

PSP0201

WEEKLY

WRITE UP

WEEK 6

Group Members:

AQRA ALISA BINTI RASHIDI	1211103093
NURUL AQILAH BINTI MOHD SHARIFF	1211103097
NUR INQSYIRA BINTI ZAMRI	1211103098
SITI NUR AMIRAH BINTI ZURAIHAN	1211102093

DAY 21

[Blue Teaming]- Time For Some ELForensics

Question 1

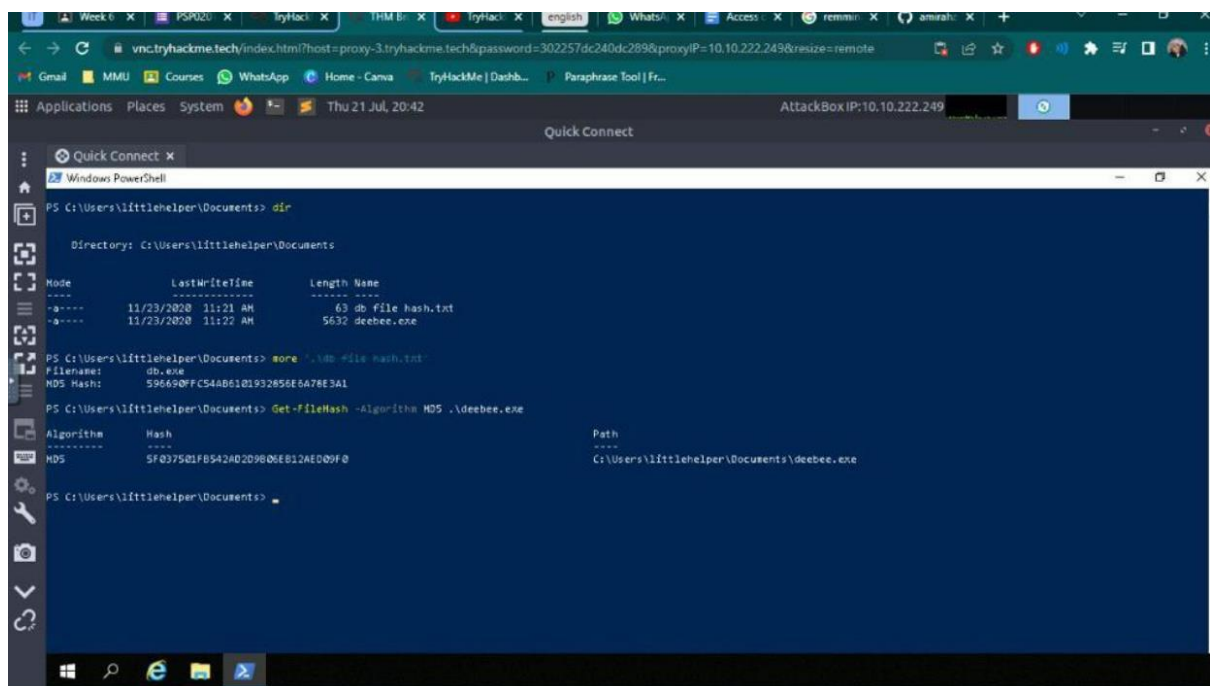
Q1: Read the contents of the text file within the Documents folder. What is the file hash for db.exe?

=596690FFC54AB6101932856E6A78E3A1

Question 2

Q2: What is the MD5 file hash of the mysterious executable within the Documents folder?

=5F037501FB542AD2D9B06EB12AED09F0



The screenshot shows a remote Windows PowerShell session. The top bar indicates the session is connected to 'AttackBox IP: 10.10.222.249'. The PowerShell prompt is at 'PS C:\Users\littiehelper\Documents>'. The user runs 'dir', showing a directory listing with two files: 'db file hash.txt' (63 bytes) and 'deebee.exe' (5632 bytes). The user then runs 'more db file hash.txt', displaying the MD5 hash '596690FFC54AB6101932856E6A78E3A1'. Finally, the user runs 'Get-FileHash -Algorithm MD5 .\deebee.exe', which outputs the MD5 hash '5F037501FB542AD2D9B06EB12AED09F0' for the file 'C:\Users\littiehelper\Documents\deebee.exe'.

```
PS C:\Users\littiehelper\Documents> dir

Directory: C:\Users\littiehelper\Documents

Mode                LastWriteTime         Length Name
----                -
-a-----         11/23/2020 11:21 AM             63 db file hash.txt
-a-----         11/23/2020 11:22 AM          5632 deebee.exe

PS C:\Users\littiehelper\Documents> more db file hash.txt
Filename: db.exe
MD5 Hash: 596690FFC54AB6101932856E6A78E3A1

PS C:\Users\littiehelper\Documents> Get-FileHash -Algorithm MD5 .\deebee.exe

Algorithm Hash
-----
MD5 5F037501FB542AD2D9B06EB12AED09F0

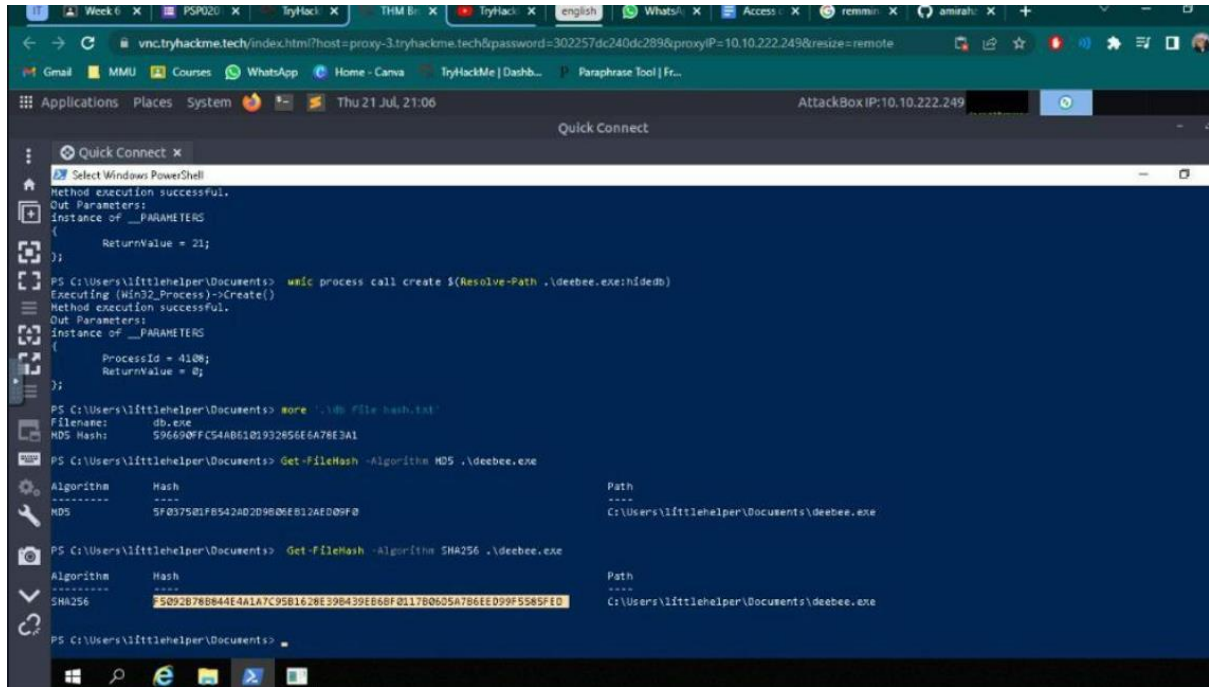
Path
---
C:\Users\littiehelper\Documents\deebee.exe

PS C:\Users\littiehelper\Documents>
```

Question 3

Q3: What is the SHA256 file hash of the mysterious executable within the Documents folder?

= F5092B78B844E4A1A7C95B1628E39B439EB6BF0117B06D5A7B6EED99F5585FED



```
PS C:\Users\littleshelper\Documents> wmic process call create $(Resolve-Path .\deebex.exe\hidedb)
Executing (Win32_Process)->Create()
Method execution successful.
Out Parameters:
Instance of __PARAMETERS
{
    ReturnValue = 21;
};

PS C:\Users\littleshelper\Documents> more .\db.exe
File name:
db.exe
MD5 Hash:
596690FFC54AB61D932656E6A78E3A1

PS C:\Users\littleshelper\Documents> Get-FileHash -Algorithm MD5 .\deebex.exe

Algorithm Hash Path
-----
MD5 5F037501F8542AD2D9B0E812AED09F0 C:\Users\littleshelper\Documents\deebex.exe

PS C:\Users\littleshelper\Documents> Get-FileHash -Algorithm SHA256 .\deebex.exe

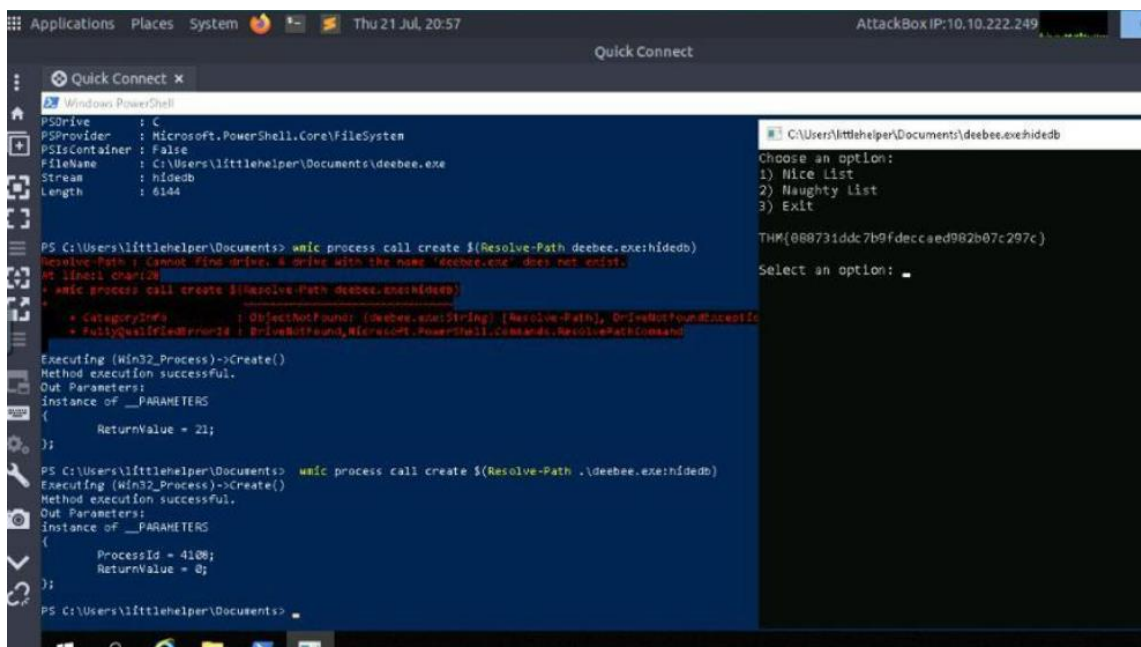
Algorithm Hash Path
-----
SHA256 F5092B78B844E4A1A7C95B1628E39B439EB6BF0117B06D5A7B6EED99F5585FED C:\Users\littleshelper\Documents\deebex.exe

PS C:\Users\littleshelper\Documents>
```

Question 4

Q4: Using Strings find the hidden flag within the executable?

