

CYBER SECURITY



Introduction

- The term cyber security is used to refer to the security offered through on-line services to protect your online information.
- With an increasing amount of people getting connected to Internet, the security threats that cause massive harm are increasing also.



To Understand

What is the
meaning of
the word
CYBER

What is the need
of Cyber Security

What are the
security
problems in
Cyber field

How to
implement and
maintain
Security of a
Cyber field
around us.

Meaning of the Word **CYBER**

- It is a combining form relating to information technology, the Internet, and virtual reality.



Need of cyber security

- Cyber security is necessary since it helps in securing data from threats such as data theft or misuse, also safeguards your system from viruses.



Major security problems

- ☐ Virus
- ☐ Hacker
- ☐ Malware
- ☐ Trojan horses
- ☐ Password cracking



Viruses and Worms

- A Virus is a “program that is loaded onto your computer without your knowledge and runs against your wishes



Solution

- Install a security suite that protects the computer against threats such as viruses and worms.





Hackers

- In common a **hacker** is a person who breaks into computers, usually by gaining access to administrative controls.



Types of Hackers

☐ White Hat Hacker

☐ Grey Hat Hacker

☐ Black Hat Hacker



How To prevent hacking

- It may be impossible to prevent computer hacking, however effective security controls including strong passwords, and the use of firewalls can helps.



Malware

- The word "malware" comes from the term "**MAL**icious soft**WARE**."
- Malware is any software that infects and damages a computer system without the owner's knowledge or permission.



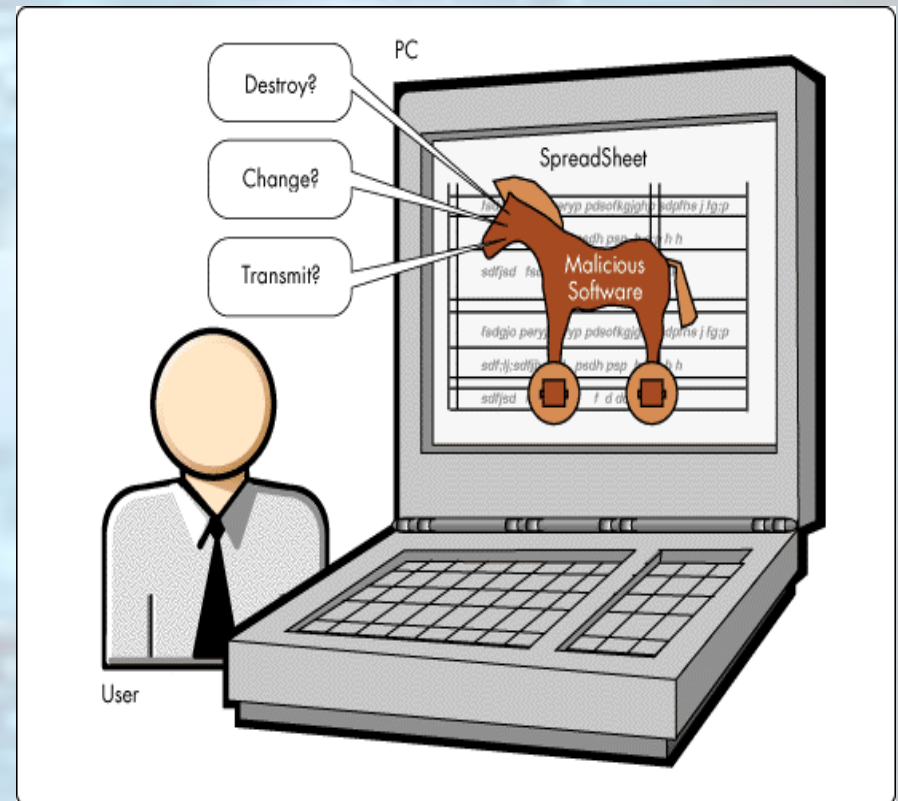
To Stop Malware

- Download an anti-malware program that also helps prevent infections.
- Activate Network Threat Protection, Firewall, Antivirus.



Trojan Horses

- ❑ Trojan horses are email viruses that can duplicate themselves, steal information, or harm the computer system.
- ❑ These viruses are the most serious threats to computers



How to Avoid Trojans

- Security suites, such as Avast Internet Security, will prevent you from downloading Trojan Horses.



Password Cracking

- Password attacks are attacks by hackers that are able to determine passwords or find passwords to different protected electronic areas and social network sites.



Securing Password



- ❑ Use always Strong password.
- ❑ Never use same password for two different sites.



