab3_trgl7/tee.txt  
/home/atplab3_trgl7/first.unix    /home/atplab3_trgl7/temp  
/home/atplab3_trgl7/for.sh        /home/atplab3_trgl7/test  
/home/atplab3_trgl7/friends.txt   /home/atplab3_trgl7/test_back  
/home/atplab3_trgl7/kk.c          /home/atplab3_trgl7/test_back-  
/home/atplab3_trgl7/lab.txt       /home/atplab3_trgl7/test_back-0905  
/home/atplab3_trgl7/myfile        /home/atplab3_trgl7/test_back-09-05  
/home/atplab3_trgl7/name-detail.sh /home/atplab3_trgl7/test_back-090519  
/home/atplab3_trgl7/nato          /home/atplab3_trgl7/test-script  
/home/atplab3_trgl7/newdir        /home/atplab3_trgl7/testss.txt  
/home/atplab3_trgl7/newdirectory  /home/atplab3_trgl7/testst.txt  
/home/atplab3_trgl7/newfriends.txt /home/atplab3_trgl7/testt.txt  
/home/atplab3_trgl7/new.tar.gz    /home/atplab3_trgl7/test.txt  
/home/atplab3_trgl7/oper.sh       /home/atplab3_trgl7/tst  
/home/atplab3_trgl7/rwxrwx---     /home/atplab3_trgl7/while.sh  
/home/atplab3_trgl7/sampl  
[atplab3_trgl7@NDAUNIX ~]$
```

4.10

```
[atplab3_trgl7@NDAUNIX ~]$ ls -d */  
direct/ first/ newdir/ newdirectory/ temp/ tst/  
[atplab3_trgl7@NDAUNIX ~]$
```

4.11

```
[atplab3_trgl7@NDAUNIX ~]$ ls chap* $PWD/*  
chapter           /home/atplab3_trgl7/oper.sh  
chapter1          /home/atplab3_trgl7/rwxrwx---  
chapter2          /home/atplab3_trgl7/sampl  
chapters          /home/atplab3_trgl7/sample-test
```


4.12

```
[atplab3_trgl7@NDAUNIX ~]$ cat > aksharaa
abishek
rajan
kayal
divya
vaishu
raga
dharani
mega
[atplab3_trgl7@NDAUNIX ~]$ sort aksharaa
abishek
dharani
divya
kayal
mega
raga
rajan
vaishu
[atplab3_trgl7@NDAUNIX ~]$
```

4.13

```
[atplab3_trgl7@NDAUNIX ~]$ awk '{print toupper($0)}' aksharaa
ABISHEK
RAJAN
KAYAL
DIVYA
VAISHU
RAGA
DHARANI
MEGA
[atplab3_trgl7@NDAUNIX ~]$
```

4.14

```
[atplab3_trgl7@NDAUNIX ~]$ cp * /home/atplab3_trgl7/dir
cp: omitting directory `dir'
cp: omitting directory `direct'
cp: omitting directory `first'
cp: omitting directory `newdir'
cp: omitting directory `newdirectory'
cp: omitting directory `temp'
cp: omitting directory `tst'
[atplab3_trgl7@NDAUNIX ~]$ cd dir
[atplab3_trgl7@NDAUNIX dir]$ ls
aa.c      dharani    lab.txt    sampl      tee.txt    testss.txt
a.c       Dhiksha    myfile     sample-test test        testst.txt
add.c     dir        name-detail.sh sample.txt  test_back  tests.txt
aksharaa  files.txt  nato       Samp.tar.gz test_back-  test.txt
chapter   first.unix newfriends.txt samp-test  test_back-0905 while.sh
chapter1  for.sh     new.tar.gz shellscrip.sh test_back-09-05
chapter2  friends.txt oper.sh    shell.sh  test_back-090519
chapters  kk.c       rwxrwx--- task.sh    test-script
[atplab3_trgl7@NDAUNIX dir]$
```

4.15

