**Linux Exam**

**1. What are Open Source softwares.**

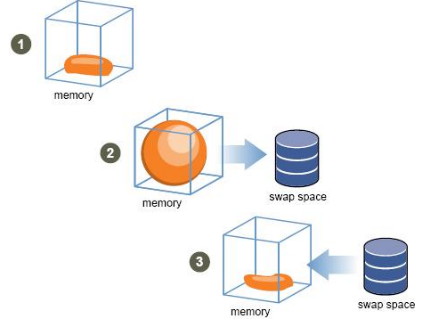
**ANSWER**: Open-source software is a software that is distributed with its sources code, making it available for use, modification and distribution with its original rights. source code is part of the software that most computer users don’t ever see its code

It’s the code computer programmers manipulate to control how program or application behaves. Programmers who have a access to change the source code and change a program by adding it

**2. What is a swap space?**

**ANSWER:** Swap isa space on a disk that is used when the amount of physical RAM memory is full

When Linux system runs out of RAM, inactive pages are moved from RAM to the space

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**3. Syntax of any Linux command is:**

**ANSWER:** In the computer world, the syntax of a command refers to the rules in which the command must be run in order for piece of software to understand it.

**4. Diffrence between RAM and swap memory?**

**ANSWER:**

|  |  |
| --- | --- |
| Ram has a physical storage and its memory was 8gb, it is the first type memory, it is short fall of memory when we execute a program  Ex:I have program of 1.2GB & I have a physical storage was 1 GB swap will take .2gb memory to run file | Swap has a virtual storage and its memory twice than ram(2x8gb), its second type of memory, In case when the program executes the short fall of memory swap will contribute his memory for configured the sysytem |

**5. Command to create soft link?**

**ANSWER:**  ln -s filename to create new file name

Example: ln -s f9 f10

**6. How do you change permissions under Linux?**

**Chmod – 777 filename**

Chmod -777 f1

**7. How do you list partitions under Linux?**

**Answer: fdisk -1**

**8. How do you list mount points in linux?**

**Answer: df -h**

**9. How to export environmental variables in Linux for user “devops”?**

**While doing nexus we can discuss**

**10. How to check RAM and swap memory size usage in Linux?**

**Answer:** free

top

**11. What is symbol of output redirection**

**Answer: >>**

**12. How do you redirect all the output to a file, including standard errors.**

**Answer: >>**

**13. Command to find all the PID’s of httpd process**

Answer: yum install httpd -y && service httpd start && ps -ef | grep httpd

This command is like task manger in linux

**14. Write a command that will look for files with an extension “.xyz” and delete it.**

Answer: **rm -rf $(find . | grep.xyz)**

rm -rf $(find . | grep .xyz)

**15. How to make sure that vsftpd process starts after system starts.**

Answer: **service vsftd start**

**16. How to install software with all the dependencies in Ubuntu & centos systems.**

**Answer:** yum install (download) for centos

apt-get install for ubuntu

**17. What runlevel will start the system in graphical mode?**

* **Answer:** 0 – System halt *i.e* the system can be safely powered off with no activity.
* 1 – Single user mode.
* 2 – Multiple user mode with no NFS(network file system).
* 3 – Multiple user mode under the command line interface and not under the graphical user interface.
* 4 – User-definable.
* 5 – Multiple user mode under GUI (graphical user interface) and this is the standard runlevel for most of the LINUX based systems.
* 6 – Reboot which is used to restart the system.

**18. What is the command to find the current run level?**

**Answer:** init/ runlevel

**19. Write a cronjob entry to run a backup script at 10:30 PM from Monday to Friday?**

Answer: 30 22 1-5 \* \* uday.txt

**20. What is the command to find the current load average of the system?**

**Answer: uptime command**

**top**

**21. Explain all the fields for user devops from /etc/passwd file**

**23. Give example of type 2 and type 1 hypervisor?**

**24. Diffrence between DNS and DHCP server?**

DNS server is a device that locates the internet domain names and translates them into internet protocol (IP) addresses. In contrast, DHCP server is a device that dynamically assigns IP address and other network configuration parameters to each device on a network so that they can communicate with each other

**25. Default ports for FTP, DNS, Telnet, HTTP & SSH?**

|  |  |
| --- | --- |
| **ftp** | **20 is for data,21 is for control** |
| **Dns** | **53** |
| **telnet** | **23** |
| **http** | **80,8080** |
| **ssh** | **22** |

**26. Command to install rpm and dpkg package.**

**Answer:** For install of RPM we need go with centos and root

After that we cann use command :**rpm -I filename**

**27.What is vagrant?**

**28. What is the default synced directory for vagrant vm?**

**29. How to make your script executable for the owner and the group?**

**Answer: chown command**

**30. Diffrence between ext2 and ext3 filesystem.**

**31. How to check the ip address of your system ?**

**Answer: Ifconfig**

**hostname -i**

**32. How To change the password of user from the Command Line ?**

**Answer: passwd filename**

**33. What is name of first process in linux and its PID?**

Answer: ls /proc | less

cat /proc/1/cmdline

cat /proc/1/status

**34. Command to check all the running processes?**

**Answer: Ps -ef** its is like a task manager

**35. Find a user root info from /etc/passwd file and display two lines after that?**

**36. Search content elephant and replace it with rhino from a file named animals.txt.**

**Sed -I ‘s/elephant/rino/g’ animals.txt**  for permant change

**Sed ‘s/elephant/rino/g’ animals.txt**  for temporary change

**37. Command to add user to the group?**

**Answer: adduser filename**

**38. How many IP addresses are available to use from CIDR block /24 and /16?**

**39. What is first and last usable ip address for network ranges 172.16.1.0/24?**

**40. What is the purpose of /etc/hosts file?**

**41. How to restart ssh service in centos and ubuntu OS?**

**Service ssh restart**

**42.How to reboot linux machine with init command?**

**Answer:** sudo telinit 6

**43. Command to copy file /tmp/logs\_backup.zip from local system to a remote server which has ipaddress 192.168.2.84 at /home/vagrant/ location?**

**Answer: Scp /tmp/logs\_backup.zip vagrant@192.168.2.84:**

**44. sudo -i command is used for what purpose?**

**Answer: root**

**45. Command to zip and compress directory named apache\_logs.**

**46. What is PPID?**

**Answer:** parent processor identifaction

**47. How to find file type in linux, like normal file, directory, block file, links etc?**

**Answer: find**

**48. Describe the root account.**

**Answer: super user account**

**49. How to list all the interfaces and its ip address in linux ?**

**50.What is /etc directory used for in Linux?**

**51.What is /etc/shadow file used for in linux?**

**52. How to check if file exists on file system?**

**53.What is diffrence between vagrant and virtualbox?**

**54.What is AWS?**

* Compute,Storage databases, Data management, Migration ,[Hybrid cloud](https://searchcloudcomputing.techtarget.com/definition/hybrid-cloud) ,Networking ,Development tools ,Management Monitoring Security ,Governance ,[Big data management](https://searchdatamanagement.techtarget.com/definition/big-data-management) Analytics ,[Artificial intelligence](https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence) (AI) ,Mobile development Messages and notification

**55.What is IAM and its purpose?**

**56.What is EC2 service used for?**

**57.What are AMI’s?**

**58.What is diff between inbound and outbound rules in SG?**

**59.What is NAT**

**60.What is subnet**

