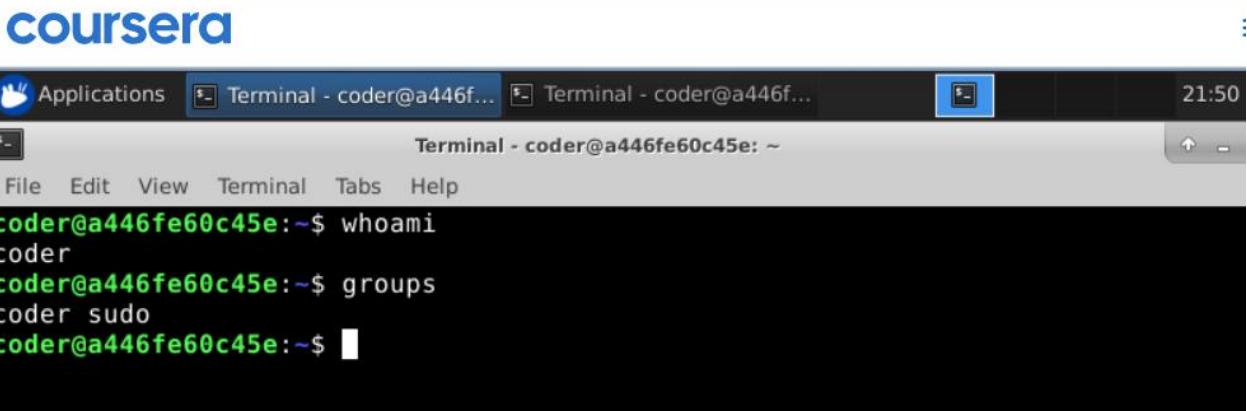


Question 1 Answers

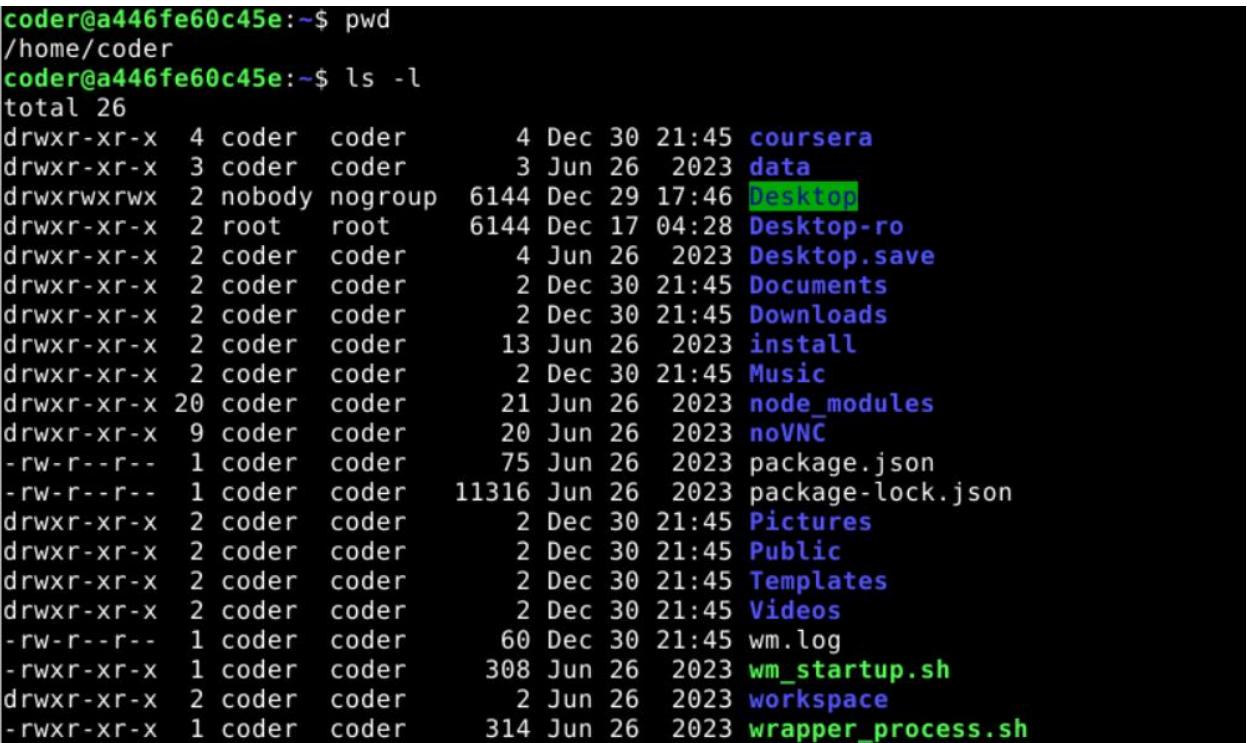
1.



```
coder@a446fe60c45e:~$ whoami
coder
coder@a446fe60c45e:~$ groups
coder sudo
coder@a446fe60c45e:~$
```

The `whoami` command shows us our current username that we are logged in with. The `Groups` command shows all the groups that my current user id belongs to, and as a verification my user ID is displayed in the output.

