* LINUX
* suppose you lost pem key and wants to ssh to server how do you do that?
* how to check the running processes on linux
* have you check or monitor the running processes on linux
* how to check open ports on linux?
* linux
* What is Swap Space?
* What is the maximum length for a file name in Linux?
* Which partition stores the system configuration files in Linux system?
* Which command is used to uncompress gzip files?
* What is the difference between soft and hard mounting points?
* What are the file permissions in Linux?
* more questions are from sed, find and awk .
* How to check Memory stats and CPU stats as a Linux admin?
* How to reduce or shrink the size of LVM partition?
* How can you enhance the security of password file?
* What is the difference between Cron and Anacron?
* What command is used to check the number of files, disk space and each user’s defined quota?
* how can you manage memory in linux machines?
* What is the name and path of the main system log?
* how to manage logical volumes?
* Explain /proc filesystem?
* What are the fields in the/etc/passwd file?
* How do you terminate an ongoing process?
* How can you know the execution time of a command?
* How can you append one file to another in Linux?
* How you can run an Linux program in the background simultaneously when you start your Linux Server?
* How to connect client and server(windows to linux)
* How do you upgrade a kernel in linux?
* suppose user has getting error of permission denied for perticular file how do you resolve the issue as a linux administrator?

EC2

* difference between nacls and security group
* WHen we use ec2 instance why do we use pem or ppk file
* I want to set up a prod setup and the client is asking me to launch my ec2 instances in private subnet and I want to access through my browser how can it be connected to outside world?
* Lets suppose i want to launch an ec2 instances what all types of instances I can launch in ec2?
* What are various EC2 instances available?’
* If I am not able to login in my instance what am I supposed to do?
* My key pair is lost how am I suppose to access the ec2 instance?
* If the ec2 instance is in the public subnet and the cpu is giving performance issues ?
* What is EC2 service used for?
* Name few types of EC2 instances?
* Diff between T2 series and C series on Ec2 instances?
* What are Elastic IP’s and how is it diffrent from normal Public IP assigned to a EC2 instance?
* Can AWS EC2 access s3 bucket without access key?
* Can we attach a Security group to multiple instances?
* What happen when one node or instance is unreachable?
* Can we create volume in one zone and attach it to a instance in the other zone?
* I have pdf files in an instance and they are eating away the space. I need these files,
* what is solution do you provide for accessing these files?
* What is the need for having your application or instances in private subnets when you
* have public domain through route 53?
* How to launch a instance from AWS
* suppose you have 3 instance running in one region and you want to migrate that instance in anoter region haow did you do that?
* A user is complaining that he is not able to access instance in aws how will you trouble shoot?
* A user is not able to connect to the application hosted by a server? how will you troubleshoot?
* If you have 2 vpc peering connected and one instance is unable to connect with the instance in another vpc how will you trouble shoot what are the things will you check
* VPC
* What is VPC?
* 32. What is default VPC?
* 33. Can we create default VPC?
* 34. What is DNS hostnames option used for in VPC?
* 35. What are Subnets in VPC?
* What is diffrence between Private and Public subnet?
* How can you design a Highly available network in VPC?
* What is VPC Peering?
* How will you identify which one is public subnet & private subnet in VPC
* What is AWS vpc?
* what is vpc peering and transit gateway?
* How do you create a VPC?
* What is vpc peering and what is the benefit of vpc peering?
* What is VPC and how we can setup VPC?
* IAM
* explain about IAM and some databases in AWS
* What is IAM and its purpose?
* 3. What are policies in IAM?
* 5. Two types of access for IAM user?
* Difference between IAM Roles & Policies?
* What is the difference between role and role policies, what is users, role and groups in IAM?
* In IAM what is the difference between a role and a group?
* what is IAM Role, User, Policy
* S3
* What are the storage options available in S3?
* Any idea about versioning in s3 is it default behaviour?
* What are different types of s3 buckets that are available? if you want to choose an s3 bucket what are the criteria you would look for?
