1. What command is used to list all files, including hidden files, in a directory?

Answer: **ls -a**

2. How do you check the disk usage of a directory?

Answer: **du**

3. Explain the difference between grep and find.

Answer: using **grep** command, we search any content inside the file and by using **find** command we can find any file or directory.

4. What is the purpose of the /var directory?

Answer: **/var** store files which change as the system runs like logs and temporary files.

5. Where are user-specific configuration files stored?

Answer:

6. What does the permission rwxr-xr-- mean?

Answer: **rwxr--xr--** this means **user** has all permission(read, write, execute) , **group** has read and execute, **others** has only read permission. This has 754 permission.

7. How can you change the ownership of a file to user “john” and group “admin”?

Answer: using the **chown** command we can change the ownership of a file.

Ex: chown john filename

And using the **chgrp** command we can change the group.

Ex: chgrp admin filename

8. How do you generate an SSH key pair?

Answer: **ssh-keygen**

9. What file stores the public keys authorized to connect to a Linux server?

Answer: **.ssh/authorized\_keys**

10. How do you save and exit Vim?

Answer: Press **esc key**→ **:wq** or **:x**

11. What is the command to undo the last change in Vim?

Answer: Press **esc key**→ **u**

12. What is the difference between IP-based and name-based virtual hosting?

Answer: IP-based virtual hosting uses a unique ip address for each website while name-based virtual hosting allows multiple websites to share the same ip address.

13. How can you check if a web server is listening on a specific port?

Answer: using telnet command. Ex: **telnet hostname/ip-address port-no**

14. How do you add a new user in Linux?

Answer: using **adduser** command. **Ex:** adduser newuser

15. How do you check the groups of a user?

Answer: **/etc/group**

16. How can you list the cron jobs of the current user?

Answer: **crontab -l**

17. What does this cron schedule 0 2 \* \* 1 do?

Answer: this cron will run on every monday at 2:00

18. Write a shell script to check if a file exists and is writable. If yes, append “Hello World” to it.

Answer:

19. What is DNS, and why is it important?

Answer: DNS stands for domain name system. It translates human-readable domain names into ip addresses.

20. What is the difference between a relative and absolute path in Linux?

Answer: A relative path starts from the current directory, while an absolute path starts from the root (/) directory.

21. What are the different types of EC2 instance purchasing options?

Answer: On-demand, Reserved, Spot, Saving plans, etc

22. How do you secure an EC2 instance using a security group?

Answer: we can allow only necessary inbound traffic and grant access only to trusted ip in the security group.

23. How do you make an S3 bucket public?

Answer: using ACL enabled and unchecking the block public access option.

24. What is the difference between S3 Standard and S3 Glacier?

Answer: S3 Standard used for frequently accessed data with higher storage cost while S3 Glacier used for long term storage with low storage cost.

25. What is the purpose of an Internet Gateway in a VPC?

Answer: Internet Gateway is used to allow resources in your VPC to access the internet.

26. How is a public subnet different from a private subnet?

Answer: A public subnet has a route to the internet via an Internet Gateway, while a private subnet has no direct internet access.

27. Explain how CloudFront improves the performance and security of applications.

Answer:

28. How can you set up an alarm in CloudWatch to monitor CPU utilization?

Answer: Step 1: we select a metrics for an instance for cpu utilization

Step 2: define the alarm condition

Step 3: define name and select the sns topic

Step 4: create alarm

29. What is a CloudWatch metric?

Answer: A CloudWatch metric is a time-series data point that monitors AWS resource performance, such as CPU usage, memory, and network traffic.

30. Describe the steps to set up a WordPress site on an EC2 instance.

Answer: Step 1: Install Apache

Step 2: Install MySQL

Step 3: Install PHP

Step 4: Install WordPress

Step 5: Create a Database for WordPress

Step 6: Setup and Configure WordPress