**LINUX**

* Ask scale of 1 – 10 in given programming languages or tools.
* Basic most used linux commands and their usecases.
* How we can check network or traffic stats on linux?

Using netstat command

* Explain more on TOP command.

The Linux top command is used to show all the running processes within your Linux environment.

* Difference between Linux and Unix?

**Linux** is a **UNIX** Clone. But if you consider Portable Operating System Interface (POSIX) standards then **Linux**can be considered as **UNIX**. To quote from Official **Linux** kernel README file:**Linux** is a **Unix** clone written from scratch by Linus Torvalds with assistance from a loosely-knit team of hackers across the Net.

* How would you make sure service starts on linux or not?

Service <service\_name> status

* Debug, Why website is showing server not found error.

Not connected to internet, proxy settings, hosted website server is not correct

* How to kill all process without using pkill?

Kill pid

Killall <process name>

Pkill <process name or partial name>

* How to find out only IP of host?

/sbin/ifconfig host | grep 'inet addr:' | cut -d: -f2 | awk '{ print $1}'

* Explain, What is MakeFile tool?

**Makefile** is a program building **tool**which runs on Unix, **Linux**, and their flavors. It aids in simplifying building program executables that may need various modules. To determine how the modules need to be compiled or recompiled together, make takes the help of user-defined **makefiles**.

* What flavor of linux is running?

cat /etc/\*-release

lsb\_release -a

cat /proc/version

* What is difference between TCP and UDP?

There are two types of Internet Protocol (IP) traffic. They are **TCP** or **Transmission Control Protocol** and **UDP** or **User Datagram Protocol**. TCP is connection oriented – once a connection is established, data can be sent bidirectional. UDP is a simpler, connectionless Internet protocol. Multiple messages are sent as packets in chunks using UDP.

* What is ICMP?

This kernel protocol module implements the **Internet** **Control** **Message** **Protocol** defined in RFC 792. It is used to signal error conditions and for diagnosis. The user doesn't interact directly with this module; instead it communicates with the other protocols in the kernel and these pass the ICMP errors to the application layers. The kernel ICMP module also answers ICMP requests.A user protocol may receive ICMP packets for all local sockets by opening a raw socket with the protocol **IPPROTO\_ICMP**. The types of ICMP packets passed to the socket can be filtered using the **ICMP\_FILTER** socket option. ICMP packets are always processed by the kernel too, even when passed to a user socket.Linux limits the rate of ICMP error packets to each destination.**ICMP\_REDIRECT** and **ICMP\_DEST\_UNREACH** are also limited by the destination route of the incoming packets.

* If mails are not sending from host, how you can debug?
* If you want to copy local to remote, how you can do that?
* How to find out disk available space and memory of host.
* How hostname resolves on the linux?
* What is KVM?
* What is hypervisor?
* How we can list available rpm?
* Commands like - $0,$1,$\*,$@,$$,$#,$?
* How to get 10th line of file?
* How to redirect stdout and stderr in file?
* What chmod 500 will do?
* What is use of –e,-f, -x <file name>?
* How to get part of string variable using only echo command.
* How to test and debug shell script files.
* Use of “export” command?
* How to check environment variables?
* How to execute shell command on remote server?
* How to get command output in shell variable?
* Explain rsync command.
* What is first line of shell script?
* For loop syntax?
* How to set crontab entry and list all cron jobs?
* How any shell command works?
* How to set mount point?
* How to enable/disable GUI mode in linux.
* How to get list of partitions?
* Explain about curl command?
* List commands to download content from internet.
* How to check port being used or not?
* How to connect remote host using IP?
* How enable password less ssh connection to remote host?
* How to find length of string?
* How to remove Ctrl + M character from linux file?
* How to find list of files modified from last 30mins?

**DevOps Common Questions**

* What is DevOps?
* Why DevOps is required?
* Where DevOps is not required?
* What is continuous integration, continues delivery and continuous deployment?
* If we ask to research on new tool what would be your approach? Can you present something in a day on the same?
* Differentiate between fault tolerance and high availability.
* What are the different type of testing and provide examples how you used/integrated?

1. Jenkins

* How to scale Jenkins for thousand of jobs?
* What are different type of jobs you can create in Jenkins?
* How to secure Jenkins?
* Explain on parallel jobs in Jenkins.
* What is the best approach, parallel jobs or sequential jobs? Why?
* How can you trigger build/job in Jenkins? Multiple ways?
* List out some of the important plugins in Jenkins
* How to make Jenkins high available?
* How to add and monitor multiple nodes in Jenkins?

1. Git

* Explain architecture of Git
* What is different between git pull and git fetch.
* How to resolve git merge conflicts
* Do you know about Git-Flow? Explain
* Tell me various type of git merge?
* Can you install GitLab?

1. Ansible

* Explain architecture of Ansible.
* How ansible makes connection to remote hosts?
* Write sample ansible playbook.
* List out some ansible module.
* Ansible command to ping all listed host in inventory.
* Explain ansible host and group vars.
* Ansible command to checkout code from github and deploy over on remote machine from inventory.
* Consider we have inventory for web, db and memcache services for local, dev and staging environment, what would be the ansible command for get ting only web and db hosts for deployment but only from staging environment.
* Can we run async job in ansible.
* Command for gather facts.
* What is ansible galexy?
* Can we include ansible playbook into other playbook?

1. Docker
   * What is Docker?
   * What is advantage of docker over hypervisor?
   * What is docker container?
   * Difference between docker image and container
   * What use case you are using with Docker?
   * Difference between virtual machine and docker
   * How do I run multiple copies of compose file on then same hosts?
   * What is difference between up, run and start?
   * Can I use JSON instead of yaml?
2. Maven
   * What maven?
   * What POM file and its structure.
   * Explain on build life cycle of maven.
   * Difference between maven and ant.
   * How to configure git project in maven.
   * How to configure nexus repo in maven.
   * List some of maven plugins and their usage.
3. Chef
   * Explain architecture of Chef
   * What is the need for using Knife?
4. Puppet
   * Explain architecture of Puppet
   * Is there any default order of execution for the resources mentioned in site.pp?
   * How do we change the polling frequency for a puppet agent?
   * Differentiate between chef, puppet and ansible.
5. AWS
   * What is EBS**?**
   * What is S3?
   * Difference between EBS and S3
   * Security aspects in aws cloud
   * How to configure load balancer in aws?
   * What are health check and why they used?
6. Cloud Computing
   * What is cloud computing
   * Benefits of cloud computing?
   * What are the different layers in cloud computing?
   * What are the cloud computing platform databases?
   * What do you mean by PaaS, IaaS, SaaS and CaaS
   * What do you mean by VPN and what does it contain?
   * What are the phases in cloud computing?
   * Approach for the migrating application into the cloud?
7. Agile
   * Explain agile
   * What is scrum and scrum master role?
   * What activity involves in agile?
   * What are you doing in agile, explain day to day activities?
   * What is sprint retrospective meeting?
   * What is post-mortems meeting?
   * Difference in post mortems and retrospective?
8. General
   * What is REST?
   * Explain differences between rest and soap.
   * Do you know Nexus? What it is for?
   * What is provisioning?
   * What is server configuration? And which are the good tools available for managing this?
   * How HTTP works and what are different types of HTTP requests.
   * Explain what would you check if Linux Build Server suddenly getting slow?
   * How would you prepare for migration from one platform to another.
   * What PTR in DNS?
   * What is authentication and authorization? Any example you worked?\
   * What is BDD, TDD approaches?