```
[atplab3_trgl7@NDAUNIX dir]$ ls -l | awk '{print $1, $9}'
total
-rw-rw-r-- aa.c
-rwxrw-r-- a.c
-rwxrwxr-x add.c
-rw-rw-r-- aksharaa
-rw-rw-r-- chapter
-rw-rw-r-- chapter1
-rw-rw-r-- chapter2
-rw-rw-r-- chapters
-rwxr-xr-x dharani
-rw-rw-r-- Dhiksha
-rw-rw-r-- dir
-rwxrw-r-- files.txt
-rw-rw-r-- first.unix
-rw-rw-r-- for.sh
-rw-rw-r-- friends.txt
-rwxrw-r-- kk.c
-rw-rw-r-- lab.txt
-rwxrw-r-- myfile
-rw-rw-r-- name-detail.sh
-rwxrw-r-- nato
-rw-rw-r-- newfriends.txt
-rw-rw-r-- new.tar.gz
-rw-rw-r-- oper.sh
-rw-rw-r-- rwxrwx---
-rw-rw-r-- sampl
-rw-rw-r-- sample-test
-rwxr-xr-x sample.txt
-rw-rw-r-- Samp.tar.gz
-rwxr-xr-x samp-test
-rwxrwxr-x shellsript.sh
-rw-rw-r-- shell.sh
-rwxrwxr-x task.sh
-rw-rw-r-- tee.txt
-rw-rw-r-- test
-rw-rw-r-- test_back
-rw-rw-r-- test_back-
-rw-rw-r-- test_back-0905
-rw-rw-r-- test_back-09-05
```

4.16

```
[atplab3_trgl7@NDAUNIX dir]$ ls -l | awk '{ print $9}' >> files.txt
[atplab3_trgl7@NDAUNIX dir]$ vi files.txt
[atplab3_trgl7@NDAUNIX dir]$ cat files.txt

aa.c
a.c
add.c
aksharaa
chapter
chapter1
chapter2
chapters
dharani
Dhiksha
dir
files.txt
first.unix
for.sh
friends.txt
kk.c
lab.txt
myfile
name-detail.sh
nato
newfriends.txt
new.tar.gz
oper.sh
rwxrwx---
sampl
sample-test
sample.txt
Samp.tar.gz
samp-test
shellscript.sh
shell.sh
task.sh
tee.txt
test
test_back
test_back-
test_back-0905
test_back-09-05
test_back-090519
test-script
```

4.17

```
[atplab3_trgl7@NDAUNIX dir]$ cat perm
```

total

-RW-RW-R--

-RWXRW-R--

-IWXIWXI-X

-RW-RW-R--

-rw-rw-r--

-rw-rw-r--

-RW-RW-R--

-RW-RW-R--

-RWXR-XR-X

-RW-RW-R--

-RW-RW-R--

-RWXIW-I--

rw rw r

—IW—IW—I—

17X1W-1

[illegible]
$$-FV = FV - F = -$$
$$-rw \times rw - r - -$$

-rw-rw-r--

-RW-RW-R--

-rw-rw-r--

-RW-RW-R--

-RW-RW-R--

-rw-rw-r--

-rw-rw-r--

-IWXI-XI-X

-RW-RW-R--

-RWXR-XR-X

- I W X I W X I - X

rw rw rw

-IWXIWXI-X

—IW—IW—I—

— I W — I W — I — —
 333 333 33

1 W	1 W	1
22.2	22.2	22

$$-rw-rw-r--r--$$
$$-rw-rw-r--$$

-rw-rw-r--

-rw-rw-r--

-rw-rw-r--

4.18

```
[atplab3_trgl7@NDAUNIX dir]$ ls -l | awk '{ print $5}' >> size  
[atplab3_trgl7@NDAUNIX dir]$ cat size
```

