More on Grep

```
┌──(kali㉿kali)-[~]
└─$ vi lab4.sh

┌──(kali㉿kali)-[~]
└─$ cat lab4.sh
pattern
Pattern
Heypattern
Hey pattern
```

4.s

1. Print all the lines having the word "pattern".

```
┌──(kali㉿kali)-[~]
└─$ grep 'pattern' lab4.sh
pattern
Heypattern
Hey pattern
```

2. Pick out the blank lines in the file

```
┌──(kali㉿kali)-[~]
└─$ cat >> lab4.sh



┌──(kali㉿kali)-[~]
└─$ grep '^$' lab4.sh



┌──(kali㉿kali)-[~]
└─$
```

3. Count total number of empty lines in the file.

```
┌──(kali㉿kali)-[~]
└─$ grep '^$' lab4.sh | wc -l
3
```

4. Print the line which have both “Sir and Madam”.

```
┌──(kali㉿kali)-[~]
└─$ grep -i "sir" lab5.sh | grep -i "madam"
Dear Sir/Madam
Respected Sir Madam
```

5. pick out lines with “pattern1” “pattern2” or “pattern3”. (use the alternator |)

```
┌──(kali㉿kali)-[~]
└─$ grep -E "pattern1|pattern2|pattern3" lab5.sh
pattern32
pattern2
Heypattern12
```

6. pick out lines that have at least two p's followed by any number of letters followed by 'ore'. The p's do not have to be next to each other.

```
┌──(kali㉿kali)-[~]
└─$ grep -P "p.*p.*[A-za-z]*ore" lab5.sh
apple pie is core
pepper is more spicy
tap before you explore
```

7. pick out all the lines with v, z or I in them

```
┌──(kali㉿kali)-[~]
└─$ grep '[vzI]' lab5.sh
It is ok madam?
```

8. pick out all the lines that do not start with an uppercase letter.

```
┌──(kali㉿kali)-[~]
└─$ grep -v '^[A-Z]' lab5.sh
pattern



pattern32
pattern2
apple pie is core
pepper is more spicy
tap before you explore
this is pure
pour some more please
```

9. pick out all the lines that end with a dash -pa

```
┌──(kali㉿kali)-[~]
└─$ grep '\-pa$' lab5.sh
Hello ap-pa
```

10. pick out all the words that end with ore

```
┌──(kali㉿kali)-[~]
└─$ grep -o '\b\w*ore\b' lab5.sh
core
more
before
explore
more
```

11. pick out all the words that start with f or F

```
┌──(kali㉿kali)-[~]
└─$ grep '\b[fF]w*' lab5.sh
Filename
filename
```

12. pick out lines that uses first letter alliteration - starting two words with the same letter.

```
┌──(kali㉿kali)-[~]
└─$ grep -Pi '^\b(\w)\w*\s+\1\w*' lab5.sh
It is ok madam?
Friendly foxes frolic in the field.
Big bears boldly bounce.
Silly squirrels sneak snacks.
```

13. determine how many times contains the word "pattern".

```
┌──(kali㉿kali)-[~]
└─$ grep -o '\bpattern\b' lab5.sh| wc -l
2
```

14. to pick out lines with at least 40 characters:

```
┌──(kali㉿kali)-[~]
└─$ grep -E '.{40,}' lab5.sh
This line has fewer than forty character
This line has exactly forty characters here!
This line is a bit longer and has more than forty characters.
Here is another line with sufficient characters.
```

15. to pick out lines with no punctuation

```
┌──(kali㉿kali)-[~]
└─$ grep '^[^[:punct:]]*$' lab5.sh
pattern
Pattern
Heypattern
Hey pattern
Patternpatter
Ppattern
Respected Sir Madam
pattern32
pattern2
Heypattern12
apple pie is core
pepper is more spicy
tap before you explore
this is pure
pour some more please
Filename
filename
This line has fewer than forty character
```

16. to pick out lines with an uppercase letter other than the first character. (The first character on the line does not count.)

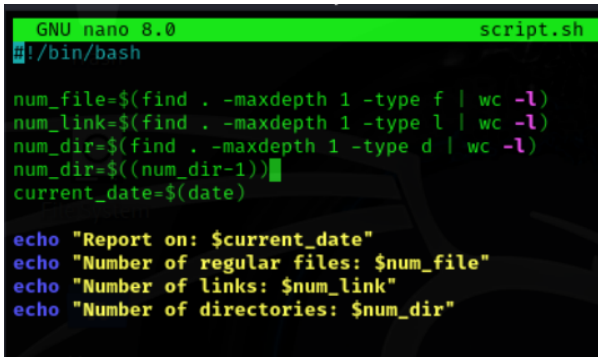
```
┌──(kali㉿kali)-[~]
└─$ grep -E '^[^A-Z].*[A-Z]' lab5.sh
```

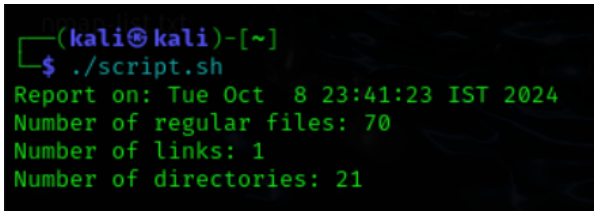
17. To pick out lines without rav

Quotes:

18. Write a shell script to generate a report with the following details.

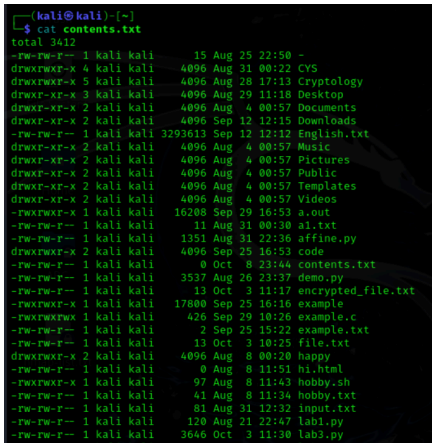
- Number of regular files
- Number of links
- Number of directories
- Print the date when it was processed!





Redirection

19. List the contents of your current directory, including the ownership and permissions, and store the output to a file called contents.txt within your home directory.



20. Sort the contents of the contents.txt file from your current directory and append it to the end of a new file named contents-sorted.txt.

```
┌──(kali㉿kali)-[~]
└─$ cat contents-sorted.txt
-rw-r--r-- 1 root root       0 Sep 12 12:17 shadow1
-rw-rw-r-- 1 kali kali       0 Aug  8 00:00 newfile.txt
-rw-rw-r-- 1 kali kali       0 Aug  8 11:51 hi.html
-rw-rw-r-- 1 kali kali       0 Aug 25 22:52 sample.txt
-rw-rw-r-- 1 kali kali       0 Aug 31 11:45 payload.txt
-rw-rw-r-- 1 kali kali       0 Oct  8 23:44 contents.txt
-rw-rw-r-- 1 kali kali       2 Sep 25 15:22 example.txt
-rw-rw-r-- 1 kali kali       3 Aug 26 18:27 sample.py
-rw-rw-r-- 1 kali kali      11 Aug 31 00:30 a1.txt
-rw-rw-r-- 1 kali kali      13 Oct  3 10:25 file.txt
-rw-rw-r-- 1 kali kali      13 Oct  3 11:17 encrypted_file.txt
-rw-rw-r-- 1 kali kali      15 Aug 25 22:50 -
-rw-rw-r-- 1 kali kali      41 Aug  8 11:34 hobby.txt
```

21. Display the last 10 lines of the /etc/passwd file and redirect it to a new file in the your user's Documents directory.

```
┌──(kali㉿kali)-[~]
└─$ tail -n 10 /etc/passwd > ~/Documents/last_passwd.txt
```

```
┌──(kali㉿kali)-[~]
└─$ cd Documents

┌──(kali㉿kali)-[~/Documents]
└─$ ls
last_passwd.txt

┌──(kali㉿kali)-[~/Documents]
└─$ cat last_passwd.txt
lightdm:x:126:128:Light Display Manager:/var/lib/lightdm:/bin/false
saned:x:127:130::/var/lib/saned:/usr/sbin/nologin
polkitd:x:989:989:User for polkitd:/:/usr/sbin/nologin
rtkit:x:128:131:RealtimeKit,,,:/proc:/usr/sbin/nologin
colord:x:129:132:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/n
nm-openvpn:x:130:133:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbi
nm-openconnect:x:131:134:NetworkManager OpenConnect plugin,,,:/var/lib/NetworkM
sr/sbin/nologin
kali:x:1000:1000:kali,,,:/home/kali:/usr/bin/zsh
surya_jjp:x:1001:1001:,,,:/home/surya_jjp:/bin/bash
manipal:x:1002:1002:,,,:/home/manipal:/bin/bash
```

22. Count the number of words within the contents.txt file and append the output to the end of a file field2.txt in your home directory. You will need to use both input and output redirection.

```
┌──(kali㉿kali)-[~/Documents]
└─$ wc -w ~/contents.txt >> ~/field2.txt
```

23. Display the first 5 lines of the /etc/passwd file and sort the output reverse alphabetically.

```
┌──(kali㉿kali)-[~]
└─$ head -n 5 /etc/passwd | sort -r

sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
root:x:0:0:root:/root:/usr/bin/zsh
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
```

24. Using the previously created contents.txt file, count the number of characters of the last 9 lines.

```
┌──(kali㉿kali)-[~]
└─$ tail -n 9 contents.txt| wc -c
489
```

Debug

25. Debug the script 1_debug.sh

Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do.

#fix the error
#!bin/bash
fruit1 = “Apples”
fruit2 = “Oranges”
if [“$1” -lt “$2”];
then
echo "This is like comparing $fruit1 and $fruit2!"
elif [“$1” -gt “$2”];
then
echo '$fruit1 win!'
else
echo "$fruit2 win!"
fi

```
  GNU nano 8.0                                rectify.sh
#!/bin/bash
fruit1="Apples"
fruit2="Oranges"
if ["$1" -lt "$2"];
then
echo "This is like comparing $fruit1 and $fruit2!"
elif ["$1" -gt "$2"];
then
echo "$fruit1 win!"
else
echo "$fruit2 win!"
fi
```