General-purpose v2 storage accounts support these Azure Storage services:

* Blobs (all types: Block, Append, Page)
* Data Lake Gen2
* Files
* Disks
* Queues
* Tables

General-purpose v1 storage accounts support these Azure Storage services:

* Blobs (all types)
* Files
* Disks
* Queues
* Tables

You should use general-purpose v2 accounts in most cases. You can use general-purpose v1 accounts for these scenarios:

* Your applications require the Azure classic deployment model. General-purpose v2 accounts and Blob storage accounts support only the Azure Resource Manager deployment model.
* Your applications are transaction-intensive or use significant geo-replication bandwidth, but don't require large capacity. In this case, general-purpose v1 may be the most economical choice.

A **BlockBlobStorage** account is a specialized storage account in the premium performance tier for storing unstructured object data as block blobs or append blobs. Compared with general-purpose v2 and BlobStorage accounts, BlockBlobStorage accounts provide low, consistent latency and higher transaction rates.

This type of storage account does not support page blobs, tables, or queues. BlockBlobStorage accounts don't currently support tiering to hot, cool, or archive access tiers.

A **FileStorage** account is a specialized storage account used to store and create premium file shares. This storage account kind supports files but not block blobs, append blobs, page blobs, tables, or queues.

**In Azure, three types of Blobs are supported;**

Append blobs are used for log data and can be up to 195GB in siz

Block blobs store text and binary data up to 4.7TB

Page blobs are used for frequent read and write operations on data. It sizes up to 8TB

Scalability :

Azure SQL database : 99.995%

Database for MYSQL : 99.99%

IOT Hub : It is for bi-directional communication between your IoT application and the devices it manages. It is **PaaS**.

IOT Central : It is **SaaS**

**Big Data** :

Big Data is a term used to describe the collection of millions of data that is large in size and keeps growing exponentially over time.

In Azure, there are many services and tools that deals with Big Data, some of them are defined below:

* 1. Azure Data Lake Analytics : In Data Lake analytics, there is parallel processing which means that same data is processed by two or more processors at the same time.
  2. HDInsight : Azure HDInsight allows storing massive amounts of data easily, efficiently and cost-effectively
  3. Azure Databricks : Azure Databricks is an analytics platform based on Apache Spark, Databricks run and process a dataset on many computers simultaneously. When using Databricks, you do not need a lot of computers nor its maintenance.

Serverless is a **PaaS**.

**Azure Functions** is the compute component of **serverless** services offered by Azure. It is called function as it has a single task to perform every time. Meaning that you can use Functions to write code without having to worry about deploying that code or creating VMs to run your code.

**ASG ( Application Security Group )** provides the security of application and **NSG** provides the security of traffic flow.