* Tell me S3 reduced redundancy vs infrequent access?
* 76. Tell me S3 Bucket level permissions ?
* What is difference in S3 and other AWS storages?
* 24. How do you use S3 bucket in your project?
* JENKINS
* how you manage rbac in Jenkins?
* how to add stages in Jenkins?
* what is shared libraries in Jenkins?
* How do you define and implement a pipeline in Jenkins?
* How do you handle failures in your Jenkins pipeline? Can you explain how you troubleshoot issues and failures in the pipeline?
* Can you describe how you monitor the health and performance of your Jenkins pipeline? What tools do you use for this?
* How do you handle security in your Jenkins pipeline? Can you describe the security measures you take to ensure that your pipeline is secure?
* Can you explain how you integrate Prometheus and Grafana with other DevOps tools such as Jenkins or Kubernetes?
* While building Jenkins pipeline we get a replay feature, you don’t have to create a pipeline always when you make changes have you used this replay feature
* Write a jenkins file
* If a certain stage fails you still want it to pass to the next stage of jenkins file how to do it?
* do you know anything about shared library in jenkins?
* What is your understanding when you say cicd?
* Explain the stages in ur project declarative pipeline.
* What is ci/cd?
* How to change Jenkins port no?
* How to connect master slave?
* How to checkout git code in Jenkins?
* How to take backup of ur jenkins?
* Do you have any script to launch slave nodes?
* How do you resolve build failure?
* Difference in soft link and hard link?
* 16. How to find a particular word from a file?
* GIT AND GITHUB
  + What is Version control system or Source code manager?
  + Benefits of VCS or SCM?
  + What is Git and What is a repository in GIT?
  + Diffrence between Git and SVN?
  + Two types of git authentication?
  + Branches in Git and its purpose?
* What is the common branching pattern in GIT?
* 7. What is Pull requests?
* 8. How to install git in Linux & Windows?
* 9. How to setup repository though command line?
* 10. How to setup repository in github and clone it?
* 11. What is git clone command used for?
* 12. What is git config command user for?
* 13. Git config data is stored in what location?
* 14. Git config global and local files?
* 15. Content of git config file?
* 16. Git add command’s purpose?
* 17. How to remove/rename files in local git repo?
* 18. git commit command’s purpose?
* 19. How to sync local git repo data with github?
* 20. git fetch?
* 21. git merge?
* 22. git pull?
* 23. How to change branches in local git repo?
* 24. What is the difference between ‘git remote’ and ‘git clone’?
* 25. git status?
* 26. What is the function of ‘git rm’?
* 27. What is the function of ‘git checkout’ in git?
* 28. What is the use of ‘git log’?
* 29. Explain what is commit message?
* 30. How to setup github ssh authentication?
* 31. What is git webhooks?
* 33.Tell me the branching strategies you followed for your project?
* 34. What is git rebase?
* 35. What is git stash?
* 36. What is the difference between git pull and git fetch?
* Differnce between git and svn?
* 38. Advantages of git compare with svn?
* 39. Explain about staging area in git?
* 40. How do you check after git merge …where merging is correctly or not?
* 41. How to create branch and delete a branch?
* 42. Do you get any conflicts while merging..how can u resolve conflicts?
* 43. How can u implement authentication and authorization in git?
* 44. What is the difference between git rebase and git merge?
* 45. How to merge the code?
* 46. Pull request in git hub - ---git pull
* 47. Forking a repository in git hub?
* 48. Diff between svn and git ---svn is centralized version control and git is Distributed Version Control.?
* 49. What is forking in git repositories?
* 50. explain about soft and hard reset and their difference?
* 51. What kind of branching and merging you worked on GIT.
* 52. with this kind of environment and the git release branching, does it work in Agile methodology?
* 53. What is tagging in GIT and what is the diff between feature branching and tagging?
* What are the git commands you use?
* 55 Difference in git fetch and git pull?
