## **CYBER THREATS**

Cyber threats refer to malicious activities aimed at compromising the integrity, confidentiality, or availability of information systems, networks, or data. These threats can take many forms, including:

- 1. **Malware**: Malicious software like viruses, worms, trojans, ransomware, and spyware designed to damage, disrupt, or gain unauthorized access to computer systems.
- 2. **Phishing**: Deceptive attempts to acquire sensitive information such as usernames, passwords, and credit card details by pretending to be a trustworthy entity in electronic communications.
- 3. **Denial of Service (DoS) and Distributed Denial of Service (DDoS) Attacks**: Efforts to overwhelm a system, network, or website with excessive traffic, rendering it unusable.
- 4. **Man-in-the-Middle (MitM) Attacks**: Interception of communication between two parties by a malicious actor who can alter, intercept, or steal the data being exchanged.
- 5. **SQL Injection**: Exploitation of vulnerabilities in a web application's database layer by inserting malicious SQL queries to access or manipulate data.
- 6. **Zero-Day Exploits**: Attacks targeting vulnerabilities in software that are unknown to the vendor or unpatched, giving the attacker a window of opportunity to exploit.
- 7. **Advanced Persistent Threats (APTs)**: Prolonged and targeted cyberattacks in which an intruder gains access to a network and remains undetected for an extended period, often to steal sensitive data.

- 8. **Insider Threats**: Threats that come from within an organization, often by disgruntled employees or contractors who have access to sensitive data and systems.
- 9. **Ransomware**: A type of malware that encrypts the victim's data and demands a ransom for its release, often leading to significant financial loss and operational disruption.
- 10.**Social Engineering**: Techniques used to manipulate individuals into divulging confidential information, such as passwords or financial data, often through psychological manipulation rather than technical hacking.