1. What is AWS Aurora? Differentiate AWS RDS and Aurora

2. How to migrate RDS Postgre to Aurora?

3. Explain in brief about Amazon aurora DB clusters.

4. What are I/Os in Amazon Aurora and how are they calculated?

5. How to migrate from MySQL to Aurora?

6. What does "five times the performance of MySQL" mean?

7. What does "three times the performance of PostgreSQL" mean?

8. How do I scale the compute resources associated with my Amazon Aurora DB Instance?

9. What happens during failover and how long does it take?

10. What is the difference between Aurora Serverless v2 and v1?

11. What are advantages of DynamoDB?

12. List methods of DynamoDBMapper class

13. How does DynamoDB Query functionality work?

14. What are the key differences between Amazon DynamoDB and Amazon Aurora?

15. How to perform replication between applications by using Amazon DynamoDB?

16. Explain DynamoDB Console Menu items

17. Is it possible for a user to have multiple databases on RDS?

18. Is it possible for a user to have multiple databases on RDS?

19. What is a maintenance window? Will my DB instance be available during maintenance events?

20. What should I do if my queries seem to be running slowly?

21. Does Amazon RDS provide guidelines for deprecating database engine versions that are currently supported?

22. How do I scale the compute resources and/or storage capacity associated with my Amazon RDS Database Instance?

23. What are the top reasons customers choose Amazon Redshift?

24. What are the top reasons customers choose Amazon Redshift?

25. When should I consider using RA3 instances?

26. When would I use Amazon Redshift vs. Amazon RDS?

27. Why should I use Amazon Redshift instead of running my own MPP data warehouse cluster on Amazon EC2?

28. Why should I use Amazon Redshift Spatial?

29. What is cold query performance enhancement, and what does Amazon Redshift do to enhance cold query performance?

30. What capabilities does Amazon Redshift Serverless (preview) provide?

31. What is the underlying technology behind Amazon Athena?

32. How does Amazon Athena store table definitions and schema?

33. What is the difference between Amazon Athena, Amazon EMR, and Amazon Redshift?

34. When should you use a full featured enterprise data warehouse, like Amazon Redshift vs. a query service like Amazon Athena?

35. When should you use a full featured enterprise data warehouse, like Amazon Redshift vs. a query service like Amazon Athena?

36. What are the important features of Elasticsearch?

37. Explain ELK stack architecture

38. What are the various ways of searching in Elasticsearch?

39. What is a document in ElasticSearch?

40. What is the benefit of using the Command Line Tools or APIs vs. AWS Management Console?

41. How is EMR Studio different from EMR Notebooks?

42. How is EMR Studio different from EMR Notebooks?

43. How do you calculate the Normalized Instance Hours displayed on the console ?

44. How do I prevent other people from viewing my data during cluster execution?

45. How do I control what EMR users can access in Amazon S3?

46. How does Amazon EMR make use of Availability Zones?

47. What happens to my data when an Amazon EC2 instance terminates?

48. What happens to my data when an Amazon EC2 instance terminates?

49. Since io2 provides higher volume durability, should I still take snapshots and plan to replicate io2 volumes across Availability Zones (AZs) for high durability?

50. What are best practices for high availability on Amazon EBS?

51. Are Provisioned IOPS SSD (io2 Block Express, io2, and io1) volumes available for all Amazon EC2 instance types?

52. What use cases does Amazon EFS support?

53. How do I access a file system from an Amazon EC2 instance?

54. How do I load data into a file system?

55. 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?

56. When should I use EFS Intelligent-Tiering?

57. What happens when I disable the policy to move files to the IA storage classes using Amazon EFS Lifecycle Management?

58. What is the latency difference between the performance-optimized storage classes (EFS Standard, EFS One Zone) and the cost-optimized IA storage classes (EFS Standard-IA, EFS One Zone-IA)?

59. What throughput can I drive against files stored in the EFS Standard-IA or EFS One Zone-IA storage class?

60. How do I migrate my existing file data into an Amazon FSx file system?

61. How do I monitor my file system’s activity?

62. How does Amazon FSx support access from my on-premises environment?

63. Does Amazon FSx support access from multiple VPCs, accounts, and regions?

64. How do I use the AWS Storage Gateway service?

65. What benefits does AWS Storage Gateway provide?

66. What file system operations are supported by Amazon S3 File Gateway?

67. What file system metadata can my client access and where is the metadata stored?

68. Can I use Amazon S3 lifecycle, cross-region replication, and S3 event notification with File Gateway?

69. How does Amazon S3 File Gateway manage the local cache? What data gets stored locally?

70. How does Amazon FSx File Gateway provide high availability?

71. Security and Compliance in AWS storage gateway

72. Performance monitoring and management in AWS storage gateway

73. Networking in AWS storage gateway

74. AWS FSx

a. Scale and performance

b. Availability and durability

75. Amazon EFS

a. Storage class and lifecycle management

b. Security

c. Data protection and availability

76. Amazon EBS

a. Performance

77. EMR

a. EMR Serverless

b. EMR Studio

c. Security and data access control

78. Amazon Athena

a. Creating tables, data formats and partitions

b. Querying and data formats

c. Machine learning

79. Amazon RDS

a. Automatic Backups and Database snapshots

b. Security

c. Billing

80. Amazon Redshift

a. Data Integration and loading

b. Scalability and concurrency

81. Amazon aurora

a. Performance

b. Availability and replication

c. Security

82. Why should I use AWS Backup? What can I back up using AWS Backup?

83. How does AWS Backup work with other AWS services that have backup capabilities?

84. What is a backup plan?

85. What services provide support for AWS Backup advanced features?

86. How does AWS Backup Vault Lock work?

A large multinational corporation needs to consolidate its data from multiple regions into a central S3 bucket for analysis. What factors would you consider when designing a global data consolidation strategy using S3?

A company wants to implement a cost-effective S3 data storage solution. Compare and contrast the storage classes available in S3, highlighting their advantages and suitable use cases.

Design an S3 data backup and recovery strategy for an e-commerce website that ensures minimal downtime during a disaster. Describe the architecture and AWS services involved.

A large healthcare organization needs to securely transfer terabytes of patient data from remote clinics to the AWS cloud. What factors should be considered when selecting the appropriate AWS Snow Family device for this data transfer?

Compare and contrast the use cases for AWS Snowball and AWS Snowcone. Provide recommendations for when each device should be chosen based on specific customer requirements.

Design an end-to-end data migration strategy using AWS Snowball for a manufacturing company looking to move a massive dataset to the cloud. Include considerations for data encryption, device management, and tracking.

A high-traffic e-commerce platform is experiencing performance bottlenecks in its order processing system. How can SNS and SQS be integrated to decouple and scale the components involved in order processing?

Compare and contrast SNS and SQS in terms of their messaging patterns, use cases, and integration with other AWS services. Provide recommendations for when to use one over the other.

Design a serverless architecture using AWS Lambda, SNS, and SQS to process user-generated content uploaded to a media-sharing platform. Describe how these services work together to ensure scalability and reliability.

A global news agency wants to implement a real-time analytics system to process and analyze incoming news feeds. What factors would you consider when designing a Kinesis-based solution for handling large volumes of streaming data from diverse sources?

Compare and contrast Kinesis Data Streams and Kinesis Data Firehose in terms of use cases, scalability, and data processing capabilities. Provide recommendations for when to use each service.

Design an architecture for a predictive maintenance system for manufacturing equipment using Kinesis Data Analytics. Explain how you would ingest, analyze, and act upon sensor data in real-time to prevent equipment failures.