

# سازمان سما

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## وابسته دانشگاه آزاد اسلامی

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### دانشگاه سما واحد حاجی آباد



# زبان تخصصی مهندسی کامپیوتر

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منبع : زبان تخصصی دکتر حسن پور

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# زبان تخصصی مهندسی کامپیوتر

درس نهم:

**Digital Crimes and Criminals**

# Part I- Writing Development:

## Supporting topic sentences with comparison

- در ادامه استفاده از مفهوم مقایسه برای توسعه پاراگراف، در این درس به دو شیوه دیگر از بکارگیری ساختار مقایسه ای در نوشتن جمله میپردازیم :

**A. Predicate structures** (to resemble; to have (noun) in common; there are similarities)

### Examples:

The popularity of computer crimes virtually *resembles* human crimes.

Computer crimes and human crimes *have many features in common*.

*There are many similarities* between human and computer crimes.

## **B. Sentence connectors** (similarly; likewise; in the same way)

### **Examples:**

There are laws governing human crimes; *similarly*, there are some laws controlling computer crimes.

There are laws governing human crimes; *likewise*, there are some laws controlling computer crimes.

There are laws governing human crimes; *in the same way*, there are some laws controlling computer crimes.

# Part II-Vocabulary

## Subject to (adj)

مشمول

- likely or prone to be affected by.

## Devastate (v)

خراب کردن، تاراج کردن

- Destroy or ruin (something): *a huge earthquake devastated the city*

## Emerge (V)

پدیدار شدن،

- Move out of or away from something and come into view: *black ravens emerged from the fog.*

## Defraud (v)

کلاه برداری مردن ، گول زدن

- Illegally obtain money from (someone) by deception: *he used a false identity to **defraud** the bank for thousands of dollars*

### Theft (n)

دزدی

- The action or crime of stealing: *he was convicted of theft | the latest theft happened at a garage.*

### Multitude (n)

جمعیت کثیر، گروه بسیار

- A large number: *a multitude of medical conditions are due to being overweight.*

### Assault (n)

تجاوز به حقوق

- Make a physical attack on: *he pleaded guilty to assaulting a police officer*

### Anonymity (n)

بی نامی

- (Of a person) not identified by name; of unknown name: *an anonymous phone call.*

## **Part III– Reading**

# **COMPUTER CRIMES AND IT ETHICS**



# Section 1: Pre-reading Questions

- What are computer crimes?
- How can a theft defraud through a computer?
- How can computer engineers prevent defrauding digitally?

## Section 2: Reading Passage

Computer crime is a phenomenon that has been recently **threatening** our society. There are few laws **governing** computer crimes, and those existing laws are **subject to** a variety of interpretations. Hence, computer users all need to be aware of different IT crimes to stay safe from any digital crimes.

A brief overview of some of the more common computer crime cases is stated here. Early computer crimes often involved direct physical damage to computer systems and to the long-distance telephone networks. For example, in 1970, a bomb killed one and injured three people, and **devastated** \$16 million worth of computer data stored in the University of Wisconsin. One of the most common forms of computer crime since the start of electronic data processing is data **diddling** - illegal or unauthorized data **alteration**. These changes can occur before and during data input or before output. Data diddling cases have included banks' records, payrolls, **inventory data**, credit card records, **school transcripts**, telephone switch configurations, and virtually all other applications of data processing.

تهدید کردن - نظارت کردن - دست کاری داده - تغییر - فهرست اموال - رونوشت مدرسه

As the impact of computers increases all around the **globe**, other forms of computer crimes emerged. In the **Salami technique** of computer crime, criminals steal money or resources a bit at a time. There were documented cases of Salami **frauds** in the 1970s and 1980s. However, one of the more striking incidents appeared in January 1993, when four **executives** of a Value Rent-a-Car **franchise** in the state of Florida, U.S were **charged** with **defrauding** at least 47,000 customers using a Salami technique. The federal **grand jury** in the city of Fort Lauderdale claimed that the **defendants** modified a computer-billing program to add five extra gallons to the actual gas tank capacity of their vehicles. From 1988 to 1991, every customer, who returned a car without topping it off, ended up paying inflated rates for an inflated total of gasoline. The **thefts** ranged from \$2 to \$15 per customer-rather thick slices of Salami but nonetheless difficult for the victims to detect. Thus, stealing is generally considered morally wrong; the Koran, Bible, and Torah all agree on this. It is typically against the law and considered unethical.

