



# Cybersecurity

## Module 10 Challenge Submission File

### Cryptography Challenge: Ransomware Riddles

Make a copy of this document to work in, and then for each mission, add the solution below the prompt. Save and submit this completed file as your Challenge deliverable.

#### Ransomware Riddles

##### 1. Riddle 1:

```
gruber
Key: 6skd8s
I just moved each letter of ozcjmz 8 steps backwards to get the answer
```

##### 2. Riddle 2:

```
Gennero
Key: cy8snd2
I just copied and pasted the binary numbers to this website
https://www.rapidtables.com/convert/number/binary-to-ascii.html and it gave
me the answer
```

##### 3. Riddle 3:

```
takagi
Key: ud6s98n
Made a file in the desktop then did nano ciphertext.enc and put in this
4qMOIvwEGXzvKmvRE2bNbg== then ran this openssl enc -pbkdf2 -nosalt
-aes-256-cbc -in ciphertext.enc -d -base64 -K
```

```
5284A3B154D99487D9D8D8508461A478C7BEB67081A64AD9A15147906E8E8564 -iv  
1907C5E255F7FC9A6B47B0E789847AED and got takagi
```

#### 4. Riddle 4:

Key: 7gsn3nd2

- Jill's Public Key
- Jill's Private Key
- 12 Asymmetric and 15S Symmetric
- Alice's Public Key

#### 5. Riddle 5:

```
argyle  
Key: ajy39d2  
I did the following steps to get the argyle  
touch hash1.txt  
ls  
echo 3b75cdd826a16f5bba0076690f644dc7 > hash1.txt  
cat hash1.txt (just to make sure it's there)  
hashcat -m 0 -a 0 -o gotthehash.txt hash1.txt  
/usr/share/wordlists/rockyou.txt --force  
cat gotthehash.txt  
Which got me 3b75cdd826a16f5bba0076690f644dc7:argyle
```

#### 6. Riddle 6:

```
mcclane  
Key: 7skahd6  
Downloaded the picture to my computer  
Opened my VM and dragged and dropped the pic  
cd Desktop  
ls  
steghide extract -sf mary-lamb.jpg  
passphrase : ABC  
Which gave me this wrote extracted data to "code_is_inside_this_file.txt".  
Then did this cat code_is_inside_this_file.txt  
And got mcclane
```

## Ransomware Screenshot

1. Include a screenshot showing proof that you've decrypted the ransomware:

