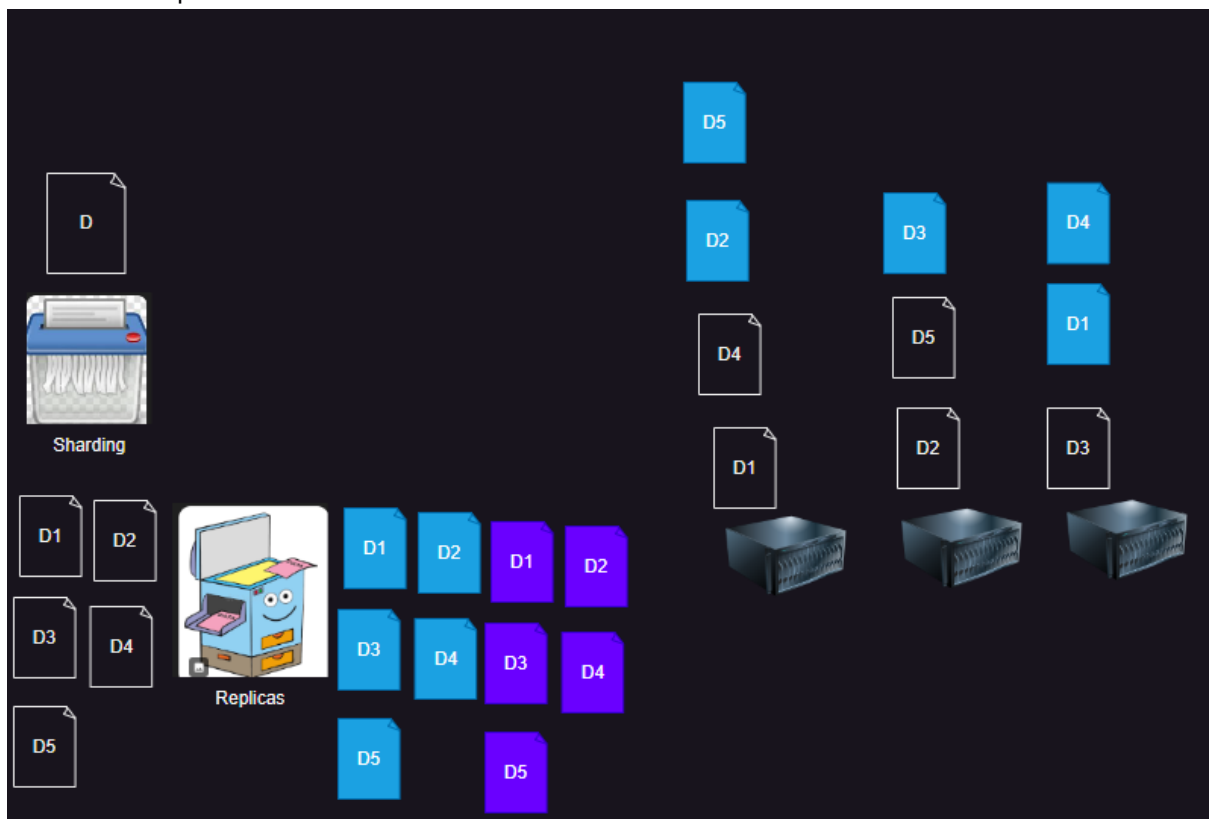


Databases offered by AWS

- RDS (Relational Database Services):
 - Engines:
 - mysql
 - PostgreSQL
 - Microsoft SQL Server
 - Oracle
 - IBM DB2
 - Aurora
 - mysql
 - postgresql
- DynamoDB (NoSQL)
- Document DB (Mongo DB)
- KeySpaces (Cassandra)
- QLDB (Quantum Ledger Database)
- Timestream:
 - IoT Devices
- Neptune (Graph Databases)
- Elastic Cache (Cache Databases)
- Memory DB (Cache Database)
- NoSQL Databases can scale horizontally using many techniques

- Shards and replicas



Databases on Azure

- Azure SQL (Microsoft SQL Server)
 - Ledger functionality
- Azure SQL for Postgres
- Azure SQL for mysql
- Azure Cosmos DB
 - Document
 - Key Value
 - Column Databases
 - Graph
- Azure Cache

Database as a Service

- Database as a service is offering from cloud providers where we get
 - Database directly (rather than installing)
 - Options for
 - automated backups
 - replications
 - patching
 - failovers
- Drawbacks:
 - not all versions are supported

- some features might not be supported.
- Advantages:
 - Minimum Administration
 - Easy configurations
- DBA Responsibilities (On-prem):
 - Backups and Recoveries
 - Replications
 - Patching
 - Performance Tuning
- With cloud databases or Database as a Service there is only one option partially left for DBA's i.e. Performance Tuning
- refer primary index, secondary index, full table scans.