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November 17, 2020

Cybersecurity HW#10

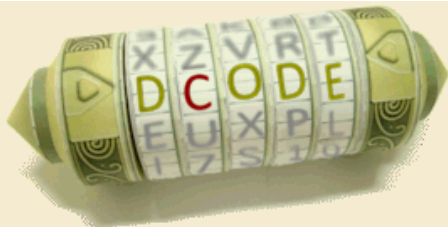
Cryptography Homework

Deliverable

- Below you will find screenshots of each riddle solution, the keys generated, and the final proof that the ransomware has been decrypted.
- **Riddle 1 Screenshot:**

Solution: `ozcjmz = gruber`

Key 1: `6skd8s`



Search for a tool

★ SEARCH A TOOL ON DCODE BY KEYWORDS:

Results



Caesar Cipher – Shift by 8
IJKLMNOPQRSTUVWXYZABCDEFGH
ABCDEFGHIJKLMNOPQRSTUVWXYZ

gruber

Caesar Cipher - [dCode](#)

Tag(s) : Substitution Cipher

Share



dCode and more

dCode is free and its tools are a valuable help in games, maths, geocaching, puzzles and problems to solve every day!

A suggestion ? a feedback ? a bug ? an idea ? *Write to dCode!*

CAESAR CIPHER

Cryptography · Substitution Cipher · Caesar Cipher

CAESAR CIPHER DECODER

★ CAESAR SHIFTED CIPHERTEXT

☒ KNOWING THE SHIFT:

☐ TEST ALL POSSIBLE SHIFTS (BRUTE-FORCE ATTACK)

See also: [ROT Cipher](#) – [Shift Cipher](#)

WITH A CUSTOM ALPHABET

★ ALPHABET

★ USE THE ASCII TABLE AS ALPHABET ☐

CAESAR ENCODER

★ CAESAR CODE PLAIN TEXT

★ KNOWING THE SHIFT:

★ ALPHABET

See also: [ROT Cipher](#) – [Roman Numerals Conversion](#) – [Vigenere Cipher](#)

RIDDLE 1

Riddle 1

Congrats, you have solved the first riddle, Your first key is: `6skd8s`

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- Riddle 2 Screenshot:

Solution:

1	01000111	01100101	01101110	
2	01101110	01100101	01110010	= Gennero
3	01101111			

Key 2: `cy8snd2`

Binary to Text Translator

Enter binary numbers with any prefix / postfix / delimiter and press the *Convert* button
(E.g: 01000101 01111000 01100001 01101101 01110000 01101100 01100101):

Open File

Open Binary File

Paste binary numbers or drop file:

01000111 01100101 01101110
01101110 01100101 01110010
01101111

Character encoding (optional)

ASCII/UTF-8

Convert

Reset

Swap

Gennero

Copy

Save

NUMBER CONVERSION

- [ASCII,Hex,Binary,Decimal converter](#)
- [ASCII text to binary converter](#)
- [ASCII text to hex converter](#)

[Text to binary converter](#) ►

RIDDLE 2

Congrats for solving the second riddle, the key is: **cy8snd2**

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- Riddle 3 Screenshot:

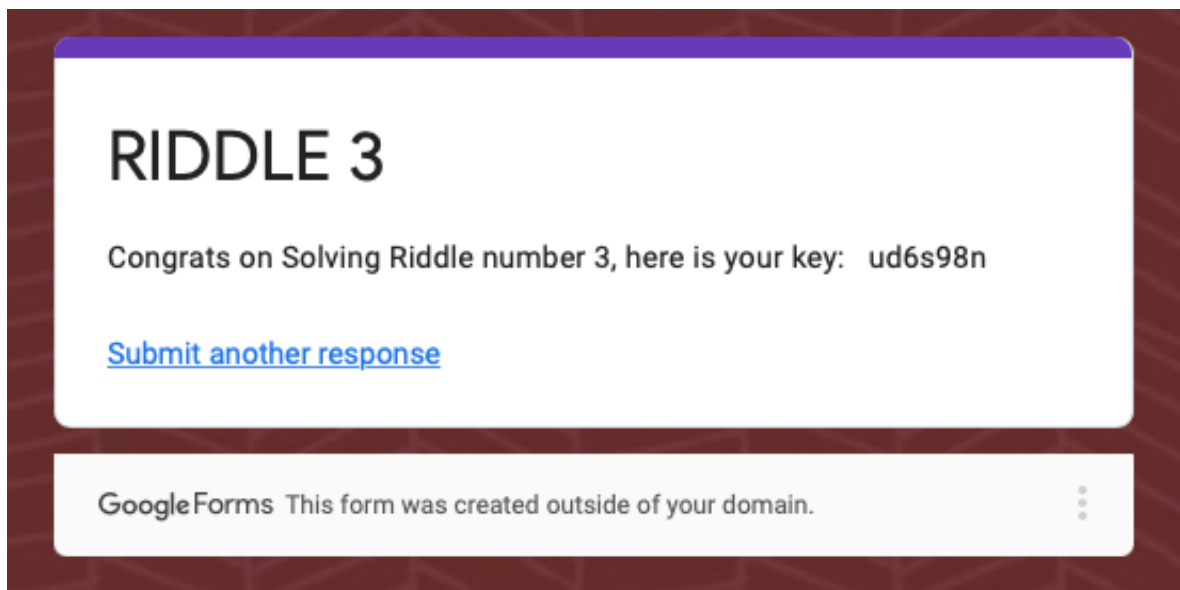
File to hold cipher text:

```
1 | # riddle3.txt.enc
2 | 4qMOIvwEGXzvKmvRE2bNbg==
```

Solution: `4qMOIvwEGXzvKmvRE2bNbg==` = `takagi`

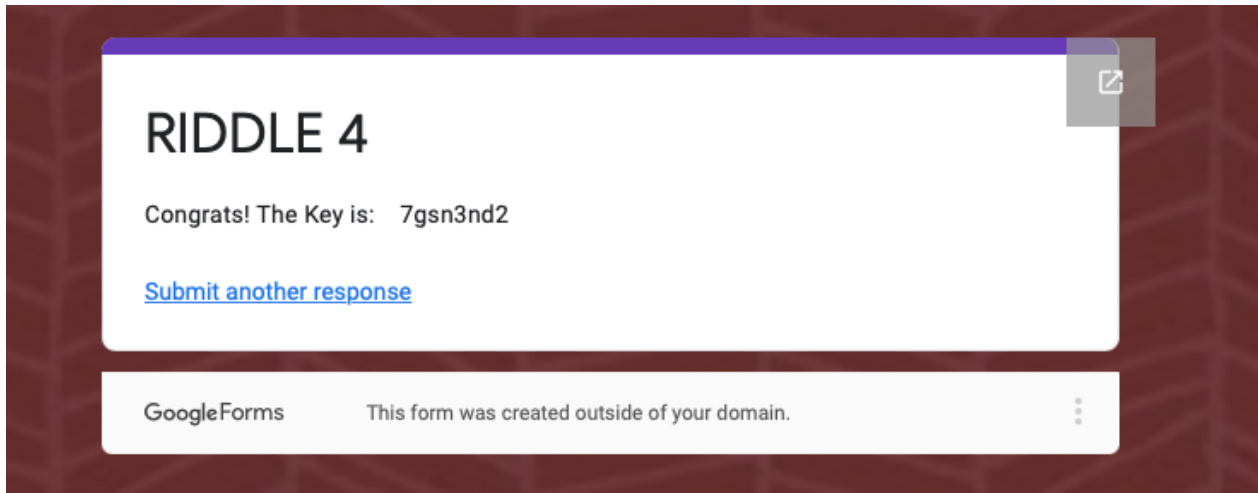
Key: `ud6s98n`

```
→ ~ nano riddle3.txt.enc
→ ~ cat riddle3.txt.enc
4qMOIvwEGXzvKmvRE2bNbg==
→ ~ openssl enc -pbkdf2 -nosalt -aes-256-cbc -d -in riddle3.txt.enc -out riddle
3Soln.txt -base64 -K 5284A3B154D99487D9D8D8508461A478C7BEB67081A64AD9A15147906E8
E8564 -iv 1907C5E255F7FC9A6B47B0E789847AED
→ ~ cat riddle3Soln.txt
takagi
→ ~
```



- Riddle 4 Screenshot:

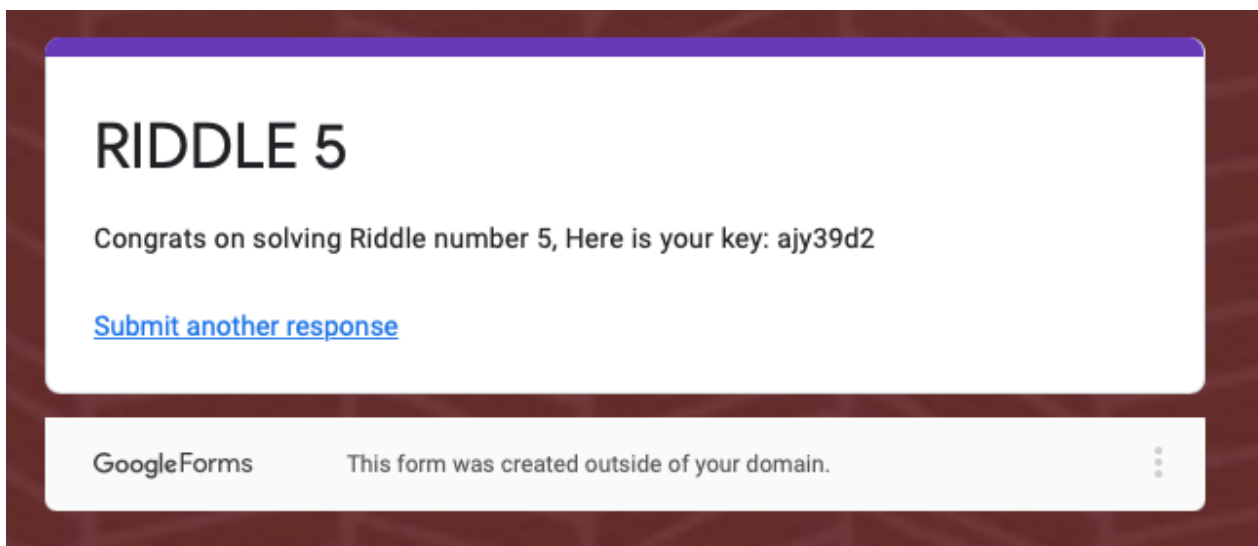
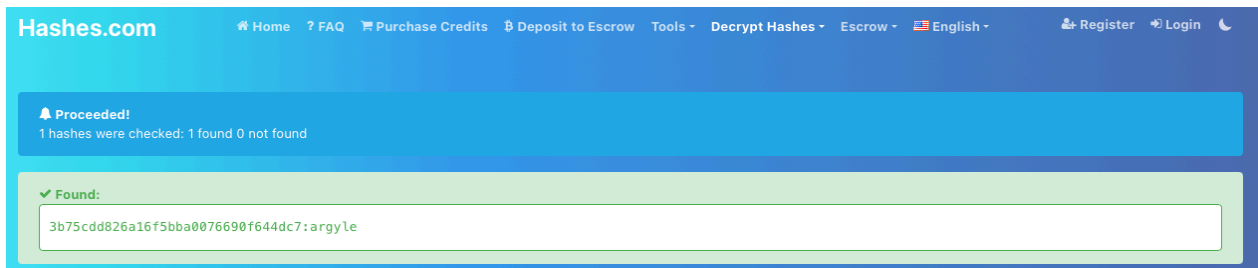
Key: `7gsn3nd2`



- **Riddle 5 Screenshot:**

Solution: `3b75cdd826a16f5bba0076690f644dc7 = argyle`

Key: `ajy39d2`



- **Riddle 6 Screenshot:**

Solution: `mcclane`

Key: `7skahd6`

```
→ ~ steghide extract -sf Downloads/mary-lamb.jpg
Enter passphrase:
wrote extracted data to "code_is_inside_this_file.txt".
→ ~ cat code_is_inside_this_file.txt
mcclane
→ ~
```

RIDDLE 6

Congrats on solving Riddle number 6, they key is: 7skahd6. Now go and enter in all of your keys into the Ransomware decrypter!!

[Submit another response](#)

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- Final Proof:

RANSOMWARE DECRYPTER

Congratulations! You have decrypted the Ransomware! All the Nakatomi Hospital Records are now Decrypted! Please take a screenshot of this message and submit as your homework!

[Submit another response](#)

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- Screenshot of personal Azure account, `renato@polymathean.org`:

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