



ondia

The logo for 'ondia' is centered on a white background. The word is written in a lowercase, rounded sans-serif font. The letters 'o', 'n', and 'd' are a medium purple, while 'i' and 'a' are a darker blue. A light blue and teal graphic element is positioned behind the 'd'. The background features four purple triangular accents in the corners, pointing towards the center.



# **AWS Databases**



# AGENDA



- ▶ **Introduction to Database**
- ▶ **Amazon RDS**
- ▶ **MySQL Workbench**



# Introduction to Database

# Introduction to Database

## What is Database?



# Introduction to Database

Type of Database?

Relational/SQL

Non-Relational/NoSQL

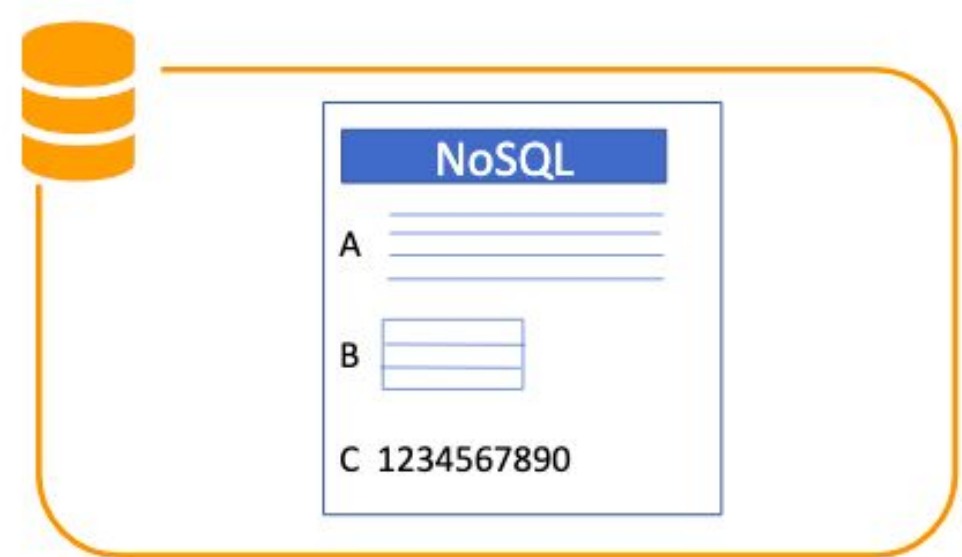
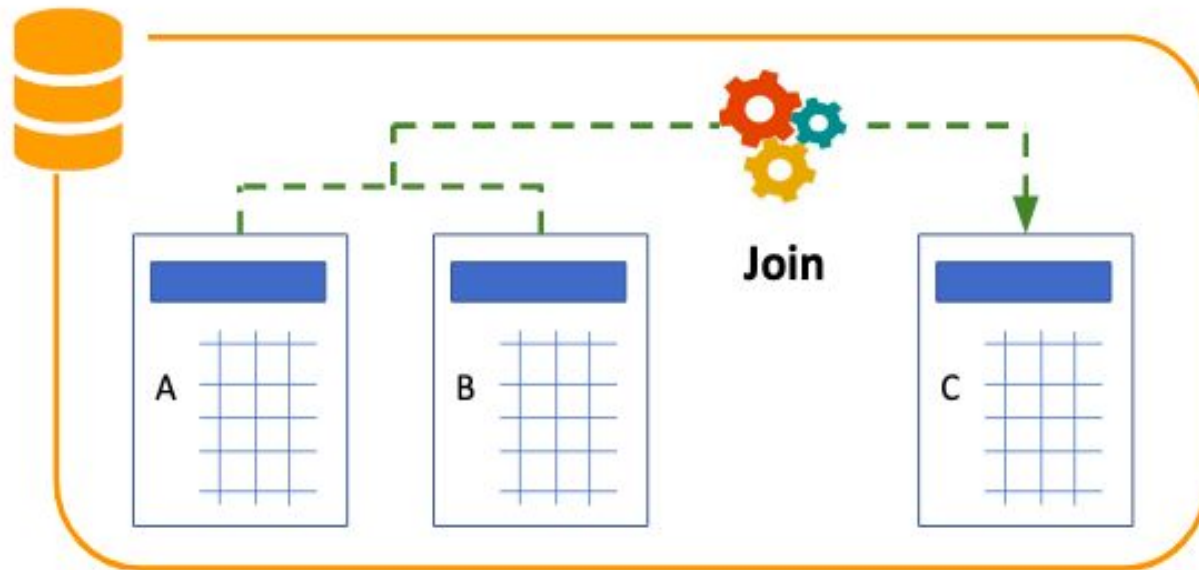
# Introduction to Database

## Type of Database?



Relational/SQL

Non-Relational/NoSQL



# Introduction to Database

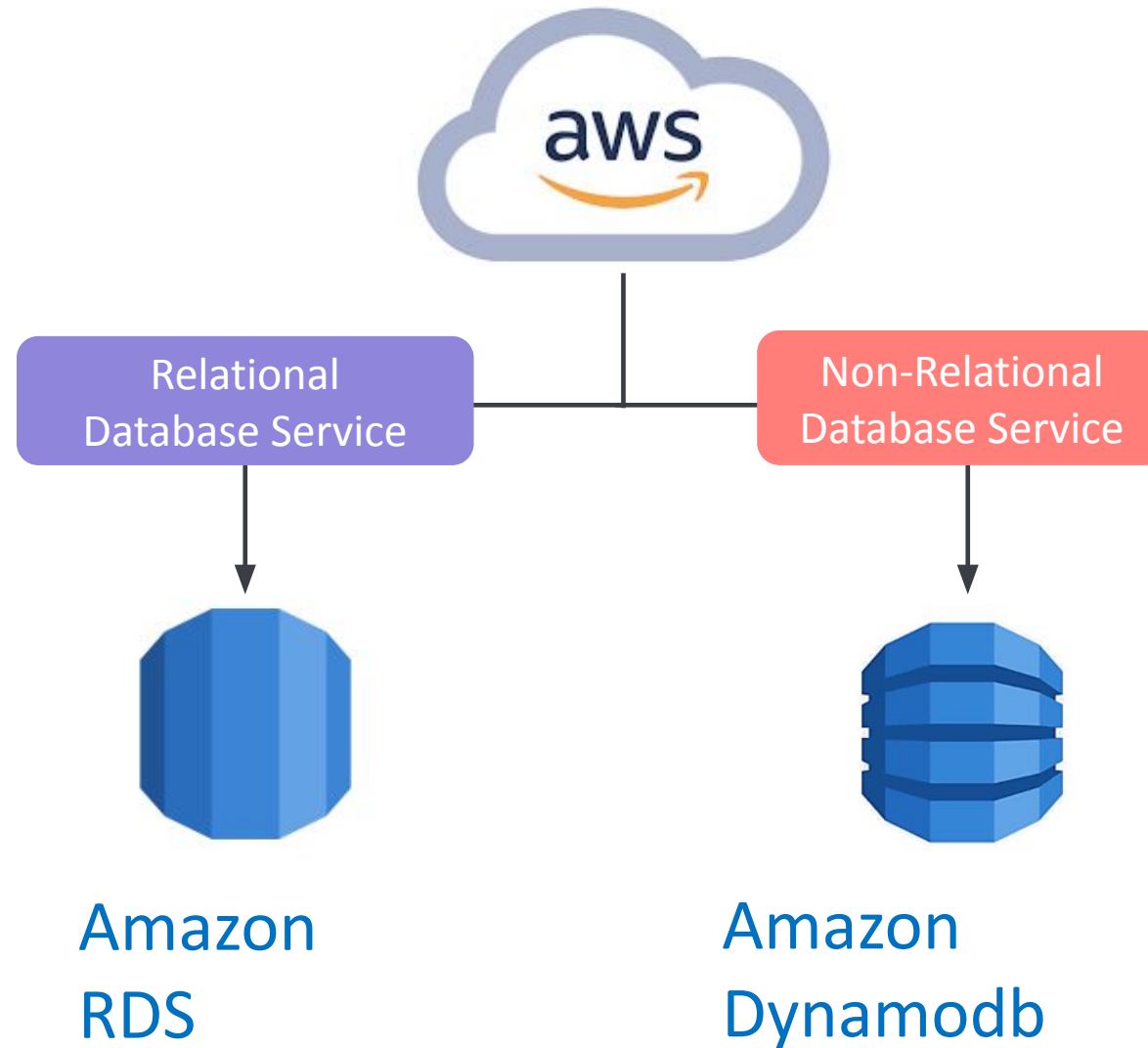
## Type of Database?





# Introduction to Database

## AWS Databases



# Introduction to Database

## SQL vs. NoSQL ?



SQL	NoSQL
Relational	Non-Relational
Table-based	Document-based, key-value pairs, graph databases or wide-column stores
Predefined Schema	Dynamic Schema
Uses SQL	As the name suggest, it doesn't use SQL
Used for complex queries	Used for simple queries
Available for <b>Join</b> function	Not available for <b>Join</b> function



# Amazon RDS



# RDS

What is RDS?