= THM{f6187e6cbeb1214139ef313e108cb6f9}



```
PS C:\Users\littleshelper\Documents> wmic process call create $(Resolve-Path deebex.exe\hidedb)
Executing (Win32_Process)->Create()
Method execution successful.
Out Parameters:
Instance of __PARAMETERS
{
    ReturnValue = 21;
};

PS C:\Users\littleshelper\Documents> wmic process call create $(Resolve-Path .\deebex.exe\hidedb)
Executing (Win32_Process)->Create()
Method execution successful.
Out Parameters:
Instance of __PARAMETERS
{
    ProcessId = 4108;
    ReturnValue = 0;
};

PS C:\Users\littleshelper\Documents>
```

Choose an option:
1) Nice List
2) Naughty List
3) Exit

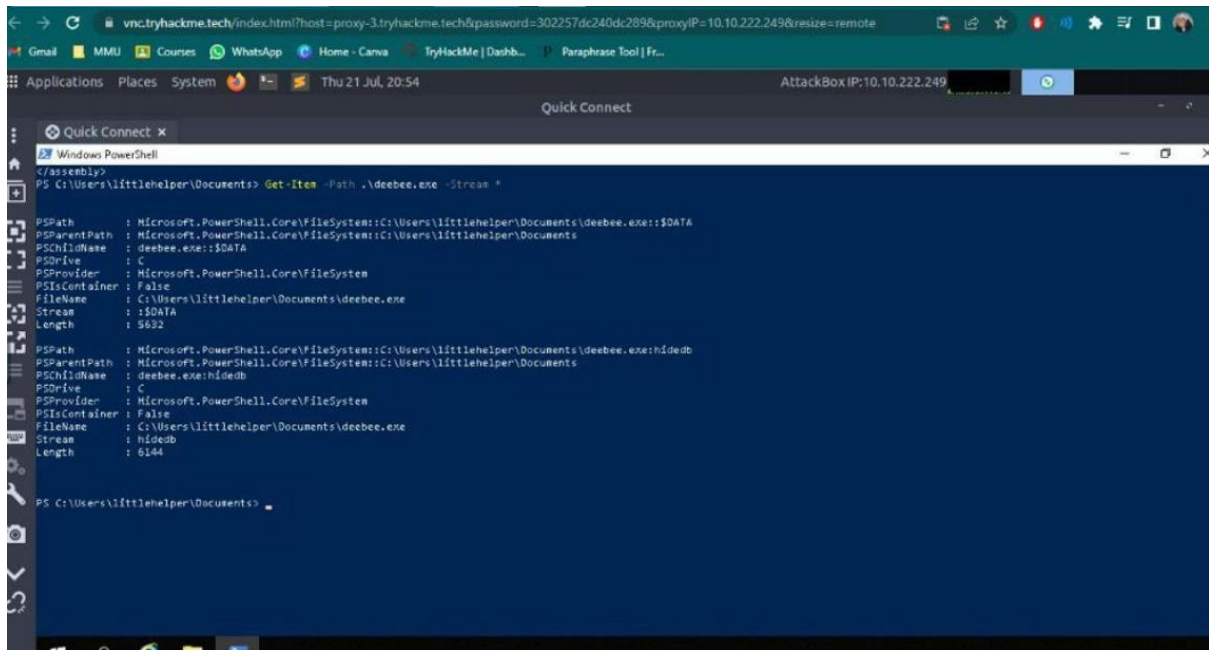
THM{f6187e6cbeb1214139ef313e108cb6f9}

Select an option: 1

Question 5

Q5: What is the powershell command used to view ADS?

= Get-Item -Path .\deebie.exe -Stream *



```
</assembly>
PS C:\Users\littlehelper\Documents> Get-Item -Path .\deebie.exe -Stream *

PSPath           : Microsoft.PowerShell.Core\FileSystem::C:\Users\littlehelper\Documents\deebie.exe::$DATA
PSParentPath      : Microsoft.PowerShell.Core\FileSystem::C:\Users\littlehelper\Documents
PSChildName       : deebie.exe::$DATA
PSDrive           : C
PSProvider        : Microsoft.PowerShell.Core\FileSystem
PSIsContainer     : False
FileName          : C:\Users\littlehelper\Documents\deebie.exe
Stream            :::$DATA
Length            : 5632

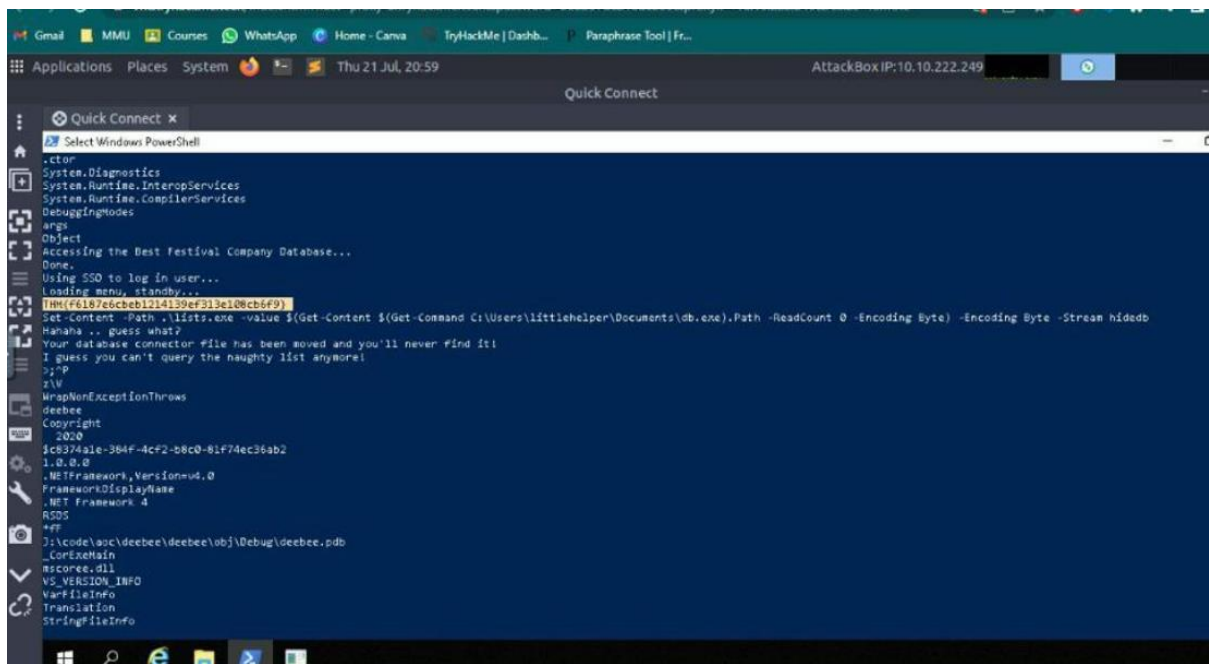
PSPath           : Microsoft.PowerShell.Core\FileSystem::C:\Users\littlehelper\Documents\deebie.exe:$HIDEB
PSParentPath      : Microsoft.PowerShell.Core\FileSystem::C:\Users\littlehelper\Documents
PSChildName       : deebie.exe:$HIDEB
PSDrive           : C
PSProvider        : Microsoft.PowerShell.Core\FileSystem
PSIsContainer     : False
FileName          : C:\Users\littlehelper\Documents\deebie.exe
Stream            ::$HIDEB
Length            : 6144

PS C:\Users\littlehelper\Documents>
```

Question 6

Q6: What is the flag that is displayed when you run the database connector file?

= THM{088731ddc7b9fdeccaed982b07c297c}



```
.ctor
System.Diagnostics
System.Runtime.InteropServices
System.Runtime.InteropServices
DebuggingModes
args
Object
Accessing the Best Festival Company Database...
Done.
Using SSO to log in user...
Loading menu, standby...
THM{088731ddc7b9fdeccaed982b07c297c}
Set-Content -Path .\lists.exe -value $(Get-Content $(Get-Command C:\Users\littlehelper\Documents\deebie.exe).Path -ReadCount 0 -Encoding Byte) -Encoding Byte -Stream hideb
Hahaha .. guess what?
Your database connector file has been moved and you'll never find it!
I guess you can't query the naughty list anymore!
2)*P
2\W
WrapNonExceptionThrows
deebie
Copyright
2020
1c8374a1e-384f-4cf2-b8c0-81f74ec36ab2
1.0.0.0
.NETFramework,Version=v4.0
FrameworkDisplayName
.NET Framework 4
R2D5
+ff
J:\code\src\deebie\deebie\obj\Debug\deebie.pdb
_corExeMain
mscorlib.dll
vs_version_info
va=FileInfo
Translation
StringFileInfo
```

Question 7

Q7: Which list is Sharika Spooner on?

=Naughty List

Question 8

Q8: Which list is Jaime Victoria on?

=Nice List

Methodology (Day 21):

First of all, we deploy attack box and use terminal to find Remmina (Remmina &). Then we insert the credentials that have been given in the instruction. Next we run Powershell to obtain the hash of the file. Lastly we have to launch hidden executable file with the command given and we will get all the list of name.

