

Malware

Malware refers to a group of computer programs designed to work against the requirements of a user's computer for the purposes of causing harm. Those who spread malware are called "hackers." There are several different classes of malware. Malware is a significant problem throughout the world resulting in billions of dollars in damages to individuals and businesses every year. Below is a summary of some of the most common forms of malware.

Viruses – These are computer programs that replicate and modify other programs by inserting code. Viruses typically target individual computers.

Worm – A worm is a malicious program that replicates itself in order to spread to other computers, often in a single network. Worms target groups of connected computers on a network.

Trojan Horse – A Trojan horse is a malicious program designed to trick a user about its true intent. Trojan horses typically show up in e-mail attachments or drive-by downloads. They often create "backdoors" which allows the creator unauthorized access to a user's computer.

Ransomware – Ransomware is a malicious program that encrypts the files on a user's computer so they are unreadable. These files can only be retrieved if the user agrees to pay a ransom (usually in Bitcoin) within a specified amount of time to obtain a decryption key. Decryption without the key is impossible.

Spyware – Spyware is a type of malicious program covertly installed on a user's computer to collect important information such as credit card numbers or passwords.

Scareware – Scareware is a type of malicious program designed to scare people into buying unwanted programs such as anti-virus software. Scareware typically comes in the form of warnings or alerts that the user's computer is infected with a virus and the purchase of software is the only way to save the computer.

- 1. Which of the following malware programs is designed to spread from computer to computer on the same network?**
 - A. Trojan horse
 - B. Worm
 - C. Spyware
 - D. Virus

- 2. What is a “backdoor?”**
 - A. A program that shows the user false alerts
 - B. A program that demands payment
 - C. A method for a hacker to retain access to a user’s computer
 - D. A program that replicates itself and causes harm to a computer

- 3. What does a decryption key do?**
 - A. Allows a user to read his or her files again
 - B. Makes files unreadable
 - C. Allows a user to find the identity of a hacker
 - D. Collects information about users that can be seen by hackers

- 4. I got a message on my computer that reads “Your computer is infected! Purchase Tom’s Anti-Virus right now for \$69.99 to clean your computer.” I probably have:**
 - A. A backdoor
 - B. A worm
 - C. Scareware
 - D. Ransomware

- 5. I got an e-mail with the message “Download attachment to redeem \$5,000!” If I click, I would likely install a _____ on my computer.**
 - A. Trojan Horse
 - B. A worm
 - C. Scareware
 - D. Spyware

- 6. What is not true about ransomware?**
 - A. Files can sometimes be decrypted without a key
 - B. Hackers usually demand bitcoin payments
 - C. Users typically must pay within a certain time frame
 - D. Ransomware makes files unreadable

7. Juan found some suspicious charges on his credit card. Which of the following malware programs could be the culprit?

- A. Worm
- B. Trojan Horse
- C. Scareware
- D. Spyware