PSP0201

Week 4

Writeup

Group Name:HUSTLERS

Members

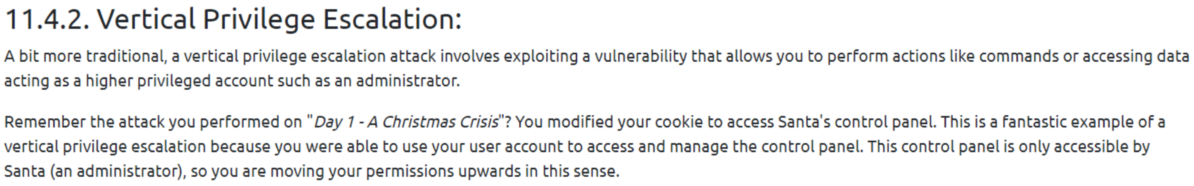
ID	Name	Role
1211100708	Muhammad Faiz BIn Mohd Fauzi	leader
1211101962	Barath A L Saravanan	member
1211101804	AKHILESHNAIDU A/L JAYA KUMAR	MEMBER

[Day 11] Networking The Rogue Gnome

Tools used:Attackbox,Terminal,linpeas.sh

Solution/walkthrough:

Question 1&2

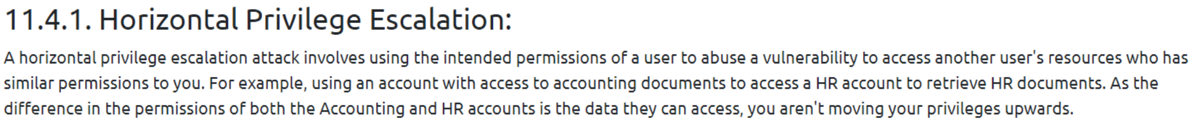


11.4.2. Vertical Privilege Escalation:

A bit more traditional, a vertical privilege escalation attack involves exploiting a vulnerability that allows you to perform actions like commands or accessing data acting as a higher privileged account such as an administrator.

Remember the attack you performed on "*Day 1 - A Christmas Crisis*"? You modified your cookie to access Santa's control panel. This is a fantastic example of a vertical privilege escalation because you were able to use your user account to access and manage the control panel. This control panel is only accessible by Santa (an administrator), so you are moving your permissions upwards in this sense.

Question 3

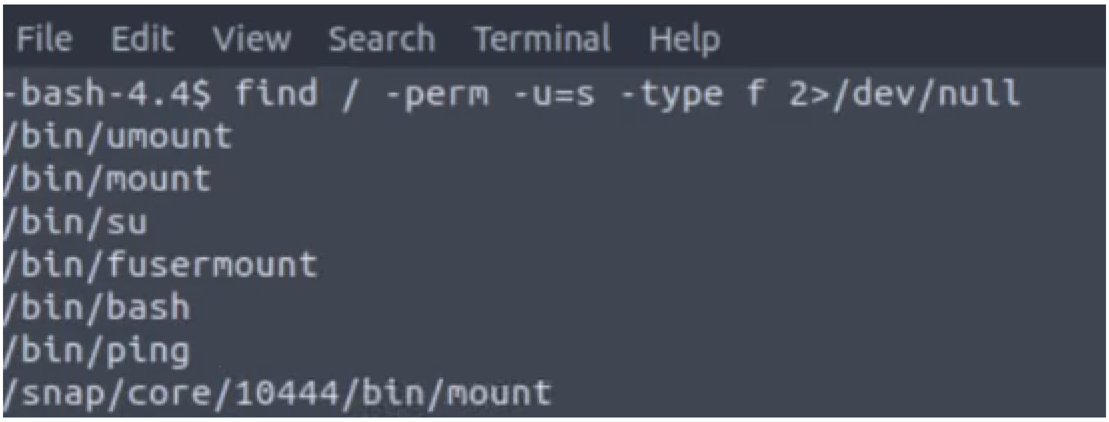


11.4.1. Horizontal Privilege Escalation:

A horizontal privilege escalation attack involves using the intended permissions of a user to abuse a vulnerability to access another user's resources who has similar permissions to you. For example, using an account with access to accounting documents to access a HR account to retrieve HR documents. As the difference in the permissions of both the Accounting and HR accounts is the data they can access, you aren't moving your privileges upwards.

Question 4

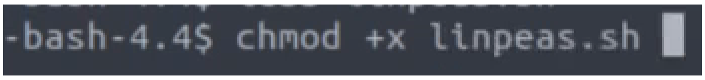
Linux Command to enumerate the key for SSH



```
-bash-4.4$ find / -perm -u=s -type f 2>/dev/null
/bin/umount
/bin/mount
/bin/su
/bin/fusermount
/bin/bash
/bin/ping
/snap/core/10444/bin/mount
```

Question 5

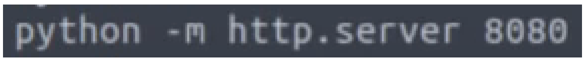
Chmod +x find.sh



```
-bash-4.4$ chmod +x linpeas.sh
```

Question 6

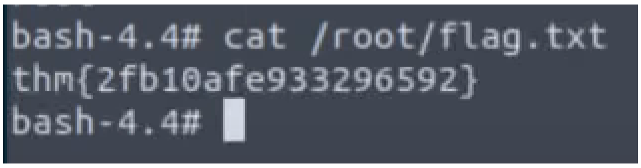
python3 -m http.server 9999



```
python -m http.server 8080
```

Question 7

Contents of the file located at /root/flag.txt



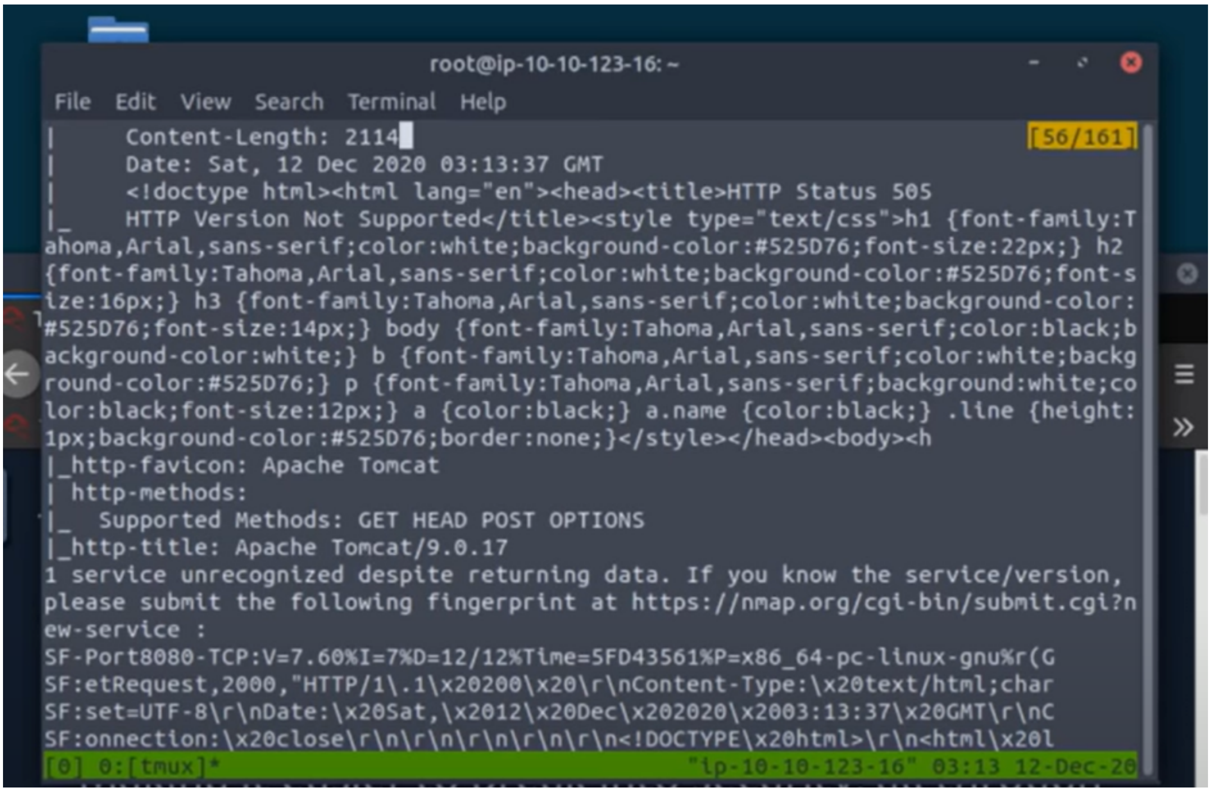
```
bash-4.4# cat /root/flag.txt
thm{2fb10afe933296592}
bash-4.4#
```

[Day 12] Networking Ready, set, elf.

