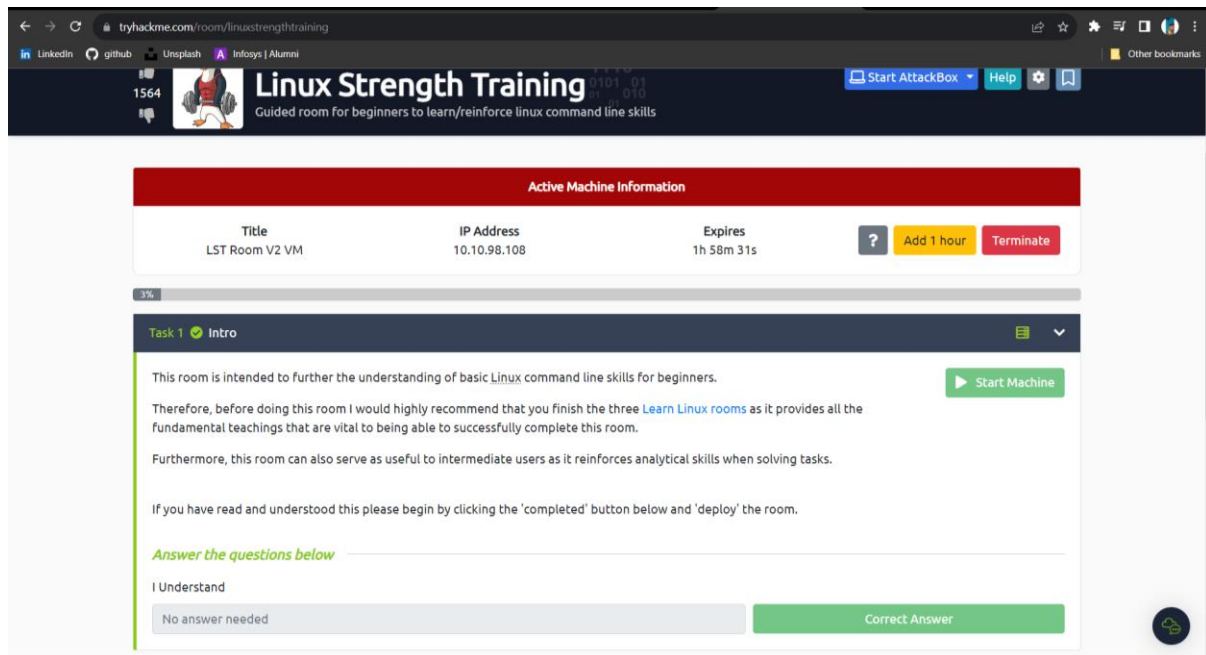


Assignment 2

THE CYBERHOST Cyber Security Intern

Task 1: Intro

First, we have to join the room to access the room then we just have to deploy the attached VM and start the Machine.



After starting the machine, we will get an IP Address after 60 seconds. And the task will be completed.

Task 2: Finding your way around Linux – overview

Q1. I have read and understood

A1. No answer needed

Q2. What is the correct option for finding files based on group

A2. -group

Q3. What is format for finding a file with the user named Francis and with a size of 52 kilobytes in the directory /home/francis/

A3. find /home/francis/ -type f -user francis -size 52k

Combining the below two query we can get the answer to the question. First enter the username query then combine the query with size query.

Find files based on size	find [directory path] -type f -size [size]	find /home/Andy -type f -size 10c (c for bytes, k for kilobytes M megabytes G for gigabytes type:'man find' for full information on the options)
Find files based on username	find [directory path] -type f -user [username]	find /etc/server -type f -user john

Q4. SSH as topson using his password topson. Go to the /home/topson/chatlogs directory and type the following: `grep -iRL 'keyword'`. What is the name of the file that you found using this command?

A4. 2019-10-11

```

root@ip-10-10-101-108:~# ssh topson@10.10.98.108
The authenticity of host '10.10.98.108 (10.10.98.108)' can't be established.
ECDSA key fingerprint is SHA256:aK0JsdxqntsBIDpYUtfYmDo0ZR8VuY50YS+LAAHeY.
Are you sure you want to continue connecting (yes/no)? YES
Warning: Permanently added '10.10.98.108' (ECDSA) to the list of known hosts.
topson@10.10.98.108's password:
Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 4.15.0-118-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Sun Sep 10 09:59:46 UTC 2023

System load:  0.0               Processes:    89
Usage of /:   64.5% of 6.82GB    Users logged in: 0
Memory usage: 62%              IP address for eth0: 10.10.98.108
Swap usage:   0%

19 packages can be updated.
0 updates are security updates.

topson@james:~$ cd chatlogs
topson@james:~/chatlogs$ grep -iRL 'keyword'
2019-10-11

```

Q5. Type: `less [filename]` to open the file. Then, before anything, type `/` before typing: keyword followed by `[ENTER]`. Notice how that allowed us to search for the first instance of that word in the entire document. For much larger documents this can be useful and if there are many more instances of that word in the document, we would be able to hit enter again to find the next instance in the document.