Amazon RDS



# RDS

## Basic Components



Amazon RDS

EC2

Database Engines

AMI



db.t2.micro



DB Instance

Instance Type

t2.micro



Storage Disk

Storage Disk/  
Root Volume





# RDS

## Database Engines

Amazon Aurora



ORACLE®

MariaDB



PostgreSQL



Microsoft SQL Server



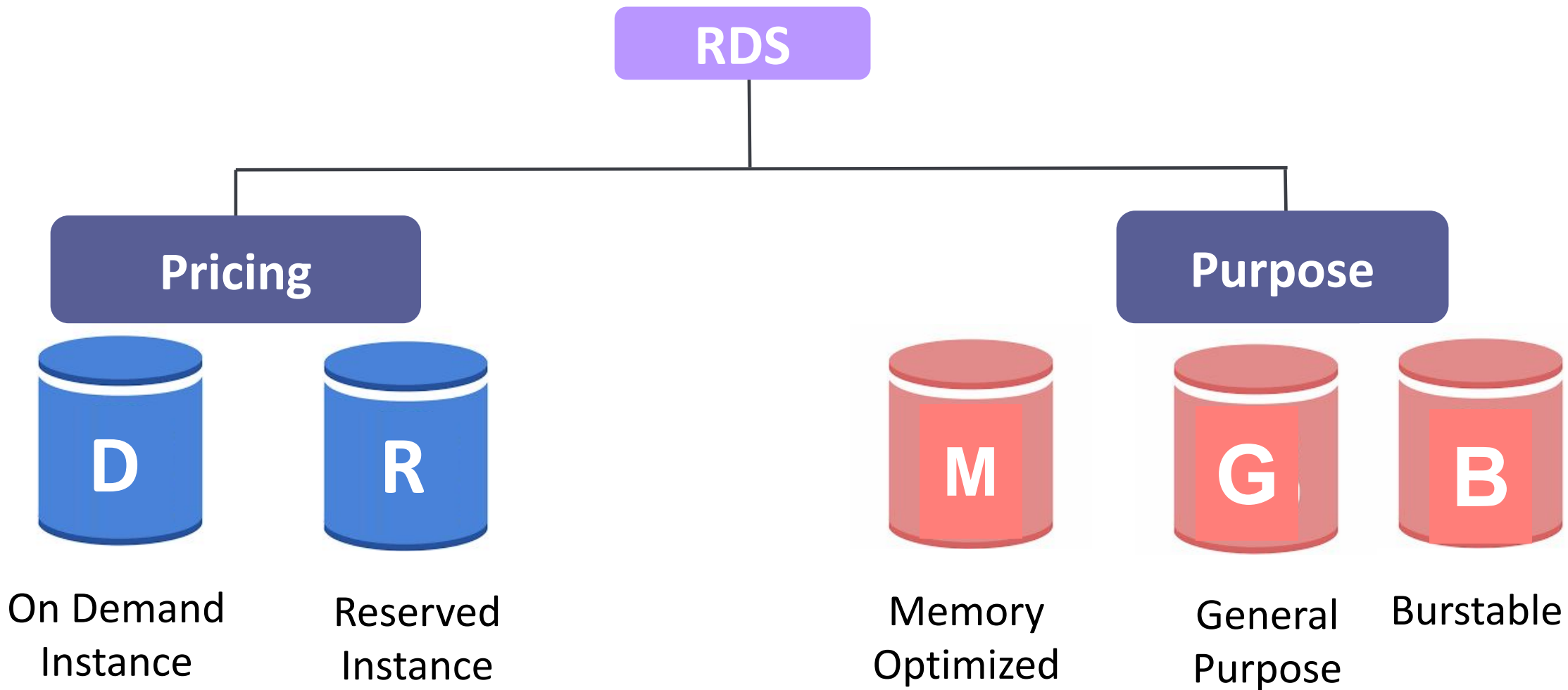
MySQL





