

1. Current directory is having 10 mp3 files, 20 mp4 files which has "space" in between each mp3 filename. Now find only the mp3 files and rename then by substituting " " (space) with "\_" (underscore)
  - A. `find -name "*.mp3" | rename "y/\ /_/"`
  - B. `find -name "*.mp3" | sed 's/ /_/g'`
  - C. `find . -name "*.mp3" | rename "y/\ /_/"`
  - D. both A & C (correct answer)
2. Find the top 5 big regular files in our aws machine (based on file size)?
  - A. `find . -type f -ls | tr -s ' ' | sort -nrt ' ' -k8 | head -5 | cut -d' ' -f12`
  - B. `find -type f -ls | tr -s ' ' | sort -nt ' ' -k8 | head -5`
  - C. `find / -type f -exec ls -l {} \; | sort -nrt ' ' -k5 | head -n 5` (correct answer)
  - D. both A and C
3. List out the files which is not a .txt file and not a .TXT file using single command?
  - A. `find -type f ! -iname "*.txt"` (correct answer)
  - B. `ls | grep "\.[^tT][^xX][^tT]$"`
  - C. `ls | grep -E "\.[^tT][^xX][^tT]$"`
  - D. both B and C
4. Remove all the files which ends with ".o", ".so", ".out" using single find command ??
  - A. `find -type f \( -name "*.o" -o -name "*.so" -o -name "*.out" \) | rm *`
  - B. `find -type f \( -name "*.o|*.so|*.out" \) | rm *`
  - C. `find -type f \( -name "*.o" -o -name "*.so" -o -name "*.out" \) -exec rm -f {} \;` (correct answer)
  - D. Both A & B
5. Find the file name 'passwd' file under root and one level down. (i.e., root – level 1, and one sub-directory – level 2)?
  - A. `find /etc -maxdepth 2 -name "passwd"`
  - B. `find / -depth 2 -name "passwd"`
  - C. `find / -maxdepth 2 -name "passwd"` (correct answer)
  - D. `find /usr -depth 2 -name "passwd"`
6. Find all files which got execute bit set only for the owner?
  - A. `find ! -perm /g=x -a ! -perm /o=x -a -perm /u=x -ls` (correct answer)
  - B. `find -perm /o=x`

7. Count the number of empty lines (includes white space characters) in a file using grep??

- A. `grep -c ^$ <file name>`
- B. `grep -c "^[ <CTRL+v><tab>]*$" <file name>` (correct answer)
- C. `wc -e -l <file name>`
- D. both A and B

8. Match the lines which contains only number ranging from 0 - 9999 from number.txt

number.txt

1

123

123345

19816282

123445

87876

78678788

- A. `grep '^[0-9]\{,4\}$' number.txt`
- B. `grep '^[0-9]\{4\}$' number.txt`
- C. `grep '^[0-9]\{4,\}$' number.txt`
- D. `grep '^[0-9]\{1,4\}$' number.txt` (correct answer)

9. grep does not provide option to match the word from any input file. Note, it should only match the word 'the' not substring (theif)?

- True
- False (correct)

10. Explain the behavior of the below sed script

```
sed -nf q1.sed <any text file>
q1.sed :
1! G
$ p
h
```

Answer:

it prints the file content in reverse

11. Explain what the below sed do.

```
sed -nf q2.sed <any text file>

q2.sed :
/^$/ {
  p
  b
}
```

```

}
# Same as cat -n from now
x
/^$/ s/^.*$/1/
G
h
s/^/ /
s/^ *\(\.....\)\\n\\1 /p
x
s/\\n.*$//
/^9*$/ s/^/0/
s/.9*$/x&/
h
s/^.*x//
y/0123456789/1234567890/
x
s/x.*$//
G
s/\\n//
h

```

Answer:

it will print the given file with line number

## 12. Explain the behavior of the below sed script

```

sed -nf q3.sed <any text file>
q3.sed :
1! {; H; g; }
1,10 !s/[^\n]*\\n//
$P
h

```

Answer:

it will print the last 10 lines of the file

## 13. In the OSI reference model, the \_\_\_\_ layer finds the best route for packets that must be transferred between different networks.

- A. Data Link
- B. Session
- C. Transport
- D. Network (correct answer)

## 14. the \_\_\_\_ field in the ICMP packet header verifies the integrity of the ICMP packet.

- A. Type
- B. Checksum (correct answer)
- C. Code
- D. Sequence number

## 15. In the given class c IP address 192.168.12.254/27, \_\_\_\_ bits of the address are the host ID.

- A. 5 (correct answer)
- B. 12
- C. 27
- D. 254

**16. Both an IP address and a MAC address are assigned to each network interface.**

- A. True (correct)
- B. False

**17. What process in network communication divides a big packet into small packets due to MTU limitation?**

- A. Bandwidth
- B. Segmentation
- C. Fragmentation (correct answer)
- D. Subnet mask

**18. In IPv4 protocol what determines how long a packet can be in the network before it reaches the destination.**

- A. TOS
- B. TL
- C. TTL (correct answer)
- D. IHL

**19. What is the name of protocol which converts the mac address of an interface to its IP address.**

- A. ARP
- B. RARP (correct answer)
- C. ICMP
- D. IPV4

**20. We can assign more than one IPs to a network interface**

- A. True (correct answer)
- B. False