A5. No answer needed.

```
root@ip-10-10-101-108: ~
File Edit View Search Terminal Help
commodo porkeywordttitor ut enim. vitae, ac, aliquet elementum felis eleifend ju
sto,
dolor viverra enim eget, dolor. nec, justo, Aenean eu, a, eu, Integer pretium
ligula tellus. quis ipsum natoque quam ante, pede pretium. dapibus elit.
nascetur parturient a, ligula, nisi. imperdiet. varius montes, lorem nec, Nullam
Curabitur quis, dapibus. Quisque ridiculus ultricies tincidunt. sociis vitae,
Nam dictum ultricies dis nisi. pellentesque consequat augue. Aliquam et Donec
enim. consectetur viverra ullamcorper eleifend nulla Vivamus felis, rutrum.
dui. mollis Fringilla vulputate penatibus pede ut, arcu. Nulla leo tellus.
Aenean magnis venenatis amet, eget Phasellus sem. ultricies rhoncus feugiat
Donec adipiscing Cum sit Aenean metus massa eu Cras vulputate vel Etiam laoreet.
Aenean massa. Lorem vel, justo. nisi quis, in, Aenean imperdiet semper consequat
eget mus. In commodo porttitor ut enim. vitae, ac, aliquet elementum felis
eleifend justo, dolor viverra enim eget, dolor. nec, justo, Aenean eu, a, eu,
Integer pretium ligula tellus. quis ipsum natoque quam ante, pede pretium.
dapibus elit. nascetur parturient a, ligula, nisi. imperdiet. varius montes,
lorem nec, Nullam Curabitur quis, dapibus. Quisque ridiculus ultricies
tincidunt. sociis vitae, Nam dictum ultricies dis nisi. pellentesque consequat
augue. Aliquam et Donec enim. consectetur viverra ullamcorper eleifend nulla
Vivamus felis, rutrum. dui. mollis Fringilla vulputate penatibus pede ut, arcu.
Nulla leo tellus. Aenean magnis venenatis amet, eget Phasellus sem. ultricies
rhoncus feugiat Donec adipiscing Cum sit Aenean metus massa eu Cras vulputate
vel Etiam laoreet. Aenean massa. Lorem vel, justo. nisi quis, in, Aenean
:
```

Q6. What are the characters subsequent to the word you found?

A6. ttitor

```
root@ip-10-10-101-108: ~
File Edit View Search Terminal Help
commodo porkeywordttitor ut enim. vitae, ac, al
sto,
```

Q7. Read the file named 'ReadMeIfStuck.txt'. What is the Flag?

A7. Flag{81726350827fe53g}

```
topson@james:~$ ls
billings chatlogs corperateFiles ReadMeIfStuck.txt
channels clientslogs meetings workflows
topson@james:~$ cat ReadMeIfStuck.txt
Looking for flag 1?:It seems you will have to think harder if you want to find t
he flag. Perhaps try looking for a file called additionalHINT if you can't find
it..
Looking for flag 2?: look for a file named readME_hint.txt
topson@james:~$
```

```
topson@james:~$ find / -type f -name additionalHINT 2>/dev/null
/home/topson/channels/additionalHINT
topson@james:~$
```

I used 2>/dev/null to avoid getting error messages.

```
topson@james:~$ cat /home/topson/channels/additionalHINT
try to find a directory called telephone numbers... Oh wait.. it contains a spa
ce.. I wonder how we can find that....
topson@james:~$
```



```
topson@james:~$ find / -type d -name "telephone numbers" 2>/dev/null
/home/topson/corperateFiles/xch/telephone numbers
topson@james:~$
```

```
topson@james:~$ cd /home/topson/corperateFiles/xch
topson@james:~/corperateFiles/xch$ ls
Egu0YOKVD    kMnGQJxue  'telephone numbers'  YXNLOlwMF
jFGmcDL      pMsBsgXdk  yikJfMW
topson@james:~/corperateFiles/xch$ cd telephone\numbers
-bash: cd: telephonenumber: No such file or directory
topson@james:~/corperateFiles/xch$ cd telephone\ numbers
topson@james:~/corperateFiles/xch/telephone numbers$ ls
readME.txt
```

```
topson@james:~/corperateFiles/xch/telephone numbers$ cat cat readME.txt
cat: cat: No such file or directory
202-555-0150
202-555-0125
617-555-0115
+1-617-555-0115
+1-617-555-0186
+1-617-555-0138
use the Find command to find a file with a modified date of 2016-09-12 from the
/workflows directory
```