# RDS

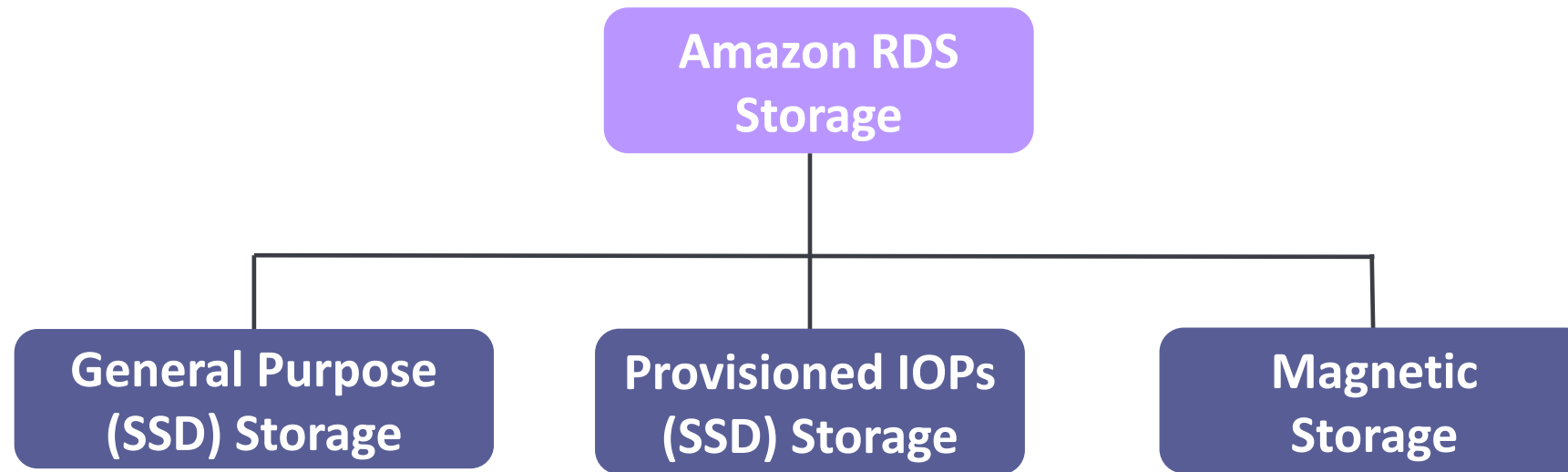
## Database Instance



# RDS



## Instance Storage



**Cost-effective**

**Fast and consistent I/O**

**Not recommended**

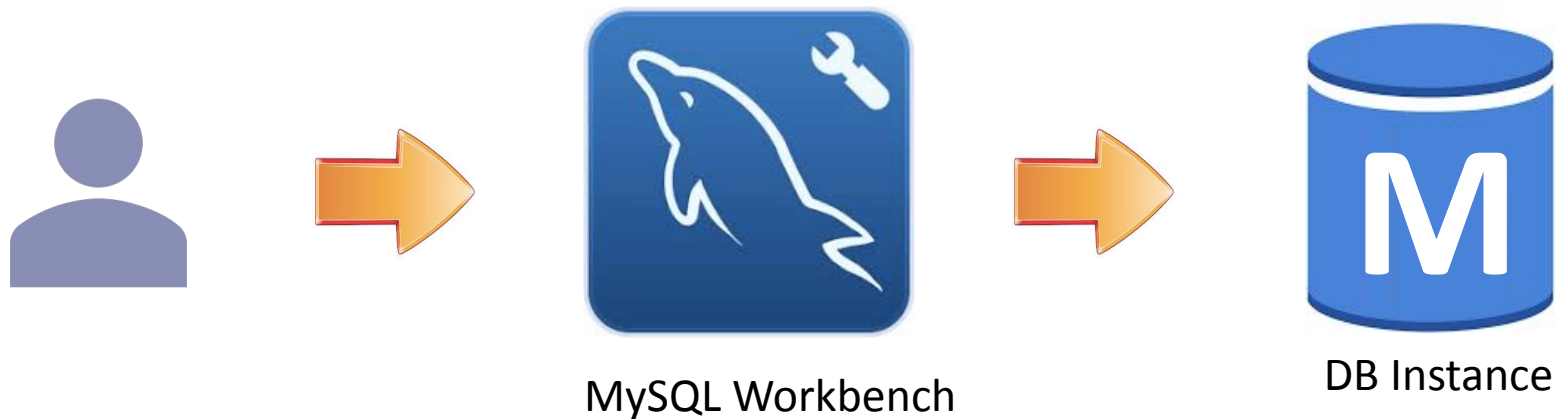
There is an important factor in the databases as much as CPU and RAM power, which is the value of **IOPs** of storage