Tools used:

solution/walkthrough:

Question 1



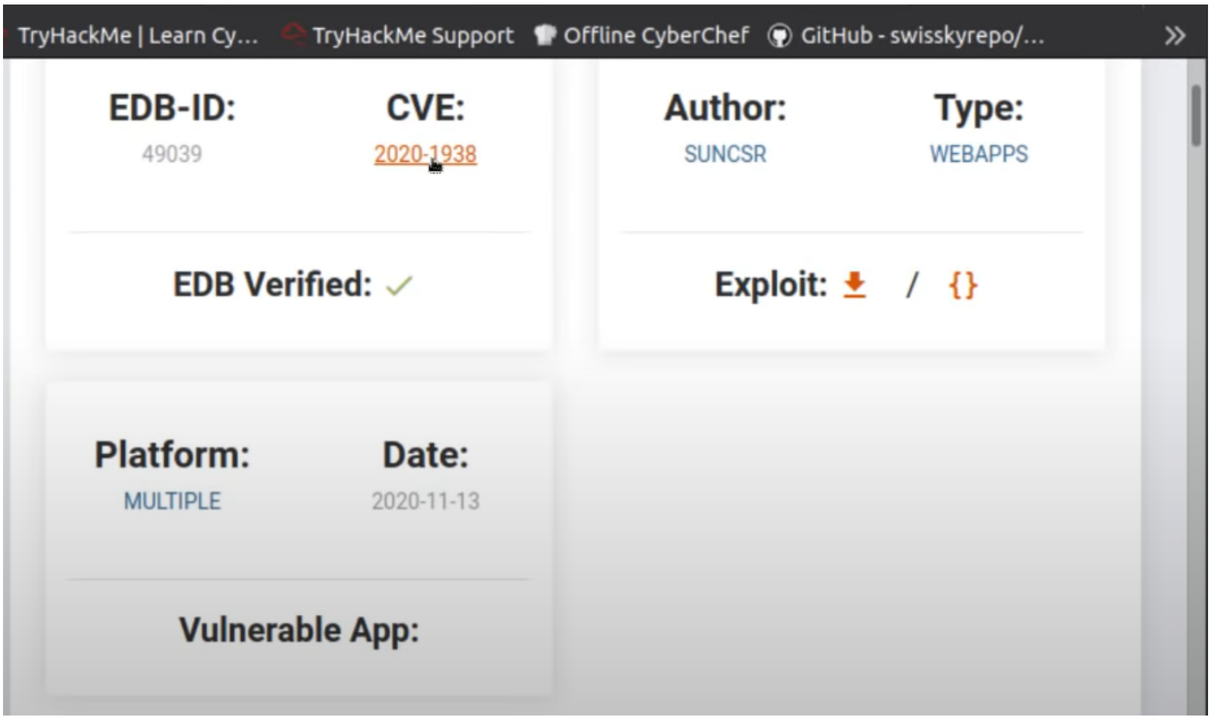
root@ip-10-10-123-16: ~

```
|     Content-Length: 2114                                          [56/161]
|     Date: Sat, 12 Dec 2020 03:13:37 GMT
|     <!doctype html><html lang="en"><head><title>HTTP Status 505
|_    HTTP Version Not Supported</title><style type="text/css">h1 {font-family:T
ahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:22px;} h2
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-s
ize:16px;} h3 {font-family:Tahoma,Arial,sans-serif;color:white;background-color:
#525D76;font-size:14px;} body {font-family:Tahoma,Arial,sans-serif;color:black;b
ackground-color:white;} b {font-family:Tahoma,Arial,sans-serif;color:white;backg
round-color:#525D76;} p {font-family:Tahoma,Arial,sans-serif;background:white;co
lor:black;font-size:12px;} a {color:black;} a.name {color:black;} .line {height:
1px;background-color:#525D76;border:none;}</style></head><body><h
|_http-favicon: Apache Tomcat
| http-methods:
|_  Supported Methods: GET HEAD POST OPTIONS
|_http-title: Apache Tomcat/9.0.17
1 service unrecognized despite returning data. If you know the service/version,
please submit the following fingerprint at https://nmap.org/cgi-bin/submit.cgi?n
ew-service :
SF-Port8080-TCP:V=7.60%I=7%D=12/12%Time=5FD43561%P=x86_64-pc-linux-gnu%r(G
SF:etRequest,2000,"HTTP/1\.1\x20200\x20\r\nContent-Type:\x20text/html;char
SF:set=UTF-8\r\nDate:\x20Sat,\x2012\x20Dec\x202020\x2003:13:37\x20GMT\r\nC
SF:onnection:\x20close\r\n\r\n\r\n\r\n\r\n<!DOCTYPE\x20html>\r\n<html\x20l
[0] 0:[tmux]*                                    "ip-10-10-123-16" 03:13 12-Dec-20
```

