* 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 = PS, TOP, HTOPP, GREP svc-name ,
* How to check Memory stats and CPU stats as a Linux admin? = FREE -h command use to see used and unused memory in linux \*
* how to check open ports on linux? = NETSTAT -TUNLP
* how to check firewall status and which which is allow or not? = UFW
* how to check open ports of remote server = NMAP ip-address
* What is Swap Space? = temporary storage on HDD to store infrequent running process when the System RAM is full
* What is the maximum length for a file name in Linux? = 255
* Which partition stores the system configuration files in Linux system? = root /ETC
* To create archive tar file and unzip file = gzip / gunzip
* Command to create ZIP from a folder = tar -cvf filename
* Command to compress a file.tar = gzip filename.tar
* Which command is used to uncompress gzip files? = tar – xvzf filename.tar.gz
* What is the difference between soft and hard mounting points? = file system allow access to file server in temporary unavailable condition in soft mount point =file system block access to file server in temporary unavailable situation until it not come back in hard mount point,
* What are the file permissions in Linux? = in linux permission is a set of rule which define who can read, write and execute the file based on owner, group and other
* Colum 1st is for owner, 2nd is for GAROUP, 3RD is for other ( 4 READ, 2 WRITE ,1 EXECUTE )
* wxr-xr-- is represented as 754.
* Owner: Read, Write, Execute (7)
* Group: Read, Execute (5)
* Others: Read only (4)
* What task have you done on linux servers, can you deploy web server on it
* Why are you apply for this roles
* Are you able to worked on underload environment
* We have 24x7 support so how will you management
* Situation where you awkworlk by the situation
* How do you deside cidr in vpc
* Have you setup and deploy sonarqube server
* How to make
* What is diff between net gat way and internet gateway
* more questions are from sed, find and awk . = AWS and SED command is used for text manipulation, print, edit and convert text in the file .
* How to reduce or shrink the size of LVM partition? = umount /data1 / resize2fs /dev/data1 6g = resize file size / lvreduce -L /dev/data1 = reduced lvm disk / mount it back
* How can you enhance the security of password file?AQ
* What is the difference between Cron and Anacron? = cron and ana cron both schedule task on certain time and periodically but cron not perform task if system goes down and anacron remain constant.
* how can you manage memory in linux machines? = Managing memory in Linux involves monitoring, optimizing, and troubleshooting to ensure efficient utilization.
* What is the name and path of the main system log?
* how to manage logical volumes?
* Explain /proc filesystem? = The /proc filesystem is a virtual filesystem in Linux that provides an interface to kernel data structures.
* What are the fields in the/etc/passwd file? = The /etc/passwd file in Unix-like operating systems contains information about user accounts seprated with the colons.
* How do you terminate an ongoing process? = kill command use to terminate the running process/ kill -9 for forcefully termination / pkill = terminate with id , killall = terminate with name
* How can you know the execution time of a command? = time command is used to see the execution time of commands.
* How can you append one file to another in Linux? = you can use cat and echo command to apppand the 1 file content into other file.
* 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

launch ec2 instances in private subnet how to connected to internet ?

* 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?’ Name few types of EC2 instances?
* = General Purpose Instances (T, M, A Instances), Compute Optimized Instances (C Instances), Memory Optimized Instances (R, X, Z Instances), Storage Optimized Instances (I, D, H Instances), Accelerated Computing Instances (P, F, G, and Inf Instances),
* Different types of EBS volumes ?
* = General Purpose (gp2)
* = Provisioned IOPS (io2, io1)
* = throw put optimized (HDD)
* = Cold HDD (HDD)
* 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?
* = Create an Amazon Machine Image (AMI) and Launch a New Instance.
* = Detach the Root Volume and Attach to Another Instance.
* = Use EC2 Systems Manager (SSM) or EC2 Serial Conole Direct connect
* If the ec2 instance is in the public subnet and the cpu is giving performance issues ?
* = Monitor cpu utilization, ram utilization by CloudWatch and make sure to use correct instance type as per your work load
* = use auto scaling to adjust your instance as per work load vertically or horizontally.
* = Check the IOPS requirement for our volume / select EBS volume and pase volume id cloudwatch/ check read ops write ops
* Can AWS EC2 access s3 bucket without access key? yess
* 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? = create/snapshot of instance volume / create volume/instance from snapshot
* 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? Use s3
* 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?

1. Can you describe a challenging project you worked on?
2. Difference between continuous integration, continuous delivery, and continuous deployment
3. What experience do you have with container orchestration systems like Docker or Kubernetes?
4. Can you describe a deployment pipeline you have created, and how did you ensure that it was reliable and efficient?
5. Tools you used for configuration management, and how have you customized them for your needs?
6. What is Infrastructure-as-Code (IaC) , have you used tools like Terraform or CloudFormation?
7. Can you describe what is serverless computing, and your experience with same
8. collaborate with developers, testers, and other stakeholders
9. How do you manage secrets and sensitive data in a Docker containerized environment?
10. Can you describe a scenario where you had to troubleshoot an issue in a Docker or Kubernetes environment
11. how have you used infrastructure as code it in your projects?
12. How do you handle scaling and deployment of microservices in a Kubernetes cluster?
13. How do you define and implement a pipeline in Jenkins?
14. How do you handle failures in your Jenkins pipeline? Can you explain how you troubleshoot issues and failures in the pipeline?
15. Can you describe how you monitor the health and performance of your Jenkins pipeline? What tools do you use for this?
16. How do you handle security in your Jenkins pipeline? Can you describe the security measures you take to ensure that your pipeline is secure?
17. Can you explain how you integrate Prometheus and Grafana with other DevOps tools such as Jenkins or Kubernetes?
18. Can you describe how you use alerts in Prometheus and Grafana ?

Akash interview questions

1) which web server you used for hosting your java based application.

2) how the tomcat and java application integrated and work together.

3) on which port application is running and on which port we can access the application

4) if I want to change the port

5) what you know about the application build

6) how we can build the application

7) so if you have to do a manual build how you can do it ?

8) if the ci pipeline is failing what is your approach ?

9) if you found any failure in ci pipeline how will you fix that ?

10) what type of issue you have faced in ci pipeline and what is your approach.

11) suppose we found failure java is not able to build how you can trouble shoot it

12) do you have any experience with client interaction

13) what is you role in this interaction and what is your In that ?

14) do you have any experienced with data admin ?

15) which data based you use for your application

16) tell me some queries which you used

17) what is the queries to list the table

18) how we can create image from running docker container ?

19) why we used config map in Kubernetes ?