Then I tried to find the file which is modified between 2016-09-11 to 2016-09-13 and I found a file in workflows directory.

```
topson@james:~$ find / -type f -newermt 2016-09-11 ! -newermt 2016-09-13 2>/dev/null
/home/topson/workflows/xft/eBQRhVvx
/usr/lib/python3/dist-packages/urllib3/packages/backports/makefile.py
/usr/lib/python3/dist-packages/urllib3/packages/backports/__init__.py
topson@james:~$
```

Then I entered the first file. And using less I found the answer.

```

tis adipisci labore nulla molestiae minus molestias nam veniam incidunt provident i
taque esse officia dolore placeat harum quo volFlag[81726350827fe53g]uptate quia se
d deleniti ad repellendus aut praesentium obcaecati facere natus architecto ullam m
axime qui earum sit perferendis rerum hic reprehenderit odit numquam vel dignissimo
```

Answer the questions below

I have read and understood

No answer needed

Correct Answer

What is the correct option for finding files based on group

-group

Correct Answer

 Hint

What is format for finding a file with the user named Francis and with a size of 52 kilobytes in the directory /home/francis/

find /home/francis/ -type f -user francis -size 52k

Correct Answer

 Hint

SSH as **topson** using his password **topson**. Go to the /home/topson/chatlogs directory and type the following: `grep -iRI 'keyword'`. What is the name of the file that you found using this command?

2019-10-11

Correct Answer

 Hint

Type: `less [filename]` to open the file. Then, before anything, type `/` before typing: keyword followed by `[ENTER]`. Notice how that allowed us to search for the first instance of that word in the entire document. For much larger documents this can be useful and if there are many more instances of that word in the document, we would be able to hit enter again to find the next instance in the document.

No answer needed

Correct Answer

What are the characters subsequent to the word you found?

ttitor

Correct Answer

Read the file named 'ReadMelfStuck.txt'. What is the Flag?

Flag{81726350827fe53g}

Correct Answer

 Hint

Task 3: Working with files:

Q1. Hypothetically, you find yourself in a directory with many files and want to move all these files to the directory of /home/francis/logs. What is the correct command to do this?

A1. `mv * /home/francis/logs`

Q2. Hypothetically, you want to transfer a file from your /home/james/Desktop/ with the name script.py to the remote machine (192.168.10.5) directory of /home/john/scripts using the username of john. What would be the full command to do this?

A2. scp /home/james/Desktop/script.py john@192.168.10.5:/home/john/scripts

upload file to a remote machine	scp [filename] [username]@[IP of remote machine]:/[directory to upload to]	scp example.txt john@192.168.100.123:/home/john/
---------------------------------	---	---

Q3. How would you rename a folder named -logs to -newlogs

A3. mv -logs -newlogs

rename files/folder	mv [current filename] [new filename]	mv ssh.conf NewSSH.conf
---------------------	--------------------------------------	-------------------------

Q4. How would you copy the file named encryption keys to the directory of /home/john/logs

A4. cp "encryption keys" /home/john/logs

copy file/folder	cp [filename/folder] [directory] (remember, if the filename/folder name has spaces then you will need to encase the filename with speech marks such as cp "[filename with spaces]" [directory]. This applies to other commands such as mv.)	cp ssh.conf /home/newfolder
------------------	---	-----------------------------

Q5. Find a file named readME_hint.txt inside topson's directory and read it. Using the instructions it gives you, get the second flag.

