

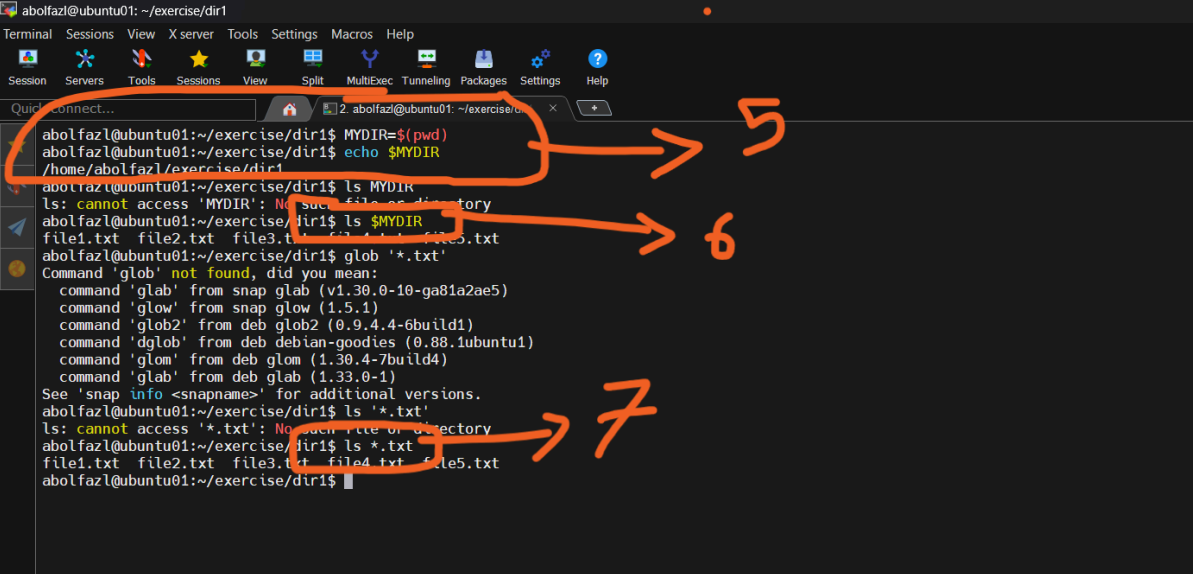
Abolfazl Aghdaee

FMLOps_Jun16_Linux_Ex03_Abolfazl_Aghdaee

A)

```
abolfazl@ubuntu01: ~/exercise/dir1
Terminal Sessions View X server Tools Settings Macros Help
Session Servers Tools Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
abolfazl@ubuntu01:~$ mkdir exercise → 1
abolfazl@ubuntu01:~$ ls
directory_01 directory_02 env exercise house_price_prediction my-project-env solution
abolfazl@ubuntu01:~$ cd exercise → 2
abolfazl@ubuntu01:~/exercise$ mkdir dir1 dir2 dir3 → 3
abolfazl@ubuntu01:~/exercise$ ls
dir1 dir2 dir3
abolfazl@ubuntu01:~/exercise$ touch ../dir1/file1.txt ../dir1/file2.txt ../dir1/file3.txt ../
dir1/file4.txt ../dir1/file5.txt
touch: cannot touch '../dir1/file1.txt': No such file or directory
touch: cannot touch '../dir1/file2.txt': No such file or directory
touch: cannot touch '../dir1/file3.txt': No such file or directory
touch: cannot touch '../dir1/file4.txt': No such file or directory
touch: cannot touch '../dir1/file5.txt': No such file or directory
abolfazl@ubuntu01:~/exercise$ touch ../dir1/{file1.txt,file2.txt,file3.txt,file4.txt,file4.tx
t}
touch: cannot touch '../dir1/file1.txt': No such file or directory
touch: cannot touch '../dir1/file2.txt': No such file or directory
touch: cannot touch '../dir1/file3.txt': No such file or directory
touch: cannot touch '../dir1/file4.txt': No such file or directory
touch: cannot touch '../dir1/file4.txt': No such file or directory
abolfazl@ubuntu01:~/exercise$ touch /dir1/{file1.txt,file2.txt,file3.txt,file4.txt,file4.txt}
touch: cannot touch '/dir1/file1.txt': No such file or directory
touch: cannot touch '/dir1/file2.txt': No such file or directory
touch: cannot touch '/dir1/file3.txt': No such file or directory
touch: cannot touch '/dir1/file4.txt': No such file or directory
touch: cannot touch '/dir1/file4.txt': No such file or directory
abolfazl@ubuntu01:~/exercise$ touch /dir1/{file1.txt,file2.txt,file3.txt,file4.txt,file4.txt
}
abolfazl@ubuntu01:~/exercise$ cd dir1
abolfazl@ubuntu01:~/exercise/dir1$ ls
file1.txt file2.txt file3.txt file4.txt
abolfazl@ubuntu01:~/exercise/dir1$ touch file5.txt → 4
abolfazl@ubuntu01:~/exercise/dir1$ ls
file1.txt file2.txt file3.txt file4.txt file5.txt
abolfazl@ubuntu01:~/exercise/dir1$
```

