**Cloud computing**

**Module -3**

1-Different type of cloud storage

🡪**Types of Cloud Storage:**

1. **Object Storage** – Stores data as objects; scalable (e.g., Amazon S3).
2. **Block Storage** – Divides data into blocks; used for databases/VMs (e.g., AWS EBS).
3. **File Storage** – Stores data as files/folders; easy sharing (e.g., Amazon EFS).

2-What is role base access control and identity and access management and MFA

🡪**Role-Based Access Control (RBAC):**  
Grants permissions based on user roles to limit access.

**Identity and Access Management (IAM):**  
Manages **who** can access **what** in a system, using users, roles, and policies.

**Multi-Factor Authentication (MFA):**  
Adds extra security by requiring **two or more** verification steps

3-What is physical and virtual host allocation?

🡪**Physical Host Allocation:**  
Assigning workloads directly to **physical servers**.

**Virtual Host Allocation:**  
Assigning workloads to **virtual machines** running on physical hosts via a **hypervisor**.

4-How to access resource of cloud computing?

🡪**Accessing Cloud Resources:**

1. **Web Portal** – Via browser (e.g., AWS Console, Azure Portal).
2. **CLI (Command Line Interface)** – For advanced users (e.g., AWS CLI).
3. **API** – Programmatic access to cloud services.
4. **SDKs** – For developers to integrate cloud into apps.

5-Type of backup in cloud?

🡪**Types of Backup in Cloud:**

1. **Full Backup** – Copies all data every time.
2. **Incremental Backup** – Backs up only data changed since last backup.
3. **Differential Backup** – Backs up data changed since last **full** backup.
4. **Snapshot Backup** – Captures the state of a system or VM at a point in time.

6-What is disaster recovery?

🡪**Disaster Recovery (DR):**  
A strategy to **restore data and systems** after a failure, cyberattack, or disaster, ensuring business continuity with minimal downtime and data loss.