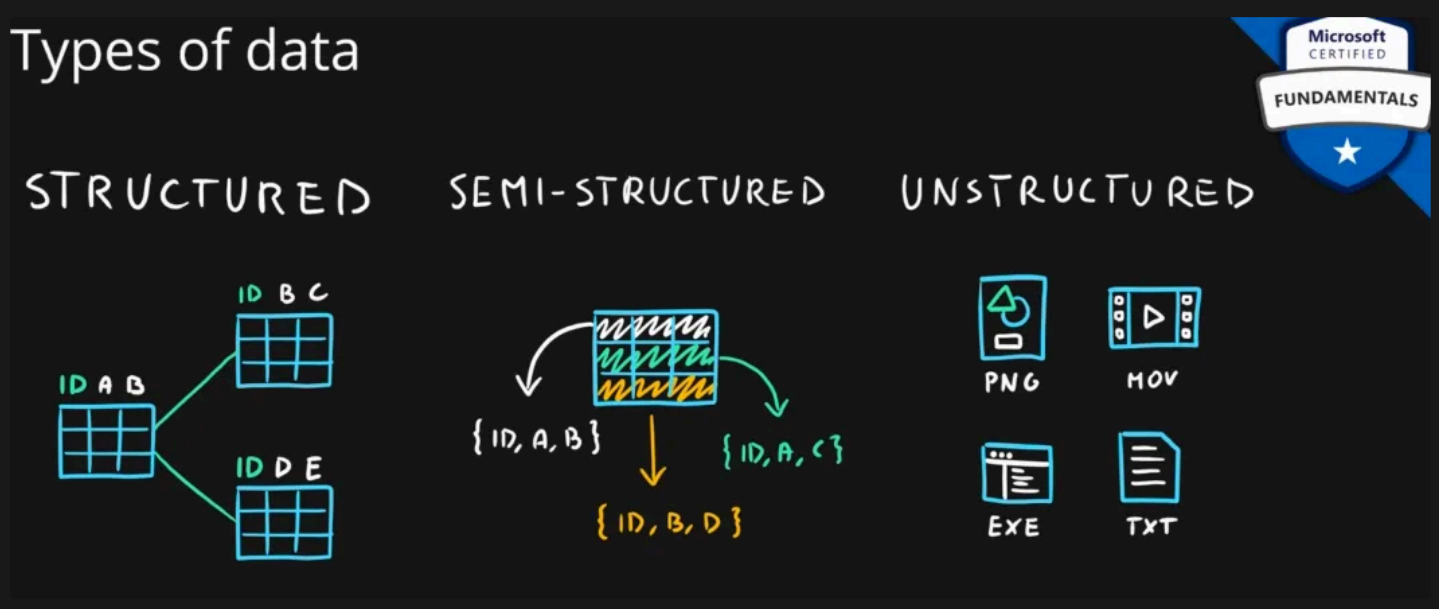