Version number = Apache Tomcat

9.0.17

Question 2



EDB-ID: 49039

CVE: 2020-1938

Author: SUNCSR

Type: WEBAPPS

EDB Verified: ✓

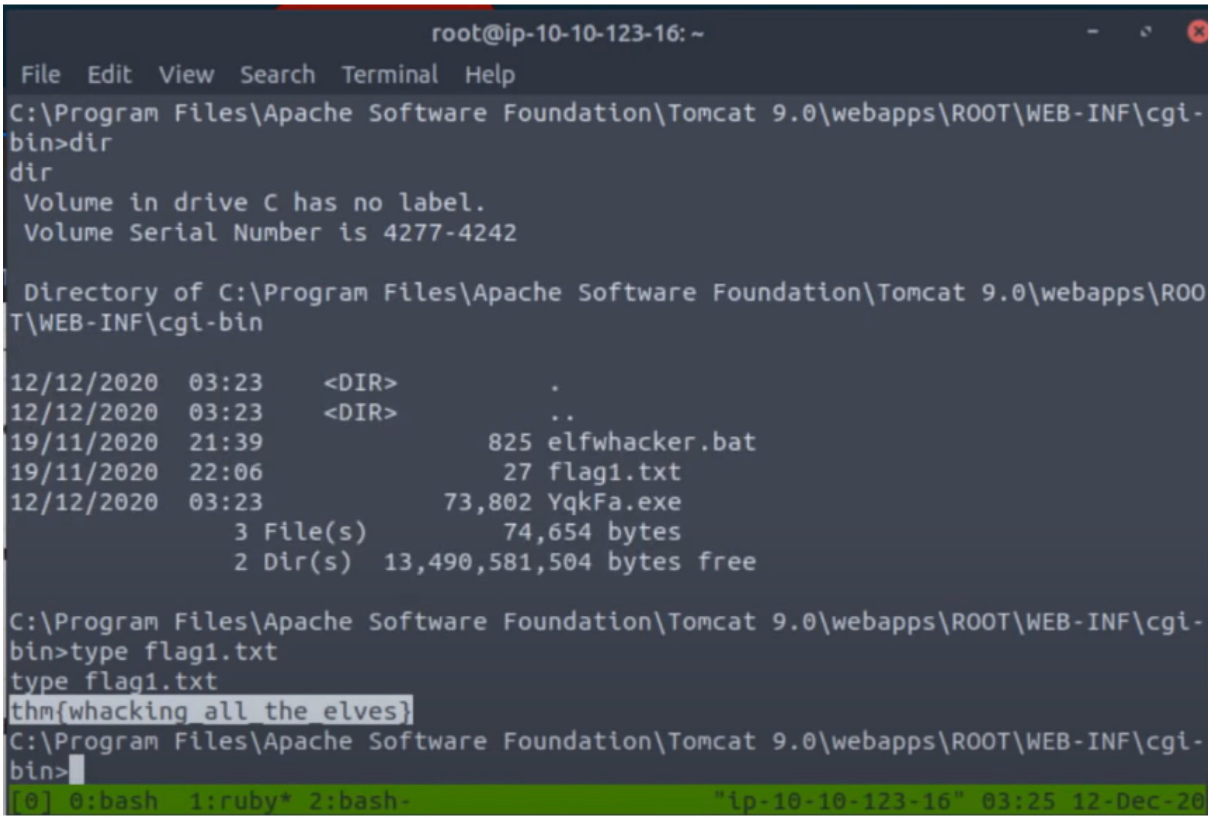
Exploit: / {}

Platform: MULTIPLE

Date: 2020-11-13

Vulnerable App:

Question 3



```
C:\Program Files\Apache Software Foundation\Tomcat 9.0\webapps\ROOT\WEB-INF\cgi-
bin>dir
dir
 Volume in drive C has no label.
 Volume Serial Number is 4277-4242

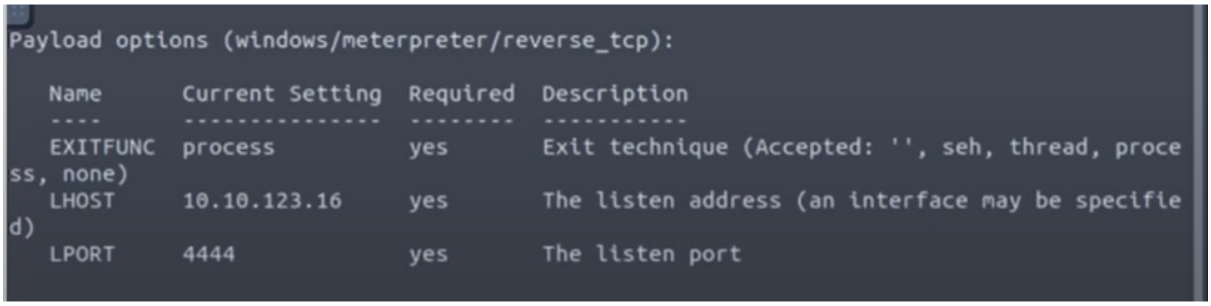
 Directory of C:\Program Files\Apache Software Foundation\Tomcat 9.0\webapps\ROO
T\WEB-INF\cgi-bin

12/12/2020  03:23    <DIR>          .
12/12/2020  03:23    <DIR>          ..
19/11/2020  21:39               825 elfwhacker.bat
19/11/2020  22:06                27 flag1.txt
12/12/2020  03:23            73,802 YqkFa.exe
               3 File(s)         74,654 bytes
               2 Dir(s)  13,490,581,504 bytes free

C:\Program Files\Apache Software Foundation\Tomcat 9.0\webapps\ROOT\WEB-INF\cgi-
bin>type flag1.txt
type flag1.txt
thm{whacking_all_the_elves}
C:\Program Files\Apache Software Foundation\Tomcat 9.0\webapps\ROOT\WEB-INF\cgi-
bin>
[0] 0:bash  1:ruby* 2:bash-                        "ip-10-10-123-16" 03:25 12-Dec-20
```

Contents of flag1.txt = thm{whacking_all_the_elves}

Question 4



```
Payload options (windows/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  process          yes       Exit technique (Accepted: '', seh, thread, proce
ss, none)
   LHOST     10.10.123.16     yes       The listen address (an interface may be specifie
d)
   LPORT     4444             yes       The listen port
```

LHOST

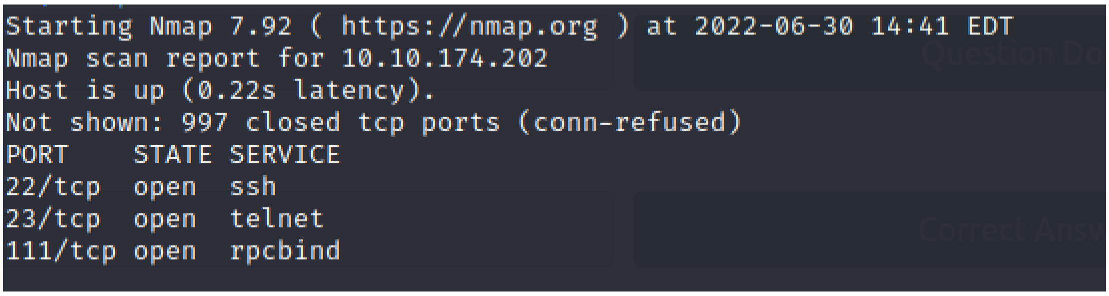
LPORT

[Day 13] Networking Coal for Christmas

Tools used:nmap,kali

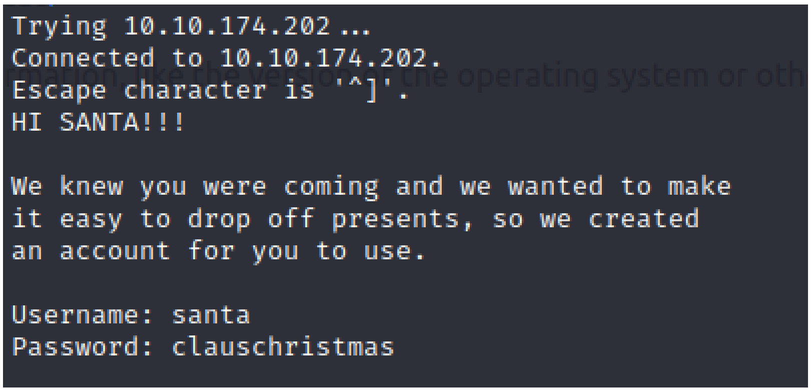
Solution:walkthrough:

Question 1



```
Starting Nmap 7.92 ( https://nmap.org ) at 2022-06-30 14:41 EDT
Nmap scan report for 10.10.174.202
Host is up (0.22s latency).
Not shown: 997 closed tcp ports (conn-refused)
PORT    STATE SERVICE
22/tcp  open  ssh
23/tcp  open  telnet
111/tcp open  rpcbind
```

Question 2



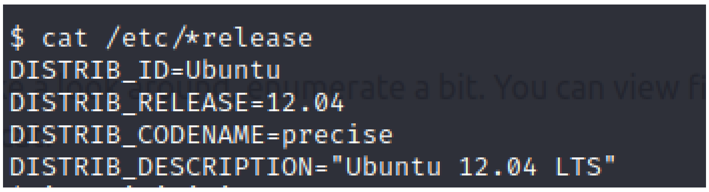
```
Trying 10.10.174.202...
Connected to 10.10.174.202.
Escape character is '^]'.
HI SANTA!!!

We knew you were coming and we wanted to make
it easy to drop off presents, so we created
an account for you to use.

Username: santa
Password: clauschristmas
```

