

Linux

1. What is Linux?
2. Who invented Linux? Explain the history of Linux?
3. What is the difference between Linux and Unix?
4. What is the core of the Linux operating system?
5. What is Linux Kernel
6. What is BASH
7. What is LILO?
8. What is CLI
9. What is the advantage of Open Source?
10. What is the disadvantage of Open Source?
11. What Shell? is
12. How many types of Shells are there in Linux
13. What are the basic components of Linux
14. How do you open a command prompt when issuing a command?
15. What is a swap space
16. What is the GUI
17. Explain File Permissions types in Linux?
18. What are the environmental variables?
19. What are the symbolic links?
20. What are the hard links
21. What is redirection
22. What are Daemons?
23. Describe the root account
24. Explain the virtual desktop

25. What are the different modes when using the vi editor
26. What are inode and process id?
27. What are the Process states in Linux?
28. Explain Process Management System Calls in Linux?
29. Explain File Permission groups in Linux?
30. What Is a File system in Linux?
31. Explain different file system types in Linux?
32. Why LVM is required
33. What is umask?
34. How to set the mask permanently for a user?
35. What is network bonding in Linux?
36. What are the different modes of Network bonding in Linux?
37. How to check the default route and routing table?
38. How to check which ports are listening in my Linux Server
39. Where the kernel modules are located
40. How to change the default run level in Linux?
41. How to share a directory using NFS?
42. What are the default ports used for SMTP, DNS, FTP, DHCP, SSH, and squid?
43. How to lock a user account in Linux
44. What is the tail command in Linux ?
45. What is grep command in linux ?
46. What is ps command in Linux?
47. What is the env command in Linux
48. What is the top Command in Linux
49. What is netstat command in Linux
50. What is lsof command in Linux?
51. Explain about chmod command?

52. Explain about chown command
53. What is the cp command in Linux
54. How to remove a file or directory from the system in Linux?
55. What is mkdir in Linux ?
56. Explain rmdir command in Linux
57. How to exit from vi editors
58. How to delete information from a file in vi
59. Enlist some Linux to file content commands?
60. Enlist some Linux distributors (Distros) along with their usage
61. Why we use LINUX?
62. What are the features of the Linux operating system
63. Differentiate between BASH and DOS
64. What is meant by internal commands and external commands
65. What is meant by PIPE in Linux
66. Describe how a parent and child process communicates with each other
67. What is a Stateless Linux Server?
68. Explain the features of Stateless Linux Server
69. What is Zombie Process
70. Explain the work of the Ctrl+Alt+Del key combination on the Linux operating system
71. Why is Linux considered more secure than other operating systems
72. What is the tail command in Linux
73. What is the cat command in Linux
74. What is the grep command in Linux?
75. What is ps command in Linux?
76. What is the env command in Linux
77. What is the top Command in Linux
78. What is the netstat command in Linux?

79. What is the lsof command in Linux
80. What is the df command in Linux?
81. What is a du command in Linux
82. What is the iptables command in Linux?
83. What is the difference between Linux and Windows?
84. What does the cd – command do
85. What does cd command do
86. What does (cd dir && command) do
87. What does pushd command do
88. What is ls -lSr command?
89. What is du -s * | sort -k1,1rn | head command used for
90. What does this du -hs /home/* | sort -k1,1h command do?
91. What is df -h command?
92. What is df -i command?
93. What is fdisk -l command used for?
94. How do you kill the program using one port in Linux?
95. How do you limit memory usage for commands
96. How do you get the full path of a file in Linux?
97. How do you list the contents of tar.gz and extract only one file?
98. How do you find who is logged in?
00. How do you check the permissions of each directory to a file?
01. How do you run the command every time a file is modified?
02. How to copy text to the clipboard?
03. How do you check resources usage?
04. How do you combine two lines from two sorted files in Linux?

Shell Scripting

1. What is Shell?
2. What is Shell Scripting?
3. What is the importance of writing Shell Scripts?
4. List some of the common and most widely used UNIX commands.
5. Shell programs are stored in which file?
6. What are the different types of Shells available ?
7. What are the advantages of C Shell over Bourne Shell
8. In a typical UNIX environment how many kernels and shells are available
9. Is separate compiler required for executing a shell program
10. how many shell scripts come with UNIX operating system
11. When should shell programming/scripting not be used
12. Basis of shell program relies on what fact
13. What are the default permissions of a file when it is created
14. What can be used to modify file permissions
15. How to accomplish any task via shell script
16. What are Shell Variables
17. What are the two types of Shell Variables? Explain in brief
18. How are shell variables stored? Explain with a simple example
19. What is the lifespan of a variable inside a shell script
20. How to make variables as unchangeable
21. How variables can be wiped out
22. What are positional parameters? Explain with an example.
23. What does the. (dot) indicate at the beginning of a file name and how should it be listed
24. Generally, each block in UNIX is how many bytes?

25. By default, a new file and a new directory that is being created will have how many links
26. Explain about file permission
27. What is a file system
28. What are the different blocks of a file system? Explain in brief
29. What are the three different security provisions provided by UNIX for a file or data
30. What are the three editors available in almost all the versions of UNIX
31. What are the three modes of operation of vi editor? Explain in brief
32. What is the alternative command available to echo and what does it do
33. How to find out the number of arguments passed to the script
34. What are control instructions and how many types of control instructions are available in a shell? Explain in brief
35. What are Loops and explain three different methods of loops in brief
36. What is IFS
37. What is a Break statement and what is it used for?
38. What is Continue statement and what is it used for?
39. What are Metacharacters in a shell? Explain with some examples.
40. How to execute multiple scripts? Explain with an example.
41. Which command needs to be used to know how long the system has been running
42. How to find the current shell which you are using
43. How to find all the available shells in your system
44. How to read keyboard inputs in shell scripts
45. How many fields are present in a crontab file and what does each field specify?
46. What are the two files of crontab command
47. What command needs to be used to take the backup?
48. What are the different commands available to check the disk usage

49. What are the different communication commands available in Unix/Shell?
50. How to find out the total disk space used by a specific user, say for example username is John
51. What is Shebang in a shell script?
52. What is the command to be used to display the shell's environment variables
53. How to debug the problems encountered in shell script/program?
54. How to know the variable length?
55. What is the difference between = and ==?
56. How to open a read-only file in Unix/shell
57. How can the contents of a file inside jar be read without extracting in a shell script?
58. What is the difference between diff and cmp commands
59. Explain in brief about sed command with an example
60. Explain in brief about awk command with an example.

EC2

1. What Is Amazon Ec2 Service ?
2. What Are The Features Of The Amazon Ec2 Service ?
3. What Are The Security Best Practices For Amazon Ec2 ?
4. Explain Storage For Amazon Ec2 Instance ?
5. What Are The Basic Structures Of The Amazon Ec2 Service ?
6. Explain Stopping, Starting, And Terminating An Amazon Ec2 Instance ?
7. Can S3 Be Cast-off With Ec2 Instances, In Case Of “yes” Please Specify How ?

8. What Are Regions And Availability Zones In Amazon Ec2 ? Explain In Brief ?
9. Explain How To Launch Ec2 Instance In An Availability Zone ?
10. What Is Amazon Ec2 Root Device Volume ?
11. How To Persist Root Device Volume In Amazon Ec2 Instance ?
12. What Is Security Group In Amazon Ec2 ?
13. What Are The Features Of Security Group In Amazon Ec2 ?
14. How To Create Security Group In Amazon Ec2 ?
15. How To Launch An Amazon Ec2 Instance ?
16. How To Connect To Your Amazon Ec2 Instance ?
17. How To Add A EBS Volume To Your Amazon Ec2 Instance ?
18. How To Clean Up Your Amazon Ec2 Instance And Volume ?
19. What Are The Best Practices For Amazon Ec2 ?
20. What Is The Size Limit For Amazon Ec2 Instance Store-backed Amis And Amazon Ebs-backed Amis
21. How You're Charged In Amazon Ec2? Explain In Detail ?
22. Can S3 Be Used With Ec2 Instances, If Yes, How ?
23. If You Want To Launch Amazon Elastic Compute Cloud (ec2) Instances And Assign Each Instance A Predetermined Private Ip Address You Should ?
24. Explain What Happens When I Reboot An Ec2 Instance ?
25. How You Will Change The Root Ebs Device Of My Amazon Ec2 Instance ?
26. What Is The Underlying Hypervisor For Ec2 ?
27. What Are Spot Instances In Amazon Ec2 ?
28. What Is The Difference Between A Spot Instance And A Demand Instance On Ec2 ?
29. What Are The Main Features Of Classic Load Balancer In Ec2 ?
30. What Are The Main Features Of Application Load Balancer (ALB) In Amazon Ec2 ?
31. What Is A Placement Group In Ec2 ?

32. What Types Of Issues Do You Face While Connecting To An Ec2 Instance ?
33. How does Amazon EC2 differ from other cloud computing services?
34. What are the various instance types available in Amazon EC2?
35. How do I choose the right instance type for my application?
36. How do I secure my EC2 instances?
37. What is the role of Security Groups in EC2?
37. How do I configure network settings for my EC2 instances?
38. Can I use my own IP addresses with EC2?
39. How does EC2 handle firewall rules?
40. How can I optimize the performance of my EC2 instances?
41. What is the difference between On-Demand and Reserved Instances?
42. How do I use Auto Scaling with EC2?
43. Can I use load balancing with EC2?
44. How does EC2 handle high traffic and scalability?
45. How is EC2 billing calculated?
46. What are the costs associated with EC2 instances?
47. How can I reduce my EC2 costs?
48. Can I reserve instances for future use?
49. How do I track and manage my EC2 usage and costs?
50. How do I migrate my application to Amazon EC2?
51. Can I integrate EC2 with other AWS services?
52. How does EC2 integrate with Amazon RDS (Relational Database Service)?
53. Can I use EC2 with Docker containers?
54. How does EC2 support hybrid cloud environments?
55. How does EC2 support containerization?
56. Can I use EC2 for machine learning and AI workloads?
57. How does EC2 support IoT applications?
58. What is Amazon EC2 Spot Instances?

59. How can I use EC2 for disaster recovery and business continuity?

EFS.

1. What is Amazon Elastic File System?
2. What use cases does Amazon EFS support?
3. When should I use Amazon EFS vs. Amazon EBS vs. Amazon S3?
4. What Regions is Amazon EFS currently available in?
5. How do I get started using Amazon EFS?
6. What Amazon EC2 instance types and AMIs work with Amazon EFS?
7. What storage classes does Amazon EFS offer
8. Is the EFS Infrequent Access storage class still available?
9. How do I move files to EFS Standard-IA and EFS One Zone-IA?
10. What is EFS Intelligent-tiering?
11. When should I use Lifecycle Management to move files to the IA storage classes without a policy to move files back to EFS Standard or EFS One Zone, if accessed?
12. What happens when I disable the policy to move files to the IA storage classes using Amazon EFS Lifecycle Management?
13. What happens when I disable EFS Intelligent-Tiering?
14. How is Amazon EFS designed to provide high durability and availability?
15. How durable is Amazon EFS?
16. Why should I use EFS Replication?
17. How do I get started with EFS Replication?
18. How does EFS Replication work?
19. What permissions do I need to use EFS Replication?
20. Can I use EFS Replication to replicate my file system to more than one AWS Region or to multiple file systems within a second Region?
21. Can I replicate Amazon EFS file systems across AWS accounts?

22. How does Amazon EFS Provisioned Throughput work?

EBS

1. What is Elastic Block Store, and how does it work?
2. What are the advantages of using Amazon EBS
3. What is EBS Block Express, and how does it work?
4. What are the various types of EBS volumes?
5. When would I want to use FSR (Fast Snapshot Restore)?
6. What are the different kinds of EBS Volumes?
7. What is the Amazon Web Services (AWS) Key Management Service (KMS)?
8. How can I change an existing EBS volume's capacity, performance, or type?
9. How can we change default root EBS size in CloudFormation?
10. What happens if the 'deleteOnTermination' flag isn't set on all of my linked instances?
11. How to Set Up Amazon EBS?
12. Is it necessary to unmount volumes before taking a snapshot?
13. Does the read and write I/O size of my application effect the rate of IOPS I get from my Provisioned IOPS SSD (io2 and io1) volumes?
14. How do I transfer files from one EBS to another?
15. the size of the read and write I/O in my application effect the rate of throughput I obtain from my HDD-backed volumes?
16. What is the maximum storage capacity of an EBS device?
17. When an EBS volume fails, how do you make it available with no downtime and link it to an EC2 instance?
18. When an Amazon EC2 instance is terminated, what happens to my data?
19. What can I expect from Amazon EBS volumes in terms of performance?

S3

1. What do you know about AWS S3?
2. Explain the S3 bucket.
3. How do I control the right of entry to an S3 bucket?
4. Define all types of Storage Classes in AWS S3?
5. What Is AWS S3 Replication
6. Write down the Differences Between S3 And EBS?
7. What do you know about S3 Intelligent Tier
8. What is EC2?
9. What are the Storage Classes available in Amazon S3?
10. How can you lock the Object in AWS S3?
11. Give an example of EC2.
12. You ought to add a report of around one hundred twenty megabytes in Amazon S3. How will you method the importing of this report?
13. Can You Host A Website In AWS S3?
14. Does AWS S3 Support Versioning?
15. What kind of data can I store in AWS S3?
16. How Is The Pricing Policy Determined For AWS S3?
17. How Would You Delete An AWS S3 Bucket?
18. What Is An Object Lock Feature In AWS S3
19. Is there a way to add a document of more than a hundred Megabytes in Amazon S3?
20. How lots of data can I save in Amazon S3 ?
21. Does Amazon save its very own data in Amazon S3?
22. What is the maximum size of the S3 bucket
23. How many requests can S3 handle

24. What is S3 lifecycle
25. How many S3 buckets can I have per account by default
26. Can two S3 buckets have same name ?
27. Can I rename an S3 bucket
28. What is the URL for S3 bucket?
29. How do I find out the size of my S3 bucket?
30. What is key name in S3 bucket?
31. Why is S3 globally unique?
32. How do I know if my S3 bucket is empty
33. What are S3 bucket properties
34. Is S3 a protocol?
35. Explain Object Lock feature in AWS S3?

VPC

1. What exactly is AWS VPC?
2. What are the features available in AWS VPC?
3. Where do VPCs live?
4. Name a few companies that are using AWS VPC?
5. Tell me the scope of the VPC market?
6. Is VPC work globally?
7. Do you think that AWS VPC is equivalent to Azure?
8. Explain to me why Amazon thought to create VPC?
9. Tell me the basic difference between VPC and VPN
10. How many VPC can be created in AWS Zone?
11. How can you connect your dedicated VPC network to the internet?

12. What steps need to be followed while setting up VPC?
13. Tell me about the advantages of AWS VPC?
14. Can we monitor the network traffic in VPC?
15. Can we use our existing AMIs in AWS VPC?
16. Is it secure if we run an EC2 instance with AWS VPC?
17. Tell me the differences between security groups in VPC and ACLS in VPC?
18. Explain default VPC?
19. Can we know that our configured account will be by default VPC?
20. Do we need prior knowledge to use them by default VPC?
21. Tell me how you can boot any AWS EC2 instance from AWS EBS inside AWS VPC?
22. How can you use AWS EC2 reversed instance with AWS VPC?
23. Do you think that we can delete the default VPC?
24. By any chance, if we delete one of the peering connections, do you think another peering connection can access the VPC
25. If we have one EC2 instance, can we get one by default VPC
26. Do you think that we can create a peering connection of any VPC in another VPC zone
27. How can we modify the VPC route table? Is it possible?
28. Explain to me how the AWS VPC router works?
29. How does one hardware VPN connection work with AWS VPC?
30. How can we connect my VPC to the corporate data center
31. How can we assign IP address ranges to VPC
32. What are the default IP address ranges for a default VPC
33. What do you think, can we change the VPC size?
34. Tell me, how many subnets can we get per VPC?
35. Can we assign one private IP address to one AWS EC2 instance within the same VPC ?
36. If the server is not managed by the VPC DNS, what will be the solution

37. Explain the security group in VPC?
38. Tell me the advantages of default AWS VPC?

Elastic Load Balancer

1. What is Elastic Load Balancer (ELB)?
2. What are the key features provided by Elastic Load Balancer (ELB)?
3. How AWS Elastic Load Balancing Works
4. What are the types of load balancers?
5. What is the difference between auto-scaling and ELB?
6. What are Load balancing web sockets?
7. How can we assign a static IP address to a ELB?
8. Difference between Ingress and Load Balancer?
9. List the types of techniques that are used by load balancers?
10. What do you mean by a target group in AWS Load Balancing?
11. What is the purpose of the AWS Elastic load balancer?
12. What are the three types of elastic Load Balancing?
13. What is the difference between cluster and load balancing?
14. What is a database cluster?
15. Explain NLB in AWS?
16. What is VPC load balancer?
17. How many types of ELB are there in AWS?
18. What is the purpose of the AWS Elastic load balancer?
19. Which load balancer is best AWS?
20. Does ELB have IP address?
21. What is difference between ELB and NLB?
22. What is difference between ALB and ELB?

23. Does ELB need gateway?

Route 53

1. What Is Amazon Route 53?
2. How Amazon Route 53 works
3. Amazon Route 53 Benefits
4. Amazon Route 53 Limitations?
5. Does Avi Offer Route 53 Monitoring Capabilities?
6. AWS Routing Policies
7. AWS Route Table
8. AWS Route 53 Key Feature
9. Hands-on: Creating a Hosted Zone
10. what is the purpose of Route 53 in AWS
11. What is the difference between DNS and Route 53?
12. What is name server in Route 53
13. Why is it called Route 53?

IAM

1. What is AWS Identity and Access Management (IAM)
2. What are the features of IAM?
3. What are the key capabilities provided by AWS IAM
4. What are the different identities provided by IAM?
5. How enable access to AWS STS AssumeRole?
6. What is IAM Manager?
7. How can we connect AWS Transfer for SFTP?

8. What is an IAM role?How to assign IAM role to users or groups.
9. What IAM permissions are needed to use CDK Deploy?
10. How to rename an AWS customer IAM policy?
11. Why is IAM important?
12. Are root users and IAM users the same?
13. In the IAM service, can we monitor the IAM user activity?
14. How authentication is controlled in the IAM service?
15. What is Authorization in terms of AWS IAM service?
16. How to control Authorization in AWS IAM?
17. How AWS IAM allows access?
18. What's the other name of the IAM user?
19. What is IAM service in AWS Cloud?
20. How IAM works.
21. What is MFA support for IA
22. What are the types of Identity based policy in AWS IAM?
23. What are the 5 top security credentials in AWS IAM?
24. How to create an AWS IAM policy?

Cloudwatch

1. What Is Amazon Cloudwatch
2. Which Operating Systems Does Cloudwatch Support?
3. What Access Management Policies Can I Implement For Cloudwatch
4. What Is Amazon Cloudwatch Logs?
5. What Kinds Of Things Can I Do With Cloudwatch Log
6. What Platforms Does The Cloudwatch Logs Agent Support

7. Does The Cloudwatch Logs Agent Support IAM Roles
8. Does The Amazon Cloudwatch Monitoring Charge Change Depending On Which Ec2 Instance I Monitor?
9. What Can I Measure With Amazon Cloudwatch Metrics
10. What Is The Retention Period Of All Metrics?
11. Will I Lose The Metrics Data If I Disable Monitoring For An Ec2 Instance
12. Can I Access The Metrics Data For A Terminated Ec2 Instance Or A Deleted Elb?
13. What Metrics Are Available At High Resolution?
14. Are High-resolution Custom Metrics Priced Differently Than Regular Custom Metrics?
15. When Would I Use A Custom Metric Over Having My Program Emit A Log To Cloudwatch Logs?
16. What Statistics Can I View And Graph In Cloudwatch?
17. What Log Monitoring Does Cloudwatch Provide?
18. What Kinds Of Things Can I Do With My Logs In Cloudwatch?
19. What Types Of Data Can I Send To Cloudwatch Logs From My Ec2 Instances Running Sql Server And Windows Server?
20. How Frequently Does The Cloudwatch Logs Agent Send Data?
21. What If I Configure The Cloudwatch Logs Agent To Send Non-textual content Log Data?
22. What Is The Syntax Of Metric Filter Patterns?
23. Can I Use Regular Expressions With My Log Data?
24. How Do I Retrieve My Log Data?
25. How Long Does Cloudwatch Logs Store My Data?
26. What Types Of Cloudwatch Alarms Can Be Created?
27. What Actions Can I Take From A Cloudwatch Alarm?
28. What Thresholds Can I Set To Trigger A Cloudwatch Alarm?