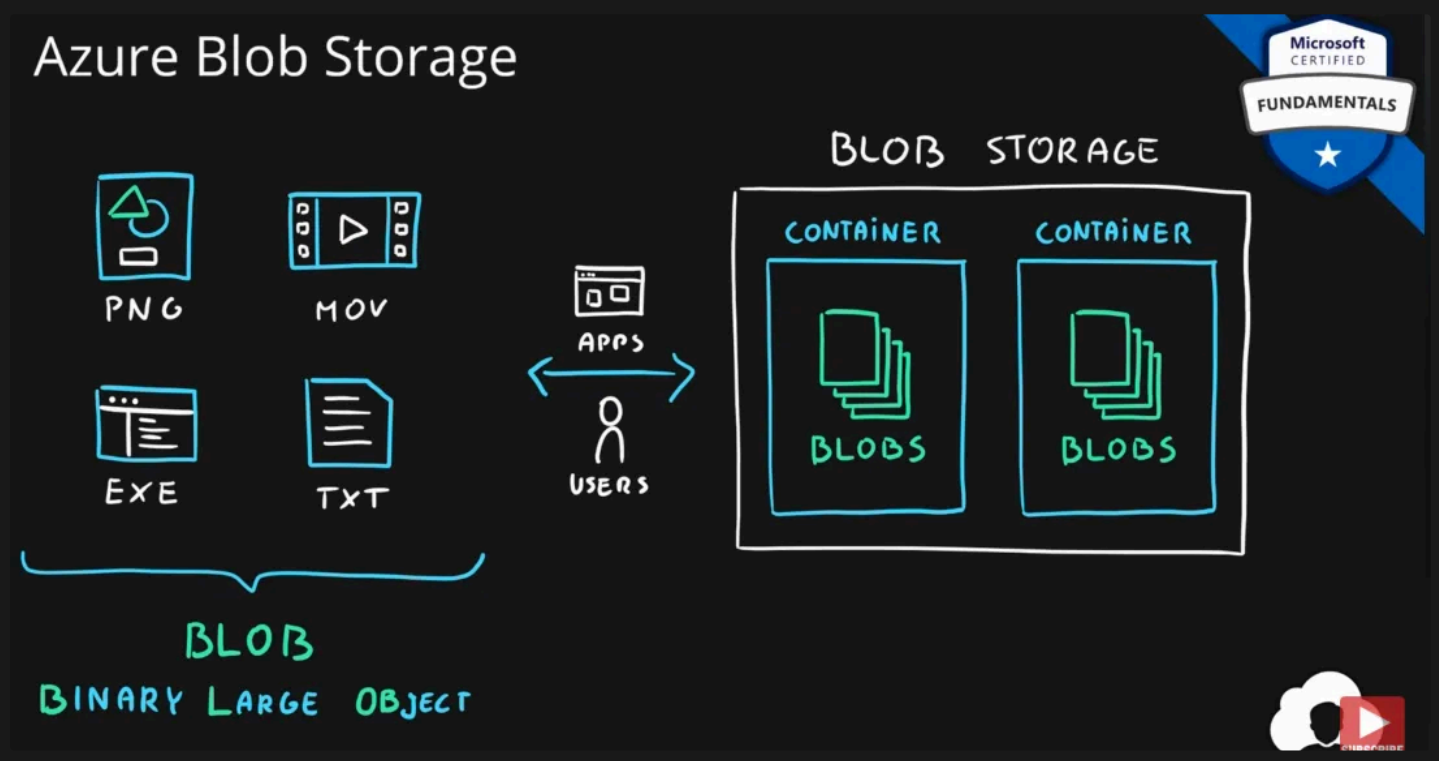
# Azure Storage Services

