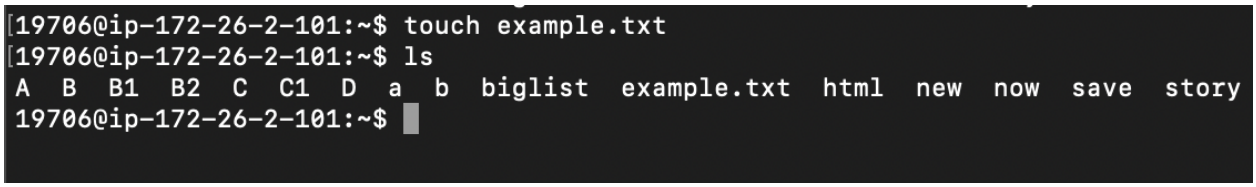
Question no.1

Touch, echo, mkdir

- type this on your Unix terminal

  ⇨ ‘touch’ is a Unix command used to create an empty file.



  ⇨ ‘Echo’ is used to display a message or the value of a variable in the terminal

  ⇨ ‘mkdir’ is used to create a new directory.

```
19706@ip-172-26-2-101:~$ mkdir new_directory
19706@ip-172-26-2-101:~$ ls
A  B1  C   D  b        example.txt  new            now   story
B  B2  C1  a  biglist  html        new_directory  save
19706@ip-172-26-2-101:~$ ls -l
total 48
drwxr-xr-x 2 19706 cs230 4096 Jan 26 19:19 A
drwxr-xr-x 2 19706 cs230 4096 Jan 26 19:27 B
drwxr-xr-x 2 19706 cs230 4096 Jan 26 19:29 B1
drwxr-xr-x 2 19706 cs230 4096 Jan 26 19:30 B2
drwxr-xr-x 2 19706 cs230 4096 Jan 26 19:30 C
drwxr-xr-x 2 19706 cs230 4096 Jan 26 19:30 C1
drwxr-xr-x 3 19706 cs230 4096 Jan 26 19:32 D
-rw-r--r-- 1 19706 cs230    0 Feb  9 21:11 a
-rw-r--r-- 1 19706 cs230    0 Feb  9 21:11 b
-rw-r--r-- 1 19706 cs230   62 Feb  3 15:42 biglist
-rw-r--r-- 1 19706 cs230    0 Feb 10 10:02 example.txt
-rw-r--r-- 1 19706 cs230    0 Feb  8 18:57 html
-rw-r--r-- 1 19706 cs230  115 Feb  2 13:13 new
drwxr-xr-x 2 19706 cs230 4096 Feb 10 10:04 new_directory
-rw-r--r-- 1 19706 cs230  213 Feb  2 13:12 now
-rw-r--r-- 1 19706 cs230   17 Feb  5 00:13 save
-rw-r--r-- 1 19706 cs230    0 Feb  3 15:33 story
19706@ip-172-26-2-101:~$
```

- echo "a b c" | xargs touch
  - Now add -t to the xargs command above. What does it do?

⇨ The ‘-t’ option can be added to the ‘xargs ‘ command to print the command that would be executed, but without executing it. This option is useful for testing and debugging purposes, as it allows us to see what the command will do before actually executing it.

```
19706@ip-172-26-2-101:~$ echo "a b c" | xargs touch
19706@ip-172-26-2-101:~$ echo "a b c" | xargs -t touch
touch a b c
19706@ip-172-26-2-101:~$
```

- Now add -p to the xargs command. What does it do?

⇨ the -p option, the command allows the user to confirm or cancel each execution.

```
19706@ip-172-26-2-101:~$ echo "a b c" | xargs -p touch
touch a b c ?...y
19706@ip-172-26-2-101:~$ echo "a b c" | xargs -p touch
touch a b c ?...n
19706@ip-172-26-2-101:~$
```