Lambda

1. What is AWS Lambda?
2. What are the languages supported by AWS Lambda?
3. What is Auto Scaling in Lambda
4. While performing DDOS, what is the limit for execution in Lambda
5. What do you think makes Lambda a timesaving approach
6. What are the best practices for security in Lambda?
7. What is elastic blockage storage in Lambda?
8. Is vertical scaling possible in Lambda
9. What are the limitations of AWS Lambda?
10. How is a Lambda function executed?
11. Name a simple method to improve performance in AWS Lambda.
12. In how many ways can AWS Lambda be used?
13. How does AWS Lambda secure my code?
14. Do Lambda-based functions stay available after the code or configuration is changed?
15. What are the restrictions applied to the AWS Lambda function code?
16. What is the difference between an anonymous class and the Lambda function?
17. Is Lambda Expression a nameless suspension of code
18. What kind of code can run on AWS Lambda
19. What are final variables and effectively final variables in Lambda
20. How does AWS Lambda work
21. What can one build with AWS Lambda
22. What is an elastic blockage in AWS lambda
23. What is SQS in AWS lambda and explain the roles?

RDS

1. What is Amazon RDS?
2. What is an RDS instance?
3. List the database engines supported by Amazon RDS
4. Enlist some features of Amazon RDS
5. What is a DB Instance in Amazon RDS?
6. What is the RDS interface?
7. List DB Storages supported by Amazon RDS?
8. What is Amazon Aurora?
9. List some Amazon RDS alternative?
10. What is the AWS RDS cluster?
11. Is Amazon RDS IaaS or PaaS
12. List Backup types supported by Amazon RDS?
13. What is RDS and its use
14. What are the different types of RDS
15. What is RDS process
16. Is RDS better than EC2?
17. What is RDS in SQL?
18. Does RDS run on EC2?
19. How do I choose the right size RDS?
20. What is the RDS interface?
21. What are RDS instances?
22. What types of storage are supported by RDS?
23. What is AWS RDS cluster?
24. Where is the RDS instance running?
25. Is RDS same as MySQL

26. What is Amazon RDS in simple terms
27. Is RDS considered serverless?
28. Is RDS A PaaS?
29. Does RDS support Oracle?
30. What is the difference between RDS and Aurora?
31. What is the full form of RDS?
32. What is difference between RDS and EBS?
33. Can we change RDS instance type
34. Can we downgrade RDS instance?
35. Can you change RDS size?
36. What database does Amazon RDS use?
37. What is relational database in AWS?
38. What is RDS in Oracle?
39. What is the difference between redshift and RDS?
40. How do I increase my RDS size?
41. What is the difference between cluster and instance?
42. What is DB name in RDS?
43. Can't connect to RDS from EC2?
44. Is RDS fully managed?
45. Why do we use database?
46. Is DynamoDB a RDS?
47. What is RDS finance?
48. Does RDS use S3?
49. Can you reduce RDS storage?

GIT

1. What are Git and GitHub?
2. What is the difference between Git and GitHub?
3. What is a Git repository? Name some popular Git hosting services.
4. What is a version control system? Mention its types
5. What are the main differences between Git and SVN?
6. What are the advantages of using GIT
7. What language is used in GIT?
8. What are the advantages of Git over SVN?
9. What is Git Bash?
10. What is the meaning of “Index” or “Staging Area” in GIT?
11. What is tagging in Git?
12. What is forking in Git
13. What is the use of a Git clone?
14. What is the function of ‘git config’
15. What is the process for creating a repository in Git
16. What is cherry-pick in Git
17. What is origin in Git
18. What is the git push command
19. What is the git pull command
20. What is the difference between git fetch and git pull?
21. Explain git checkout in Git.
22. What does git rebase do?
23. What is the difference between git rebase and git merge?
24. What is revert in Git?
25. What is the difference between resetting and reverting?
26. What is the difference between ‘git remote’ and ‘git clone’?
27. What is GIT stash?

28. What is GIT stash drop?
29. Why do we need branching in GIT?
30. What is HEAD in Git, and how many HEADs can be created in a repository?
31. What is the regular way for branching in GIT?
32. State a way to create a new branch in Git.
33. How do you define a 'conflict' in git?
34. How to resolve a conflict in Git?
35. 1. What is Git, and what is it used for?
36. 2. What is the difference between Git and GitHub?
37. 3. How do you initialize a new Git repository
38. 4. What is the purpose of the .gitignore file?
39. 5. How do you commit changes in Git?
40. 6. What is a branch in Git, and how do you create a new one
41. 7. How do you merge two branches in Git?
42. 8. What is the difference between git pull and git fetch?
43. 9. How do you resolve conflicts in a Git merge?
44. 10. What is the purpose of git remote add origin?
45. 1. What is the difference between git reset and git revert
46. 2. How do you delete a branch in Git?
47. 3. What is a Git tag, and how do you create one?
48. 4. How do you squash multiple commits into one?
49. 5. What is a Git submodule, and how do you add one?
50. 6. How do you cherry-pick a commit from one branch to another?
51. 7. What is the difference between git stash and git reset?
52. 8. How do you create a new Git repository from an existing one
53. 9. What is GitFlow, and how does it differ from GitHub Flow?
54. 10. How do you configure Git to use a proxy server?

55. How do you find the SHA of a commit in Git?
56. What is the purpose of git clean?
57. How do you create an empty Git repository?
58. What is the difference between git diff and git status?
59. How do you configure Git to ignore file permissions?
60. What is a Git hook, and how do you use one?
61. How do you change the author of a commit in Git?
62. What is the purpose of git bisect?
63. How do you create a Git repository from a folder?
64. What is the difference between git rebase and git merge?

Jenkins

1. What is Jenkins?
2. What are the features of Jenkins?
3. What is Groovy in Jenkins?
4. How do you install Jenkins?
5. Which commands can be used to begin Jenkins?
6. What is “Continuous Integration” with reference to Jenkins?
7. What are the differences between Continuous Integration, Continuous Delivery, and Continuous Deployment?
8. What is a CI/CD pipeline
9. What is a Jenkins pipeline
10. Name the three different types of pipelines in Jenkins
11. How can you set up a Jenkins job?
12. What are the requirements for using Jenkins
13. Name the two components that Jenkins is mostly integrated with
14. Name some of the useful plugins in Jenkins

15. How can you create a backup and copy files in Jenkins?
16. How can you deploy a custom build of a core plugin
17. What could be the steps to move or copy Jenkins from one server to another?
18. Name some more continuous Integration tools other than Jenkins
19. Assume that you have a pipeline. The first job that you performed was successful, but the second one failed. What would you do now
20. Explain the process in which Jenkins works?
21. What is Jenkins file?
22. Differentiate between Maven, Ant, and Jenkins.
23. Differentiate between Bamboo and Jenkins?
24. What is the difference between Jenkins and Hudson?
25. Why is Jenkins used with Selenium?
26. What is the process to integrate Git with Jenkins?
27. Explain Kubernetes, and how can you integrate Jenkins with Kubernetes?
28. What is DSL Jenkins?
29. What is the process to configure Third-party tools in Jenkins
30. What are some of the default environmental variables in Jenkins?
31. What are some of the critical aspects of the Jenkins pipeline?
32. What is Jenkins, and what is it used for
33. How do you install and configure Jenkins on a Linux server
34. What is a Jenkins job, and how do you create one
35. What is the difference between a Jenkins freestyle project and a pipeline project?
36. How do you configure Jenkins to build a project from a Git repository?
37. What is Jenkinsfile, and how do you use it to define a pipeline?
38. How do you add a build step to a Jenkins job?
39. What is the purpose of Jenkins plugins, and how do you install them?

40. How do you configure Jenkins to send build notifications via email?
41. What is the difference between a Jenkins node and a Jenkins agent?
42. How do you configure Jenkins to use a load balancer for distributed builds?
43. What is Jenkins' Master-Slave architecture and how does it work
44. How do you use Jenkins to automate testing of a microservices-based application.
45. What is Jenkins' built-in support for Continuous Deployment (CD)?
46. How do you configure Jenkins to use an external database for storing build metadata?
47. What is Jenkins' support for automated testing frameworks like Selenium and Appium
48. How do you use Jenkins to automate deployment to a cloud-based infrastructure like AWS or Azure?
49. What is Jenkins' built-in support for Continuous Integration (CI) pipelines?
50. How do you use Jenkins to automate the creation of test environments for QA teams?
51. What is Jenkins' support for containerization using Docker and Kubernetes?
52. How do you configure Jenkins to use a service mesh for microservices-based applications?
53. What is Jenkins' built-in support for serverless computing platforms like AWS Lambda?
54. How do you use Jenkins to automate the deployment of machine learning models?
55. What is Jenkins' support for automating compliance and regulatory requirements?
56. How do you configure Jenkins to use a message broker like Apache Kafka or RabbitMQ?
57. What is Jenkins' built-in support for automating database schema changes and migrations?
58. How do you use Jenkins to automate the creation of technical documentation for software projects

59. What is Jenkins' support for automating IT service management (ITSM) processes?
60. Let's say there is a broken build in the Jenkins project, then what can be done?
61. How to deploy a custom build of a core plugin
62. What is the process of making a Multibranch Pipeline in Jenkins?
63. How can the parameters be defined in Jenkins
64. Explain the ways to configure Jenkins node agent to communicate with Jenkins master?
65. What is the use of the JENKINS_HOME directory
66. Explain a backup plugin and its uses
67. What do you understand by a trigger concerning a pipeline
68. What are the three security mechanisms Jenkins uses to authenticate users?

Docker

1. What is Docker ?
2. What is a Docker Container
3. What are Docker Images?
4. What is Docker Hub
5. Explain Docker Architecture
6. What is a Dockerfile?
7. Tell us something about Docker Compose.
8. What is Docker Swarm?
9. What is a Docker Namespace?
10. What is the lifecycle of a Docker Container
11. What is Docker Machine
12. How to check for Docker Client and Docker Server version?
13. How do you get the number of containers running, paused and stopped?
14. If you vaguely remember the command and you'd like to confirm it, how will you get help on that particular command
15. How to login into docker repository
16. How do you create a docker container from an image
17. Once you've worked with an image, how do you push it to docker hub?

18. How to build a Dockerfile?
19. Do you know why docker system prune is used? What does it do?
20. Will you lose your data, when a docker container exists
21. Where all do you think Docker is being used?
22. How is Docker different from other containerization methods?
23. Can I use JSON instead of YAML for my compose file in Docker
24. How have you used Docker in your previous position?
25. How far do Docker containers scale? Are there any requirements for the same?
26. What platforms does docker run on?
27. Is there a way to identify the status of a Docker container
28. Can you remove a paused container from Docker
29. Suppose you have an application that has many dependent services. Will docker compose wait for the current container to be ready to move to the running of the next service?
30. How will you monitor Docker in production?
31. Is it a good practice to run Docker compose in production?
32. What changes are expected in your docker compose file while moving it to production?
33. Explain the difference between Dockerfile and docker-compose.yml.
34. Describe the role of Docker Hub in containerization.
35. How do you design a scalable Docker architecture?
36. Explain Docker's layered filesystem and its benefits.
37. How do you optimize Docker image sizes?
38. Explain Docker's security features (e.g., SELinux, AppArmor).
39. How do you secure Docker containers from unauthorized access?
40. Describe Docker's network security options.
41. How do you manage Docker image vulnerabilities?
42. Explain Docker Content Trust.
43. Explain Docker's networking modes (e.g., bridge, host).
44. How do you configure Docker networking for multiple containers?
45. Describe Docker's DNS resolution mechanisms.
46. How do you expose container ports to the host?
47. Explain Docker's load balancing options
48. Explain Docker's service discovery mechanisms.
49. How do you deploy a Docker application using Kubernetes?
50. Describe Docker's rolling update strategy.
51. Explain Docker's self-healing capabilities.
52. How do you debug Docker container issues
53. Explain Docker's logging mechanisms.

54. Describe Docker's monitoring tools (e.g., Docker Stats).
55. How do you troubleshoot Docker network connectivity?
56. Explain Docker's error handling mechanisms.
57. Explain Docker's best practices for image creation.
58. Describe Docker's guidelines for container management
59. How do you optimize Docker container performance?
60. Explain Docker's recommendations for security.
61. Describe Docker's advice for scalable architecture.
62. How do you configure Docker to use a custom registry?
63. Explain Docker's configuration file (daemon.json).
64. How do you manage Docker container logs?
65. Describe Docker's resource management capabilities
66. How do you configure Docker's CPU and memory limits?
67. Explain Docker's networking model
68. How do you create a Docker network?
69. Describe Docker's network drivers.
70. How do you configure Docker's DNS resolution?
71. Explain Docker's load balancing options.
72. Explain Docker's security features.
73. How do you secure Docker containers?
74. Describe Docker's network security options.
75. How do you manage Docker image vulnerabilities?
76. Explain Docker Content Trust.
77. Compare Docker Swarm with Kubernetes.
78. Explain Docker's service discovery mechanisms.
79. How do you deploy a Docker application using Kubernetes?
80. Describe Docker's rolling update strategy.
81. Explain Docker's self-healing capabilities

Ansible

1. What is Ansible?
2. What is the use of Ansible?
3. What are the features of Ansible
4. What are the advantages of Ansible?
5. What is Ansible Galaxy?