B)



The image shows a terminal window with a dark theme. The title bar reads 'abolfazl@ubuntu01: ~/exercise/dir1'. The menu bar includes 'Terminal', 'Sessions', 'View', 'X server', 'Tools', 'Settings', 'Macros', and 'Help'. The toolbar contains icons for Session, Servers, Tools, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. The terminal content is as follows:

```
abolfazl@ubuntu01:~/exercise/dir1$ MYDIR=$(pwd)
abolfazl@ubuntu01:~/exercise/dir1$ echo $MYDIR
/home/abolfazl/exercise/dir1
abolfazl@ubuntu01:~/exercise/dir1$ ls MYDIR
ls: cannot access 'MYDIR': No such file or directory
abolfazl@ubuntu01:~/exercise/dir1$ ls $MYDIR
file1.txt file2.txt file3.txt file4.txt file5.txt
abolfazl@ubuntu01:~/exercise/dir1$ glob '*.txt'
Command 'glob' not found, did you mean:
  command 'glab' from snap glab (v1.30.0-10-ga81a2ae5)
  command 'glow' from snap glow (1.5.1)
  command 'glob2' from deb glob2 (0.9.4.4-6build1)
  command 'dglob' from deb debian-goodies (0.88.1ubuntu1)
  command 'glom' from deb glom (1.30.4-7build4)
  command 'glab' from deb glab (1.33.0-1)
See 'snap info <snapname>' for additional versions.
abolfazl@ubuntu01:~/exercise/dir1$ ls '*.txt'
ls: cannot access '*.txt': No such file or directory
abolfazl@ubuntu01:~/exercise/dir1$ ls *.txt
file1.txt file2.txt file3.txt file4.txt file5.txt
abolfazl@ubuntu01:~/exercise/dir1$
```

Handwritten orange annotations include:

- A box around the first two lines of code, with an arrow pointing to the number '5'.
- A box around the third line of code, with an arrow pointing to the number '6'.
- A box around the last two lines of code, with an arrow pointing to the number '7'.

C)

```
abolfazl@ubuntu01: ~/exercise/dir3
Terminal Sessions View Xserver Tools Settings Macros Help
Session Servers Tools Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect... 2. abolfazl@ubuntu01: ~/exercise/dir3
abolfazl@ubuntu01:~/exercise/dir1$ nano file1.txt
abolfazl@ubuntu01:~/exercise/dir1$ cat file1.txt
hi may name is abolfazl aghdaee
abolfazl@ubuntu01:~/exercise/dir1$ cp file1.txt ../dir2
abolfazl@ubuntu01:~/exercise/dir1$ cd ..
abolfazl@ubuntu01:~/exercise$ cd dir2
abolfazl@ubuntu01:~/exercise/dir2$ ls
file1.txt
abolfazl@ubuntu01:~/exercise/dir2$ rm file1.txt copy_of_file1.txt
rm: cannot remove 'copy_of_file1.txt': No such file or directory
abolfazl@ubuntu01:~/exercise/dir2$ mv file1.txt copy_of_file1.txt
mv: cannot stat 'file1.txt': No such file or directory
abolfazl@ubuntu01:~/exercise/dir2$ ls
copy_of_file1.txt
abolfazl@ubuntu01:~/exercise/dir2$ cd ..
abolfazl@ubuntu01:~/exercise$ cd dir1
abolfazl@ubuntu01:~/exercise/dir1$ cp file1.txt ../dir2
abolfazl@ubuntu01:~/exercise/dir1$ cd ..
abolfazl@ubuntu01:~/exercise$ cd dir2
abolfazl@ubuntu01:~/exercise/dir2$ ls
file1.txt
abolfazl@ubuntu01:~/exercise/dir2$ mv file1.txt copy_of_file1.txt
abolfazl@ubuntu01:~/exercise/dir2$ ls
copy_of_file1.txt
abolfazl@ubuntu01:~/exercise/dir2$ cd ..
abolfazl@ubuntu01:~/exercise$ cd dir1
abolfazl@ubuntu01:~/exercise/dir1$ mv file2.txt ../dir3
abolfazl@ubuntu01:~/exercise/dir1$ cd ..
abolfazl@ubuntu01:~/exercise$ cd dir3
abolfazl@ubuntu01:~/exercise/dir3$ ls
file2.txt
abolfazl@ubuntu01:~/exercise/dir3$
```