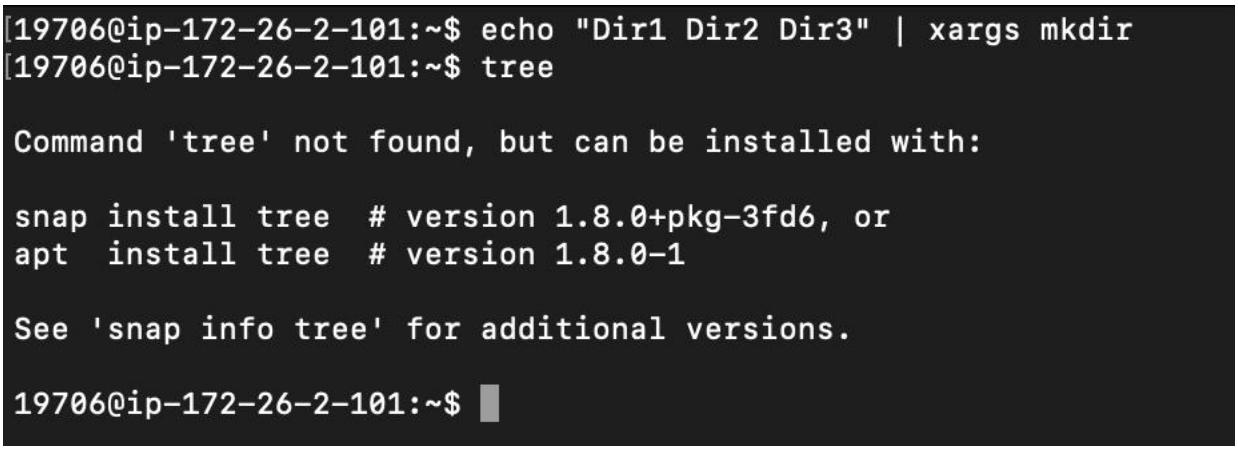
- echo "Dir1 Dir2 Dir3" | xargs mkdir

⇨ The command echo "Dir1 Dir2 Dir3" | xargs mkdir creates multiple directories in a Unix-like operating system.

```
19706@ip-172-26-2-101:~$ echo "Dir1 Dir2 Dir3" | xargs mkdir
19706@ip-172-26-2-101:~$ ls
A  B  B1  B2  C  C1  D  Dir1  Dir2  Dir3  a  b  biglist  c  example.txt  html  ls.help  new  new_directory  now  save  story
19706@ip-172-26-2-101:~$
```

- Type tree to see the directory structure

⇨ The “tree” command is not installed in my system.



Question no.2

Go through Lesson 5 on Webminal. Manipulate and Parse File Contents

Note: You may need to mkdir and touch to create directories and files

- ⇨ grep: It searches the matching words or lines on the file or directory.
- ⇨ grep -r: The -r option is used to search recursively through all subdirectories and files, starting from the current directory.

```
[19706@ip-172-26-2-101:~$ vi hello                                                                                  ]
[19706@ip-172-26-2-101:~$ grep linux hello                                                                          ]
 19706@ip-172-26-2-101:~$ history | grep 'grep linux hello'
   518  grep linux hello
   519  history | grep 'grep linux hello'
[19706@ip-172-26-2-101:~$ ls                                                                                       ]
 A  B1  C   D     Dir2  a  biglist  example.txt  html     new            now   story
 B  B2  C1  Dir1  Dir3  b  c        hello        ls.help  new_directory  save
[19706@ip-172-26-2-101:~$ grep -r "hello"                                                                           ]
 hello:Hello is a common greeting used to acknowledge and initiate communication with others. It is a
  simple word that carries a friendly and welcoming tone and is used in many cultures around the worl
 d. The word hello has its roots in the English language and has been used as a greeting for centurie
 s. It is a versatile word that can be used in a variety of situations, both formal and informal, and
  is a good way to start a conversation with someone new or say hello to an old friend.
 .viminfo:<Hello is a common greeting used to acknowledge and initiate communication with others. It
 is a simple word that carries a friendly and welcoming tone and is used in many cultures around the
 world. The word hello has its roots in the English language and has been used as a greeting for cent
 uries. It is a versatile word that can be used in a variety of situations, both formal and informal,
  and is a good way to start a conversation with someone new or say hello to an old friend.
 .viminfo:|<"Hello is a common greeting used to acknowledge and initiate communication with others. I
 t is a simple word that carries a friendly and welcoming tone and is used in many cultures around th
 e world. The word hello has its roots in the English language and has been used as a greeting for ce
 nturies. It is a versatile word that can be used in a variety of situations, both formal and informa
 l, and is a good way to start a conversation with someone new or say hello to an old friend.","
 .viminfo:'0  2  0  ~/hello
 .viminfo:|4,48,2,0,1676071578,"~/hello"
 .viminfo:'1  4  0  ~/hello
 .viminfo:|4,49,4,0,1676071127,"~/hello"
 .viminfo:'2  1  568  ~/hello
 .viminfo:|4,50,1,568,1676071068,"~/hello"
 .viminfo:'3  1  568  ~/hello
 .viminfo:|4,51,1,568,1676071068,"~/hello"
 .viminfo:'4  1  568  ~/hello
 .viminfo:|4,52,1,568,1676071068,"~/hello"
 .viminfo:'5  1  568  ~/hello
 .viminfo:|4,53,1,568,1676071068,"~/hello"
 .viminfo:'6  1  568  ~/hello
 .viminfo:|4,54,1,568,1676071034,"~/hello"
 .viminfo:'7  1  568  ~/hello
 .viminfo:|4,55,1,568,1676071034,"~/hello"
 .viminfo:'8  1  568  ~/hello
 .viminfo:|4,56,1,568,1676071034,"~/hello"
 .viminfo:'9  1  568  ~/hello
 .viminfo:|4,57,1,568,1676071034,"~/hello"
 .viminfo:-'  2  0  ~/hello
 .viminfo:|4,39,2,0,1676071578,"~/hello"
 .viminfo:-'  1  0  ~/hello
 .viminfo:|4,39,1,0,1676071471,"~/hello"
 .viminfo:-'  4  0  ~/hello
 .viminfo:|4,39,4,0,1676071127,"~/hello"
 .viminfo:-'  1  568  ~/hello
 .viminfo:|4,39,1,568,1676071088,"~/hello"
 .viminfo:-'  1  568  ~/hello
 .viminfo:|4,39,1,568,1676071068,"~/hello"
 .viminfo:-'  1  568  ~/hello
 .viminfo:|4,39,1,568,1676071034,"~/hello"
 .viminfo:> ~/hello
 .bash_history:cp -i file1 hello
 .bash_history:rm hello
 .bash_history:cp D hello
 .bash_history:cp -r D hello
 .bash_history:cd hello
 .bash_history:rm hello
```