- Describe the benefits and usage of
  - Blob storage including storage tiers,
  - File storage,
  - Table storage,
  - Queue storage, and
  - Disk storage

## Types of data



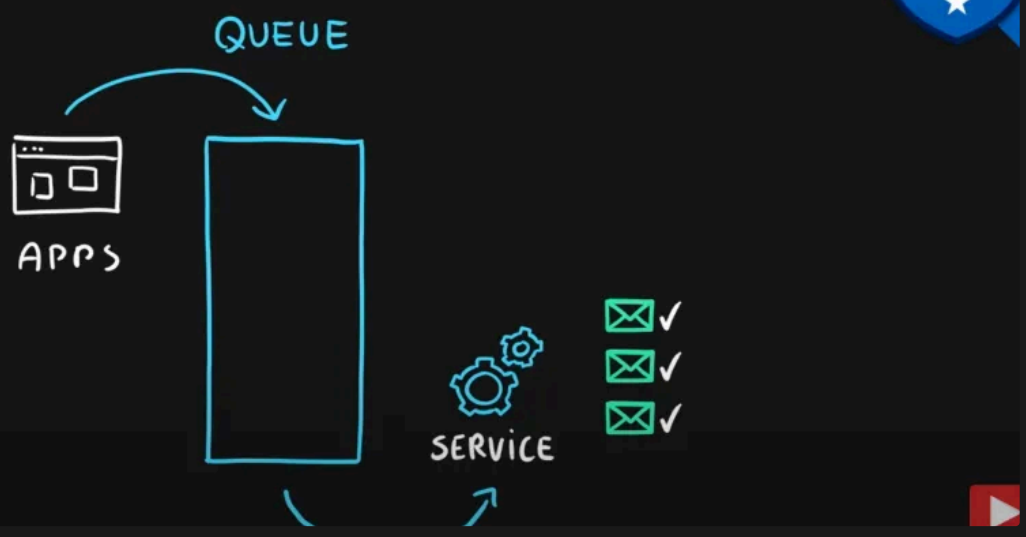

## Azure Blob Storage




## Key Characteristics

- Designed for storage of files of any kind
  (BLOB – Binary Large OBbject – file)
- Three storage tiers
  - Hot – frequently accessed data
  - Cool – infrequently accessed data (lower availability, high durability)
  - Archive – rarely (if-ever) accessed data

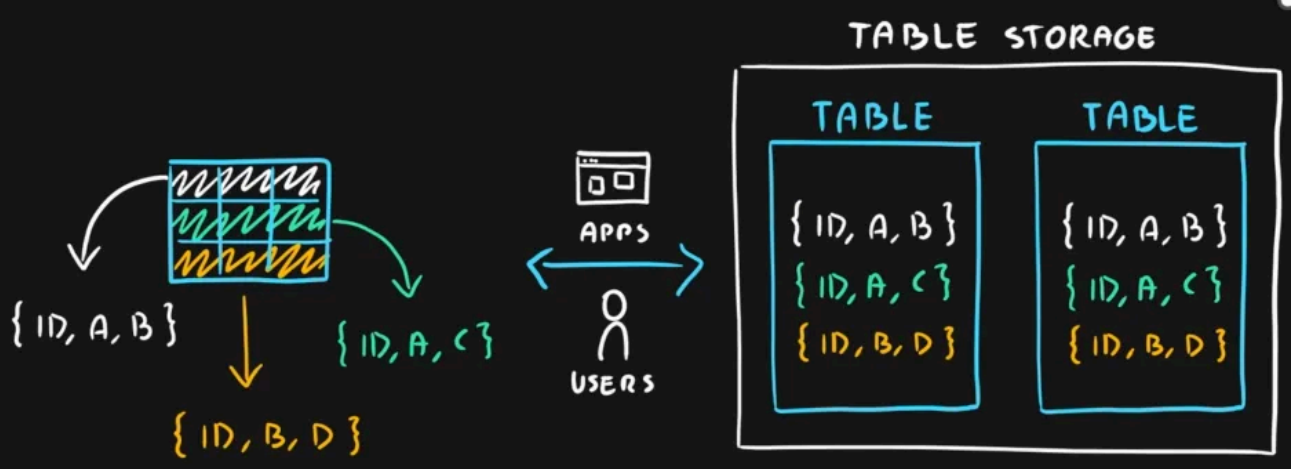
# Azure Queue Storage




## Key Characteristics

- Storage for small pieces of data (messages)
- Designed for scalable asynchronous processing

