Q1. List down 5 un-common linux commands along with their respective outputs.

ethtool - Ethernet card settings

fsck - File system consistency check and repair

true - Do nothing, successfully

false - Do nothing, unsuccessfully

yes - Print a string until interrupted

sleep - Delay for a specified time

- Q2. You are selected for a tech debate on Android vs iOS. You represent the android community. Put up some points which might get you an upper hand.
- 1) Android is more accepted all around the world than iOS. The huge number of Android users speaks for itself.
- 2) Android encourages budding hackers and coders to exploit it. Some phone companies like Nextbit allow users to root their phones and flash custom ROMs without affecting the warranty. Jailbreaks on the other hand are mostly seen as outcasts.
- 3) People find Android easier to understand and use. We all have that one friend who asks help to transfer files from PC to his/her iDevices. It's simple but still :P. And it's frustrating.
- 4) Android phones offers more options like SD storage and dual sims. iOS devices lack those features.
- Q3. Be the judge in an age-old war. Differentiate between vim and emacs and choose your side, explaining why.

## vim

- 1) Just a text editor.
- 2) Lacks integration with background processes.
- 3) Easier to learn and use.

## emacs

- 1) It's also an IDE, a file manager, a terminal emulator, a web browser, a mail client, a news client.
- 2) Integration with background processes.
- 3) A teeny bit complicated.

I'd prefer emacs cause it's all in one. Though it's a bit complicated, once we get through the learning process, it's all good.

Emacs wins when you try to do something that the authors just didn't think of.

Q4. Generally, penetration testing applications discourage being run as root. Now assuming you are a pentester, and assuming you paid heed to their advice and are not logged in as root, how would you access a file in the root directory [From terminal and from a file manager]?

First install gksu using apt get command and then type gksudo nautilus. This will open the file explorer where you have access to the root files. Or you can press alt+f2 and type "gksu nautilus" and type your password and click enter this will open a file explorer where you have access to the root folder.

Q5. Different flavours of Linux use different commands to update and upgrade. Categorize

these commands [based on flavours] and write what they mean.

Kubuntu - sudo do-release-upgrade -d Upgrades to a newer version and also allows user to respond to prompts like

"Y or I: install the package maintainer's version N or O: keep your currently-installed version D: show the differences between the versions Z: start a shell to examine the situation The default action is to keep your current version".

Lubuntu - apt-get update Updates to a newer version

Xubuntu - update manager.
Simply opens the upgrade manager.

Fedora - su -c 'yum update'
This performs a full system update.

Q6. Convince your Apple fanboy friend to shift over to a Linux machine.

<u>1.Freedomv</u>: Most Linux distros are free. Users do not need to pay for a copy <u>2.Stable</u>: Linux systems rarely crash, and when they do, the whole system normally does not go down.

<u>3.Consistency</u>: Unlike iOS, Linux does not easily become bogged down with spyware and malware, which can greatly reduce a computer's performance.

<u>4.Variety</u>: Linux comes in all sizes and flavors, which offers a wide variety from which to choose the distro which will best suit your needs.

5. Software - There are so many software choices when it comes to doing any specific task.

Q7. What are the different compilers available for Linux? How do they differ [if they do] from traditional Windows-based ones?

GNU Compiler Collection - The standard compiler for most Unix-like operating systems Open64 - The Open Research Compiler

g95 - Production Fortran 95 compiler available for multiple architectures

clang - C Language Family Frontend for LLVM

LLVM - Low-Level Virtual Machine (LLVM) compiler for C/C++

Free Pascal - Advanced Pascal compiler for Pascal and Object Pascal

Glasgow Haskell Compiler - An optimizing compiler for Haskell, written in Haskell

FreeBASIC - 32-bit BASIC compiler

Q8. Which is the best Linux distro? And why, according to you?

## Mint

I like good looking GUI's so I'll go with Mint. It offers a good deal of customisation. There are four flavours of Mint which offer different desktop environment. These change the look and layout of the basic Linux interface and its Start menu.

Q9. Create a github account and link it to us along with the rest of your answers.