I. Computer Security: Lightweight Introduction

What is Cybersecurity?

Cybersecurity is the ability to protect or defend the use of cyberspace from cyber attacks.

What is Cyberspace?

Cyberspace is a global domain of information systems infrastructures including the Internet, telecommunications networks, computer systems and embedded processors and controllers.

In other words – everything involving a computer

Cyberspace includes only the Infrastructure but it doesn't include the information in it. In PISP we protect two things.

1. Infrastructure
2. Data in it (Data in the infrastructure)

What is a Cyber Attack?

An attack for the purpose of disrupting, disabling, destroying, or maliciously controlling a computing environment/infrastructure; or destroying the integrity of the data or stealing controlled information.

Hackers

A hacker is a person who secretly gets access to a computer system in order to get information, cause damage, etc.

Script Kiddies – people just messing around with hacking tools (usually young people)

Hacktivists – hackers with political motivations

Cyber Espionage

Cyber espionage is unauthorized spying by computer. The term generally refers to the deployment of viruses that clandestinely observe or destroy data in the computer systems of government agencies and large enterprises.

Crypto locker - Breaking into computer and encrypt all our files and ask for ransom.

Attackers can do in two ways

1. IP address spoofing - using other people ip address to send some packets/something but it will not become interactive. (One way)
2. Breaking into someone else computer to take control and stay at low.