# Azure Table Storage



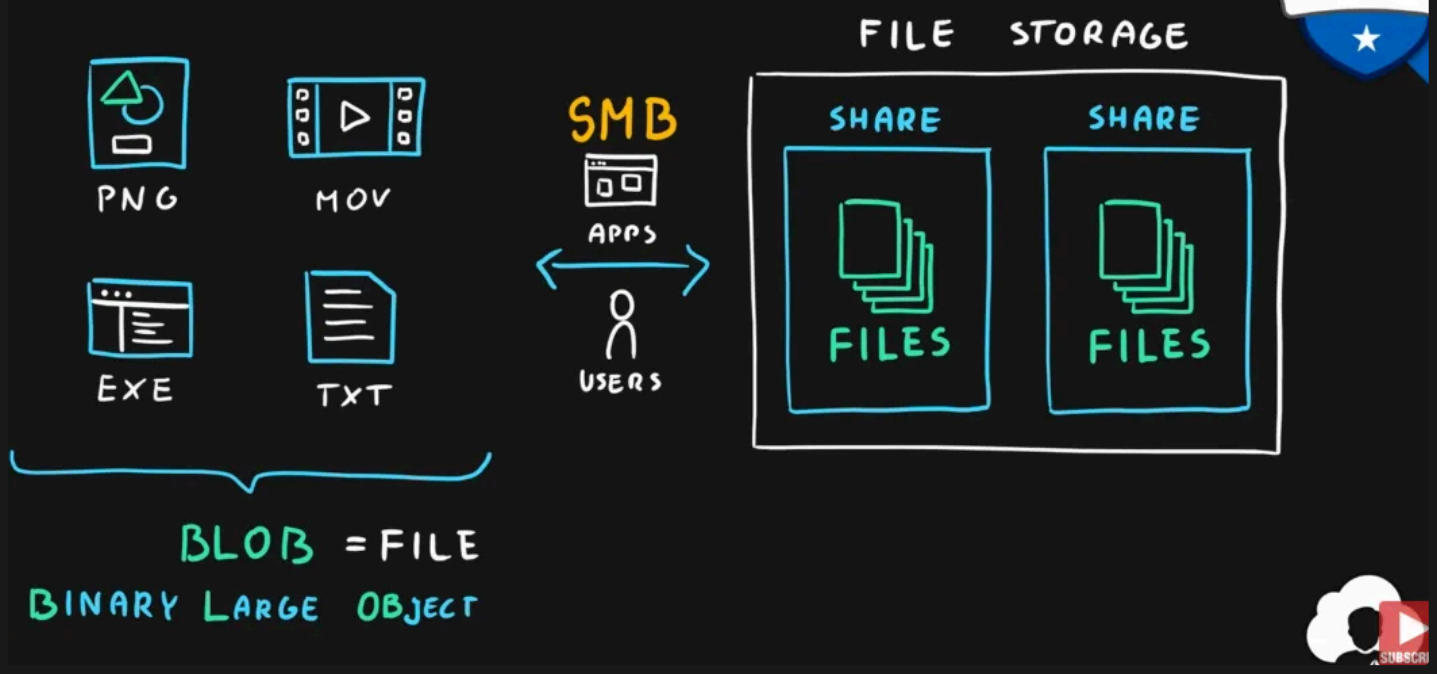

# Azure Table Storage

## Key Characteristics

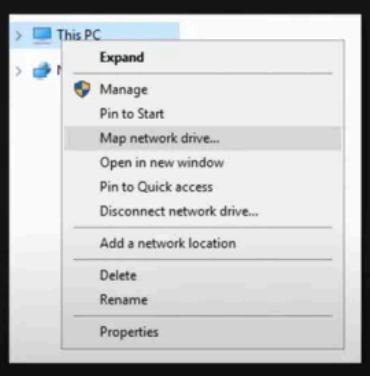
- Storage for semi-structured data (NoSQL)
  - No need for foreign joins, foreign keys, relationships or strict schema
  - Designed for fast access
- Many programming interfaces and SDKs