DAY 22

[Blue Teaming] Elf McEager becomes CyberElf

Question 1

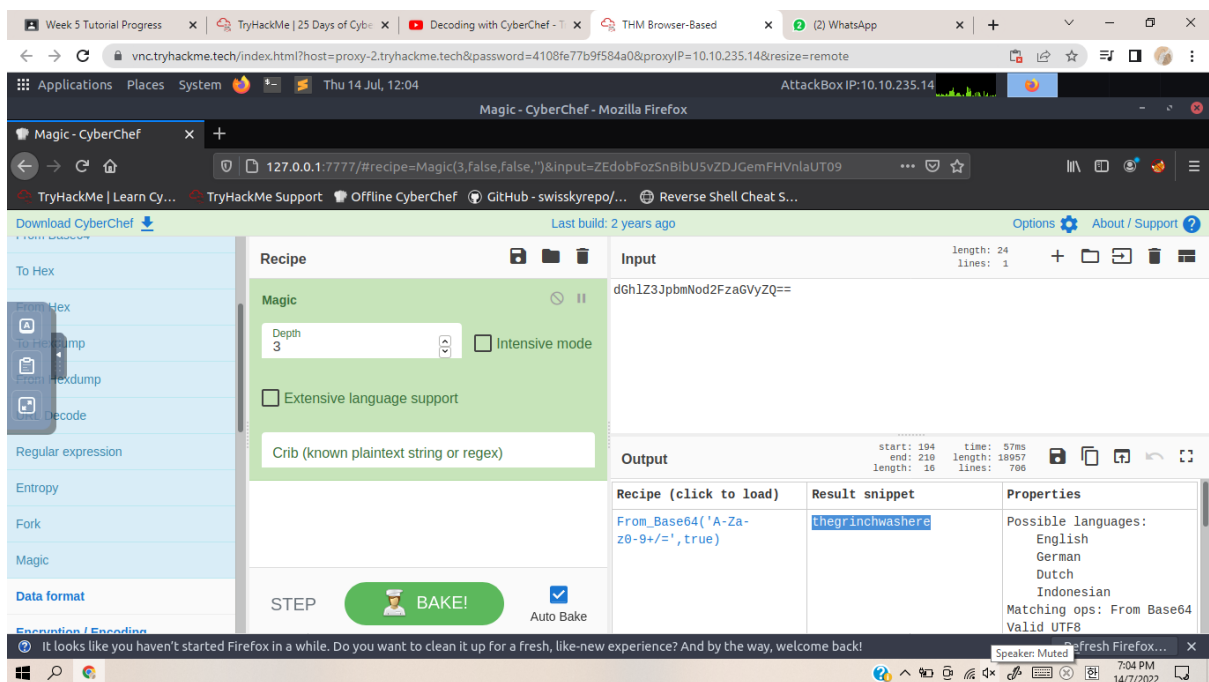
Q1: What is the password to the KeePass database?

= thegrinchwashere

Question 2

Q2: What is the encoding method listed as the 'Matching ops'?

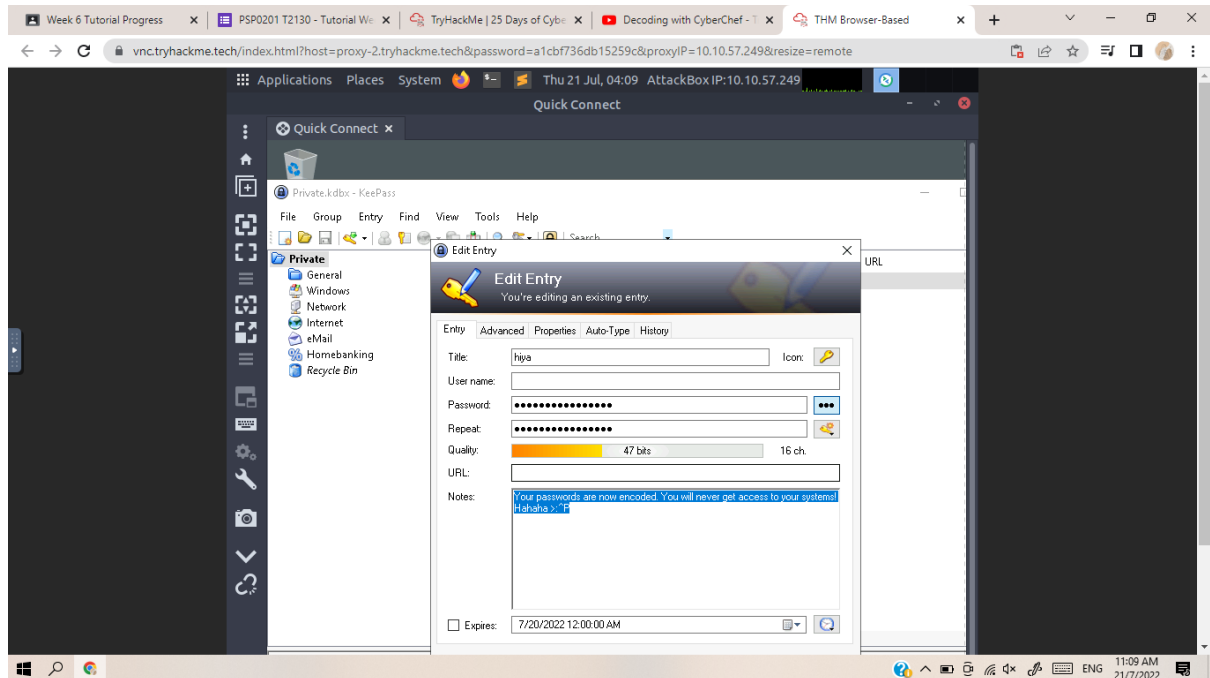
=base64



Question 3

Q3: What is the note on the hiya key?

= Your passwords are now encoded. You will never get access to your systems! Hahaha
>:^P



Question 4

Q4: What is the decoded password value of the Elf Server?

=sn0wM4n!

Question 5

Q5: What was the encoding used on the Elf Server password?

=base64

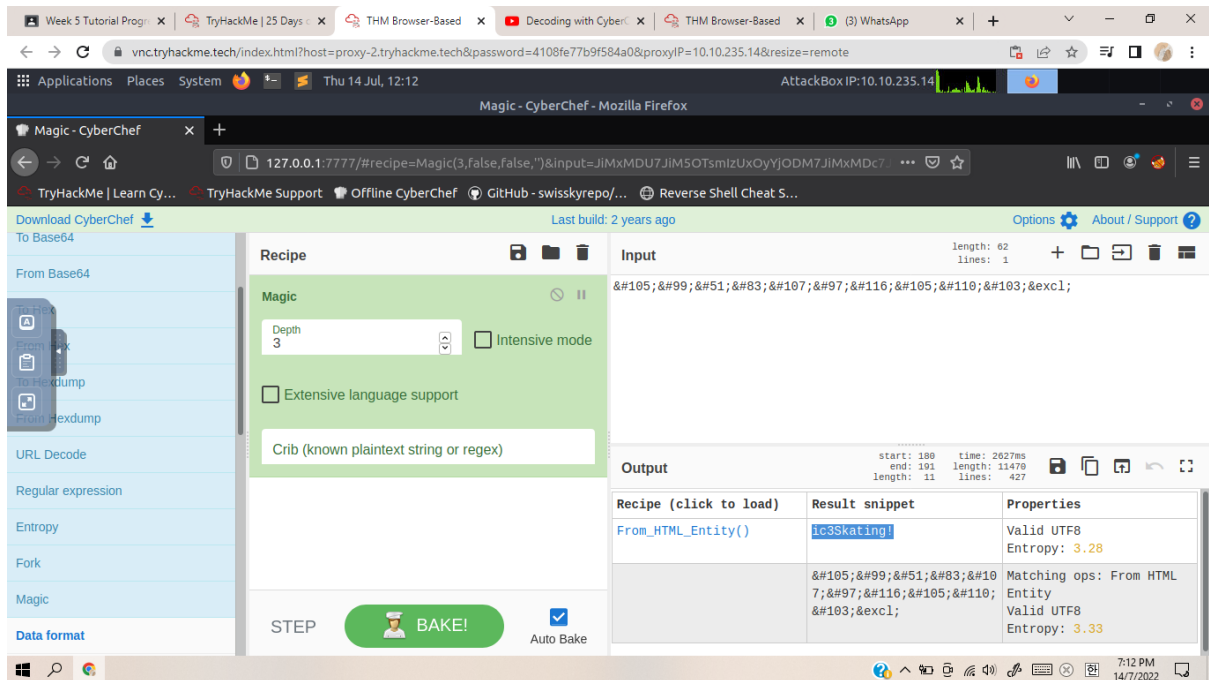
The screenshot shows the Magic-CyberChef web application in a browser. The interface includes a sidebar with various tools like 'From Hex', 'To Hexdump', 'Entropy', and 'Fork'. The main area displays a recipe named 'Magic' with a depth of 3. The input field contains the hex string '736e30774d346e21'. The output field shows the result 'sn0wM4n!'. The 'Properties' section indicates that the result is 'Valid UTF8' with an entropy of 2.75. The 'Recipe (click to load)' section shows the recipe name 'From_Hex('None')' and the result snippet 'sn0wM4n!'. The 'Output' section shows the original hex string '736e30774d346e21' and its properties, including 'Matching ops: From Base64, From Hex, From Hexdump' and 'Valid UTF8' with an entropy of 3.03.

Recipe (click to load)	Result snippet	Properties
From_Hex('None')	sn0wM4n!	Valid UTF8 Entropy: 2.75
	736e30774d346e21	Matching ops: From Base64, From Hex, From Hexdump Valid UTF8 Entropy: 3.03

Question 6

Q6: What is the decoded password value for ElfMail?

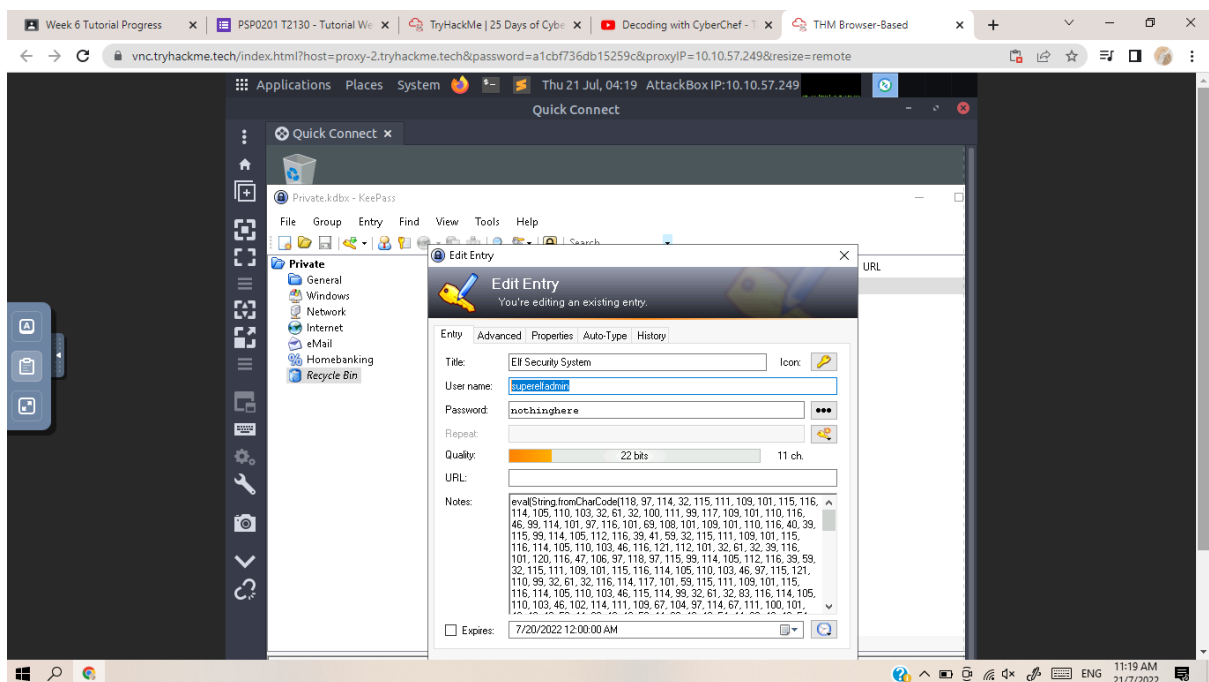
= ic3Skating!