```
15  
2  
27  
51  
0  
0  
0  
0  
114  
25  
0  
431  
186  
43  
186  
2  
536  
2  
145  
2  
186  
124  
131  
512  
0  
66  
26  
368  
124  
1586  
83  
94  
0  
26  
25  
30  
0  
0  
0  
0
```

4.19

```
[atplab3_trgl7@NDAUNIX dir]$ ls -l | awk '{ print $9,$5,$1}'
total
aa.c 15 -rw-rw-r--
a.c 2 -rwxrw-r--
add.c 27 -rwxrwxr-x
aksharaa 51 -rw-rw-r--
chapter 0 -rw-rw-r--
chapter1 0 -rw-rw-r--
chapter2 0 -rw-rw-r--
chapters 0 -rw-rw-r--
dharani 114 -rwxr-xr-x
Dhiksha 25 -rw-rw-r--
dir 0 -rw-rw-r--
files.txt 431 -rwxrw-r--
first.unix 186 -rw-rw-r--
for.sh 43 -rw-rw-r--
friends.txt 186 -rw-rw-r--
kk.c 2 -rwxrw-r--
lab.txt 536 -rw-rw-r--
myfile 2 -rwxrw-r--
name-detail.sh 145 -rw-rw-r--
nato 2 -rwxrw-r--
newfriends.txt 186 -rw-rw-r--
new.tar.gz 124 -rw-rw-r--
oper.sh 131 -rw-rw-r--
perm 512 -rw-rw-r--
rwxrwx--- 0 -rw-rw-r--
sampl 66 -rw-rw-r--
sample-test 26 -rw-rw-r--
sample.txt 368 -rwxr-xr-x
Samp.tar.gz 124 -rw-rw-r--
samp-test 1586 -rwxr-xr-x
shellscript.sh 83 -rwxrwxr-x
shell.sh 94 -rw-rw-r--
size 139 -rw-rw-r--
task.sh 26 -rwxrwxr-x
tee.txt 25 -rw-rw-r--
test 30 -rw-rw-r--
test_back 0 -rw-rw-r--
test_back- 0 -rw-rw-r--
test_back-0905 0 -rw-rw-r--
test_back-09-05 0 -rw-rw-r--
test_back-090519 0 -rw-rw-r--
```

4.20

```
[atplab3_trgl7@NDAUNIX ~]$ who | wc -l
91
[atplab3_trgl7@NDAUNIX ~]$
```

4.21

```
[atplab3_trgl7@NDAUNIX ~]$ du -S /home/atplab3_trgl7 | sort -n | head -1
4      /home/atplab3_trgl7/direct
[atplab3_trgl7@NDAUNIX ~]$
```

4.22

```
[atplab3_trgl7@NDAUNIX dir]$ wc -l < friends
15
[atplab3_trgl7@NDAUNIX dir]$
```

4.25

```
[atplab3_trgl7@NDAUNIX ~]$ date "+%T %A %d %b %Y"
16:56:37 Thursday 05 Sep 2019
[atplab3_trgl7@NDAUNIX ~]$
```

5.1

```
[atplab3_trgl7@NDAUNIX ~]$ vi lab.txt
[atplab3_trgl7@NDAUNIX ~]$ cat lab.txt
A network is a group of computers that can communicate with each other, share resources,
and access remote hosts or other networks. Netware is a computer network operating system
designed to connect, manage, and maintain a network and its services. Some of the network
services are Netware Directory Services (NDS), file system, printing and security.
[atplab3_trgl7@NDAUNIX ~]$
```

5.1.1

```
[atplab3_trgl7@NDAUNIX ~]$ vi lab.txt
[atplab3_trgl7@NDAUNIX ~]$ cat lab.txt
A network is a group of computers that can communicate with each other, share resources,
and access remote hosts or other networks. Netware is a computer network operating system
designed to connect, manage, and maintain a network and its services. Some of the network
k services are Netware Directory Services (NDS), file system, printing and security.
[atplab3_trgl7@NDAUNIX ~]$ vi lab.txt
[atplab3_trgl7@NDAUNIX ~]$ cat lab.txt
A network is a group of computers that can communicate with each other, share resources,
and access remote hosts or other networks. Novell Netware is a computer network operating
system designed to connect, manage, and maintain a network and its services. Some of the
network services are Novell Netware Directory Services (NDS), file system, printing and
security.
[atplab3_trgl7@NDAUNIX ~]$ █
```

5.1.2