⇨ grep -i: The "grep -i" option is used to searching for a pattern in a file or files while ignoring the case of the characters in the pattern.

```
[19706@ip-172-26-2-101:~$ grep -i 'linux' hello
Linux is an open-source, free operating system based on the Unix architecture. It was developed by L
inus Torvalds in the early 1990s and is now widely used for servers, desktop computers, and embedded
 devices such as smartphones and tablets. Linux is known for its stability, security, and flexibilit
y, and is used in a wide range of applications, from web servers and databases to scientific computi
ng and gaming. Linux is also highly customizable, and users can choose from a variety of distributio
ns, or "distros", each with its own unique features and applications.
19706@ip-172-26-2-101:~$
```

⇨ wc: it counts the number of lines, words, and characters in a file or in the standard input.

i) wc -l: it prints the number of lines in the input.

```
[19706@ip-172-26-2-101:~$ wc -l hello
4 hello
```

ii) wc -L: it prints the length of the longest line in the input.

```
[19706@ip-172-26-2-101:~$ wc -L hello
569 hello
```

⇨ echo -e "col1 col2 r1\ncol5 col6 r2\ncol3 col4 r3 " >> new.txt:

```
[19706@ip-172-26-2-101:~$ echo -e "col1 col2 r1\ncol5 col6 r2\ncol3 col4 r3 " >> new.txt
[19706@ip-172-26-2-101:~$ cat new.txt
Linux is an open-source, free operating system based on the Unix architecture. It was developed by L
inus Torvalds in the early 1990s and is now widely used for servers, desktop computers, and embedded
 devices such as smartphones and tablets. Linux is known for its stability, security, and flexibilit
y, and is used in a wide range of applications, from web servers and databases to scientific computi
ng and gaming. Linux is also highly customizable, and users can choose from a variety of distributio
ns, or "distros", each with its own unique features and applications.          Hello is a common gr
eeting used to acknowledge and initiate communication with others. It is a simple word that carries
a friendly and welcoming tone and is used in many cultures around the world. The word hello has its
roots in the English language and has been used as a greeting for centuries. It is a versatile word
that can be used in a variety of situations, both formal and informal, and is a good way to start a
conversation with someone new or say hello to an old friend.
col1 col2 r1
col5 col6 r2
col3 col4 r3
```

⇨ echo -e "Hello\nlinux\nProgrammers paradise" >> linux.txt:

```
[19706@ip-172-26-2-101:~$ echo -e "Hello\nlinux\nProgrammers paradise" >> linux.txt
[19706@ip-172-26-2-101:~$ cat linux.txt
Hello
linux
Programmers paradise
```

⇨ cut : it is used to extract specific fields from a file. It operates on either a single column of data or multiple columns.

i) cut -f1 -d' ' new.txt:

```
19706@ip-172-26-2-101:~$ cut -f1 -d' ' new.txt
Linux
col1
col5
col3
```

ii) cut -f3 -d' ' new.txt:

```
[19706@ip-172-26-2-101:~$ cut -f3 -d' ' new.txt
an
r1
r2
r3
```

