

Laborator 1

Securitatea Sistemelor Informatice

1.

A -> 3

B -> 1

C -> 5

D -> 2

E -> 4

3.

Ziua de nastere: 20

$20 + 10 = 30$

$30 = 16 + 8 + 4 + 2 = 2^4 * 1 + 2^3 * 1 + 2^2 * 1 + 2^1 * 1 + 2^0 * 0$

$\Rightarrow 30$ in baza 10 = 11110 in baza 2

$11110 \rightarrow 2^4 * 1 + 2^3 * 1 + 2^2 * 1 + 2^1 * 1 + 2^0 * 0 = 16 + 8 + 4 + 2 + 0 = 30$

Numar oarecare in baza 16: A9E2

A 9 E 2 -> 1010 1001 1110 0010

1010 1001 1110 0010 -> A 9 E 2

Am folosit <https://www.unitconverters.net/numbers/base-16-to-base-2.htm>.

4.

THEODOR -> 84 72 69 79 68 79 82

66 82 65 86 79 -> BRAVO

Am folosit <https://onlinestringtools.com/convert-ascii-to-string> si <https://onlinestringtools.com/convert-string-to-ascii>.

5.

TUDORACHE -> VFVET1JBQ0hF

U3VudCBzdHVkZW50IGxhIEZNSS4= -> Sunt student la FMI.

Am folosit <https://www.base64encode.org/> si <https://www.base64decode.org/>.

6.

Malware -> is any software intentionally designed to cause damage to a computer, server client, or computer network.

Virus -> a malicious software program loaded onto a user's computer without the user's knowledge and performs malicious actions.

Dropper -> a malicious program designed to deliver other malware to a victim's computer.

Downloader -> a malicious program designed to download and install other malware to a victim's computer.

Trojan -> a type of malware that downloads onto a computer disguised as a legitimate program.

Spyware -> software with malicious behavior that aims to gather information about a person or organization and send it to another entity in a way that harms the user.

Riskware -> legitimate programs that pose potential risks due to security vulnerability, software incompatibility, or legal violations.

Ransomware -> malicious software that threatens to publish or blocks access to data or a computer system, usually by encrypting it, until the victim pays a ransom fee to the attacker.

Adware -> software that displays unwanted (and sometimes irritating) pop-up adverts which can appear on your computer or mobile device.

Worm -> a type of malware that spreads copies of itself from computer to computer. A worm can replicate itself without any human interaction, and it does not need to attach itself to a software program in order to cause damage.

Obfuscation -> the process to making something difficult to understand. Code is often obfuscated to protect intellectual property or trade secrets and to prevent an attacker from reverse engineering a proprietary software program.

7.

