

# AWS Database Services – SAA-C03 Exam Cheat Sheet

## Amazon RDS

- Managed relational DB (MySQL, PostgreSQL, Oracle, SQL Server, MariaDB)
- Multi-AZ for HA, Read Replicas for scaling
- Backup, patching, monitoring handled by AWS
- Use cases: Traditional applications, ERP, CRM

## Amazon Aurora

- MySQL/Postgres compatible, 3–5x faster than RDS
- 6 copies of data across 3 AZs
- Aurora Serverless for on-demand autoscaling
- Global Database for multi-region read

## Amazon DynamoDB

- Fully managed NoSQL (key-value, document)
- Single-digit ms latency, scales automatically
- On-Demand or Provisioned capacity modes
- Streams + Lambda for event-driven apps

## Amazon ElastiCache

- In-memory cache: Redis or Memcached
- Improves performance for RDS/DynamoDB
- Use cases: Session store, caching, leaderboard

## Amazon Redshift

- Data warehouse, columnar storage
- Massive parallel processing (MPP)
- Integrates with S3 (Redshift Spectrum)
- Use cases: BI, analytics, big data queries

## Amazon Neptune

- Fully managed graph DB (Property Graph, RDF)
- Use cases: Social networks, fraud detection, recommendation engines

## Amazon QLDB

- Ledger DB with immutable, cryptographically verifiable log
- Use cases: Finance, supply chain, audit trail

## Amazon Timestream

- Time-series DB for IoT, operational apps
- Stores trillions of events cost-effectively
- Built-in analytics functions