



# Cognizance

## Task - 4

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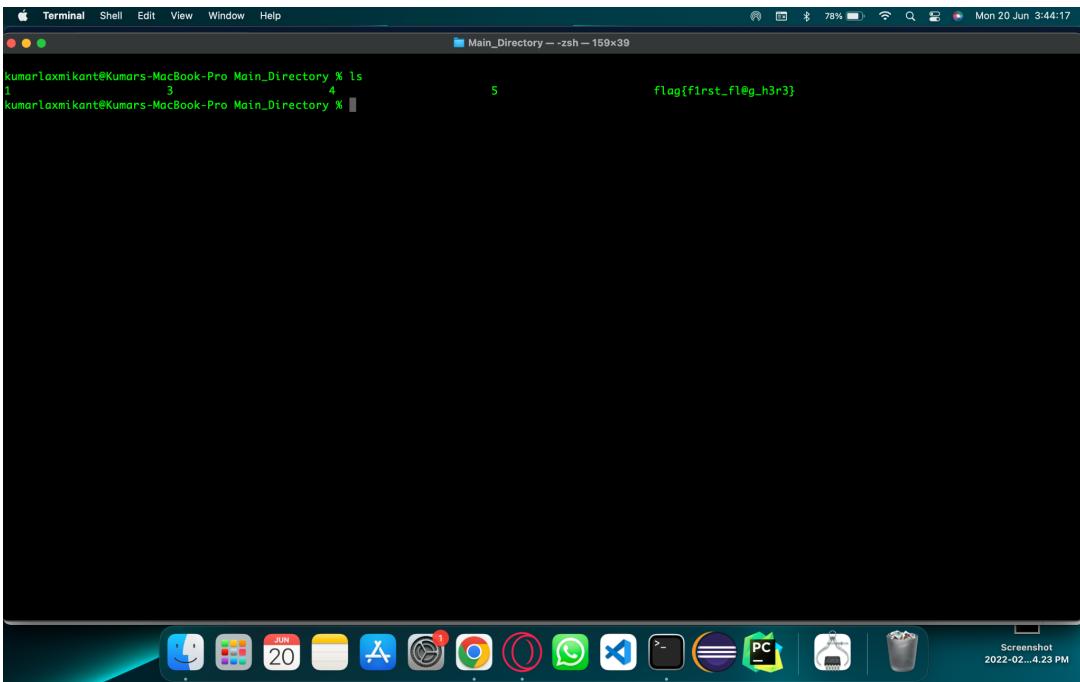
**Roll No:** CH.EN.U4CSE20039

**Batch:** 2020-24

**Department:** CSE-A

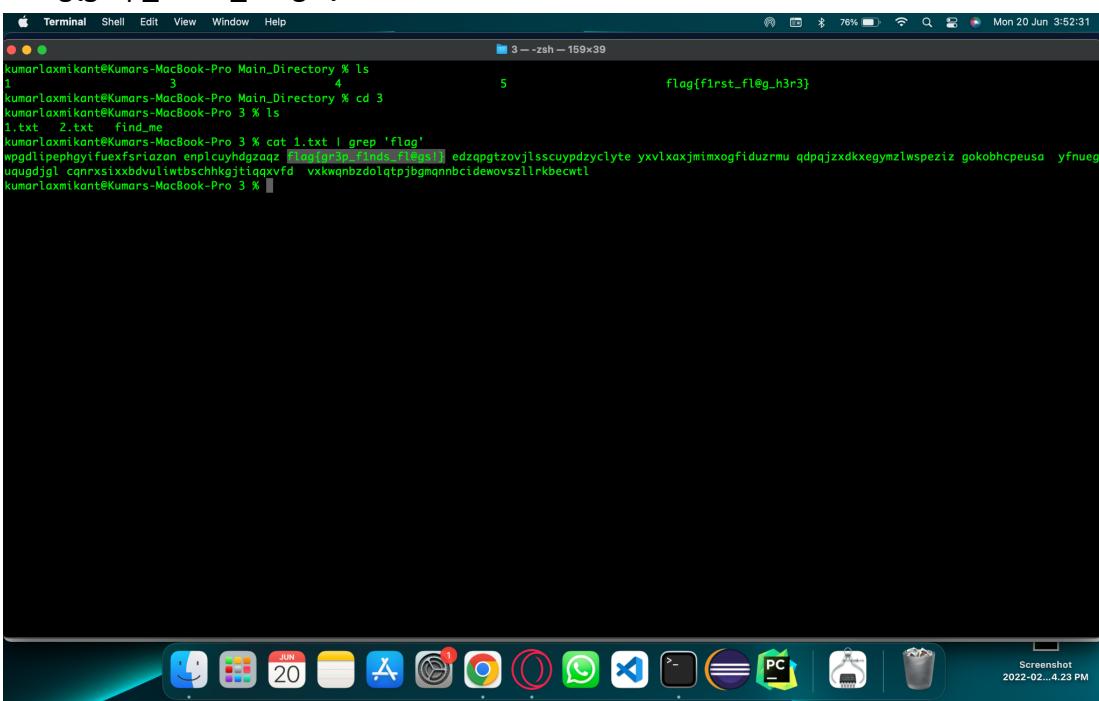
## PART 1: (Flags and Output screen)

