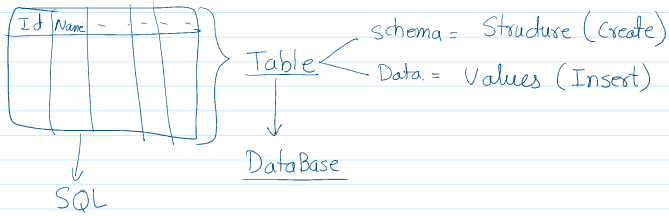


> Structure Query Language



Data

A] Traditional

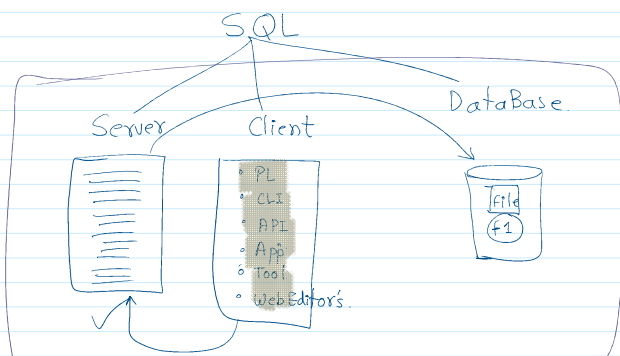
- RDBMS → SQL
 - Structure
- RDBMS (SQL)

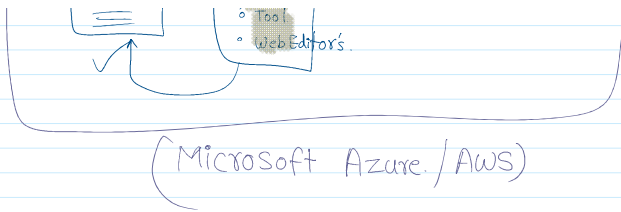
B] Big Data

- Unstructure
 - Semi-Structure
- Complains
Bank, Finance
- AWS S3

C] New Data

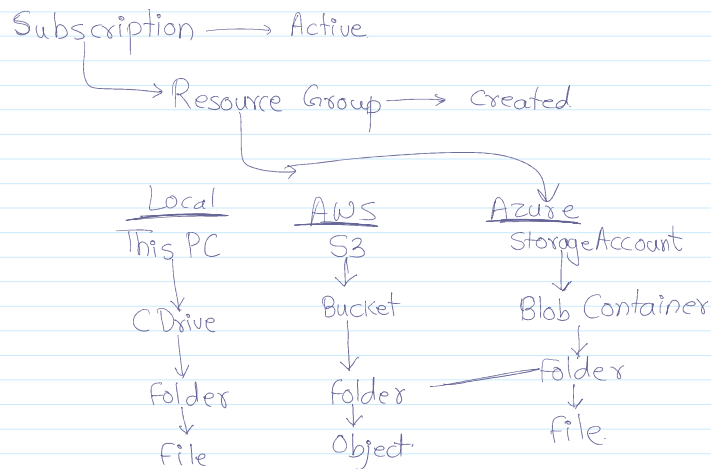
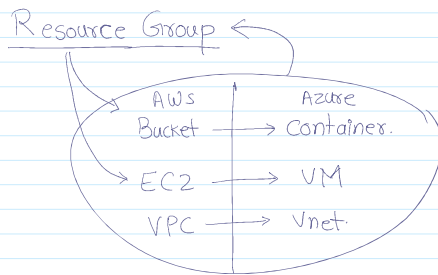
- Structured
 - Unstructure
 - Semi-structure
- No-Complains
IoT
- Databricks





Microsoft Azure.

- Promo Code → Redeem
 Subscription = Active.



* Generate SAS

- Shared Access Signature
- Token based Authentication.

Storage Resource URL ? sp=

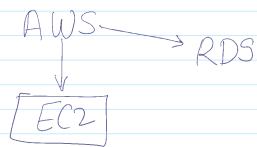
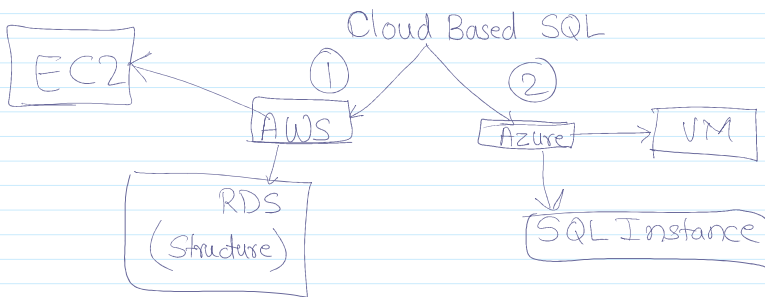
↓

Delimiter Character.

