#### WHAT IS CYBERSECURITY?

It can be rightfully said that today's generation lives on the internet, and we general users are almost ignorant as to how those random bits of 1's and 0's reach securely to our computer. For a hacker, it's a golden age. With so many access points, public IP's and constant traffic and tons of data to exploit, black hat hackers are having one hell of a time exploiting vulnerabilities and creating malicious software for the same. Above that, cyber-attacks are evolving by the day. Hackers are becoming smarter and more creative with their malware and how they bypass virus scans and firewalls still baffles many people.

Therefore there has to be some sort of protocol that protects us against all these cyber attacks and make sure our data doesn't fall into the wrong hands. This is exactly why we need cybersecurity.

Cybersecurity refers to a set of techniques used to protect the integrity of networks, programs and data from attack, damage or unauthorized access

This cyber security is important due to following three reasons...

- Unauthorised Access
- Unauthorised Deletion
- Unauthorised Modification

# TYPES OF CYBER SECURITY

There are 5 types related to cyber security

### 1. Critical infrastructure security:

Critical infrastructure security consists of the cyber-physical systems that modern societies rely on.

Common examples of critical infrastructure:

- traffic lights
- shopping centers

### 2. Application security:

Application security uses software and hardware methods to tackle external threats that can arise in the development stage of an application.

Types of application security:

- antivirus programs
- firewalls
- encryption programs

### 3. Network security:

Network security ensures that internal networks are secure by protecting the infrastructure and inhibiting access to it.

# 4. Cloud security:

Cloud security is a software-based security tool that protects and monitors the data in your cloud resources. Cloud providers are constantly creating and implementing new security tools to help enterprise users better secure their data.

### 5. Internet of things (IoT) security

IoT refers to a wide variety of critical and non-critical cyber physical systems, like appliances, sensors, televisions, wifi routers, printers, and security cameras.