***Read the text and pay attention to the new words.***

**INTERNET SECURITY**

**MALWARE**

The Internet provides a wide variety of opportunities for communication and development, but unfortunately it also has it dark side. **Hackers** are computer criminals who use technology to perform a variety of crimes: **virus propagation**, **fraud**, **intellectual property theft**, etc. Hackers differentiate themselves into three groups:

**A white hat hacker,** upon finding some **flaw** in a system, will report the flaw to the vendor of that system. For example, if a white hat hacker discovered some flaw in Red Hat Linux, he would then email the Red Hat company (probably anonymously) and explain exactly what the flaw is and how it was **exploited.** White hat hackers are often hired specifically by companies to do **penetration tests**.

**A black hat hacker** is the person normally depicted in the media. Once he/she gains access to a system, his/her goal is to cause some type of harm. He/she might steal data, erase files, or **deface** websites. Black hat hackers are sometimes referred to as crackers.

**A gray hat hacker** is normally a **law-abiding** citizen, but in some cases will **venture** into illegal activities.

Internet-based crimes include **scam**, email fraud to obtain money or valuables and **phishing**, bank fraud, to get banking information such as password of Internet bank account or credit card details. Both crimes use emails or websites that look like those of real organizations.

Due to its anonymity, the Internet also provides the right environment for cyber stalking, online harassment or abuse, mainly in chat rooms or newsgroups**. Piracy,** the illegal copying and distribution of **copyrighted software**, information, music and video files, is widespread.

Malware (malicious software) is software created to damage or **alter** the computer data or its operations. These are main types:

**- Viruses** are programs that spread by attaching themselves to executable files or documents. When the infected program is run, the virus **propagates** to other files or programs on the computer. Some viruses are designed to work at a particular time or on a specific date, for example on Friday 13? An email virus spreads by sending a copy of itself to everyone in an email address book.

**- Worms** are self-copying programs that have the capacity to move from one computer to another without human help, by exploiting security flaws in computer networks. Worms are **self-contained** and don t need to be attached to a document or program the way virus do.

**- Trojan horses** are malicious programs **disguised** as **innocent**-looking files or **embedded** within legitimate software. Once they are activated, they may affect the computer in a variety of ways: some are just annoying, others are more **ominous**, creating a backdoor to the computer which can be used to collect stored data. They don’t copy themselves or **reproduce** by infecting other files.

**- Spyware**, software designed to collect information from computers for commercial or criminal purposes, is another example of malicious software. It usually comes hidden in fake freeware or shareware applications downloadable from the Internet.

**Exercise 1. Answer the questions.**

1. What crimes can be conducted on the Internet?
2. What types of hackers could you name? What’s the difference?
3. What is malware?
4. What types of malware can you differentiate?
5. Have you ever been a victim of hackers? Tell about your experience.

**Exercise 2. Identify the Internet crimes sentences (1-6) refer to. Then match them with the advice below (a-f)**

|  |  |
| --- | --- |
| 1. Crackers try to find a way to copy the latest game or computer program. | A. Be suspicious of wonderful offers. Don't buy if you aren't sure. |
| 2. A study has revealed that half a million people will automatically open an email they believe to be from their bank and happily send off all their security details. | B. People shouldn't buy cracked software or download music illegally from the Internet. |
| 3. This software's danger is hidden behind an attractive appearance. That's why it is often wrapped in attractive packages promising photos of celebrities like Anna Kournikova or Jennifer Lopez. | C. It's dangerous to give personal information to people you contact in chat rooms. |
| 4. There is a particular danger in Internet commerce and emails. Many people believe they have been offered a special gift only to find out later they have been deceived. | D. Don't open attachments from people you don't know even if the subject looks attractive. |
| 5. 'Nimda' spreads by sending infected emails and is also able to infect websites, so when a user visits a compromised website, the browser can infect the computer. | E. Scan your email and be careful about which websites you visit. |
| 6. Every day, millions of children spend time in Internet chat rooms talking to strangers. But what many of them don't realize is that some of the surfers chatting with them may be sexual predators. | F. Check with your bank before sending information. |