1) flag{f1rst\_fl@g\_h3r3}



A screenshot of a macOS Terminal window titled "Main\_Directory -- zsh -- 159x39". The terminal shows the command "ls" being run, which lists files 1, 3, 4, and 5. The file "5" contains the flag "flag{f1rst\_fl@g\_h3r3}".

2) flag{gr3p\_f1nds\_fl@gs!}



A screenshot of a macOS Terminal window titled "3 -- zsh -- 159x39". The terminal shows the command "ls" being run, which lists files 1, 3, 4, and 5. The file "5" contains the flag "flag{f1rst\_fl@g\_h3r3}". Below this, the command "cat 1.txt | grep 'flag'" is run, displaying a long string of characters: "nppdlipephyifluefxfsriazan enplcuyhdgzaqz [REDACTED] edzqpgtzovjllscuypdzyclyte yxvlaxajmimxogfiduzrmu qdpqjzxdkxegymzlwsppeziz gokohcpeusa yfnueg uquqdjgl cnqrnsixxbdvliwtbschnkjtiagxvfd vxkwqnzbzdolqtpjbgmqnnbcidewovszlirkbecwtl".

### 3) flag{Y0u\_f0und\_m3!}

A screenshot of a macOS terminal window titled "8 --zsh - 159x39". The terminal shows a user navigating through a directory structure to find a file named "flag.txt". The user runs "grep 'flag'" on "find\_me" files and finds a long, encoded string. They then run "cat 2.txt" to reveal the flag: "Flag{Y0u\_f0und\_m3!}". The terminal window has a dark theme with a blue gradient bar at the bottom. The dock below shows various application icons.