Question 7

Q7: What is the username:password pair of Elf Security System?

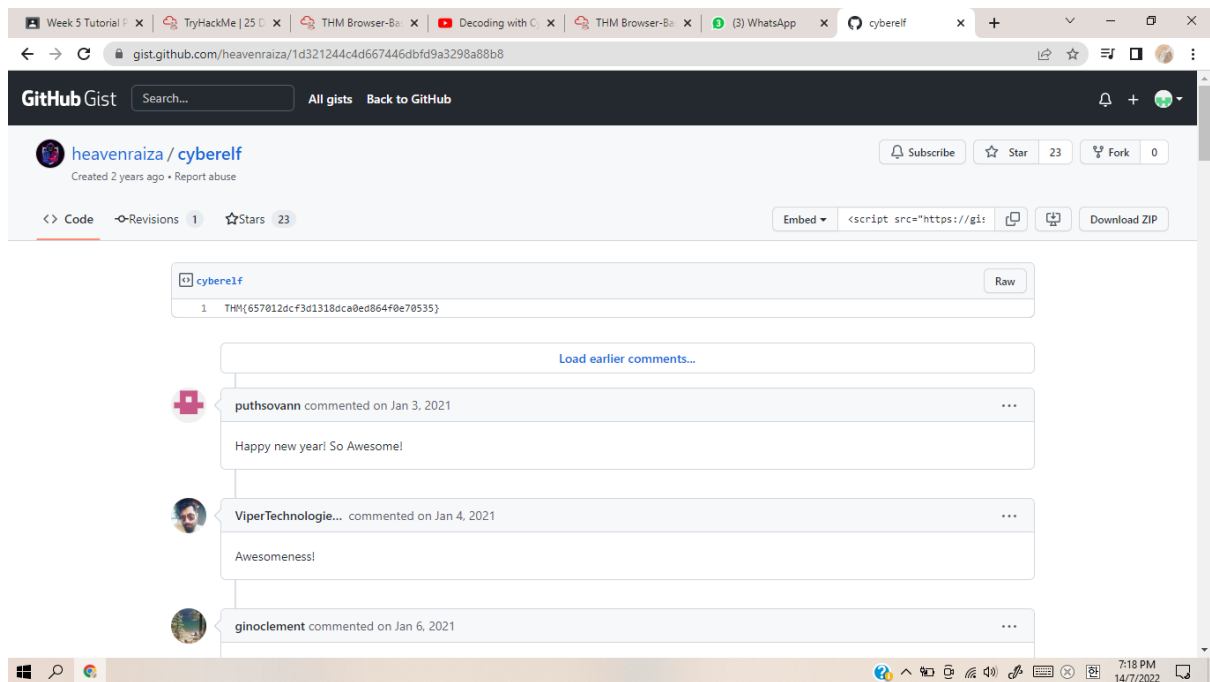
=superelfadmin:nothinghere



Question 8

Q8: Decode the last encoded value. What is the flag?

=THM{657012dcf3d1318dca0ed864f0e70535}



Methodology (Day 22):

First of all, we deploy our machine and attackbox. We started the progress by using Remmina to connect to the remote machine and we fill in the server, user name and password. After connected, we were shown a folder on the desktop and we run KeePass. We use CyberChef to get the KeePass password. Then, we decoded passwords from KeePass database file and get the challenge flag.

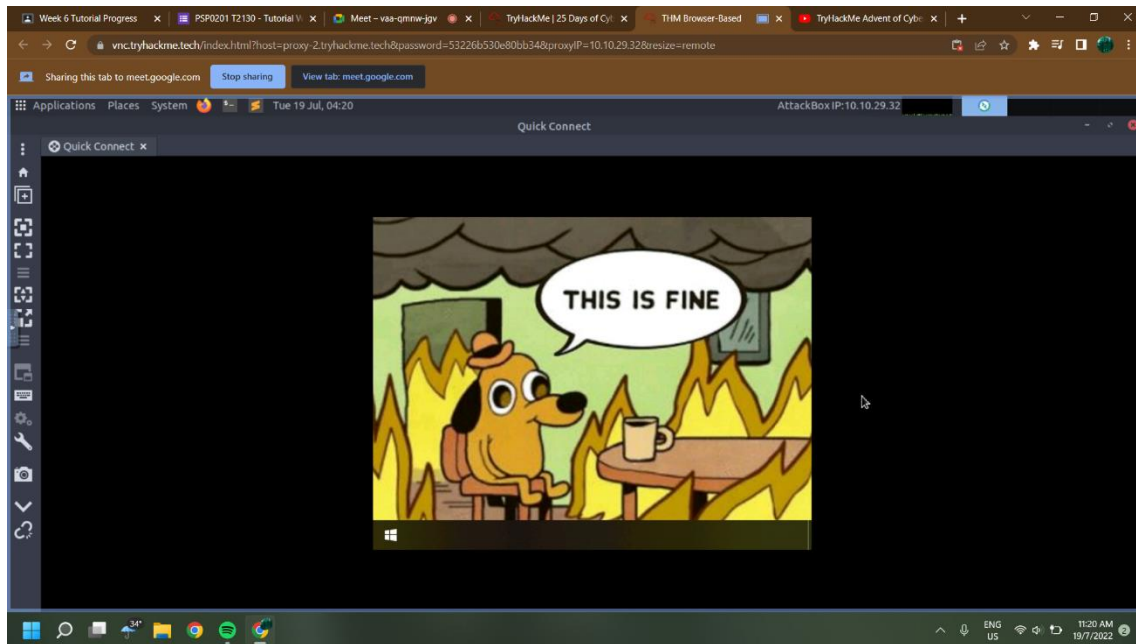
DAY 23

[Blue Teaming] The Grinch Strikes Again!

Question 1

Q1: What does the wallpaper say?

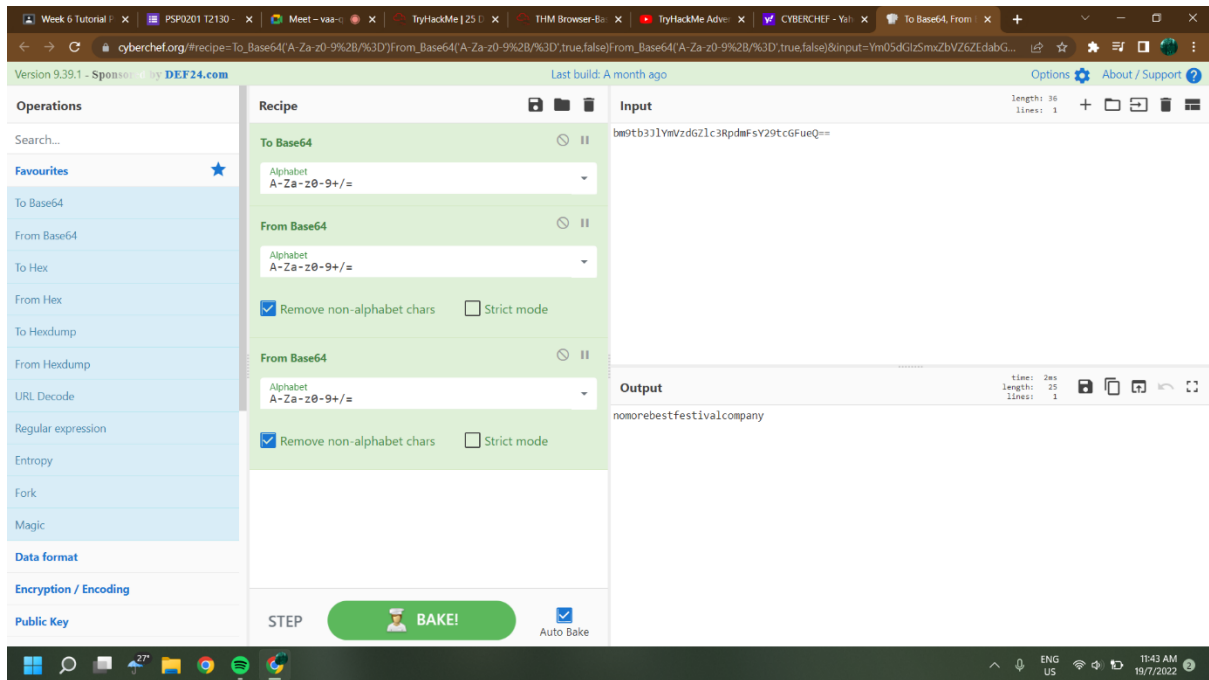
=THIS IS FINE!



Question 2

Q2: Decrypt the fake 'bitcoin address' within the ransom note. What is the plain text value?

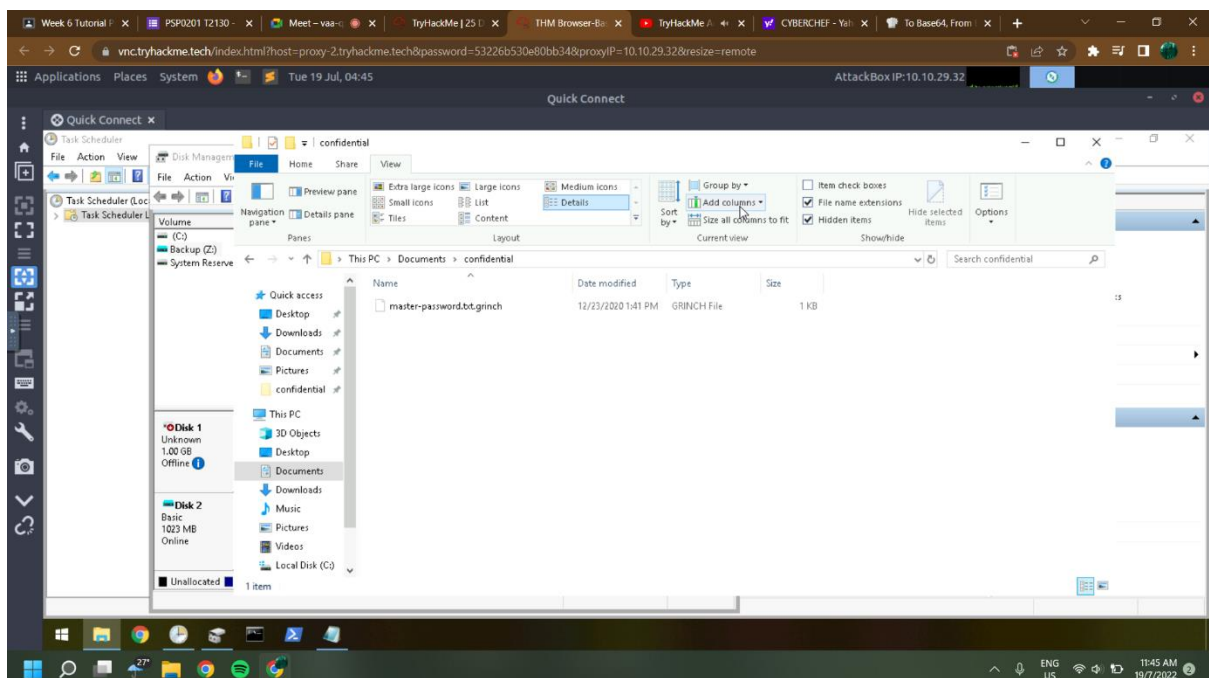
= nomorebestfestivalcompany



Question 3

Q3: At times ransomware changes the file extensions of the encrypted files. What is the file extension for each of the encrypted files?