↓

SAS Token

https://sa24julsql.blob.core.windows.net/e-commerce/gender_submission.csv?sp=r&st=2023-07-24T16:12:42Z&se=2023-07-25T00:12:42Z&sv=2022-11-02&sr=b&sig=5sStBoI2wsRkL4MAvCjnalUM4SO4BErPeDcqPCEUM8%3D



- Cloud Virtual Server
- Compute/Processing

Host

Dedicated

- Cloud Server
 - Pay More
 - Good Security.
 - Good Performance
- 100\$

Instance

Sharable

- Cloud Virtual Server
 - Security
 - Performance
- } Limits

Adv.

Cost
10-15\$

On Demand

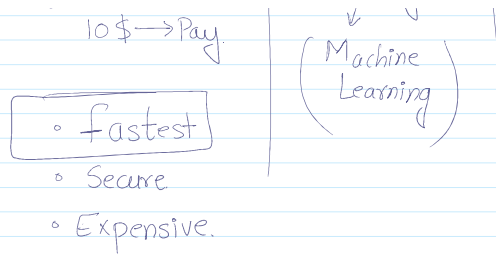
10\$ → Pay

Spot

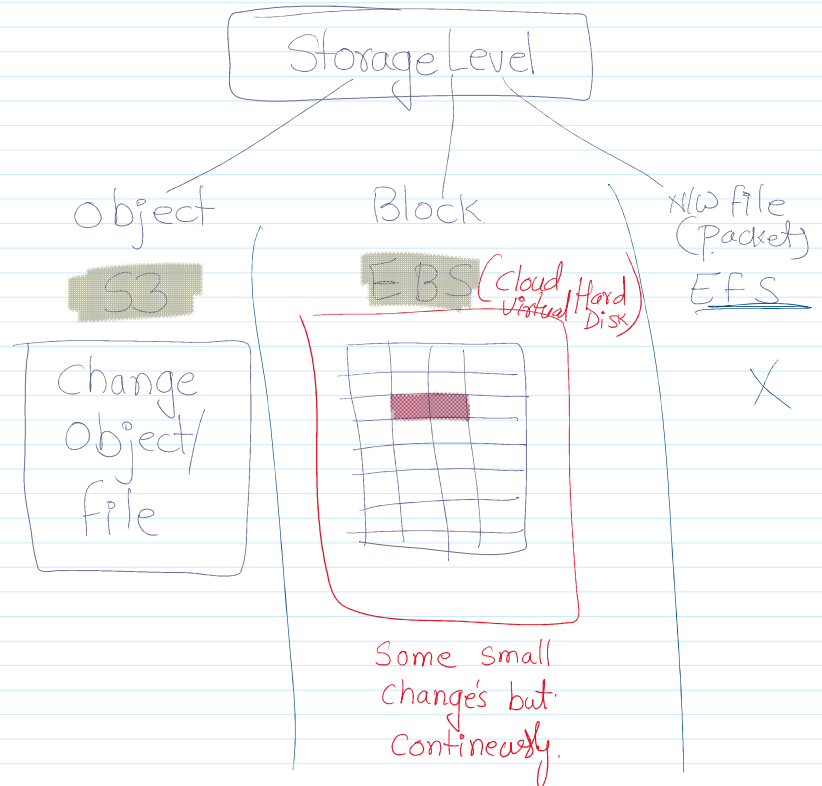
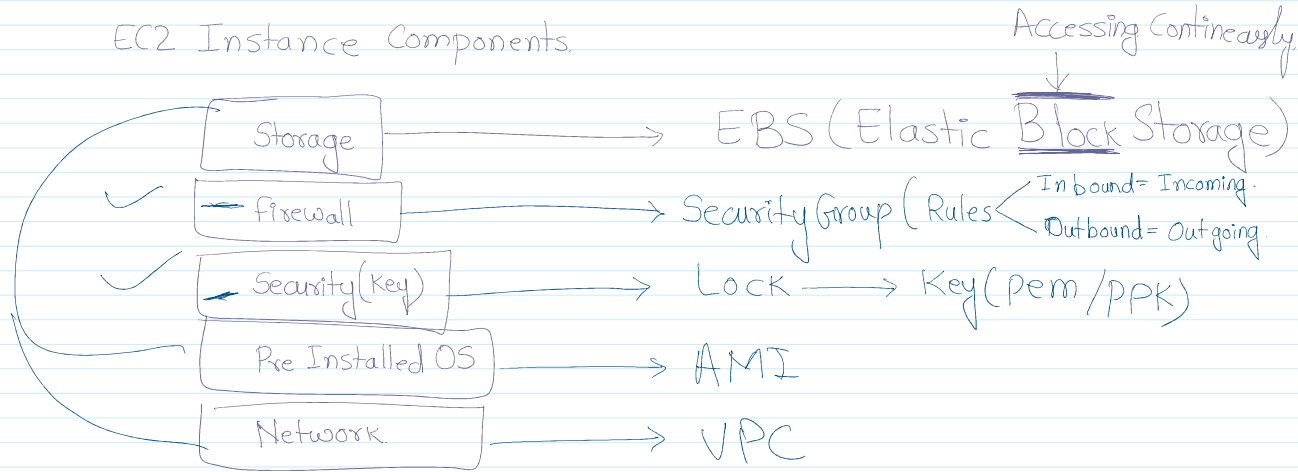
- Bidding
- ↓
- (Machine Learning)