**Exercise 3. Make the right choice.**

1. Internet-based crimes include scam, email fraud \_\_\_\_\_\_\_\_\_ money or valuables.

|  |  |
| --- | --- |
| a) to transfer | c) to make |
| b) to obtain | d) to earn |

2. Piracy , the illegal copying and distribution of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |
| --- | --- |
| a)self-copying programs | c) malicious software |
| b)email attachments | d) copyrighted software |

3. Viruses are programs that spread by attaching themselves to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| a)shareware applications | c) email attachments |
| b)backup copies | d) executable files or documents |

4. When the infected program is run, the virus \_\_\_\_\_\_\_\_\_\_\_to other files or programs on the computer

|  |  |
| --- | --- |
| a)includes | c) provides |
| b)propagates | d) obtains |

5. Install a\_\_\_\_\_\_\_\_\_\_\_, a program designed to prevent spyware from gaining access to the internal network.

|  |  |
| --- | --- |
| a)self-copying programs | c) firewall |
| b)backup copy | d) shareware application |

6. Spyware usually comes hidden in \_\_\_\_\_\_\_\_\_\_\_ downloadable from the Internet.

|  |  |
| --- | --- |
| a)fake freeware | c) copyrighted software |
| b)self-copyingprograms | d) legitimate software |

7. Worms are \_\_\_\_\_\_\_\_\_\_and don't need to be attached to a document or program

|  |  |
| --- | --- |
| a)embedded | c) self-contained |
| b)hidden | d) downloadable |

8. Trojan horses are malicious programs \_\_\_\_\_\_\_\_\_\_\_ as innocent-looking files*.*

|  |  |
| --- | --- |
| a)downloaded | c) embedded |
| b)disguised | d) included |

**Exercise 4. Answer the questions.**

1. What do you do to prevent computer infections?

2. Do you keep your virus protection update? What should you do to improve your computer security?

**Exercise 5. Solve the anagrams by reading the clues and putting the letters in order to form words. Learn the words which are connected with digital security.**

1. Software that collects information from computers secretly…….…..…YEARSPW

2. Illegal copying and distribution of copyrighted content ………………..IYARCP

3. A self-contained and self-copying virus………………………………..MRWO

4. What a computer gets when it has caught a virus……………………...OIIECFNNT

5. A program that helps computers prevent undesirable access………….AIELLWRF

6. Internet crime of obtaining money or possessions……………………..AMCS

7. What dishonest people do with information or money…………………AELTS

8. The law that Internet pirates break…...………………..YOIPRCTHG

9. A disguised or embedded virus…………………...……AONJRT

10. What a person doing illegal things on the net is………IIALMNRC

11. What viruses do to a computer…………………………EAAMGD

12. Actions that are against the laws ………………………..EAILLLG

13. Software which aims to do harm to computers…………EAARWLM

14. The crime of getting bank information…………………..IIGNHHSP

15. Harmful programs that spread over the net………………UIRSV

16. The crime of deceiving people to gain something….……UADRF

17. The crime of stealing……………..……………………….ETTFH

18. A group of letters or numbers that gives access to a system…………...OADRPSSW

**Exercise 6. Translate into English.**

**Зачем нужен брандмауэр?**

Брандмауэр защищает компьютер от проникновения хакеров или вредоносных программ (например, червей) по сети или через Интернет. Брандмауэр также помогает предотвратить отправку программ на другие компьютеры.

Даже если вы считаете, что на компьютере нет ничего интересного для посторонних, вредоносные программы (сетевые черви) могут сделать ваш компьютер полностью неработоспособным, а также кто-то может воспользоваться им для рассылки подобных программ или вирусов другим компьютерам без вашего ведома.