By: Imran Afzal

Introduction to Computer Security

The Internet has transformed our lives in many good ways. Unfortunately, this vast network and its associated technologies also have brought in their wake, the increasing number of security threats. The most effective way to protect yourself from these threats and attacks is to be aware of standard cybersecurity practices. This article on "What is Computer Security?" presents an introduction to computer security and its key concepts.

- What is Computer Security?
- Computer Security Threats
- Best computer security practices

What is computer security?

Computer security basically is the protection of computer systems and information from harm, theft, and unauthorized use. It is the process of preventing and detecting unauthorized use of your computer system.

Information security is securing information from unauthorized access, modification & deletion Computer Security means securing a standalone machine by keeping it updated and patched. Cybersecurity is defined as protecting computer systems, which communicate over the computer networks

So, Computer security can be defined as controls that are put in place to provide confidentiality, integrity, and availability for all components of computer systems. Let's elaborate the definition. Components of computer system

The components of a computer system that needs to be protected are:

Hardware, the physical part of the computer, like the system memory and disk drive Firmware, permanent software that is etched into a hardware device's nonvolatile memory and is mostly invisible to the user Software, the programming that offers services, like operating system, word processor, internet browser to the user

Linux Security
Linux is an open source operating system whose code can be easily be read by the users, but still, it is the more secure operating system when compared to the other OS.

The need of Linux security arises for 2 reasons
- Internal = No access to outside world (protect from your own mistakes)
- External = Serving outside services such as, http, ftp, ftp etc.

OS Hardening
- OS security or hardening used interchangeably
- In simple words, hardening is used when making the OS so hard to break