A5. Flag{234@i4s87u5hbn\$3}

```
topson@james:~$ find / -type f -name readME_hint.txt 2>/dev/null
/home/topson/corperateFiles/RecordsFinances/readME_hint.txt
```

```
topson@james:~$ find / -type f -name -MoveMe.txt 2>/dev/null
/home/topson/corperateFiles/RecordsFinances/-MoveMe.txt
topson@james:~$
```

```
topson@james:~$ cd /home/topson/corperateFiles/RecordsFinances/
topson@james:~/corperateFiles/RecordsFinances$ ls
ajkJji  GxPtUIo  january  -MoveMe.txt  uIkMHPN
CeCJDJ  hHYDeM  '-march folder'  readME_hint.txt
topson@james:~/corperateFiles/RecordsFinances$
```

```
topson@james:~/corperateFiles/RecordsFinances$ mv -- -MoveMe.txt -march\ folder
topson@james:~/corperateFiles/RecordsFinances$ cd -- -march\ folder
topson@james:~/corperateFiles/RecordsFinances/-march folder$ ls
-MoveMe.txt  -runME.sh
topson@james:~/corperateFiles/RecordsFinances/-march folder$
```

```
topson@james:~/corperateFiles/RecordsFinances/-march folder$ ./-runME.sh
-MoveMe.txt exists.
Flag{234@i4s87u5hbn$3}
```

Answer the questions below

Hypothetically, you find yourself in a directory with many files and want to move all these files to the directory of /home/francis/logs. What is the correct command to do this?

```
mv * /home/francis/logs
```

Correct Answer

Hypothetically, you want to transfer a file from your /home/james/Desktop/ with the name script.py to the remote machine (192.168.10.5) directory of /home/john/scripts using the username of john. What would be the full command to do this?

```
scp /home/james/Desktop/script.py john@192.168.10.5:/home/john/scripts
```

Correct Answer

How would you rename a folder named -logs to -newlogs

```
mv -logs -newlogs
```

Correct Answer

Hint

How would you copy the file named encryption keys to the directory of /home/john/logs

```
cp "encryption keys" /home/john/logs
```

Correct Answer

Hint

Find a file named readME_hint.txt inside topson's directory and read it. Using the instructions it gives you, get the second flag.

```
Flag{234@i4s87u5hbn$3}
```

Correct Answer

Hint

Task 4: Hashing – Introduction

I downloaded the file in my windows. Then I opened the file and copy the text. And in my attach machine I created a text file named hash1 and paste the text inside the file.

Q1. Download the hash file attached to this task and attempt to crack the MD5 hash. What is the password?

A1. secret123

```
root@ip-10-10-252-162:~/Desktop# john --format=raw-md5 --wordlist=/usr/share/wordlists/rockyou.txt hash1
Using default input encoding: UTF-8
Loaded 1 password hash (Raw-MD5 [MD5 256/256 AVX2 8x3])
Warning: no OpenMP support for this hash type, consider --fork=2
Press 'q' or Ctrl-C to abort, almost any other key for status
secret123 (??)
1g 0:00:00:00 DONE (2023-09-10 12:47) 5.000g/s 86400p/s 86400c/s 86400C/s extrem
o..goarmy
Use the "--show --format=Raw-MD5" options to display all of the cracked password
s reliably
Session completed.
root@ip-10-10-252-162:~/Desktop#
```

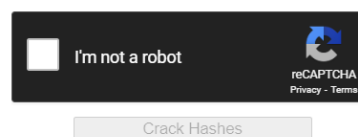
Q2. What is the hash type stored in the file hashA.txt

A2. Md4

```
sarah@james:~$ find / -type f -name hashA.txt 2>/dev/null
/home/sarah/system AB/server_mail/server settings/hashA.txt
sarah@james:~$

sarah@james:~$ cat /home/sarah/system\ AB/server_mail/server\ settings/hashA.txt
f9d4049dd6a4dc35d40e5265954b2a46sarah@james:~$
```


f9d4049dd6a4dc35d40e5265954b2a46



Supports: LM, NTLM, md2, md4, md5, md5(md5_hex), md5-half, sha1, sha224, sha256, sha384, sha512, ripeMD160, whirlpool, MySQL 4.1+ (sha1 sha1_bin), QubesV3.1BackupDefaults

Hash	Type	Result
f9d4049dd6a4dc35d40e5265954b2a46	md4	admin

Q3. Crack hashA.txt using john the ripper, what is the password?

