



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:

For each letter shifted back by 8.

o shifted back by 8 = g

z shifted back by 8 = r

c shifted back by 8 = u

j shifted back by 8 = b

m shifted back by 8 = e

z shifted back by 8 = r

Message: gruber

Key: 6skd8s

2. Riddle 2:

Used an online tool to covert Binary.

Message: Gennero

Key: cy8snd2

3. Riddle 3:

Ran the following command:

```
openssl enc -pbkdf2 -nosalt -aes-256-cbc -in module10.txt -d -base64 -K  
5284A3B154D99487D9D8D8508461A478C7BEB67081A64AD9A15147906E8E8564 -iv  
1907C5E255F7FC9A6B47BOE789847AED
```

Decryption: takagi

Key: ud6s98n

4. Riddle 4:

1: Jills public key

2: Jills private key

3: 12 asymmetric and 15 asymmetric

4: Alices public key

Key: 7gsn3nd2

5. Riddle 5:

```
echo 3b75cdd826a16f5bba0076690f644dc7 > Riddle5.txt
```

```
Hashcat -m 0 -a 0 -o Riddlesolved.txt Riddle5.txt  
/usr/share/wordlists/rockyou.txt -force
```

```
Cat Riddle5solved.txt
```

Decryption: argyle

Key: ajy39d2

6. Riddle 6:

```
steghide extract -sf mary-lamb.jpg
```

Decryption: mcclane

Key: 7skahd6

Ransomware Screenshot

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