* 56 what is cherry pick command
* Loadbalancer
* I have 2 servers on aws and I want to load balance the traffic how will I do it? (if i use a load balancer and if I dont want to use a load balancer)
* What are load balancer and explain types?
* What is ELB?
* Diffrence between internet facing and internal ELB?
* What is route 53? How do you configure it? And link it to ELB?
* difference between nlb and alb
* DOCKER & KUBERNETES
* What experience do you have with container orchestration systems like Docker or Kubernetes?
* How do you manage secrets and sensitive data in a Docker containerized environment?
* Can you explain how you integrate Prometheus and Grafana with other DevOps tools such as Jenkins or Kubernetes?
* Can you describe a scenario where you had to troubleshoot an issue in a Docker or Kubernetes environment
* can you write a docker file
* How do you handle scaling and deployment of microservices in a Kubernetes cluster?
* What is Kubernetes why are we using it?
* Can you explain how you integrate Prometheus and Grafana with other DevOps tools such as Jenkins or Kubernetes?
* **what is kubernetes architecture?**
* Tell me the different services in the kubernetes?
* You have newly joined a company and company is also new to the kubernetes and now you have to deploy to kubernetes and as a infra admin how do you know how many resources you need for an application
* 15. explain about kubernetes and what is the use and all
* What is namespaces in kubernetes can you tell me some?
* 8.Can you tell me some commands using in kubernetes ?
* .What is Kubernetes
* How do you run docker container?
* How many projects you used kubernetes?
* number of docker containers deployed to different vms how will you manage there is no kubernetes installed?
* If installed kubernetes how you will deploy this containers into kubernetes cluster?
* Can you tell me the command for creating kubernetes cluster in vm?
* How many nodes we required to create kubernetes cluster?
* Explain what Kubernetes is.
* What does K8s mean?
* Explain what orchestration means and how it relates to DevOps.
* Why is container orchestration important?
* How does Kubernetes make deployment in containers easier?
* How is host application deployment different from container application deployment?
* Explain what the GKE is.
* What is Prometheus?
* What objects can you use in Kubernetes?
* What are stateful sets?
* What is Kubectl?
* Name some crucial Kubectl commands.
* Name the main pod types in Kubernetes.
* What does persistent volume mean?
* Which tools does Kubernetes use to do container monitoring?
* Explain some of the advantages of Kubernetes.
* Explain some of the disadvantages of Kubernetes.
* Name some of the main Kubernetes features.
* Name two main Kubernetes architecture components.
* Why are cloud system administration skills important for Kubernetes developers?
* Why are programming skills important for Kubernetes developers?
* What are the main recommended Kubernetes security measures?
* Which method would you use to set up a static IP for load balancers?
* What are the critical components of a node status in Kubernetes?
* What does the deploying applications process involve in Kubernetes?
* Explain what a replica set does.
* Explain what a replication controller does.
* Explain the difference between replica sets and replication controllers.
* How can an organization enhance the efficiency of its technical operations and keep costs low using Kubernetes?
* How would you help an organization change its deployment strategy with Kubernetes and build a more scalable platform?
* How can Kubernetes help with workload distribution optimization?
* Whatis difference between replica set & deployments?
* what is service and what are service types?
* what is taints & toleration?
* what feilds are needed in yaml file, when you use ndoe port in service?
* what is port, target port, node port?
* what are affinity rules, what feilds you give in yaml for node affinity?
* what are the different types of health checks?
* what are daemon sets?
* what all component of worker node
* If scheduler went down then what are the impact over existing application - no impact
* If etcd went down then what are the impact over existing application - no impact
* If etcd went down then what are the impact over existing application when it restart - i will be impact
* if kubelet down then what are the impact - pod will be impacted
* which conatiner runtime we are using in our infrastructure - containerD
* what is kube-proxy
* What is daemon set
* what is diffrence between deployment and statefulset
* What are main parameter we have to define in pod yaml file ?
* which type of application running in your env - mysql...atlas...busybox...elastich seacrh...
* what are the command to uodate image in deployment - kubectl set image deployment/my-deployment mycontainer=myimage:1.9.1
* How do we roll back application when we are doing upgradation ?
* How many types of service
* what are difference between clusterIp and NodePort IP
* What are the range of NodePort service
* What is config map and why do we use
* What is secret and why do we use
* How many types of secret
* How do we extend size of existing PV
* do we require downtime durung extend pv --- Yes we require
* config map update - we need downtime,,..we have only restart pod
* If pod down how do we fix
* If PVC are in pending state then how do we fix
* If Pod are getting imagePullBack off error then how do we fix
* If storage class is missing do we create PVC
* If we delete pod then pv is also deleted -- No its deleted
* if pvc deleted then corresponding pv is also deleted? its depeend upon reclaim policy...if reclaim policy would be delete then automati would be deleted
* if reclaim plocy would be Retain then pv would not be deleted , we have manually delete
* I am not able to extend persistent volume , how do we fix ?
* Pod and stuck terminating state how do we delete permanently ?
* sometime we are trying to delete namespace but it stuck in terminating state , how do we fix ?
* Have you done AKS cluster upgradation, explain it all process ?
* What all challenges you have faced during upgradation and how do you fix those issue ?
* How do we take backup and restoration of namespace and pod backup ?
* How do we assign permision over namespace and cluster level access
* what is cordon and drain
* I want to restrict pod on a particular node how do we acheive
* i want not not schdule any pod on a particular worker node --- taint and toleration
* What type of issue you have faced in your project
* what is taint and toleration
* i want a not any single pod will schdule on worker node - using taint and toleration
* how do we secure our cluster
* How do we assign permission on a particular namespace
* What is Role and Cluster Role
* What is Role Binding and Cluster Role binding
* What is HPA and VPA
* How to we autoscale our cluster
* How do we take backup of etcd
* What is readiness and liveness
* What is init container
* DOCKER
* Difference between CMD and entry point
* why we use labels in dockerfile?
* how to check docker logs ?
* how to bind docker volumes
* Explain how Kubernetes is related to Docker.
* Name some differences between Kubernetes and Docker Swarm.
* hat is difference between docker swarm and kubernetes
* Our var/lib/docker filesystem has been full, how do we fix this issue
* Current roles & responsibilities?
* What is Docker compose?
* What is Docker server version?
* What are the advantages of Docker?
* How do create Docker image from Docker file?
* What is Docker data centre?
* What is Docker hub & uses?
* What are the types of Docker networks?
* How do you define network in the Docker compose file?
* What are the basic parameters required in the Docker compose file?
* How to store the data present in the Docker container in the AWS?
* If we define the Docker volume in the docker compose file is it possible to share
* Why we need to mention dual ports(8080:8080) in docker run command
* Differnce between Copy and Add
* How to write a docker file to deploy a war file
* We have private repository and don’t have base images .how can deploy a war file?
* Write a simple docker file to deploy a war file by using base images?
* Difference between docker compose and docker swarm
* why we need to use docker compose?
* Tell me about Docker Network.
* I want deploy containers but have storage persisentsar problems in AWS and in
* Docker?