2.



```
coder@a446fe60c45e:~$ pwd
/home/coder
coder@a446fe60c45e:~$ ls -l
total 26
drwxr-xr-x  4 coder  coder   4 Dec 30 21:45 coursera
drwxr-xr-x  3 coder  coder   3 Jun 26 2023 data
drwxrwxrwx  2 nobody nogroup 6144 Dec 29 17:46 Desktop
drwxr-xr-x  2 root   root    6144 Dec 17 04:28 Desktop-ro
drwxr-xr-x  2 coder  coder   4 Jun 26 2023 Desktop.save
drwxr-xr-x  2 coder  coder   2 Dec 30 21:45 Documents
drwxr-xr-x  2 coder  coder   2 Dec 30 21:45 Downloads
drwxr-xr-x  2 coder  coder  13 Jun 26 2023 install
drwxr-xr-x  2 coder  coder   2 Dec 30 21:45 Music
drwxr-xr-x 20 coder  coder  21 Jun 26 2023 node_modules
drwxr-xr-x  9 coder  coder  20 Jun 26 2023 noVNC
-rw-r--r--  1 coder  coder   75 Jun 26 2023 package.json
-rw-r--r--  1 coder  coder  11316 Jun 26 2023 package-lock.json
drwxr-xr-x  2 coder  coder   2 Dec 30 21:45 Pictures
drwxr-xr-x  2 coder  coder   2 Dec 30 21:45 Public
drwxr-xr-x  2 coder  coder   2 Dec 30 21:45 Templates
drwxr-xr-x  2 coder  coder   2 Dec 30 21:45 Videos
-rw-r--r--  1 coder  coder   60 Dec 30 21:45 wm.log
-rwrxr-xr-x 1 coder  coder  308 Jun 26 2023 wm_startup.sh
drwxr-xr-x  2 coder  coder   2 Jun 26 2023 workspace
-rwxr-xr-x  1 coder  coder  314 Jun 26 2023 wrapper_process.sh
```

The pwd command shows my present working directory. And the ls -l command displays all the files and directories in the long format listing at my current location.

3.

```
coder@a446fe60c45e:~$ echo "Linux user environment verified" > user_info.txt
```

Here we created a new file with specified name and added the text to it using the echo command.

4.

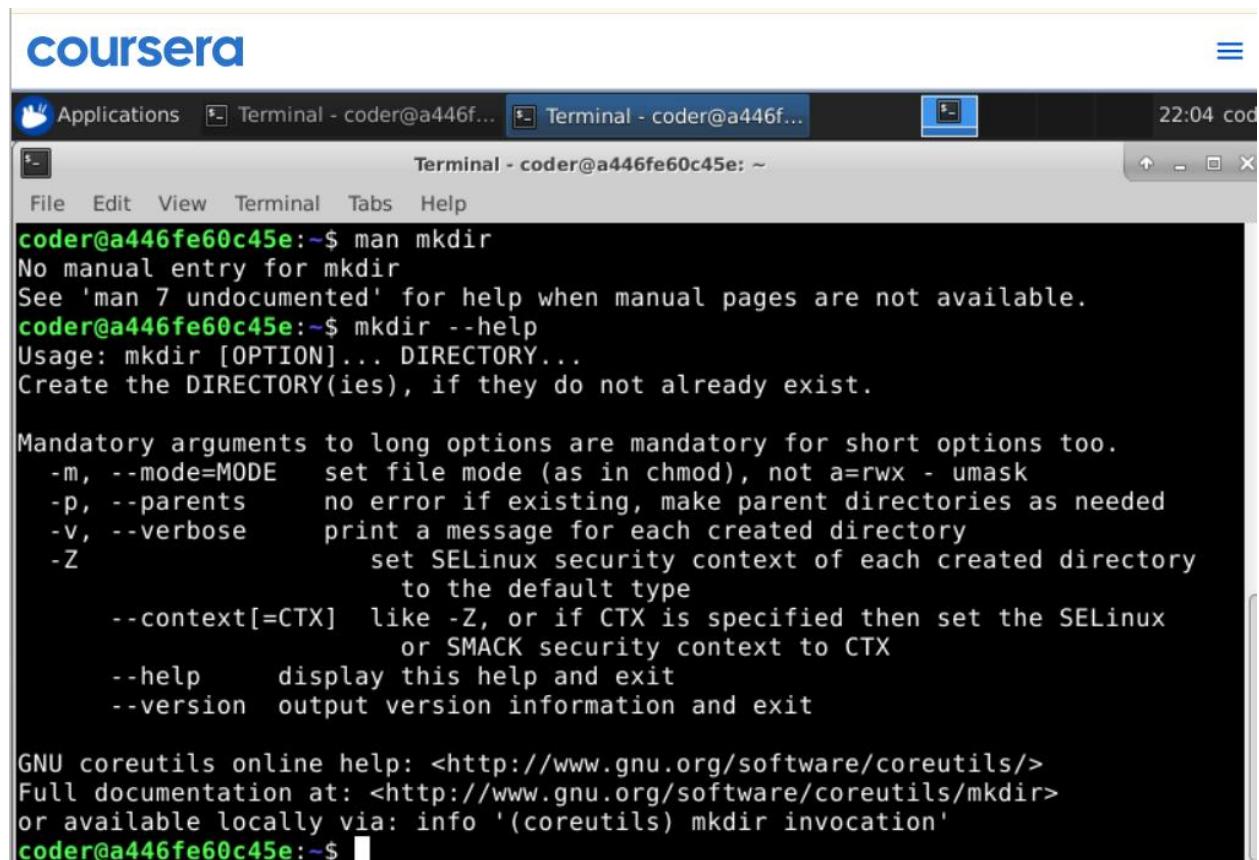
```
coder@a446fe60c45e:~$ wc -m user_info.txt  
32 user_info.txt  
coder@a446fe60c45e:~$ pr user_info.txt
```

```
2025-12-30 21:54           user_info.txt          Page 1
```

```
Linux user environment verified
```

