Please answer the questions below in 3-4 lines.

1. What is your experience around interfacing with stakeholders on requirements. What are the few challenges in that area you have experienced.

A. With over four years of cloud experience, I've had the opportunity to work with several stakeholders. In my previous role as an Amazon Connect Developer, I was tasked with research and development. My job was to explore and implement new features released by AWS for Amazon Connect, test them, and present the results to the client. It was a challenging yet interesting role, as it required working with multiple resources and third-party services.

2.What cloud services are you aware of? list the services and what problems have you solved using these services.  
A. I have worked with different Aws Services.   
Amazon Connect, Amazon Lex, Amazon S3, Amazon Pinpoint, Amazon Lambda, Amazon DynamoDB, Amazon Bedrock, Amazon Textract, Amazon Comprehend, Aws IAM, Amazon CloudWatch, Amazon CloudTrail. Amazon EC2, Amazon VPC.

a. Implemented a contact center solution for different clients.

- I worked on automating outbound calling campaigns with Amazon Connect, improving call answer rates using predictive dialing, and ensuring compliance with Do-Not-Call lists.

b. Created a GenAI solution to streamline how healthcare organizations manage and process prescription data.

- The system makes prescription processing easier by improving image quality, using AWS Textract to extract text, and analyzing it with Amazon Bedrock and Comprehend Medical. This helps speed up the process, reduce errors, and securely manage patient data.

3. Can you describe best practices around Git you have followed, can you describe a use case where you implemented a git strategy? branching and merging etc.  
  
For managing Amazon Connect configurations with Git:

1. Repository Structure: Organize into directories like contact-flows, routing-profiles, and queues.

2. Branching Strategy: Use main for production, and feature branches for specific changes. Develop branch is used for integrating features branches.

Each feature, such as "Queues" or "Routing profiles," was developed in its own branch, e.g., feature/queues and feature/routing profiles.

Once a feature was complete, a pull request was created to merge the feature branch into develop. After code review and approval, the feature was merged. Periodically, develop was merged into main after passing all tests.

4. What do you understand by release management in your projects and experience?

A. For Amazon Connect, release management involves handling updates and changes to contact center configurations, ensuring that new features, improvements, or fixes are implemented smoothly.

Example scenario:

Suppose Client want to introduce a new feature where customer calls are routed to different queues based on the time of day.  
1. Planning and Preparation: Implement changes during low traffic period and connect with stockholders (IT team and Manager to ensure availability and preparedness for the change. Gather requirements for time-based routing rules, including specific times and corresponding queues.

2. Development and Testing: Design new contact flows in Amazon Connect to include time-based routing logic.

- Move the new contact flows to a test environment that looks and works like the real one.

- Try out different times of day to make sure calls go to the right queues.

- Check that call handling, queue management, and reporting all work as expected.  
3. Deployment  
 - Apply the new time-based routing rules to the contact flows in your Amazon Connect environment.  
 - Check that the new rules are working correctly by running some test calls.

- Make sure everything is functioning as expected before fully rolling out the changes

5. What do you understand by IAC pipeline and how are they different from usual CI/CD pipelines  
A. I have no idea.

6. What GitOps experience do you have?

A. I have little experience on Helm. Deploying GenAI application.

7. How is the file system, networking different in containers as compared to on premise?

A. Containers use a layered and isolated file system but On-premises uses a dedicated file system/shared file system. Network in Containers are isolated and Virtualized where as Network in On-premises uses physical resources.

8. What is a container? Specific experience around Kubernetes/containerization?

A container is a small, self-contained unit that runs an application and its dependencies together.

I have exposer on writing docker file and run containers on docker.

9. What is the fundamental difference between virtual machines and containers?

A. Virtual machines run on full operating system but containers are light-weight it will uses Host-OS.

10. For a given project, there are two release branches that have been forked from the master branch. Due to vulnerabilities in one of your interfaces or third-party libraries, a hotfix release is required. To create this new hotfix release, you need to select certain commits from both the release1 and release2 branches. How would you go about doing this for the application? Note: It is preferred not to apply any local commits to any branch.

A. I have no idea.

11. During development, Developer A created a new branch, Fix-2, from another branch, Fix-1. After completing the development, the Fix-1 branch was deleted from the remote repository. Later, there is a need to create a new branch, Fix-3, based on the deleted branch Fix-1.

How can we retrieve the commits of the Fix-1 branch to start working on Fix-3?

1. First, need to check for any local references to the fix-1 branch. To check this we should use git reflog command. If you find commit hash of the last commit on Fix-1. We can create Fix-3 branch from it.