

OS-LINUX:

Q1) How can you view running processes?

ps aux  
top(htop)

Q2) How do you check server uptime?

uptime

top

Q3) How do you start/stop services?

(deprecated) service start/stop service\_name

systemctl start/stop service\_name

Q4) How do you display the shell's environment variables?

env

printenv

Q5) What does #!/bin/bash at the top of a script do?

It say to shell, what interpreter to use when run this script

Q6) What does "&" after a command do?

It run command in background

Q7) What does piping commands mean?

piping with '|' transfer stdout of one command to another, for example, ps aux | grep httpd - first command show all running processes, then, transfer stdout to stdin of second command, whose find only strings where 'httpd'.

Q8) What distributions have you used on servers?Why?

Ubuntu - very fresh kernels and packages

CentOS/RHEL - Enterprise and stability

Q9) What is your favorite editor?

Q10) What is RAID? What is RAID0, RAID1, RAID5, RAID10?

Q11) Describe the general file system hierarchy of a Linux system.

Q12) Describe what each of the following command line utilities do:

tee

awk

tr

cut

curl

tail

sed

Q13)Command line demo:

Search for "my konfu is the best" in all \*.py files

Replace the occurrence of "my konfu is the best" with "I'm a linux jedi master" in all \*.txt files

Find all files which have been accessed within the last 30 days

Q14) What is the difference between virtual memory and swap ?

Q15) What is the difference between hardlinks and symlinks?

Q16) What is an inode and what fields are stored in an inode?

Q17) What are zombie processes ?

Q18) Can you have several HTTPS virtual hosts sharing the same IP?

Yes, I can. I can setup several virtual hosts on one IP and split up yhem with different ports.

Q19) What is the difference between processes and threads?

Q20) What is the difference between exec and fork?

Q21) How nginx can handle a lot of connections? What does it use inside?

Example of answer: Eventloop.

Q22) What is "nohup" used for?

Q23) What is an atomic operation?

Q24) I've added my public ssh key into authorized\_keys but I'm still getting a password prompt, what can be wrong?

Q25) How do you catch a SIGHUP ? What about SIGSEGV ? What about SIGKILL ?

Q26) What is the Linux Kernel OOM and how does it work ?

Q27) What's a chroot jail?

Q28) Describe the Linux boot process with as much detail as possible, starting from when the system is powered on and ending when you get a prompt.

Q29) What's LD\_PRELOAD and when is it used?

Q30) You ran a binary and nothing happened. How would you debug this?

I run binary with strace, for example: strace binary\_name

Q31) When can a socket receive E\_AGAIN ?

Q32) What is a dynamically/statically linked file?

Q33) A careless sysadmin executes the following command: chmod 444 /bin/chmod - what do you do to fix this?

Q34) I've lost my root password, what can I do?

Q35) You have accidentally deleted a running script, how could you restore it ?

Q36) What load balancers have you used ?

Q37) AWS:

What is the difference between an AMI and an instance ?

What's EBS ? What's an EBS snapshot ? What is the real cost of having an EBS snapshot ?

What's a VPC ?

What's the difference between a region and an availability zone ?

What's an ELB ?

What's S3 ? What are the features supported on S3 ?