


## Databases:




**Database**


**KEY TAKEAWAYS**

- ✓ Databases allow us to collect, store, retrieve, sort, graph, and manipulate data.
- ✓ A database is an organized collection of various forms of data.
- ✓ Databases are used by many applications: web, mobile, services, and more.


In the **AWS** ecosystem, there are many different types of databases that support different use cases.




RDS




Aurora




DynamoDB



DocumentDB



ElastiCache



Neptune

## Amazon RDS:

RDS is a service that makes it easy to launch and manage relational databases.

Supports popular **database engines**

Offers **high availability** and fault tolerance using **Multi-AZ** deployment option



**AWS manages** the database with automatic software patching, automated backups, operating system maintenance, and more.

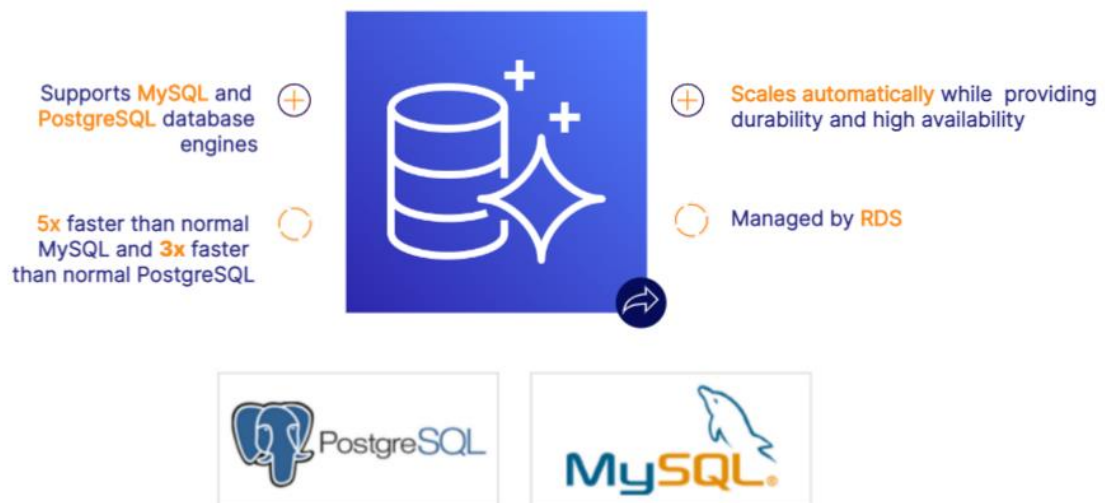
Launch **read replicas** across Regions in order to provide enhanced **performance** and **durability**.

Supported DB Engines:



Amazon Aurora:

**Aurora** is a relational database compatible with **MySQL** and **PostgreSQL** that was created by **AWS**.



Amazon DynamoDB:

**DynamoDB** is a fully managed **NoSQL** key-value and document database.



Amazon DocumentDB:

**DocumentDB** is a fully managed document database that supports **MongoDB**.



Amazon ElastiCache:

ElastiCache is a fully managed in-memory datastore compatible with **Redis** or **Memcached**.



Amazon Neptune:

**Neptune** is a fully managed graph database that supports highly connected datasets.



1

Migrate an on-premises Oracle database to the cloud.



RDS

2

Migrate an on-premises PostgreSQL database to the cloud.



RDS



Aurora

3

Alleviate database load for data that is accessed often.



ElastiCache

4

Process large sets of user profiles and social interactions.



Neptune

5

NoSQL database fast enough to handle millions of requests per second.



DynamoDB

6

Operate MongoDB workloads at scale.



DocumentDB

# Things to Remember When Studying for the Exam



## RDS

RDS is only for relational databases. Don't forget the supported database engines: Amazon Aurora, PostgreSQL, MySQL, MariaDB, Oracle Database, and SQL Server.



## DynamoDB

Going into the exam, don't forget DynamoDB is a NoSQL database.



## Aurora

Don't forget Aurora only supports PostgreSQL and MySQL.



## ElastiCache

Keep in mind that ElastiCache is an in-memory datastore.



## Neptune

Don't forget Neptune helps you create social media graphs.



## DocumentDB

Keep in mind that DocumentDB supports MongoDB.