A3. Admin

```
root@ip-10-10-252-162:~/Desktop# john --format=raw-md4 --wordlist=/usr/share/wordlists/rockyou.txt hash1
Using default input encoding: UTF-8
Loaded 1 password hash (Raw-MD4 [MD4 256/256 AVX2 8x3])
Warning: no OpenMP support for this hash type, consider --fork=2
Press 'q' or Ctrl-C to abort, almost any other key for status
admin (??)
1g 0:00:00:00 DONE (2023-09-10 13:15) 50.00g/s 998400p/s 998400c/s 998400C/s mon
te..johny
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
root@ip-10-10-252-162:~/Desktop#
```

Q4. What is the hash type stored in the file hashB.txt

A4. SHA-1

```
sarah@james:~$ find / -type f -name hashB.txt 2>/dev/null
/home/sarah/oldLogs/settings/craft/hashB.txt
sarah@james:~$
```

```
sarah@james:~$ cat /home/sarah/oldLogs/settings/craft/hashB.txt
b7a875fc1ea228b9061041b7cec4bd3c52ab3ce3sarah@james:~$
```

Q5. Find a wordlist with the file extension of '.mnf' and use it to crack the hash with the filename hashC.txt. What is the password?

A5. unacvaolipatnuggi

Q6. Crack hashB.txt using john the ripper, what is the password?

A6. letmein

```
root@ip-10-10-252-162:~# cd Desktop
root@ip-10-10-252-162:~/Desktop# john --format=raw-sha1 --wordlist=/usr/share/wordlists/rockyou.txt hash1
Using default input encoding: UTF-8
Loaded 1 password hash (Raw-SHA1 [SHA1 256/256 AVX2 8x])
Warning: no OpenMP support for this hash type, consider --fork=2
Press 'q' or Ctrl-C to abort, almost any other key for status
letmein (??)
1g 0:00:00:00 DONE (2023-09-10 13:13) 100.0g/s 51200p/s 51200c/s 51200C/s stupid
..letmein
Use the "--show --format=Raw-SHA1" options to display all of the cracked passwords reliably
Session completed.
root@ip-10-10-252-162:~/Desktop#
```


Answer the questions below

Download the hash file attached to this task and attempt to crack the MD5 hash. What is the password?

Correct Answer

SSH as sarah using: sarah@[10.10.98.108] and use the password: rainbowtree1230x

What is the hash type stored in the file hashA.txt

Correct Answer

Crack hashA.txt using john the ripper, what is the password?

Correct Answer

What is the hash type stored in the file hashB.txt

Correct Answer

Find a wordlist with the file extension of '.mnf' and use it to crack the hash with the filename hashC.txt. What is the password?

Correct Answer

Hint

Crack hashB.txt using john the ripper, what is the password?

Correct Answer

My 1 hour of Attach Machine is over so I'll use my Kali Linux

Task 5: Decoding base64

Q1. what is the name of the tool which allows us to decode base64 strings?

A1. base64

Q2. find a file called encoded.txt. What is the special answer?

A2. john

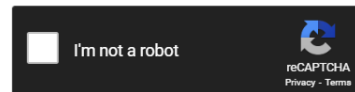
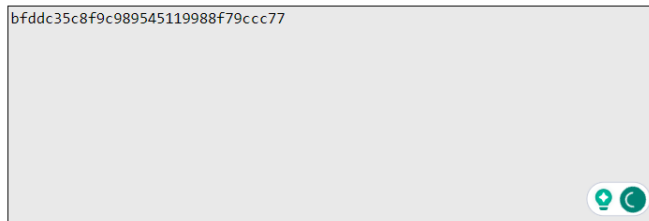
We found the file and we converted into base64 and store the output in a new file name decoded.txt

```
B1dCm0d1xwF10indXJpcyosTwyZwVtL1800wXsT302ixs0xmgchvydxmsIHbVChKIHsTwtCmF010vS2W1t0nK10S6t03wg0w9S2XN0aw0gTQg2XN0C18E02J
lYyB1dCBsZWN0dXMgcGxhY2VyYXQsIG9ybWZyZSBxdWVtIHZpdGF1LCBjb25zZWNOZXR1ciBtaS4gTW9yYmkgbm9uIGxpYmVybyBmYWNPbG1zaXMsIHBvc3VlcmUgZXJh
dCBpZCwg2Vt0GvYIGxpYmVyby4gRXRPYW0gaW4gbWF1cm1zIGJpYmVuZHVtLCB2aXZ1cnJhIGxhY3VzIG51YywgG9ydGEgbGVjdHVzLiA=
sarah@james:~$ cat /home/sarah/system\ AB\managed\encoded.txt | base64 -d >> decoded.txt
sarah@james:~$ ls
decoded.txt  example.txt  'linuxconf backup'  logs  logs33  oldLogs  serverLx  'system AB'  'system mx'
sarah@james:~$ cat decoded.txt
```