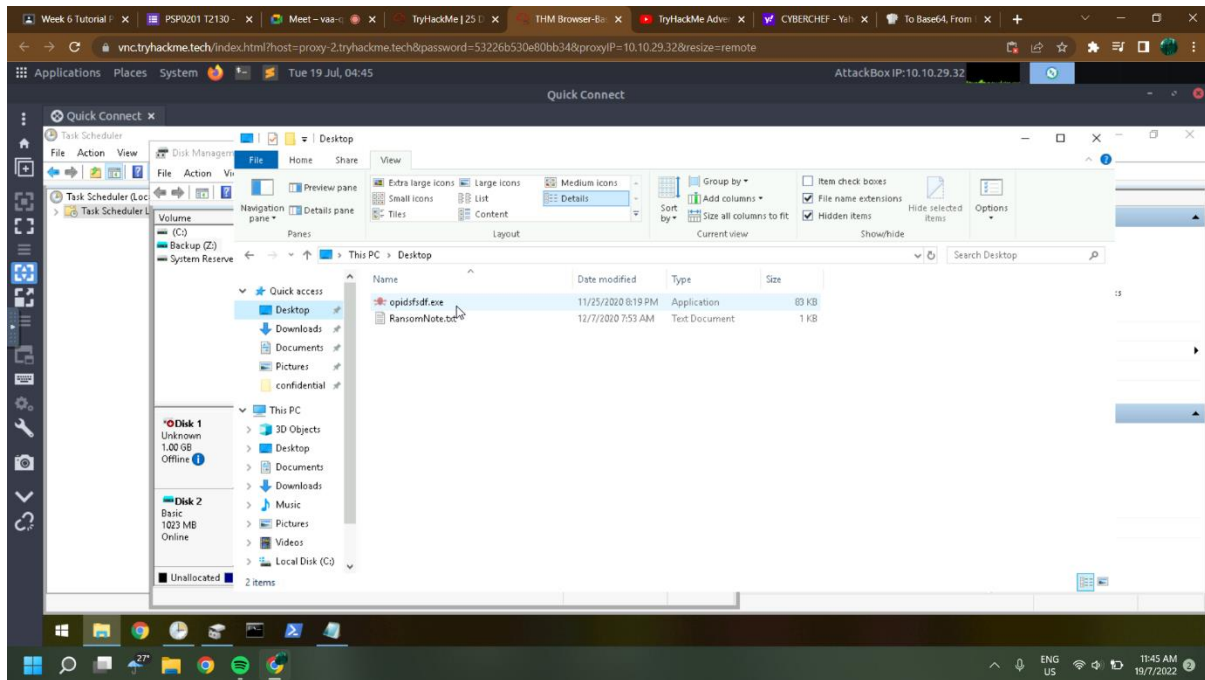
= .grinch



Question 4

Q4: What is the name of the suspicious scheduled task?

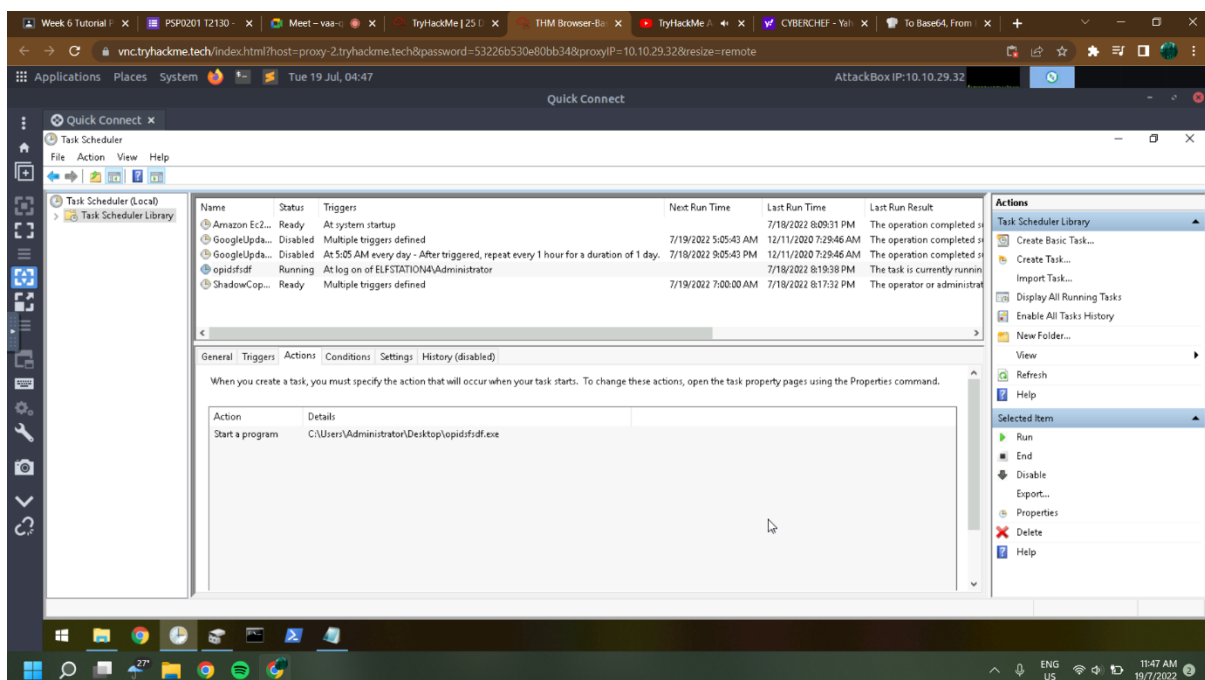
= opidsfsdf



Question 5

Q5: Inspect the properties of the scheduled task. What is the location of the executable that is run at login?

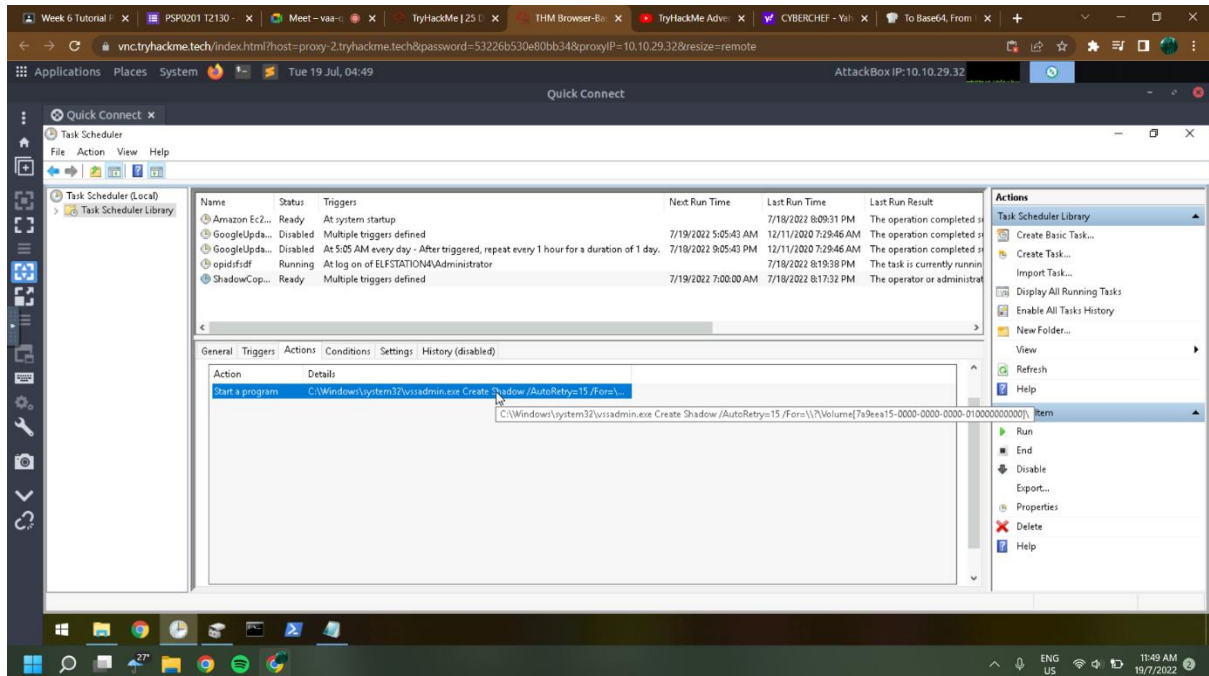
= C:\Users\Administrator\Desktop\opidsfsdf.exe



Question 6

Q6: There is another scheduled task that is related to VSS. What is the ShadowCopyVolume ID?