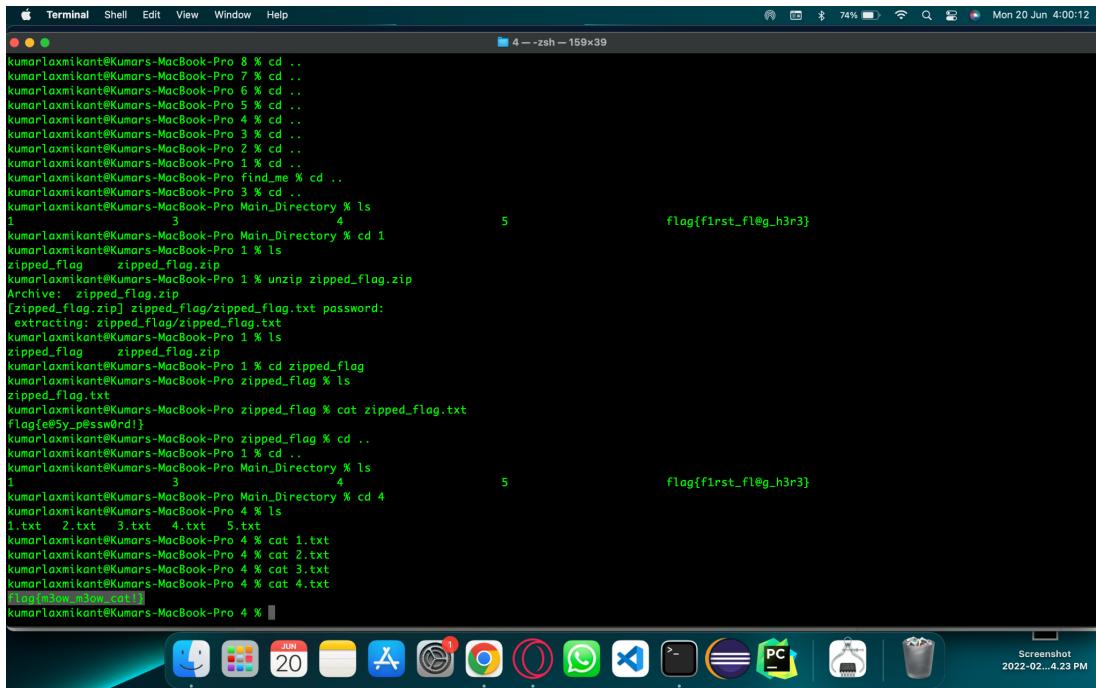
```
Kumarlaxmikant@Kumars-MacBook-Pro 3 % ls
1.txt 2.txt find_me
Kumarlaxmikant@Kumars-MacBook-Pro 3 % cat 1.txt | grep 'flag'
npgdilipphgyifueixsriazan enplcuyhdgzaqz flag{gr3p_finds_flag$} edzpqgtzovjlsscuypdzlyte yxvlxaxjimimxogfiduzrmu qdpqjzxdkxegymzlwspetz gokebhcpesa yfneug
uquqdjgl cqnrkstixxbvulwtbschkgjtiquxvfd vxkwanzbd0lqtjpjbgmqnnbc1dewovszllrkbecwlt
Kumarlaxmikant@Kumars-MacBook-Pro 3 % cat 2.txt
No Flag here
Kumarlaxmikant@Kumars-MacBook-Pro 3 % cd find_me
Kumarlaxmikant@Kumars-MacBook-Pro find_me % ls
1
Kumarlaxmikant@Kumars-MacBook-Pro find_me % cd 1
Kumarlaxmikant@Kumars-MacBook-Pro 1 % ls
2
Kumarlaxmikant@Kumars-MacBook-Pro 1 % cd 2
Kumarlaxmikant@Kumars-MacBook-Pro 2 % ls
3
Kumarlaxmikant@Kumars-MacBook-Pro 2 % cd 3
Kumarlaxmikant@Kumars-MacBook-Pro 3 % ls
4
Kumarlaxmikant@Kumars-MacBook-Pro 3 % cd 4
Kumarlaxmikant@Kumars-MacBook-Pro 4 % ls
5
password_for_zip.txt
Kumarlaxmikant@Kumars-MacBook-Pro 4 % cat password_for_zip.txt
zip_file_huh?
Kumarlaxmikant@Kumars-MacBook-Pro 4 % cd 5
Kumarlaxmikant@Kumars-MacBook-Pro 5 % ls
6
Kumarlaxmikant@Kumars-MacBook-Pro 5 % cd 6
Kumarlaxmikant@Kumars-MacBook-Pro 6 % ls
7
Kumarlaxmikant@Kumars-MacBook-Pro 6 % cd 7
Kumarlaxmikant@Kumars-MacBook-Pro 7 % ls
8
Kumarlaxmikant@Kumars-MacBook-Pro 7 % cd 8
Kumarlaxmikant@Kumars-MacBook-Pro 8 % ls
Flag.txt.txt
Kumarlaxmikant@Kumars-MacBook-Pro 8 % cat flag.txt.txt
Flag{Y0u_f0und_m3!
Kumarlaxmikant@Kumars-MacBook-Pro 8 %
```

### 4) flag{e@5y\_p@ssw0rd!}

A screenshot of a macOS terminal window titled "zipped\_flag --zsh - 159x39". The terminal shows a user extracting a zipped file named "zipped\_flag.zip". They run "unzip zipped\_flag.zip" and then "cat zipped\_flag.txt" to reveal the flag: "Flag{e@5y\_p@ssw0rd!}". The terminal window has a dark theme with a blue gradient bar at the bottom. The dock below shows various application icons.