Using less command we got the place of that answer

```
dignissim. Suspendisse ultrices condimentum nisi et
c special: the answer is in a file called ent.txt,
e egestas dui, ut condimentum magna. Vestibulum tel
```

```
Last login: Sun Sep 10 12:44:23 2023 from 10.17.72.138
sarah@james:~$ find / -type f -name ent.txt 2>/dev/null
/home/sarah/logs/zhc/ent.txt
sarah@james:~$ cat /home/sarah/logs/zhc/ent.txt
bfddc35c8f9c989545119988f79ccc77
```



Supports: LM, NTLM, md2, md4, md5, md5(md5_hex), md5-half, sha1, sha224, sha256, sha384, sha512, ripeMD160, whirlpool, MySQL 4.1+ (sha1 sha1_bin), QubesV3.1BackupDefaults

Hash	Type	Result
bfddc35c8f9c989545119988f79ccc77	md4	john

Answer the questions below

what is the name of the tool which allows us to decode base64 strings?

base64

Correct Answer

find a file called encoded.txt. What is the special answer?

john

Correct Answer

Hint

Task 6: Encryption/Decryption using gpg

Q1. Now try it for yourself. Make a random text file and enter some readable sentences in there before encrypting and decrypting it as illustrated above.

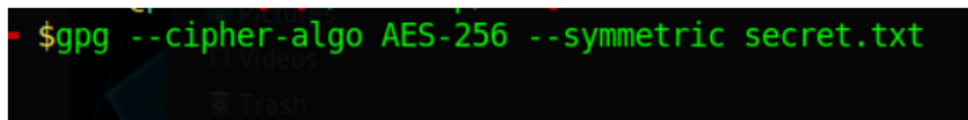
A1. No answer needed

Q2. You wish to encrypt a file called history_logs.txt using the AES-128 scheme. What is the full command to do this?

A2. `gpg --cipher-algo AES-128 --symmetric history_logs.txt`

This can be encrypted using the the program gpg to encrypt it using the AES-256 scheme:

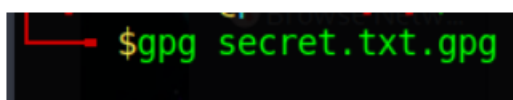
`gpg --cipher-algo [encryption type] [encryption method] [file to encrypt]`



Q3. What is the command to decrypt the file you just encrypted?

A3. `gpg history_logs.txt.gpg`

`gpg [encrypted file]`



Q4. Find an encrypted file called layer4.txt, its password is bob. Use this to locate the flag. What is the flag?

A4. Flag{B07\$f854f5ghg4s37}

```
sarah@james:~$ gpg /home/sarah/system\ AB/keys/vnmA/layer4.txt
gpg: keybox '/home/sarah/.gnupg/pubring.kbx' created
```

```
sarah@james:~$ find / -type f -name layer3.txt 2>/dev/null  
/home/sarah/oldLogs/2014-02-15/layer3.txt  
sarah@james:~$ cat /home/sarah/oldLogs/2014-02-15/layer3.txt  
♦      ♦|X♦+B♦♦r+S♦♦♦~)ju:n   $`S9|♦♦♦♦♦♦♦♦h♦♦!C♦T/  
  
                                !♦B♦t5_p♦♦f  
                                ♦♦♦♦T>♦bl(          ♦♦D♦+i♦♦♦T        #♦♦c♦♦♦z♦♦♦#♦)H♦♦0>dmz♦♦♦♦sarah  
  
@james:~$
```

```
sarah@james:~$ find / -type f -name layer2.txt 2>/dev/null
/home/sarah/oldLogs/settings/layer2.txt
sarah@james:~$ cat /home/sarah/oldLogs/settings/layer2.txt
8+... v...t.....Nz0*Z*]...!!)ZJC*SC...#9s|*...C;*,*{*(Ca*:#vD*...U+...SM,Sr4... p+S....._e>+cc
sarah@james:~$ gpg /home/sarah/oldLogs/settings/layer2.txt
gpg: WARNING: no command supplied. Trying to guess what you mean ...
gpg: AES256 encrypted data
gpg: encrypted with 1 passphrase
gpg: /home/sarah/oldLogs/settings/layer2.txt: unknown suffix
Enter new filename [layer2.txt]: l2dec.txt
sarah@james:~$ ls
decoded.txt  l1dec.txt  l3dec.txt      logs    oldLogs  'system AB'
example.txt  l2dec.txt  'linuxconf backup'  log33   serverLx  'system mx'
sarah@james:~$ cat l2dec.txt
MS4gRmluZCBIGZpbGUyF2FsbgVkIGheWVYMS50eHQsIGl0cyBwXWNzdDZyCBpcBoYWNRZWQu
sarah@james:~$
```

```
sarah@james:~$ find / -type f -name layer1.txt 2>/dev/null
/home/sarah/logs/zmn/layer1.txt
sarah@james:~$ cat /home/sarah/logs/zmn/layer1.txt
♦      O004I0D0W/00001D0:e00c000}0x0y00%060K0W00N`P00HXG.0BW0
(0n0gC000zOW/ Q000sarah@james:~$ gpg /home/sarah/logs/zmn/layer1.txt
gpg: WARNING: no command supplied. Trying to guess what you mean ...
gpg: AES256 encrypted data
gpg: encrypted with 1 passphrase
gpg: /home/sarah/logs/zmn/layer1.txt: unknown suffix
Enter new filename [layer1.txt]: final.txt
sarah@james:~$ ls
dd.txt          example.txt     l1dec.txt      l3dec.txt      logs           oldLogs        'system AB'
decoded.txt     final.txt      l2dec.txt      'linuxconf backup' logs33         serverLx       'system mx'
sarah@james:~$ cat final.txt
Flag{B07$f854f5ghg4s37}
sarah@james:~$
```

