

1. What is git & Why do we need to use it?
2. Difference between Distributed vs Centralized version control system?
3. What is RollBack & How to do RollBack ?
4. Explain stages/Architecture of Git ?
5. What is Local Repo ?
6. What is Git Branch ?
7. What is default branch in git ?
8. Difference blw Git & GitHub ?
9. Difference blw git clone vs git fork ?
10. Difference blw git merge vs git rebase ?
11. Difference blw git merge vs git revert ?
12. Difference blw git pull vs git fetch ?
13. Difference blw git pull vs git clone ?
14. Difference blw git pull vs git push ?
15. what is git cherry-pick & .git ignore & git restore & stash ?
16. Difference blw git merge vs git cherry-pick ?
17. what is maven ?
18. Types of Artifacts ?
19. what is POM.XML ?
20. What is maven Homepath ?
21. Explain maven lifecycle ?
22. What is a Goal and how it will work ?
23. What is the Differenc blw Maven & ant ?
24. What is CI/CD ?
25. what is Pipeline ?
26. Explain about Jenkins ?
27. What is workspace and how to create custom workspace ?
28. Explain the process of integration Github withh Jenkins ?
29. What is jenkins Port Number ?
30. What is variables in jenkins and how many types ?
31. What is Build executors in jenkins ?
32. How to run multiple builds at same time in jenkins ?

30. How to schedule work in jenkins ?
31. Explain Cron syntax.
32. What is PollScm?
33. Explain about webhooks ?
34. Explain about Pipelines ?
35. Types of Pipelines & Difference blw them ?
36. What is Multi-stage pipeline ?
37. what is pipeline As a Code ?
38. what is Input parameter in pipeline ?
39. Explain about Master and slave configuration ?

40. How to reduce load on Jenkins server ?
41. What is Build Executors ?
42. What is Agent in jenkins master & slave ?
43. What is Label in jenkins ?
44. What is Nexus and Explain about it ?
45. What is Tomact and Explain about it ?
46. Path to deploy war & jar files in Tomact ?
47. How do you restart users in Jenkins ?
48. Explain about Linked jobs ?
49. EXPLAIN JENKINS DEPLOYMENT PROCESS ?
50. Explain Parameters in jenkins ?
51. What is Jenkinsfile ?
52. What is Ansible ?
53. Explain Ansible architecture ?
54. what is Ansible Inventory file ?
55. Types of Ansible inventory file ?
56. How to establish connection b/w ansible and worker nodes ?
57. What is Agent less ?
58. What is Adhoc commands ?
59. What is a Module ?
60. Explain any few modules you know ?
61. How to execute multiple modules ?
62. What is a playbook ?
63. What is yaml and explain it ?
64. what is Gather facts in ansible ?
65. what is a task in ansible ?
66. command to run playbook ?
67. How to skip errors in playbook ?
68. What is Tags in playbook ?
69. Explain variables in a playbook ?
70. What is ansible conditions ?
71. what is handlers in a playbook ?
72. Why to use loops in playbook ?
73. what is LAMP stack ?
74. How to get complete info of worker nodes ?
75. What is Debug module ?
76. what is LookUp module ?
77. what is IN-Line module ? (to change a specific line of a file in worker node)
78. What is Jinja2 Template ?
79. Explain Ansible Vault ?
80. Explain Ansible Roles ?
81. Explain Ansible Galaxy ?
82. Explain Ansible PIP Module ?

83. What is Shell, Command, Raw modules ?
84. How to restrict the tasks for specific time in playbook ?
85. What is Ansible Tower ?
86. What is Monolithic & Micro services ?
87. Limitations of Monolithic ?
88. What is a container ?
89. what is a docker image ?
90. what is containerization ?
91. Explain Docker Architecture & Components of Docker ?
92. What is Docker Daemon ?
93. How to download docker images ?
95. How to create conatiner ?
96. What is OS-level of Virtualization ?
97. What is Dockerfile and why to use it ?
98. Explain Dockerfile components ?
99. What is differece blw RUN vs CMD ?
100. What is differece blw ENTRYPOINT vs CMD ?
101. What is differece blw COPY vs ADD ?
102. What is differece blw ENV vs ARGS ?
103. How to run the Dockerfile ?
104. What is A docker volume ?
105. what is Docker volume mounting ?
106. Homepath for Docker Components ?
107. What is a layer in image ?
108. How to allocate CPU & RAM for containers ?
109. What is Compose and why to use it ?
110. How to change default compose file ?
111. What is DockerHub ?
112. How to store images on Dockerhub ?
113. What is Dockerswarm ?
114. What is Service in Dockerswarm ?
115. How manager is connecting to worker in Dockerswarm ?
116. What is Port number for Dockerswarm ?
117. What is self healing in connainers ?
118. What is Network in Docker & Types of Network ?
119. Differences Blw Bridge and Overlay networks ?
120. Difference blw attach & exec ?
121. Difference blw stop & kill ?
122. What is Docker prune command ?
123. How to see cup and ram utilization of Conatiners ?
124. How to see storage of containers, images and volumes ?
125. What is Dockerstack ?
126. What is Kubernetes ?