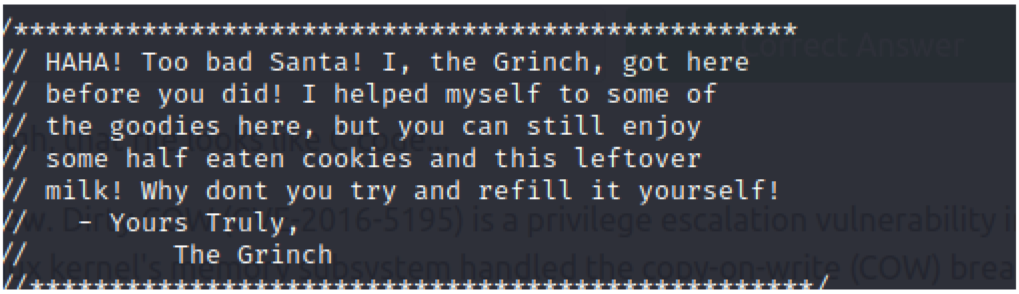
Question 3

Use cat to get version number that is running



```
$ cat /etc/*release
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=12.04
DISTRIB_CODENAME=precise
DISTRIB_DESCRIPTION="Ubuntu 12.04 LTS"
```

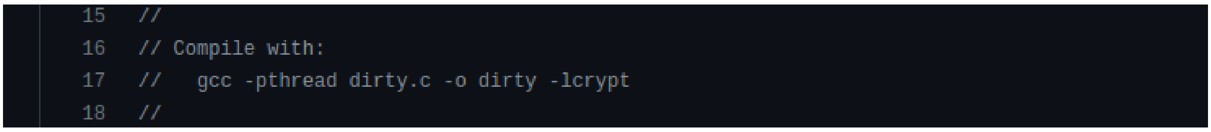
Question 4



```
/*************************************************
// HAHA! Too bad Santa! I, the Grinch, got here
// before you did! I helped myself to some of
// the goodies here, but you can still enjoy
// some half eaten cookies and this leftover
// milk! Why dont you try and refill it yourself!
//    - Yours Truly,
//          The Grinch
//*************************************************/
```

Question 5

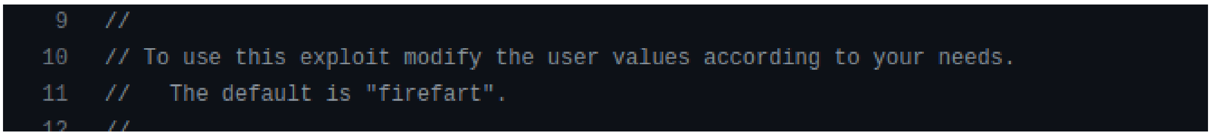
Research for verbatim syntax use to compile



```
//
// Compile with:
//   gcc -pthread dirty.c -o dirty -lcrypt
//
```

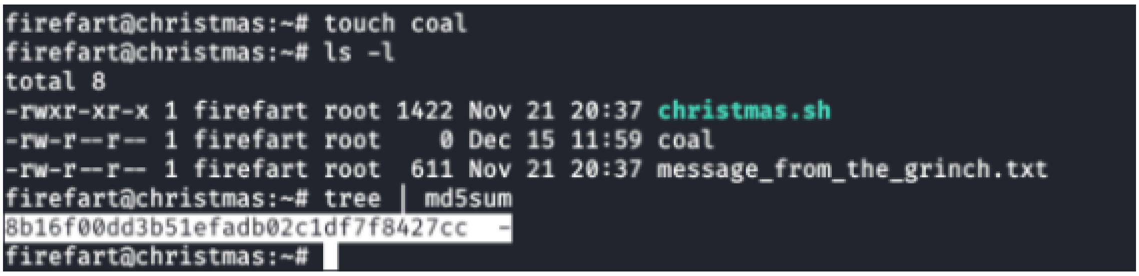
Question 6

Default new username



```
//
// To use this exploit modify the user values according to your needs.
//   The default is "firefart".
```

Question 7



```
firefart@christmas:~# touch coal
firefart@christmas:~# ls -l
total 8
-rwxr-xr-x 1 firefart root 1422 Nov 21 20:37 christmas.sh
-rw-r--r-- 1 firefart root    0 Dec 15 11:59 coal
-rw-r--r-- 1 firefart root  611 Nov 21 20:37 message_from_the_grinch.txt
firefart@christmas:~# tree | md5sum
8b16f00dd3b51efadb02c1df7f8427cc  -
firefart@christmas:~#
```

Question 8

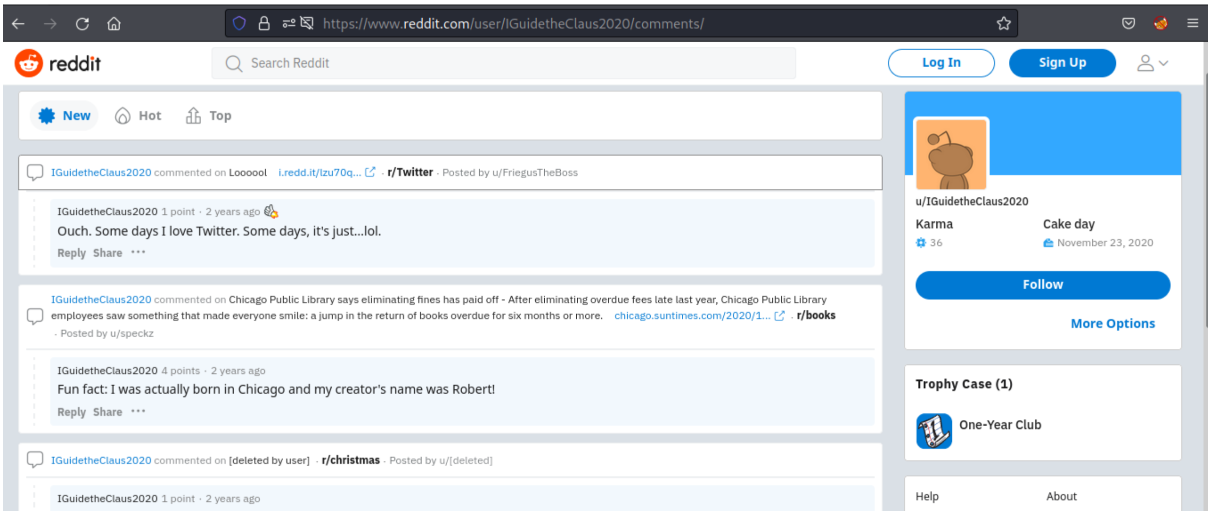
That C source code is a portion of a kernel exploit called **DirtyCow**. Dirty COW (CVE-2016-5195) is a privilege escalation vulnerability in the Linux Kernel, taking advantage of a race condition that was found in the way the Linux kernel's memory subsystem handled the copy-on-write (COW) breakage of private read-only memory mappings. An unprivileged local user could use this flaw to gain write access to otherwise read-only memory mappings and thus increase their privileges on the system.

Day 14 - [OSINT] Where's Rudolph?

Tools used:google map,reddit,google image,twitter,name checkup site,

Solution/walkthrough

Question 1,2



IGuidetheClaus2020 commented on Loooool i.redd.it/lzu70q... · r/Twitter · Posted by u/FriegusTheBoss

IGuidetheClaus2020 1 point · 2 years ago

Ouch. Some days I love Twitter. Some days, it's just...lol.

Reply Share ···

IGuidetheClaus2020 commented on Chicago Public Library says eliminating fines has paid off - After eliminating overdue fees late last year, Chicago Public Library employees saw something that made everyone smile: a jump in the return of books overdue for six months or more. chicago.suntimes.com/2020/1... · r/books · Posted by u/speckz

IGuidetheClaus2020 4 points · 2 years ago

Fun fact: I was actually born in Chicago and my creator's name was Robert!