6. What is CI/CD?
7. What is configuration management
8. What are Ansible server requirements
9. What are Ansible tasks?
10. Explain a few of the basic terminologies or concepts in Ansible
11. What is a playbook?
12. What are ad hoc commands? Give an example
13. Compare Ansible with Chef
14. What is a YAML file and how do we use it in Ansible?
15. Code difference between JSON and YAML:
16. How is Ansible different from Puppet?
17. What is Ansible-doc?
18. What is the code you need to write for accessing a variable name?
19. What is the method to check the inventory vars defined for the host?
20. Explain Ansible facts
21. Discuss the method to create an empty file with Ansible
22. Explain Ansible modules in detail
23. What are callback plug-ins in Ansible?
24. What is Ansible inventory and its types?
25. What is an Ansible vault?
26. How do we write an Ansible handler with multiple tasks
27. How to generate encrypted passwords for a user module?
28. Explain the concept of blocks under Ansible?
29. Do you have any idea of how to turn off the facts in Ansible?
30. What are the registered variables under Ansible?
31. By default, the Ansible reboot module waits for how many seconds. Is there any way to increase it?
32. Can docker modules be implemented in Ansible? If so, how can you use it?

33. How do you test Ansible projects?
34. What is Ansible, and how does it differ from other configuration management tools?
35. How do you install Ansible on [Linux/Windows/Mac]?
36. What is an Ansible playbook, and what are its components?
37. Explain Ansible's architecture and its components
38. How do you write a simple Ansible playbook?
39. How do you manage variables in Ansible?
40. Explain Ansible's conditionals and loops.
41. How do you use Ansible modules (e.g., file, package, service)?
42. Describe Ansible's roles and how to create them.
43. How do you use Ansible's built-in filters?
44. Explain Ansible's best practices for playbook organization.
45. Describe Ansible's guidelines for variable management.
46. How do you optimize Ansible playbook performance?
47. Explain Ansible's recommendations for security.
48. Describe Ansible's advice for scalable architecture.
49. Explain Ansible's architecture and its components.
50. Describe Ansible's inventory management.
51. How do you design an Ansible playbook for scalability?
52. Explain Ansible's role-based access control.
53. Describe Ansible's integration with cloud providers.
54. Explain Ansible's security features for encrypting sensitive data.
55. Describe Ansible's integration with compliance scanning tools.
56. How do you manage Ansible's SSH connections securely?
57. Explain Ansible's support for multi-factor authentication.
58. Describe Ansible's role-based access control.
59. Explain Ansible's debugging techniques for playbooks.

60. Describe Ansible's logging mechanisms for troubleshooting.
61. How do you troubleshoot Ansible playbook errors?
62. Explain Ansible's error handling mechanisms.
63. Describe Ansible's troubleshooting tools.

Terraform

1. What is Terraform, and how does it differ from other infrastructure-as-code tools?
2. How do you install Terraform on [Linux/Windows/Mac]?
3. What is a Terraform configuration file, and what are its components?
4. Explain Terraform's architecture and its components.
5. How do you write a simple Terraform configuration?
6. How do you manage state in Terraform?
7. Explain Terraform's resource dependencies
8. How do you use Terraform modules?
9. Describe Terraform's built-in functions.
10. How do you use Terraform's built-in providers?
11. How do you implement Terraform's advanced features (e.g., conditional expressions)?
12. Explain Terraform's dynamic resource allocation.
13. How do you integrate Terraform with CI/CD pipelines?
14. Describe Terraform's security features and best practices.
15. How do you troubleshoot common Terraform issues?
16. How would you deploy a web application using Terraform?
17. Describe how to manage AWS resources using Terraform.
18. How would you configure a Kubernetes cluster using Terraform?
19. Explain how to automate infrastructure provisioning using Terraform
20. Describe how to integrate Terraform with Docker.
21. Explain Terraform's best practices for configuration organization.
22. Describe Terraform's guidelines for variable management.
23. How do you optimize Terraform configuration performance?
24. Explain Terraform's recommendations for security.
25. Describe Terraform's advice for scalable architecture.
26. Explain Terraform's architecture and its components.
27. Describe Terraform's configuration file structure.
28. How do you design a scalable Terraform configuration
29. Explain Terraform's module system.

30. Describe Terraform's integration with cloud providers
31. Explain Terraform's state management.
32. Describe Terraform's backup and recovery process.
33. How do you manage Terraform state versions?
34. Explain Terraform's state locking mechanism
35. Describe Terraform's backup strategies
36. Explain Terraform's security features.
37. Describe Terraform's encryption methods.
38. How do you manage Terraform's access controls?
39. Explain Terraform's compliance scanning.
40. Describe Terraform's integration with security tools.
41. Explain Terraform's debugging techniques.
42. Describe Terraform's logging mechanisms.
43. How do you troubleshoot Terraform configuration errors?
44. Explain Terraform's error handling.
45. Describe Terraform's troubleshooting tools.
46. Explain Terraform's best practices for configuration organization.
47. Describe Terraform's guidelines for variable management.
48. How do you optimize Terraform configuration performance?
49. Explain Terraform's recommendations for security.
50. Describe Terraform's advice for scalable architecture.
51. Explain Terraform's advanced features (e.g., conditional expressions).
52. Describe Terraform's dynamic resource allocation.
53. How do you integrate Terraform with CI/CD pipelines?
54. Explain Terraform's support for multi-cloud deployments.
55. Describe Terraform's advanced networking features.
56. Explain Terraform's state locking mechanism.
57. Describe Terraform's backup strategies.
58. How do you manage Terraform state versions?
59. Explain Terraform's backup and recovery process.
60. Describe Terraform's state management.

Kubernetes

1. How is Kubernetes different from Docker Swarm?
2. What is Kubernetes?

3. How is Kubernetes related to Docker?
4. What is Container Orchestration ?
5. How does Kubernetes simplify containerized Deployment?
6. What is Minikube?
7. What is Kubectl?
8. What is Kubelet?
9. What do you understand by Kube-proxy?
10. What is the role of kube-apiserver and kube-scheduler?
11. Can you brief about the Kubernetes controller manager?
12. What is ETCD?
13. What do you understand by load balancer in Kubernetes?
14. What is the difference between a replica set and replication controller?
15. What is a Headless Service?
16. What are K8s?
17. What are the features of Kubernetes?
18. What are the main components of Kubernetes architecture?
19. What is the role of Kube-apiserver?
20. What process runs on Kubernetes Master Node?

Helm

- 1) What is Helm?
- 2) What are the advantages of Helm?
- 3) Why to use Helm?
- 4) What are Helm Charts?
- 5) What is the Folder Structure of Helm Chart?
- 6) Which of the different types of fields needed to be specified for dependencies in Helm Chart?