The wc -m command is used to count the total number of a specific characters in a file.

5.



The screenshot shows a Linux desktop environment with a terminal window open. The terminal title is "Terminal - coder@a446fe60c45e: ~". The terminal content displays the man page for the "mkdir" command. It includes the synopsis, detailed descriptions of options like -m, -p, -v, -Z, --context, --help, and --version, and links to online help and full documentation.

```
coder@a446fe60c45e:~$ man mkdir
No manual entry for mkdir
See 'man 7 undocumented' for help when manual pages are not available.
coder@a446fe60c45e:~$ mkdir --help
Usage: mkdir [OPTION]... DIRECTORY...
Create the DIRECTORY(ies), if they do not already exist.

Mandatory arguments to long options are mandatory for short options too.
-m, --mode=MODE    set file mode (as in chmod), not a=rwx - umask
-p, --parents      no error if existing, make parent directories as needed
-v, --verbose      print a message for each created directory
-Z                 set SELinux security context of each created directory
                  to the default type
--context[=CTX]   like -Z, or if CTX is specified then set the SELinux
                  or SMACK security context to CTX
--help            display this help and exit
--version         output version information and exit

GNU coreutils online help: <http://www.gnu.org/software/coreutils/>
Full documentation at: <http://www.gnu.org/software/coreutils/mkdir>
or available locally via: info '(coreutils) mkdir invocation'
coder@a446fe60c45e:~$
```

Ideally, we use “man mkdir” to get to the manual page of mkdir. However, as man repository was not installed, I used mkdir –help command to know more about mkdir command. For example, we can use mkdir -p to create a parent directory if it does not already exist.

6.



The screenshot shows a Linux desktop environment with a terminal window open. The terminal title is "Terminal - coder@a446fe60c45e: ~". The terminal content displays the output of the "ls" command, listing various files and directories in the home directory.

```
coder@a446fe60c45e:~$ ls
coursera    Downloads    package-lock.json  wm.log
data        install     Pictures          wm_startup.sh
Desktop     Music       Public           workspace
Desktop-ro   node_modules Templates        wrapper_process.sh
Desktop.save noVNC      user_info.txt
Documents   package.json Videos          Start
coder@a446fe60c45e:~$
```

The ls command is used to list all files and directories in the home directory. The output is by default alphabetically sorted.

7.

```
coder@a446fe60c45e:~$ grep "admin" log.txt  
grep: log.txt: No such file or directory
```

This code is used to search for specific characters or words in a file. But currently this file does not exist, so we got an error.

8.

```
coder@a446fe60c45e:/home$ uname -r  
6.5.0-1024-aws  
coder@a446fe60c45e:/home$ █
```

This command is used to show the currently running version of Linux Kernel on system.

9.

```
coder@a446fe60c45e:/home$ ping -c 3 www.google.com  
PING www.google.com (142.251.179.147) 56(84) bytes of data.  
From ip-172-18-0-1.ec2.internal (172.18.0.1) icmp_seq=1 Destination Port Unreachable  
From ip-172-18-0-1.ec2.internal (172.18.0.1) icmp_seq=2 Destination Port Unreachable  
From ip-172-18-0-1.ec2.internal (172.18.0.1) icmp_seq=3 Destination Port Unreachable  
  
--- www.google.com ping statistics ---  
3 packets transmitted, 0 received, +3 errors, 100% packet loss, time 2015ms  
coder@a446fe60c45e:/home$ █
```

Ping command is used to test connectivity by sending ICMP packages to server, in our case we used Google server to test connectivity.

10.

```
coder@a446fe60c45e:/home$ uptime  
22:36:44 up 27 days, 5:33, 0 users, load average: 5.78, 5.23, 5.63  
coder@a446fe60c45e:/home$ █
```

This command is used to display the running time of the system along with logged in users and average load times.