Answer the questions below

Now try it for yourself. Make a random text file and enter some readable sentences in there before encrypting and decrypting it as illustrated above.

No answer needed

Correct Answer

You wish to encrypt a file called history_logs.txt using the AES-128 scheme. What is the full command to do this?

gpg --cipher-algo AES-128 --symmetric history_logs.txt

Correct Answer

Hint

What is the command to decrypt the file you just encrypted?

gpg history_logs.txt.gpg

Correct Answer

Hint

Find an encrypted file called layer4.txt, its password is bob. Use this to locate the flag. What is the flag?

Flag{B07\$F854F5ghg4s37}

Correct Answer

Task 7: Cracking encrypted gpg files

Q1. Now try it yourself! Encrypt a file and use a common password contained in the wordlist you wish to use. Follow the instructions above to decrypt as if you are a hacker. If it worked, well done.

A1. No answer needed.

Q2. Find an encrypted file called personal.txt.gpg and find a wordlist called data.txt. Use tac to reverse the wordlist before brute-forcing it against the encrypted file. What is the password to the encrypted file?

A2. Valamanezivonia

Q3. What is written in this now decrypted file?

A3. Getting stronger in linux

Answer the questions below

Now try it yourself! Encrypt a file and use a common password contained in the wordlist you wish to use. Follow the instructions above to decrypt as if you are a hacker. If it worked, well done.

No answer needed

Correct Answer

Find an encrypted file called personal.txt.gpg and find a wordlist called data.txt. Use tac to reverse the wordlist before brute-forcing it against the encrypted file. What is the password to the encrypted file?

valamanezivonia

Correct Answer

Hint

What is written in this now decrypted file?

Getting stronger in linux

Correct Answer

Hint

Task 8: Reading SQL databases

Q1. Find a file called employees.sql and read the SQL database. (Sarah and Sameer can log both into mysql using the password: password). Find the flag contained in one of the tables. What is the flag?

A1. Flag{13490AB8}

```
sarah@james:~$ find / -type f -name employees.sql 2>/dev/null
/home/sarah/server1x/employees.sql
```



```
bye
sarah@james:~$ cd /home/sarah/serverLx
sarah@james:~/serverLx$ mysql -u sarah -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 4
```

```
mysql> show databases
→ ;
+-----+
| Database |
+-----+
| information_schema |
| employees |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0.00 sec)

mysql> █
```

```
mysql> show tables;
+-----+
| Tables_in_employees |
+-----+
| current_dept_emp |
| departments |
| dept_emp |
| dept_emp_latest_date |
| dept_manager |
| employees |
| salaries |
| titles |
+-----+
8 rows in set (0.01 sec)

mysql> desc employees;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| emp_no | int(11) | NO | PRI | NULL | |
| birth_date | date | NO | | NULL | |
| first_name | varchar(14) | NO | | NULL | |
| last_name | varchar(16) | NO | | NULL | |
| gender | enum('M','F') | NO | | NULL | |
| hire_date | date | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> select * from employees where last_name like 'flags%';
Empty set (0.08 sec)

mysql> select * from employees where first_name like 'flag%';
Empty set (0.09 sec)

mysql> select * from employees where last_name like 'flag%';
+-----+-----+-----+-----+-----+-----+
| emp_no | birth_date | first_name | last_name | gender | hire_date |
+-----+-----+-----+-----+-----+-----+
| 499973 | 1963-06-03 | Lobel | Flag{13490AB8} | M | 1994-02-01 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.08 sec)
```

Answer the questions below

Find a file called employees.sql and read the SQL database. (Sarah and Sameer can log both into mysql using the password: password). Find the flag contained in one of the tables. What is the flag?