⇨ paste: it is used to join lines of files horizontally (i.e., side by side) to create a merged version of the input files.

```
19706@ip-172-26-2-101:~$ paste hello new.txt
Linux is an open-source, free operating system based on the Unix architecture. It was developed by L
inus Torvalds in the early 1990s and is now widely used for servers, desktop computers, and embedded
 devices such as smartphones and tablets. Linux is known for its stability, security, and flexibilit
y, and is used in a wide range of applications, from web servers and databases to scientific computi
ng and gaming. Linux is also highly customizable, and users can choose from a variety of distributio
ns, or "distros", each with its own unique features and applications.   Linux is an open-source, fre
e operating system based on the Unix architecture. It was developed by Linus Torvalds in the early 1
990s and is now widely used for servers, desktop computers, and embedded devices such as smartphones
 and tablets. Linux is known for its stability, security, and flexibility, and is used in a wide ran
ge of applications, from web servers and databases to scientific computing and gaming. Linux is also
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its own unique features and applications.              Hello is a common greeting used to acknowled
ge and initiate communication with others. It is a simple word that carries a friendly and welcoming
 tone and is used in many cultures around the world. The word hello has its roots in the English lan
guage and has been used as a greeting for centuries. It is a versatile word that can be used in a va
riety of situations, both formal and informal, and is a good way to start a conversation with someon
e new or say hello to an old friend.
       col1 col2 r1
Hello is a common greeting used to acknowledge and initiate communication with others. It is a simpl
e word that carries a friendly and welcoming tone and is used in many cultures around the world. The
 word hello has its roots in the English language and has been used as a greeting for centuries. It
is a versatile word that can be used in a variety of situations, both formal and informal, and is a
good way to start a conversation with someone new or say hello to an old friend.        col5 col6 r2
```

⇨ paste -s hello new.txt:

```
19706@ip-172-26-2-101:~$ paste -s hello new.txt
Linux is an open-source, free operating system based on the Unix architecture. It was developed by L
inus Torvalds in the early 1990s and is now widely used for servers, desktop computers, and embedded
 devices such as smartphones and tablets. Linux is known for its stability, security, and flexibilit
y, and is used in a wide range of applications, from web servers and databases to scientific computi
ng and gaming. Linux is also highly customizable, and users can choose from a variety of distributio
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a friendly and welcoming tone and is used in many cultures around the world. The word hello has its
roots in the English language and has been used as a greeting for centuries. It is a versatile word
that can be used in a variety of situations, both formal and informal, and is a good way to start a
conversation with someone new or say hello to an old friend.
Linux is an open-source, free operating system based on the Unix architecture. It was developed by L
inus Torvalds in the early 1990s and is now widely used for servers, desktop computers, and embedded
 devices such as smartphones and tablets. Linux is known for its stability, security, and flexibilit
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ng and gaming. Linux is also highly customizable, and users can choose from a variety of distributio
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eeting used to acknowledge and initiate communication with others. It is a simple word that carries
a friendly and welcoming tone and is used in many cultures around the world. The word hello has its
roots in the English language and has been used as a greeting for centuries. It is a versatile word
that can be used in a variety of situations, both formal and informal, and is a good way to start a
conversation with someone new or say hello to an old friend.           col1 col2 r1    col5 col6 rc
ol3 col4 r3
19706@ip-172-26-2-101:~$
```
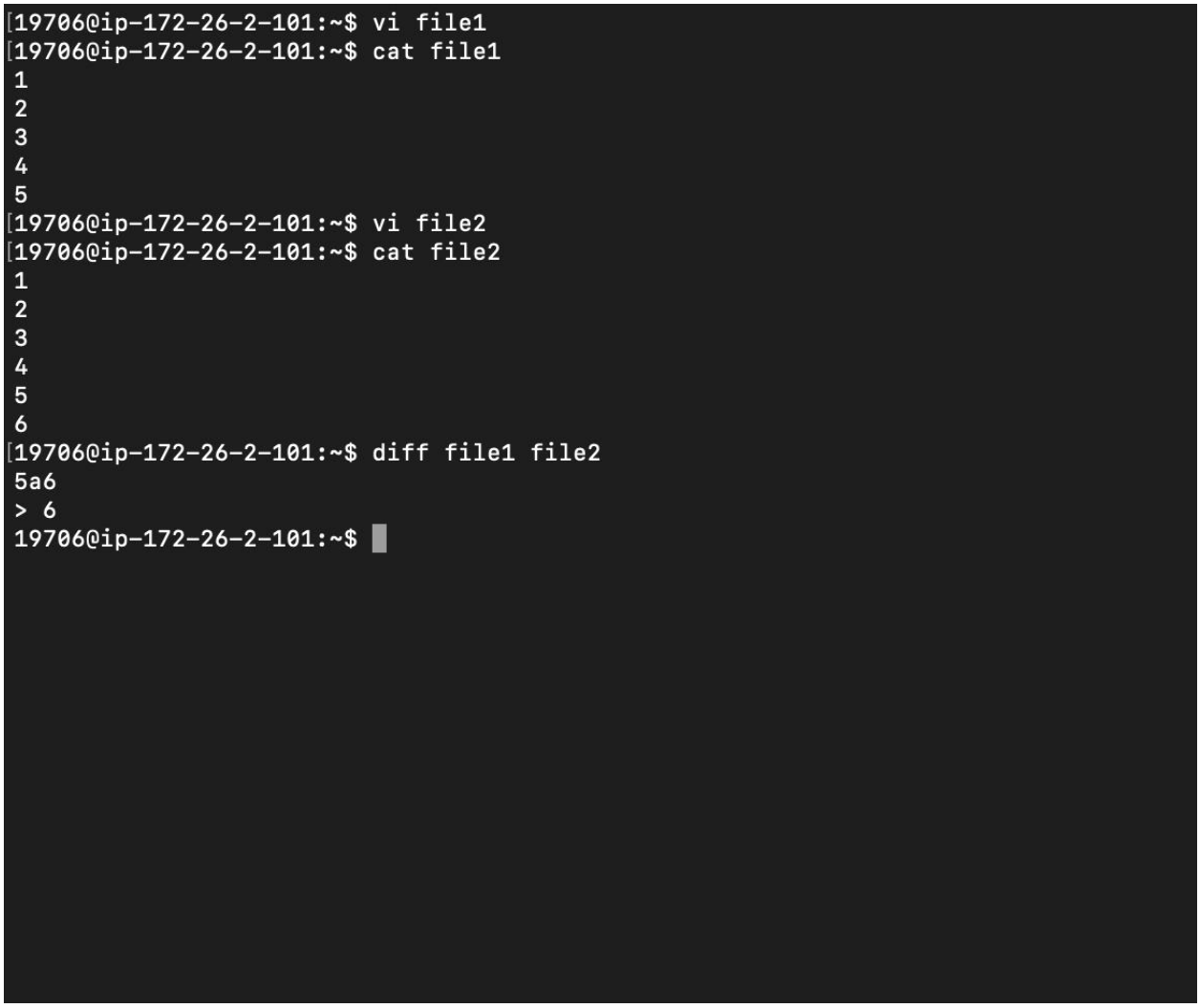