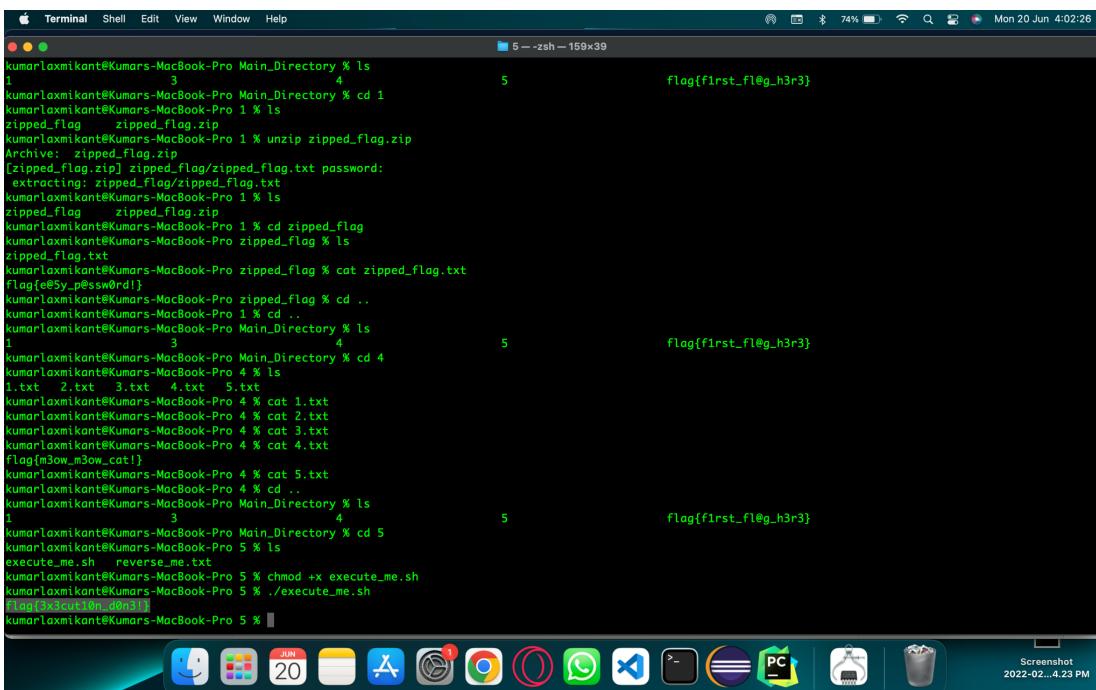
```
6
Kumarlaxmikant@Kumars-MacBook-Pro 5 % cd 6
Kumarlaxmikant@Kumars-MacBook-Pro 6 % ls
7
Kumarlaxmikant@Kumars-MacBook-Pro 6 % cd 7
Kumarlaxmikant@Kumars-MacBook-Pro 7 % ls
8
Kumarlaxmikant@Kumars-MacBook-Pro 7 % cd 8
Kumarlaxmikant@Kumars-MacBook-Pro 8 % ls
flag.txt.txt
Kumarlaxmikant@Kumars-MacBook-Pro 8 % cat flag.txt.txt
flag{Y0u_f0und_m3!}
Kumarlaxmikant@Kumars-MacBook-Pro 8 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro 7 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro 6 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro 5 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro 4 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro 3 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro 2 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro 1 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro find_me % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro 3 % cd ..
Kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % ls
1
Kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % cd 1
Kumarlaxmikant@Kumars-MacBook-Pro 1 % ls
zipped_flag zipped_flag.zip
Kumarlaxmikant@Kumars-MacBook-Pro 1 % unzip zipped_flag.zip
Archive: zipped_flag.zip
[zipped_flag.zip] zipped_flag/zipped_flag.txt password:
extracting: zipped_flag/zipped_flag.txt
Kumarlaxmikant@Kumars-MacBook-Pro 1 % ls
zipped_flag zipped_flag.zip
Kumarlaxmikant@Kumars-MacBook-Pro 1 % cd zipped_flag
Kumarlaxmikant@Kumars-MacBook-Pro zipped_flag % ls
zipped_flag.txt
Kumarlaxmikant@Kumars-MacBook-Pro zipped_flag % cat zipped_flag.txt
Flag{e@5y_p@ssw0rd!
Kumarlaxmikant@Kumars-MacBook-Pro zipped_flag %
```

## 5) flag{m3ow\_m3ow\_cat!}



```
kumarlaxmikant@Kumars-MacBook-Pro 8 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 7 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 6 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 5 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 4 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 3 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 2 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 1 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro find_me % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 3 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % ls
1 3 4 5 flag{first_flag_h3r3}
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % cd 1
kumarlaxmikant@Kumars-MacBook-Pro 1 % ls
zipped_flag zipped_flag.zip
kumarlaxmikant@Kumars-MacBook-Pro 1 % unzip zipped_flag.zip
Archive: zipped_flag.zip
[zipped_flag.zip] zipped_flag/zipped_flag.txt password:
extracting: zipped_flag/zipped_flag.txt
kumarlaxmikant@Kumars-MacBook-Pro 1 % ls
zipped_flag zipped_flag.zip
kumarlaxmikant@Kumars-MacBook-Pro 1 % cd zipped_flag
kumarlaxmikant@Kumars-MacBook-Pro zipped_flag % ls
zipped_flag.txt
kumarlaxmikant@Kumars-MacBook-Pro cat zipped_flag.txt
flag{e5y_pess0rd!}
kumarlaxmikant@Kumars-MacBook-Pro zipped_flag % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 1 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % ls
1 3 4 5 flag{first_flag_h3r3}
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % cd 4
kumarlaxmikant@Kumars-MacBook-Pro 4 % ls
1.txt 2.txt 3.txt 4.txt 5.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 1.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 2.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 3.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 4.txt
flag{3ow_cat!}
kumarlaxmikant@Kumars-MacBook-Pro 4 %
```

