

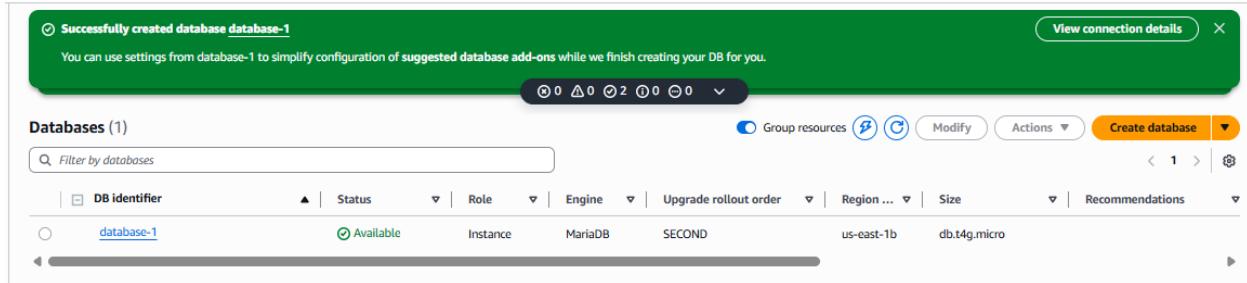
# Assignment 1

## Problem Statement:

You work for XYZ Corporation. Their application requires an SQL service that can store data which can be retrieved if required. Implement a suitable RDS engine for the same.

**While migrating, you are asked to perform the following tasks:**

1. Create a MariaDB Engine based RDS Database.
2. Connect to the DB using the following ways:
  - a. SQL Client for Windows
  - b. Linux based EC2 Instance



The screenshot shows the AWS RDS 'Databases' page. A green banner at the top indicates 'Successfully created database database-1'. Below it, a message says 'You can use settings from database-1 to simplify configuration of suggested database add-ons while we finish creating your DB for you.' The main table lists one database entry:

DB identifier	Status	Role	Engine	Upgrade rollout order	Region	Size	Recommendations
database-1	Available	Instance	MariaDB	SECOND	us-east-1b	db.t4g.micro	

Connection Name: database1

Hostname: RDS Endpoint

Port: 3306

Username: admin

Click Store in Keychain and enter password

Click Test Connection

Databases (1)									
<input type="checkbox"/> Group resources    Actions  Create database									
<input type="text"/> Filter by databases									
DB identifier	Status	Role	Engine	Upgrade rollout ...	Region ...	Size	Recom...	C	
<a href="#">database-1</a>		Instance	MariaDB	SECOND	us-east-1b	db.t4g.micro			

```
[ec2-user@ip-172-31-100-10 ~]$ mysql -h database-1.c0f862wsuljd.us-east-1.rds.amazonaws.com \
-p 3306 \
-u admin \
-p'March2019!' \
--ssl-ca=global-bundle.pem
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 76
Server version: 11.8.5-MariaDB-log managed by https://aws.amazon.com/rds/
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases
-> select version();
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'select version()' at line 2
MariaDB [(none)]> select version();
+-----+
| version()      |
+-----+
| 11.8.5-MariaDB-log |
+-----+
1 row in set (0.001 sec)

MariaDB [(none)]>
```

## Assignment 2

You work for XYZ Corporation. Their application requires a database service that can store data which can be retrieved if required. Implement a suitable service for the same.

While migrating, you are asked to perform the following tasks:

1. Create a DynamoDB table with partition key as ID.
2. Add 5 items to the DynamoDB table.
3. Take backup and delete the table.

Tables (1) <a href="#">Info</a>									
<input type="text"/> Find tables									
Filter by tag  Any tag key            Filter by tag value  Any tag value            Last updated January 31, 2026, 14:12 (UTC+5:30)									
Name	Status	Partition key	Sort key	Indexes	Replication Regions	Deletion protection	Favorite	Read capacity mode	Write capacity mode
<a href="#">Assignmentdb</a>		ID (S)	-	0	0			On-demand	On-demand

Completed - Items returned: 0 - Items scanned: 0 - Efficiency: 100% - RCU's consumed: 2

**Table: Assignmentdb - Items returned (5)**

Scan started on January 31, 2026, 14:09:20

**Actions** | **Create item**

	ID (String)	Employee Name	Employee name	Employee Name	Salary
	5				
	4	Ashok			4000
	3				
	2	Arun			1000
	1			Abhi	5000

**AWS Backup**

**My account**

- Dashboard
- Jobs dashboard **New**
- Vaults
- Backup vault locks **New**
- S3 backup tiering **New**
- Backup plans
- Protected resources
- Search **New**
- Jobs
- Maintenance notifications **New**

**Jobs**

In jobs, you can monitor the status and other details of backup, restore, and copy activity.

**Backup jobs** | **Restore jobs** | **Copy jobs**

**Backup jobs (1) Info**

Records of your scheduled or on-demand backups.

**Filter backup jobs by job ID, status, resource ID, resource type or message category**

Backup job ID	Status	Resource name	Message category	Resource ID	Resource type	Creation time
70d5b243-811d-4d81-b506-091e9526c4c8	Running	Assignmentdb	-	table/Assignmentdb	DynamoDB	January 31, 2026, 14:14:30 (UTC+05:30)

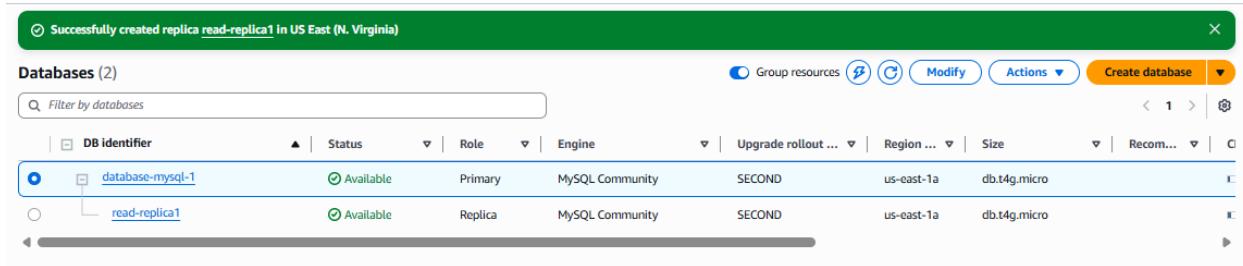
# Assignment 3

## Problem Statement:

You work for XYZ Corporation. Their application requires a SQL service that can store data which can be retrieved if required. Implement a suitable RDS engine for the same.

While migrating, you are asked to perform the following tasks:

1. Create an AuroraDB Engine based RDS Database.
2. Create 2 Read Replicas in different availability zones for better infrastructure availability.



Successfully created replica read-replica1 in US East (N. Virginia)

Databases (2)

DB identifier	Status	Role	Engine	Upgrade rollout ...	Region ...	Size	Recom...
database-mysql-1	Available	Primary	MySQL Community	SECOND	us-east-1a	db.t4g.micro	
read-replica1	Available	Replica	MySQL Community	SECOND	us-east-1a	db.t4g.micro	

## Assignment 4

### Problem Statement:

You work for XYZ Corporation. Their application requires a database service that can store data which can be retrieved if required.

### Implement suitable service for the same.

While migrating, you are asked to perform the following tasks:

1. Create a Redshift data warehouse.
2. Using the query editor:
  - a. Load some data
  - b. Query the data