127. Difference blw Docker Swarm & Kubernetes ?
128. Explain Kubernetes Architecture ?
129. Explain master node and worker node components in Kubernetes ?
130. What is Kubectl ?
131. How many types of Kubernetes cluster we have ?
132. What is a Pod in Kubernetes ?
133. what is minikube and what are the requirements for setup ?
134. In Kubernetes how many ways we can create resources ?
134. what is ReplicaSet in Kubernetes ?
135. what is Deployment in Kubernetes ?
136. what is Difference blw ReplicaSet & Deployment in Kubernetes ?
137. what is Rollout in Kubernetes ?
139. what is Namespaces in Kubernetes & why we need to use it ?
140. What are types of services in k8s ?
141. difference blw ClusterIp vs NodePort vs LoadBalancer ?
142. What is scaling and what is HPA in K8s ?
143. What is a metric server in k8s ?
144. How you get metrics of nodes and pods ?
145. Difference blw HPA VS VPA ?
146. what is DaemonSet ?
147. Difference blw Deployment and DaemonSet ?
148. Difference blw ReplicaSet and ReplicationController ?
149. MAX NODES: 5000, MAX PODS: 1,50,000 MAX PODS PER NODE: 110 ?
What is resource quotas in kubernetes it is and what is rbac ?
what is helmschart and why we need to use it ?
What is Prometheus Grafana and node exporter explain them briefly ?
How to create the dashboards in grafana ?

TERRAFORM:

- What is terraform and why use it ?
- What is infra as a code ?
- Describe the advantages of using terraform ?
- How to provide authentication for terraform to create resource ?
- What is terraform syntax ?
- What is variables in terraform and in how many ways we can pass variables to terraform ?
- What is the purpose of using TF var files ?
- What are the Types of Variables in Terraform ?
- What is the variable precedence in terraform ?
- What is locals block in terraform ?
- what is dynamic block in terraform ?
- what is provider block in terraform ?
- what is output block in terraform ?
- what is resource block in terraform ?

What is terraform workspaces and why we need to use it ?

Expand the comments of Terraform Workspace ?

What is back end setup in terraform and why it is important ?

What is the state file in terraform and what is the purpose of maintaining it safely ?

What is version constraint in terraform ?

What is the difference between count and for each in terraform ?

What is the difference between set and list terraform ?

What is depends on in terraform ?

What are the life cycle rules of meta arguments in terraform ?

What is modules in terraform ?

How many types of provider categories we have on terraform ?

What are the types of providers we have on terraform ?

How do you recreate a specific object in terraform ?

How do you delete a specific object in terraform ?

What are the comments in terraform ?

What is Alias and providers in terraform ?

What is state locking in terraform and why it will happen ?

What is terraform cloud ?

What is terraform vault ?

What is Drift in Terraform and How to Detect ?

AWS QUESTIONS ?

1. What is Cloud ?

2. What are types of Clouds in market ?

3. What is EC2 and explain processs of creation ?

4. What is ELB ?

5. Types of LoadBalancers?

6. Explain about Application LoadBalancer ?

7. What is diff blw internet and internal LoadBalancer ?

8. What is Listener rule in LoadBalancer ?

9. Which algrithm we used on LoadBalancer ?

10. What is Target Group in LoadBalancer ?

11. what is ebs volume and why we need to use it ?

12. what is diff blw Root volume and Non-Root volume ?

13. Types of EBS volume ?

14. What is a Snapshot ?

15. How to migrate sever form one region to another region ?
16. what is the process of creation AMI from existing server ?
17. What is Min and Max storage of EBS ?

ASSIGNMENT-1 (JENKINS) :

CREATE 1 MASTER AND 2 SLAVES

CREATE 2 JOBS

JOB-1: CI IN FREE STYLE

JOB-2: CI IN PIPELINE

JOB-1 NEED TO EXECUTE ON SLAVE-1

JOB-2 NEED TO EXECUTE ON SLAVE-2

WHEN YOU RUN JOB-1 THEN AUTOMATICALLY JOB-2 NEED TO RUN

BUT: JOB-1 NEED TO RUN AUTOMATICALLY

YOU CAN BUILD JOB-1 MANUALLY

ASSIGNMENT-2 (ANSIBLE):

CREATE A 5-NODE CLUSTER

CREATE A index.html file IN ANSIBLE SERVER

CREATE A PLAYBOOK WITH FOLLOWING TASKS: NOTE: Playbook need to run on all servers

1. install httpd (if your servers are dev then install)
2. create 5 users on worker nodes
3. copy the index.html to the web server path
4. Print the cont what you written on index.html

OPT: all of the above tasks need to be performed from roles concept.

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Q1. WHAT IS PORT NUMBER FOR WEB-SERVER ?

A: 80

Q2. WHAT IS PATH FOR WEB-SERVER ?

A: cd /var/www/html

Q3. WHAT IS BASIC FILE FOR WEB-SERVER ?

A: index.html

Q4. IF WEB-SERVER IS NOT SHOWING APP TO USER WHAT WE DO FIRSTLY.

A: CHECK PORT NUMBERS, CHECK THE SERVIVE IS RUNNING OR NOT

Q5. TELL ME FEW REAL TIME MOST USED WEB-SERVERS ?

A: APACHE, NGINX, IIS -----