Reply Share ···

IGuidetheClaus2020 commented on [deleted by user] · r/christmas · Posted by u/[deleted]

IGuidetheClaus2020 1 point · 2 years ago

u/IGuidetheClaus2020

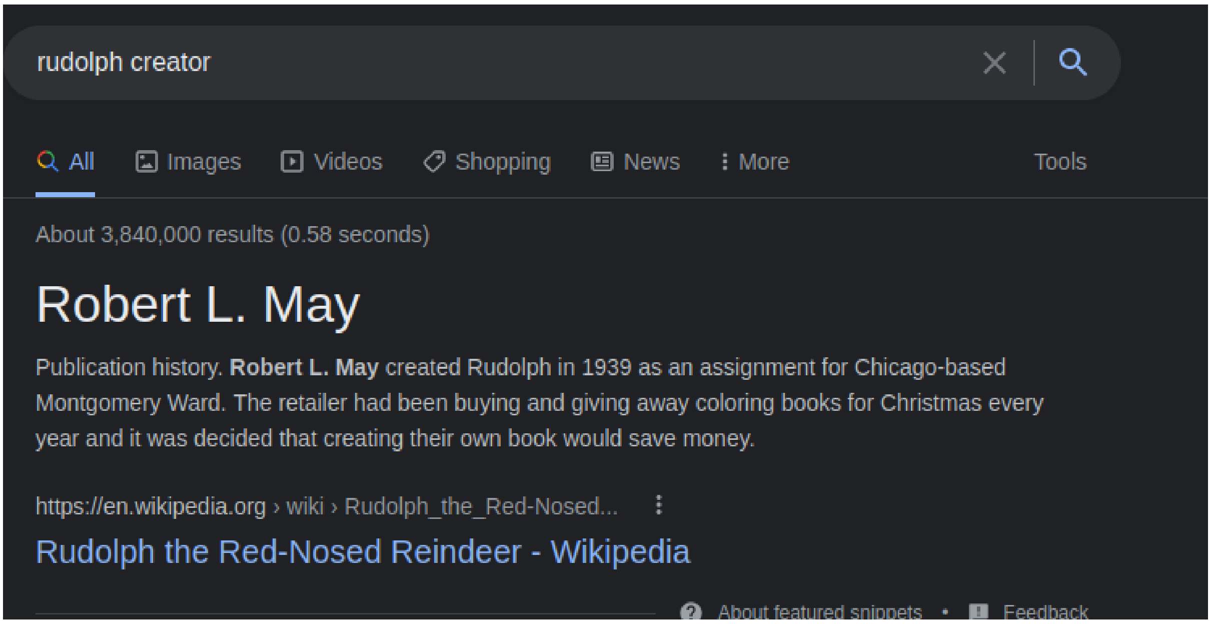
Karma: 36

Cake day: November 23, 2020

Trophy Case (1)

One-Year Club

Question 3



rudolph creator

About 3,840,000 results (0.58 seconds)

Robert L. May

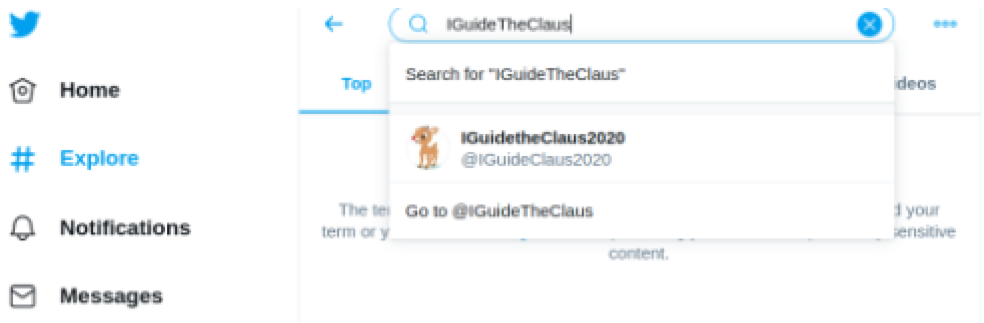
Publication history. **Robert L. May** created Rudolph in 1939 as an assignment for Chicago-based Montgomery Ward. The retailer had been buying and giving away coloring books for Christmas every year and it was decided that creating their own book would save money.

https://en.wikipedia.org › wiki › Rudolph_the_Red-Nosed...

Rudolph the Red-Nosed Reindeer - Wikipedia

Question 4

Question 5



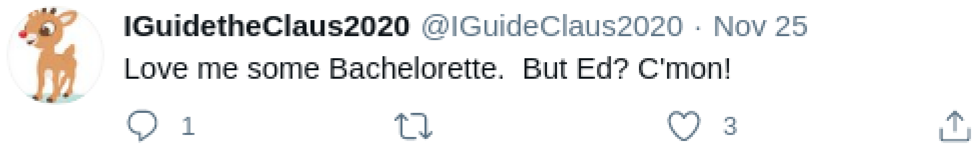
IGuideTheClaus

Search for "IGuideTheClaus"

IGuidetheClaus2020
@IGuideClaus2020

Go to @IGuideTheClaus

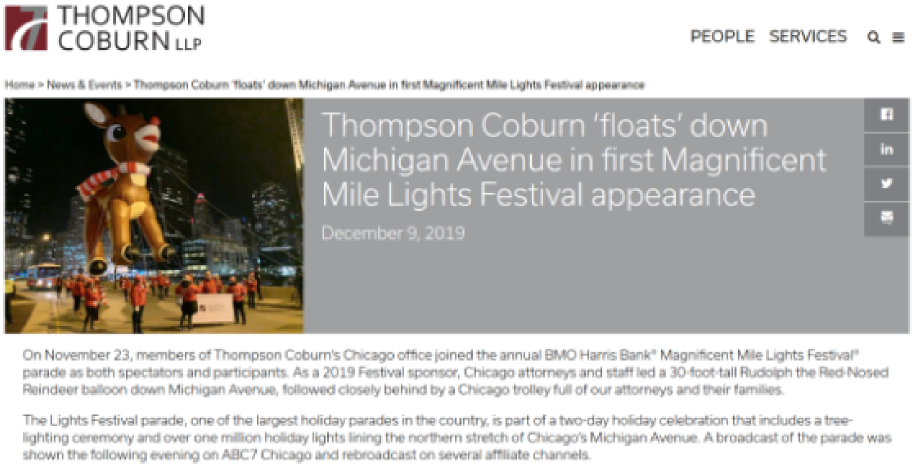
Question 6



IGuidetheClaus2020 @IGuideClaus2020 · Nov 25

Love me some Bachelorette. But Ed? C'mon!

Question 7



THOMPSON COBURN LLP

Home > News & Events > Thompson Coburn 'floats' down Michigan Avenue in first Magnificent Mile Lights Festival appearance

Thompson Coburn 'floats' down Michigan Avenue in first Magnificent Mile Lights Festival appearance

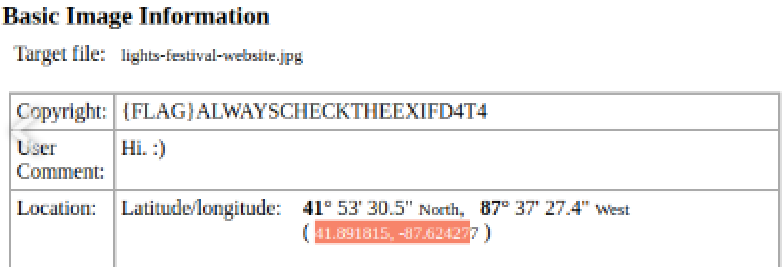
December 9, 2019

On November 23, members of Thompson Coburn's Chicago office joined the annual BMO Harris Bank® Magnificent Mile Lights Festival® parade as both spectators and participants. As a 2019 Festival sponsor, Chicago attorneys and staff led a 30-foot-tall Rudolph the Red-Nosed Reindeer balloon down Michigan Avenue, followed closely behind by a Chicago trolley full of our attorneys and their families.

