

## **Linux**

1. Ten basic linux commands
2. What is shell
3. Architecture of linux kernel
4. Use of touch command
5. What is timestamp
6. / directory
7. Editors in linux system
8. Vi/vim editor modes
9. How to create parent directory in linux system
10. How to copy file in linux system
11. How to move file in linux system
12. How to rename files in linux
13. Explain sudo user
14. Explain root user
15. Difference between root and sudo user
16. Explain command mode in vim editor
17. What are the different types of users in linux system
18. What is local user
19. What is system user
20. How to create an local user in linux
21. What are the different files affect when new user is added
22. Can we create new user without using any user add or adduser command
23. How to assign password to user in linux system
24. Explain /etc/shadow file
25. Explain /etc/passwd file
26. password aging policy
27. What is umask
28. Default umask of root and local user
29. How to change temporary and permanent umask of any user
30. What is link count
31. Difference between hardlink and softlink
32. Explain archiving
33. Explain compression
34. Difference between gzip and tar file
35. Fields of crontab
36. Set an crontab for every Friday at 10am
37. Cat command uses
38. What are redirectors in linux
39. Explain top command
40. Difference between jobs and ps command
41. How to terminate jobs in linux
42. Difference between free memory and available memory
43. What is ISP
44. What is difference between public and private ip
45. What is the use of static ip
46. Explain OSI model
47. What is load average in top command and what it indicated
48. What is kernel
49. What is low level language
50. How to see linux system configuration

## **AWS**

1. Difference between virtualization and AWS cloud
2. Difference between region and availability zone
3. Explain security group
4. Difference between NACL and security group
5. scenario: suppose you have lost your ssh key pair how can you get it back
6. What is instance and different types of instance type
7. What is status check explain in short ?
8. What is AMI
9. What is custom AMI
10. Difference between AMI and launch template
11. What are different purchasing option
12. Explain EBS volume and its types
13. How to mount EBS volume in EC2 instance
14. What is snapshot
15. Create an schedule to take backup every 31st of month
16. Create an lambda function to take backup of volume every 31st of month (python script)
17. What is NFS
18. How to create and mount EFS in two different EC2 machine
19. What is IP explain different types and its use
20. Different classes of IP address
21. What is Internet Getaway
22. What is NAT getaway
23. Difference between NAT and IGW
24. What is elastic IP
25. What are placement group
26. What is Load balancer
27. What is OSI model Explain layers
28. Difference between ALB and NLB
29. What is auto scaling group
30. What are target groups
31. Scenario: servers are getting more request than it regularly handle how it will handle increased number of requests
32. How servers can handle request in didos attack
33. What is VPC wearing
34. Difference between VPC bearing and Transit gateway
35. What is IAM service in AWS
36. What are roles
37. What are policies
38. Difference between IAM roles and IAM policy
39. Scenario: User1 has only policy attached to access EC2, for security reasons user1 is not allowed to give the s3 service access how can an User1 will get an access of S3 bucket to work with bucket data
40. S3 Bucket storage classes
41. What is replication rule
42. Create an lambda function to replicate the data from s3 bucket 1 to another s3 bucket 2 in different storage class
43. What is cloud watch
44. What is SNS
45. What is RDS
46. What is schema in Database
47. Difference between Relational Database and non-relational database
48. What is DNS service explain different records
49. What is cloud front
50. Create an lambda function to stop running instance in region ap-south-1

## DevOps

1. Difference between Agile methodology and Waterfall methodology
2. What is GIT
3. Lifecycle of GIT
4. Difference between Git and Github
5. Github commands basic
6. What are the different methodology of authentication
7. What key we use while establishing ssh with EC2
8. Explain different branching strategy in git
9. Difference between monolithic and micro service based application
10. What is containerization
11. Docker architecture
12. Explain dockerfile
13. Difference between dockerfile and docker image
14. Docker networking explain different network used in Docker
15. What is docker hub
16. What is ECR (elastic container registry)
17. What is HPA (Horizontal pod autoscaling)
18. Difference between HPA and VPA
19. Explain kubernetes architecture
20. What are pods
21. Best practices while dealing with Pods
22. How to expose pods to external traffic
23. What does a Kubernetes YAML manifest file define?
24. What is the purpose of a Kubernetes Namespace?
25. What is replica set in k8s
26. What are docker volumes
27. How to list all the docker volumes
28. How to build lightweight docker images
29. What is a YAML manifest file in Kubernetes?
30. Difference between deployment and statefulset
31. Types of autoscaling in kubernetes
32. What is an Ingress Controller?
33. What is Infrastructure as Code (IaC) and why do we need it in cloud environments?
34. What is tfstate file in terraform
35. Explain terraform life cycle
36. Difference between terraform and cloud-formation
37. How to add state locking feature
38. What is blue green deployment
39. What is canary deployment
40. What is maven
41. How to check code vulnerabilities
42. What are webhooks
43. What is Jenkins?
44. Explain stages of Jenkins pipeline
45. What are Jenkins plugins, and how are they used?
46. What's the difference between continuous integration, continuous delivery, and continuous deployment?
47. Explain different stages in CI-CD setup?
48. What is different between Scripted and Declarative Pipelines?
49. What is Observability
50. What is datadog agent