Reserved

- 3-5 year's.



EC2 Instance Components.



① Order EC2 Instance.

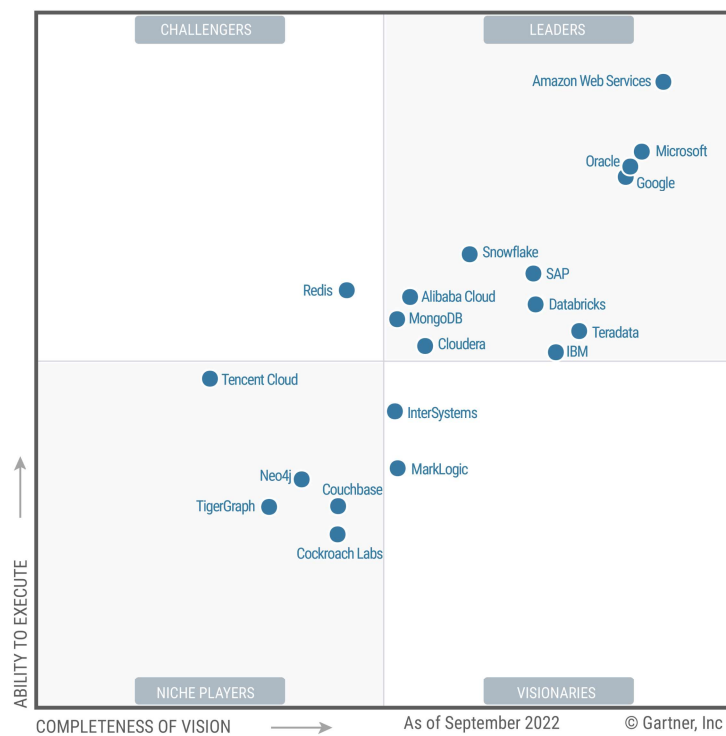
- AMI = Ubuntu
- Instance Type = t2.micro
- Key-Pair = mujahedh.
- Security Gr. = sg-all-traffic

②

```
$ sudo su
# apt update
# apt install mysql-server
# systemctl start mysql.service
```

RDS

Figure 1: Magic Quadrant for Cloud Database Management Systems



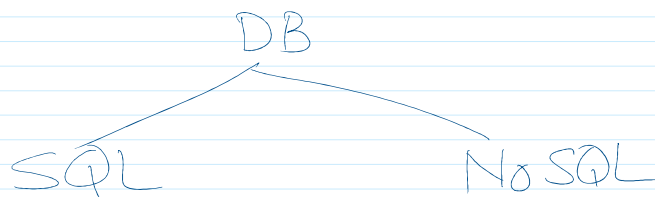
Source: Gartner (December 2022)

• DB Engine.

- MySQL
- PostgreSQL
- Oracle

- PostgreSQL
- Oracle
- MS-SQL
- MariaDB

- Fully Managed
 - Secure.
 - HA.
 - performance at scale.
- 3-5X.



RDBMS = RDS

CDWH = Redshift

◦ Graph. = Neptune.

◦ Key Value = DynamoDB.

◦ In-Memory = Elastic Cache.

◦ Dat

Document = DocDB.

Database Name: database-1
 User Name: admin
 Password: 48KJ8Rh4MBVzYAPE3o5H

- Storage (object)
- Compute (Block)
- ◦ RDS (SQL)
- NoSQL (DynamoDB)
- Storage Account.
- VM
- SQL Instance.
- NoSQL