The Lights Festival parade, one of the largest holiday parades in the country, is part of a two-day holiday celebration that includes a tree-lighting ceremony and over one million holiday lights lining the northern stretch of Chicago's Michigan Avenue. A broadcast of the parade was shown the following evening on ABC7 Chicago and rebroadcast on several affiliate channels.

Question 8&9

Use exif.regex.info to get EXIF data and get flag



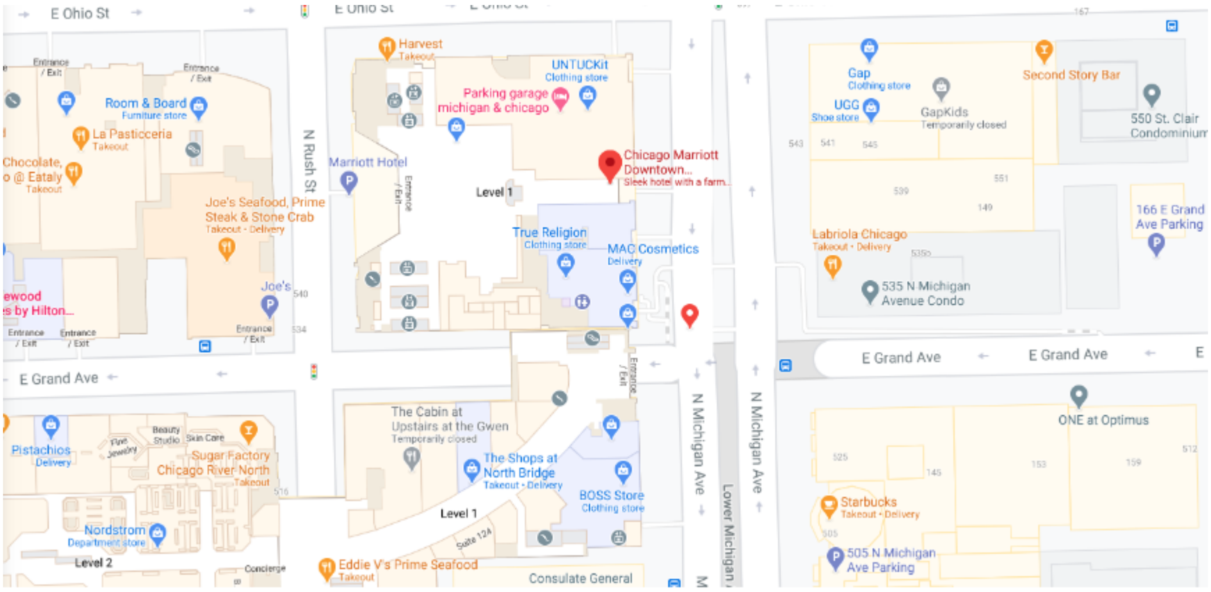
Basic Image Information

Target file: lights-festival-website.jpg

Copyright:	{FLAG}ALWAYSCHECKTHEEXIFD4T4
User Comment:	Hi. :)
Location:	Latitude/longitude: 41° 53' 30.5" North, 87° 37' 27.4" West (41.891815, -87.624277)

Q10

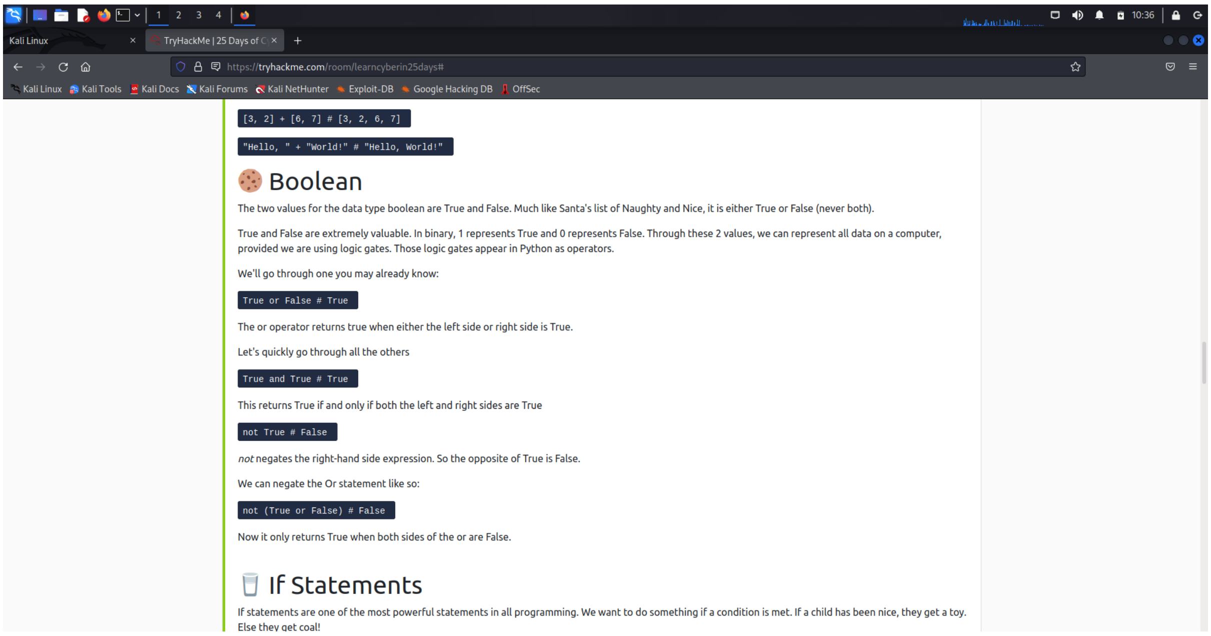
Question 11


E Ohio St
E Ohio St
Room & Board
Furniture store
La Pasticceria
Takeout
Chocolate,
o @ Eataly
Takeout
Joe's Seafood, Prime Steak & Stone Crab
Takeout · Delivery
Joe's
ewood
es by Hilton...
N Rush St
Harvest
Takeout
UNTUCKit
Clothing store
Parking garage michigan & chicago
Marriott Hotel
Level 1
Chicago Marriott Downtown...
Sleek hotel with a farm...
True Religion
Clothing store
MAC Cosmetics
Delivery
Gap
Clothing store
UGG
Shoe store
GapKids
Temporarily closed
Second Story Bar
550 St. Clair Condominium
Labriola Chicago
Takeout · Delivery
166 E Grand Ave Parking
535 N Michigan Avenue Condo
E Grand Ave
E Grand Ave
E Grand Ave
Pistachios
Delivery
Sugar Factory Chicago River North
Takeout
Nordstrom
Department store
Level 2
The Cabin at Upstairs at the Gwen
Temporarily closed
The Shops at North Bridge
Takeout · Delivery
BOSS Store
Clothing store
Level 1
Eddie V's Prime Seafood
Takeout
Consulate General
N Michigan Ave
N Michigan Ave
Lower Michigan
ONE at Optimus
Starbucks
Takeout · Delivery
505 N Michigan Ave Parking

Day15 - [Scripting] There’s a Python in my stocking

TOOLS = MOZILA FEREFOX//PYTHON

Question 1



```
[3, 2] + [6, 7] # [3, 2, 6, 7]
```

```
"Hello, " + "World!" # "Hello, World!"
```

Boolean

The two values for the data type boolean are True and False. Much like Santa's list of Naughty and Nice, it is either True or False (never both).

