

DATA BREACH AND CYBER ATTACKS

Submitted by <u>SOURAV</u> 24/48044 + Table of contents

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## What are Cyber Threat?

A cyber threat is a harmful activity committed with the intent of destroying, stealing, or disrupting data, critical systems, and digital life in general. Computer viruses, malware attacks, data breaches, and Denial of Service (DoS) assaults are examples of these risks.



### + From Where do they come?

# Hackers and Cybercriminals

These individuals or groups exploit vulnerabilities in systems and networks for personal gain, such as stealing data, financial information, or intellectual property.

# Malware and Viruses

Malicious software can infect systems, steal data, or disrupt operations.

### + From Where do they come?

# State-Sponsor ed Actors

These individuals or groups exploit vulnerabilities in systems and networks for personal gain, such as stealing data, financial information, or intellectual property.

# 1 Insider Threats

Employees or contractors with access to sensitive information may misuse their privileges for malicious purposes, such as data theft or sabotage.

## Types of Attacks?

Malware	Malicious software designed to harm computer systems or steal data. This includes viruses, worms, ransomware, spyware, and adware.
Phishing	Deceiving users into revealing sensitive information through fraudulent emails or messages disguised as legitimate communications
Denial-of-Service (DoS) Attacks:	Overwhelming a system or network with traffic, making it inaccessible to legitimate users.
Man-in-the-Middle (MitM) Attacks	Intercepting communication between two parties to steal data or inject malicious code.
Insider Threats:	Malicious activities carried out by employees or contractors within an organization.
Ransomware	Encrypting files and demanding a ransom for decryption.

# Data Breaches and Cyber attacks: A Growing Threat

#### **Data Breach**

A data breach occurs when sensitive information is accessed, used, or disclosed without authorization.

This can include personal information like names, addresses, Social Security numbers, credit card details, and medical records. Data breaches can have severe consequences, including identity theft, financial loss, reputational damage, and legal liabilities.

## Cyber Attack!

A cyberattack is a malicious and deliberate attempt by an individual or organisation to breach the information system of another individual or organisation.

### The Connection Between Data Breaches and Cyber Attacks

Cyberattacks are often the root cause of data breaches. Hackers may exploit vulnerabilities in systems and networks to gain unauthorized access to sensitive information.

Once they have access, they can steal, modify, or delete data.

### **Prevention and solutions**



Strong Passwords



Regular Software Update



Firewall Protection



Data Encryption



Multi-Factor Authenticat ion (MFA)



**Backup data** 



**Employee Training** 





Antivirus and Anti-Malware Software

## Thanks!

Do you have any questions?

SOURAV 24/48044

### Sources

- 1.PreyProject
- 2.CDSPI.com
- 3.Crowdstrike 4.CISCO