Flag{13490AB8}

Correct Answer

Hint

Task 9: Final Challenge

Q1. Go to the /home/shared/chatlogs directory and read the first chat log named: LpnQ. Use this to help you to proceed to the next task.

A1. No answer needed

Q2. What is Sameer's SSH password?

A2. thegreatestpasswordever000

```
(2020-08-13) Michael: once you find the configuration file and consequently the wordlist directory, visit it. One of those wordlists must contain the password it used for the testing. All I remember is that the password began with ebq. You will need Sameer's account. His SSH password is: thegreatestpasswordever000
```

Q3. What is the password for the sql database back-up copy

A3. Ebqattle

Q4. Find the SSH password of the user James. What is the password?

A4. Vuimaxcullings

```
mysql> select * from employees where first_name like 'James';
```

emp_no	birth_date	first_name	last_name	gender	hire_date
499996	1953-03-07	James	vuimaxcullings	M	1990-09-27

```
1 row in set (0.09 sec)
```

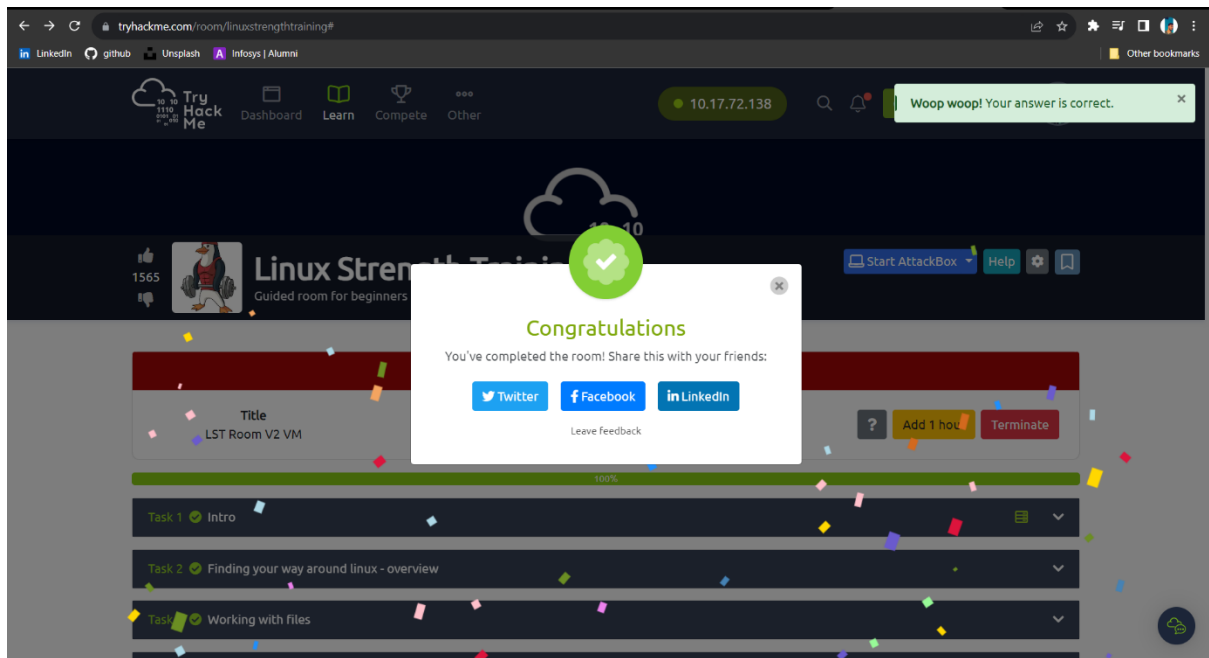
Q5. SSH as james and change the user to root?

A5. No answer needed

Q6. What is the root flag?

A6. Flag{6\$8\$hyJSJ3KDJ3881}

```
[sudo] password for james:
root@james:/home/james# id
uid=0(root) gid=0(root) groups=0(root)
root@james:/home/james# cd /root
root@james:~# ls
root.txt
root@james:~# cat root.txt
Flag{6$8$hyJSJ3KDJ3881}
```



The Room is complete

-Sadiq Sonalkar