## 6) flag{3x3cut10n\_d0n3!}



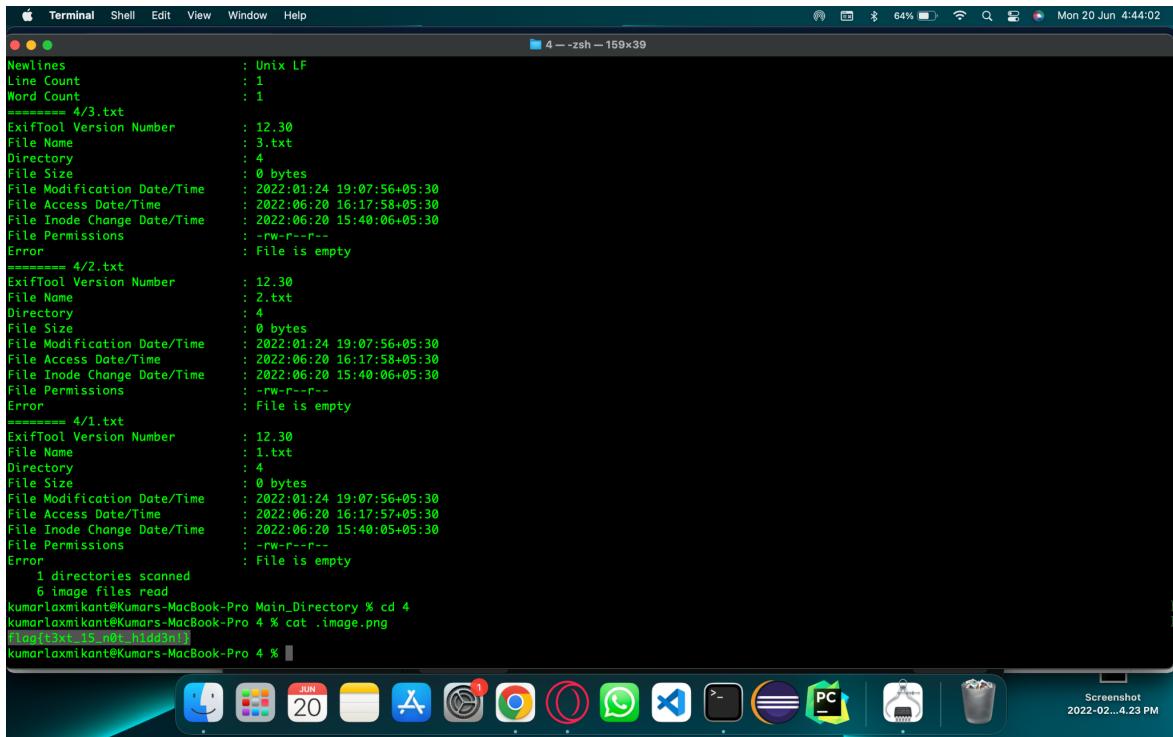
```
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % ls
1 3 4 5 flag{first_flag_h3r3}
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % cd 1
kumarlaxmikant@Kumars-MacBook-Pro 1 % ls
zipped_flag zipped_flag.zip
kumarlaxmikant@Kumars-MacBook-Pro 1 % unzip zipped_flag.zip
Archive: zipped_flag.zip
[zipped_flag.zip] zipped_flag/zipped_flag.txt password:
extracting: zipped_flag/zipped_flag.txt
kumarlaxmikant@Kumars-MacBook-Pro 1 % ls
zipped_flag zipped_flag.zip
kumarlaxmikant@Kumars-MacBook-Pro zipped_flag % ls
zipped_flag.txt
kumarlaxmikant@Kumars-MacBook-Pro cat zipped_flag.txt
flag{e5y_pess0rd!}
kumarlaxmikant@Kumars-MacBook-Pro zipped_flag % cd ..
kumarlaxmikant@Kumars-MacBook-Pro 1 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % ls
1 3 4 5 flag{first_flag_h3r3}
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % cd 4
kumarlaxmikant@Kumars-MacBook-Pro 4 % ls
1.txt 2.txt 3.txt 4.txt 5.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 1.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 2.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 3.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 4.txt
flag{3ow3ow_cat!}
kumarlaxmikant@Kumars-MacBook-Pro 4 % cat 5.txt
kumarlaxmikant@Kumars-MacBook-Pro 4 % cd ..
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % ls
1 3 4 5 flag{first_flag_h3r3}
kumarlaxmikant@Kumars-MacBook-Pro Main_Directory % cd 5
kumarlaxmikant@Kumars-MacBook-Pro 5 % ls
execute_me.sh reverse_me.txt
kumarlaxmikant@Kumars-MacBook-Pro 5 % chmod +x execute_me.sh
kumarlaxmikant@Kumars-MacBook-Pro 5 % ./execute_me.sh
flag{3x3cut10n_d0n3!}
kumarlaxmikant@Kumars-MacBook-Pro 5 %
```