کره (زمین) - دنباله ای از خلاف های کوچک - اغفال، تقلب - مدیر اجرایی - امتیاز (حق العمل) - متهم شدن - هیئت منصفه - مدافع



Developing computer viruses or computer worms are other forms of computer crime. There might be different reasons in developing these malwares. The effect of viruses on a computer ranges from the non-damaging, yet **annoying**, display of pieces of message on a computer screen, to serious damage such as **corrupting** programs, deleting files, or reformatting your hard drive. Since viruses are **intentionally** developed to alter the way a computer operates, creating or spreading a computer virus without the permission is morally unacceptable.

Hacking computer systems and web sites are other forms of technological trouble in our society. A hacker seeks and **exploits** weaknesses in a computer system or computer network for any illegal access. Hackers may be **motivated** by a multitude of reasons, such as profit, **protest**, or challenge. One of the major motivators for unauthorized access is industrial **espionage**. The incidents of physical abuse of computer systems did not stop as other forms of computer crime increased. In 2001, a report from Wired Magazine stated that one in every four computers has been physically assaulted by its owner, according to the 4,200 respondents.

مزاحم شدن - خراب کردن - عمداً - بهره برداری کردن - برانگیختن، ترغیب کردن - اعتراض - جاسوسی

## *1. Computer and IT ethics*

**Ethics** is a set of moral principles that govern the behavior of a group or individual. Therefore, computer ethics is a set of moral principles that regulate the use of computers. Some common issues of computer ethics include **intellectual property** rights (such as copyrighted electronic content), privacy concerns, and how computers affect society. For example, while it is easy to duplicate copyrighted electronic (or digital) content, computer ethics would suggest that it is wrong to do so without the author's **approval**. And while it may be possible to access someone's personal information on a computer system, computer ethics would advise that such an action is unethical.

As technology advances, computers continue to have a greater impact on our society. Therefore, computer ethics **promotes** the discussion of how much influence computers should have in areas such as artificial intelligence and human communication. As the world of computers evolves, computer ethics continues to create ethical standards that address new issues **raised** by new technologies.

اخلاق - مالکیت معنوی - تایید - ترغیب کردن - رخ دادن، به وجود آوردن



Information technology, computers, and networks do not raise new ethical issues. Stealing is always considered as stealing and so is **stalking**. However, the Internet does contribute to a **fascinating** sense of **anonymity** focusing on the notion that no one can see or find out what we are doing. When people think of ethics, they often think of personal values. While personal values are a large part of ethics, because of the rapid advancement of information technology, a redefinition of ethics occurs. The redefinition of ethics includes the non-human element in the computer. The purpose of ethics in information security is not just philosophically important, and it can also mean the **survival** of a business or an industry.

The ethical issues are not solely in the use of computer system or software. There are similar codes of ethics in designing and creating computer systems and computer software. For example, the ethical expectations of computer architects are similar to that of physical architects who design houses. If you paid someone, for instance, to design a house, you would expect him to have an ethical responsibility to address threats relating to the geographical area such as earthquake. Once a computer engineer is **hired** to design and build a new system, it is appropriate to build a system within the requirements defined to withstand a computer crack or virus attack.

در کمین بودن - مجذوب کردن - بقاء - به خدمت گرفتن (استخدام کردن) - تحمل کردن - رخنه، شکاف

## Part IV- Reading comprehension

**Mark each statement as T (True), F (False), or NG (Not Given) to the information in the reading comprehension passage.**

1. Enough laws exist to prevent digital crimes.
2. A bomb killed and injured a few people and destroyed a lot of digital data in the late 20<sup>th</sup> century.
3. Computer crimes are not dependent on the increasing important roles of computers.
4. To make money, a computer expert intentionally creates viruses.
5. Hackers have multiple reasons to break down a computer system.
6. Computer ethics is not as important as it has been paid close attention in society.
7. Most people consider ethics as a personal value based on the passage.
8. A computer engineer should not be as careful as an architect while designing a system.