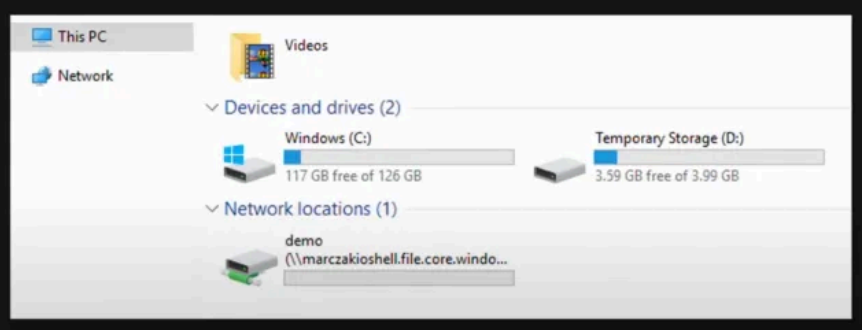
# Azure File Storage

# Azure File Storage




# Azure File Storage



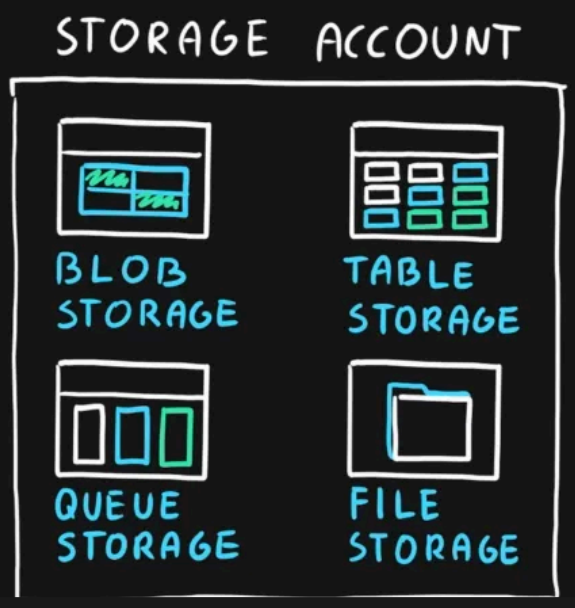




## Key Characteristics

- Storage for files accessed via shared drive protocols
- Designed to extend on-premise file shares or implement lift-and-shift scenarios

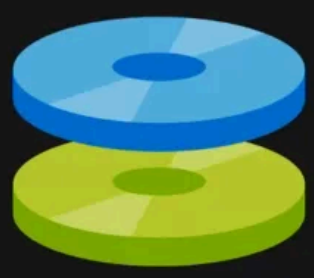
## Azure Storage Account

# Azure Storage Account

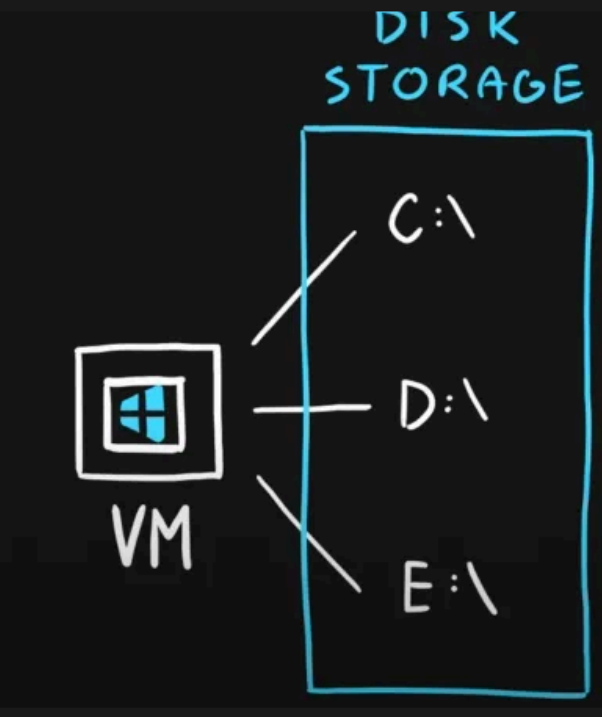



## Key Characteristics

- Group of services which include
  - blob storage,
  - queue storage,
  - table storage, and
  - file storage
- Used to store
  - files,
  - messages, and
  - semi-structured data
- Highly scalable (up to petabytes of data)
- Highly durable (99.999999999% - 11 nines, up to 16 nines)
- Cheapest per GB storage



# Azure Disk Storage



## Key Characteristics

- Disk emulation in the cloud
- Persistent storage for Virtual Machines
- Different
  - sizes,
  - types (SSD, HDD)
  - performance tiers
- Disk can be unmanaged or managed