7) flag{t@c\_15\_fun!}

NOTE: The ‘tac’ command does work on Mac Terminal

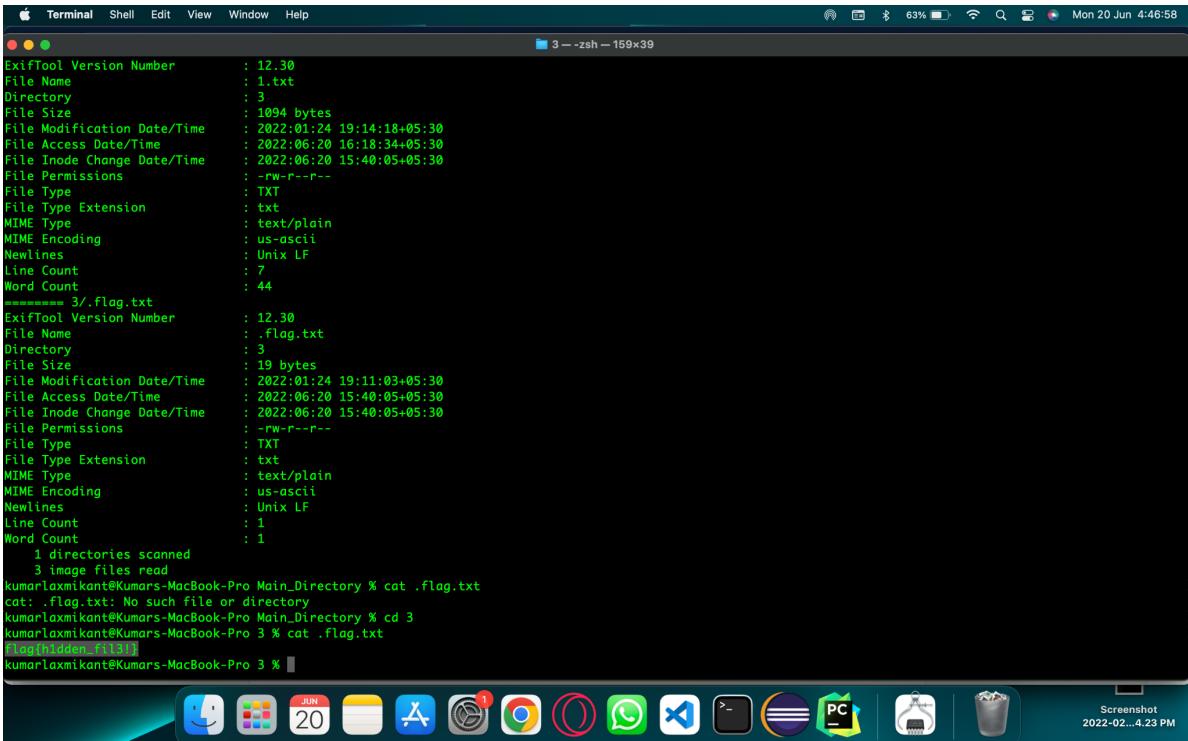
8) flag{d1ff\_15\_u53ful!}

### 9) flag{t3xt\_15\_n0t\_h1dd3n!}



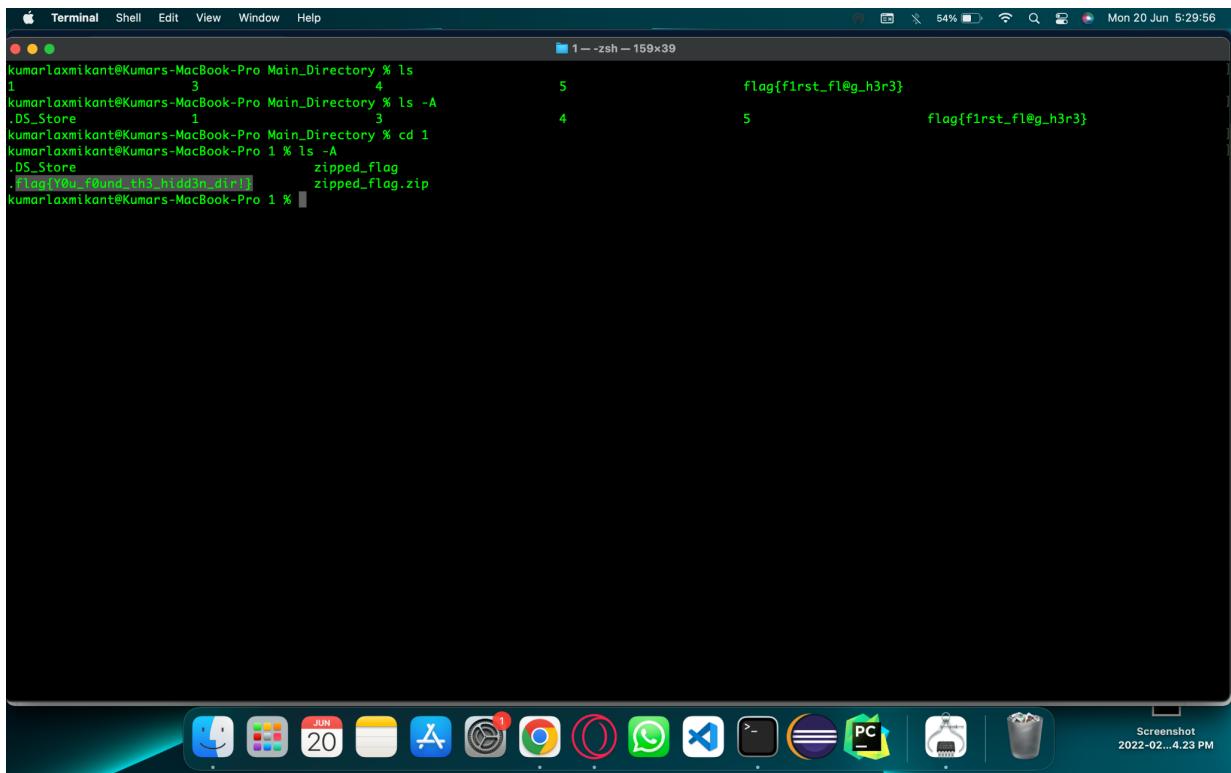
```
Terminal Shell Edit View Window Help
4 --zsh - 159x39
Newlines : Unix LF
Line Count : 1
Word Count : 1
===== 4/3.txt
ExifTool Version Number : 12.30
File Name : 3.txt
Directory : 4
File Size : 0 bytes
File Modification Date/Time : 2022:01:24 19:07:56+05:30
File Access Date/Time : 2022:06:20 16:17:58+05:30
File Inode Change Date/Time : 2022:06:20 15:40:06+05:30
File Permissions : -rw-r--r--
Error : File is empty
===== 4/2.txt
ExifTool Version Number : 12.30
File Name : 2.txt
Directory : 4
File Size : 0 bytes
File Modification Date/Time : 2022:01:24 19:07:56+05:30
File Access Date/Time : 2022:06:20 16:17:58+05:30
File Inode Change Date/Time : 2022:06:20 15:40:06+05:30
File Permissions : -rw-r--r--
Error : File is empty
===== 4/1.txt
ExifTool Version Number : 12.30
File Name : 1.txt
Directory : 4
File Size : 0 bytes
File Modification Date/Time : 2022:01:24 19:07:56+05:30
File Access Date/Time : 2022:06:20 16:17:57+05:30
File Inode Change Date/Time : 2022:06:20 15:40:05+05:30
File Permissions : -rw-r--r--
Error : File is empty
1 directories scanned
6 image files read
kumarloaxmikant@Kumars-MacBook-Pro Main_Directory % cd 4
kumarloaxmikant@Kumars-MacBook-Pro 4 % cat .image.png
[Flag] ==> 3/1246121
kumarloaxmikant@Kumars-MacBook-Pro 4 %
Screenshot 2022-02...4.23 PM
```