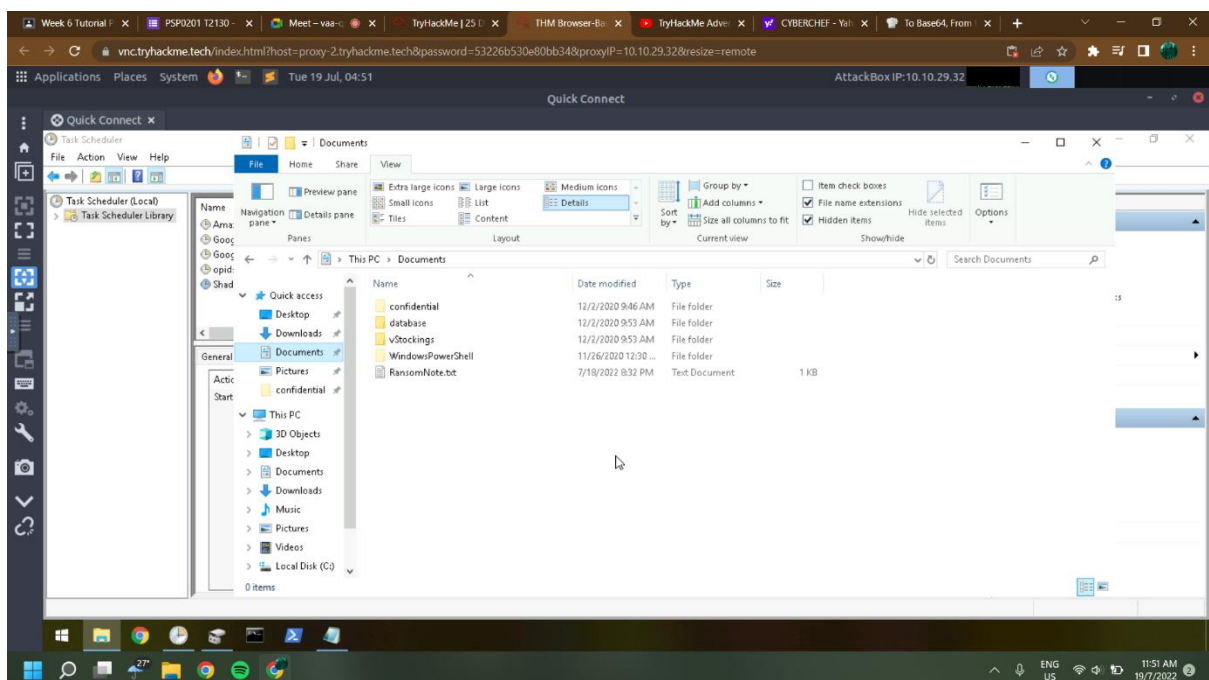
= 7a9eea15-0000-0000-0000-010000000000



Question 7

Q7: Assign the hidden partition a letter. What is the name of the hidden folder?

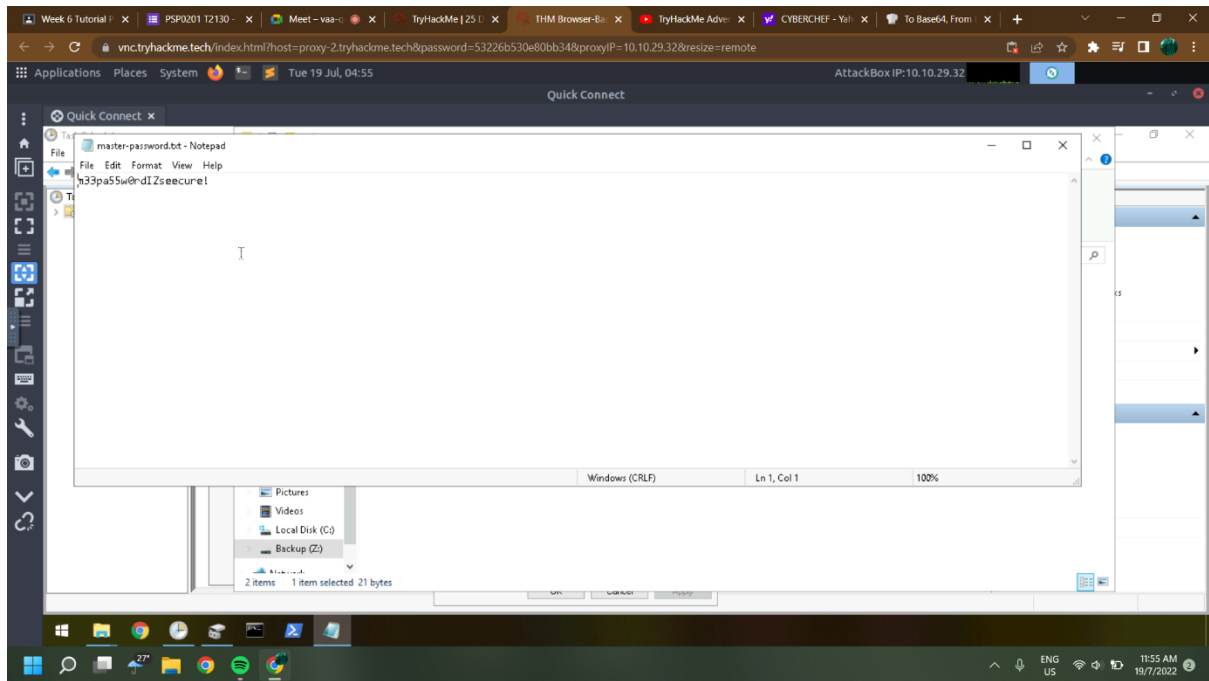
= confidential



Question 8

Q8: Right-click and inspect the properties for the hidden folder. Use the 'Previous Versions' tab to restore the encrypted file that is within this hidden folder to the previous version. What is the password within the file?

= m33pa55w0rdIZseecure!



Methodology (Day 23):

First we deploy the machine and attackbox. Once our machine is fully booted up, we use Remmina to connect to it. We fill in the server, user name and password. But we need to change the Preferences in Remmina to RDP and make sure the wallpaper option is checked. We clicked the RansomNote on our Desktop and then go to cyberchef to decode from base64. We open the Task Scheduler and click on the last scheduled task in the library. Next we open the Disk Management. Lastly, we restore the master-password.txt.grinch file then opened it to retrieve the flag.

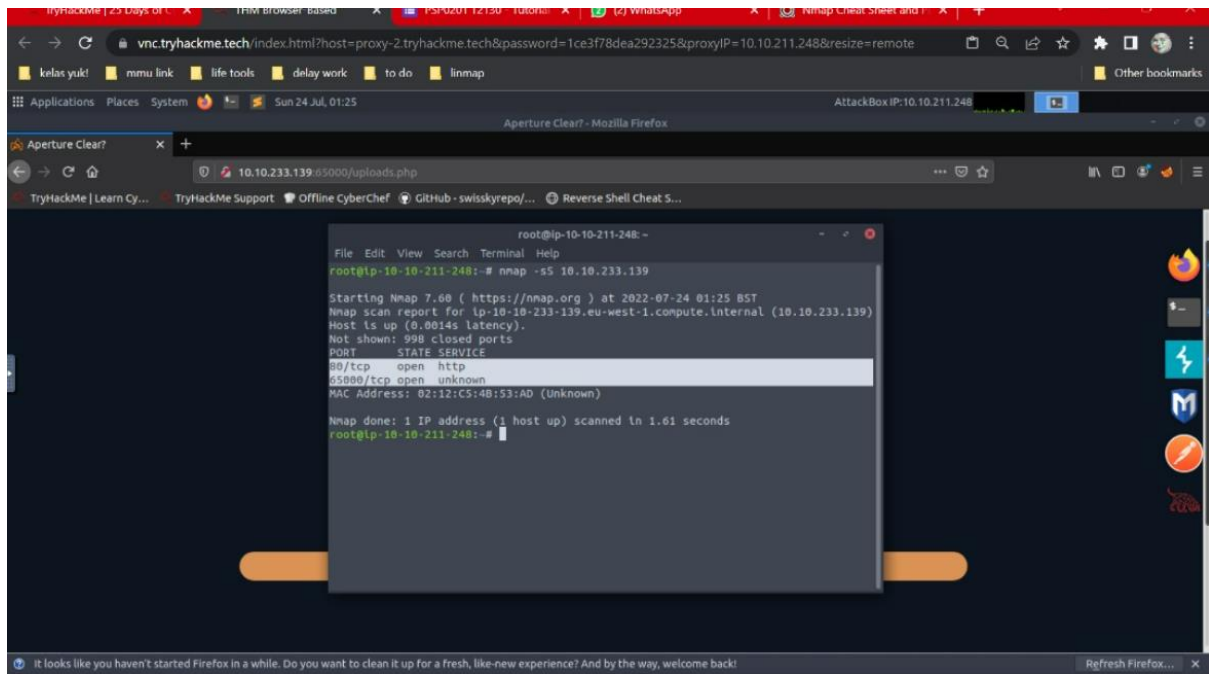
DAY 24

[Final Challenge] The Trial Before Christmas.

Question 1

Q1: Scan the machine. What ports are open?

=80, 65000



```
root@ip-10-10-211-248:~# nmap -sS 10.10.233.139

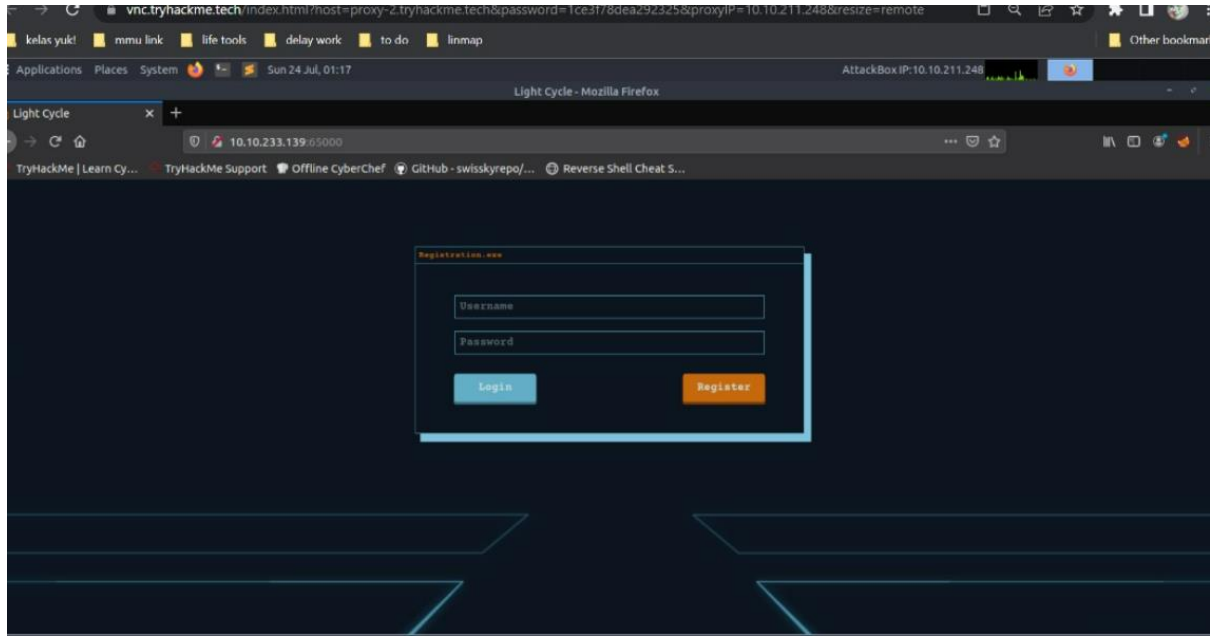
Starting Nmap 7.60 ( https://nmap.org ) at 2022-07-24 01:25 BST
Nmap scan report for ip-10-10-233-139.eu-west-1.compute.internal (10.10.233.139)
Host is up (0.0014s latency).
Not shown: 998 closed ports
PORT      STATE SERVICE
80/tcp    open  http
65000/tcp  open  unknown
MAC Address: 02:12:C5:4B:53:AD (Unknown)

Nmap done: 1 IP address (1 host up) scanned in 1.61 seconds
root@ip-10-10-211-248:~#
```


Question 2

Q2: What's the title of the hidden website? It's worthwhile looking recursively at all websites on the box for this step.