- 7) How can we create Helm Charts?
- 8) What is Helm?
- 9) How does Helm work?
- 10) What are the concepts used in Helm?
- 11) How can we install a specific Chart version in Helm?
- 12) How can we set multiple values with Helm?
- 13) How does Helm updates Kubernetes?
- 14) How do we list all the available charts under a Helm Repo?
- 15) How do we validate Helm Chart content?
- 16) How can we uninstall Helm Chart on specific resource?
- 17) Does helm still use Tiller?
- 18) What is replicaCount in helm?
- 19) What is _helpers TPL in helm?
- 20) Can a helm chart have multiple deployments?
- 21) Where do you store helm charts?
- 22) Where do you store helm charts?
- 23) Where are helm repos stored locally?
- 24) What is Helm values yaml?
- 25) What is Helm Kubernetes?
- 26) What is Helm DevOps
- 27) Who invented helm?
- 28) What are the benefits of Helm?
- 29) Is helm an open source?
- 30) What is Helm deployment?
- 31) What is Helm hub?
- 32) What is helm artifact?
- 33) What is helm chart used for?

- 34) How do you push a helm chart?
- 35) What is Umbrella chart in helm?
- 36) How does helm upgrade work
- 37) Does helm have API?
- 38) What is Helm init?
- 39) What is value yaml?
- 40) What is fullname Helm?
- 41) What is Helm value?

Azure Devops

Virtualization in Azure

1. What is Azure Virtual Machines (VMs), and how does it differ from on-premises virtualization?
2. How do you create and manage virtual machines in Azure?
3. What are Azure Virtual Machine Scale Sets, and when would you use them?
4. How does Azure's virtual network (VNet) enable secure communication between virtual machines?
5. What is Azure's approach to container virtualization using Azure Kubernetes Service (AKS)?
6. How does Azure's storage virtualization enable scalable and secure storage for virtual machines?
7. Can you explain the concept of virtualization-based security (VBS) in Azure?
8. How does Azure's virtualization infrastructure support high availability and disaster recovery?
9. What are the benefits of using Azure's virtualization platform for lift-and-shift migration of on-premises workloads?
10. How does Azure's virtualization support hybrid cloud and multi-cloud environments?

11. Can you explain the difference between Azure's Type 1 and Type 2 virtualization?
12. How does Azure's virtualization infrastructure support GPU-based workloads?
13. What is Azure's approach to virtualization management using Azure Resource Manager (ARM)?
14. Can you explain Azure's virtualization-based disaster recovery solutions?
15. How does Azure's virtualization infrastructure support compliance and security standards?
16. How does Azure's virtualization support nested virtualization?
17. Can you explain the concept of virtualization-based networking in Azure?
18. How does Azure's virtualization infrastructure support software-defined networking (SDN)?
19. What is Azure's approach to virtualization management using Azure Automation?
20. Can you explain the benefits of using Azure's virtualization platform for dev/test environments?
21. How does Azure's virtualization support high-performance computing (HPC) workloads?
22. Can you explain the difference between Azure's virtual machines and virtual machine scale sets?
23. How does Azure's virtualization infrastructure support live migration of virtual machines?
24. What is Azure's approach to virtualization security using Network Security Groups (NSGs)?
25. Can you explain the benefits of using Azure's virtualization platform for data center extension?
26. How does Azure's virtualization support VMware virtual machines?
27. Can you explain the concept of virtualization-based disaster recovery using Azure Site Recovery?
28. How does Azure's virtualization infrastructure support compliance with regulatory requirements?
29. What is Azure's approach to virtualization management using Azure Monitor?
30. Can you explain the benefits of using Azure's virtualization platform for cloud-native applications?
31. How does Azure's virtualization support Azure Functions and serverless computing?
32. Can you explain the concept of virtualization-based storage using Azure Disk Storage?

- 33. How does Azure's virtualization infrastructure support Azure Kubernetes Service (AKS) clusters?
- 34. What is Azure's approach to virtualization security using Azure Sentinel?
- 35. Can you explain the benefits of using Azure's virtualization platform for data analytics workloads?
- 36. How does Azure's virtualization support SAP and other enterprise applications?
- 37. Can you explain the concept of virtualization-based networking using Azure Virtual WAN?
- 38. How does Azure's virtualization infrastructure support Azure Active Directory (AAD) authentication?
- 39. What is Azure's approach to virtualization management using Azure Arc?
- 40. Can you explain the benefits of using Azure's virtualization platform for IoT workloads?
- 41. How does Azure's virtualization support Azure Machine Learning and AI workloads?
- 42. Can you explain the concept of virtualization-based disaster recovery using Azure Backup?
- 43. How does Azure's virtualization infrastructure support compliance with GDPR and other regulations?
- 44. What is Azure's approach to virtualization security using Azure Security Center?
- 45. Can you explain the benefits of using Azure's virtualization platform for cloud migration?
- 46. How does Azure's virtualization support Azure Dedicated Hosts?
- 47. Can you explain the concept of virtualization-based licensing in Azure?
- 48. How does Azure's virtualization infrastructure support Azure Virtual Desktop?
- 49. What is Azure's approach to virtualization management using Azure Lighthouse?
- 50. Can you explain the benefits of using Azure's virtualization platform for cybersecurity workloads?

- 51. How does Azure's virtualization support Azure Sphere and IoT security?
- 52. 7. Can you explain the concept of virtualization-based networking using Azure Peering?
- 53. How does Azure's virtualization infrastructure support Azure Stack Hub?
- 54. What is Azure's approach to virtualization security using Azure Firewall?

55. Can you explain the benefits of using Azure's virtualization platform for edge computing workloads?
56. How does Azure's virtualization support Azure Cognitive Services and AI workloads?
57. Can you explain the concept of virtualization-based disaster recovery using Azure Disaster Recovery?
58. How does Azure's virtualization infrastructure support compliance with HIPAA and other regulations?
59. What is Azure's approach to virtualization management using Azure Governance?
60. Can you explain the benefits of using Azure's virtualization platform for blockchain workloads?

Azure Backup

1. What is Azure Backup, and how does it work?
2. What types of data can be backed up using Azure Backup?
3. How does Azure Backup support long-term data retention?
4. Can you explain the concept of backup vaults in Azure Backup?
5. How does Azure Backup support encryption?
6. What is the difference between Azure Backup and Azure Site Recovery?
7. How does Azure Backup support backup for Azure VMs?
8. Can you explain the concept of snapshot-based backups in Azure Backup?
9. How does Azure Backup support backup for on-premises workloads?
10. What is the Azure Backup agent, and how is it used?
11. How does Azure Backup support backup for Azure Files?
12. Can you explain the concept of backup policies in Azure Backup?
13. How does Azure Backup support backup for SQL Server?
14. What is the difference between full backup, incremental backup, and differential backup in Azure Backup?
15. How does Azure Backup support backup for Azure Blob Storage?
16. Can you explain the concept of backup retention in Azure Backup?
17. How does Azure Backup support backup for Azure Database for PostgreSQL?
18. What is the Azure Backup Explorer, and how is it used?
19. How does Azure Backup support backup for Azure Virtual Desktop?
20. Can you explain the concept of cross-region backup in Azure Backup?