⇨ I can’t paste the text from the old file to the new file directly, I need to use other commands such as cat or cp in conjunction with paste.

```
19706@ip-172-26-2-101:~$ which paste
/usr/bin/paste
19706@ip-172-26-2-101:~$ cat hello | paste -s > new.txt
19706@ip-172-26-2-101:~$ cat new.txt
Linux is an open-source, free operating system based on the Unix architecture. It was developed by L
inus Torvalds in the early 1990s and is now widely used for servers, desktop computers, and embedded
 devices such as smartphones and tablets. Linux is known for its stability, security, and flexibilit
y, and is used in a wide range of applications, from web servers and databases to scientific computi
ng and gaming. Linux is also highly customizable, and users can choose from a variety of distributio
ns, or "distros", each with its own unique features and applications.          Hello is a common gr
eeting used to acknowledge and initiate communication with others. It is a simple word that carries
a friendly and welcoming tone and is used in many cultures around the world. The word hello has its
roots in the English language and has been used as a greeting for centuries. It is a versatile word
that can be used in a variety of situations, both formal and informal, and is a good way to start a
conversation with someone new or say hello to an old friend.
19706@ip-172-26-2-101:~$
```

⇨ sort: The sort of command is used to sort the lines of a text file in a specified order.

```
19706@ip-172-26-2-101:~$ sort new.txt
Linux is an open-source, free operating system based on the Unix architecture. It was developed by
inus Torvalds in the early 1990s and is now widely used for servers, desktop computers, and embedde
 devices such as smartphones and tablets. Linux is known for its stability, security, and flexibili
y, and is used in a wide range of applications, from web servers and databases to scientific comput
ng and gaming. Linux is also highly customizable, and users can choose from a variety of distributi
ns, or "distros", each with its own unique features and applications.          Hello is a common g
eeting used to acknowledge and initiate communication with others. It is a simple word that carries
a friendly and welcoming tone and is used in many cultures around the world. The word hello has its
roots in the English language and has been used as a greeting for centuries. It is a versatile word
that can be used in a variety of situations, both formal and informal, and is a good way to start a
conversation with someone new or say hello to an old friend.
19706@ip-172-26-2-101:~$
```

⇨ diff: The diff command is used in Linux to compare the contents of two files. The output shows the differences between the two files.



Question no.3

Go through Lesson 6 on Webminal. Changing File Attributes

Note: You may need to mkdir and touch to create directories and files

- ⇨ dirname: The dirname command returns the path of the directory containing the file, without the file name.

```
19706@ip-172-26-2-101:~$ dirname hello/file1/file2
hello/file1
19706@ip-172-26-2-101:~$
```

```
19706@ip-172-26-2-101:~$ dirname file1
.
19706@ip-172-26-2-101:~$
```

⇨ basename: It removes the directory path information and returns only the file name.

```
19706@ip-172-26-2-101:~$ basename /path/to/file1
file1
19706@ip-172-26-2-101:~$
```

⇨ chmod: The chmod command is used to change the permissions of files or directories in Unix-like operating systems. The -v option provides verbose output, meaning that it will print the result of each file specified on the command line.

```
19706@ip-172-26-2-101:~$ chmod -v 666 file1
mode of 'file1' changed from 0644 (rw-r--r--) to 0666 (rw-rw-rw-)
19706@ip-172-26-2-101:~$
```

i) chmod a+rw file1:

```
[19706@ip-172-26-2-101:~$ chmod a+rw file1
[19706@ip-172-26-2-101:~$ stat file1
  File: file1
  Size: 10              Blocks: 8          IO Block: 4096   regular file
Device: ca01h/51713d    Inode: 257692      Links: 1
Access: (0777/-rwxrwxrwx)  Uid: ( 1016/   19706)   Gid: ( 1001/   cs230)
Access: 2023-02-10 15:47:39.233885572 -0800
Modify: 2023-02-10 15:47:34.793939172 -0800
Change: 2023-02-10 16:19:46.690956761 -0800
 Birth: -
19706@ip-172-26-2-101:~$
```

ii) chmod a-rw file1:

```
[19706@ip-172-26-2-101:~$ chmod a-rw file1
[19706@ip-172-26-2-101:~$ stat file1
  File: file1
  Size: 10              Blocks: 8          IO Block: 4096   regular file
Device: ca01h/51713d    Inode: 257692      Links: 1
Access: (0111/---x--x--x)  Uid: ( 1016/   19706)   Gid: ( 1001/   cs230)
Access: 2023-02-10 15:47:39.233885572 -0800
Modify: 2023-02-10 15:47:34.793939172 -0800
Change: 2023-02-10 16:21:29.553995231 -0800
 Birth: -
19706@ip-172-26-2-101:~$
```

iii) chmod u+rw file1:

```
[19706@ip-172-26-2-101:~$ chmod u+rw file1
[19706@ip-172-26-2-101:~$ stat file1
  File: file1
  Size: 10              Blocks: 8          IO Block: 4096   regular file
Device: ca01h/51713d    Inode: 257692      Links: 1
Access: (0711/-rwx--x--x)  Uid: ( 1016/   19706)   Gid: ( 1001/   cs230)
Access: 2023-02-10 15:47:39.233885572 -0800
Modify: 2023-02-10 15:47:34.793939172 -0800
Change: 2023-02-10 16:22:14.393916639 -0800
 Birth: -
19706@ip-172-26-2-101:~$
```

iv) chmod -R 644 ~/chmod_dir :

```
[19706@ip-172-26-2-101:~$ mkdir chmod_dir
[19706@ip-172-26-2-101:~$ chmod -R 644 ~/chmod_dir
```

⇨ chown: it changes the owner and/or group of files, directories, or symbolic links.

```
[19706@ip-172-26-2-101:~$ chown 19706 file1
[19706@ip-172-26-2-101:~$ ls -l file1
 ---x--x--x 1 19706 cs230 10 Feb 10 15:47 file1
 19706@ip-172-26-2-101:~$
```

i) chown root:staff -R ~/dir2:

```
[19706@ip-172-26-2-101:~$ chown root:staff -R ~/dir2
 chown: changing ownership of '/home/19706/dir2': Operation not permitted
 19706@ip-172-26-2-101:~$
```

ii) chown --from=webminal:webminal root:staff -R ~/dir2:

```
19706@ip-172-26-2-101:~$ chown --from=webminal:webminal root:staff -R ~/dir2
chown: invalid user: ‘webminal:webminal’
19706@ip-172-26-2-101:~$
```

⇨ chgrp: to change the group ownership of a file or directory.

i) chgrp root file1:

```
[19706@ip-172-26-2-101:~$ ls -l file1
 -rwx--x--x 1 19706 cs230 10 Feb 10 15:47 file1
[19706@ip-172-26-2-101:~$ chgrp root file1
 chgrp: changing group of 'file1': Operation not permitted
 19706@ip-172-26-2-101:~$
```

ii) chgrp -hR root dir2:

```
[19706@ip-172-26-2-101:~$ chgrp -hR root dir2
 chgrp: changing group of 'dir2': Operation not permitted
 19706@ip-172-26-2-101:~$
```