Handwritten annotations in the image:

- 8: Points to the command `cat file1.txt`.
- 9: Points to the output of the `cat` command.
- 10: Points to the command `cp file1.txt ../dir2`.
- 11: Points to the command `mv file2.txt ../dir3`.

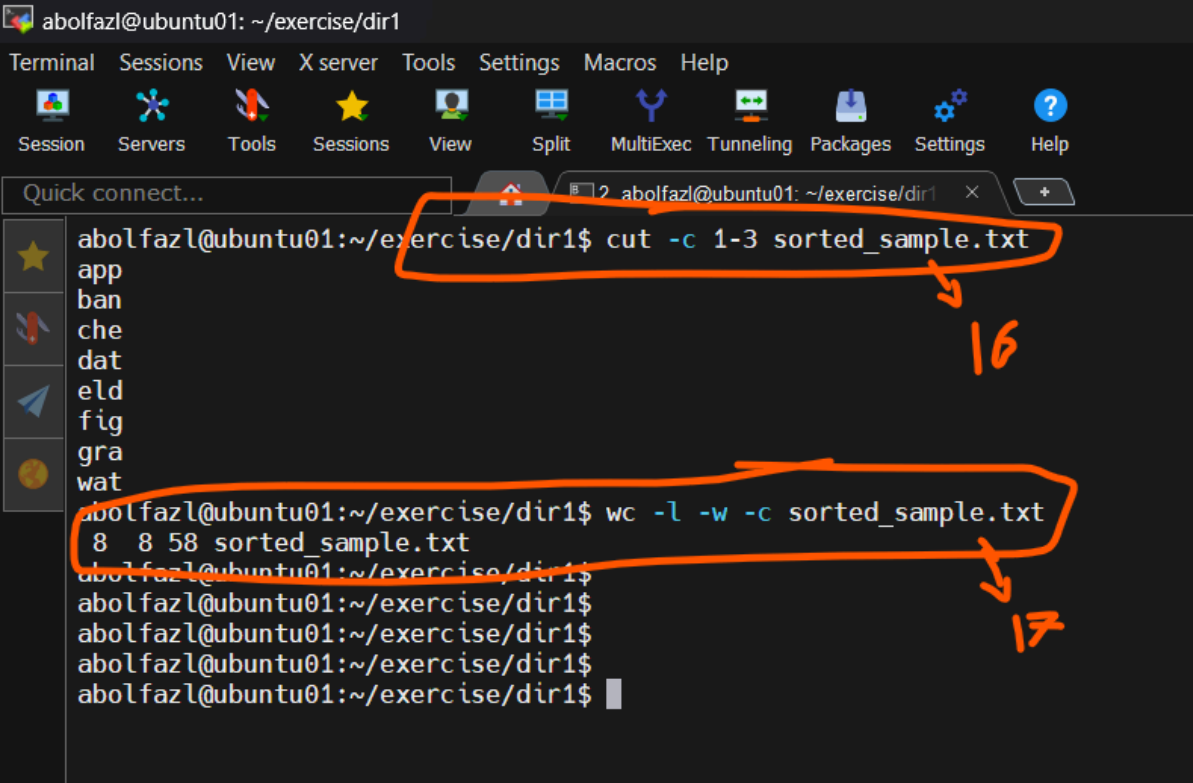
D)

```
abolfazl@ubuntu01: ~/exercise/dir1
Terminal Sessions View X server Tools Settings Macros Help
Session Servers Tools Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect... 2 abolfazl@ubuntu01: ~/exercise/dir1
abolfazl@ubuntu01:~/exercise/dir3$ cd ..
abolfazl@ubuntu01:~/exercise$ cd dir1
abolfazl@ubuntu01:~/exercise/dir1$ touch sample.txt
abolfazl@ubuntu01:~/exercise/dir1$ nano sample.txt
abolfazl@ubuntu01:~/exercise/dir1$ cat sample.txt
apple
banana
cherry
watermelon
date
elderberry
fig
grape
abolfazl@ubuntu01:~/exercise/dir1$ grep 'a' sample.txt
apple
banana
watermelon
date
grape
abolfazl@ubuntu01:~/exercise/dir1$ grep '^[bd]' sample.txt
banana
date
abolfazl@ubuntu01:~/exercise/dir1$
abolfazl@ubuntu01:~/exercise/dir1$
abolfazl@ubuntu01:~/exercise/dir1$ sort sample.txt > dir1/sorted_sample.txt
-bash: dir1/sorted_sample.txt: No such file or directory
abolfazl@ubuntu01:~/exercise/dir1$ sort sample.txt >> dir1/sorted_sample.txt
-bash: dir1/sorted_sample.txt: No such file or directory
abolfazl@ubuntu01:~/exercise/dir1$ sort sample.txt >> sorted_sample.txt
abolfazl@ubuntu01:~/exercise/dir1$ ld
ld: no input files
abolfazl@ubuntu01:~/exercise/dir1$ ls
file1.txt file3.txt file4.txt file5.txt sample.txt sorted_sample.txt
abolfazl@ubuntu01:~/exercise/dir1$ cat sorted_sample.txt
apple
banana
cherry
date
elderberry
fig
grape
watermelon
```