21. How does Azure Backup support backup for Azure Kubernetes Service (AKS)?
22. What is the difference between Azure Backup and Azure Storage snapshots?
23. How does Azure Backup support backup for Azure Functions?
24. Can you explain the concept of backup for Azure Cosmos DB?
25. How does Azure Backup support backup for Azure App Service?
26. What is the Azure Backup report, and how is it used?
27. How does Azure Backup support backup for Azure Cognitive Search?
28. Can you explain the concept of backup for Azure Machine Learning?
29. How does Azure Backup support backup for Azure DevOps?
30. What is the Azure Backup pricing model, and how is it calculated?

Azure Storage

1. What is Azure Storage, and what services does it offer?
2. What is the difference between Azure Blob Storage and Azure File Storage?
3. How does Azure Storage support data redundancy and durability?
4. Can you explain the concept of storage accounts in Azure Storage?
5. What is the difference between hot and cool storage tiers in Azure Blob Storage?
6. How does Azure Storage support data encryption?
7. What is Azure Data Lake Storage, and how does it differ from Azure Blob Storage?
8. Can you explain the concept of containers in Azure Blob Storage?
9. How does Azure Storage support data lifecycle management?
10. What is the difference between Azure File Storage and Azure File Sync?
11. Can you explain the concept of storage queues in Azure Storage?
12. How does Azure Storage support data archiving?
13. What is Azure Disk Storage, and how does it differ from Azure Blob Storage?
14. Can you explain the concept of snapshots in Azure Disk Storage?
15. How does Azure Storage support data sharing and collaboration?
16. What is the difference between Azure Storage and Azure Data Factory?
17. Can you explain the concept of Azure Storage Explorer?
18. How does Azure Storage support data migration?
19. What is the difference between Azure Blob Storage and Azure Data Lake Storage Gen2?
20. How does Azure Storage support data analytics?

21. What is the difference between Azure Storage and Azure Databricks?
22. Can you explain the concept of Azure Storage security and access control?
23. How does Azure Storage support data compliance and governance?
24. What is the difference between Azure Storage and Azure Synapse Analytics?
25. Can you explain the concept of Azure Storage pricing and cost optimization?
26. How does Azure Storage support data backup and disaster recovery?
27. What is the difference between Azure Storage and Azure Archive Storage?
28. Can you explain the concept of Azure Storage data tiering?
29. How does Azure Storage support data migration from on-premises storage?

Azure BLOB's

1. What is Azure Blob Storage, and how does it work?
2. What types of data can be stored in Azure Blob Storage?
3. How does Azure Blob Storage support data redundancy and durability?
4. Can you explain the concept of containers in Azure Blob Storage?
5. What is the difference between block blobs, page blobs, and append blobs?
6. How does Azure Blob Storage support data encryption?
7. What is the maximum size limit for a block blob in Azure Blob Storage?
8. Can you explain the concept of blob metadata in Azure Blob Storage ?
9. How does Azure Blob Storage support data versioning?
10. What is the difference between hot and cool storage tiers in Azure Blob Storage?
11. Can you explain the concept of blob leasing in Azure Blob Storage?
12. How does Azure Blob Storage support data archiving?
13. What is the Azure Blob Storage Data Transfer tool, and how is it used?
14. Can you explain the concept of blob snapshots in Azure Blob Storage?
15. How does Azure Blob Storage support data sharing and collaboration?
16. What is the difference between Azure Blob Storage and Azure File Storage?
17. Can you explain the concept of Azure Blob Storage security and access control?
18. How does Azure Blob Storage support data compliance and governance?
19. What is the Azure Blob Storage client library, and how is it used?
20. Can you explain the concept of blob streaming in Azure Blob Storage?
21. How does Azure Blob Storage support data analytics?
22. What is the difference between Azure Blob Storage and Azure Data Lake Storage?

23. Can you explain the concept of hierarchical namespaces in Azure Blob Storage?
24. How does Azure Blob Storage support data migration?
25. What is the Azure Blob Storage pricing model, and how is it calculated?
26. Can you explain the concept of blob soft delete in Azure Blob Storage?
27. How does Azure Blob Storage support data backup and disaster recovery?
28. What is the difference between Azure Blob Storage and Azure Archive Storage?
29. Can you explain the concept of blob immutability in Azure Blob Storage?
30. How does Azure Blob Storage support data tiering?

Azure VM High Availability

1. What is high availability in Azure VMs, and why is it important?
2. How does Azure VM high availability differ from disaster recovery?
3. Can you explain the concept of Availability Sets in Azure VMs?
4. What is the benefit of using Availability Zones in Azure VMs?
5. How does Azure VM high availability support business continuity?
6. Can you explain the concept of Fault Domains in Azure VMs?
7. What is the difference between planned and unplanned maintenance in Azure VMs?
8. How does Azure VM high availability support scalability?
9. Can you explain the concept of Update Domains in Azure VMs?
10. What is the benefit of using Load Balancer in Azure VMs?
11. How does Azure VM high availability support data replication?
12. Can you explain the concept of Geo-Redundant Storage in Azure VMs?
13. What is the difference between Azure VM high availability and Azure Site Recovery?
14. How does Azure VM high availability support network redundancy?
15. Can you explain the concept of Azure VM Scale Sets?
16. What is the benefit of using Azure Availability Zones for high availability?
17. How does Azure VM high availability support monitoring and alerting?
18. Can you explain the concept of Azure VM high availability and disaster recovery together?
19. What is the difference between Azure VM high availability and Azure Backup?

20. How does Azure VM high availability support compliance and regulatory requirements?

Application High Availability in Azure

1. What is application high availability in Azure, and why is it important?
2. How does Azure support high availability for web applications?
3. Can you explain the concept of Azure Traffic Manager for application high availability?
4. What is the benefit of using Azure Load Balancer for application high availability?
5. How does Azure support high availability for database applications?
6. Can you explain the concept of Azure Availability Zones for application high availability?
7. What is the difference between Azure Active-Active and Active-Passive high availability configurations?
8. How does Azure support high availability for microservices-based applications?
9. Can you explain the concept of Azure Service Fabric for application high availability?
10. What is the benefit of using Azure Kubernetes Service (AKS) for application high availability?
11. How does Azure support high availability for serverless applications?
12. Can you explain the concept of Azure Function App high availability?
13. What is the difference between Azure regional and global high availability configurations?
14. How does Azure support high availability for applications using Azure Storage?
15. Can you explain the concept of Azure Data Lake Storage high availability?
16. What is the benefit of using Azure Cosmos DB for application high availability?
17. How does Azure support high availability for applications using Azure Databricks?
18. Can you explain the concept of Azure HDInsight high availability?

19. What is the difference between Azure high availability and disaster recovery for applications?
20. How does Azure support high availability for applications with multi-region deployments?