# RDS

## MySQL Workbench

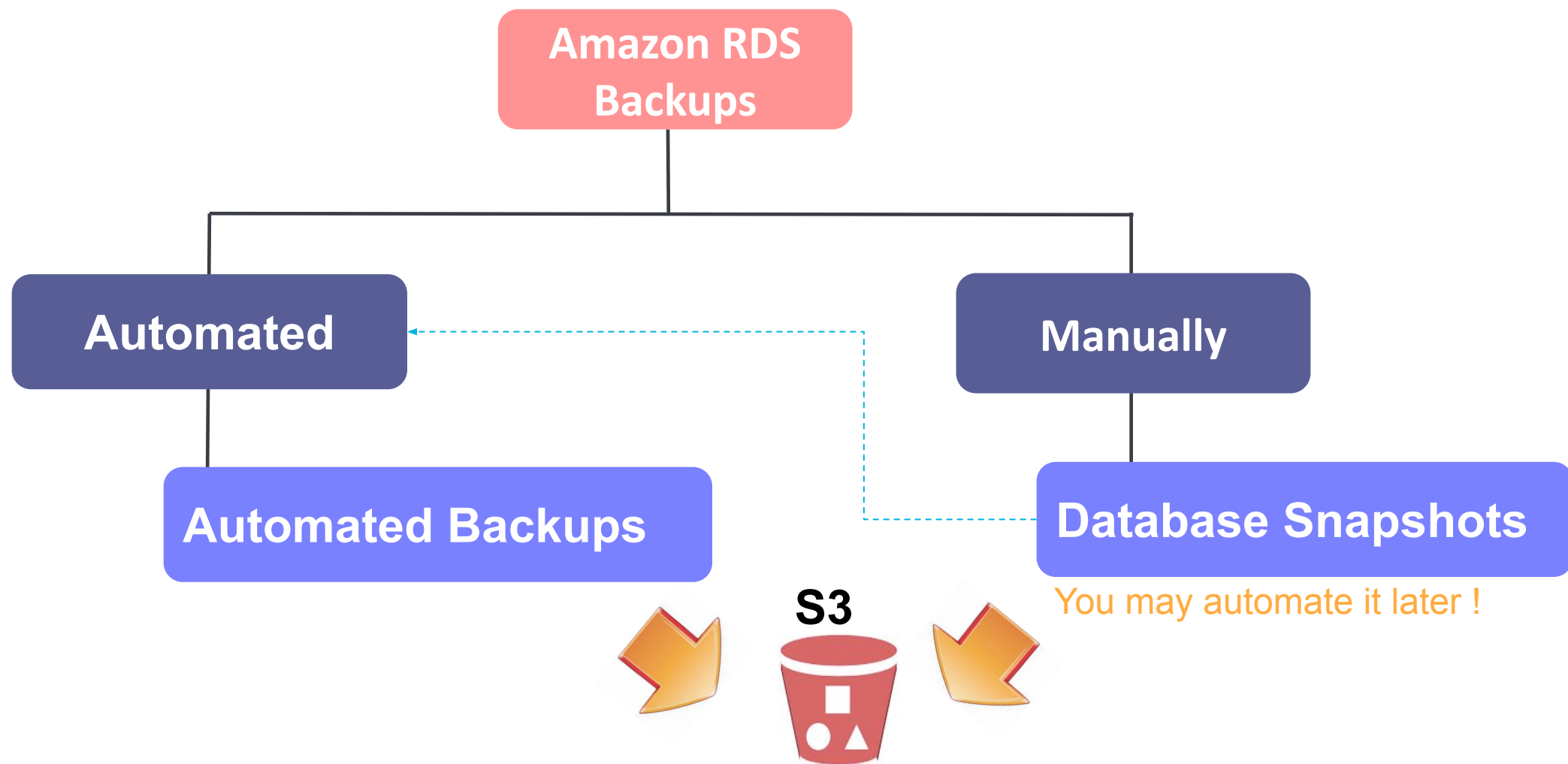


MySQL Workbench = Graphical tool for working with MySQL databases.



# RDS

## DB Instance Backups

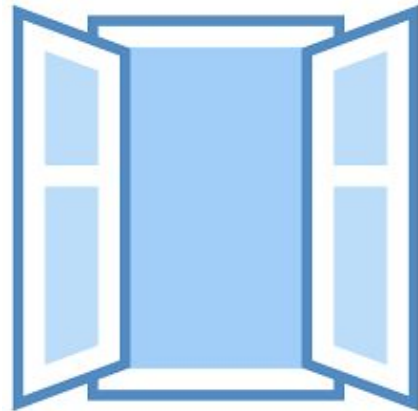


You may automate it later !