```
[atplab3_trgl7@NDAUNIX ~]$ vi lab.txt
[atplab3_trgl7@NDAUNIX ~]$ cat lab.txt
A network is a group of computers that can communicate with each other, share resources(such as hard disks and
printers), and access remote hosts or other networks. Novell Netware is a computer network operating system de
signed to connect, manage, and maintain a network and its services. Some of the network services are Novell Net
ware Directory Services (NDS), file system, printing and security. Managing NDS is a fundamental administrator
role because NDS provides a single point for accessing and managing most network resources.
[atplab3_trgl7@NDAUNIX ~]$ █
```

5.1.3

```
[atplab3_trgl7@NDAUNIX ~]$ vi lab.txt
[atplab3_trgl7@NDAUNIX ~]$ cat lab.txt
A network is a group of computers that can communicate with each other, share resources(such as hard disks and
printers), and access remote hosts or other networks. Novell Netware is a computer network operating system de
signed to connect, manage, and maintain a network and its services. Some of the network services are Novell Net
ware Directory Services (NDS), file system, printing and security. Managing NDS is a fundamental administrator
role because NDS provides a single point for accessing and managing most network resources.
[atplab3_trgl7@NDAUNIX ~]$ █
```

5.2.1

Madhu	6966456	09/07/68
Jamil	2345215	08/09/67
Ajay	554678	01/04/66
Mano	7820022	09/09/60
David	8281292	09/07/68
Simmi	7864563	12/12/70
Navin	2224311	30/05/68

5.2.2

```
[atplab3_trgl7@NDAUNIX ~]$ ls
aa.c  add.c      first.unix  kk.c  myfile  newdir      newfriends.txt  temp
a.c   files.txt  friends.txt lab.txt  nato   newdirectory sample.txt
[atplab3_trgl7@NDAUNIX ~]$ vi newfriends.txt
[atplab3_trgl7@NDAUNIX ~]$ ls
aa.c  add.c      first.unix  kk.c  myfile  newdir      newfriends.txt  temp
a.c   files.txt  friends.txt lab.txt  nato   newdirectory sample.txt
[atplab3_trgl7@NDAUNIX ~]$
```

6.1

```
[ec2-user@ip-172-31-30-106 ~]$ grep "MANU SHARMA" /home/ec2-user/Mumbai/emp.lst
E12|MANU SHARMA|ENGINEER|NETWORK|12/05/1985|13000
[ec2-user@ip-172-31-30-106 ~]$
```

6.2

```
ec2-user~/Mumbai grep "MANU SHARMA" emp.lst | cut -d "|" -f1,4
E12|NETWORK
ec2-user~/Mumbai
```

6.3

```
ec2-user~ find . -name emp.lst* |xargs grep "MANAGER" |cut -d ":" -f2
E11|RAJU|MANAGER|FINANCE|12/03/1996|28000
E16|RAJ|MANAGER|FINANCE|19/03/1996|28000
E21|BHUPENDRA|MANAGER|FINANCE|12/04/1996|28000
ec2-user~
```

6.4

```
ec2-user~/TTC cd
ec2-user~ find . -name desig.lst* |xargs grep "SE" | wc -l
3
ec2-user~
```

6.5

```
ec2-user~/Pune cat -n emp.lst | grep "H/W" | cut -d "|" -f1
3 2070
ec2-user~/Pune
```

6.6

atplab3_trg25@NDAUNIX~

```
# bin/bast
username=$(whoami)
if [ $username = $1 ]
then
echo "$username logged in"
else
echo "user not logged in"
fi
```