Handwritten annotations in orange:

- 12: Points to the output of `cat sample.txt`.
- 13: Points to the output of `grep 'a' sample.txt`.
- 14: Points to the output of `grep '^[bd]' sample.txt`.
- 15: Points to the output of `cat sorted_sample.txt`.

E)



The screenshot shows a terminal window with a menu bar (Terminal, Sessions, View, X server, Tools, Settings, Macros, Help) and a toolbar with icons for Session, Servers, Tools, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. The terminal title is 'abolfazl@ubuntu01: ~/exercise/dir1'. The command history on the left lists: app, ban, che, dat, eld, fig, gra, wat. The terminal output shows the following commands and results:

```
abolfazl@ubuntu01:~/exercise/dir1$ cut -c 1-3 sorted_sample.txt
app
ban
che
dat
eld
fig
gra
wat

abolfazl@ubuntu01:~/exercise/dir1$ wc -l -w -c sorted_sample.txt
 8  8 58 sorted_sample.txt
```

Handwritten orange annotations include a box around the first command, an arrow pointing to the number 16, and another box around the second command with an arrow pointing to the number 17.

F)

```
abolfazl@ubuntu01: ~  
Terminal Sessions View X server Tools Settings Macros Help  
Session Servers Tools Sessions View Split MultiExec Tunneling Packages Settings Help  
Quick connect... 2. abolfazl@ubuntu01: ~  
abolfazl@ubuntu01:~/exercise/dir1$ find exercise -type f -name "*.txt"  
find: 'exercise': No such file or directory  
abolfazl@ubuntu01:~/exercise/dir1$ cd ..  
abolfazl@ubuntu01:~/exercise$ find exercise -type f -name "*.txt"  
find: 'exercise': No such file or directory  
abolfazl@ubuntu01:~/exercise$ cd ..  
abolfazl@ubuntu01:~$ find exercise -type f -name "*.txt" → 18  
exercise/dir2/copy_of_file1.txt  
exercise/dir3/file2.txt  
exercise/dir1/sample.txt  
exercise/dir1/file3.txt  
exercise/dir1/file5.txt  
exercise/dir1/sorted_sample.txt  
exercise/dir1/file1.txt  
exercise/dir1/file4.txt  
abolfazl@ubuntu01:~$  
abolfazl@ubuntu01:~$  
abolfazl@ubuntu01:~$ rm ./exercise/dir1/file3.txt  
rm: cannot remove './exercise/dir1/file3.txt': No such file or directory  
abolfazl@ubuntu01:~$ rm /exercise/dir1/file3.txt  
rm: cannot remove '/exercise/dir1/file3.txt': No such file or directory  
abolfazl@ubuntu01:~$ rm ./exercise/dir1/file3.txt → 19  
abolfazl@ubuntu01:~$ ls -R exercise  
exercise:  
dir1 dir2 dir3  
  
exercise/dir1:  
file1.txt file4.txt file5.txt sample.txt sorted_sample.txt  
  
exercise/dir2:  
copy_of_file1.txt  
  
exercise/dir3:  
file2.txt  
abolfazl@ubuntu01:~$ █ → 20
```