= Light Cycle



Question 3

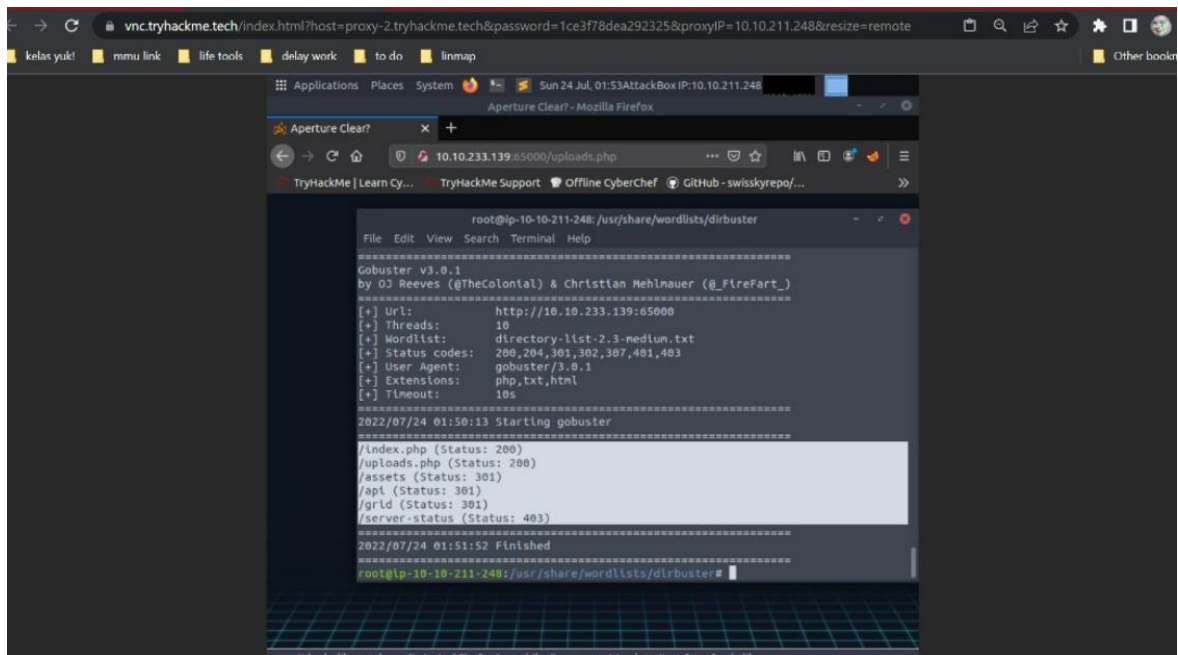
Q3: What is the name of the hidden php page?

= uploads.php

Question 4

Q4: What is the name of the hidden directory where file uploads are saved?

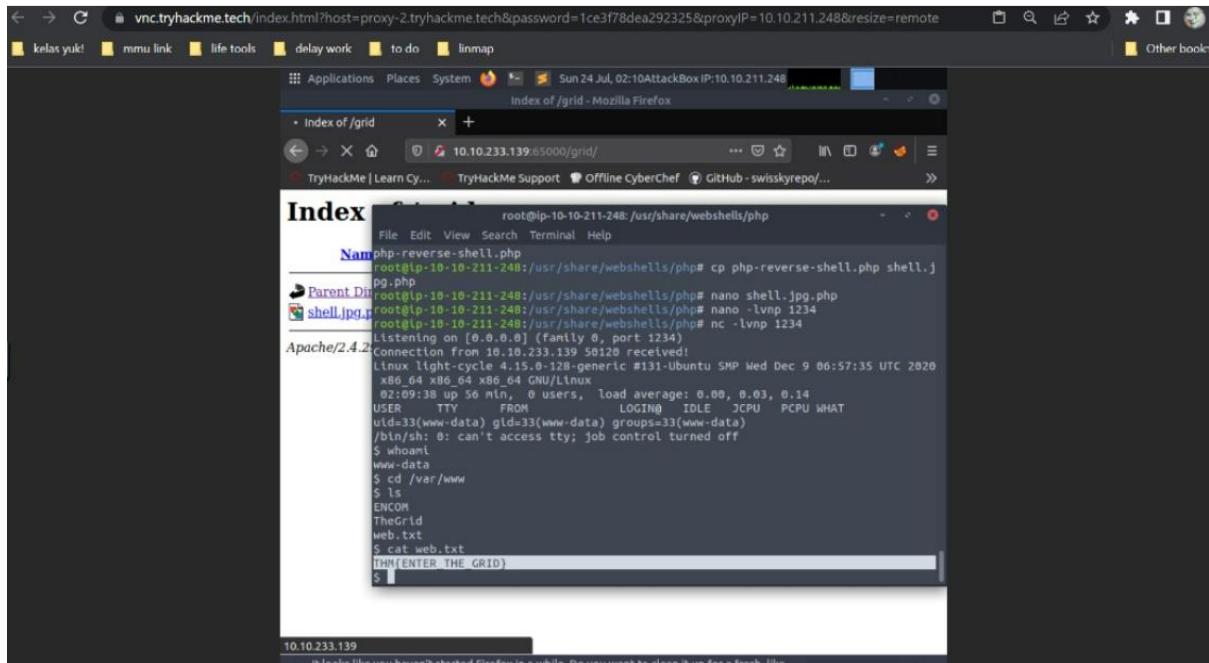
= grid



Question 5

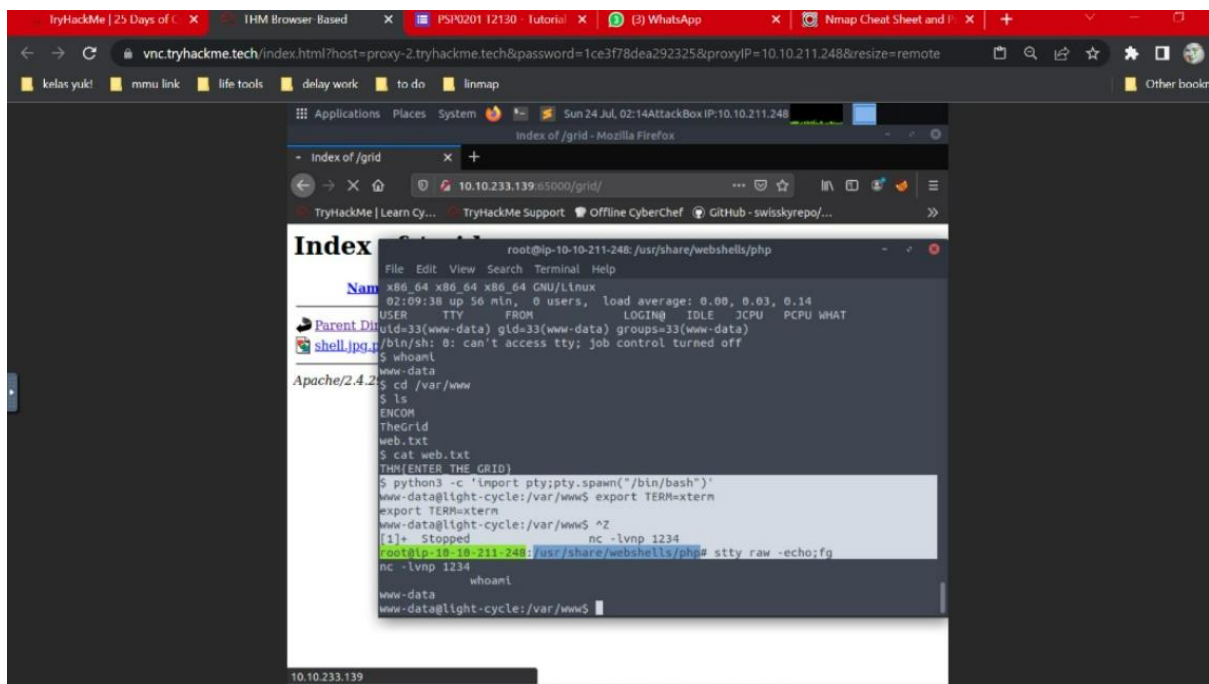
Q5: What is the value of the web.txt flag?

= THM{ENTER_THE_GRID}



Question 6

Q6: What lines are used to upgrade and stabilize your shell?



Question 7

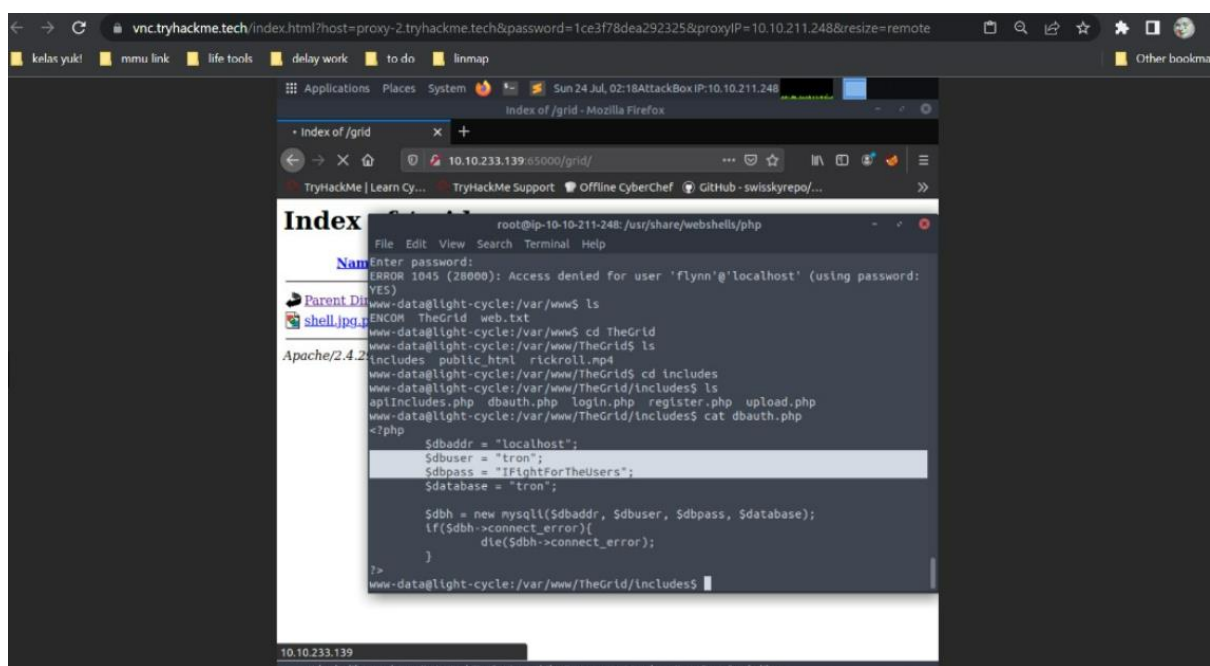
Q7: Review the configuration files for the webserver to find some useful loot in the form of credentials. What credentials do you find? **username:password**

= tron:IFightForTheUser

Question 8

Q8: Access the database and discover the encrypted credentials. What is the name of the database you find these in?