```
login as: atplab3_trg25
atplab3_trg25@10.51.103.212's password:
Last login: Tue Sep 10 15:58:58 2019 from din80000548.corp.capgemini.com
[atplab3_trg25@NDAUNIX ~]$ vi script6.sh
[atplab3_trg25@NDAUNIX ~]$ sh script6.sh
logged in
[atplab3_trg25@NDAUNIX ~]$
```

6.7

```
atplab3_trg25@NDAUNIX~  
$ bin/bash  
list='ls .'  
for file in $list  
do  
echo `cat $file`  
done
```

6.8

```
bin/bash  
if [ -e $1 ]  
then  
echo "file exists"  
if [ -r $1 ]  
then  
echo "read"  
fi  
if [ -w $1 ]  
then  
echo "write"  
fi  
if [ -x $1 ]  
then  
echo "execute"  
fi  
else  
echo "file does not exist"  
fi  
~
```

```
[atplab3_trg25@NDAUNIX ~]$ vi script8.sh  
[atplab3_trg25@NDAUNIX ~]$ sh script8.sh  
file exists  
read  
write  
execute  
[atplab3_trg25@NDAUNIX ~]$
```

6.9

```
bin/bash  
if [ $1 -gt $2 ]  
then  
if [ $1 -gt $3 ]  
then  
echo "$1 is largest"  
else  
echo "$3 is largest"  
fi  
else  
if [ $2 -gt $3 ]  
then  
echo "$2 is largest"  
else  
echo "$3 is largest"  
fi  
fi
```

```
read  
write  
execute  
[atplab3_trg25@NDAUNIX ~]$ vi script8.sh  
[atplab3_trg25@NDAUNIX ~]$ vi script9.sh  
[atplab3_trg25@NDAUNIX ~]$ sh script9.sh  
is largest  
[atplab3_trg25@NDAUNIX ~]$
```

6.10

```
#!/bin/bash
res=$(grep $1 $2)
echo $res
~
~
~
```

6.11

```
stplab3_trg25@NDAUNIX~
#!/bin/bash
res=$(grep $1 $2)
echo $res
~
~
~
```

6.12

```
#!/bin/bash
yesno(){
if [ $ch = 'y' ]
then
return 0
elif [ $ch = 'n' ]
return 1
else
echo "invalid choice"
fi
}
echo $1
echo "enter y/n"
read ch
c=yesno
echo $?
~
~
~

[atplab3_trg25@NDAUNIX ~]$ vi script12.sh
[atplab3_trg25@NDAUNIX ~]$ sh script12.sh
enter y/n
y
0
[atplab3_trg25@NDAUNIX ~]$
```

6.13

```
#!/bin/bash
list='users'
for user in $list
do
if [ $user = $1 -o $user = $2 -o $user = $3 -o $user = $4 ]
then
echo $user
fi
done
~
~
~
```

6.14

```
#!/bin/bash
echo "enter the first name"
read fname
echo "enter the last name"
read lname
echo "$fname $lname"
```

```
[atplab3_trg25@NDAUNIX ~]$ vi script14.sh
[atplab3_trg25@NDAUNIX ~]$ sh script14.sh
enter the first name
prem
enter the last name
chand
[atplab3_trg25@NDAUNIX ~]$
```

6.15

```
atplab3_trg25@NDAUNIX:~
#!/bin/bash
echo `find $HOME -mtime -1 -print`

~
~
~
```

```
[atplab3_trg25@NDAUNIX ~]$ vi script14.sh
[atplab3_trg25@NDAUNIX ~]$ vi script15.sh
[atplab3_trg25@NDAUNIX ~]$ sh script15.sh
/home/atplab3_trg25 /home/atplab3_trg25/script13.sh /home/atplab3_trg25/script7.sh /home/atplab3_trg25/script8.sh /home/atplab3_trg25/script9.sh /home/atplab3_trg25/script14.sh /home/atplab3_trg25/script6.sh /home/atplab3_trg25/script71.sh /home/atplab3_trg25/.viminfo /home/atplab3_trg25/script10.sh /home/atplab3_trg25/script15.sh /home/atplab3_trg25/script12.sh /home/atplab3_trg25/script11.sh
[atplab3_trg25@NDAUNIX ~]$
```

6.16

```
atplab3_trg25@NDAUNIX:~
#!/bin/bash
list=`ls`
for file in $list
do
if [ -r $file ]
then
echo `ls -l $file`
fi
done
```

```

[atplab3_trg25@NDAUNIX ~]$ vi script16.sh
[atplab3_trg25@NDAUNIX ~]$ sh script16.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 1000 Sep 10 14:31 basics.sh
-rwxrwx--- 1 atplab3_trg25 atplab3_trg25 8 Sep 5 10:38 chand
total 0
total 0
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 13 Sep 5 14:52 flowers
-rwxrwxr-x 1 atplab3_trg25 atplab3_trg25 48 Sep 6 15:44 for.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 126 Sep 7 12:13 friends
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 20 Sep 5 14:51 fruits
total 0
total 0
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 0 Sep 10 14:22 newfile
-rwxrwxr-x 1 atplab3_trg25 atplab3_trg25 112 Sep 6 15:41 opr.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 28 Sep 6 10:12 pc
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 27 Sep 5 12:27 pcbkp-05Sep19
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 13 Sep 6 12:01 pock
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 0 Sep 5 12:07 pockk-
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 970 Sep 6 10:55 pck
-r----- 1 atplab3_trg25 atplab3_trg25 0 Sep 5 10:46 premchand
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 0 Sep 10 14:17 premchandkancharla
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 0 Sep 5 10:46 premchand
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 49 Sep 12 08:55 script10.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 818 Sep 12 08:56 script11.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 162 Sep 12 08:57 script12.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 131 Sep 12 08:59 script13.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 110 Sep 12 09:01 script14.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 48 Sep 12 09:02 script15.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 92 Sep 12 09:03 script16.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 118 Sep 12 08:43 script6.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 72 Sep 12 08:47 script71.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 69 Sep 12 08:45 script7.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 188 Sep 12 08:48 script8.sh
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 187 Sep 12 08:50 script9.sh
-rwxrwxr-x 1 atplab3_trg25 atplab3_trg25 117 Sep 6 14:37 shellscrip
-rwxrwxr-x 1 atplab3_trg25 atplab3_trg25 146 Sep 6 15:01 sa.sh
total 0 -rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 0 Sep 9 09:12 first
-rw-rw-r-- 1 atplab3_trg25 atplab3_trg25 34517 Sep 6 10:11 test
total 0

```

6.17

```

[atplab3_trg25@NDAUNIX ~]$

```

```

[atplab3_trg25@NDAUNIX ~]$ vi script17.sh
[atplab3_trg25@NDAUNIX ~]$ sh script17.sh
sh: script17.sh: No such file or directory
[atplab3_trg25@NDAUNIX ~]$ vi script17.sh
[atplab3_trg25@NDAUNIX ~]$ sh script17.sh
basics.sh chand chandu first flowers for.sh friends fruits items ites
[atplab3_trg25@NDAUNIX ~]$

```

6.18

```

[atplab3_trg25@NDAUNIX ~]$

```

```

[atplab3_trg25@NDAUNIX ~]$ vi script18.sh
[atplab3_trg25@NDAUNIX ~]$ sh script18.sh
res=$(grep $1 $2)
echo $res

```

```
[atplab3_trg25@NDAUNIX ~]$ vi script18.sh
[atplab3_trg25@NDAUNIX ~]$ sh script18.sh
script18.sh
4537
[atplab3_trg25@NDAUNIX ~]$
```



6.19

```
atplab3_trg25@NDAUNIX:~
$ cat /dev/urandom
list='ls .'
for file in $list
do
echo `cat $file`
done
```