Cyber Security Is Everyone's Responsibility

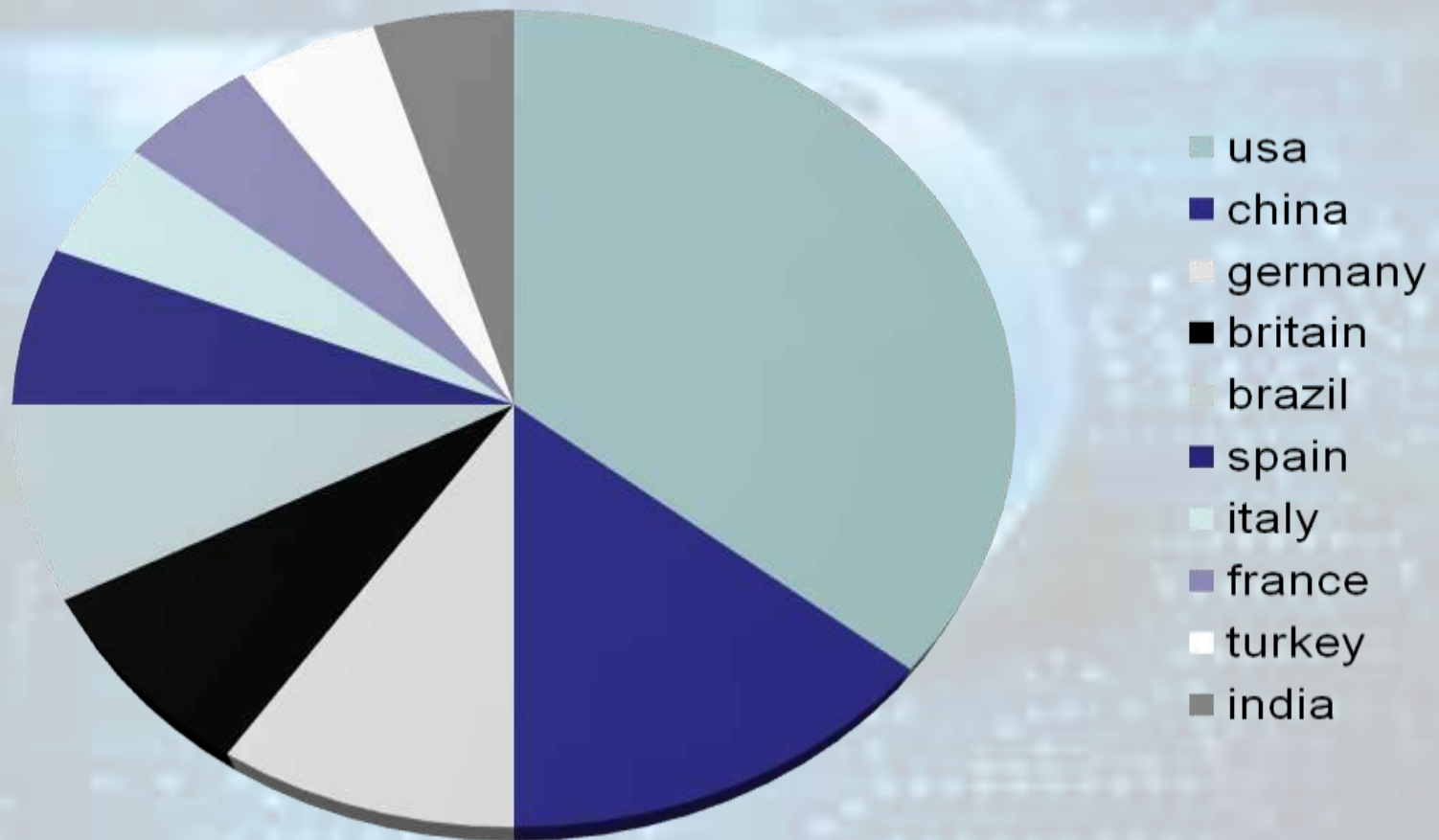


Cyber Security Strategy – India

- **Security Policy, Legal Framework**
 - IT Act, 2000
 - IT (Amendment) Bill, 2006 – Data Protection & Computer crimes
- **Capacity building**
 - Skill & Competence development
- **Research and Development**
 - Cyber Monitoring
 - Network Security
- **International Collaboration**



India stands 10th in the cyber crime in the world



8 Biggest Cyber Attacks in 2012



One Cyber Theft
hacked the information of
24 MILLION
Zappos/Amazon customers



65 MILLION
Linkedin Passwords
were put at risk AND
30,000
Passwords were cracked



198 MILLION
Android owners memory cards
AT RISK
by malicious link or app.



1.5 MILLION
Card Numbers were
STOLEN



1.5 MILLION
eHarmony Passwords
were stolen in 2012



Security Hole
discovered allows
Hackers
to install malicious software on
Windows computers



27 MILLION
user account compromised
Hackers Obtained
users, passwords, credit card number



1,656,227
computer Viruses, worms &
Trojans
were found

Thank You!