Question no.4

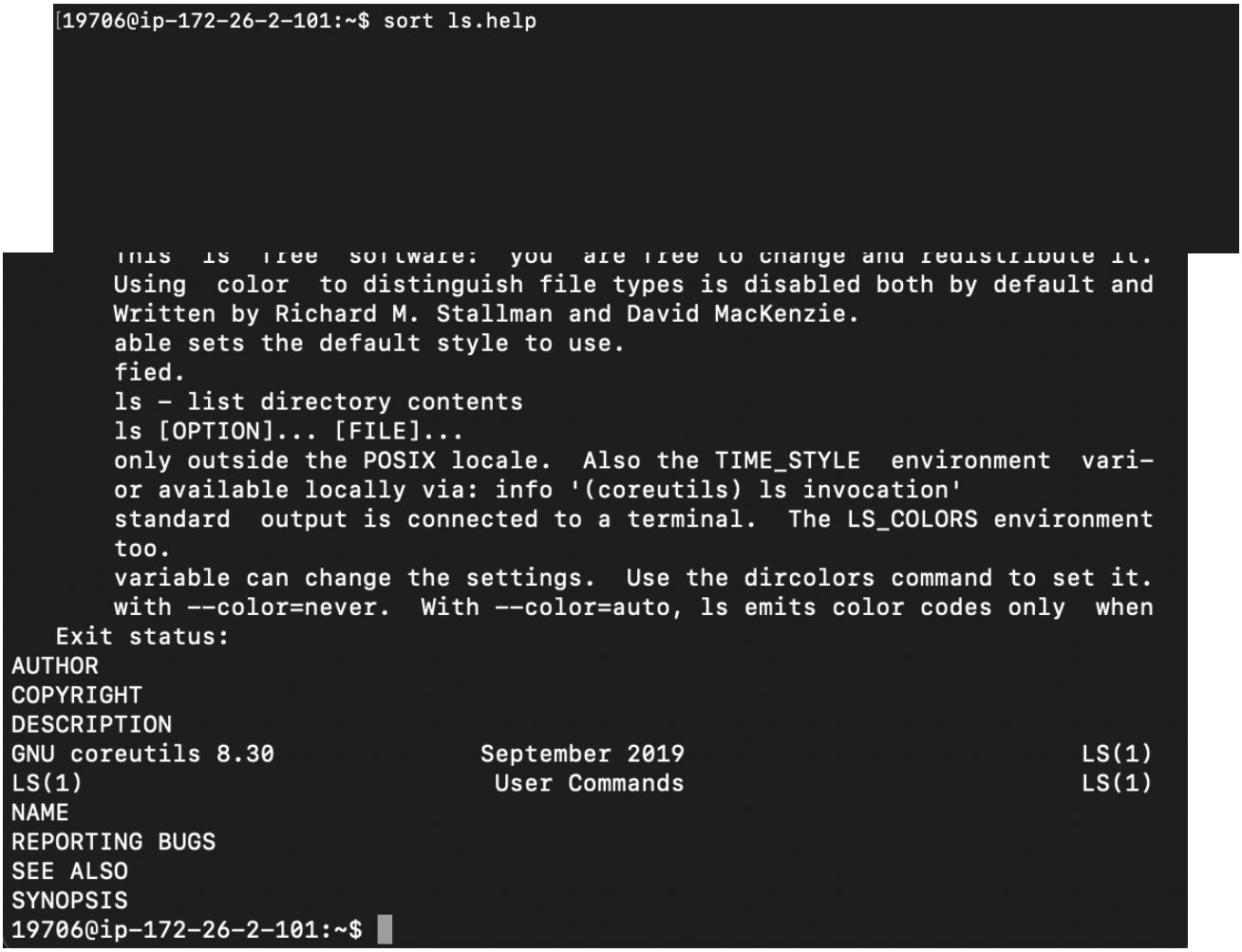
sort

- Save the man pages of the "ls" command to a file. You can type $man ls > ls.help
  ⇨ The “man ls” command displays the manual page for the ‘ls’ command, and the output is redirected to a file name ‘ls.help’ using the ‘>’ symbol.

```
19706@ip-172-26-2-101:~$ man ls > ls.help
19706@ip-172-26-2-101:~$ cat ls.help
LS(1)                           User Commands                                LS(1)

NAME
       ls - list directory contents

SYNOPSIS
       ls [OPTION]... [FILE]...

DESCRIPTION
       List  information  about  the FILEs (the current directory by default).
       Sort entries alphabetically if none of -cftuvSUX nor --sort  is  speci-
       fied.

       Mandatory  arguments  to  long  options are mandatory for short options
       too.

       -a, --all
              do not ignore entries starting with .

       -A, --almost-all
              do not list implied . and ..
```

- Now sort this file alphabetically. $sort ls.help
  ⇨ The ‘sort’ command sorts the contents of the file ‘ls.help’ and displays the sorted the output in the terminal.

There were some spaces due to the error or empty lines because of that my terminal there were blank spaces and only the notes.



- Do a reverse sort. The option is -r
  ⇨ It helps to sort the contents of a file in reverse (descending) order.

```
19706@ip-172-26-2-101:~$ sort -r ls.help
SYNOPSIS
SEE ALSO
REPORTING BUGS
NAME
LS(1)                            User Commands                           LS(1)
GNU coreutils 8.30               September 2019                          LS(1)
DESCRIPTION
COPYRIGHT
AUTHOR
   Exit status:
       with --color=never.  With --color=auto, ls emits color codes only  when
       variable can change the settings.  Use the dircolors command to set it.
       too.
       standard  output is connected to a terminal.  The LS_COLORS environment
       or available locally via: info '(coreutils) ls invocation'
       only outside the POSIX locale.  Also the TIME_STYLE  environment  vari-
       ls [OPTION]... [FILE]...
       ls - list directory contents
       fied.
       able sets the default style to use.
       Written by Richard M. Stallman and David MacKenzie.
       Using  color  to distinguish file types is disabled both by default and
       This  is  free  software:  you  are free to change and redistribute it.
       There is NO WARRANTY, to the extent permitted by law.
       The TIME_STYLE argument can be  full-iso,  long-iso,  iso,  locale,  or
       The SIZE argument is an integer and  optional  unit  (example:  10K  is
       Sort entries alphabetically if none of -cftuvSUX nor --sort  is  speci-
       Report ls translation bugs to <https://translationproject.org/team/>
       Mandatory  arguments  to  long  options are mandatory for short options
       MAT2  to  recent files.  TIME_STYLE prefixed with 'posix-' takes effect
       MAT1<newline>FORMAT2, then FORMAT1 applies to non-recent files and FOR-
       List  information  about  the FILEs (the current directory by default).
       GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
       GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
       Full documentation at: <https://www.gnu.org/software/coreutils/ls>
       Copyright © 2018 Free Software Foundation, Inc.   License  GPLv3+:  GNU
       2      if serious trouble (e.g., cannot access command-line argument).
       10*1024).   Units  are  K,M,G,T,P,E,Z,Y  (powers  of 1024) or KB,MB,...
```

- Now sort on the second field. The option is -k, although different versions of the sort could be different. To find out, look at the man pages from a sort
  - ⇨ To sort the contents of a file based on the second field, you can use the sort command with the -k

option. The -k option specifies the field to sort on. In this case, 2 specifies the second field. The sorted output will be displayed in the terminal.

```
19706@ip-172-26-2-101:~$ sort -k 2 ls.help
```

```
              append indicator (one of */=>@|) to entries
              append indicator with style WORD to entry names: none (default),
       There is NO WARRANTY, to the extent permitted by law.
       Report ls translation bugs to <https://translationproject.org/team/>
              show nongraphic characters as-is (the default, unless program is
              do not ignore entries starting with .
              do not list implied . and ..
              do not list implied entries ending with ~
              do not list implied entries matching shell  PATTERN  (overridden
              do not list implied entries matching shell PATTERN
       (powers of 1000).
              'auto', or 'never'
              'auto', or 'never'; more info below
              reverse order while sorting
              generate output designed for Emacs' dired mode
              set output width to COLS.  0 means no limit
       only outside the POSIX locale.  Also the TIME_STYLE  environment  vari-
              and per directory totals
              that points to a directory
              '--block-size=M'; see SIZE format below
       able sets the default style to use.
              when showing file information for a symbolic link, show informa-
              otherwise: sort by ctime, newest first
              file status information); with -l: show ctime and sort by  name;
    Exit status:
              list subdirectories recursively
              follow symbolic links listed on the command line
              assume tab stops at each COLS instead of 8
              print the allocated size of each file, in blocks
              print the index number of each file
       MAT1<newline>FORMAT2, then FORMAT1 applies to non-recent files and FOR-
              specified time as sort key if --sort=time (newest first)
       GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
              output version information and exit
       Copyright © 2018 Free Software Foundation, Inc.   License  GPLv3+:  GNU
19706@ip-172-26-2-101:~$
```

Question no.5

Follow the UNIX Prompt Customization Article to customize your UNIX prompt. Show me your script. Then take a screenshot of your prompt after customization.

Your prompt needs to use 3 or 4 of \ information. Please explain what the \ info you used and what each one does.

⇨ UNIX prompt customization script uses three pieces of information: the current working directory, the current user, and the hostname.

The three pieces of information are represented by the following escape sequences:

i) \W represents the current working directory in abbreviated form, showing only the basename of the current directory

ii) \u represents the current username

iii) \h represents the hostname up to the first .