

# Aws Certified Database Specialty Course(DBS-C01)

- 1 Database Services on AWS:
  - 1.1 Overview of AWS database services, including Amazon RDS, Amazon Aurora, Amazon DynamoDB
  - 1.2 Amazon Redshift, and others.
  - 1.3 Understanding the characteristics, use cases, and benefits of different database services.
  
- 2 Database Design:
  - 2.1 Database schema design and optimization for specific use cases.
  - 2.2 Data modeling and normalization.
  - 2.3 Choosing the right database engine for specific application requirements.
  
- 3 Database Security:
  - 3.1 Authentication and authorization mechanisms for AWS database services.
  - 3.2 Encryption at rest and in transit.
  - 3.3 Security best practices for database deployments.



## 4 High Availability and Disaster Recovery:

- 4.1 Configuring and managing multi-AZ deployments for high availability.
- 4.2 Backup and restore strategies.
- 4.3 Failover and recovery procedures

## 5 Performance Optimization:

- 5.1 Monitoring and optimizing database performance.
- 5.2 Use of AWS tools like Amazon CloudWatch for performance monitoring.
- 5.3 Query optimization techniques.

## 6 Database Migration and Transfer:

- 6.1 Strategies and tools for migrating databases to AWS.
- 6.2 Data transfer and replication techniques.
- 6.3 Understanding database import/export methods.

## 7 Data Warehousing and Analytics:

- 7.1 Amazon Redshift for data warehousing.
- 7.2 Integration with analytics and visualization tools.
- 7.3 Query optimization for analytical workloads.



## **8 NoSQL Databases:**

- 8.1 Overview of NoSQL databases on AWS, including Amazon DynamoDB.
- 8.2 Data modeling and best practices for NoSQL databases.

## **9 Database Automation and Orchestration:**

- 9.1 Use of AWS services like AWS Lambda and AWS Step Functions for database automation.
- 9.2 Infrastructure as code (IAC) concepts.

## **10 Cost Optimization:**

- 10.1 Strategies for optimizing database costs.
- 10.2 Right-sizing database instances.
- 10.3 Understanding AWS pricing models for databases.

