Linux Commands

Q1: How do you find all `.log` files in the `/var/log` directory that were modified more than 15 days ago, but exclude those files that are larger than 500MB?

A) **find /var/log -name "*.log" -mtime +15 ! -size +500M**

Q2: Q2: How can you search for all symbolic links in a directory and delete them using a single `find` command?

A) **find /path/to/directory -type 1 –delete**

Q3: Using `find`, how do you locate files in the `/home/user` directory that are owned by a user other than the current owner?

A) **find /home/user ! -user $(whoami)**

Q4: How can you find all files in the `/etc` directory that contain the word "config" in their name and have write permission for others?

A) **find /etc -name "*config*" -perm –002**

Q5: How can you search for all lines in a file `/etc/passwd` that do not contain the word "bash"?

A) **grep –v "bash" /etc/passwd.**

Q6: How do you search recursively through all files in a directory for a specific string, showing only the matching filenames and excluding binary files?

A) **grep -rl --exclude-binary <string> /path/to/directory**

Q7: : How can you search for the word "error" in a file, displaying the surrounding 3 lines before and after each match?

A) **grep -C 3 "error" /path/to/file**

Q8: Using `grep`, how would you find all occurrences of the word "root" in `/etc/passwd` that start at the beginning of a line?

A) **grep "^root" /etc/passwd**

Q9: How can you create a compressed archive of the `/home/user` directory, excluding all `.mp4` files?

A) **tar --exclude='*.mp4' -czf user_backup.tar.gz -C /home user**

Q10: How would you extract only a specific file `file.txt` from a `.tar.gz` archive without extracting the entire archive?

A) **tar -xzf archive.tar.gz file.txt**

Q11:: How can you append a file called `newfile.txt` to an existing `archive.tar.gz` without decompressing the archive?

A) **tar -rf archive.tar newfile.txt && gzip archive.tar**

Q12: How would you list the contents of a `.tar.gz` archive without extracting it?

A) **tar -tzf archive.tar.gz**

Q13: How can you list all currently running processes and then filter for processes that include the word "java", showing only the process ID and name?

A) **ps aux | grep java | grep -v grep | awk '{print $2, $11}'**

Q14: How can you display a list of all files in `/var/log`, then filter for files containing the word "error" using both `ls` and `grep` in a pipeline?

A) **ls /var/log | grep "error"**

Q15: How do you count the number of lines in a file that contain the word "failed" using `grep` and `wc`?

A) **grep -c "failed" /path/to/file**

Q16: How can you display the last 20 lines of a log file and filter the lines that contain the word "critical" using a combination of `tail` and `grep`?

A) **tail -n 20 /path/to/logfile | grep "critical"**

Q17:: How do you display the disk usage of all files and directories in `/home/user` in humanreadable format, sorted by size in descending order?

A) **du -ah /home/user | sort -hr**

Q18:: How can you display the total disk usage of the `/var` directory but exclude the subdirectory `/var/log`?

A) **du -sh --exclude=/var/log /var/***

Q19: How can you use `du` to find the disk usage of files larger than 100MB in a directory?

A) **find /path/to/directory -type f -size +100M -exec du -h {} +**

Q20: How do you display the disk usage of the 10 largest directories in the `/usr` directory using `du`?

A) **du -sh /usr/* | sort -hr | head -n 10**