True and False are extremely valuable. In binary, 1 represents True and 0 represents False. Through these 2 values, we can represent all data on a computer, provided we are using logic gates. Those logic gates appear in Python as operators.

We'll go through one you may already know:

```
True or False # True
```

The or operator returns true when either the left side or right side is True.

Let's quickly go through all the others

```
True and True # True
```

This returns True if and only if both the left and right sides are True

```
not True # False
```

not negates the right-hand side expression. So the opposite of True is False.

We can negate the Or statement like so:

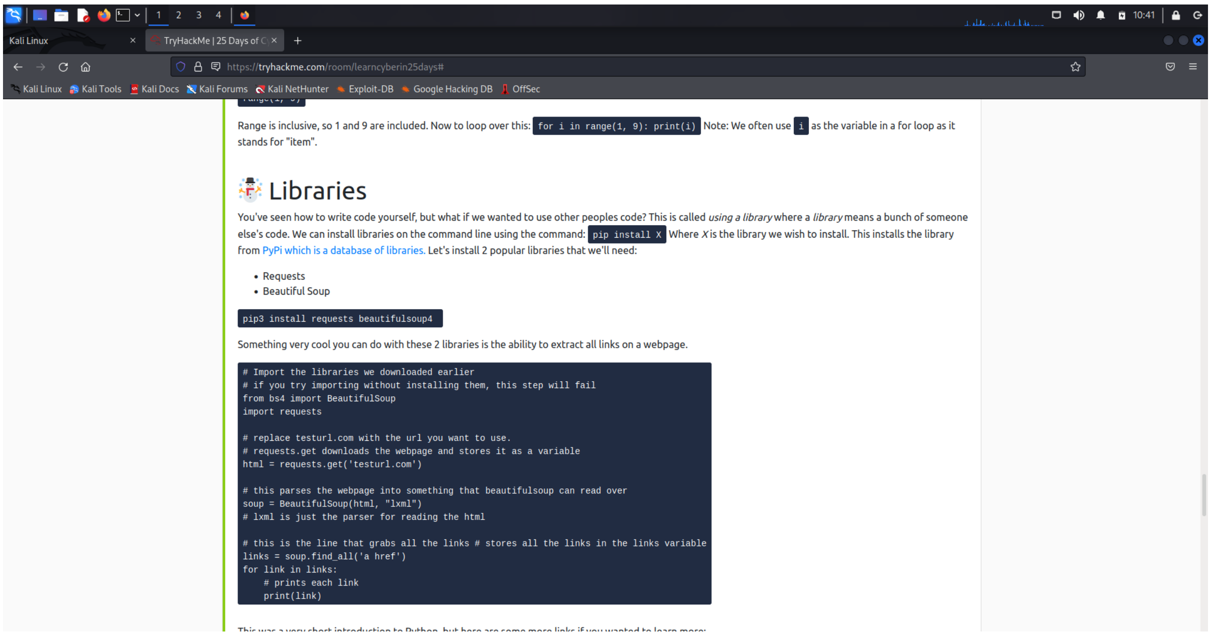
```
not (True or False) # False
```

Now it only returns True when both sides of the or are False.

If Statements

If statements are one of the most powerful statements in all programming. We want to do something if a condition is met. If a child has been nice, they get a toy. Else they get coal!

Question 2



Range is inclusive, so 1 and 9 are included. Now to loop over this: `for i in range(1, 9): print(i)` Note: We often use `i` as the variable in a for loop as it stands for "item".

Libraries

You've seen how to write code yourself, but what if we wanted to use other peoples code? This is called *using a library* where a *library* means a bunch of someone else's code. We can install libraries on the command line using the command: `pip install X` Where *X* is the library we wish to install. This installs the library from PyPi which is a database of libraries. Let's install 2 popular libraries that we'll need:

- Requests
- Beautiful Soup

```
pip3 install requests beautifulsoup4
```

Something very cool you can do with these 2 libraries is the ability to extract all links on a webpage.

```
# Import the libraries we downloaded earlier
# if you try importing without installing them, this step will fail
from bs4 import BeautifulSoup
import requests

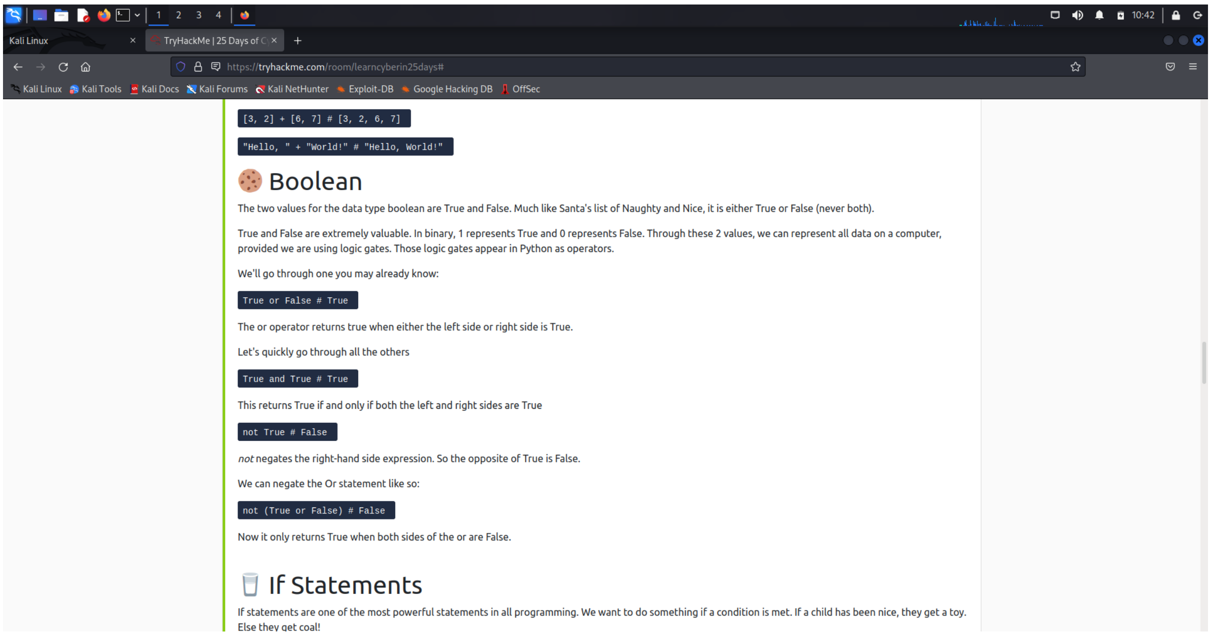
# replace testurl.com with the url you want to use.
# requests.get downloads the webpage and stores it as a variable
html = requests.get('testurl.com')

# this parses the webpage into something that beautifulsoup can read over
soup = BeautifulSoup(html, "lxml")
# lxml is just the parser for reading the html

# this is the line that grabs all the links # stores all the links in the links variable
links = soup.find_all('a href')
for link in links:
    # prints each link
    print(link)
```

This was a very short introduction to Python, but here are some more links if you wanted to learn more:

Question 3


Kali Linux
TryHackMe | 25 Days of C
https://tryhackme.com/room/learncyberin25days#
Kali Linux · Kali Tools · Kali Docs · Kali Forums · Kali NetHunter · Exploit-DB · Google Hacking DB · OffSec
10:42

```
[3, 2] + [6, 7] # [3, 2, 6, 7]
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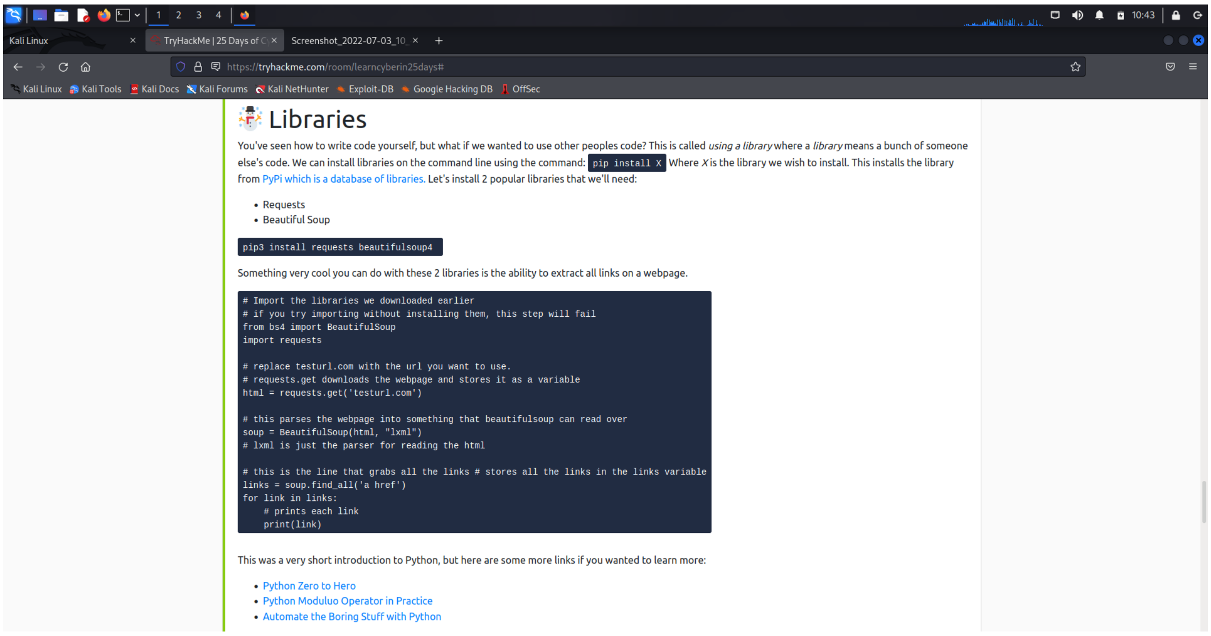
If statements are one of the most powerful statements in all programming. We want to do something if a condition is met. If a child has been nice, they get a toy. Else they get coal!

Question 4


Kali Linux
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https://tryhackme.com/room/learncyberin25days#
Kali Linux · Kali Tools · Kali Docs · Kali Forums · Kali NetHunter · Exploit-DB · Google Hacking DB · OffSec
10:43

Libraries

You've seen how to write code yourself, but what if we wanted to use other peoples code? This is called *using a library* where a *library* means a bunch of someone else's code. We can install libraries on the command line using the command: `pip install X` Where *X* is the library we wish to install. This installs the library from PyPi which is a database of libraries. Let's install 2 popular libraries that we'll need:

- Requests
- Beautiful Soup

```
pip3 install requests beautifulsoup4
```

Something very cool you can do with these 2 libraries is the ability to extract all links on a webpage.

```
# Import the libraries we downloaded earlier
# if you try importing without installing them, this step will fail
from bs4 import BeautifulSoup
import requests

# replace testurl.com with the url you want to use.
# requests.get downloads the webpage and stores it as a variable
html = requests.get('testurl.com')

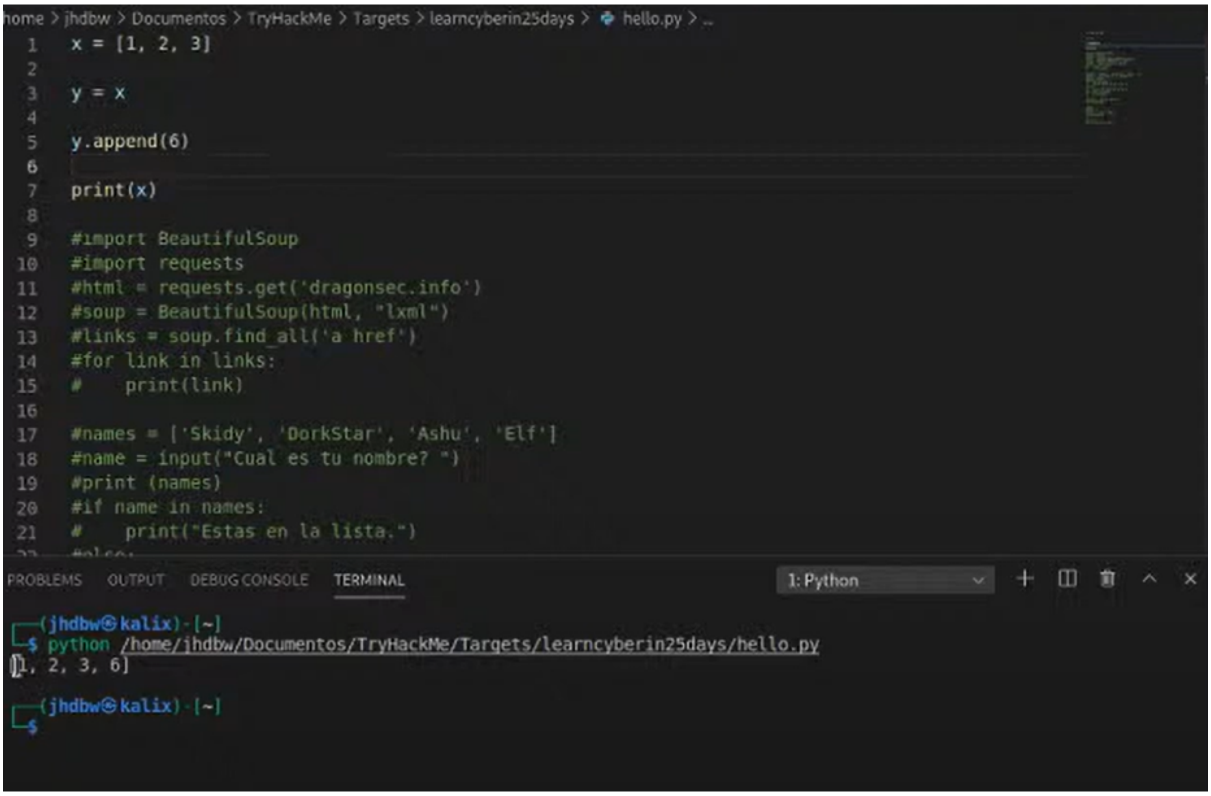
# this parses the webpage into something that beautifulsoup can read over
soup = BeautifulSoup(html, "lxml")
# lxml is just the parser for reading the html

# this is the line that grabs all the links # stores all the links in the links variable
links = soup.find_all('a href')
for link in links:
    # prints each link
    print(link)
```

This was a very short introduction to Python, but here are some more links if you wanted to learn more:

- Python Zero to Hero
- Python Moduluo Operator in Practice
- Automate the Boring Stuff with Python

Question 5



home > jhdbw > Documentos > TryHackMe > Targets > learncyberin25days > hello.py > ...
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: Python

```python
x = [1, 2, 3]

y = x

y.append(6)

print(x)

#import BeautifulSoup
#import requests
#html = requests.get('dragonsec.info')
#soup = BeautifulSoup(html, "lxml")
#links = soup.find_all('a href')
#for link in links:
#    print(link)

#names = ['Skidy', 'DorkStar', 'Ashu', 'Elf']
#name = input("Cual es tu nombre? ")
#print (names)
#if name in names:
#    print("Estas en la lista.")
#else:
```

```
┌──(jhdbw㉿kalix)-[~]
└─$ python /home/jhdbw/Documentos/TryHackMe/Targets/learncyberin25days/hello.py
[1, 2, 3, 6]

┌──(jhdbw㉿kalix)-[~]
└─$
```

Q6,7,8 have no proof because its already in it.