1 Linux Admin

Links:
https://www.slideshare.net/kavyasri790693/linux-admin-interview-questions
http://simplylinuxfaq.blogspot.in/p/linux-system-admin-interview-questions.html
https://github.com/kylejohnson/linux-sysadmin-interview-questions/blob/master/test.md
https://github.com/chassing/linux-sysadmin-interview-questions#hard

1.1 Users, Passwords & Permissions

Users

1	Adding a user	useradd (single) → newusers (batch mode useradd)
2	Lock an Account	usermod -l _____
3	New password	passwd "username"
4	Default file permissions	Set UMASK in /etc/login.defs (debians). Takes away the permissions
5	Change Owner & Group	chown
6	Hashed passwords storage	/etc/shadow
7	Change Permissions	chmod Bit mask OGA rwx
8	Delete User	userdel, removing recusively home folder and files → userdel -r

1.2 Sudo

1. Add a user as a sudoer by using visudo. You can specify users or groups.
2. Common to have a sudo or wheel group and to give that group permissions in visudo
3. Syntax → user computerAddress=(Runas_Alias) Command_Alias
4. You can use a Runas_Alias to define a semi-super user that owns a group of files or processes. Then the user can use sudo to run as that user. Same you can limit the commands that a user can run as sudo with the Command_Alias

5. to give sudo root access use 'user' ALL=(ALL) ALL → root privilages to "user" with use of sudo

Groups

1	Wheel	Group allowing access to the sudo/su command to become another user or the superuser, for sudo this is enabled with visudo.
2	Add user to a group	usermod -a -G "group" "user"(-a only used with -G, without -a, -G makes the given groups the only additional groups he is a member of)
3	Change users primary group	usermod -g "group" "user"
4	New Group	groupadd _____
5	All groups on system	getent group

1.3 General

Mounting

1	Mounting	mount /dev/_____destination
2	What disk are mounted	mount
3	Connected disks	lsblk prints out all of the connected devices nicely formatted
4	Mounting on boot	edit /etc/fstab

TAR & ZIP

1	Make a tarball	tar -cf fileout.tar filename1 filename2...
2	Extract a tarball	tar -xf filename.tar (be cautious of 'tarbombs' extract in a directory)
3	Compress to .gz	gzip filename
4	Uncompress .gz	gzip -c filename.gz
5	tar & compress	tar -zcf fileout.tar.gz filename1 filename2...
6		

Files

1	Types	7 types block special, char spectial, directory, normal file, symbolic link, named pipe, socket
2		
3		

Pipes & Redirection

1	Pipes	Sends the output of one file into the input of another → cat _____— grep "_____"
2	Redirect	Use > to overwrite a file, >> to append. Use 1>> for STDOUT & 2>> for STDERR

General Bash

1	curl	Tool for talking over several different protocols

Maintenance

1	Schedule Jobs (user)	crontab, edit using crontab -e, kept in /var/spool/cron/crontabs, also package specific cron jobs are in /etc/cron.d
2	Schedule Jobs (system)	/etc/crontab

1.4 Strings & Searching

Bash Strings

1	cat	Read a file
2	tac	Read a file backwards
3	Head	Read first few file lines
4	Tail	Read last few file lines
5	read	read from user input → read var → will set the var variable
6	cut	Break a line on a delimiter

1.4.1 Grep

1. Search for a character pattern in a string

2. grep _____filename → returns the lines with the character pattern _____in file filename
3. Follow directories "grep -r _____./*"
4. Get the line number → -n
5. Get files with the string → -l
6. Ignore case → -i

1.4.2 Find

1. Find a specific file by name find {Starting directory} -name "filename"
2. Finding by type → find {Starting directory} -type d/f...
3. Searching depth → find _____-maxdepth "depth"
4. Running a command on all found files → find __________-exec "command" + (the + ends the command)

2 GIT

3 MySQL

3.1 Users & Permissions

4 Python