# RDS



## DB Instance Automated Backups



35 days



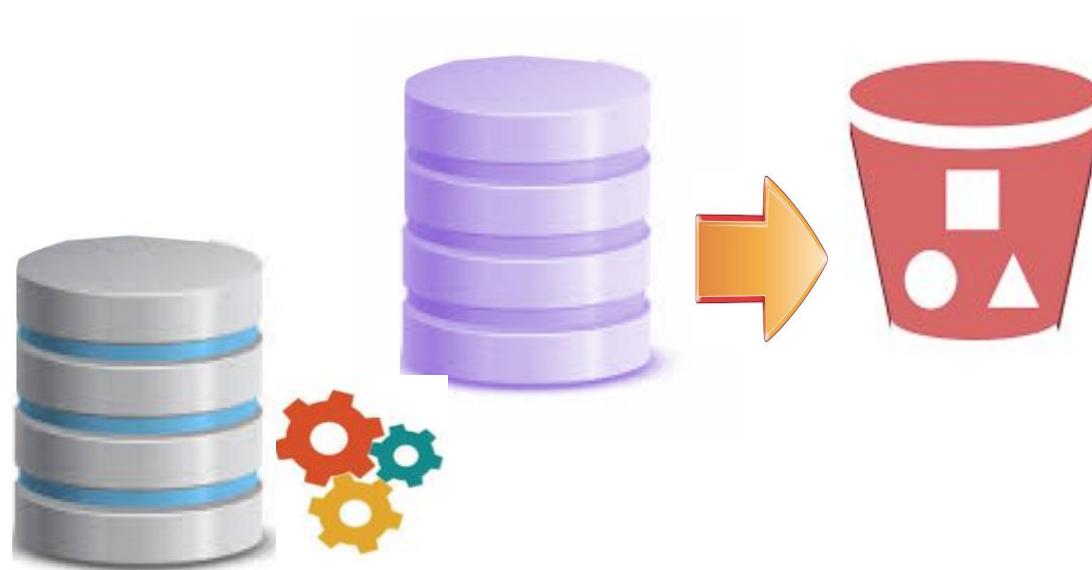
5 minutes





# RDS

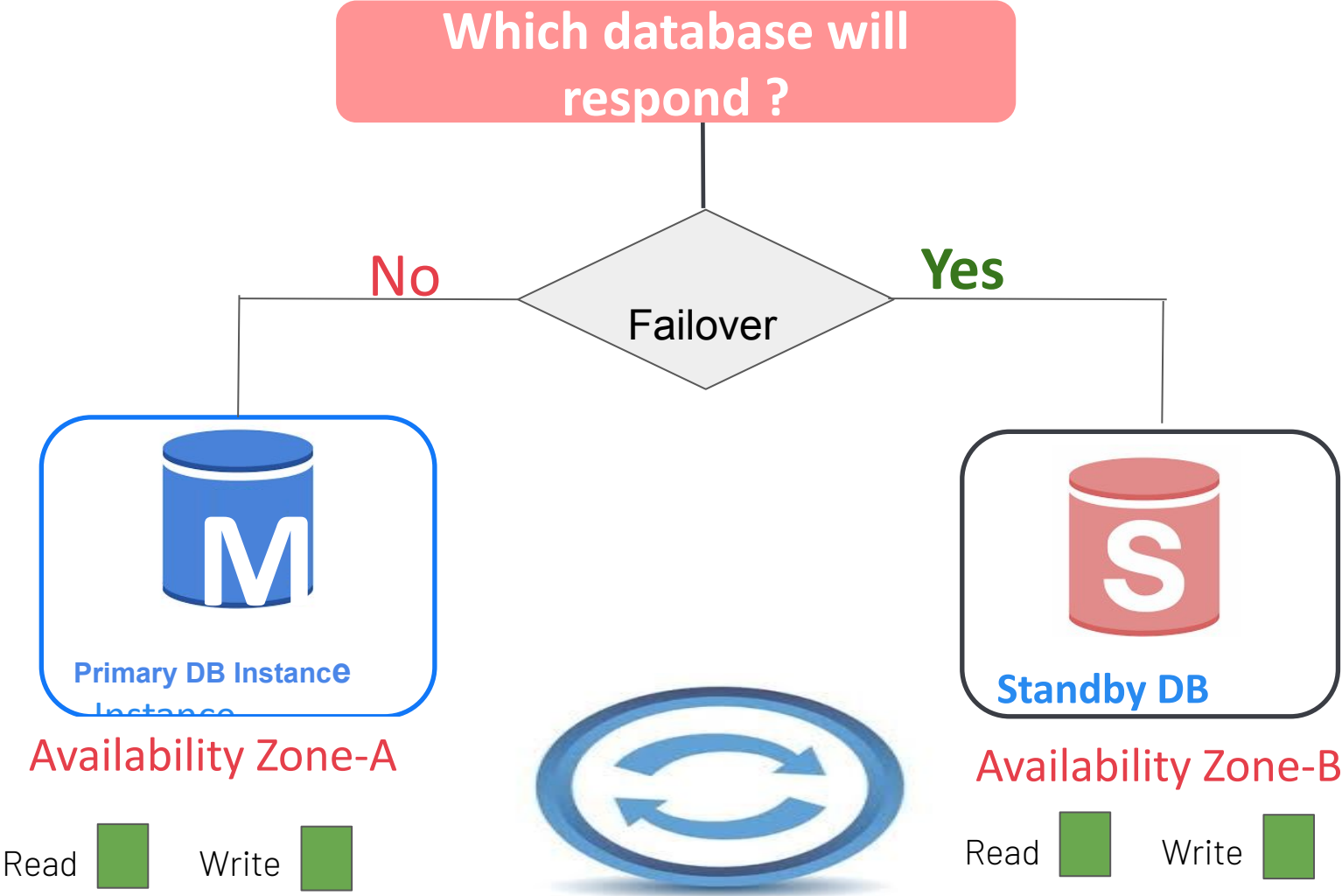
## DB Instance Snapshot



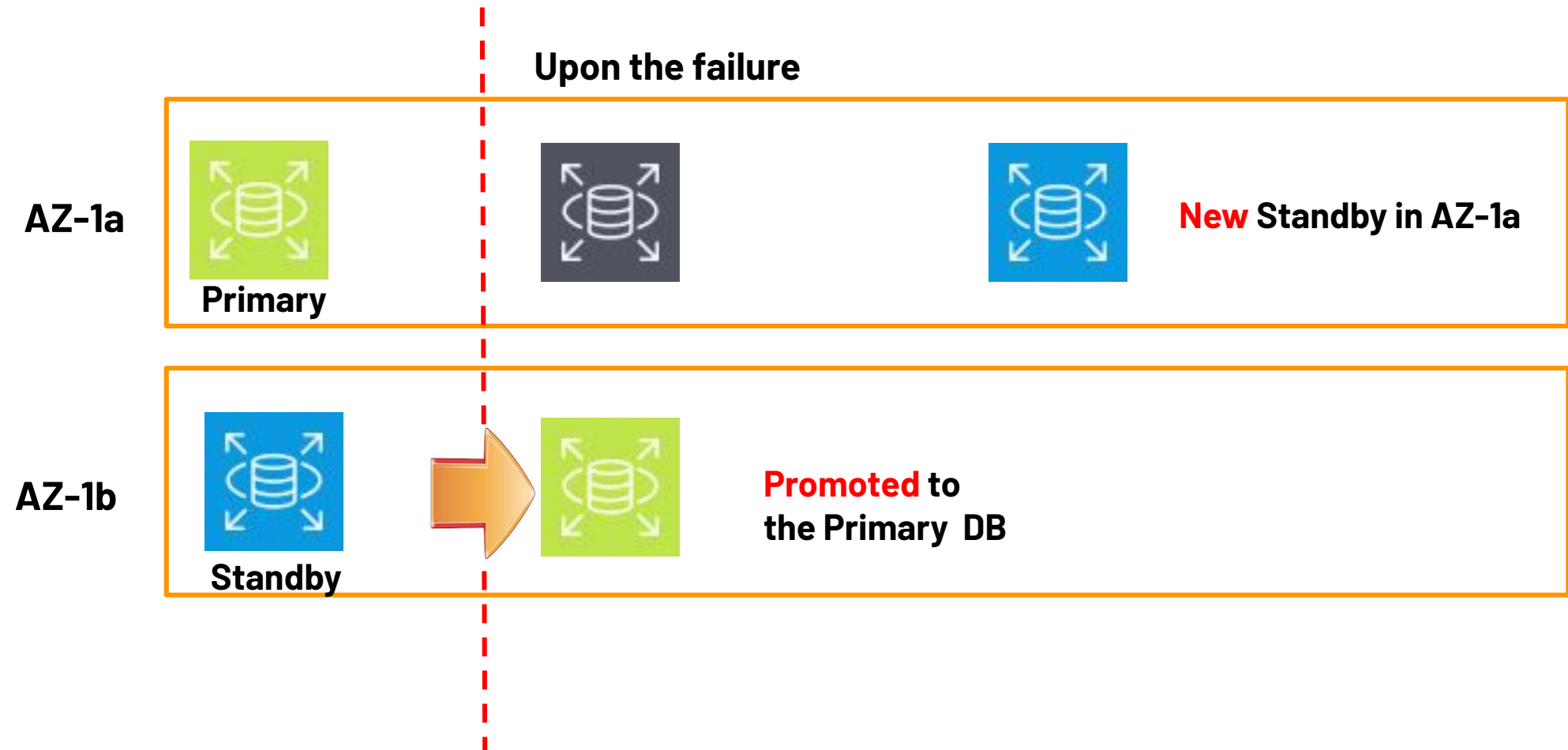