= tron



Question 9

Q9: Crack the password. What is it?

= @computer@

The screenshot shows a web browser window with the URL `md5decrypt.net/en/#answer`. The page title is "Md5 Decrypt & Encrypt". There is a text input field with the placeholder "Paste one or several hashes (up to 100)". Below the input field are two buttons: "Encrypt" and "Decrypt". A green box displays the result: "edc621628f6d19a13a00fd683f5e3ff7 : @computer@". Below this, it says "Found in 0.362s". At the bottom, there is a section titled "About Md5 online Decryption and encryption :" which contains a paragraph explaining the MD5 function and its limitations.

Md5 Decrypt & Encrypt

Paste one or several hashes (up to 100)

Encrypt Decrypt

edc621628f6d19a13a00fd683f5e3ff7 : @computer@

Found in 0.362s

About Md5 online Decryption and encryption :

Md5 (Message Digest 5) is a cryptographic function that allows you to make a 128-bits (32 characters) "hash" from any string taken as input, no matter the length (up to 2⁶⁴ bits). This function is irreversible, you can't obtain the plaintext only from the hash. The only way to online decrypt your hash is to compare it with a database using our online decrypter. Here we have 15183605161 md5 online database to help you with decryption. One should know that md5, although it's very used and common, shouldn't be use to encrypt critical data, since it's not secure anymore (collisions were found, and decrypt is becoming more and more easy). If you are building a new website, Sha256, 512, or other kind of encryption (with salt) would be better than md5 encryption, or even sha1. Our decrypter online database is compile from all the

Question 10

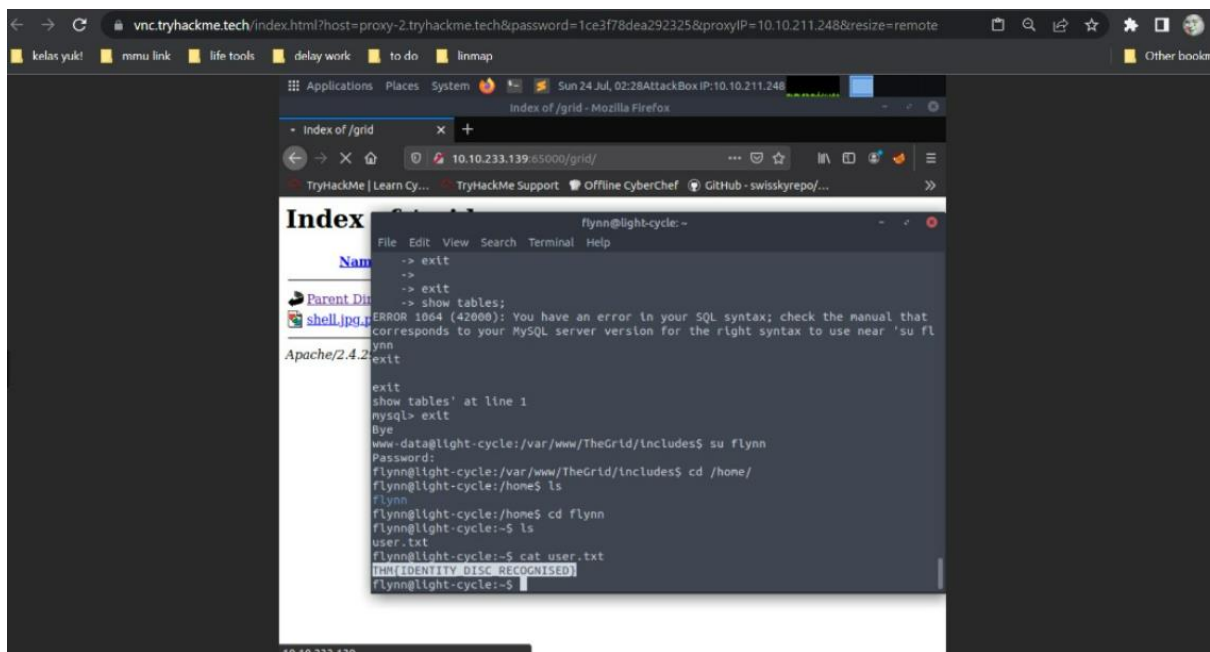
Q10: Use su to login to the newly discovered user by exploiting password reuse. What is the user you are switching to?

= Flynn

Question 11

Q11: What is the value of the user.txt flag?

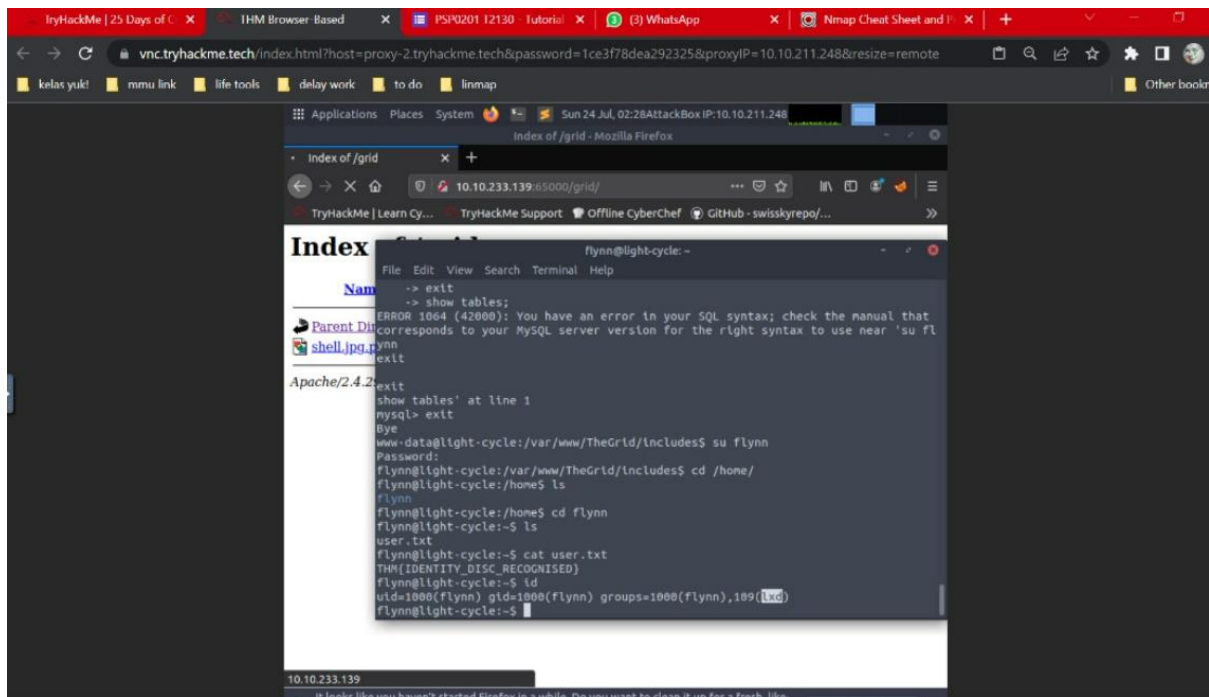
= THM{IDENTITY_DISC_RECOGNISED}



Question 12

Q12: Check the user's groups. Which group can be leveraged to escalate privileges?

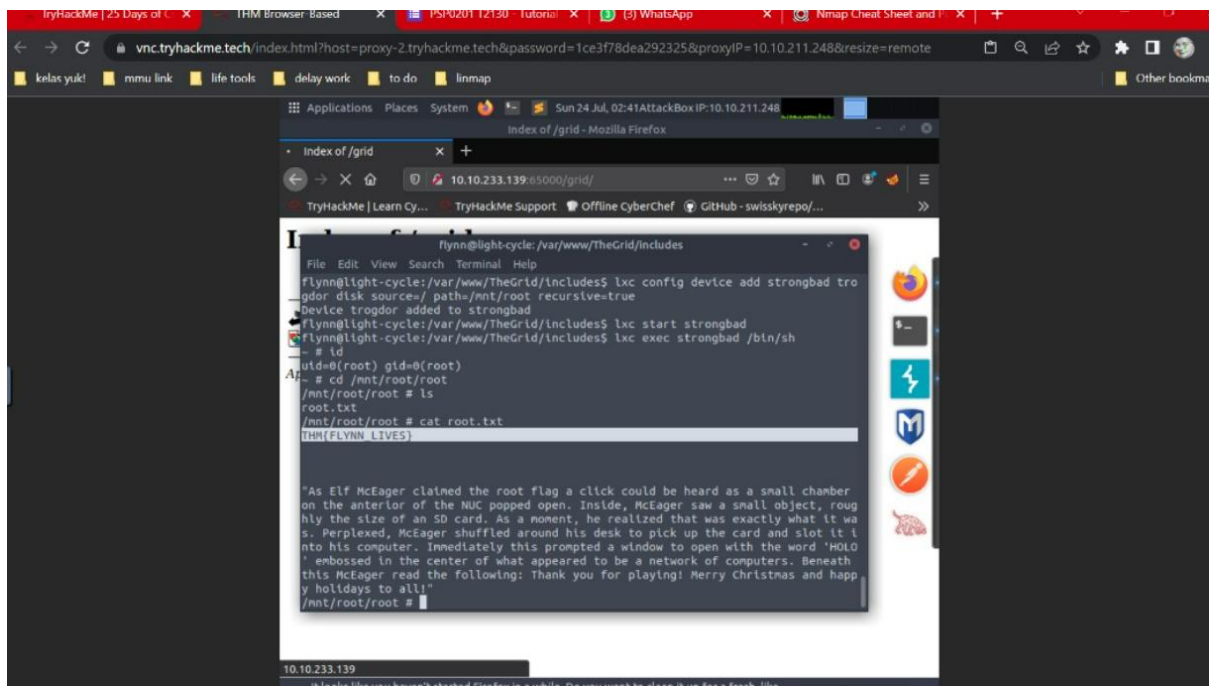
= lxd



Question 13

Q13: What is the value of the root.txt flag?

= THM{FLYNN_LIVES}



Methodology (Day 24):

First and foremost, we deploy attackbox, use terminal and enter the IP address and use nmap to find ports open. there are 2 ports open. After that we already found the hidden website which is Light cycle. Next, we try all the directory. We also need to use Burp Suite to look into the hidden php page. Lastly after several sequence got the configuration file and all credentials.