### 10) flag{h1dden\_fil3!}



```
Terminal Shell Edit View Window Help
3 --zsh - 159x39
ExifTool Version Number : 12.30
File Name : .flag.txt
Directory : 3
File Size : 1094 bytes
File Modification Date/Time : 2022:01:24 19:14:18+05:30
File Access Date/Time : 2022:06:20 16:18:34+05:30
File Inode Change Date/Time : 2022:06:20 15:40:05+05:30
File Permissions : -rw-r--r--
File Type : TXT
File Type Extension : txt
MIME Type : text/plain
MIME Encoding : us-ascii
Newlines : Unix LF
Line Count : 7
Word Count : 44
===== 3/.flag.txt
ExifTool Version Number : 12.30
File Name : .flag.txt
Directory : 3
File Size : 19 bytes
File Modification Date/Time : 2022:01:24 19:11:03+05:30
File Access Date/Time : 2022:06:20 15:40:05+05:30
File Inode Change Date/Time : 2022:06:20 15:40:05+05:30
File Permissions : -rw-r--r--
File Type : TXT
File Type Extension : txt
MIME Type : text/plain
MIME Encoding : us-ascii
Newlines : Unix LF
Line Count : 1
Word Count : 1
1 directories scanned
3 image files read
kumarloaxmikant@Kumars-MacBook-Pro Main_Directory % cat .flag.txt
cat: .flag.txt: No such file or directory
kumarloaxmikant@Kumars-MacBook-Pro Main_Directory % cd 3
kumarloaxmikant@Kumars-MacBook-Pro 3 % cat .flag.txt
[FlagHiddenFil3!]
kumarloaxmikant@Kumars-MacBook-Pro 3 %
Screenshot 2022-02...4.23 PM
```

11) flag{Y0u\_f0und\_th3\_hidd3n\_dir!}



```
Terminal Shell Edit View Window Help
kumarlaxmikant@Kumars-MacBook-Pro ~ % ls
1 3 4
kumarlaxmikant@Kumars-MacBook-Pro ~ % ls -A
.DS_Store 1 3
kumarlaxmikant@Kumars-MacBook-Pro ~ % cd 1
kumarlaxmikant@Kumars-MacBook-Pro 1 % ls -A
.DS_Store zipped_flag
.flag{Y0u_f0und_th3_hidd3n_dir!} zipped_flag.zip
kumarlaxmikant@Kumars-MacBook-Pro 1 %
```

Screenshot  
2022-02... 4.23 PM

ALL Flags: (Corresponding Output screen-shot are pasted above)

- flag{f1rst\_fl@g\_h3r3}
- flag{gr3p\_f1nds\_fl@gs!}
- flag{Y0u\_f0und\_m3!}
- flag{e@5y\_p@ssw0rd!}
- flag{m3ow\_m3ow\_cat!}
- flag{3x3cut10n\_d0n3!}
- flag{t@c\_15\_fun!}
- flag{d1ff\_15\_u53full!}
- flag{t3xt\_15\_n0t\_h1dd3n!}
- flag{h1dden\_fil3!}
- flag{Y0u\_f0und\_th3\_hidd3n\_dir!}

## PART 2:

## Questions:

## **Q.1. Write a bash script to echo your name 25 times**

## CODE

```
#!/bin/bash

for((i=0; i<25; i++))

do

    echo "Kumar Laxmikant"

done
```

## OUTPUT

**Q.2. What command should I use to display the first 30 entries of a syslog file?**

**Ans:** head -n 30 /var/log/syslog

**Q.3. What command should I use to display the last 30 entries of a syslog file?**

**Ans:** tail -n 30 /var/log/syslog

**Q.4. What command should I use to arrange the entries of a file**

- **Alphabetically:** sort <file\_name>
- **Reverse order:** sort -r <file\_name>
- **Numerical order:** sort -n <file\_name>

**Q.5. Copee is a hard-working cop. He found a case and was almost on the verge of cracking it. It could be his best breakthrough. He has the list of criminals but lots of duplicates are there. He needs to find the only one that is different. He sought your help. How will you sort this issue?**

**Ans:** Let's say that the list on names is stored on 'culprit.txt', so to filter all duplicates Copee can execute the following command:

```
cat culprit.txt | sort | uniq
```

**Q.6. What are the Three parts of file's permission?**

**Ans:** We have three types of file permissions:

- 'Read' permission: Grants user the permission to read a file.
- 'Write' permission: Grants user the permission to write to a file.
- 'Execute' permission: Grants user the permission to execute the file.