# RDS

## RDS Multi-AZ Deployment



## RDS Multi-AZ Deployment Life Cycle

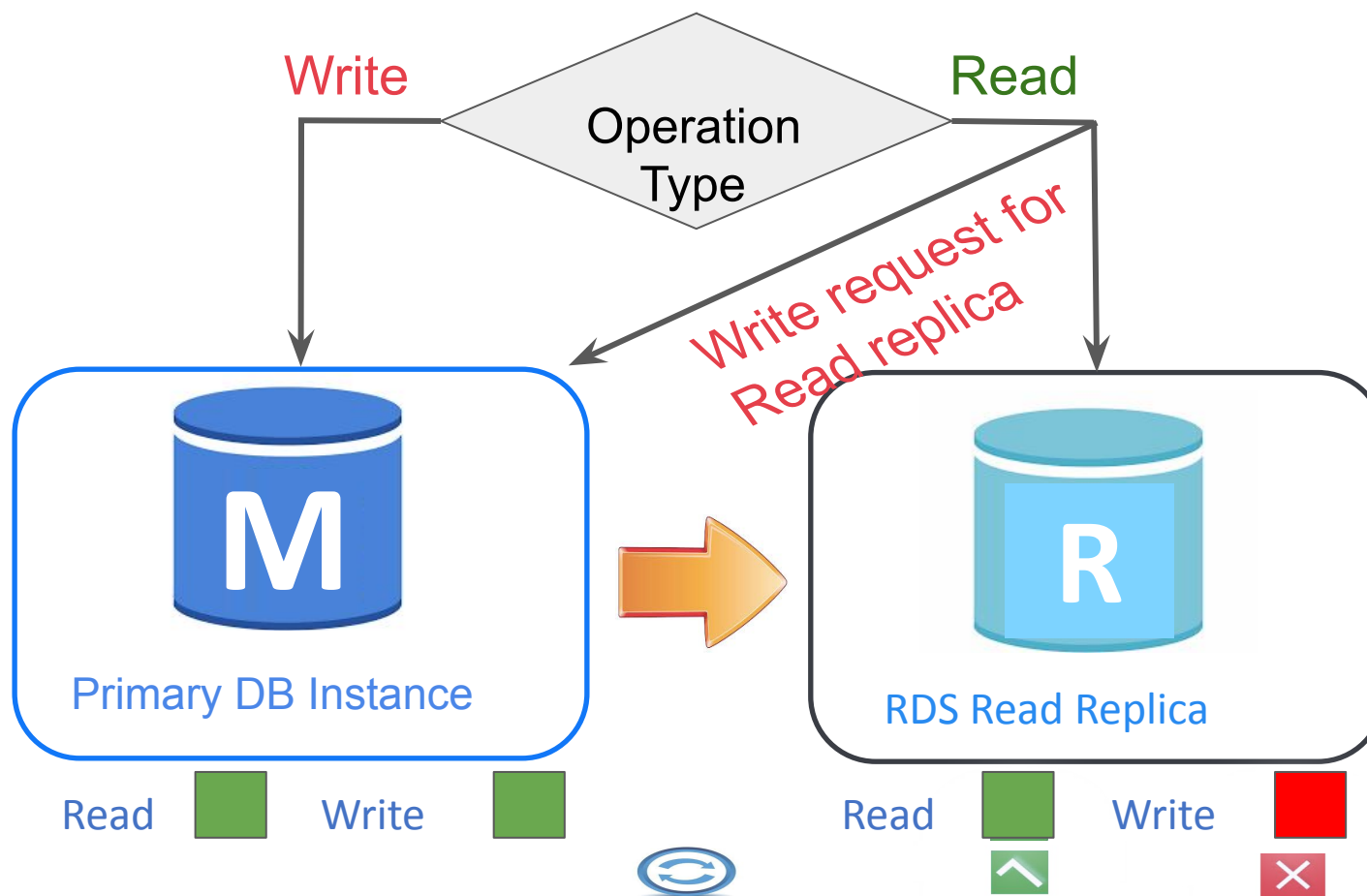




# RDS

## Read Replicas

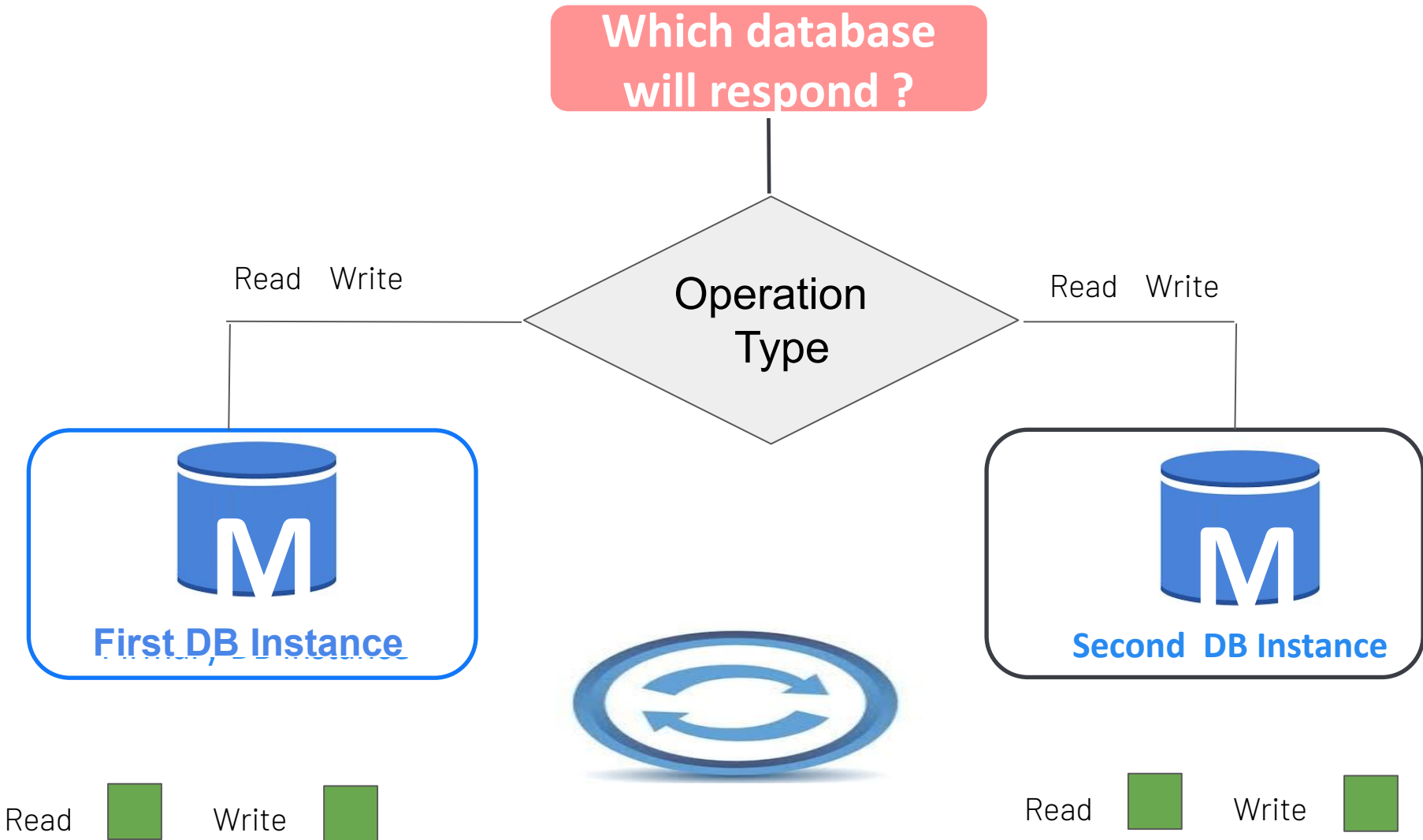
Which database will respond ?





# RDS

## Aurora Multi-Master clusters







## Let's get our hands dirty!

- Creating a RDS Instance
- Connecting DB via MySQL Workbench



# THANKS!

**Any questions?**

