7. Explain AWS S3 Storage Classes

Explain “S3 Storage Classes''.

S3 Standard is the default storage class.

S3 Standard-Infrequent Access, or S3 Standard-IA, is designed for the data which requires less frequent access, but with longer storage time than the Standard class

S3 One Zone IA class is a modified version of Standard IA. It stores data only in one availability zone.

S3 Intelligent Tier is ideal if your access patterns are unknown or unpredictable. Intelligent Tiering optimizes storage costs by automatically moving your data between four access tiers when your access patterns change.

S3 Glacier Instant Retrieval is used for archive data that needs immediate access.

As for S3 Glacier Flexible Retrieval - formerly called S3 Glacier- it is for rarely accessed long-term data that does not require immediate access.

S3 Glacier Deep Archive is designed for long-term archive and digital preservation with retrieval in hours at the lowest cost storage in the cloud.

Amazon Simple Storage Service (Amazon S3) is an object-based storage service that offers industry-leading scalability, data availability, security, and performance.

* This means customers of all sizes and industries can use it to store and protect any amount of data for a range of use cases, such as websites, mobile applications, backup and restore, archive, enterprise applications, IoT devices, and big data analytics.
* Amazon S3 provides easy-to-use management features so you can organize your data and configure finely-tuned access controls to meet your specific business, organizational, and compliance requirements.
* Amazon S3 is designed for 99.999999999% (11 9's) of durability, and stores data for millions of applications for companies all around the world.

One of AWS's oldest services, Amazon S3 could be defined as AWS object-based file storage service.

* Amazon S3 stores data in buckets as objects.
* An object consists of a file or metadata that optionally identifies this file.