* What is Docker file commands
* How to port forward in docker
* ANSIBLE
* **What is inventory file used for and default inventory host location?**
* **What is ansible configuration file used for and its default path?**
* **Do you write your inventory file?**
* **How many types of variables and precedence?**
* **Write the command to find the python version on nodes?**
* **What is the file structure of ansible roles?**
* **What happen when one task is failed in playbook?**
* **i have 20 servers , I want to install one package in 5 servers and other package in next 5 servers..like that How to write in ansible script for that…Explain?**
* **What is the architecture of ansible?**
* **How do I supply variables while executing the playbook in ansible?**
* **Explain about the tags in ansible?**
* **How to execute failure playbook again?**
* **How is ansible diffrent than any other configuration management tool?**
* **Ansible playbooks are written in what format?**
* **What is a module in Ansible?**
* **What is inventory used for in ansible?**
* **Name three places where ansible variables can be stored?**
* **What connection anible establishes with linux and windows node.**
* **Diffrence between Remote and local execution in ansible.**
* **What is the purpose and location of ansible.cfg file.**
* **Name any two settings from anible.cfg file.**
* **Please write below a sample inventory file with host, group & group of groups syntax in it.**
* **What is the diffrence between group\_vars & host\_vars directory?**
* **What are adhocs commands used for & write below syntax of a ad hocs command?**
* **Write below ad hoc command to gather fact varibales on all the hosts from the inventory file?**
* **What format does ansible ad hoc command returns the output?**
* **Name three types of modules in ansible?**
* **Name any 10 modules in ansible that you have used.**
* **How to list all the ansible core modules from command line.**
* **How to display all the options/attributes for apt module from command line.**
* **How can you check mandatory option for any module from command line?**
* **What is setup module used for?**
* **Write down sample global play declaration**
* **Write down any two tasks from playbook with its proper format and names.**
* **Whats is the diffrence between sudo and become module and its purpose.**
* **Write down playbook syntax of starting ntp service on webserver and dbservers host group at once.**
* **How to take user input from a playbook?**
* **What is debug module used for in playbooks?**
* **How tostore output of any task into a varible from playbook?**
* **What are handlers used for in ansible and how is it diffrent from tasks?**
* **Conditional execution in ansible is used for what purpose and write down its syntax with small description?**
* **What are templates used for and its format?**
* **What are ansible roles and its purpose?**
* **Command to generate ansible roles directory structure.**
* **Name 5 directories from ansible roles.**
* **Write a Ansible task that can copy the file to remote location with the ownership of Jboss?**
* **What is local action in Ansible?**
* **What are the roles in Ansible?**
* **Write a playbook for installation of apache in ubuntu and centos?**
* **How to create a role in ansible?**
* **Different types of inventories in ansible?**
* **if we want system information of machine how we will get the data with ansible like we use facter in puppet ?**
* **In which language we write playbooks in ansible?**
* **Activity that we use with ansibles or advantage Functionality or purpose of ansible using in your project?**
* **How to launch an LDAP server using ansible?**
* **How ansible works.. and what are the playbook written other than the basic playbooks ?**
* **For example there are 4 aps server running and 4 websers running and we have a new code change and this change should automatically copy to these different servers using ansible, how I will come to know new code is generated.**
* **Use Jenkins with POLL SCM option and after artifact is generated using ansible to push suing copy module.**
* **Have u done any automation like app goes down then for self healing of the app kind of the thing. 73 .Have u written any playbook. Exp**
* **what is a dynamic inventory in ansible?**
* **How can you manage cloud services with ansible?**
* **How can you protect sensitive information in ansible?**
* **How can you save the output of module execution in ansible?**
* **How can you manage error handling?**
* **what are conditionals in ansible?**
* **How can you the fact varibales in ansible?**
* **can we create an ansible module ?**
* **How can you do provisioning with ansible?**
* **BASH Vs Python Vs Configuration Management Tools?**
* What is ansible playbook
* 28. Syntax of ansible playbook
* How u run ansible playbook?
* TERRAFORM
* What is Terraform provisioner?
* What is Terraform module?
* Is it possible to lock Terraform module?
* How do you select availability zones using Terraform?
* What is Terraform provider versioning?
* What is Infrastructure-as-Code (IaC) , have you used tools like Terraform or CloudFormation?
* Where does the role of terraform fit in your project?
* Where does it get called, where is terraform file stored? how does it gets created how does it work?
* write a terraform file?
* what is terraform module?
* what is terraform tfstate file?
* what is terraform variable?
* if my statefile delete by mistake then what provision do you have?
* ]what is difference between terraform.tfvars file and variable.tf file
* how do you differentiate the dev,QA, PROD enviromnemt in terraform?
* explain 10 bits of file or directory?
* what is terraform module
* explain what is terraform and its advantage?
* what is terraform workspace?